G2

G-15932
Name ..... CITY OF HALSEY
ATTN: ANDY RIDINGER
By ..... PO BOX 10
Address . HALSEY OR 97348

Date filed .....
Priority .....
Action suspended until 1-07
Return to applicant .....
Date of approval .....

Application No. G 15932
Permit No. G 155513
Certificate No. .....

Stream Index, Page No. .....

FEES PAID

Date	Amount	Receipt No.
2/24/03	400.00	58431
12/26/03	250.00	64992
9/25/08	350.00	94300
	Cert. Fee	

FEES REFUNDED

Date	Amount	Check No.

ASSIGNMENTS

Date	To Whom	Address	Volume	Page

CONSTRUCTION

Date for beginning .....
Date for completion .....
Extended to .....
.....
Date for application of water 10-1-08
Extended to 10-1-2057
.....

PROSECUTION OF WORK

Form "A" filed .....
Form "B" filed .....
Form "C" filed .....

FINAL PROOF

Blank mailed .....
Proof received .....
Date certificate issued .....

REMARKS

G-15932

Oregon
John A. Kitzhaber, MD, Governor

Water Resources Department
North Mall Office Building
725 Summer St. NE, Suite A
Salem, OR 97301
Phone 503-986-0900
FAX 503-986-0904
www.wrd.state.or.us

December 16, 2011

City of Halsey
Attn: Judy Cleeton, City Administrator
PO Box 10
Halsey, OR 97348

Subject: Water Management and Conservation Plan

Dear Ms. Cleeton:

Thank you for your response to my review of the City of Halsey's Water Management and Conservation Plan (plan) and submittal of the final revisions to the plan.

The Department has reviewed the final revised plan and determined it to be generally consistent with the relevant requirements under OAR Chapter 690, Division 086. Therefore, please find the enclosed final order approving the City of Halsey's Water Management and Conservation Plan.

We appreciate your cooperation in this effort. Please do not hesitate to contact me at 503-986-0880 or Lisa.J.Jaramillo@wrd.state.or.us if you have any questions.

Sincerely,

Lisa J. Jaramillo
Water Management and Conservation Analyst
Water Right Services Division

Enclosure

cc: WMCP File
Application G-13998 (Permit G-12998)
Application G-15932 (Permit G-15551)
Michael Mattick, District #02 Watermaster
Oregon Association of Water Utilities, Attn: Tim Tice, 935 N. Main Street, Independence, OR 97351

BEFORE THE WATER RESOURCES DEPARTMENT
OF THE
STATE OF OREGON

In the Matter of the Proposed Water Management and Conservation Plan for the City of Halsey, Linn County	)))	FINAL ORDER APPROVING A WATER MANAGEMENT AND CONSERVATION PLAN

Authority

OAR Chapter 690, Division 086, establishes the process and criteria for approving water management and conservation plans required under the conditions of permits, permit extensions and other orders of the Department.

Findings of Fact

1. The City of Halsey submitted a Water Management and Conservation Plan (plan) to the Water Resources Department (Department) on August 9, 2010. The required statutory fee for review of the plan was received by the Department on August 16, 2010. The plan was required by conditions set forth under Permits G-12998 and G-15551 and by conditions set forth in the final orders approving extensions of time for Permits G-12998 and G-15551.

2. The Department published notice of receipt of the plan on August 24, 2010, as required under OAR Chapter 690, Division 086. No comments were received.

3. The Department provided written comments on the plan to the City on April 22, 2011, and in response, the City submitted revisions to the plan on October 5 and 11, 2011. The final revised plan was submitted on December 14, 2011.

4. The Department reviewed the final revised plan and finds that it is consistent with the relevant requirements under OAR Chapter 690, Division 086.

Conclusion of Law

The Water Management and Conservation Plan submitted by the City of Halsey is consistent with the criteria in OAR Chapter 690, Division 086.

Now, therefore, it is ORDERED:

1. The City of Halsey's Water Management and Conservation Plan is approved and shall remain in effect until December 15, 2021, unless this approval is rescinded pursuant to OAR 690-086-0920.

This is a final order in other than a contested case. This order is subject to judicial review under ORS 183.484. Any petition for judicial review must be filed within the 60-day time period specified by ORS 183.484(2). Pursuant to ORS 536.075 and OAR 137-004-0080, you may petition for judicial review or petition the Director for reconsideration of this order. A petition for reconsideration may be granted or denied by the Director, and if no action is taken within 60 days following the date the petition was filed, the petition shall be deemed denied.

2. The City of Halsey shall submit an updated plan meeting the requirements of OAR Chapter 690, Division 086 (effective November 1, 2002) within 10 years and no later than June 15, 2021.

3. The City of Halsey shall submit a progress report containing the information required under OAR 690-086-0120(4) by December 15, 2016.

Dated at Salem, Oregon this 15 day of December, 2011.

Dwight French, Water Right Services Administrator *for*
PHILLIP C. WARD, DIRECTOR

Mailing date: DEC 19 2011

G-15932

Scott Kudlemyer

From: Judy Cleeton [judy@cityofhalsey.com]
Sent: Tuesday, April 21, 2009 9:43 AM
To: Scott Kudlemyer
Subject: RE: City of Halsey Permit Extension

Hi Scott

I have researched your questions and here is what I come up with:

The population figures are reported from two different sources. The 780 is from PSUPRC and the 801 is from the US Census Bureau.
Our City Engineers felt it was important to mention both sources, however the City only uses the PSU figures for any types of
questions or calculations.

The Current Peak Water Demand reported was from Well #3 only. It was calculated for one 24 hour period for the maximum
Beneficial water used to date. Well #2 serves at this time only as a back up well and is run only during sampling times and
When the reservoir gets low.

The reason we are asking for the 49 year extension is because the projected peak water demand is expected to
Be the 1.0 cfs in 2057 which is what is allowed under our existing permits.

I hope this helps. Some of the process for this permit extension has been a bit difficult so sorry for any confusion
On the information provided.

Judy Cleeton
City Administrator
City of Halsey
Phone No. (541) 369-2522
Fax No. (541) 369-2521
HAVE A HAPPY DAY!

From: Scott Kudlemyer [mailto:kudlemsb@wrd.state.or.us]
Sent: Monday, April 20, 2009 3:32 PM
To: Judy Cleeton
Subject: City of Halsey Permit Extension

Hi Judy

I've run into a couple of snags with the extension and need some more information. While the report is very complete, it left me extrapolating a lot of the data that I need and we prefer the Municipality provide the data rather than us extrapolating it, for accuracy and consistency's sake if nothing else. The data I need is as follows:

Population for 2008, some documents show 780, others show 801.

Current Peak Water Demand broken out by well, I.e. x.xx cfs from Well 2 and x.xx cfs from Well 3, reported as cfs or gpm.

Projected Peak Water Demand for 2057, reported as cfs or gpm.

There may be a couple of other pieces of data that I need as I progress but this will get me started.

I'm sorry to have to come to you for more data at this late date but it is unavoidable. If I can be of any assistance at all with regards to this matter please don't hesitate to call, the number listed below is my direct line.

Thanks very much

Scott Kudlemyer
Water Rights and Adjudication
Oregon Water Resources Dept.
725 Summer St. NE, Suite A
Salem, OR 97301-1266
(503) 986-0813

Oregon Water Resources Department
Water Rights Division

Water Rights Application
Number G-15932

Final Order
Extension of Time for Permit Number G-15551

Appeal Rights

This is a final order in other than a contested case. This order is subject to judicial review under ORS 183.484. A request for judicial review must be filed within the 60 day time period specified by ORS 183.484(2). Pursuant to ORS 536.075 and OAR 137-004-0080 you may either file for judicial review, or petition the Director for reconsideration of this order. A petition for reconsideration may be granted or denied by the Director, and if no action is taken within 60 days following the date the petition was filed, the petition shall be deemed denied.

Application History

Permit G-15551 was issued by the Department on January 16 2004. The permit called for complete application of water to beneficial use by October 1, 2008. On September 25, 2008 the City of Halsey submitted an application to the Department for an extension of time for Permit G-15551. In accordance with OAR 690-315-0050(2), on May 5, 2009 the Department issued a Proposed Final Order proposing to extend the time to fully apply water to beneficial use to October 1, 2057. The protest period closed June 19, 2009 in accordance with OAR 690-315-0060(1). No protest was filed.

At time of issuance of the Proposed Final Order the Department concluded that, based on the factors demonstrated by the applicant, the permit may be extended subject to the following conditions:

CONDITIONS

1. **Development Limitations**

Diversion of any water beyond 0.320 cfs under Permit G-15551 shall only be authorized upon issuance of a final order approving a Water Management and Conservation Plan (WMCP) under OAR Chapter 690, Division 86. The required WMCP shall be submitted to the Department within 3 years of an approved extension application. Use of water under Permit G-15551 must be consistent with this and subsequent WMCP's approved under OAR Chapter 690, Division 86 on file with the Department.

The deadline established in this PFO for submittal of a WMCP shall not relieve a permit holder of any existing or future requirement for submittal of a WMCP at an earlier date as established through other orders of the Department. A WMCP submitted to meet the requirements of this order may also meet the WMCP submittal requirements of other Department orders.

The applicant has demonstrated good cause for the permit extension pursuant to ORS 537.630, 539.010(5) and OAR 690-315-0080(3).

Order

The extension of time for Application G-15932, Permit G-15551, therefore, is approved subject to conditions contained herein. The deadline for applying water to full beneficial use is extended to October 1, 2057.

DATED: July 21, 2009

Dwight French, Administrator of
Water Rights and Adjudications
for
Phillip C. Ward, Director

If you have any questions about statements contained in this document, please contact Scott Kudlemyer at (503) 986-0813.

If you have other questions about the Department or any of its programs, please contact our Water Resources Customer Service Group at (503) 986-0900.

Mailing List for Extension FO Copies

Note: Include a copy of the "Important Notice" document along with the original copy of the Final Order being sent to the permit holder.

FO Date: July 21, 2009

Application G-15932
Permit G-15551

Copies Mailed
By: _____ (SUPPORT STAFF)
on: 7/22/09 (DATE)

Original mailed to permit holder:

City of Halsey
Attn: Judy Cleeton
PO Box 10
Halsey, OR 97348

Copies sent to:

1. WRD - App. File G-15932/ Permit G-15551
2. WRD - Watermaster District 2, Michael Mattick
3. WRD – Sarah Henderson, Technical Services
4. WRD - Support Staff, Salem

Fee paid as specified under ORS 536.050 to receive copy:

5. None

Receiving via e-mail (10 AM day of signature date)

6. None
7. WRD – Bill Fujii – Notify of WMCP needed

Done by _____ *Date* 7/21/09

CASEWORKER: SBK

G-15932
CITY OF HALSEY
ATTN: JUDY CLEETON
PO BOX 10
HALSEY OR 97348

G-15932
CITY OF HALSEY
ATTN: JUDY CLEETON
PO BOX 10
HALSEY OR 97348

G-15932
CITY OF HALSEY
ATTN: JUDY CLEETON
PO BOX 10
HALSEY OR 97348

Oregon Water Resources Department
Water Rights Division

Application for Extension of Time

In the Matter of the Application for an Extension of Time for Permit G-15551, Water Right Application G-15932, in the name of the City of Halsey.

PROPOSED FINAL ORDER

Permit Information

Application File G-15932/ Permit G-15551
Basin 2 – Willamette Basin / Watermaster District 2
Date of Priority: February 24, 2003

Authorized Use of Water

Source of Water:	Well 2 and Well 3 within the Muddy Creek Basin
Purpose or Use:	Municipal
Maximum Rate:	1.0 Cubic Foot per Second (cfs)

This Extension of Time request is being processed in accordance with Oregon Administrative Rule Chapter 690, Division 315.

Please read this Proposed Final Order in its entirety as it contains additional conditions not included in the original permit.

This Proposed Final Order applies only to Permit G-15551, water right Application G-15932. A copy of Permit G-15551 is enclosed as Attachment 1.

Summary of Proposed Final Order for Extension of Time

The Department proposes to:

- Grant an extension of time to apply water to full beneficial use from October 1, 2008 to October 1, 2057.
- Make the extension of time subject to certain conditions as set forth below.

ACRONYM QUICK REFERENCE

Department – Oregon Department of Water Resources
City – City of Halsey
PFO – Proposed Final Order
WMCP – Water Management and Conservation Plan
UGB – Urban Growth Boundary

Units of Measure
cfs – cubic feet per second
gpm – gallons per minute

AUTHORITY

Generally, see ORS 537.630 and OAR Chapter 690 Division 315.

ORS 537.630(2) provides in pertinent part that the Oregon Water Resources Department (Department) may, for good cause shown, shall order and allow an extension of time, for the completion of the well or other means of developing and securing the ground water or for complete application of water to beneficial use. In determining the extension, the department shall give due weight to the considerations described under ORS 539.010 (5) and to whether other governmental requirements relating to the project have significantly delayed completion of construction or perfection of the right.

ORS 539.010(5) provides in pertinent part that the Water Resources Director, for good cause shown, may extend the time within which the full amount of the water appropriated shall be applied to a beneficial use. This statute instructs the Director to consider: the cost of the appropriation and application of the water to a beneficial purpose; the good faith of the appropriator; the market for water or power to be supplied; the present demands therefore; and the income or use that may be required to provide fair and reasonable returns upon the investment.

OAR 690-315-0080 provides in pertinent part that the Department shall make findings to determine if an extension of time for municipal and/or quasi-municipal water use permit holders may be approved to complete construction and/or apply water to full beneficial use.

OAR 690-315-0090(3) authorizes the Department, under specific circumstances, to condition an extension of time for municipal and/or quasi-municipal water use permit holders to provide that diversion of water beyond the maximum rate diverted under the permit or previous extension(s) shall only be authorized upon issuance of a final order approving a Water Management and Conservation Plan under OAR Chapter 690, Division 86.

FINDINGS OF FACT

Background

1. Permit G-15551 was granted by the Department on January 16, 2004. The permit authorizes the use of 1.0 cfs of water from Well 2 and Well 3 within the Muddy Creek Basin, for municipal use. The permit specified that complete application of water was to be made on or before October 1, 2008.

2. The permit holder, the City of Halsey (City), submitted an "Application for Extension of Time" to the Department on September 25, 2008, requesting the time to apply water to full beneficial use under the terms and conditions of Permit G-15551 be extended from October 1, 2008 to October 1, 2048. This is the first extension of time request for Permit G-15551.

3. Notification of the City's Application for Extension of Time for Permit G-15551 was published in the Department's Public Notice dated September 30, 2008. No public comments were received regarding the extension application.

4. On October 24, 2008 and November 20, 2008, the City submitted additional information to supplement their Application for Extension of Time, and requested the time to apply water to full beneficial use under the terms and conditions of Permit G-15551 be changed from October 1, 2048 to October 1, 2057.

Review Criteria for Municipal Quasi-Municipal Water Use Permits *[OAR 690-315-0080(1)]*
The time limits to complete construction and/or apply water to full beneficial use may be extended if the Department finds that the permit holder has met the requirements set forth under OAR 690-315-0080. This determination shall consider the applicable requirements of ORS 537.230[1], 537.248[2], 537.630[3] and/or 539.010(5)[4]

Complete Extension of Time Application *[OAR 690-315-0080(1)(a)]*

4. On September 25, 2008, the Department received a completed Application for Extension of Time and the fee specified in ORS 536.050 from the permit holder.

Start of Construction *[OAR 690-315-0080(1)(b)]*

5. Permit G-15551 was issued prior to June 29, 2005; therefore, the applicant is not required to provide evidence of actions taken to begin actual construction of the project.[5]

Duration of Extension *[OAR 690-315-0080(1)(c) and (1)(d)]*
Under OAR 690-315-0080(1)(c),(d), in order to approve an extension of time for municipal and quasi-municipal water use permits the Department must find that the time requested is reasonable and the applicant can complete the project within the time requested.

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[1] ORS 537.230 applies to surface water permits only.

[2] ORS 537.248 applies to reservoir permits only.

[3] ORS 537.630 applies to ground water permits only.

[4] ORS 537.010(5) applies to surface water and ground water permits.

[5] Section 5, Chapter 410, Oregon Laws 2005 and OAR 690-315-0070(1)(d).

6. The remaining work to be accomplished under Permit G-15551 consists of replacement of old waterlines, purchasing a larger well pump, construction of a 250,000 gal storage reservoir, Northwest, Southwest, and Eastside waterline improvements, completing a WMCP and applying water to full beneficial use.

7. As of November 20, 2008, the permit holder has appropriated 0.320 cfs of the 1.0 cfs of water available from Well 3 and no water from Well 2 as authorized under Permit G-15551 for municipal purposes. There is an undeveloped portion of 0.680 cfs of water available from Well 2 and/or Well 3 under Permit G-15551 as per OAR 690-315-0010(6)(g). Well 3 is primary water supply for the City, Well 2 is used as emergency, back-up supply.

8. In addition to the 1.0 cfs of water from Wells 2 and 3 authorized under Permit G-15551, the City also holds the rights for 0.613 cfs of water from Well 2 in the Muddy Creek Basin. These water rights and permits total 1.613 of groundwater. The City of Halsey has not yet made beneficial use of 0.792 cfs of water, being 0.112 cfs under Permit G-12998 and 0.680 cfs of water under Permit G-15551.

9. According to the City, the City's peak hourly water demand within its service area boundaries is currently 0.682 cfs. (Table 5-8, 2008 Water System Master Plan, p.5-12)

10. According to the City, in 2007, the population within the service boundary of the City of Halsey was 780. The City of Halsey anticipates the population to increase at an estimated growth rate of 1.75 percent per year, reaching an estimated population of 1897 by the year 2057.

11. The City's current City Limits contain approximately 339.1 acres, of which about 58% is already developed. The other 42% is either in agricultural use or comprised of vacant City lots. The Urban Growth Boundary (UGB) includes approximately 88.7 acres located outside the City Limits, of which 1% is designated for commercial use, 7.3% designated for industrial use, and 12% designated for residential use. (Table 2-1, 2008 Water System Master Plan, p.3)

12. According to the City, the City's projected peak hourly day demand is 1.613 cfs of water by the year 2057.

13. Full development of Permit G-15551 is needed to address the present and future water demand of the City, including system redundancy and emergency use.

14. The City's request for an extension of time until October 1, 2057 to apply water to full beneficial use under the terms and conditions of Permit G-15551 is both reasonable and necessary.

Good Cause *[OAR 690-315-0080(1)(e) and (3)(a-g)and (4)]*
The Department's determination of good cause shall consider the requirements set forth under OAR 690-315-0080(3) and OAR 690-315-0080(4).

Reasonable Diligence and Good Faith of the Appropriator *[OAR 690-315-0080(3)(a),(3)(c) and (4)]*
Reasonable diligence and good faith of the appropriator must be demonstrated during the permit period or prior extension period as a part of evaluating good cause in determining whether or not to grant an extension. In determining the reasonable diligence and good faith of a municipal or quasi-municipal water use permit holder, the Department shall consider activities associated with the development of the right including, but not limited to, the

items set forth under OAR 690-315-0080(4) and shall evaluate how well the applicant met the conditions of the permit or conditions of a prior extension period.

15. Prior to the issuance of Permit G-15551 on January 16, 2004, the City constructed Well 3, installed a water meter, completed a water use impact plan, and finished the 4th Street waterline replacement project.

16. During the original development time frame under Permit G-15551 the City completed the 2008 Water Master Plan.

17. According to the City, as of November 20, 2008, they have invested approximately $292,958. which is approximately 8 percent of the total projected cost for complete development of this project. The City anticipates an additional $3,563,310. investment is needed for the completion of this project. The Department recognizes that while some of these investment costs are unique to construction and development solely under G-15551, other costs included in this accounting are not partitioned out for G-15551 because (1) they are incurred under the development of a water supply system jointly utilized under other rights held by the City, and/or (2) they are generated from individual activities counted towards reasonable diligence and good faith as listed in ORS 690-315-0080(4) which are not associated with just this permit, but with the development and exercise of all the City's water rights.

18. Since the issuance of Permit G-15551 on January 16, 2004, approximately 0.320 cfs of the 1.0 cfs allowed has been appropriated from Well 3 for beneficial municipal purposes under the terms of this permit. Well 2 is back-up for Well 3 and has not had any water appropriated under this permit for the same time period.

19. The Department has considered the City's compliance with conditions and identified one concern, the City has not submitted its WMCP which was due in 2007.

Cost to Appropriate and Apply Water to a Beneficial Purpose *[OAR 690-315-0080(3)(b)]*

20. According to the City, as of November 20, 2008, they have invested approximately $292,958. which is approximately 8 percent of the total projected cost for complete development of this project. The City anticipates an additional $3,563,310 investment is needed for the completion of this project:

The Market and Present Demands for Water *[OAR 690-315-0080(3)(d) and (5)(a-f)]*
For municipal or quasi-municipal water use permits issued after November 2, 1998, in making a determination of good cause pursuant to 690-315-0080(3)(d), the Department shall also consider, but is not limited to, the factors in 690-315-0080(5)(a-f).

21. The amount of water available to satisfy other affected water rights and scenic waterway flows; special water use designations established since permit issuance, including but not limited to state scenic waterways, federal wild and scenic rivers, serious water management problem areas or water quality limited sources established under 33 U.S.C. 1313(d); or the habitat needs of sensitive, threatened or endangered species, in consultation with the Oregon Department of Fish and Wildlife *[OAR 690-315-0080(5)(a-f)]*.

    a. The amount of water available to satisfy other affected water rights and scenic waterway

flows was determined at the time of issuance of Permit G-15551; furthermore, water availability for other affected water rights and scenic waterway flows after the permit was issued is determined at such time that such application for a new water right is submitted. The points of appropriation for Permit G-15551, located within the Muddy Creek Basin, are not located within a limited or critical ground water area. Muddy Creek is not located within or above any state or federal scenic waterway, is located within an area ranked low for stream flow restoration needs as determined by the Department in consultation with the Oregon Department of Fish and Wildlife, and is located within a Sensitive, Threatened or Endangered Fish Species Area as identified by the Department in consultation with Oregon Department of Fish and Wildlife. Muddy Creek is listed by the Department of Environmental Quality as a water quality limited stream.

Economic investment in the project to date *[OAR 690-315-0080(5)(d)]*.

22. According to the City, as of November 20, 2008, they have invested approximately $292,958. which is approximately 8 percent of the total projected cost for complete development of this project. The City anticipates an additional $3,563,310. investment is needed for the completion of this project.

Other economic interests dependent on completion of the project *[OAR 690-315-0080(5)(e)]*.

23. None have been identified.

Other factors relevant to the determination of the market and present demand for water and power *[OAR 690-315-0080(5)(f)]*.

24. As described in Findings 8 through 12 the City of Halsey has indicated, and the Department finds, the City must rely on full development of Permit G-15551 to meet its present and future water demands.

25. City of Halsey projects a population increase of 1.75 percent per year over the next forty nine years and also expects some commercial and industrial growth.

26. Given the current water supply situation of the City as well as current and expected demands, there is a market and present demand for the water to be supplied under Permit G-15551.

27. On June 30, 2003, the Water Resources Department determined under OAR Chapter 690 Division 9, that use of water under this ground water Permit G-15551 does not have the potential for substantial interference with surface water.

28. OAR 690-315-0090(3) requires the Department to place a condition on this extension of time to provide that diversion of water beyond 0.320 cfs under Permit G-15551 shall only be authorized upon issuance of a final order approving a Water Management and Conservation Plan (WMCP) under OAR Chapter 690, Division 86. A "Development Limitation" condition" is specified under Item 1 of the "Conditions" section of this PFO to meet this requirement.

Fair Return Upon Investment *[OAR 690-315-0080(3)(e)]*

29. Use and income from the permitted water development project would result in reasonable returns upon the investment made in the project to date.

Other Governmental Requirements *[OAR 690-315-0080(3)(f)]*

30. Delays caused by any other governmental requirements in the development of this project have not been identified.

Events which Delayed Development under the Permit *[OAR 690-315-0080(3)(g)]*

31. Delay of development under Permit G-15551 was due, in part, to the size and scope of the municipal water system, which was designed to be phased in over a period of years.

CONCLUSIONS OF LAW

1. The City is entitled to apply for an extension of time to complete construction and/or completely apply water to the full beneficial use pursuant to ORS 537.630(2).

2. The City has submitted a complete extension application form and the fee specified under ORS 536.050(1)(k), as required by OAR 690-315-0080(1)(a).

3. Pursuant to Section 5, Chapter 410, Oregon Laws 2005, the permit holder is not required to demonstrate that actual construction of the project began within one year of the date of issuance of the permit, as otherwise required by OAR 690-315-0080(1)(b).

4. The time requested to apply water to full beneficial use is reasonable, as required by OAR 690-315-0080(1)(c).

5. Full application of water to beneficial use can be completed by October 1, 2057[6] pursuant to OAR 690-315-0080(1)(d).

6. The Department has considered the reasonable diligence and good faith of the appropriator, the cost to appropriate and apply water to a beneficial purpose, the market and present demands for water to be supplied, the financial investment made and the fair return upon the investment, the requirements of other governmental agencies, and unforeseen events over which the water right permit holder had no control, and the Department has determined that the City has shown good cause for an extension of time to apply the water to full beneficial use pursuant to OAR 690-315-0080(1)(e).

---

6 Pursuant to ORS 537.630(4), upon completion of beneficial use of water allowed under this permit, the permit hold shall hire a certified water rights examiner to survey the appropriation. Within one year after the complete application of water to a beneficial use(or by the date allowed for the complete application of water to a beneficial use), the permit holder shall submit a map of the survey and the claim of beneficial use.

8. As required by OAR 690-315-0090(3) and as described in Finding 26 above and specified under Item 1 of the "Conditions" section of this PFO, the diversion of water beyond 0.320 cfs under Permit G-15551 shall only be authorized upon issuance of a final order approving a Water Management and Conservation Plan under OAR Chapter 690, Division 86.

Proposed Order

Based upon the foregoing Findings of Fact and Conclusions of Law, the Department proposes to issue an order to:

extend the time to apply the water to beneficial use under Permit G-15551 from October 1, 2008 to October 1, 2057.

Subject to the following conditions:

CONDITIONS

1. **Development Limitations**
Diversion of any water beyond 0.320 cfs under Permit G-15551 shall only be authorized upon issuance of a final order approving a Water Management and Conservation Plan (WMCP) under OAR Chapter 690, Division 86. The required WMCP shall be submitted to the Department within 3 years of an approved extension of time application. Use of water under Permit G-15551 must be consistent with this and subsequent WMCP's approved under OAR Chapter 690, Division 86 that is on file with the Department. The deadline established in this PFO for submittal of a WMCP shall not relieve a permit holder of any existing or future requirement for submittal of a WMCP at an earlier date as established through other orders of the Department. A WMCP submitted to meet the requirements of this order may also meet the WMCP submittal requirements of other Department orders.

DATED: May 5, 2009

Dwight French
Administrator
Water Rights and Adjudications Division

If you have any questions, please check the information box on the last page for the appropriate names and phone numbers.

Proposed Final Order Hearing Rights

1. Under the provisions of OAR 690-315-0100(1) and 690-315-0060, the applicant or any other person adversely affected or aggrieved by the proposed final order may submit a written protest to the proposed final order. The written protest must be received by the Water Resources Department no later than **June 19, 2009 ,** being 45 days from the date of publication of the proposed final order in the Department's weekly notice.

2. A written protest shall include:
   a. The name, address and telephone number of the petitioner;
   b. A description of the petitioner's interest in the proposed final order and if the protestant claims to represent the public interest, a precise statement of the public interest represented;

c. A detailed description of how the action proposed in the proposed final order would adversely affect or aggrieve the petitioner's interest;
d. A detailed description of how the proposed final order is in error or deficient and how to correct the alleged error or deficiency;
e. Any citation of legal authority supporting the petitioner, if known;
f. Proof of service of the protest upon the water right permit holder, if petitioner is other than the water right permit holder; and
g. The protest fee required under ORS 536.050, if petitioner is other than the water right permit holder.

3. Within 60 days after the close of the period for requesting a contested case hearing, the Director shall:
   a. Issue a final order on the extension request; or
   b. Schedule a contested case hearing if a protest has been submitted, and:
      1) Upon review of the issues, the Director finds there are significant disputes related to the proposed agency action; or
      2) The applicant submits a written request for a contested case hearing within 30 days after the close of the period for submitting protests.

- If you have any questions about statements contained in this document, please contact Scott Kudlemyer at 503-986-0813.
- If you have questions about how to file a protest or if you have previously filed a protest and you want to know the status, please contact Patricia McCarty at 503-986-0820.
- If you have any questions about the Department or any of its programs, please contact our Water Resources Customer Service Group at 503-986-0801.
- Address any correspondence to: Water Rights and Adjudications Division
  725 Summer St NE, Suite A
- Fax: 503-986-0901 Salem, OR 97301-1266

Mailing List for Extension PFO Copies

PFO Date: May 5, 2009

Application G-15932
Permit G-15551

Original mailed to Applicant:

City of Halsey
Attn: Judy Cleeton
PO Box 10
Halsey, OR 97348

Copies Mailed
By: DS
(SUPPORT STAFF)
on: 5/5/09
(DATE)

Copies sent to:

1. WRD - App. File G- 15932/ Permit G-15551

2. WRD - Watermaster District 2 – Michael Mattick

Fee paid as specified under ORS 536.050 to receive copy:

3. None

Receiving via e-mail (10 AM Tuesday of signature date)

4. WRD – Bill Fujii – Notify of WMCP needed

Done by SBK *Date* 4/28/09

CASEWORKER: SBK

STATE OF OREGON

COUNTY OF LINN

PERMIT TO APPROPRIATE THE PUBLIC WATERS

THIS PERMIT IS HEREBY ISSUED TO

CITY OF HALSEY
773 W FIRST ST
HALSEY, OREGON 97348

(541) 369-2522

The specific limits for the use and conditions are listed below.

APPLICATION FILE NUMBER: G-13998

SOURCE OF WATER: Backup WELL 2 WITHIN THE WILLAMETTE BASIN
Linn 13705

PURPOSE OR USE: MUNICIPAL USE

MAXIMUM RATE: 0.613 CUBIC FOOT PER SECOND

PERIOD OF USE: YEAR ROUND

DATE OF PRIORITY: March 3, 1995

POINT OF DIVERSION LOCATION: NE 1/4 SE 1/4, SECTION 1, T14S, R4W, W.M.; 340 SOUTH AND 1030 FEET WEST FROM THE E 1/4 CORNER OF SECTION 1

THE PLACE OF USE IS LOCATED AS FOLLOWS:

WITHIN THE CITY OF HALSEY SERVICE AREA

Measurement, recording and reporting conditions:

A. Before water use may begin under this permit, the permittee shall install a meter or other suitable measuring device as approved by the Director. The permittee shall maintain the meter or measuring device in good working order.

B. The permittee shall allow the watermaster access to the meter or measuring device; provided however, where the meter or measuring device is located within a private structure, the watermaster shall request access upon reasonable notice.

C. The Director may require the permittee to keep and maintain a record of the amount (volume) of water used and may require the permittee to report water use on a periodic schedule as established by the Director. In addition, the Director may require the permittee to report general water use information, the periods of water use and the place and nature of use of water under the permit. The Director may provide an opportunity for the permittee to submit alternative reporting procedures for review and approval.

The water user shall develop a plan to monitor and report the impact of water use under this permit on water levels within the aquifer that provides water to the permitted well(s). The plan shall be submitted to the Department within one year of the date the permit is issued and shall be subject to the approval of the Department. At a minimum, the plan shall include a program to periodically measure static water levels within the permitted well(s) or an adequate substitute such as water levels in nearby wells. The plan shall also stipulate a reference water level against which any water-level declines will be compared. If a well listed on this permit (or replacement well) displays a total static water-level decline of 25 or more feet over any period of years, as compared to the reference level, then the water user shall discontinue use of, or reduce the rate or volume of withdrawal from, the well(s). Such action shall be taken until the water level recovers to above the 25-foot decline level or until the Department determines, based on the water user's and/or the Department's data and analysis, that no action is necessary because the aquifer in question can sustain the observed declines without adversely impacting the resource or senior water rights. The water user shall in no instance allow excessive decline, as defined in Commission rules, to occur within the aquifer as a result of use under this permit.

Within one year of permit issuance, the permittee shall submit a water management and conservation plan consistent with OAR Chapter 690, Division 86.

STANDARD CONDITIONS

The wells shall be constructed in accordance with the General Standards for the Construction and Maintenance of Water Wells in Oregon. The works shall be equipped with a usable access port, and may also include an air line and pressure gauge adequate to determine water level elevation in the well at all times.

The use shall conform to such reasonable rotation system as may be ordered by the proper state officer.

Prior to receiving a certificate of water right, the permit holder shall submit the results of a pump test meeting the department's standards, to the Water Resources Department. The Director may require water level or pump test results every ten years thereafter.

Failure to comply with any of the provisions of this permit may result in action including, but not limited to, restrictions on the use, civil penalties, or cancellation of the permit.

This permit is for the beneficial use of water without waste. The water user is advised that new regulations may require the use of best practical technologies or conservation practices to achieve this end.

By law, the land use associated with this water use must be in compliance with statewide land-use goals and any local acknowledged land-use plan.

The use of water shall be limited when it interferes with any prior surface or ground water rights.

The Director finds that the proposed use(s) of water described by this permit, as conditioned, will not impair or be detrimental to the public interest.

Actual construction of the well shall begin within one year from permit issuance, and shall be completed on or before October 1, 1998. Complete application of the water to the use shall be made on or before October 1, 1999.

Issued November 27, 1996 B+C 05

Martha O. Pagel, Director
Water Resources Department

STATE OF OREGON

WATER RESOURCES DEPARTMENT

RECEIPT # 94300

725 Summer St. N.E. Ste. A
SALEM, OR 97301-4172
(503) 986-0900 / (503) 986-0904 (fax)

INVOICE # _____

RECEIVED FROM: City of Halsey

BY: _____

APPLICATION	G15752
PERMIT	
TRANSFER	

CASH: ☐ CHECK:# ☒ 11808 OTHER: (IDENTIFY) ☐ _____

TOTAL REC'D $ 350.00

1083 TREASURY 4170 WRD MISC CASH ACCT

0407	COPIES		$
_____	OTHER:	(IDENTIFY) _____	$

0243 I/S Lease _____ 0244 Muni Water Mgmt. Plan _____ 0245 Cons. Water _____

4270 WRD OPERATING ACCT

	MISCELLANEOUS				
0407	COPY & TAPE FEES				$
0410	RESEARCH FEES				$
0408	MISC REVENUE: (IDENTIFY)	_____			$
TC162	DEPOSIT LIAB. (IDENTIFY)	_____			$
0240	EXTENSION OF TIME				$ 350.00
	WATER RIGHTS:	**EXAM FEE**		**RECORD FEE**	
0201	SURFACE WATER	$	0202	$	
0203	GROUND WATER	$	0204	$	
0205	TRANSFER	$			
	WELL CONSTRUCTION	**EXAM FEE**		**LICENSE FEE**	
0218	WELL DRILL CONSTRUCTOR	$	0219	$	
	LANDOWNER'S PERMIT		0220	$	

_____ OTHER (IDENTIFY) _____

0536 TREASURY 0437 WELL CONST. START FEE

0211	WELL CONST START FEE	$	CARD #	
0210	MONITORING WELLS	$	CARD #	

_____ OTHER (IDENTIFY) _____

0607 TREASURY 0467 HYDRO ACTIVITY

		LIC NUMBER	
0233	POWER LICENSE FEE (FW/WRD)		$
0231	HYDRO LICENSE FEE (FW/WRD)		$
_____	HYDRO APPLICATION		$

_____ TREASURY OTHER / RDX

FUND _____ TITLE _____

OBJ. CODE _____ VENDOR # _____

DESCRIPTION _____ $

RECEIPT: 94300 DATED: 9-25-08 BY: _____

Distribution – White Copy - Customer, Yellow Copy - Fiscal, Blue Copy - File, Buff Copy - Fiscal

ANDERSON ENGINEERING & SURVEYING, INC.

25173

Oregon Water Resources Department 9/29/2008

Extension of Time - G-15337	350.00
Extension of Time - G-12970	350.00

RECEIVED

SEP 30 2008

WATER RESOURCES DEPT
SALEM, OREGON

Sterling Savings Bank/ Extension of Time - G-15337 & G-12970 700.00

Oregon
Theodore R. Kulongoski, Governor

Water Resources Department
North Mall Office Building
725 Summer Street NE, Suite A
Salem, OR 97301-1271
503-986-0900
FAX 503-986-0904

November 25, 2008

REFERENCE: Application for Extension of Time

Dear Extension of Time Applicant:

The Water Rights Section has received your application for an extension of time for **APPLICATION FILE #** G-15932 **(PERMIT #** G-15551). Your application will be reviewed in the near future. Following the review, you will receive a Proposed Final Order either approving or rejecting the extension of time request. A 45-day protest period begins upon issuance of the Proposed Final Order. After the protest period closes, a Final Order is issued.

If you have questions concerning your extension of time application, please contact Scott Kudlemyer at (503) 986-0813. For general information about the Water Resources Department, you may contact the Water Resources' Customer Service Group at (503) 986-0801 or you may access the Department's Internet home page at: "**www.wrd.state.or.us**".

Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem Oregon 97301-1266
(503) 986-0900
www.wrd.state.or.us

Application for Extension of Time for Municipal and Quasi-Municipal Water Use Permits

Make use of this form, *Application for Extension of Time for Municipal and Quasi-Municipal Water Use Permits*, only if the permit uses the word "Municipal" or "Quasi-municipal" in the description of the purpose or use to which water is to be applied.

TO THE DIRECTOR OF THE OREGON WATER RESOURCES DEPARTMENT

A separate extension application must be submitted for each permit as per OAR 690-315-0070(2). This page, with an original signature by the permit holder of record, must accompany any application for extension of time.

This application and a summary of review criteria and procedures that are generally applicable to this application are available at http://www.wrd.state.or.us/OWRD/PUBS/forms.shtml

I, City of Halsey — Judy Cleeton
NAME OF PERMIT HOLDER *[OAR 690-315-0070(1) and (3)(a)]* — NAME OF CONTACT

P O Box 10 — Halsey — OR — 97348
ADDRESS — CITY — STATE — ZIP

(541) 369-2522 — judy@cityofhalsey.com
PHONE — E-MAIL ADDRESS

the permit holder of: Application Number G - 15932

Permit Number G - 15551
[OAR 690-315-0070(3)(b)]

do hereby request that the time in which to:

☐ complete construction (of diversion/appropriation works and/or purchase and installation of the equipment necessary to the use of water), which time now expires on October 1, _____, be extended to October 1, _____,

and/or the time in which to:

☒ apply water to full beneficial use under the terms and conditions of the permit, which time now expires on October 1, , be extended to October 1, 2057 2008.

I am the permittee, or have written authorization from the permittee, to apply for an extension of time under this permit. I certify that the information I have provided in this application is true and correct to the best of my knowledge.

Judy M. Cleeton — 11/18/2008
Signature — Date

City of Halsey Application for Extension of Time for A Water Right Permit

1. Halsey Check#11808 in the amount of $350.00 previously submitted.

2. For Quasi-Municipal water use permit holders, provide evidence of the actions taken to begin actual construction on the project if required under the applicable statue.

Begin Date December 17, 1997 Construction of Well #3 began.

The original permit application for Well #3 was in November, 1996 with construction to begin by November 27, 1997. Construction did not begin until December 17, 1997 due largely to delays with the contractor which ultimately led to litigation. The City reapplied for a permit on February 21, 2003 based upon the recommendation from the Water Resources Department and Well #2 was added to the application in order to increase flexibility in the water distribution system.

3. N/A

4. Provide evidence of actions taken to develop the water right permit within the permitted time period and/or within the time period of the previous extension.

INSERT DATES	WORK ACCOMPLISHED BEFORE PERMIT WAS ISSUED	COST
4/16/1998	Construction of well completed Well 3	$ 60, 178
3/2003	Installation of water meter and water use impact plan	$109, 109

INSERT DATES	ALL WORK AND ACTIONS ACCOMPLISHED DURING PERMITTED TIME PERIOD	COST
	The permit was signed	
1/16/2004	Signed by Water Resources Department	
10/1/2008	The permit specified complete application of water to the use shall be made ("C-Date")	

INSERT DATES	ALL WORK AND ACTIONS ACCOMPLISHED AFTER PERMIT "C-DATE" AND PRIOR TO ANY EXTENSION OF TIME REQUEST	COST
9/21/2003	Completion of 4th Street Waterline Replacement	$98,671 Before Permit

TOTAL COST TO DATE: $267,868

5. **Provide evidence of compliance with conditions contained in the original permit, and any previous extension(s), or the reason the condition was not satisfied.**

A.

1. A Water Management and Conservation Plan was to be submitted within 3 years of the permit issuance, however that has not been completed. The City has been working to complete a Water Master Plan which is also required by your Department. Although City employees have devoted many hours to this project, the City has been at the mercy of its City Engineers to bring this plan to completion. The City Engineer finally completed the Water System Master Plan on September 24, 2008 and has submitted it to Tom Charbonneau. The City anticipates with the completion of the Water System Master Plan that the Water Management and Conservation Plan could be finished within a year of that date.

B. Measurement, recording and reporting conditions have been met as required by the permit.

1. A meter has been installed at the water plant and records the amount of water used each day. Reports of the recorded water use measurements are reported to the Department annually as required.
2. The meter is accessible to the watermaster with reasonable notice as it is confined in a locked area.
3. A plan to monitor and report the impact of water use on water levels within the aquifer that provides water to the permitted wells was completed in March, 2003 and has been approved by your Department. A copy of the latest Water-Use Impact Report is included.

6. **Provide <u>evidence</u> of the maximum rate, or duty if applicable, of water diverted for beneficial use under the permit and/or prior extensions of time, if any, made to date.**

Maximum instantaneous rate used to date = .320 cfs (cubic feet per second)
A copy of the production for July 2004, which is maximum rate of water diverted for beneficial use under this permit, is enclosed to support this information.

7. **Provide an estimate of the population served under this permit and a description of the Methodology used to make the estimate.**

   The estimated current population supplied water by the City of Halsey is 780. The estimate is derived from the Portland State University Population Research Center from the July 1, 2007 report. A copy of the report is enclosed.

8. **Provide a description of the financial expenditures made toward completion of the water development under this permit.**

DATE	WORK OR ACTIONS ACCOMPLISHED	COST
9/21/2003	Completion of 4th Street Waterline Replacement	$98,671
1/2008 – 10/2008	Completion of Water Master Plan	Est. $25,000
	TOTAL COST	$123,671

9. **Provide an estimate of the cost necessary to complete the water development.**

DATE	WORK AND ACTIONS TO BE ACCOMPLISHED (Projected)	COST
2020 – 2050	Replacement of old waterlines (Copy of estimate enclosed)	$3,288,310
2015 – 2025	Larger pump for well – current pump 20HP Crown Vehicle Turbine Submersible	$75,000
2010 – 2050	Demands for use anticipated as population grows	$200.000
	TOTAL COST	$3,563,310

10. **Provide a summary of any events that delayed completion of the water development or application of water to full beneficial use, including other governmental requirements (if any), relating to the project that have significantly delayed completion of construction or perfection of the right.**

Since the issuance of Permit #G-15551 the population of Halsey has grown from 724 to 780, based upon the attached Portland State University Center for Population Research and Census. The average annual population was expected to increase 2.85 percent over the next twenty-five years, however due to economic downturns the projected increase has slowed considerably. Given the amount of development left to occur, the City's projected growth rate, the current demands for water, and the information reported in the Water System Master Plan, the City requests and extension until 2057 in order to fully make beneficial use of the water under this permit.

10. Continued

The replacement of the remaining old waterlines is extremely cost prohibitive for a small rural community of 780 residents. Grant funding has become limited compared to prior years, thus the financial impact for needed improvements to make full beneficial use of the water must be analyzed carefully. The City has reviewed bond possibilities, however the financial impact to the citizens would be substantial based upon the estimated costs for improvements. The City has not, but will probably look at low cost loan opportunities, such as those offered through the State Revolving Loan Fund. Other than that, the City will have to look at increasing water rates. In addition, the need to meet to the governmental regulation of developing a Water Master Plan, and ultimately a Water Management and Conservation Plan, although both extremely important simply adds to the financial burden of such a small community.

11-A. Provide an estimated demand projection and a description of the methodology used for the subject water right permit, considering the other water rights held by the municipal or quasi-municipal water use permit holder, and a date by which the water development is anticipated to be completed and water put to full beneficial use.

a) Inventory of Water Rights Held

Ground Water

Application/Permit Number	Certificate Number	Source	Use	Priority Date	Authorized Amount of Water	Max Amount of Beneficial Water Used to Date	Use Limitations
G13998/G12998	N/A	Well#2	Municipal	3/3/1995	.613 cfs	.501 cfs	Emergency Backup to Well #3
G15932/G15551	N.A	Well#3/ Well #2	Municipal	2/24/2003	1.0 cfs	.320 cfs	Cost/Population Growth

b) Water Supply contracts and/or Agreements

N/A

c) Current Peak Water Demands

The maximum amount of beneficial water used to date as reported under the application for an extension of time for permit #G-12998 is .501 cfs. However, Well #2, operating under this permit, is currently used as a backup to Well #3, therefore for the most part it

c) Current Peak Water Demands continued

it is not in use. The maximum beneficial use for Well #3 reported is .320 cfs which was for one 24 hour period in July, 2004 and is therefore reported as the maximum amount of beneficial water used to date, however this is not the normal current peak water demand. Per the attached information provided by our City Engineer, the current peak demand from all water rights currently (year 2007) is 440,550 gpd or 305.94 gpm which converts to a rate of .682 cfs. Therefore, the current remaining authorized amount of water for all water rights is .931 cfs. (1.613 cfs - .682 cfs = .931 cfs)

d) Projected Population

Between 2000 and 2007, the City of Halsey's population increased from 725 to 780 according to the Portland State University's Center for Population Research and Census. This calculates to an average annual growth rate of 1.05 percent, however the recent trend in the last two years, and the development noted in section "f" would suggest the average annual growth rate to be higher. A Linn-Benton Regional Analysis Study done by ECONorthwest in 1999 used population projections provided by the counties and listed a 1.25 percent average annual growth rate in the City of Halsey for the next twenty-years. The 1993 Water System Analysis for the City of Halsey used an average annual growth rate of 2.85 percent and the City's Sanitary Sewerage System Facilities Plan Update for the City of Halsey used an average annual growth rate of 2.31 percent. According to the Water System Master Plan, based upon the recent trend and the potential development in the planning stages, the City can estimate the average annual growth rate to be somewhere between 1.25 percent and 2.00 percent. The Master Plan selected an average annual growth rate for the City of Halsey to be 1.75 percent. At an annual average annual growth rate of 1.75 percent, it is estimated that that the population in the City by the year 2028 would be 1153 residents. The U.S. Census data lists an average of 2.58 people per household in Linn County, therefore it is anticipated that 136 new homes would be required. There are sufficient buildable lands in the Urban Growth Boundary to accommodate this growth. The Water System Master Plan states that the water system must be able to support a population of 1153 by the year 2028.

e) Future Peak Water Demands

The maximum peak hour demand (PHD) is projected in Table 5-8 of the Water System Master Plan. Based upon the projected demands it is anticipated that approximately .632 cfs will still be available under the Water Rights permit in the year 2028. The Water System Master Plan reports the water demand to be 634,150 gpd or 440.38 gpm by the year 2028 which equates to .981 cfs future peak demand for the 2028 year. In order to calculate the number of

e) Future Peak Water Demands continued

additional persons used in determining future peak water demand, the available authorized amount of water is divided by the peak hour demand. Therefore, the 408,471 gpd (.632 cfs) is divided by 550 gpcd. The 550 gpcd is located in Table 5-7 of the Water System Master Plan listing the Target Water Demand Design Values. This calculation equates to approximately 744 people. The total population for future peak demand calculations is based upon the estimated population of 1153 in the year 2028 plus the additional 744 people which totals 1897 persons. In order to determine the number of years it will take to realize the additional 744 persons the calculation is as follows:

$F=P*(1+i)n$ where F is the Future Value = 1897
P is the Present Value = 1153
I is the Average Annual Growth Rate = 1.75% or .0175
n is the number of years

$1897 = 1153*(1+0.0175)n$
$n = [\ln (1897/1153]/[\ln (1.0175)]$
n = 28.7 years or approximately 29 years

Therefore, the population of 1897 will be realized in the year 2057 (2028 + 29). Populations and water demand projections are based upon historical trends, application of comprehensive plan policies, and various other factors which can change over time. It should be noted that a major water customer to the system, or approval of an extensive land development, could substantially impact water demands in a small community of this size. Unless the City experiences a large increase in the average annual growth rate of 1.75 percent or an increase in the MMD water usage, Well #3 should adequately meet the anticipated future water needs. If a major development were to occur that required a need to increase the MDD than what is currently being projected a new well could become necessary and the City would have to look to secure additional water rights or determine if the existing water right certificate allows for additional water to be withdrawn. It could also be that the permit #G-12998 for Well #2 which is currently used as a backup to Well #3 would be fully developed for beneficial use.

f) Potential Growth

The City approved its first subdivision in 2001 of 39 homes, however there are still six lots either not developed or have homes with no occupants at this time. Around 2005 there was a 7-lot subdivision constructed in the southwest part of the City and in 2006, a small 13 lot subdivision was approved and 7 homes have been constructed there to date. In September, 2007 an annexation was approved that led to another 60+ homes approved as an addition to this subdivision in January, 2008. As part of this annexation, there are still a little more than 5 acres that will potentially add an additional 40+ homes to this subdivision. The economy has slowed the development of these subdivisions, however it is anticipated growth will pick up again in two to three years. Along with new

f) Potential Growth continued

residents there is hope that some type of industry or small commercial business will be attracted to the City as well. For this reason, the City requests an extended time to make full beneficial use of their water permit as the City grows and thus additional residents and businesses affect future water demands.

g) Completion Date

Again, due to the fact that the economy has been in a continual slowdown, and not expected to turn around anytime soon, it is anticipated that it will take the next forty-nine years to put the water to full beneficial use. The City requests an extension until October 1, 2057 in order to meet the water needs of the community.

12. Provide a summary of the future plan and schedule to complete construction and/or perfect the water right.

Although the City of Halsey's Capitalization Policy designates infrastructure to have a useful life of 50-60 years, it is intended that the City will make full beneficial use of its water system within 49 years. The following table is a proposed schedule to perfect the water right.

Approximate Date Range	Work and Actions to be Accomplished	Estimated Cost
2010-2020	Cost of Construction for Addition of a new 0.25 MG Storage Reservoir	$548,400
2010-2057	Demands for use due to growth	$200,000
2015-2020	Determine need for larger pump for Well#2 and Well#3 with assistance from the City Engineer	$20,000
2020-2025	Purchase of larger pump	$80,000
2020-2035	Work with City Engineer to develop a plan to replace old water lines	$25,000
2025-2040	Construction of East Side Waterline Improvements	$867,725
2035-2045	Construction of Northwest Side Waterline Improvements – Phase One	$462,450
2045–2050	Construction of Northwest Side Waterline Improvements – Phase Two	$302,900
2050-2057	Construction of Southwest Side Waterline Improvements	$865,925
	TOTAL COST	$3,192,400

13. **Justify the time requested to complete the project and/or apply the water to full beneficial Use.**

The replacement of the remaining old water lines is extremely cost prohibitive for a small rural community of 780 residents and unfortunately even low cost loans would have a huge impact financially on the citizens. It will take time to develop a fundamental plan to fund this type of improvement and financing options are addressed in the Water System Master Plan. In addition, the City needs to continue to grow in order to fully make beneficial use of the water system. The community had begun to grow however development has been slower than earlier projected. In fact, the City recently received the Portland Population Census Estimate and the July, 2008 population figure is the same as the July, 2007 figure which is 780 residents.

14. **Provide any other information you wish OWRD to consider while evaluating the Application For Extension of Time.**

The City has made every effort to comply with the conditions of this permit. City employees contributed considerable time to the Water Master Plan, however much of the expertise was be left to our City Engineers. Unfortunately, until the Water Master Plan was finished, and the need to rely on another agency, the Water Management and Conservation Plan could not be completed. In addition, the Water System Master Plan will assist the City in determining the future water needs, including peak demands, in order to make full beneficial use of its permit.

15. **N/A**

Ann Reece

From: Ann Reece
Sent: Friday, September 26, 2008 4:12 PM
To: judy@cityofhalsey.com
Cc: Ann Reece
Subject: Extension for Permit G-15551

Hi Judy,

I have received the extension application for the City. It needs a tiny bit more work, but instead of returning it, I got Andy's word that the City will provide the needed information as soon as you are all back from vacation. Thank you for all working so hard to get the extension filed timely.

I need some further clarification on 11A (c) Current peak demands, and (e) future peak demands. And this may have a bearing how long of an extension the City may want to request.

Peak demand needs to be based on rates (because you water rights are based on rates), rather than volume. The future peak demand was reported in MGD (volume). If you know how long the wells pumped to generate that much water, then we could determine the pumping rate from MGD. If you assume pumping 24/7 that would be a rate of 5.89 cfs, which exceeds your water rights, and probably exceeds the pumping capacities of the wells.

In looking at the July 2004 water use/pumping records, it appears the highest water use (207,000 gallons) occurred on July 9, and the water was from City Well 2 (OWRD calls this Well 3) pumped over a 12.8 hour period. If I have done my math correctly, and don't assume that I have, I find a peak use of 0.60 cfs (269 GPM) which is more than the .320 cfs reported on the inventory chart. Based on the City's historical increase in demand (9.2% every 5 years according to the extension application) then your peak day demand would increase from 0.6 cfs in 2008 to 1.216 cfs by the year 2048 (again, don't assume my math is correct).

The City has two water rights: Permit G-12998 for 0.613 cfs from Well 2 (which I understand is the back-up well).

Permit G-15551 for 1.0 cfs from Well 2 (the back-up well) and Well 3 (the primary well).

In order to "prove- up" (get water right certificates) on these two wells the City will need to demonstrate beneficial use of 1.613 cfs of water, being 0.613 from Well 2, and

1.0 cfs from Well 2 and/or Well 3. According to my calculations above, and using the City's historical increase in demand, by the year 2048 the City would reach 1.216 cfs - short of being able to show beneficial use of the entire 1.613. That leads me to believe your extension is not long enough. Requesting more than 50 years on an extension requires additional documentation that the demand projection is consistent with the amount and types of lands and uses proposed to be served by the permit holder. Assuming my calculations are reasonable, peak demand in 2058 (a 50 year extension) would be 1.45 cfs, considerably closer to the 1.613 cfs.

In summary, I believe it will be beneficial for the City to take another look at it's current and future peak demands, report the demands as a rate, and consider again the length of an extension that the City may require.

Permit G-12998 had a prior extension that gave the City until 2005 to show beneficial use of the 0.613 cfs from Well 2. If the City has not utilized this much water from this well by Oct. 1, ~~2005~~ 2025, than an extension will be needed on this permit providing the City wants to prove up on the entire rate of 0.613. Or, the City may submit a Claim of Beneficial use for the highest amount used prior to Oct. 1, 2005.

This was wrong in the data base. Extended to 2025

Please give me a call with any questions you may have regarding the content of this e-mail.

You may amend your extension application by e-mail.

Sincerely,

Ann Reece

Extensions Specialist
Water Resources Department
725 Summer St NE, Suite A
Salem, OR 97301-1266
503-986-0827 (tele)
503-986-0901 (fax)

City of Halsey

PO Box 10
773 West First Street
Halsey, OR 97348

Telephone (541) 369-2522
FAX: (541) 369-2521
TTY: (800) 735-2900

November 18, 2008

Ann Reece
Extensions Specialist
Water Resources Department
725 Summer St. N.E. Suite A
Salem, OR 97301-1266

Dear Ann:

First of all, on behalf of the City I thank you very much for your patience as well as the information you have provided in order for the City to complete an Application for Extension of Time for Municipal and Quasi-Municipal Water Use Permits. I have been in contact with the City Engineer, as well as Andy Ridinger, our public works employee and I think we have finally been able to estimate more accurate figures for current peak demand and future peak water demands. Based upon this information we estimate the full beneficial use of all water right permits will be realized in the year 2057. Therefore, the City requests a forty-nine year extension on Permit #G-15551.

Also, based upon our previous conversation, Andy and I think it best to remain with the .320 cfs earlier submitted as the maximum beneficial use to date. Other calculations seem to be near that amount and as I recall you said that we would need to base our Water Management and Conservation Plan on this figure and we would not be allowed to go over that until it was completed.

I thank you in advance for reviewing this information once again and will wait to hear from you regarding this revised application.

Sincerely,

Judy M. Cleeton

Judy M. Cleeton
City Administrator

July 9 207 x 1000 = 207,000 gallons pumped in 12.8 hours

16,171 gallons/hr ÷ 60 minutes = 269 gallons/minute = .6 cfs from primary well (Linn 51585)

July - 2004 - City of Halsey

150533 Linn13705 110861 #3 124.5 49.6 51.5 154243 177440

Date	Flow Meter Reading	GPD x100	Well #1 Hour Meter	Well #1 Hours/day	Well #2 Linn 51585 Hour Meter	Well #2 Hours/day	Dist Pump #1 Hour Meter	Dist Pump #1 Hours/day	Dist Pump #2 Hour Meter	Dist Pump #2 Hours/day	Dist Pump #3 Hour Meter	Dist Pump #3 Hours/day	PH	Chlorine Residual mg/L	Chlorine Conc. %	Metering Pump Jock Pump	Reservoir Level Feet	Influent	Total	Initial/Comments
1	150643	0.160	740.5		110935	7.4	125.0	0.1	49.8		51.6		7.12	0.31		154484	28.66	177580	0.140	GR
2	150766	0.123	740.5		111040	10.5	125.0		49.8		51.6			0.32		154721	29.65	177720	0.140	GR power surge
3	150843	0.077	740.5		111092	5.2	125.0		49.8		51.6			0.53		154947	29.58	177801	0.081	GR
4	150938	0.095	740.5		111152	6.0	125.0		49.8		51.6			0.29		155185	29.11	177893	0.092	GR
5	151022	0.084	740.5		111204	5.2	125.0		49.8		51.6			0.15		155434	28.68	177975	0.082	GR
6	151174	0.152	740.5		111317	11.3	125.0		49.8		51.6		7.07	0.36		155683	29.01	178151	0.176	GR Power surge
7	151303	0.129	740.5		111403	8.6	125.0		49.8		51.6			0.36		155921	28.85	178283	0.132	GR Power glitch — adjusting Jockey pump off.
8	151458	0.155	740.5		111516	11.8	127.4	2.4	49.9		54.1	2.5	7.03	0.35		156177	29.34	178456	0.173	GR
9	151665	0.207	740.5		111644	12.8	127.5		50.0	0.2	54.2			0.40		156206	28.57	178648	0.192	GR EC WTP pc — adjustment / new #5 alarm
10	151802	0.137	740.5		111745	10.1	127.6	0.1	50.0		54.2			0.38		156446	28.98	178801	0.153	GR
11	151902	0.100	740.5		111828	8.3	127.6		50.0		54.2			0.35		156705	29.51	178928	0.127	GR
12	152031	0.129	740.5		111901	7.3	127.6		50.0		54.2			0.36		156936	28.70	179039	0.111	GR
13	152180	0.149	740.5		112005	10.4	127.9	0.3	50.4	0.4	54.6	0.4	7.07	0.36		157144	28.68	179198	0.159	GR Filled CL2 — 20/40 CL2 pump
14	152241	0.061	740.5		112118	11.3	128.0	0.1	50.4		54.6			0.46		157383	28.54	179365	0.167	GR
15	152241	0	740.5		112233	11.5	129.0	1	50.4		54.6		7.03	0.38		157626	28.64	179536	0.171	GR Eff meter Down
16	152352	0.111	740.5		112362	12.9	128.1	0.9	50.4		54.6			0.42		157864	28.84	179724	0.188	GR
17	152503	0.151	740.5		112483	12.1	128.5	0.4	50.5	0.1	54.7	0.1		0.34		158098	29.21	179903	0.179	GR
18	152643	0.140	740.5		112583	10.0	128.5		50.5		54.7			0.16		158333	29.14	180048	0.145	GR
19	152769	0.126	740.5		112662	7.9	128.5		50.5		54.7			0.29		158583	28.69	180165	0.117	GR
20	152922	0.153	740.5		112781	1.19	128.5		50.5		54.7		7.09	0.38		158825	28.92	180334	0.174	GR
21	153087	0.165	754.0		112799	1.8	128.5		50.5		54.7			0.39		159064	28.78	180508	0.169	GR
22	153215	0.118	768.2	13.5	112799	0	128.6	0.1	50.6		54.9		7.15	0.33		159301	29.13	180656	0.148	GR
23	153380	0.165	768.2		112910	11	128.6		50.6		54.9			0.38		159541	28.58	180819	0.163	GR
24	153570	0.190	768.2		113056	14.6	128.6		50.6		54.8			0.39		159794	29.07	181035	0.216	GR
25	153734	0.164	768.2		113169	11.3	128.7	0.1	50.6		54.8			0.49		160034	28.70	181199	0.164	GR
26	153894	0.160	768.2		113296	12.7	128.7		50.6		54.9			0.45		160260	29.32	181383	0.184	GR
27	154073	0.179	768.2		113421	12.5	128.7		50.7		54.9		7.12	0.46		160497	28.59	181564	0.181	GR
28	154200	0.127	768.2		113519	9.8	129.6	0.3	50.7		54.9			0.31		160738	28.61	181706	0.142	GR
29	154371	0.171	768.2		113656	13.7	129.0		50.8		55.0		7.11	0.24		161005	29.06	181907	0.201	GR
30	154519	0.148	768.2		113762	10.6	129.0		50.8		55.0			0.42		161220	28.80	182062	0.155	GR
31	154653	0.134	768.2		113863	10.1	129.0		50.8		55.0			0.26		161456	29.08	182209	0.147	GR
Total		4.109		135		289.39		5.8		0.7		3							4.769	
Max.		0.207						2.4		0.4		2.5							0.081	
Min.		0.077						0.1		0.1		0.1							0.216	
Avg.		0.137				9.6		0.5		0.2		1							0.154	

Scott Kudlemyer

From: Judy Cleeton [judy@cityofhalsey.com]
Sent: Tuesday, April 21, 2009 9:43 AM
To: Scott Kudlemyer
Subject: RE: City of Halsey Permit Extension

Hi Scott

I have researched your questions and here is what I come up with:

The population figures are reported from two different sources. The 780 is from PSUPRC and the 801 is from the US Census Bureau.
Our City Engineers felt it was important to mention both sources, however the City only uses the PSU figures for any types of
questions or calculations.

The Current Peak Water Demand reported was from Well #3 only. It was calculated for one 24 hour period for the maximum
Beneficial water used to date. Well #2 serves at this time only as a back up well and is run only during sampling times and
When the reservoir gets low.

The reason we are asking for the 49 year extension is because the projected peak water demand is expected to
Be the 1.0 cfs in 2057 which is what is allowed under our existing permits.

I hope this helps. Some of the process for this permit extension has been a bit difficult so sorry for any confusion
On the information provided.

Judy Cleeton
City Administrator
City of Halsey
Phone No. (541) 369-2522
Fax No. (541) 369-2521
HAVE A HAPPY DAY!

From: Scott Kudlemyer [mailto:kudlemsb@wrd.state.or.us]
Sent: Monday, April 20, 2009 3:32 PM
To: Judy Cleeton
Subject: City of Halsey Permit Extension

Hi Judy

I've run into a couple of snags with the extension and need some more information. While the report is very complete, it left me extrapolating a lot of the data that I need and we prefer the Municipality provide the data rather than us extrapolating it, for accuracy and consistency's sake if nothing else. The data I need is as follows:

Population for 2008, some documents show 780, others show 801.

Current Peak Water Demand broken out by well, I.e. x.xx cfs from Well 2 and x.xx cfs from Well 3, reported as cfs or gpm.

Projected Peak Water Demand for 2057, reported as cfs or gpm.

There may be a couple of other pieces of data that I need as I progress but this will get me started.

I'm sorry to have to come to you for more data at this late date but it is unavoidable. If I can be of any assistance at all with regards to this matter please don't hesitate to call, the number listed below is my direct line.

Thanks very much

Scott Kudlemyer
Water Rights and Adjudication
Oregon Water Resources Dept.
725 Summer St. NE, Suite A
Salem, OR 97301-1266
(503) 986-0813

Municipal or Quasi-Municipal

Extension PFO Checklist for Water Use Permits

issued after November 2, 1998

(OAR 690-315-0010 through OAR 690-315-0060)

Application: G- 15932 Permit: G- 15551 Permit Amendment? No ☒ Yes ☐ T- ____ ☐ pending ☐ approved

Permit Holder's Name: City of Halsey Attn: Judy Cleeton

Permit Holder's Mailing Address: PO Box 10 Halsey OR. 97348 e-mail judy@cityofhalsey.com

Phone Number: 541-369-2522

POD Location: Township 14 S Range 4W Section 1 ¼¼ NESE

Drainage Basin: 2 County: Linn Watermaster District: 2 Watermaster: Michael Mattick

Date Permit was issued: ~~1/16/2004~~ SIC **Priority Date:** 2/24/2003 **Date of PN:** 9/30/2008

Source: Well 2 and Well 3 in Muddy Creek Basin

Use: ☒ Municipal ☐ Quasi Municipal ____

"Q": 1.0 cfs

Orig "A" Date: ____ **Orig "B" Date:** 10/1/____ **Orig "C" Date:** 10/1/2008

Extension request rec'd: 9/25/2008 **Last Authorized "B" Date:** 10/1/____ **Last Authorized "C" Date:** 10/1/2008

Request Number (1, 2, 3...): 1 **Proposed "B" Date:** 10/1/____ **Proposed C Date:** 10/1/2057

Conditions of Permit:

Condition Met?	Condition Not Met?	Permit Condition
☐	☒	WMCP (estimated completion date is 2009)
☒	☐	install meter prior to water use
☒	☐	plan to monitor and report imapct of water use
☒	☐	submit water use records annually
☐	☐	

Factors to consider in determining "Reasonable Diligence" [OAR 690-315-0040(3)]:

Now GW Review need as per D. French

Yes No

☒ ☐ Work was accomplished within the time allowed in the permit or previous extension

☐ ☒ Water right permit holder conformed with the permit or previous extension conditions

☒ ☐ Beneficial use made of the water during the permit or previous extension time limits

- Permit holder has beneficially used .320 ☒cfs☐gpm☐af Undeveloped portion 0.680 ☒cfs☐gpm☐af

☒ ☐ Financial investments were made toward developing the beneficial water use.

- Amount Invested to date: $123,671 Estimated Remaining Cost: $3,563,310

Has the applicant pursued perfection of the right in good faith and with reasonable diligence? Yes ☒ No ☐

Population 780 **As of (Year)** 2007 ☐**Growth** 1.75% ☐**Projected Population** 1897 **by (Year)** 2057 **Calculated? Yes** ☐

Peak Demand ~~0.320~~ .682 **cfs/gpm As of (Year)** 2007 ☐**Projected Peak Demand** ~~1.0~~ 1.613 **cfs/gpm by (Year)** 2057 **Calculated? Yes** ☐

Application: -_____ Permit: -_____ Township _____ Range _____ Section _____

Determination of the market and the present demand for water or power to be supplied:

Identify the closest surface water or localized water basin. Muddy creek Basin

Ground Water Permits: Is the POA located…

Surface Water Permits: Is the POD located…

Yes No

☐ ☒ above a state scenic waterway? Name Source: OWRD "Areas Above State Scenic Waterways" Map

☐ ☒ within a stream segment designated as a federal wild and scenic river? Source: www.rivers.gov/wildriverslist.html

☒ ☐ within a sensitive, threatened or endangered species area Source: "/gisdata/dev/projects/salmon/div33map.aml"

☐ ☒ within a critical or limited Ground Water Area? Name of area

☐ ☒ within a Withdrawn Area? Name of area

☒ ☐ in a waterbody listed on the DEQ Section 303(d) List of Water Quality Limited Areas? Date added to list 2004

☒ ☐ within an area ranking ☒low / ☐moderate / ☐high / ☐highest for stream flow restoration needs Source: OWRD "Streamflow Restoration Needs" Maps (by region)

Based on the written record, can the Department make a finding of "Good Cause" to approve the extension request?

Yes... "Good Cause" can be found. ☒ Approval of Extension Request

No ... "Good Cause" *cannot* be found. ☐ Denial of Extension Request

Conditions to be included in Extension PFO (if applicable)? Yes ☐ No ☐

(NOTE: Check the file record for documentation to add a condition(s) at the extension stage.)

☒ Max "Q" Development Limitations and Div. 86 Water Management and Conservation Plan

☐ Other: _____

Footnote regarding Claim of Beneficial Use. Choose the appropriate language below and insert as a footnote in the PFO:

☐ **COBU Requirement - Surface/Ground Water - on or prior to July 9, 1987**

"For permits applied for or received on or before July 9, 1987, upon complete development of the permit, you must notify the Department that the work has been completed and either: (1) Hire a water right examiner certified under ORS 537.798 to conduct a survey, the original to be submitted as required by the Water Resources Department, for issuance of a water right certificate; or (2) Continue to appropriate water under the water right permit until the Water Resources Department conducts a survey and issues a water right certificate under ORS 537.250 or 537.625."

☐ **COBU Requirement - Surface Water - post July 9, 1987**

"Pursuant to ORS 537.230(4), upon the completion of beneficial use of water allowed under the permit, the permit holder shall hire a certified water rights examiner to survey the appropriation. Within one year after the complete application of water to a beneficial use (or by the date allowed for the complete application of water to a beneficial use), the permit holder shall submit a map of the survey and the claim of beneficial use."

☒ **COBU Requirement - Ground Water - post July 9, 1987**

"Pursuant to ORS 537.630(4), upon the completion of beneficial use of water allowed under the permit, the permit holder shall hire a certified water rights examiner to survey the appropriation. Within one year after the complete application of water to a beneficial use (or by the date allowed for the complete application of water to a beneficial use), the permit holder shall submit a map of the survey and the claim of beneficial use."

NOTES:

These finding based on App rec'd 11/20/2008. sbk

Extension "PFO" Dates

Mailing / Issuance Date: _____ **Protest Deadline Date:** _____

Reviewer's Name: _____ **Date:** _____

STATE OF OREGON

COUNTY OF LINN

PERMIT TO APPROPRIATE THE PUBLIC WATERS

THIS PERMIT IS HEREBY ISSUED TO

CITY OF HALSEY
PO BOX 10 (541)466-5421
HALSEY, OR 97348

The specific limits and conditions of the use are listed below.

APPLICATION FILE NUMBER: G-15932 primary heaver well

SOURCE OF WATER: (Backup) WELL 2 AND WELL 3 IN MUDDY CREEK BASIN
Linn 13705 Linn 51585

PURPOSE OR USE: MUNICIPAL USE

MAXIMUM RATE: 1.0 CUBIC FOOT PER SECOND

PERIOD OF USE: YEAR ROUND

DATE OF PRIORITY: FEBRUARY 24, 2003

RECEIVED
SEP 25 2008
WATER RESOURCES DEPT
SALEM, OREGON

WELL LOCATIONS:

WELL 2: NE ¼ SE ¼ SECTION 1, T14S, R4W, W.M.; 44 DEGREES 22 MINUTES 50.948 SECONDS NORTH, 123 DEGREES 6 MINUTES 45.094 SECONDS WEST

WELL 3: NE ¼ SE ¼ SECTION 1, T14S, R4W, W.M.; 44 DEGREES 22 MINUTES 50.763 SECONDS NORTH, 123 DEGREES 6 MINUTES 43.934 SECONDS WEST

THE PLACE OF USE IS LOCATED AS FOLLOWS:

WITHIN THE SERVICE BOUNDARIES OF THE CITY OF HALSEY

Measurement, recording and reporting conditions:

B. 1. A. Before water use may begin under this permit, the permittee shall install a meter or other suitable measuring device as approved by the Director. The permittee shall maintain the meter or measuring device in good working order, shall keep a complete record of the amount of water used each month and shall submit a report which includes the recorded water use measurements to the Department annually or more frequently as may be required by the Director. Further, the Director may require the permittee to report general water use information,

including the place and nature of use of water under the permit.

B.2 ~~B.~~ The permittee shall allow the watermaster access to the meter or measuring device; provided however, where the meter or measuring device is located within a private structure, the watermaster shall request access upon reasonable notice.

B.3. The water user shall develop a plan to monitor and report the impact of water use under this permit on water levels within the aquifer that provides water to the permitted well(s). The plan shall be submitted to the Department within one year of the date the permit is issued and shall be subject to the approval of the Department. At a minimum, the plan shall include a program to periodically measure static water levels within the permitted well(s) or an adequate substitute such as water levels in nearby wells. The plan shall also stipulate a reference water level against which any water-level declines will be compared. If a well listed on this permit (or replacement well) displays a total static water-level decline of 25 or more feet over any period of years, as compared to the reference level, then the water user shall discontinue use of, or reduce the rate or volume of withdrawal from, the well(s). Such action shall be taken until the water level recovers to above the 25-foot decline level or until the Department determines, based on the water user's and/or the Department's data and analysis, that no action is necessary because the aquifer in question can sustain the observed declines without adversely impacting the resource or senior water rights. The water user shall in no instance allow excessive decline, as defined in Commission rules, to occur within the aquifer as a result of use under this permit.

A.1 Within 3 years of permit issuance, the permittee shall submit a Water Management and Conservation Plan consistent with OAR Chapter 690, Division 86. The Director may approve an extension of this time line to complete the required Water Management and Conservation Plan. The time line for submittal of a plan under this permit does not alter the time lines for submittal of a plan under any other order of the Department.

STANDARD CONDITIONS

If the number, location, or construction of any well deviates from that proposed in the permit application or permit conditions, the conclusions of the Proposed Final Order and Final Order under which this permit was granted may be revised, conditions may be appropriately revised, or this permit may not be valid.

If substantial interference with a senior water right occurs due to withdrawal of water from any well listed on this permit, then use of water from the well(s) shall be discontinued or reduced and/or the schedule of withdrawal shall be regulated until or unless the Department approves or implements an alternative administrative action to mitigate the interference. The Department encourages junior and senior appropriators to jointly develop plans to mitigate interferences.

The wells shall be constructed in accordance with the General Standards for the Construction and Maintenance of Water Wells in Oregon. The works shall be equipped with a usable access port, and may also include an air line and pressure gauge adequate to determine water level elevation in the well at all times.

The use shall conform to such reasonable rotation system as may be ordered by the proper state officer.

Prior to receiving a certificate of water right, the permit holder shall submit the results of a pump test meeting the department's standards, to the Water Resources Department. The Director may require water level or pump test results every ten years thereafter.

Failure to comply with any of the provisions of this permit may result in action including, but not limited to, restrictions on the use, civil penalties, or cancellation of the permit.

This permit is for the beneficial use of water without waste. The water user is advised that new regulations may require the use of best practical technologies or conservation practices to achieve this end.

By law, the land use associated with this water use must be in compliance with statewide land-use goals and any local acknowledged land-use plan.

The use of water shall be limited when it interferes with any prior surface or ground water rights.

The Director finds that the proposed use(s) of water described by this permit, as conditioned, will not impair or be detrimental to the public interest.

Complete application of the water to the use shall be made on or before October 1, 2008. If the water is not completely applied before this date, and the permittee wishes to continue development under the permit, the permittee must submit an application for extension of time, which may be approved based upon the merit of the application.

Within one year after complete application of water to the proposed use, the permittee shall submit a claim of beneficial use, which includes a map and report, prepared by a Certified Water Rights Examiner (CWRE).

Issued January 16, 2004

Paul R. Cleary, Director
Water Resources Department

REAL ESTATE TRANSACTIONS: Pursuant to ORS 537.330, in any transaction for the conveyance of real estate that includes any portion of the lands described in this permit, the seller of the real estate shall, upon accepting an offer to purchase that real estate, also inform the purchaser in writing whether any permit, transfer approval order, or certificate evidencing the water right is available and that the seller will deliver any permit, transfer approval order or certificate to the purchaser at closing, if the permit, transfer approval order or certificate is available.

CULTURAL RESOURCES PROTECTION LAWS: Permittees involved in ground-disturbing activities should be aware of federal and state cultural resources protection laws. ORS 358.920 prohibits the excavation, injury, destruction or alteration of an archeological site or object, or removal of archeological objects from public and private lands without an archeological permit issued by the State Historic Preservation Office. 16 USC 470, Section 106, National Historic Preservation Act of 1966 requires a federal agency, prior to any undertaking to take into account the effect of the undertaking that is included on or eligible for inclusion in the National Register. For further information, contact the State Historic Preservation Office at 503-378-4168, extension 232.

WORK COPY

Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem Oregon 97301-1266
(503) 986-0900
www.wrd.state.or.us

Application for Extension of Time for Municipal and Quasi-Municipal Water Use Permits

Make use of this form, *Application for Extension of Time for Municipal and Quasi-Municipal Water Use Permits*, only if the permit uses the word "Municipal" or "Quasi-municipal" in the description of the purpose or use to which water is to be applied.

TO THE DIRECTOR OF THE OREGON WATER RESOURCES DEPARTMENT

A separate extension application must be submitted for each permit as per OAR 690-315-0070(2). This page, with an original signature by the permit holder of record, must accompany any application for extension of time.

This application and a summary of review criteria and procedures that are generally applicable to this application are available at http://www.wrd.state.or.us/OWRD/PUBS/forms.shtml

I, City of Halsey — Judy Cleeton
NAME OF PERMIT HOLDER [*OAR 690-315-0070(1) and (3)(a)*] — NAME OF CONTACT

P O Box 10 — Halsey — OR — 97348
ADDRESS — CITY — STATE — ZIP

(541) 369-2522 — judy@cityofhalsey.com
PHONE — E-MAIL ADDRESS

the permit holder of: Application Number G - 15932

Permit Number G - 15551
[OAR 690-315-0070(3)(b)]

do hereby request that the time in which to:

☐ complete construction (of diversion/appropriation works and/or purchase and installation of the equipment necessary to the use of water), which time now expires on October 1, _____ , be extended to October 1, _____,

and/or the time in which to:

☒ apply water to full beneficial use under the terms and conditions of the permit, which time now expires on October 1, , be extended to October 1, 2057.
2008

I am the permittee, or have written authorization from the permittee, to apply for an extension of time under this permit. I certify that the information I have provided in this application is true and correct to the best of my knowledge.

Judy M. Cleeton — 11/18/2008
Signature — Date

City of Halsey Application for Extension of Time for A Water Right Permit

1. Halsey Check#11808 in the amount of $350.00 previously submitted.

2. For Quasi-Municipal water use permit holders, provide evidence of the actions taken to begin actual construction on the project if required under the applicable statue.

Begin Date December 17, 1997 Construction of Well #3 began.

The original permit application for Well #3 was in November, 1996 with construction to begin by November 27, 1997. Construction did not begin until December 17, 1997 due largely to delays with the contractor which ultimately led to litigation. The City reapplied for a permit on February 21, 2003 based upon the recommendation from the Water Resources Department and Well #2 was added to the application in order to increase flexibility in the water distribution system.

3. N/A

4. Provide evidence of actions taken to develop the water right permit within the permitted time period and/or within the time period of the previous extension.

INSERT DATES	WORK ACCOMPLISHED BEFORE PERMIT WAS ISSUED	COST
4/16/1998	Construction of well completed Well 3	$ 60, 178
3/2003	Installation of water meter and water use impact plan	$109, 109

INSERT DATES	ALL WORK AND ACTIONS ACCOMPLISHED DURING PERMITTED TIME PERIOD	COST
	The permit was signed	
1/16/2004	Signed by Water Resources Department	
10/1/2008	The permit specified complete application of water to the use shall be made ("C-Date")	

INSERT DATES	ALL WORK AND ACTIONS ACCOMPLISHED AFTER PERMIT "C-DATE" AND PRIOR TO ANY EXTENSION OF TIME REQUEST	COST
9/21/2003	Completion of 4th Street Waterline Replacement	$98,671 Before Permit

TOTAL COST TO DATE: $267,868

5. **Provide evidence of compliance with conditions contained in the original permit, and any previous extension(s), or the reason the condition was not satisfied.**

A.

1. A Water Management and Conservation Plan was to be submitted within 3 years of the permit issuance, however that has not been completed. The City has been working to complete a Water Master Plan which is also required by your Department. Although City employees have devoted many hours to this project, the City has been at the mercy of its City Engineers to bring this plan to completion. The City Engineer finally completed the Water System Master Plan on September 24, 2008 and has submitted it to Tom Charbonneau. The City anticipates with the completion of the Water System Master Plan that the Water Management and Conservation Plan could be finished within a year of that date.

B. Measurement, recording and reporting conditions have been met as required by the permit.

1. A meter has been installed at the water plant and records the amount of water used each day. Reports of the recorded water use measurements are reported to the Department annually as required.
2. The meter is accessible to the watermaster with reasonable notice as it is confined in a locked area.
3. A plan to monitor and report the impact of water use on water levels within the aquifer that provides water to the permitted wells was completed in March, 2003 and has been approved by your Department. A copy of the latest Water-Use Impact Report is included.

6. **Provide evidence of the maximum rate, or duty if applicable, of water diverted for beneficial use under the permit and/or prior extensions of time, if any, made to date.**

Maximum instantaneous rate used to date = .320 cfs (cubic feet per second)
A copy of the production for July 2004, which is maximum rate of water diverted for beneficial use under this permit, is enclosed to support this information.

7. Provide an estimate of the population served under this permit and a description of the Methodology used to make the estimate.

The estimated current population supplied water by the City of Halsey is 780. The estimate is derived from the Portland State University Population Research Center from the July 1, 2007 report. A copy of the report is enclosed.

8. Provide a description of the financial expenditures made toward completion of the water development under this permit.

DATE	WORK OR ACTIONS ACCOMPLISHED	COST
9/21/2003	Completion of 4th Street Waterline Replacement	$98,671
1/2008 – 10/2008	Completion of Water Master Plan	Est. $25,000
	TOTAL COST	$123,671

9. Provide an estimate of the cost necessary to complete the water development.

DATE	WORK AND ACTIONS TO BE ACCOMPLISHED (Projected)	COST
2020 – 2050	Replacement of old waterlines (Copy of estimate enclosed)	$3,288,310
2015 – 2025	Larger pump for well – current pump 20HP Crown Vehicle Turbine Submersible	$75,000
2010 – 2050	Demands for use anticipated as population grows	$200.000
	TOTAL COST	$3,563,310

10. Provide a summary of any events that delayed completion of the water development or application of water to full beneficial use, including other governmental requirements (if any), relating to the project that have significantly delayed completion of construction or perfection of the right.

Since the issuance of Permit #G-15551 the population of Halsey has grown from 724 to 780, based upon the attached Portland State University Center for Population Research and Census. The average annual population was expected to increase 2.85 percent over the next twenty-five years, however due to economic downturns the projected increase has slowed considerably. Given the amount of development left to occur, the City's projected growth rate, the current demands for water, and the information reported in the Water System Master Plan, the City requests and extension until 2057 in order to fully make beneficial use of the water under this permit.

10. Continued

The replacement of the remaining old waterlines is extremely cost prohibitive for a small rural community of 780 residents. Grant funding has become limited compared to prior years, thus the financial impact for needed improvements to make full beneficial use of the water must be analyzed carefully. The City has reviewed bond possibilities, however the financial impact to the citizens would be substantial based upon the estimated costs for improvements. The City has not, but will probably look at low cost loan opportunities, such as those offered through the State Revolving Loan Fund. Other than that, the City will have to look at increasing water rates. In addition, the need to meet to the governmental regulation of developing a Water Master Plan, and ultimately a Water Management and Conservation Plan, although both extremely important simply adds to the financial burden of such a small community.

11-A. Provide an estimated demand projection and a description of the methodology used for the subject water right permit, considering the other water rights held by the municipal or quasi-municipal water use permit holder, and a date by which the water development is anticipated to be completed and water put to full beneficial use.

a) Inventory of Water Rights Held

Ground Water

Application/Permit Number	Certificate Number	Source	Use	Priority Date	Authorized Amount of Water	Max Amount of Beneficial Water Used to Date	Use Limitations
G13998/G12998	N/A	Well#2	Municipal	3/3/1995	.613 cfs	.501 cfs .112 cfs Remaining	Emergency Backup to Well #3
G15932/G15551	N.A	Well#3/ Well #2	Municipal	2/24/2003	1.0 cfs	.320 cfs .680 Remaining	Cost/Population Growth

.792 Total cfs remaining

b) Water Supply contracts and/or Agreements

N/A

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SALEM, OREGON

c) Current Peak Water Demands

The maximum amount of beneficial water used to date as reported under the application for an extension of time for permit #G-12998 is .501 cfs. However, Well #2, operating under this permit, is currently used as a backup to Well #3, therefore for the most part it

c) Current Peak Water Demands continued

it is not in use. The maximum beneficial use for Well #3 reported is .320 cfs which was for one 24 hour period in July, 2004 and is therefore reported as the maximum amount of beneficial water used to date, however this is not the normal current peak water demand. Per the attached information provided by our City Engineer, the current peak demand from all water rights currently (year 2007) is 440,550 gpd or 305.94 gpm which converts to a rate of .682 cfs. Therefore, the current remaining authorized amount of water for all water rights is .931 cfs. (1.613 cfs - .682 cfs = .931 cfs)

.362 cfs well 2
.320 cfs well 3
.792 cfs
?

d) Projected Population

Between 2000 and 2007, the City of Halsey's population increased from 725 to 780 according to the Portland State University's Center for Population Research and Census. This calculates to an average annual growth rate of 1.05 percent, however the recent trend in the last two years, and the development noted in section "f" would suggest the average annual growth rate to be higher. A Linn-Benton Regional Analysis Study done by ECONorthwest in 1999 used population projections provided by the counties and listed a 1.25 percent average annual growth rate in the City of Halsey for the next twenty-years. The 1993 Water System Analysis for the City of Halsey used an average annual growth rate of 2.85 percent and the City's Sanitary Sewerage System Facilities Plan Update for the City of Halsey used an average annual growth rate of 2.31 percent. According to the Water System Master Plan, based upon the recent trend and the potential development in the planning stages, the City can estimate the average annual growth rate to be somewhere between 1.25 percent and 2.00 percent. The Master Plan selected an average annual growth rate for the City of Halsey to be 1.75 percent. At an annual average annual growth rate of 1.75 percent, it is estimated that that the population in the City by the year 2028 would be 1153 residents. The U.S. Census data lists an average of 2.58 people per household in Linn County, therefore it is anticipated that 136 new homes would be required. There are sufficient buildable lands in the Urban Growth Boundary to accommodate this growth. The Water System Master Plan states that the water system must be able to support a population of 1153 by the year 2028.

e) Future Peak Water Demands

The maximum peak hour demand (PHD) is projected in Table 5-8 of the Water System Master Plan. Based upon the projected demands it is anticipated that approximately .632 cfs will still be available under the Water Rights permit in the year 2028. The Water System Master Plan reports the water demand to be 634,150 gpd or 440.38 gpm by the year 2028 which equates to .981 cfs future peak demand for the 2028 year. In order to calculate the number of

e) Future Peak Water Demands continued

additional persons used in determining future peak water demand, the available authorized amount of water is divided by the peak hour demand. Therefore, the 408,471 gpd (.632 cfs) is divided by 550 gpcd. The 550 gpcd is located in Table 5-7 of the Water System Master Plan listing the Target Water Demand Design Values. This calculation equates to approximately 744 people. The total population for future peak demand calculations is based upon the estimated population of 1153 in the year 2028 plus the additional 744 people which totals 1897 persons. In order to determine the number of years it will take to realize the additional 744 persons the calculation is as follows:

$F=P*(1+i)n$ where F is the Future Value = 1897
P is the Present Value = 1153
I is the Average Annual Growth Rate = 1.75% or .0175
n is the number of years

$1897 = 1153*(1+0.0175)n$
$n = [\ln (1897/1153]/[\ln (1.0175)]$
n = 28.7 years or approximately 29 years

Therefore, the population of 1897 will be realized in the year 2057 (2028 + 29). Populations and water demand projections are based upon historical trends, application of comprehensive plan policies, and various other factors which can change over time. It should be noted that a major water customer to the system, or approval of an extensive land development, could substantially impact water demands in a small community of this size. Unless the City experiences a large increase in the average annual growth rate of 1.75 percent or an increase in the MMD water usage, Well #3 should adequately meet the anticipated future water needs. If a major development were to occur that required a need to increase the MDD than what is currently being projected a new well could become necessary and the City would have to look to secure additional water rights or determine if the existing water right certificate allows for additional water to be withdrawn. It could also be that the permit #G-12998 for Well #2 which is currently used as a backup to Well #3 would be fully developed for beneficial use.

f) Potential Growth

The City approved its first subdivision in 2001 of 39 homes, however there are still six lots either not developed or have homes with no occupants at this time. Around 2005 there was a 7-lot subdivision constructed in the southwest part of the City and in 2006, a small 13 lot subdivision was approved and 7 homes have been constructed there to date. In September, 2007 an annexation was approved that led to another 60+ homes approved as an addition to this subdivision in January, 2008. As part of this annexation, there are still a little more than 5 acres that will potentially add an additional 40+ homes to this subdivision. The economy has slowed the development of these subdivisions, however it is anticipated growth will pick up again in two to three years. Along with new

f) Potential Growth continued

residents there is hope that some type of industry or small commercial business will be attracted to the City as well. For this reason, the City requests an extended time to make full beneficial use of their water permit as the City grows and thus additional residents and businesses affect future water demands.

g) Completion Date

Again, due to the fact that the economy has been in a continual slowdown, and not expected to turn around anytime soon, it is anticipated that it will take the next forty-nine years to put the water to full beneficial use. The City requests an extension until October 1, 2057 in order to meet the water needs of the community.

12. Provide a summary of the future plan and schedule to complete construction and/or perfect the water right.

Although the City of Halsey's Capitalization Policy designates infrastructure to have a useful life of 50-60 years, it is intended that the City will make full beneficial use of its water system within 49 years. The following table is a proposed schedule to perfect the water right.

Approximate Date Range	Work and Actions to be Accomplished	Estimated Cost
2010-2020	Cost of Construction for Addition of a new 0.25 MG Storage Reservoir	$548,400
2010-2057	Demands for use due to growth	$200,000
2015-2020	Determine need for larger pump for Well#2 and Well#3 with assistance from the City Engineer	$20,000
2020-2025	Purchase of larger pump	$80,000
2020-2035	Work with City Engineer to develop a plan to replace old water lines	$25,000
2025-2040	Construction of East Side Waterline Improvements	$867,725
2035-2045	Construction of Northwest Side Waterline Improvements – Phase One	$462,450
2045–2050	Construction of Northwest Side Waterline Improvements – Phase Two	$302,900
2050-2057	Construction of Southwest Side Waterline Improvements	$865,925
	TOTAL COST	$3,192,400

Section 5.1 Description and Definitions

Water demand is the quantity of water delivered to the system over a period of time to meet the needs of consumers and to supply the needs for fire fighting. Virtually all water systems have some amount of leakage in the system that cannot be economically removed and total demand includes some leakage. Demand varies seasonally with the lowest usage in winter months and the highest usage during the summer months. Variations in demand also occur with respect to time of day with higher usage occurring during the morning and early evening periods and lower usage during the night time hours.

The objective of this section is to determine the current water demand characteristics and to project future demand requirements that will establish system component adequacy and sizing needs. Water demand is described below in the following terminology:

- *Average Annual Demand* (AAD) – The total volume of water delivered to the system in a full year expressed in gallons. When demand fluctuates up and down over several years, an average is used.

- *Average Daily Demand* (ADD) – The total volume of water delivered to the system over a year divided by 365 days. The average use in a single day expressed in gallons per day.

- *Maximum Daily Demand* (MMD) – The gallons per day average during the month with the highest water demand. The highest monthly usage typically occurs during the summer months.

- *Peak Weekly Demand* (PWD) – The greatest 7 day average demand that occurs in a year. Expressed in gallons per day.

- *Maximum Day Demand* (MDD) – The largest volume of water delivered to the system in a single day expressed in gallons per day. The water supply, treatment plant and transmission lines should be designed to handle the maximum day demand.

- *Peak Hourly Demand* (PHD) – The maximum volume of water delivered to the system in a single hour expressed in gallons per day. Distribution systems should be designed to adequately handle the peak hourly demand. During this peak usage, storage reservoirs supply the demand in excess of the maximum day demand.

Demands described above are expressed in gallons per day (gpd). The demands can be divided by the population served to come up with a demand per person per day or demand per capita per day which is expressed in gallons per capita per day (gpcd). Per capita demands can be multiplied by future population projections to determine future water demands.

Section 5.2 Current Water Demand

Water Sales (Consumption)

The analysis of water consumption is based on a monthly sales record beginning January 2002 and ending December 2007. The water sales records allow for the calculation of Equivalent Dwelling Units (EDU) and provide a measurement of unaccounted water (water loss) when compared with Water Treatment Plan (WTP) production records. In the City of Halsey, water is consumed by residential, commercial and public users. All known connections are metered and meter services are read once a month. Currently, as of December 2007, there are 332 water meters in the water system.

Table 5-1 shows a summary of the monthly water consumption between 2002 and 2007 for the City of Halsey. This table breaks down the total monthly water consumption to residential, commercial, and public usage. This table also lists the number of residential and commercial customers.

Table 5-1 Monthly Water Consumption Summary between Year 2002 and Year 2007

Year 2002							
Month	Commercial (gallons)	Residential (gallons)	Park/ City Hall (gallons)	Total (gallons)	Number of Commercial Customers	Number of Residential Customers	Total of Customers
January	378,020	1,139,800	0	1,517,820	33	237	270
February	312,280	1,053,088	0	1,365,368	35	235	270
March	279,820	1,108,510	0	1,388,330	35	237	272
April	298,440	1,270,202	0	1,568,642	36	248	284
May	378,213	1,581,812	0	1,960,025	41	258	299
June	467,991	1,869,700	0	2,337,691	42	258	300
July	610,871	3,139,950	0	3,750,821	42	261	303
August	610,871	3,016,550	0	3,627,421	42	263	305
September	731,471	1,751,191	0	2,482,662	42	255	297
October	630,100	1,446,782	0	2,076,882	43	255	298
November	322,232	1,047,634	0	1,369,866	42	249	291
December	329,194	1,170,914	0	1,500,108	42	240	282
Total	**5,349,503**	**19,596,133**	**0**	**24,945,636**	**475**	**2,996**	**3,471**
Average	**445,792**	**1,633,011**	**0**	**2,078,803**	**40**	**250**	**289**

Year 2003							
Month	Commercial (gallons)	Residential (gallons)	Park/ City Hall (gallons)	Total (gallons)	Number of Commercial Customers	Number of Residential Customers	Total of Customers
January	360,451	1,264,723	0	1,625,174	41	244	285
February	394,060	988,684	10,080	1,392,824	41	239	280
March	327,850	1,070,680	10,510	1,409,040	40	240	280
April	327,760	1,185,774	5,120	1,563,654	39	236	275
May	400,660	1,218,700	15,160	1,634,520	42	243	285
June	428,810	1,819,470	414,180	2,662,460	41	244	285
July	806,539	3,065,130	505,510	4,377,179	42	241	283
August	427,330	2,537,550	462,570	3,427,450	42	241	283
September	434,380	1,901,090	261,000	2,596,470	42	240	282
October	375,490	1,123,900	6,560	1,505,950	45	248	293
November	402,760	840,540	3,150	1,246,450	40	238	278
December	308,840	1,210,210	3,200	1,522,250	40	235	275
Total	**5,039,930**	**18,226,451**	**1,697,040**	**24,963,421**	**495**	**2,889**	**3,384**
Average	**419,994**	**1,518,871**	**141,420**	**2,080,285**	**41**	**241**	**282**

Year 2004							
January	686,000	1,225,760	39,910	1,951,670	39	234	273
February	296,230	944,000	10,190	1,250,420	39	234	273
March	334,250	1,150,920	18,960	1,504,130	20	232	252
April	327,230	1,100,990	6,390	1,434,610	40	234	274
May	327,330	1,110,640	33,210	1,471,180	40	231	271
June	323,760	1,742,030	12,650	2,078,440	41	236	277
July	761,080	2,428,490	22,130	3,211,700	41	236	277
August	772,280	2,300,070	377,940	3,450,290	42	237	279
September	387,160	1,212,870	128,710	1,728,740	43	237	280
October	454,400	1,080,870	3,220	1,538,490	47	249	296
November	455,790	1,257,180	6,830	1,719,800	43	236	279
December	367,120	1,156,660	4,280	1,528,060	42	234	276
Total	**5,492,630**	**16,710,480**	**664,420**	**22,867,530**	**477**	**2,830**	**3,307**
Average	**457,719**	**1,392,540**	**55,368**	**1,905,627**	**40**	**236**	**276**

Year 2005							
January	387,470	1,056,190	5,970	1,449,630	41	234	275
February	483,490	978,013	2,240	1,463,743	41	235	276
March	411,950	1,197,817	2,690	1,612,457	41	234	275
April	410,280	1,027,880	7,220	1,445,380	42	236	278
May	376,530	1,012,320	5,740	1,394,590	41	235	276
June	493,250	1,414,470	17,530	1,925,250	43	241	284
July	295,280	1,902,500	357,620	2,555,400	42	240	282
August	813,410	2,507,880	602,286	3,923,576	42	238	280
September	410,950	1,450,790	126,984	1,988,724	42	241	283
October	355,540	1,046,975	77,910	1,480,425	44	254	298
November	373,940	1,128,115	10,830	1,512,885	41	242	283
December	393,990	1,084,510	10,820	1,489,320	42	240	282
Total	**5,206,080**	**15,807,460**	**1,227,840**	**22,241,380**	**502**	**2,870**	**3,372**
Average	**433,840**	**1,317,288**	**102,320**	**1,853,448**	**42**	**239**	**281**

Year 2006							
Month	Commercial (gallons)	Residential (gallons)	Park/ City Hall (gallons)	Total (gallons)	Number of Commercial Customers	Number of Residential Customers	Total of Customers
January	383,840	1,156,180	1,860	1,541,880	40	240	280
February	414,910	969,660	7,180	1,391,750	39	244	283
March	370,330	1,170,520	2,590	1,543,440	39	239	278
April	391,600	1,018,660	11,340	1,421,600	38	245	283
May	492,310	1,579,821	11,390	2,083,521	38	249	287
June	420,390	1,794,258	238,890	2,453,538	38	253	291
July	429,540	2,606,975	483,750	3,520,265	38	253	291
August	713,070	2,808,211	624,120	4,145,401	38	259	297
September	449,970	1,687,765	282,230	2,419,965	41	258	299
October	509,030	1,464,116	4,590	1,977,736	47	273	320
November	383,780	1,173,221	1,900	1,558,901	40	259	299
December	367,410	1,093,558	1,990	1,462,958	40	259	299
Total	**5,326,180**	**18,522,945**	**1,671,830**	**25,520,955**	**476**	**3,031**	**3,507**
Average	**443,848**	**1,543,579**	**139,319**	**2,126,746**	**40**	**252**	**292**

Year 2007							
January	433,170	1,286,361	2,290	1,721,821	41	258	299
February	389,310	1,055,665	2,810	1,447,785	40	259	299
March	370,310	1,140,012	2,550	1,512,872	41	259	300
April	345,070	1,111,339	3,550	1,459,959	41	267	308
May	424,480	1,656,904	142,010	2,223,394	42	275	317
June	408,050	1,981,886	311,560	2,701,496	42	275	317
July	445,370	2,788,034	460,030	3,693,434	43	279	322
August	490,260	2,647,027	362,410	3,499,697	42	285	327
September	425,390	1,908,165	47,150	2,380,705	42	286	328
October	450,480	1,484,805	2,490	1,197,775	46	299	345
November	368,280	1,260,811	1,900	1,630,991	42	286	328
December	361,810	1,193,627	2,000	1,557,437	42	285	327
Total	**4,911,980**	**19,514,636**	**1,340,750**	**25,767,366**	**504**	**3,313**	**3,817**
Average	**409,332**	**1,626,220**	**111,729**	**2,147,281**	**42**	**276**	**318**

As shown in Table 5-1, the average annual consumption and the average number of residential customers have been up and down from the start of 2002 to the end of 2007. Over this period, the average monthly water consumption is 2,032,032 gallons per month or an equivalent 67,807-gpd. Monthly water consumption ranged from a low of 1,246,450 gallons in November 2003 to a high of 4,377,179 gallons in July 2003. The highest monthly consumption usage occurs during the months of July and August and the months of relatively low usage are February and March.

The average annual consumption increase between 2002 to 2007 is 0.54 percent. This small increase is due to the small decrease in consumption in 2004 and 2005. If we look at the previous 3 year average annual consumption, it shows an increase of 5.03 percent per year. This can be attributed to the recent increase in development the last few years.

In a 6 year average, the City of Halsey had an average of 249 residential meter services consuming an average of 199 gpd per meter or 6,045 gallons per month per meter. With an estimate of 2.58 persons per household (Census data for Linn County), the residential consumption usage is 77 gallons per persons per day (gpcd). This per residential capita consumption usage is below other municipalities of similar population and size of the City of Halsey. The average residential per capita consumption in Oregon is approximately 111 gpcd[1]. ([1] AWWA Water Distribution Systems Handbook, Larry W. Mays, 2000. Table 3.1)

Most of the water that is consumed in the City of Halsey is by residential customers at 75.7 percent. The second largest portion is by commercial customers at 19.1 percent. The remainder is by public use (Parks and City Hall) at 5.2 percent.

Equivalent Dwelling Units (EDU)

A dwelling unit is defined as on typical single family residential dwelling. Non-residential users (industrial, commercial, public facility, etc.) can be described as a number of equivalent residential units based on their water consumption compared to the construction of a residential unit. The number of equivalent dwelling units (EDU's) that a commercial or other non-residential user has can be used as a basis for rate structure. Capacity of a system can be defined based on the ability to serve a certain number of EDU's and future checks can be made on system capacity at any time regardless of the growth patterns that have occurred in residential, commercial, or industrial users.

Based on the water consumption records, it was determined that the average single-family dwelling in the City of Halsey uses approximately 6,045 gallons of water per month or 199 gpd. This shows that the average consumption per EDU is 199 gpd. This should not be confused with demand per EDU, which may be higher due to system losses and other unaccounted flows. Consumption per single EDU can be used to calculate the number of EDUs for other users based on average water consumption. Table 5-2 summarizes the City of Halsey Water System EDUs.

Table 5-2 City of Halsey Water System EDUs

User	Gallons per Year	Gallons per Day	Number of EDUs
Residential	18,063,018	49,488	249
Commercial	5,221,051	14,304	72.0
Public Uses	1,100,313	3,015	15.2
Total	**24,384,382**	**66,807**	**336.2 (336)**

For a 6-year period of January 2002 through December 2007, an equivalent of 336 EDUs used water from the system.

Water Treatment Plant Production

The volume of water pumped from the groundwater wells and treated by the WTP indicates the system demand. System leakage, distribution flushing, fire hydrant testing, County unmetered usage, Fire Department unmetered usage and other unaccounted water can cause production quantities higher than consumption quantities, however, portions of these unaccounted flows that cannot be eliminated must still be provided for in the system.

Plant production records were obtained from the City of Halsey for January 2000 through December 2007. Table 5-3 summarizes the City of Halsey Water Plant Production. This table only summarizes the plant production between January 2002 to December 2007.

Table 5-3 City of Halsey Water Plant Production Summary

Year 2002						
Month	**Total Influent-Pumped from Wells (gallons)**	**Average Daily Influent-Pumped from Wells (gpd)**	**Total Effluent-Pumped to Distribution System (gallons)**	**Average Daily Effluent-Pumped to Distribution System (gpd)**	**Maximum Day Demand from City Records for Influent (gpd)**	**Maximum Day Demand from City Records for Effluent (gpd)**
January	2,283,000	74,000	1,409,000	56,000	150,000	74,000
February	2,903,000	104,000	2,022,000	72,000	138,000	108,000
March	2,250,000	72,000	2,248,000	72,000	157,000	79,000
April	2,165,000	72,000	1,473,000	49,000	226,000	64,000
May	2,090,000	67,000	1,674,000	54,000	170,000	76,000
June	3,139,000	104,000	2,541,000	84,000	251,000	179,000
July	4,428,000	143,000	4,070,000	131,000	240,000	226,000
August	4,404,000	142,000	4,029,000	130,000	316,000	196,000
September	2,956,000	98,000	2,972,000	99,000	212,000	188,000
October	2,388,000	77,000	2,061,000	66,000	96,000	100,000
November	2,682,000	89,000	1,778,000	59,000	122,000	100,000
December	1,901,000	61,000	1,540,000	50,000	107,000	101,000
	33,589,000	**91,917**	**27,817,000**	**76,833**		
Year 2003						
January	1,923,000	62,000	1,373,000	44,000	111,000	61,000
February	1,676,000	54,000	1,232,000	44,000	82,000	61,000
March	1,835,000	59,000	1,246,000	40,000	109,000	58,000
April	1,775,000	59,000	1,316,000	44,000	94,000	110,000
May	2,194,000	71,000	1,785,000	57,000	139,000	124,000
June	3,454,000	115,000	3,192,000	106,000	182,000	161,000
July	5,062,000	163,000	4,802,000	155,000	246,000	215,000
August	4,482,000	144,000	4,138,000	133,000	201,000	177,000
September	2,987,000	99,000	2,678,000	89,000	158,000	144,000
October	2,122,000	73,000	1,505,000	51,000	277,000	75,000
November	1,983,000	66,000	1,697,000	56,000	139,000	129,000
December	1,847,000	59,000	1,327,000	42,000	83,000	64,000
	31,340,000	**85,333**	**26,291,000**	**71,750**		

Year 2004						
Month	Total Influent-Pumped from Wells (gallons)	Average Daily Influent-Pumped from Wells (gpd)	Total Effluent-Pumped to Distribution System (gallons)	Average Daily Effluent-Pumped to Distribution System (gpd)	Maximum Day Demand from City Records for Influent (gpd)	Maximum Day Demand from City Records for Effluent (gpd)
January	2,011,000	65,000	1,704,000	55,000	124,000	131,000
February	1,788,000	62,000	1,521,000	52,000	85,000	62,000
March	1,883,000	61,000	1,665,000	54,000	89,000	88,000
May	2,245,000	72,000	1,816,000	58,000	114,000	99,000
June	2,855,000	95,000	2,600,000	86,000	165,000	149,000
July	4,769,000	154,000	4,109,000	137,000	216,000	207,000
August	3,858,000	124,000	3,525,000	113,000	191,000	164,000
September	2,317,000	77,000	2,057,000	68,000	132,000	107,000
October	2,157,000	69,000	1,828,000	59,000	117,000	70,000
November	2,000,000	66,000	1,724,000	57,000	97,000	76,000
December	2,008,000	65,000	1,791,000	58,000	88,000	74,000
	27,891,000	**75,833**	**24,340,000**	**66,417**		

Year 2005						
January	1,983,000	64,000	1,731,000	56,000	102,000	65,000
February	1,866,000	66,000	1,649,000	59,000	137,000	118,000
March	1,866,000	60,000	1,703,000	55,000	94,000	69,000
April	2,045,000	68,000	1,690,000	56,000	173,000	66,000
May	2,051,000	66,000	1,794,000	58,000	90,000	79,000
June	2,176,000	72,000	1,908,000	63,000	128,000	103,000
July	3,452,000	111,000	2,954,000	98,000	164,000	145,000
August	3,918,000	128,000	3,656,000	118,000	184,000	166,000
September	2,596,000	86,000	2,258,000	75,000	153,000	129,000
October	2,197,000	71,000	1,845,000	59,000	170,000	154,000
November	1,690,000	56,000	1,562,000	52,000	91,000	79,000
December	1,926,000	62,000	1,875,000	60,000	89,000	88,000
	27,766,000	**75,833**	**24,625,000**	**67,417**		

Year 2006						
January	1,774,000	57,000	1,572,000	50,000	86,000	62,000
February	1,733,000	61,000	1,499,000	53,000	91,000	71,000
March	1,912,000	61,000	1,685,000	54,000	89,000	92,000
April	1,927,000	64,000	1,635,000	54,000	97,000	80,000
May	2,389,000	77,000	1,859,000	59,000	146,000	120,000
June	2,772,000	92,000	2,033,000	67,000	182,000	174,000
July	4,503,000	145,000	3,733,000	120,000	228,000	205,000
August	4,987,000	160,000	4,412,000	142,000	248,000	206,000
September	3,688,000	123,000	3,217,000	107,000	205,000	175,000
October	2,136,000	68,000	1,914,000	62,000	126,000	84,000
November	2,026,000	67,000	1,775,000	59,000	90,000	132,000
December	2,145,000	69,000	1,661,000	53,000	160,000	64,000
	31,992,000	**87,000**	**26,995,000**	**73,333**		

Year 2007						
Month	Total Influent-Pumped from Wells (gallons)	Average Daily Influent-Pumped from Wells (gpd)	Total Effluent-Pumped to Distribution System (gallons)	Average Daily Effluent-Pumped to Distribution System (gpd)	Maximum Day Demand from City Records for Influent (gpd)	Maximum Day Demand from City Records for Effluent (gpd)
January	2,099,000	68,000	1,700,000	55,000	94,000	65,000
February	2,053,000	73,000	1,650,000	59,000	147,000	96,000
March	2,112,000	68,000	1,690,000	54,000	90,000	71,000
April	2,000,000	67,000	1,564,000	51,000	97,000	69,000
May	2,679,000	86,000	2,216,000	71,000	177,000	161,000
June	3,283,000	109,000	2,457,000	82,000	163,000	140,000
July	4,091,000	132,000	3,667,000	122,000	192,000	178,000
August	4,125,000	133,000	3,729,000	120,000	214,000	180,000
September	3,009,000	100,000	2,494,000	83,000	174,000	137,000
October	2,444,000	79,000	1,857,000	60,000	152,000	111,000
November	2,150,000	72,000	No Data[1]	No Data[1]	94,000	No Data[1]
December	2,250,000	73,000	Data Inconclusive[2]	Data Inconclusive[2]	92,000	Data Inconclusive[2]
	32,295,000	**88,333**	**23,024,000[3]**	**75,700[4]**		
			27,628,800[5]	**90,840[5]**		

[1] No Flow Meter for 14-days.
[2] Meter not working properly for the first 3-days.
[3] Totals for 10-months.
[4] Average for 10-months.
[5] Estimated production for 12-months based on the 10-month average.

As shown in the table above, the 6 year average treated (influent) production is 30,184,500 gallons per year and the 6 year average distributed (effluent) production is 26,282,800 gallons per year. The difference between the treated and the distributed production is the storage component of the water system. When a demand is imposed on the distribution side of the water system, this water comes from the reservoirs through the booster pump stations. The influent production does not occur until the reservoirs level reaches a defined or set level that triggers the reservoirs to refill with treated water. From this point forward, production will mean effluent production or distribution production.

The average monthly production for this period is 2,190,233 gallons. The lowest monthly production occurred in March 2003 with 1,232,000 gallons and the highest monthly production occurred in July 2003 with a production of 4,802,000 gallons. The average day production over this period is 72,008 gallons.

The plant production in Table 5-3 includes water that is used to backwash the treatment filters. There are no meters that record this volume, however, a backwash is performed every 48 hours of well pump runtime in Well #2. The plant production records have records of the well pump runtime each day. Table 5-4 calculates the approximate number of backwashes that occur each year.

Table 5-4 City of Halsey Backwash Summary

	Year						
	2002	2003	2004	2005	2006	2007	Average
Total Well#2 Runtime (hours)	1,808.8	1,948.8	1,861.6	1,719.2	1,986.4	2035.2	**1,893.3**
Number of Backwashes per Year	37.7	40.6	38.8	35.8	41.4	42.4	**39.4**
Number of Backwashes per Month	3.1	3.4	3.2	3.0	3.4	3.5	**3.3**

The backwash water volume is approximately equal to the capacity of the backwash pond which is 1,350 cubic feet or 10,100 gallons. Over the past 6-years, this computes to an average backwash volume of 397,940 gallons per year or 33,330 gallons per month or 1.5 percent of the total plant production.

Analyzing the averages of the past 6-years, the Average Daily Demand (ADD) is 72,008 gpd, the average Maximum Month Demand (MMD) is 134,167 gpd, and the average Maximum Daily Demand (MDD) is 200,000 gpd. The averages of the effluent production closely match the population trend of the up and down usage over the past 6 years.

Analyzing and averaging the last 2 years, we find that the ADD was 74,827-gpd (75,000 gpd), the MMD was 132,000 gpd, and the MDD was 193,000 gpd. The measured MMD peaking factor is 1.76. The measured MDD peaking factor is 2.57. The ratio of the MMD and MDD to the ADD of 1.76 and 2.57 are considered normal.

These demands are used by a total population of 801 (see Section 2.4) and a total of 336 EDUs. Applying the demands to the population gives the per capita demands, or "unit demands". A summary of current water demand unit values is presented in Table 5-5 Current Water Demands.

Table 5-5 Current Water Demands (past two-years)

Unit Demand	Gallons per Day (gpd)	Gallons per Day per Equivalent Dwelling Unit (gpd/EDU)	Gallons per capita per Day (gpcd)
Average Daily Demand, ADD	75,000	223	87
Maximum Monthly Demand, MMD	132,000	393	152
Maximum Day Demand, MDD	193,000	574	223

The current demands include a certain amount of unaccounted water use. An analysis of unaccounted water follows. Design values, based on current water demand, water loss, and anticipated reductions will be selected for use in water demand projections.

Unaccounted Water

The difference between water delivered to the system (plant production) and the amount of water metered through residential, commercial, and public water meters (water consumption) is unaccounted water. The difference can be attributed to leakage in the distribution system, water used for system flushing, fire fighting, and other public unmetered use. Table 5-6 summarizes the Unaccounted Water.

Table 5-6 Unaccounted Water Summary

Year	Water Delivered (gallons)	Water Consumed/Sold (gallons)	Backwash per Table 4-4 (gallons)	Unaccounted Water (gallons)	Percent Loss per year
2002	27,817,000	24,945,636	380,770	2,490,594	8.95%
2003	26,291,000	24,263,421	410,060	1,617,519	6.15%
2004	24,340,000	22,867,530	391,880	1,080,590	4.44%
2005	24,625,000	22,241,380	361,580	2,022,040	8.21%
2006	26,995,000	25,520,955	418,140	1,055,905	3.91%
2007	27,628,800	25,767,366	428,240	1,433,194	5.19%
6-year Average	**26,282,800**	**24,267,715**	**398,445**	**1,616,640**	**6.15%**

Over the last 6 years, the City of Halsey has delivered an average of 26,282,800 gallons per year, water consumption and sales have averaged 24,267,715 gallons per year and the treatment plant backwashes average 398,445 gallons per year. Based on these values, an average of 1,616,640 gallons per year have been unaccounted for. This calculates to an average percent loss of 6.15 percent.

Water system flushing through fire hydrants and blow-offs are conducted periodically but water quantities used for these flushing are not known. The City of Halsey Public Work's personnel have indicated that Linn County and the Halsey-Shedd Rural Fire Department have used water through the years and these water volumes are also not known.

According to State standards, municipalities should take efforts to reduce loss to 15 percent. If 15 percent is easily achieved, the municipality should strive to reduce loss to 10 percent. As shown above, the loss in the City's water system is under 10 percent. This low loss could be attributed to the fact that most of the major distribution main lines in the system are under 15 years old.

Section 5.3 Target Design Values

As previously shown, the last 2 years the ADD is 87 gpcd, including unaccounted water. The measured MMD/ADD ratio is 1.76 and the measured MDD/ADD ratio 2.57. These are reasonable and common ratios. A peaking factor of 5.0 will be used to estimate the Peak Hourly Demand (PHD).

The per capita water usage for Oregon is documented by the U.S. Department of the Interior in the 2000 U.S. Geological Survey – Circular 1268. According to this study, the average per capita water use for Oregon is 207 gallons per capita per day (gpcd) including domestic, commercial, industrial, public use, and loss. Of the total 207 gpcd, 63 percent is residential, commercial and public use/loss, 34 percent is industrial, and 3 percent is related to thermoelectric power generation. Typical values are as follows: ADD of 207 gpcd, MMD of 321 gpcd, PWD of 458 gpcd, MDD of 518 gpcd (2.5 times the ADD), and PHD of 1,035 gpcd (5 times the ADD). These values, however, are state averages and values in a specific community can vary considerably. Often, higher per capita values are seen in smaller communities. Peaking factors are also typically higher in small communities.

With the loss in the water system under 10 percent and the potential of industrial lands developing, the 87 gpcd seems rather low and should be increased for future demand projections. However, funding agencies discourage the use of excessive demands being projected into the future resulting in large facilities being required to support high per capita usages. Some reasonable increase in demand must be assumed.

Industrial use can vary considerably depending on the type of industry. Planning water use values ranges from 200 to 4,800 gpd per acre, with a value of 1,620 gpd/acre common for light industrial, and a value of 2,270 gpd/acre common for heavy industrial. If we assume that 10-percent of the industrial lands (10-acres) within the City Limits is developed and assuming a medium industrial use needing 2000 gpd/acre, an additional 20,000 gpd would be added to the ADD. This would equate to a new ADD of 95,000 gpd or 110 gpcd.

The value of 110 gpcd is still substantially lower than the design value of Westech Engineering 1993 Water System Analysis for the City of Halsey. This ADD value is reasonable and at the low end of communities similar to Halsey, but is selected for the design demand projection. An MMD peaking factor of 1.8, MDD peaking factor of 2.6 and a PHD peaking factor of 5.0 are selected for design demand projections in the City of Halsey.

Table 5-7 Target Water Demand Design Values

Demand Unit	Gallons per Capita per Day (gpcd)	Gallons per day (gpd)/EDU
Average Day Demand, ADD	110	284
Maximum Month Demand, MMD	198	511
Maximum Day Demand, MDD	286	738
Peak Hour Demand, PHD	550	1,419

Section 5.4 Projected Water Demand

Water demands are projected into the future using the target design value along with projected population estimates. The goal of projecting future water demand is not to build larger facilities to accommodate excessive water consumption, but rather to evaluate the

capability of existing system and to size new facilities for reasonable demand rates. Water demand projections should be based on acceptable water loss quantities, reasonable conservation measures, and the communities expected water use characteristics. The project water demands listed in this section are based on current levels of water use. The selected target design values are multiplied with the population projections prepared in Section 2.4 to give the projected water demands. A unit ADD of 110 gpcd is used for residential, commercial, industrial, and public use and loss.

The current population of 801 is projected to increase to 1,153 over the next 20 years. This is equivalent to an average annual growth rate of 1.75 percent. Projected demands are summarized in Table 5-8.

Table 5-8 Project Water Demand

Year	Population	ADD (gpd)	MMD (gpd)	MDD (gpd)	PHD (gpd)
2007, Current	801	88,110	158,598	229,086	440,550
2010	843	92,730	166,914	241,098	463,650
2015	920	101,200	182,160	263,120	506,000
2020	1,003	110,330	198,594	286,858	551,650
2025	1,094	120,340	216,612	312,884	601,700
2028	1,153	126,830	228,294	329,758	634,150

2057 1897 1646.272

Water facilities are designed using ADD, MDD, and PHD values. Components such as well pumps, treatment equipment and storage reservoirs are typically sized to provide for the 20 year MDD. Distribution systems must be able to convey projected PHD flows. Component sizing and design is discussed in the following sections.

It should be noted that these populations and water demands projections are based upon historical trends, application of comprehensive plan policies, and other factors which can change over time. The addition of a major water customer to the system, or approval of extensive land development, could substantially impact water demands and water service in this small community. Accordingly, water demands and supplies should be reviewed at least every 5 years.

Section ES
Executive Summary

Section ES.1 Introduction and Purpose of Study

Primary components of the City of Halsey's water system, including the groundwater wells, water treatment plant, booster pump station, and storage reservoirs were updated and improved in 1998. The water system overall is well designed and should be able to adequately supply the City of Halsey for many years to come.

The purpose of this Water System Master Plan is to furnish the City of Halsey with a comprehensive planning document that provides an engineering assessment of the water system components and guidance for future planning and management of the water system over the next twenty years. This document satisfies the Oregon Health Division (OHD) requirement for water master plans. The principal plan objectives include:

- Evaluation of existing water system components
- Prediction of future water demands
- Evaluation of the capacities and capabilities of the existing system to meet future needs and regulations
- Recommendations for improvements needed to meet future needs and/or address deficiencies
- Discussion of financing options and impacts to water rates users
- Description of water management and conservation measures

Section ES.2 System Planning and Study Area

Planning and Study Area

The planning and study area are areas where water service is expected to be provided during the planning period which corresponds to the City of Halsey's Urban Growth Boundary (UGB). The City of Halsey's current City Limits contain approximately 339.1 acres of land, with roughly 58 percent of which is already developed. The remainder is either in agricultural use located on the perimeter of the City Limits, or in vacant City lots. The UGB includes approximately 88.7 acres of land outside the City Limits, of which 4.3 acres (1.0 percent) are designated for commercial use, 31.1 acres (7.3 percent) are designated for industrial use, and 53.3 acres (12.5 percent) are designated for residential use. The planning and study areas are described in detail in Section 2 of this Master Plan.

Population

The current population, as of the year 2007, is estimated to be at 801 persons. This is based upon the U.S. Census Data and the Portland State University Population Research Center. If we estimate the current population based upon water service connections (290 connections) and multiply this number of connections to the county census figure of 2.58 people per household, the estimated population is 748 people.

This Master Plan has selected an average annual population growth of 1.75 percent. In comparison, the previous water system analysis report used an average annual growth rate of 2.85 percent and the City's Sanitary Sewerage System Facilities Plan Update for the City of Halsey used an average annual growth rate of 2.31 percent. A Linn-Benton Regional Analysis Study done by ECONorthwest in 1999 used population projections provided by the counties and listed a 1.25 percent average annual growth rate in the City of Halsey for the next twenty-years. This Master Plan projects that the population of the City of Halsey by the year 2028 will be 1,153 persons. The analysis, improvement alternatives and recommended improvements in this Master Plan are based upon this projected population of 1,153.

Section ES.3 Regulatory Conditions

Congress passed the original Title XIV of the Public Health Service Act, commonly known as the Safe Drinking Water Act, in 1974, and amended it in 1986 and 1996. The Safe Drinking Water Act (SDWA) and the 1986 and 1996 amendments are federal water quality regulations affecting all public water purveyors. In Oregon, water treatment and distribution regulations under the SDWA are promulgated by the US Environmental Protection Agency (USEPA) and administered by the Oregon Health Division (OHD).

In addition to OHD, the Oregon Water Resources Department (OWRD) regulates the use of both surface and groundwater throughout the State of Oregon. Over the years as greater demand are placed on limited water resources, OWRD has been exercising greater control over this water use.

Water regulations are often divided into two major categories. These are:

- Water Treatment, Distribution and Storage
- Water Use and Supply (Water Rights)

Section 3 of this Master Plan contains brief summaries of the regulatory requirements and standards which form the basis of the master planning effort.

Section ES.4 Existing Water System

The existing water system is described in Section 4 of this Master Plan. The water supply is currently taken from groundwater wells. The City of Halsey has three water rights permits listed in the Oregon Water Resources Department's database. Two active permits include a 1.0 cubic feet per second (cfs) water rights and a 0.613 cfs water rights. The City of Halsey water system consists of two groundwater wells with well pumps located on the Water Treatment Plant (WTP) site, a disinfection and direct filtration treatment plant, two steel storage reservoir tanks providing a total of 0.75 million gallons of storage, a booster pump station, and approximately 6 miles of distribution piping excluding water service piping. All known water connections to the City's water system are metered. There are currently 332 metered connection servicing residential, commercial and school customers.

Section ES.5 Present and Past Water Use and Projected Future Demand

See Section 5 of this Master Plan, for more detail on the water use and water demand explanations and calculations.

Water Sales (Consumption)

From the start of 2002 to the end of 2007, the average monthly water consumption over this period is 2,032,032 gallons per month or an equivalent 67,807 gallons per day (gpd). Monthly water consumption ranges from a low of 1,246,450 gallons to a high of 4,377,179 gallons. The highest monthly consumption usage occurs during the months of July and August and the months of relatively low usage are February and March.

Average residential water consumption is 199 gpd per meter (199 gpd/EDU), or 6,045 gallons of water per month. Over the last six years, the system has served an average of 336 EDUs based on water consumption calculations.

Water Treatment Plant Production

The WTP average monthly production for this period is 2,190,233 gallons. Over the last six years, the lowest monthly production was 1,232,000 gallons and the highest monthly production was 4,802,000 gallons. The average day production over this period is 72,008 gallons. Over the past six years, the average backwash volume per year is 397,940 gallons or 33,330 gallons per month or 1.5 percent of the total plant production.

Analyzing and averaging the last 2 years, we find that the ADD was 74,827-gpd (75,000 gpd), the MMD was 132,000 gpd, and the MDD was 193,000 gpd. The measured MMD peaking factor is 1.76. The measured MDD peaking factor is 2.58. The ratio of the MMD and MDD to the ADD of 1.76 and 2.58 are considered normal.

Unaccounted Water

Over the last 6 years, the City of Halsey has delivered an average of 26,282,800 gallons per year, water consumption and sales have averaged 24,267,715 gallons per year and the treatment plant backwashes average 398,445 gallons per year. Based on these values, an average of 1,616,640 gallons per year have been unaccounted for. This calculates to an average percent loss of 6.15 percent.

Water system flushing through fire hydrants and blow-offs are conducted periodically but water quantities used for these flushing are not known. The City of Halsey Public Work's personnel have indicated that Linn County and the Halsey-Shedd Rural Fire Department have used water through the years and these water volumes are also not known.

According to State standards, municipalities should take efforts to reduce loss to 15 percent. If 15 percent is easily achieved, the municipality should strive to reduce loss to 10 percent. As shown above, the loss in the City's water system is under 10 percent. This low loss could be attributed to the fact that most of the major distribution main lines in the system are under 15 years old.

Projected Water Demands

The ADD is 87 gpcd, including unaccounted water. The measured MMD/ADD ratio is 1.76 and the measured MDD/ADD ratio 2.57. These are reasonable and common ratios. With the loss in the water system under 10 percent and the potential of industrial lands developing, the 87 gpcd seems rather low and should be increased for future demand projections. However, funding agencies discourage the use of excessive demands being projected into the future resulting in large facilities being required to support high per capita usages. Some reasonable increase in demand must be assumed.

Industrial use can vary considerably depending on the type of industry. Planning water use values ranges from 200 to 4,800 gpd per acre, with a value of 1,620 gpd/acre common for light industrial, and a value of 2,270 gpd/acre common for heavy industrial. If we assume that 10 percent of the industrial lands (10-acres) within the City Limits is developed and assuming a medium industrial use needing 2000 gpd/acre, an additional 20,000 gpd would be added to the ADD. This would equate to a new ADD of 95,000 gpd or 110 gpcd.

The value of 110 gpcd is still substantially lower than the design value of Westech Engineering 1993 Water System Analysis for the City of Halsey. This ADD value is reasonable and at the low end of communities similar to Halsey, but is selected for the design demand projection. An MMD peaking factor of 1.8, MDD peaking factor of 2.6 and a PHD peaking factor of 5.0 are selected for design demand projections in the City of Halsey. The projected water demands based upon these per capita demands and the population projections are summarized in the following table:

Year	Population	ADD (gpd)	MMD (gpd)	MDD (gpd)	PHD (gpd)
2007, Current	801	88,110	158,598	229,086	440,550
2010	843	92,730	166,914	241,098	463,650
2015	920	101,200	182,160	263,120	506,000
2020	1,003	110,330	198,594	286,858	551,650
2025	1,094	120,340	216,612	312,884	601,700
2028	1,153	126,830	228,294	329,758	634,150

Section ES.6 Recommended Improvements

Section 9 of this Master Plan contains the analysis and improvement alternatives for the City's water system. Included in this section are summaries of the major water system components, a description of whether the major water components are adequate or deficient, and an estimated probable cost of construction to bring a deficient component up to date. Section 10 summarizes the preferred alternatives and costs and presents project scenarios. All the improvements discussed in Section 10 of this Master Plan total $2.5 million dollars which does not include the new finish storage reservoir, and $3 million which includes the new finish storage reservoir.

As mentioned in Section 10.1, there are no current deficiency improvements needed for the City of Halsey water distribution system. However, the age of the existing steel waterlines is becoming an issue. These pipes almost 40 years old and will be nearing the end of their useful life at the end of the planning period. Approximately 62 percent of the distribution piping consists of steel which were installed in 1969. We have divided the city into three areas: the east side, which is the area east of the Union Pacific Railroad tracks; the northwest side, which is the area west of the Union Pacific Railroad tracks and north of H Street; and the southwest side, which is the area west of the Union Pacific Railroad tracks and south of H Street. These steel waterlines should be replaced with new polyvinyl chloride pipe (PVC) or ductile iron (DI) pipe. The proposed water improvements to the distribution lines will loop lines wherever possible and will limit dead-end lines.

The costs associated with each area are fairly equal to one another. From a priority standpoint, we recommend constructing the eastside improvements first due to the development potential. Below is the estimated cost of construction for waterline improvements to the east side.

Estimated Cost of Construction for the City of Halsey - East Side Waterline Improvements

Item	Description	Units	Quantity	Unit Cost	Construction Cost
1	Mobilization, Bonds (10%)	LS	All	$62,000	$62,000
2	Sawcutting	LF	10,500	$1	$10,500
3	Connection to existing pipe	EACH	7	$1,000	$7,000
4	8-inch piping with aggregate backfill	LF	6,170	$50	$308,500
5	Fire hydrants Assembly	EACH	9	$2,500	$22,500
6	Water meter settings (3/4-inch service)	EACH	66	$500	$33,000
7	8-inch gate valve	EACH	20	$800	$16,000
8	Dead-end Main Blow-off	EACH	1	$900	$900
9	Pavement Patching (3-inch thick)	SF	13,125	$3.00	$39,375
10	24-inch Bored Steel Casing under Northeast Drainage Ditch	LF	300	$400	$120,000
		Construction Subtotal			$619,775
		Contingency (15%)			$93,000
		Engineering (20%)			$123,950
		Administration (5%)			$31,000
		Project Total			$867,725

The waterline improvements for the northwest or southwest areas shall be a function of funds available or future water demands. Estimated cost of construction for the northwest and southwest waterline improvements are listed below.

Estimated Cost of Construction for the City of Halsey - Northwest Side Waterline Improvements

Item	Description	Units	Quantity	Unit Cost	Construction Cost
1	Mobilization, Bonds (10%)	LS	All	$55,000	$55,000
2	Sawcutting	LF	11,600	$1	$11,600
3	Connection to existing pipe	EACH	7	$1,000	$7,000
4	8-inch piping with aggregate backfill	LF	5,200	$50	$260,000
5	6-inch piping with aggregate backfill	LF	1,850	$45	$83,250
6	Fire hydrants Assembly	EACH	11	$2,500	$27,500
7	Water meter settings (3/4-inch service)	EACH	76	$500	$38,000
8	Water meter setting (3-inch service to school)	EACH	1	$1,500	$1,500
9	8-inch gate valve w/ valve box	EACH	11	$800	$8,800
10	6-inch gate valve w/ valve box	EACH	7	$600	$4,200
11	Dead-end Blow-off	EACH	7	$900	$6,300
12	Pavement Patching (3-inch thick)	SF	14,500	$3.00	$43,500
		Construction Subtotal			$546,650
		Contingency (15%)			$82,000
		Engineering (20%)			$109,400
		Administration (5%)			$27,300
		Project Total			$765,350

Estimated Cost of Construction for the City of Halsey - Southwest Side Waterline Improvements

Item	Description	Units	Quantity	Unit Cost	Construction Cost
1	Mobilization, Bonds (10%)	LS	All	$62,000	$62,000
2	Sawcutting	LF	15,100	$1	$15,100
3	Connection to existing pipe	EACH	8	$1,000	$8,000
4	12-inch piping with aggregate backfill	LF	300	$75	$22,500
4	10-inch piping with aggregate backfill	LF	1,200	$60	$72,000
5	8-inch piping with aggregate backfill	LF	5,270	$50	$263,500
6	6-inch piping with aggregate backfill	LF	780	$45	$35,100
7	Fire hydrants Assembly	EACH	9	$2,500	$22,500
8	Water meter settings (3/4-inch service)	EACH	73	$500	$36,500
9	12-inch gate valve w/ valve box	EACH	1	$1,200	$1,200
10	10-inch gate valve w/ valve box	EACH	7	$1,000	$7,000
11	8-inch gate valve w/ valve box	EACH	9	$800	$7,200
12	6-inch gate valve w/ valve box	EACH	5	$600	$3,000
13	Dead-end Blow-off	EACH	7	$900	$6,300
14	Pavement Patching (3-inch thick)	SF	18,875	$3.00	$56,625
		Construction Subtotal			$618,525
		Contingency (15%)			$92,775
		Engineering (20%)			$123,700
		Administration (5%)			$30,925
		Project Total			$865,925

Section 11 of this Master Plan discusses different financial considerations. It is unknown what level of funding the varying agencies will provide to help assist the City construct recommended improvements. Once this Master Plan is approved by the Oregon Health Department (OHD) and a specific request is made for funding assistance, the different funding agencies will work with the City to determine the level of assistance available.

Section 2
System Planning and Study Area

Section 2.1 Planning Period

The planning period for this Water System Master Plan is 20 years, ending in the year 2028. A 20 year planning period is consistent with most comprehensive plans and other facilities master plans in most communities. The period must be short enough for current users to benefit from the system improvements and yet long enough to provide for a reserve capacity for future growth and increased demand. If the design life for public improvements is too short, the community is faced with continuing demands for increasing system capacities. For systems that do not lend themselves to gradual and economic expansions, short design periods lead to excessive expenditures of capital. Conversely, facilities designed for too many years into the future can provide capacities which may never be needed if the predicted population projection does not occur. Such facilities can place an unfair economic burden upon the present population and may become obsolete before fully being used.

It should be noted that population projections into the future are subject to many forces and inaccuracies. Therefore, it is recommended that the City of Halsey should review their water system capabilities and needs as well as other public facilities every 5 years.

Section 2.2 Planning and Study Area

For the purpose of this Water System Master Plan, the Planning and Study area are areas where water service is expected to be provided during the planning period, which corresponds to the City of Halsey's Urban Growth Boundary (UGB). The City of Halsey's City Limits, Urban Growth Boundary, and Land-Use Designation are shown on Figure 2-1.

Section 2.3 Land Use

The City of Halsey's current City Limits contain approximately 339.1 acres of land, with roughly 58 percent of which is already developed. The remainder is either in agricultural use located on the perimeter of the City Limits, or in vacant City lots. The UGB includes approximately 88.7 acres of land outside the City Limits, of which 4.3 acres (1.0 percent) are designated for commercial use, 31.1 acres (7.3 percent) are designated for industrial use, and 53.3 acres (12.5 percent) are designated for residential use. A summary of the comprehensive plan land-use zoning areas are shown in Table 2-1.

Outside the City Limits and within the UGB, the commercial use designation is located north of the City and the industrial use designation is located to the south and southwest with a

INSERT FIGURE 2-1

small portion located north of the City. The residential use areas located outside the City Limits and within the UGB are located to the West and East of the City.

Table 2-1 Comprehensive Plan Land-Use Designation

Planned Land-Use Zoning	Acres	Percent of Total UGB Land Area
Lands within the City Limits		
• Commercial	50.7	11.8
• Industrial	101.7	23.8
• Residential	186.7	43.6
Subtotal:	339.1	79.2
Lands within the UGB and outside the City Limits		
• Commercial	4.3	1.0
• Industrial	31.1	7.3
• Residential	53.3	12.5
Subtotal:	88.7	20.8
Total of All Land:	427.8	100.0

*The areas above include the City's Street and Railroad Right-of-Ways.

Section 2.4 Population

Existing Population

In 2000, the population of the City of Halsey was 724 based upon the U.S. Census Bureau and 725 based upon the Portland State University Population Research Center (PSUPRC). The U.S. Census Bureau and PSUPRC have annual estimates of population for incorporated places in Oregon between April 1, 2000 and July 1, 2007 and these figures are shown in Table 2-2. Table 2-2 illustrates a rather slow growth in the early 2000's, however, recent trends starting in 2005 show an increase in growth with the recent developments of a 39-lot subdivision in northeast Halsey, a 7-lot subdivision located in the southwest, a 13-lot subdivision in East Halsey, and a proposed 61-lot subdivision in East Halsey.

Table 2-2 Population Estimates for Incorporated Places in Oregon – City of Halsey

U.S. Census Bureau									
July1 Population Estimates								April 1, 2000	
2007	2006	2005	2004	2003	2002	2001	2000	Estimate Base	Census
821	778	741	735	731	729	724	723	724	724
Portland State University Population Research Center									
July 1 Population Estimates								Census Population April 1	
2007	2006	2005	2004	2003	2002	2001	2000	2000	1990
780	780	760	750	740	730	730	725	724	667

As of July 1, 2007, the U.S. Census Bureau and PSUPRC have estimated the current population of the City of Halsey to be 821 and 780, respectively.

Projected Population

Between 2000 and 2007, the City of Halsey's population increased from 723 to 821 according to the U.S. Census Bureau or 725 to 780 according to the PSUPRC. This calculates to an average annual growth rate of 1.83 percent and 1.05 percent, respectively. However, the recent trend in the last two years, and the development stated above would suggest the average annual growth rate to be higher. A Linn-Benton Regional Analysis Study done by ECONorthwest in 1999 used population projections provided by the counties and listed a 1.25 percent average annual growth rate in the City of Halsey for the next twenty-years. The 1993 Water System Analysis for the City of Halsey used an average annual growth rate of 2.85 percent and the City's Sanitary Sewerage System Facilities Plan Update for the City of Halsey used an average annual growth rate of 2.31 percent. Based upon the recent trend and the potential development in the planning stages, we can estimate the average annual growth rate to be somewhere between 1.25 percent 2.00 percent. For this Master Plan, we have selected an average annual growth rate for the City of Halsey to be 1.75 percent.

Table 2-3 Current and Project Population

Year	Population (U.S. Census Bureau)	Population (PSUPRC)	Average Population
2007, current	821	780	801
2010	864	822	843
2015	943	896	920
2020	1,029	977	1,003
2025	1,122	1,066	1,094
2028	1,182	1,123	1,153

As shown on Table 2-3, an average annual growth rate of 1.75 percent would result in a total of 361 additional people based the average population in City of Halsey over the twenty-year planning period. The U.S. Census data lists an average of 2.58 people per household in Linn County. Based on this data, 140 new homes would be required. There are sufficient buildable lands in the UGB to accommodate this growth.

Improvements developed in subsequent sections of this Master Plan will be based on the above population projections. In summary, the water system must be able to support a population of 1,153 by the year 2028.

Section 5
Water Use and Projected Demand

Section 5.1 Description and Definitions

Water demand is the quantity of water delivered to the system over a period of time to meet the needs of consumers and to supply the needs for fire fighting. Virtually all water systems have some amount of leakage in the system that cannot be economically removed and total demand includes some leakage. Demand varies seasonally with the lowest usage in winter months and the highest usage during the summer months. Variations in demand also occur with respect to time of day with higher usage occurring during the morning and early evening periods and lower usage during the night time hours.

The objective of this section is to determine the current water demand characteristics and to project future demand requirements that will establish system component adequacy and sizing needs. Water demand is described below in the following terminology:

- *Average Annual Demand* (AAD) – The total volume of water delivered to the system in a full year expressed in gallons. When demand fluctuates up and down over several years, an average is used.

- *Average Daily Demand* (ADD) – The total volume of water delivered to the system over a year divided by 365 days. The average use in a single day expressed in gallons per day.

- *Maximum Daily Demand* (MMD) – The gallons per day average during the month with the highest water demand. The highest monthly usage typically occurs during the summer months.

- *Peak Weekly Demand* (PWD) – The greatest 7 day average demand that occurs in a year. Expressed in gallons per day.

- *Maximum Day Demand* (MDD) – The largest volume of water delivered to the system in a single day expressed in gallons per day. The water supply, treatment plant and transmission lines should be designed to handle the maximum day demand.

- *Peak Hourly Demand* (PHD) – The maximum volume of water delivered to the system in a single hour expressed in gallons per day. Distribution systems should be designed to adequately handle the peak hourly demand. During this peak usage, storage reservoirs supply the demand in excess of the maximum day demand.

Demands described above are expressed in gallons per day (gpd). The demands can be divided by the population served to come up with a demand per person per day or demand per capita per day which is expressed in gallons per capita per day (gpcd). Per capita demands can be multiplied by future population projections to determine future water demands.

Section 5.2 Current Water Demand

Water Sales (Consumption)

The analysis of water consumption is based on a monthly sales record beginning January 2002 and ending December 2007. The water sales records allow for the calculation of Equivalent Dwelling Units (EDU) and provide a measurement of unaccounted water (water loss) when compared with Water Treatment Plan (WTP) production records. In the City of Halsey, water is consumed by residential, commercial and public users. All known connections are metered and meter services are read once a month. Currently, as of December 2007, there are 332 water meters in the water system.

Table 5-1 shows a summary of the monthly water consumption between 2002 and 2007 for the City of Halsey. This table breaks down the total monthly water consumption to residential, commercial, and public usage. This table also lists the number of residential and commercial customers.

Table 5-1 Monthly Water Consumption Summary between Year 2002 and Year 2007

Year 2002							
Month	Commercial (gallons)	Residential (gallons)	Park/ City Hall (gallons)	Total (gallons)	Number of Commercial Customers	Number of Residential Customers	Total of Customers
January	378,020	1,139,800	0	1,517,820	33	237	270
February	312,280	1,053,088	0	1,365,368	35	235	270
March	279,820	1,108,510	0	1,388,330	35	237	272
April	298,440	1,270,202	0	1,568,642	36	248	284
May	378,213	1,581,812	0	1,960,025	41	258	299
June	467,991	1,869,700	0	2,337,691	42	258	300
July	610,871	3,139,950	0	3,750,821	42	261	303
August	610,871	3,016,550	0	3,627,421	42	263	305
September	731,471	1,751,191	0	2,482,662	42	255	297
October	630,100	1,446,782	0	2,076,882	43	255	298
November	322,232	1,047,634	0	1,369,866	42	249	291
December	329,194	1,170,914	0	1,500,108	42	240	282
Total	**5,349,503**	**19,596,133**	**0**	**24,945,636**	**475**	**2,996**	**3,471**
Average	**445,792**	**1,633,011**	**0**	**2,078,803**	**40**	**250**	**289**

Year 2003							
Month	Commercial (gallons)	Residential (gallons)	Park/ City Hall (gallons)	Total (gallons)	Number of Commercial Customers	Number of Residential Customers	Total of Customers
January	360,451	1,264,723	0	1,625,174	41	244	285
February	394,060	988,684	10,080	1,392,824	41	239	280
March	327,850	1,070,680	10,510	1,409,040	40	240	280
April	327,760	1,185,774	5,120	1,563,654	39	236	275
May	400,660	1,218,700	15,160	1,634,520	42	243	285
June	428,810	1,819,470	414,180	2,662,460	41	244	285
July	806,539	3,065,130	505,510	4,377,179	42	241	283
August	427,330	2,537,550	462,570	3,427,450	42	241	283
September	434,380	1,901,090	261,000	2,596,470	42	240	282
October	375,490	1,123,900	6,560	1,505,950	45	248	293
November	402,760	840,540	3,150	1,246,450	40	238	278
December	308,840	1,210,210	3,200	1,522,250	40	235	275
Total	**5,039,930**	**18,226,451**	**1,697,040**	**24,963,421**	**495**	**2,889**	**3,384**
Average	**419,994**	**1,518,871**	**141,420**	**2,080,285**	**41**	**241**	**282**

Year 2004							
January	686,000	1,225,760	39,910	1,951,670	39	234	273
February	296,230	944,000	10,190	1,250,420	39	234	273
March	334,250	1,150,920	18,960	1,504,130	20	232	252
April	327,230	1,100,990	6,390	1,434,610	40	234	274
May	327,330	1,110,640	33,210	1,471,180	40	231	271
June	323,760	1,742,030	12,650	2,078,440	41	236	277
July	761,080	2,428,490	22,130	3,211,700	41	236	277
August	772,280	2,300,070	377,940	3,450,290	42	237	279
September	387,160	1,212,870	128,710	1,728,740	43	237	280
October	454,400	1,080,870	3,220	1,538,490	47	249	296
November	455,790	1,257,180	6,830	1,719,800	43	236	279
December	367,120	1,156,660	4,280	1,528,060	42	234	276
Total	**5,492,630**	**16,710,480**	**664,420**	**22,867,530**	**477**	**2,830**	**3,307**
Average	**457,719**	**1,392,540**	**55,368**	**1,905,627**	**40**	**236**	**276**

Year 2005							
January	387,470	1,056,190	5,970	1,449,630	41	234	275
February	483,490	978,013	2,240	1,463,743	41	235	276
March	411,950	1,197,817	2,690	1,612,457	41	234	275
April	410,280	1,027,880	7,220	1,445,380	42	236	278
May	376,530	1,012,320	5,740	1,394,590	41	235	276
June	493,250	1,414,470	17,530	1,925,250	43	241	284
July	295,280	1,902,500	357,620	2,555,400	42	240	282
August	813,410	2,507,880	602,286	3,923,576	42	238	280
September	410,950	1,450,790	126,984	1,988,724	42	241	283
October	355,540	1,046,975	77,910	1,480,425	44	254	298
November	373,940	1,128,115	10,830	1,512,885	41	242	283
December	393,990	1,084,510	10,820	1,489,320	42	240	282
Total	**5,206,080**	**15,807,460**	**1,227,840**	**22,241,380**	**502**	**2,870**	**3,372**
Average	**433,840**	**1,317,288**	**102,320**	**1,853,448**	**42**	**239**	**281**

Year 2006							
Month	Commercial (gallons)	Residential (gallons)	Park/ City Hall (gallons)	Total (gallons)	Number of Commercial Customers	Number of Residential Customers	Total of Customers
January	383,840	1,156,180	1,860	1,541,880	40	240	280
February	414,910	969,660	7,180	1,391,750	39	244	283
March	370,330	1,170,520	2,590	1,543,440	39	239	278
April	391,600	1,018,660	11,340	1,421,600	38	245	283
May	492,310	1,579,821	11,390	2,083,521	38	249	287
June	420,390	1,794,258	238,890	2,453,538	38	253	291
July	429,540	2,606,975	483,750	3,520,265	38	253	291
August	713,070	2,808,211	624,120	4,145,401	38	259	297
September	449,970	1,687,765	282,230	2,419,965	41	258	299
October	509,030	1,464,116	4,590	1,977,736	47	273	320
November	383,780	1,173,221	1,900	1,558,901	40	259	299
December	367,410	1,093,558	1,990	1,462,958	40	259	299
Total	**5,326,180**	**18,522,945**	**1,671,830**	**25,520,955**	**476**	**3,031**	**3,507**
Average	**443,848**	**1,543,579**	**139,319**	**2,126,746**	**40**	**252**	**292**

Year 2007							
January	433,170	1,286,361	2,290	1,721,821	41	258	299
February	389,310	1,055,665	2,810	1,447,785	40	259	299
March	370,310	1,140,012	2,550	1,512,872	41	259	300
April	345,070	1,111,339	3,550	1,459,959	41	267	308
May	424,480	1,656,904	142,010	2,223,394	42	275	317
June	408,050	1,981,886	311,560	2,701,496	42	275	317
July	445,370	2,788,034	460,030	3,693,434	43	279	322
August	490,260	2,647,027	362,410	3,499,697	42	285	327
September	425,390	1,908,165	47,150	2,380,705	42	286	328
October	450,480	1,484,805	2,490	1,197,775	46	299	345
November	368,280	1,260,811	1,900	1,630,991	42	286	328
December	361,810	1,193,627	2,000	1,557,437	42	285	327
Total	**4,911,980**	**19,514,636**	**1,340,750**	**25,767,366**	**504**	**3,313**	**3,817**
Average	**409,332**	**1,626,220**	**111,729**	**2,147,281**	**42**	**276**	**318**

As shown in Table 5-1, the average annual consumption and the average number of residential customers have been up and down from the start of 2002 to the end of 2007. Over this period, the average monthly water consumption is 2,032,032 gallons per month or an equivalent 67,807-gpd. Monthly water consumption ranged from a low of 1,246,450 gallons in November 2003 to a high of 4,377,179 gallons in July 2003. The highest monthly consumption usage occurs during the months of July and August and the months of relatively low usage are February and March.

The average annual consumption increase between 2002 to 2007 is 0.54 percent. This small increase is due to the small decrease in consumption in 2004 and 2005. If we look at the previous 3 year average annual consumption, it shows an increase of 5.03 percent per year. This can be attributed to the recent increase in development the last few years.

In a 6 year average, the City of Halsey had an average of 249 residential meter services consuming an average of 199 gpd per meter or 6,045 gallons per month per meter. With an estimate of 2.58 persons per household (Census data for Linn County), the residential consumption usage is 77 gallons per persons per day (gpcd). This per residential capita consumption usage is below other municipalities of similar population and size of the City of Halsey. The average residential per capita consumption in Oregon is approximately 111 gpcd[1]. ([1] AWWA Water Distribution Systems Handbook, Larry W. Mays, 2000. Table 3.1)

Most of the water that is consumed in the City of Halsey is by residential customers at 75.7 percent. The second largest portion is by commercial customers at 19.1 percent. The remainder is by public use (Parks and City Hall) at 5.2 percent.

Equivalent Dwelling Units (EDU)

A dwelling unit is defined as on typical single family residential dwelling. Non-residential users (industrial, commercial, public facility, etc.) can be described as a number of equivalent residential units based on their water consumption compared to the construction of a residential unit. The number of equivalent dwelling units (EDU's) that a commercial or other non-residential user has can be used as a basis for rate structure. Capacity of a system can be defined based on the ability to serve a certain number of EDU's and future checks can be made on system capacity at any time regardless of the growth patterns that have occurred in residential, commercial, or industrial users.

Based on the water consumption records, it was determined that the average single-family dwelling in the City of Halsey uses approximately 6,045 gallons of water per month or 199 gpd. This shows that the average consumption per EDU is 199 gpd. This should not be confused with demand per EDU, which may be higher due to system losses and other unaccounted flows. Consumption per single EDU can be used to calculate the number of EDUs for other users based on average water consumption. Table 5-2 summarizes the City of Halsey Water System EDUs.

Table 5-2 City of Halsey Water System EDUs

User	Gallons per Year	Gallons per Day	Number of EDUs
Residential	18,063,018	49,488	249
Commercial	5,221,051	14,304	72.0
Public Uses	1,100,313	3,015	15.2
Total	**24,384,382**	**66,807**	**336.2 (336)**

For a 6-year period of January 2002 through December 2007, an equivalent of 336 EDUs used water from the system.

Water Treatment Plant Production

The volume of water pumped from the groundwater wells and treated by the WTP indicates the system demand. System leakage, distribution flushing, fire hydrant testing, County unmetered usage, Fire Department unmetered usage and other unaccounted water can cause production quantities higher than consumption quantities, however, portions of these unaccounted flows that cannot be eliminated must still be provided for in the system.

Plant production records were obtained from the City of Halsey for January 2000 through December 2007. Table 5-3 summarizes the City of Halsey Water Plant Production. This table only summarizes the plant production between January 2002 to December 2007.

Table 5-3 City of Halsey Water Plant Production Summary

Year 2002						
Month	Total Influent-Pumped from Wells (gallons)	Average Daily Influent-Pumped from Wells (gpd)	Total Effluent-Pumped to Distribution System (gallons)	Average Daily Effluent-Pumped to Distribution System (gpd)	Maximum Day Demand from City Records for Influent (gpd)	Maximum Day Demand from City Records for Effluent (gpd)
January	2,283,000	74,000	1,409,000	56,000	150,000	74,000
February	2,903,000	104,000	2,022,000	72,000	138,000	108,000
March	2,250,000	72,000	2,248,000	72,000	157,000	79,000
April	2,165,000	72,000	1,473,000	49,000	226,000	64,000
May	2,090,000	67,000	1,674,000	54,000	170,000	76,000
June	3,139,000	104,000	2,541,000	84,000	251,000	179,000
July	4,428,000	143,000	4,070,000	131,000	240,000	226,000
August	4,404,000	142,000	4,029,000	130,000	316,000	196,000
September	2,956,000	98,000	2,972,000	99,000	212,000	188,000
October	2,388,000	77,000	2,061,000	66,000	96,000	100,000
November	2,682,000	89,000	1,778,000	59,000	122,000	100,000
December	1,901,000	61,000	1,540,000	50,000	107,000	101,000
	33,589,000	**91,917**	**27,817,000**	**76,833**		

Year 2003						
January	1,923,000	62,000	1,373,000	44,000	111,000	61,000
February	1,676,000	54,000	1,232,000	44,000	82,000	61,000
March	1,835,000	59,000	1,246,000	40,000	109,000	58,000
April	1,775,000	59,000	1,316,000	44,000	94,000	110,000
May	2,194,000	71,000	1,785,000	57,000	139,000	124,000
June	3,454,000	115,000	3,192,000	106,000	182,000	161,000
July	5,062,000	163,000	4,802,000	155,000	246,000	215,000
August	4,482,000	144,000	4,138,000	133,000	201,000	177,000
September	2,987,000	99,000	2,678,000	89,000	158,000	144,000
October	2,122,000	73,000	1,505,000	51,000	277,000	75,000
November	1,983,000	66,000	1,697,000	56,000	139,000	129,000
December	1,847,000	59,000	1,327,000	42,000	83,000	64,000
	31,340,000	**85,333**	**26,291,000**	**71,750**		

Year 2004						
Month	Total Influent-Pumped from Wells (gallons)	Average Daily Influent-Pumped from Wells (gpd)	Total Effluent-Pumped to Distribution System (gallons)	Average Daily Effluent-Pumped to Distribution System (gpd)	Maximum Day Demand from City Records for Influent (gpd)	Maximum Day Demand from City Records for Effluent (gpd)
January	2,011,000	65,000	1,704,000	55,000	124,000	131,000
February	1,788,000	62,000	1,521,000	52,000	85,000	62,000
March	1,883,000	61,000	1,665,000	54,000	89,000	88,000
May	2,245,000	72,000	1,816,000	58,000	114,000	99,000
June	2,855,000	95,000	2,600,000	86,000	165,000	149,000
July	4,769,000	154,000	4,109,000	137,000	216,000	207,000
August	3,858,000	124,000	3,525,000	113,000	191,000	164,000
September	2,317,000	77,000	2,057,000	68,000	132,000	107,000
October	2,157,000	69,000	1,828,000	59,000	117,000	70,000
November	2,000,000	66,000	1,724,000	57,000	97,000	76,000
December	2,008,000	65,000	1,791,000	58,000	88,000	74,000
	27,891,000	**75,833**	**24,340,000**	**66,417**		

Year 2005						
January	1,983,000	64,000	1,731,000	56,000	102,000	65,000
February	1,866,000	66,000	1,649,000	59,000	137,000	118,000
March	1,866,000	60,000	1,703,000	55,000	94,000	69,000
April	2,045,000	68,000	1,690,000	56,000	173,000	66,000
May	2,051,000	66,000	1,794,000	58,000	90,000	79,000
June	2,176,000	72,000	1,908,000	63,000	128,000	103,000
July	3,452,000	111,000	2,954,000	98,000	164,000	145,000
August	3,918,000	128,000	3,656,000	118,000	184,000	166,000
September	2,596,000	86,000	2,258,000	75,000	153,000	129,000
October	2,197,000	71,000	1,845,000	59,000	170,000	154,000
November	1,690,000	56,000	1,562,000	52,000	91,000	79,000
December	1,926,000	62,000	1,875,000	60,000	89,000	88,000
	27,766,000	**75,833**	**24,625,000**	**67,417**		

Year 2006						
January	1,774,000	57,000	1,572,000	50,000	86,000	62,000
February	1,733,000	61,000	1,499,000	53,000	91,000	71,000
March	1,912,000	61,000	1,685,000	54,000	89,000	92,000
April	1,927,000	64,000	1,635,000	54,000	97,000	80,000
May	2,389,000	77,000	1,859,000	59,000	146,000	120,000
June	2,772,000	92,000	2,033,000	67,000	182,000	174,000
July	4,503,000	145,000	3,733,000	120,000	228,000	205,000
August	4,987,000	160,000	4,412,000	142,000	248,000	206,000
September	3,688,000	123,000	3,217,000	107,000	205,000	175,000
October	2,136,000	68,000	1,914,000	62,000	126,000	84,000
November	2,026,000	67,000	1,775,000	59,000	90,000	132,000
December	2,145,000	69,000	1,661,000	53,000	160,000	64,000
	31,992,000	**87,000**	**26,995,000**	**73,333**		

Year 2007						
Month	Total Influent-Pumped from Wells (gallons)	Average Daily Influent-Pumped from Wells (gpd)	Total Effluent-Pumped to Distribution System (gallons)	Average Daily Effluent-Pumped to Distribution System (gpd)	Maximum Day Demand from City Records for Influent (gpd)	Maximum Day Demand from City Records for Effluent (gpd)
January	2,099,000	68,000	1,700,000	55,000	94,000	65,000
February	2,053,000	73,000	1,650,000	59,000	147,000	96,000
March	2,112,000	68,000	1,690,000	54,000	90,000	71,000
April	2,000,000	67,000	1,564,000	51,000	97,000	69,000
May	2,679,000	86,000	2,216,000	71,000	177,000	161,000
June	3,283,000	109,000	2,457,000	82,000	163,000	140,000
July	4,091,000	132,000	3,667,000	122,000	192,000	178,000
August	4,125,000	133,000	3,729,000	120,000	214,000	180,000
September	3,009,000	100,000	2,494,000	83,000	174,000	137,000
October	2,444,000	79,000	1,857,000	60,000	152,000	111,000
November	2,150,000	72,000	No Data[1]	No Data[1]	94,000	No Data[1]
December	2,250,000	73,000	Data Inconclusive[2]	Data Inconclusive[2]	92,000	Data Inconclusive[2]
	32,295,000	**88,333**	**23,024,000[3]**	**75,700[4]**		
			27,628,800[5]	**90,840[5]**		

[1] No Flow Meter for 14-days.
[2] Meter not working properly for the first 3-days.
[3] Totals for 10-months.
[4] Average for 10-months.
[5] Estimated production for 12-months based on the 10-month average.

As shown in the table above, the 6 year average treated (influent) production is 30,184,500 gallons per year and the 6 year average distributed (effluent) production is 26,282,800 gallons per year. The difference between the treated and the distributed production is the storage component of the water system. When a demand is imposed on the distribution side of the water system, this water comes from the reservoirs through the booster pump stations. The influent production does not occur until the reservoirs level reaches a defined or set level that triggers the reservoirs to refill with treated water. From this point forward, production will mean effluent production or distribution production.

The average monthly production for this period is 2,190,233 gallons. The lowest monthly production occurred in March 2003 with 1,232,000 gallons and the highest monthly production occurred in July 2003 with a production of 4,802,000 gallons. The average day production over this period is 72,008 gallons.

The plant production in Table 5-3 includes water that is used to backwash the treatment filters. There are no meters that record this volume, however, a backwash is performed every 48 hours of well pump runtime in Well #2. The plant production records have records of the well pump runtime each day. Table 5-4 calculates the approximate number of backwashes that occur each year.

Table 5-4 City of Halsey Backwash Summary

	Year						
	2002	2003	2004	2005	2006	2007	Average
Total Well#2 Runtime (hours)	1,808.8	1,948.8	1,861.6	1,719.2	1,986.4	2035.2	**1,893.3**
Number of Backwashes per Year	37.7	40.6	38.8	35.8	41.4	42.4	**39.4**
Number of Backwashes per Month	3.1	3.4	3.2	3.0	3.4	3.5	**3.3**

The backwash water volume is approximately equal to the capacity of the backwash pond which is 1,350 cubic feet or 10,100 gallons. Over the past 6-years, this computes to an average backwash volume of 397,940 gallons per year or 33,330 gallons per month or 1.5 percent of the total plant production.

Analyzing the averages of the past 6-years, the Average Daily Demand (ADD) is 72,008 gpd, the average Maximum Month Demand (MMD) is 134,167 gpd, and the average Maximum Daily Demand (MDD) is 200,000 gpd. The averages of the effluent production closely match the population trend of the up and down usage over the past 6 years.

Analyzing and averaging the last 2 years, we find that the ADD was 74,827-gpd (75,000 gpd), the MMD was 132,000 gpd, and the MDD was 193,000 gpd. The measured MMD peaking factor is 1.76. The measured MDD peaking factor is 2.57. The ratio of the MMD and MDD to the ADD of 1.76 and 2.57 are considered normal.

These demands are used by a total population of 801 (see Section 2.4) and a total of 336 EDUs. Applying the demands to the population gives the per capita demands, or "unit demands". A summary of current water demand unit values is presented in Table 5-5 Current Water Demands.

Table 5-5 Current Water Demands (past two-years)

Unit Demand	Gallons per Day (gpd)	Gallons per Day per Equivalent Dwelling Unit (gpd/EDU)	Gallons per capita per Day (gpcd)
Average Daily Demand, ADD	75,000	223	87
Maximum Monthly Demand, MMD	132,000	393	152
Maximum Day Demand, MDD	193,000	574	223

The current demands include a certain amount of unaccounted water use. An analysis of unaccounted water follows. Design values, based on current water demand, water loss, and anticipated reductions will be selected for use in water demand projections.

Unaccounted Water

The difference between water delivered to the system (plant production) and the amount of water metered through residential, commercial, and public water meters (water consumption) is unaccounted water. The difference can be attributed to leakage in the distribution system, water used for system flushing, fire fighting, and other public unmetered use. Table 5-6 summarizes the Unaccounted Water.

Table 5-6 Unaccounted Water Summary

Year	Water Delivered (gallons)	Water Consumed/Sold (gallons)	Backwash per Table 4-4 (gallons)	Unaccounted Water (gallons)	Percent Loss per year
2002	27,817,000	24,945,636	380,770	2,490,594	8.95%
2003	26,291,000	24,263,421	410,060	1,617,519	6.15%
2004	24,340,000	22,867,530	391,880	1,080,590	4.44%
2005	24,625,000	22,241,380	361,580	2,022,040	8.21%
2006	26,995,000	25,520,955	418,140	1,055,905	3.91%
2007	27,628,800	25,767,366	428,240	1,433,194	5.19%
6-year Average	**26,282,800**	**24,267,715**	**398,445**	**1,616,640**	**6.15%**

Over the last 6 years, the City of Halsey has delivered an average of 26,282,800 gallons per year, water consumption and sales have averaged 24,267,715 gallons per year and the treatment plant backwashes average 398,445 gallons per year. Based on these values, an average of 1,616,640 gallons per year have been unaccounted for. This calculates to an average percent loss of 6.15 percent.

Water system flushing through fire hydrants and blow-offs are conducted periodically but water quantities used for these flushing are not known. The City of Halsey Public Work's personnel have indicated that Linn County and the Halsey-Shedd Rural Fire Department have used water through the years and these water volumes are also not known.

According to State standards, municipalities should take efforts to reduce loss to 15 percent. If 15 percent is easily achieved, the municipality should strive to reduce loss to 10 percent. As shown above, the loss in the City's water system is under 10 percent. This low loss could be attributed to the fact that most of the major distribution main lines in the system are under 15 years old.

Section 5.3 Target Design Values

As previously shown, the last 2 years the ADD is 87 gpcd, including unaccounted water. The measured MMD/ADD ratio is 1.76 and the measured MDD/ADD ratio 2.57. These are reasonable and common ratios. A peaking factor of 5.0 will be used to estimate the Peak Hourly Demand (PHD).

The per capita water usage for Oregon is documented by the U.S. Department of the Interior in the 2000 U.S. Geological Survey – Circular 1268. According to this study, the average per capita water use for Oregon is 207 gallons per capita per day (gpcd) including domestic, commercial, industrial, public use, and loss. Of the total 207 gpcd, 63 percent is residential, commercial and public use/loss, 34 percent is industrial, and 3 percent is related to thermoelectric power generation. Typical values are as follows: ADD of 207 gpcd, MMD of 321 gpcd, PWD of 458 gpcd, MDD of 518 gpcd (2.5 times the ADD), and PHD of 1,035 gpcd (5 times the ADD). These values, however, are state averages and values in a specific community can vary considerably. Often, higher per capita values are seen in smaller communities. Peaking factors are also typically higher in small communities.

With the loss in the water system under 10 percent and the potential of industrial lands developing, the 87 gpcd seems rather low and should be increased for future demand projections. However, funding agencies discourage the use of excessive demands being projected into the future resulting in large facilities being required to support high per capita usages. Some reasonable increase in demand must be assumed.

Industrial use can vary considerably depending on the type of industry. Planning water use values ranges from 200 to 4,800 gpd per acre, with a value of 1,620 gpd/acre common for light industrial, and a value of 2,270 gpd/acre common for heavy industrial. If we assume that 10-percent of the industrial lands (10-acres) within the City Limits is developed and assuming a medium industrial use needing 2000 gpd/acre, an additional 20,000 gpd would be added to the ADD. This would equate to a new ADD of 95,000 gpd or 110 gpcd.

The value of 110 gpcd is still substantially lower than the design value of Westech Engineering 1993 Water System Analysis for the City of Halsey. This ADD value is reasonable and at the low end of communities similar to Halsey, but is selected for the design demand projection. An MMD peaking factor of 1.8, MDD peaking factor of 2.6 and a PHD peaking factor of 5.0 are selected for design demand projections in the City of Halsey.

Table 5-7 Target Water Demand Design Values

Demand Unit	Gallons per Capita per Day (gpcd)	Gallons per day (gpd)/EDU
Average Day Demand, ADD	110	284
Maximum Month Demand, MMD	198	511
Maximum Day Demand, MDD	286	738
Peak Hour Demand, PHD	550	1,419

Section 5.4 Projected Water Demand

Water demands are projected into the future using the target design value along with projected population estimates. The goal of projecting future water demand is not to build larger facilities to accommodate excessive water consumption, but rather to evaluate the

capability of existing system and to size new facilities for reasonable demand rates. Water demand projections should be based on acceptable water loss quantities, reasonable conservation measures, and the communities expected water use characteristics. The project water demands listed in this section are based on current levels of water use. The selected target design values are multiplied with the population projections prepared in Section 2.4 to give the projected water demands. A unit ADD of 110 gpcd is used for residential, commercial, industrial, and public use and loss.

The current population of 801 is projected to increase to 1,153 over the next 20 years. This is equivalent to an average annual growth rate of 1.75 percent. Projected demands are summarized in Table 5-8.

Table 5-8 Project Water Demand

Year	Population	ADD (gpd)	MMD (gpd)	MDD (gpd)	PHD (gpd)
2007, Current	801	88,110	158,598	354 229,086	440,550
2010	843	92,730	166,914	241,098	463,650
2015	920	101,200	182,160	263,120	506,000
2020	1,003	110,330	198,594	286,858	551,650
2025	1,094	120,340	216,612	312,884	601,700
2028	1,153	126,830	228,294	329,758	634,150

.682

Water facilities are designed using ADD, MDD, and PHD values. Components such as well pumps, treatment equipment and storage reservoirs are typically sized to provide for the 20 year MDD. Distribution systems must be able to convey projected PHD flows. Component sizing and design is discussed in the following sections.

It should be noted that these populations and water demands projections are based upon historical trends, application of comprehensive plan policies, and other factors which can change over time. The addition of a major water customer to the system, or approval of extensive land development, could substantially impact water demands and water service in this small community. Accordingly, water demands and supplies should be reviewed at least every 5 years.

Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem Oregon 97301-1266
(503) 986-0900
www.wrd.state.or.us

Application for Extension of Time for Municipal and Quasi-Municipal Water Use Permits

Make use of this form, *Application for Extension of Time for Municipal and Quasi-Municipal Water Use Permits*, only if the permit uses the word "Municipal" or "Quasi-municipal" in the description of the purpose or use to which water is to be applied.

Superseded by Nov 20 2009 Application

TO THE DIRECTOR OF THE OREGON WATER RESOURCES DEPARTMENT

A separate extension application must be submitted for each permit as per OAR 690-315-0070(2). This page, with an original signature by the permit holder of record, must accompany any application for extension of time.

This application and a summary of review criteria and procedures that are generally applicable to this application are available at http://www.wrd.state.or.us/OWRD/PUBS/forms.shtml

I, City of Halsey — Judy Cleeton
NAME OF PERMIT HOLDER [*OAR 690-315-0070(1) and (3)(a)*] — NAME OF CONTACT

P. O. Box 10 — Halsey — OR — 97348
ADDRESS — CITY — STATE — ZIP

(541) 369-2522 — judy@cityofhalsey.com
PHONE — E-MAIL ADDRESS

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the permit holder of:

Application Number G - 15932

Permit Number G - 15551
[OAR 690-315-0070(3)(b)]

do hereby request that the time in which to:

☐ complete construction (of diversion/appropriation works and/or purchase and installation of the equipment necessary to the use of water), which time now expires on October 1, _____, be extended to October 1, _____,

and/or the time in which to:

☒ apply water to full beneficial use under the terms and conditions of the permit, which time now expires on October 1, 2008, be extended to October 1, 2050.

I am the permittee, or have written authorization from the permittee, to apply for an extension of time under this permit. I certify that the information I have provided in this application is true and correct to the best of my knowledge.

Judy M. Cleeton — 10/21/2008
Signature — Date

WRAD

City of Halsey

PO Box 10
369-2522
773 West First Street
2521
Halsey, OR 97348
2900

Telephone (541)
FAX: (541) 369-
TTY: (800) 735-

October 22, 2008

Ann Reece
Extensions Specialist
Water Resources Department
725 Summer St. N.E. Suite A
Salem, OR 97301-1266

Dear Ann:

Enclosed is the revised application for an Extension of Time for Municipal and Quasi-Municipal Water Use Permits. Since submitting the application, you will note that I have received a copy of the Water System Master Plan. Using current information provided in that report I have revised some of the data you were needing clarification on. I trust I have provided the correct information but let me know if there are other additions or corrections needed. I have paper-clipped the revised application with some additional attachments in anticipation that you can replace the original application and add these attachments to the ones earlier submitted.
I have one other question that apparently I was not aware that Permit G-12998 needed to show beneficial use of .0613 cfs from Well #2 before October 1, 2005. The City would like to make full beneficial use of this permit, and since it is used as a backup to Well #3, we have not made full beneficial use to date. So do I need file a separate extension for this permit?
Thank you Ann for your patience and assistance in working with the City to keep our well permits in order.

Sincerely,

Judy M. Cleeton

Judy M. Cleeton
City Administrator

The City of Halsey is operated in accordance with federally established policies which prohibit discrimination on the basis of race, color, sex, age, handicap, religion, or national origin.

City of Halsey Application for Extension of Time for A Water Right Permit

1. Halsey Check#11808 in the amount of $350.00 enclosed

2. For Quasi-Municipal water use permit holders, provide evidence of the actions taken to begin actual construction on the project if required under the applicable statue.

   Begin Date December 17, 1997 Construction of Well #3 began.

G-12997 Linn 51585

The original permit application for Well #3 was in November, 1996 with construction to begin by November 27, 1997. Construction did not begin until December 17, 1997 due largely to delays with the contractor which ultimately led to litigation. The City reapplied for a permit on February 21, 2003 based upon the recommendation from the Water Resources Department and Well #2 was added to the application in order to increase flexibility in the water distribution system.

→ G-15551 Linn 13705

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3. N/A

4. Provide evidence of actions taken to develop the water right permit within the permitted time period and/or within the time period of the previous extension.

INSERT DATES	WORK ACCOMPLISHED BEFORE PERMIT WAS ISSUED	COST
4/16/1998	Construction of well completed	$ 60, 178
3/2003	Installation of water meter and water use impact plan	$109, 109

INSERT DATES	ALL WORK AND ACTIONS ACCOMPLISHED DURING PERMITTED TIME PERIOD	COST
	The permit was signed	
1/16/2004	Signed by Water Resources Department	
10/1/2008	The permit specified complete application of water to the use shall be made ("C-Date")	

INSERT DATES	ALL WORK AND ACTIONS ACCOMPLISHED AFTER PERMIT "C-DATE" AND PRIOR TO ANY EXTENSION OF TIME REQUEST	COST
9/21/2003	Completion of 4th Street Waterline Replacement	$98,671

TOTAL COST TO DATE: $267,868

\+ 25,000 Water Master Plan

292,868

5. Provide evidence of compliance with conditions contained in the original permit, and any previous extension(s), or the reason the condition was not satisfied.

A.

1. A Water Management and Conservation Plan was to be submitted within 3 years of the permit issuance, however that has not been completed. The City has been working to complete a Water Master Plan which is also required by your Department. Although City employees have devoted many hours to this project, the City has been at the mercy of its City Engineers to bring this plan to completion. The City Engineer finally completed the Water System Master Plan on September 24, 2008 and has submitted it to Tom Charbonneau. The City anticipates with the completion of the Water System Master Plan that the Water Management and Conservation Plan could be finished within a year of that date.

B. Measurement, recording and reporting conditions have been met as required by the permit.

1. A meter has been installed at the water plant and records the amount of water used each day. Reports of the recorded water use measurements are reported to the Department annually as required.
2. The meter is accessible to the watermaster with reasonable notice as it is confined in a locked area.
3. A plan to monitor and report the impact of water use on water levels within the aquifer that provides water to the permitted wells was completed in March, 2003 and has been approved by your Department. A copy of the latest Water-Use Impact Report is included.

6. Provide <u>evidence</u> of the maximum rate, or duty if applicable, of water diverted for beneficial use under the permit and/or prior extensions of time, if any, made to date.

Maximum instantaneous rate used to date = .320 cfs (cubic feet per second)
A copy of the production for July 2004, which is maximum rate of water diverted for beneficial use under this permit, is enclosed to support this information.

0.6 (see July 2004 pumping records) received 9-25-08

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7. **Provide an estimate of the population served under this permit and a description of the Methodology used to make the estimate.**

801 - see Table 5-8 Water Master Plan

The estimated current population supplied water by the City of Halsey is 780. The estimate is derived from the Portland State University Population Research Center from the July 1, 2007 report. A copy of the report is enclosed.

8. **Provide a description of the financial expenditures made toward completion of the water development under this permit.**

DATE	WORK OR ACTIONS ACCOMPLISHED	COST
9/21/2003	Completion of 4th Street Waterline Replacement	$98,671
1/2008 – 10/2008	Completion of Water Master Plan	Est. $25,000
	TOTAL COST	$123,671

9. **Provide an estimate of the cost necessary to complete the water development.**

DATE	WORK AND ACTIONS TO BE ACCOMPLISHED (Projected)	COST
2020 – 2050	Replacement of old waterlines (Copy of estimate enclosed)	$3,288,310
2015 – 2025	Larger pump for well – current pump 20HP Crown Vehicle Turbine Submersible	$75,000
2010 – 2050	Demands for use anticipated as population grows	$200.000
	TOTAL COST	$3,563,310

10. **Provide a summary of any events that delayed completion of the water development or application of water to full beneficial use, including other governmental requirements (if any), relating to the project that have significantly delayed completion of construction or perfection of the right.**

Since the issuance of Permit #G-15551 the population of Halsey has grown from 724 to 780; based upon the attached Portland State University Center for Population Research and Census. The average annual population was expected to increase 2.85 percent over the next twenty-five years, however due to economic downturns the projected increase has slowed considerably. Given the amount of development left to occur, the City's projected growth rate, the current demands for water, and the information reported in the Water System Master Plan, the City requests and extension until 2050 in order to fully make beneficial use of the water under this permit.

10. Continued

The replacement of the remaining old waterlines is extremely cost prohibitive for a small rural community of 780 residents. Grant funding has become limited compared to prior years, thus the financial impact for needed improvements to make full beneficial use of the water must be analyzed carefully. The City has reviewed bond possibilities, however the financial impact to the citizens would be substantial based upon the estimated costs for improvements. The City has not, but will probably look at low cost loan opportunities, such as those offered through the State Revolving Loan Fund. Other than that, the City will have to look at increasing water rates. In addition, the need to meet to the governmental regulation of developing a Water Master Plan, and ultimately a Water Management and Conservation Plan, although both extremely important simply adds to the financial burden of such a small community.

11-A. Provide an estimated demand projection and a description of the methodology used for the subject water right permit, considering the other water rights held by the municipal or quasi-municipal water use permit holder, and a date by which the water development is anticipated to be completed and water put to full beneficial use.

a) Inventory of Water Rights Held

Ground Water

Application/Permit Number	Certificate Number	Source	Use	Priority Date	Authorized Amount of Water	Max Amount of Beneficial Water Used to Date	Use Limitations
G13998/G12998	N/A	Well#2	Municipal	3/3/1995	.613 cfs	.501 cfs	Emergency Backup to Well #3
G15932/G15551	N.A	Well#3/ Well #2	Municipal	2/24/2003	1.0 cfs	.320 cfs	Cost/Population Growth

Jan 2004: .394

b) Water Supply contracts and/or Agreements

N/A

c) Current Peak Water Demands

The total rate of water being used to meet the current peak demands for water from all water rights held by the City of Halsey is .320 cfs as noted above. Well #3 is the primary well as indicated, and Well #2 serves currently as an emergency backup.

d) **Projected Population**

Between 2000 and 2007, the City of Halsey's population increased from 725 to 780 According to the Portland State University's Center for Population Research and Census. This calculates to an average annual growth rate of 1.05 percent, however the recent trend in the last two years, and the development noted in section "f" would suggest the average annual growth rate to be higher. A Linn-Benton Regional Analysis Study done by ECONorthwest in 1999 used population projections provided by the counties and listed a 1.25 percent average annual growth rate in the City of Halsey for the next twenty-years. The 1993 Water System Analysis for the City of Halsey used an average annual growth rate of 2.85 percent and the City's Sanitary Sewerage System Facilities Plan Update for the City of Halsey used an average annual growth rate of 2.31 percent. According to the Water System Master Plan, based upon the recent trend and the potential development in the planning stages, the City can estimate the average annual growth rate to be somewhere between 1.25 percent and 2.00 percent. The Master Plan selected an average annual growth rate for the City of Halsey to be 1.75 percent. At an annual average annual growth rate of 1.75 percent, it is estimated that a total of 352 people would reside in the City over the next twenty years. The U.S. Census data lists an average of 2.58 people per household in Linn County, therefore it is anticipated that 136 new homes would be required. There are sufficient buildable lands in the Urban Growth Boundary to accommodate this growth. The Master Plan states that the water system must be able to support a population of 1153 by the year 2028.

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e) **Future Peak Water Demands**

The maximum peak hour demand (PHD) is projected in Table 5-8 of the Water System Master Plan. Based upon the projected demands it is anticipated that approximately .316 cfs will still be available under the Water Rights permit in the year 2028. It is stated in Section 9 that the City of Halsey's MMD will exceed its 1.0 cfs water rights capacity when the population hits 1692 people. Using the 1.75 percent average annual growth rate in the Master Plan this population would be realized in the year 2050. Populations and water demand projections are based upon historical trends, application of comprehensive plan policies, and various other factors which can change over time. It should be noted that a major water customer to the system, or approval of an extensive land development, could substantially impact water demands in a small community of this size.

Unless the City experiences a large increase in the average annual growth rate of 1.75

e) Future Peak Water Demands continued

percent or an increase in the MMD water usage, Well #3 should adequately meet the anticipated future water needs. If a major development were to occur that required a need to increase the MDD than what is currently being projected a new well could become necessary and the City would have to look to secure additional water rights or determine if the existing water right certificate allows for additional water to be withdrawn. It could also be that the permit #G-12998 for Well #2 which is currently used as a backup to Well #3 would be fully developed for beneficial use.

f) Potential Growth

The City approved its first subdivision in 2001 of 39 homes, however there are still six lots either not developed or have homes with no occupants at this time. Around 2005 there was a 7-lot subdivision constructed in the southwest part of the City and in 2006, a small 13 lot subdivision was approved and 7 homes have been constructed there to date. In September, 2007 an annexation was approved that led to another 60+ homes approved as an addition to this subdivision in January, 2008. As part of this annexation, there are still a little more than 5 acres that will potentially add an additional 40+ homes to this subdivision. The economy has slowed the development of these subdivisions, however it is anticipated growth will pick up again in two to three years. Along with new residents there is hope that some type of industry or small commercial businesses will be attracted to the City as well. For this reason, the City requests an extended time to make full beneficial use of their water permit as the City grows and thus additional residents and businesses affect future water demands.

g) Completion Date

Again, due to the fact that the economy has been in a continual slowdown, and not expected to turn around anytime soon, it is anticipated that it will take the next forty-two years to put the water to full beneficial use. The City requests an extension until October 1, 2050 in order to meet the water needs of the community.

12. Provide a summary of the future plan and schedule to complete construction and/or perfect the water right.

Although the City of Halsey's Capitalization Policy designates infrastructure to have a useful life of 50-60 years, it is intended that the City will make full beneficial use of its water system within 42 years. The following table is a proposed schedule to perfect the water right.

Approximate Date Range	Work and Actions to be Accomplished	Estimated Cost
2010-2012	Cost of Construction for Addition of a new 0.25 MG Storage Reservoir	$548,400
2010-2045	Demands for use due to growth	$200,000
2015-2020	Determine need for larger pump for Well#2 and Well#3 with assistance from the City Engineer	$20,000
2025-2030	Purchase of larger pump	$80,000
2020-2025	Work with City Engineer to develop a plan to replace old water lines	$25,000
2025-2035	Construction of East Side Waterline Improvements	$867,725
2035-2040	Construction of Northwest Side Waterline Improvements – Phase One	$462,450
2040–2045	Construction of Northwest Side Waterline Improvements – Phase Two	$302,900
2045-2050	Construction of Southwest Side Waterline Improvements	$865,925
	TOTAL COST	$3,192,400

13. Justify the time requested to complete the project and/or apply the water to full beneficial Use.

The replacement of the remaining old water lines is extremely cost prohibitive for a small rural community of 780 residents and unfortunately even low cost loans would have a huge impact financially on the citizens. It will take time to develop a fundamental plan to fund this type of improvement and financing options are addressed in the Water System Master Plan. In addition, the City needs to continue to grow in order to fully make beneficial use of the water system. The community has begun to grow however development has been slower than earlier projected.

14. Provide any other information you wish OWRD to consider while evaluating the Application For Extension of Time.

The City has made every effort to comply with the conditions of this permit. City employees contributed considerable time to the Water Master Plan, however much of the expertise was be left to our City Engineers. Unfortunately, until the Water Master Plan was finished, and the need to rely on another agency, the Water Management and Conservation Plan could not be completed. In addition, the Water System Master Plan will assist the City in determining the future water needs, including peak demands, in order to make full beneficial use of its permit.

15. N/A

As of July 1, 2007, the U.S. Census Bureau and PSUPRC have estimated the current population of the City of Halsey to be 821 and 780, respectively.

Projected Population

Between 2000 and 2007, the City of Halsey's population increased from 723 to 821 according to the U.S. Census Bureau or 725 to 780 according to the PSUPRC. This calculates to an average annual growth rate of 1.83 percent and 1.05 percent, respectively. However, the recent trend in the last two years, and the development stated above would suggest the average annual growth rate to be higher. A Linn-Benton Regional Analysis Study done by ECONorthwest in 1999 used population projections provided by the counties and listed a 1.25 percent average annual growth rate in the City of Halsey for the next twenty-years. The 1993 Water System Analysis for the City of Halsey used an average annual growth rate of 2.85 percent and the City's Sanitary Sewerage System Facilities Plan Update for the City of Halsey used an average annual growth rate of 2.31 percent. Based upon the recent trend and the potential development in the planning stages, we can estimate the average annual growth rate to be somewhere between 1.25 percent 2.00 percent. For this Master Plan, we have selected an average annual growth rate for the City of Halsey to be 1.75 percent.

Table 2-3 Current and Project Population

Year	Population (U.S. Census Bureau)	Population (PSUPRC)	Average Population
2007, current	821	780	801
2010	864	822	843
2015	943	896	920
2020	1,029	977	1,003
2025	1,122	1,066	1,094
2028	1,182	1,123	1,153

As shown on Table 2-3, an average annual growth rate of 1.75 percent would result in a total of 352 additional people based the average population in City of Halsey over the twenty-year planning period. The U.S. Census data lists an average of 2.58 people per household in Linn County. Based on this data, 136 new homes would be required. There are sufficient buildable lands in the UGB to accommodate this growth.

Improvements developed in subsequent sections of this Master Plan will be based on the above population projections. In summary, the water system must be able to support a population of 1,153 by the year 2028.

capability of existing system and to size new facilities for reasonable demand rates. Water demand projections should be based on acceptable water loss quantities, reasonable conservation measures, and the communities expected water use characteristics. The project water demands listed in this section are based on current levels of water use. The selected target design values are multiplied with the population projections prepared in Section 2.4 to give the projected water demands. A unit ADD of 110 gpcd is used for residential, commercial, industrial, and public use and loss.

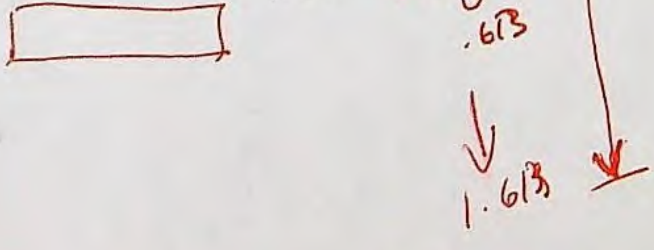
The current population of 801 is projected to increase to 1,153 over the next 20 years. This is equivalent to an average annual growth rate of 1.84 percent. Projected demands are summarized in Table 5-8.

Table 5-8 Project Water Demand

Year	Population	ADD (gpd)	MMD (gpd)	MDD (gpd)	PHD (gpd)
2007, Current	801	88,110	158,598	229,086	440,550
2010	843	92,730	166,914	241,098	463,650
2015	920	101,200	182,160	263,120	506,000
2020	1,003	110,330	198,594	286,858	551,650
2025	1,094	120,340	216,612	312,884	601,700
2028	1,153	126,830	228,294	329,758	634,150

Water facilities are designed using ADD, MDD, and PHD values. Components such as well pumps, treatment equipment and storage reservoirs are typically sized to provide for the 20 year MDD. Distribution systems must be able to convey projected PHD flows. Component sizing and design is discussed in the following sections.

It should be noted that these populations and water demands projections are based upon historical trends, application of comprehensive plan policies, and other factors which can change over time. The addition of a major water customer to the system, or approval of extensive land development, could substantially impact water demands and water service in this small community. Accordingly, water demands and supplies should be reviewed at least every 5 years.



Section 9
Analysis and Improvement Alternatives

Section 9.1 Background

As mentioned in previous sections of this Master Plan, Westech Engineering, Inc (WEI) performed and completed a Water System Analysis Report (WSAR) for the City of Halsey in February of 1993. In this report, WEI recommended extensive and major improvements to the current water system at the time. As mentioned in Section 1, most, if not all, of the recommended improvements in this report were constructed in 1998. It should be mentioned that the population projection in the WSAR estimated the population in 2010 to be 1,100 people. This Master Plan estimates the population projection to be 1,153 as calculated in Section 2.

Section 9.2 Supply

Through an online search on the Oregon Water Resource Department and verified by the City of Halsey, the City of Halsey has three Water Rights permits on file. Permits G-12997and G-12998 allows a maximum of 0.724 cubic feet per second (cfs) or ~~325.0~~ gallons per minute (gpm) and 0.613 cfs or 275.1 gpm to be withdrawn from the Willamette Basin, respectively. Each Water Rights permit contains one well or one Point of Diversion and the Date of Priority for both permits is March 3, 1995. Permit G-15551 allows a maximum rate of 1.0 cfs or 448.8 gpm to be withdrawn from two wells in the Muddy Creek Basin and the Date of Priority for this permit is February 24, 2003. As mentioned in Section 2, the City of Halsey cancelled their Water Rights Permit number G-12997 which describes the right to develop the use of up to 0.724 cfs of water for municipal purposes on February 20, 2003. It is important to note that the City may still have the right to withdraw the maximum amount that is identified on this permit.

Current supply sources are sized to provide for the Maximum Daily Demand (MDD). The projected ~~0.44~~ 33 million gallons per day (mgd) or ~~306~~ 229 gpm; therefore the existing water right is sufficient for the planning period projected population. .68cfs

Based on the projected demands, approximately ~~142~~ 219 gpm will still be available under the Water Rights permit in the year 2028. This may be a sufficient quantity of water for small industrial uses; however, other facilities such as computer chip manufacturers may require much more water to be available.

Considering the importance of water rights, it is prudent to consider growth periods longer than 20 years when planning for water supply. Based upon design per capita demands used in this Master Plan, the City of Halsey's ~~MMD~~ MDD will exceed its 1.0 cfs water rights capacity

448.8 - 306 = 142.8

448.8 + 275.1 = 723.9 - 439

when the population hits 2256 ~~1,692~~ people. If we continue to use the 1.75 percent average annual growth rate noted in Section 2 of this Master Plan, this population would be realized in the year ~~2050~~ 2066.

Surface Water Alternative

There are two available sources of surface water for the City of Halsey; the Calapooia River and the Willamette River. Both sources are rather far, approximately 23,000 feet from the Calapooia and approximately 30,000 feet from the Willamette. The Oregon Water Resource Department and the Army Corp of Engineers will probably not offer any indication of success in obtaining Water Rights until a formal application is submitted and a request is made. Only after a review of the application can the City find out if water rights will be granted or they might impose some restriction on the water rights. The associated cost of construction to construct a water intake and pumps station, coupled with the remote location of the two sources of water considered and the possibility of restrictions imposed on water rights makes this alternative unattractive.

Section 9.3 Well

The major water system improvements in 1998 consisted of the abandonment of one existing well, the minor modification to above-ground piping of the other existing well (Well No. 1), and the new construction of a new well (Well No. 2). Based on the information and input provided by the City of Halsey Public Works personnel, Well No. 2 is the primary well being used with Well No. 1 as a back-up source to Well No. 2 if its capacity has been exceeded.

called #2 in permit called #3 in permit

At this time, it is not necessary to plan for a new well unless the City experiences a large increase in their average annual growth rate of 1.75 percent or an increase in their MMD water usage. A new well may also be required if a major development requires the need to increase the MDD than what is currently being projected. As stated above in Section 9.2, the time at which the City's MDD will exceed its 1.0 cfs water rights capacity will be when the population hits ~~1,692~~ 2256 people based upon a MDD design value of ~~382~~ 286 gallons per capita per day and that population may be realized in the year ~~2050~~ 2066.

1692 x 382 = 646344 gpd = 1.0 cfs

If and when a new well is needed to meet increased MDD, the City needs to secure additional water rights or check if their existing water right certificate allows for additional water to be withdrawn. Table 9-1 below is the estimated probable cost to construct a new well and bring online to the existing Water Treatment Plant.

Table 10-1 Estimated Probable Cost of Construction for Replacement of the existing 0.25 MG Storage Reservoir with New 0.50 MG Storage Reservoir

Item	Description	Units	Quantity	Unit Cost	Construction Cost
1	Mobilization, Bonds (10%)	LS	All	$42,000	$42,000
2	Tank, Foundation, Ladder, Roof	LS	All	$300,000	$300,000
3	Valve, Vault and Piping	LS	All	$30,000	$30,000
4	Level Monitoring Telemetry Equipment	LS	All	$15,000	$15,000
5	Site Work, Demolition, Grading, Fill, Etc.	LS	All	$35,000	$35,000
	Construction Subtotal				$422,000
	Contingency (15%)				$63,300
	Engineering (20%)				$84,400
	Administration (5%)				$21,100
	Project Total				$590,800

Table 10-2 Estimated Probable Cost of Construction for Addition of New 0.25 MG Storage Reservoir

Item	Description	Units	Quantity	Unit Cost	Construction Cost
*	Land Acquisition (if new storage reservoir is not on City Property)	LS	All	$50,000	$50,000
1	Mobilization, Bonds (10%)	LS	All	$36,000	$36,000
2	Tank, Foundation, Ladder, Roof	LS	All	$200,000	$200,000
3	Valve, Vault and Piping	LS	All	$40,000	$40,000
4	Level Monitoring Telemetry Equipment	LS	All	$15,000	$15,000
6	Electrical and Controls to Site	LS	All	$25,000	$25,000
5	Site Work, Grading, Fill, Etc.	LS	All	$40,000	$40,000
	Construction Subtotal				$356,000
	Contingency (15%)				$53,400
	Engineering (20%)				$71,200
	Administration (5%)				$17,800
	Project Total without Land Acquisition				$498,400
	Project Total				$548,400

The second scenario presented looked at just the minimum requirement for a finish storage reservoir requirement, similar to that of other communities. This minimum required storage volume would be equal to the equalization storage plus emergency storage plus residential fire demand storage. The minimum recommended fire demand storage volume for a typical residential area would be 180,000 gallons. This equates to a fire flow demand of 1,500 gpm for a duration of 2 hours. Based upon the above equation, this final storage volume is 731,000 gallons at the end of the planning period. Table 9-3 summarizes this calculation and demonstrates that the City's existing finish storage reservoirs are adequate to handle the water demands till the end of the planning period.

Table 10-3 Estimated Probable Cost of Construction for the City of Halsey - East Side Waterline Improvements

Item	Description	Units	Quantity	Unit Cost	Construction Cost
1	Mobilization, Bonds (10%)	LS	All	$62,000	$62,000
2	Sawcutting	LF	10,500	$1	$10,500
3	Connection to existing pipe	EACH	7	$1,000	$7,000
4	8-inch piping with aggregate backfill	LF	6,170	$50	$308,500
5	Fire hydrants Assembly	EACH	9	$2,500	$22,500
6	Water meter settings (3/4-inch service)	EACH	66	$500	$33,000
7	8-inch gate valve	EACH	20	$800	$16,000
8	Dead-end Main Blow-off	EACH	1	$900	$900
9	Pavement Patching (3-inch thick)	SF	13,125	$3.00	$39,375
10	24-inch Bored Steel Casing under Northeast Drainage Ditch	LF	300	$400	$120,000
		Construction Subtotal			$619,775
		Contingency (15%)			$93,000
		Engineering (20%)			$123,950
		Administration (5%)			$31,000
		Project Total			$867,725

Distribution Piping on the Northwest and Southwest Sides of Halsey

These improvements are really based upon a City goal to replace as much of the existing steel piping as City funds allow, as well as limiting dead-end mains. Some of the proposed improvements show new water extensions to provide service to parts of the industrial area. With the increase in pipe size and the looping of distribution lines, these improvements will increase fire flow capacities and provide system reliability and redundancy. Some of these water distribution improvements could be installed as part of any development that may occur. Tables 10-4, 10-5 and 10-6 summarize the estimated probable cost of construction for the replacement and extension of the water improvements in these areas.

Table 10-4 Estimated Probable Cost of Construction for the City of Halsey - Northwest Side Waterline Improvements – Phase One

Item	Description	Units	Quantity	Unit Cost	Construction Cost
1	Mobilization, Bonds (10%)	LS	All	$33,000	$33,000
2	Sawcutting	LF	6,200	$1	$6,200
3	Connection to existing pipe	EACH	4	$1,000	$4,000
4	8-inch piping with aggregate backfill	LF	3,100	$50	$155,000
5	6-inch piping with aggregate backfill	LF	1,250	$45	$56,250
6	Fire hydrants Assembly	EACH	7	$2,500	$17,500
7	Water meter settings (3/4-inch service)	EACH	50	$500	$25,000
8	8-inch gate valve w/ valve box	EACH	7	$800	$5,600
9	6-inch gate valve w/ valve box	EACH	3	$600	$1,800
10	Dead-end Blow-off	EACH	3	$900	$2,700
11	Pavement Patching (3-inch thick)	SF	7,750	$3.00	$23,250
		Construction Subtotal			$330,300
		Contingency (15%)			$49,550
		Engineering (20%)			$66,100
		Administration (5%)			$16,500
		Project Total			$462,450

Table 10-5 Estimated Probable Cost of Construction for the City of Halsey - Northwest Side Waterline Improvements – Phase Two

Item	Description	Units	Quantity	Unit Cost	Construction Cost
1	Mobilization, Bonds (10%)	LS	All	$22,000	$22,000
2	Sawcutting	LF	5,400	$1	$5,400
3	Connection to existing pipe	EACH	3	$1,000	$3,000
4	8-inch piping with aggregate backfill	LF	2,100	$50	$105,000
5	6-inch piping with aggregate backfill	LF	600	$45	$27,000
6	Fire hydrants Assembly	EACH	4	$2,500	$10,000
7	Water meter settings (3/4-inch service)	EACH	26	$500	$13,000
8	Water meter setting (3-inch service to school)	EACH	1	$1,500	$1,500
9	8-inch gate valve w/ valve box	EACH	4	$800	$3,200
10	6-inch gate valve w/ valve box	EACH	4	$600	$2,400
11	Dead-end Blow-off	EACH	4	$900	$3,600
12	Pavement Patching (3-inch thick)	SF	6,750	$3.00	$20,250
		Construction Subtotal			$216,350
		Contingency (15%)			$32,450
		Engineering (20%)			$43,300
		Administration (5%)			$10,800
		Project Total			$302,900

Table 10-6 Estimated Probable Cost of Construction for the City of Halsey - Southwest Side Waterline Improvements

Item	Description	Units	Quantity	Unit Cost	Construction Cost
1	Mobilization, Bonds (10%)	LS	All	$62,000	$62,000
2	Sawcutting	LF	15,100	$1	$15,100
3	Connection to existing pipe	EACH	8	$1,000	$8,000
4	12-inch piping with aggregate backfill	LF	300	$75	$22,500
4	10-inch piping with aggregate backfill	LF	1,200	$60	$72,000
5	8-inch piping with aggregate backfill	LF	5,270	$50	$263,500
6	6-inch piping with aggregate backfill	LF	780	$45	$35,100
7	Fire hydrants Assembly	EACH	9	$2,500	$22,500
8	Water meter settings (3/4-inch service)	EACH	73	$500	$36,500
9	12-inch gate valve w/ valve box	EACH	1	$1,200	$1,200
10	10-inch gate valve w/ valve box	EACH	7	$1,000	$7,000
11	8-inch gate valve w/ valve box	EACH	9	$800	$7,200
12	6-inch gate valve w/ valve box	EACH	5	$600	$3,000
13	Dead-end Blow-off	EACH	7	$900	$6,300
14	Pavement Patching (3-inch thick)	SF	18,875	$3.00	$56,625
		Construction Subtotal			$618,525
		Contingency (15%)			$92,775
		Engineering (20%)			$123,700
		Administration (5%)			$30,925
		Project Total			$865,925

See Figures 9-1 through 9-4 for the summary of water improvements and their locations in the system.

This 9-25-08 Application Superceeded by 10-24-08 Applic.

Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem Oregon 97301-1266
(503) 986-0900
www.wrd.state.or.us

Application for Extension of Time for Municipal and Quasi-Municipal Water Use Permits

Make use of this form, *Application for Extension of Time for Municipal and Quasi-Municipal Water Use Permits*, only if the permit uses the word "Municipal" or "Quasi-municipal" in the description of the purpose or use to which water is to be applied.

TO THE DIRECTOR OF THE OREGON WATER RESOURCES DEPARTMENT

A separate extension application must be submitted for each permit as per OAR 690-315-0070(2). This page, with an original signature by the permit holder of record, must accompany any application for extension of time.

This application and a summary of review criteria and procedures that are generally applicable to this application are available at http://www.wrd.state.or.us/OWRD/PUBS/forms.shtml

I, City of Halsey — Judy Cleeton
NAME OF PERMIT HOLDER *[OAR 690-315-0070(1) and (3)(a)]* — NAME OF CONTACT

P. O. Box 10 — Halsey — OR — 97348
ADDRESS — CITY — STATE — ZIP

(541) 369-2522 — judy@cityofhalsey.com
PHONE — E-MAIL ADDRESS

the permit holder of:

Application Number G - 15932

Permit Number G - 15551
[OAR 690-315-0070(3)(b)]

do hereby request that the time in which to:

☐ complete construction (of diversion/appropriation works and/or purchase and installation of the equipment necessary to the use of water), which time now expires on October 1, _____, be extended to October 1, _____.

and/or the time in which to:

☒ apply water to full beneficial use under the terms and conditions of the permit, which time now expires on October 1, , be extended to October 1, 2048 ~~2008~~.

I am the permittee, or have written authorization from the permittee, to apply for an extension of time under this permit. I certify that the information I have provided in this application is true and correct to the best of my knowledge.

Judy M. Cleeton — 9/23/2008
Signature — Date

RECEIVED
SEP 25 2008
WATER RESOURCES DEPT
SALEM, OREGON

City of Halsey Application for Extension of Time for A Water Right Permit

1. Halsey Check#11808 in the amount of $350.00 enclosed

2. For Quasi-Municipal water use permit holders, provide evidence of the actions taken to begin actual construction on the project if required under the applicable statue.

Begin Date December 17, 1997 Construction of Well #3 began.

The original permit application for Well #3 was in November, 1996 with construction to begin by November 27, 1997. Construction did not begin until December 17, 1997 due largely to delays with the contractor which ultimately led to litigation. The City reapplied for a permit on February 21, 2003 based upon the recommendation from the Water Resources Department and Well #2 was added to the application in order to increase flexibility in the water distribution system.

3. N/A

4. Provide evidence of actions taken to develop the water right permit within the permitted time period and/or within the time period of the previous extension.

INSERT DATES	WORK ACCOMPLISHED BEFORE PERMIT WAS ISSUED	COST
4/16/1998	Construction of well completed	$ 60, 178
3/2003	Installation of water meter and water use impact plan	$109, 109

INSERT DATES	ALL WORK AND ACTIONS ACCOMPLISHED DURING PERMITTED TIME PERIOD	COST
	The permit was signed	
1/16/2004	Signed by Water Resources Department	
10/1/2008	The permit specified complete application of water to the use shall be made ("C-Date")	

INSERT DATES	ALL WORK AND ACTIONS ACCOMPLISHED AFTER PERMIT "C-DATE" AND PRIOR TO ANY EXTENSION OF TIME REQUEST	COST
9/21/2003	Completion of 4th Street Waterline Replacement	$98,671

TOTAL COST TO DATE: $267,868

5. Provide evidence of compliance with conditions contained in the original permit, and any previous extension(s), or the reason the condition was not satisfied.

A.

1. A Water Management and Conservation Plan was to be submitted within 3 years of the permit issuance, however that has not been completed. The City has been working to complete a Water Master Plan which is also required by your Department. Although City employees have devoted many hours to this project, the City has been at the mercy of its City Engineers to bring this plan to completion. The City Engineer has been in contact with Tom Charbonneau and should complete the Plan later this month or by the end of October, 2008. Once the Water Master Plan is completed, the City will be able to develop a Water Management and Conservation Plan. The City anticipates with the completion of the Water Master Plan that the Water Management and Conservation Plan could be finished within a year of that date.

B. Measurement, recording and reporting conditions have been met as required by the permit.

1. A meter has been installed at the water plant and records the amount of water used each day. Reports of the recorded water use measurements are reported to the Department annually as required.
2. The meter is accessible to the watermaster with reasonable notice as it is confined in a locked area.
3. A plan to monitor and report the impact of water use on water levels within the aquifer that provides water to the permitted wells was completed in March, 2003 and has been approved by your Department. A copy of the latest Water-Use Impact Report is included.

6. Provide <u>evidence</u> of the maximum rate, or duty if applicable, of water diverted for beneficial use under the permit and/or prior extensions of time, if any, made to date.

Maximum instantaneous rate used to date = .320 cfs (cubic feet per second)
A copy of the production for July 2004, which is maximum rate of water diverted for beneficial use under this permit, is enclosed to support this information.

7. Provide an estimate of the population served under this permit and a description of the Methodology used to make the estimate.

The estimated current population supplied water by the City of Halsey is 780. The estimate is derived from the Portland State University Population Research Center from the July 1, 2007 report. A copy of the report is enclosed.

8. Provide a description of the financial expenditures made toward completion of the water development under this permit.

DATE	WORK OR ACTIONS ACCOMPLISHED	COST
9/21/2003	Completion of 4th Street Waterline Replacement	$98,671
1/2008 – 10/2008	Completion of Water Master Plan	Est. $25,000
	TOTAL COST	$123,671

9. Provide an estimate of the cost necessary to complete the water development.

DATE	WORK AND ACTIONS TO BE ACCOMPLISHED (Projected)	COST
2020 – 2048	Replacement of old waterlines (Copy of estimate enclosed)	$3,288,310
2015 – 2025	Larger pump for well – current pump 20HP Crown Vehicle Turbine Submersible	$75,000
2010 – 2048	Demands for use anticipated as population grows	$200.000
	TOTAL COST	$3,563,310

10. Provide a summary of any events that delayed completion of the water development or application of water to full beneficial use, including other governmental requirements (if any), relating to the project that have significantly delayed completion of construction or perfection of the right.

Since the issuance of Permit #G-15551 the population of Halsey has grown from 724 to 780; based upon the attached Portland State University Center for Population Research and Census. The average annual population was expected to increase 2.85 percent over the next twenty-five years, however due to economic downturns the projected increase has slowed considerably. Given the amount of development left to occur, the City's projected growth rate, and current demands for water, the City requests and extension until 2048 in order to fully make beneficial use of the water under this permit.

10. Continued

The replacement of the remaining old waterlines is extremely cost prohibitive for a small rural community of 780 residents. Grant funding has become limited compared to prior years, thus the financial impact for needed improvements to make full beneficial use of the water must be analyzed carefully. The City has reviewed bond possibilities, however the financial impact to the citizens would be substantial based upon the estimated costs for improvements. The City has not, but will probably look at low cost loan opportunities, such as those offered through the State Revolving Loan Fund. Other than that, the City will have to look at increasing water rates. In addition, the need to meet to the governmental regulation of developing a Water Master Plan, and ultimately a Water Management and Conservation Plan, although both extremely important simply adds to the financial burden of such a small community.

11-A. Provide an estimated demand projection and a description of the methodology used for the subject water right permit, considering the other water rights held by the municipal or quasi-municipal water use permit holder, and a date by which the water development is anticipated to be completed and water put to full beneficial use.

a) Inventory of Water Rights Held

Ground Water

Application/Permit Number	Certificate Number	Source	Use	Priority Date	Authorized Amount of Water	Max Amount of Beneficial Water Used to Date	Use Limitations
G13998/G12998	N/A	Well#2	Municipal	3/3/1995	.613 cfs	.501 cfs	Emergency Backup to Well #3
G15932/G15551	N.A	Well#3/ Well #2	Municipal	2/24/2003	1.0 cfs	.320 cfs	Cost/Population Growth

b) Water Supply contracts and/or Agreements

N/A

c) Current Peak Water Demands

The total rate of water being used to meet the current peak demands for water from all water rights held by the City of Halsey is .320 cfs as noted above. Well #3 is the primary well as indicated, and Well #2 serves currently as an emergency backup.

d) **Projected Population**

With the downturn in the economy, the City has not increased in population as was projected in previous studies. It is anticipated that the grown in Halsey over the next two to three years will be approximately .07%, however as the economy improves it is expected that the population will increase at a rate of 1.1 percent per year over the next nine years to a population of approximately 1000. This rate is slightly less than the overall average for Linn County based upon the Linn County Coordinated Population Growth Estimate which was determined from the Halsey Buildable Lands Inventory completed in February, 2003. Based upon these studies, the City is growing at a slower pace than overall in the County, however, after the year 2020, the growth rate for the next twenty-eight years it is anticipated to be approximately 2.85% based upon the Portland State University's Center for Population Research and Census.

1.1% until 2020 2.85% until 2048 = 1976 pop. in 2048

e) **Future Peak Water Demands**

Current demand .32 cfs @ 9.2% increase per 5 yr increment

.32 2008 9.2%
.35 2013
.383 2018
.419 2023
.458 2028
.5 2033
.54620 39
.596 2043
.65 2048

The maximum monthly peaking demand has been reported in the Water Master Plan which is currently in the process of being completed. Unfortunately, with the completion of the water plant in 1999 there is not a lot of history, however it has been determined that the maximum monthly demand in 2001 was 3.803 mgd and the average maximum monthly demand in 2006 was 4.145 mgd. This information was taken from the data obtained from the current water system over the past five years and reflects an increase of .092% during this time. If this percentage of increase were to remain constant over the next forty years the projected monthly peak water demand would be 8.381 mgd. This permit, as well as Permit #G12998, will provide the water rights to supply the future water needs of the community. With the replacement of old waterlines and information provided in the Water Master Plan, the City will be able to plan to meet the anticipated future water needs of the citizens.

4.145 mgd → 8.381 = 102% increase
current demand @ 0.32 cfs @ 102% increase = .65

Peak in 2048 (c.f.s)
.71 2053
.775 2057

f) **Potential Growth**

The City approved its first subdivision in 2001 of 39 homes, however there are still six lots either not developed or have homes with no occupants at this time. In 2006, a small 14 lot subdivision was approved and in September, 2007 an annexation was approved that led to an 60+ homes approved as an addition to this subdivision in January, 2008. As part of this annexation, there are still a little more than 5 acres that will potentially add an additional 40+ homes to this subdivision. The economy has

f) Potential Growth continued

slowed the development of these subdivisions, however it is anticipated growth will pick up again in two to three years. Along with new residents there is hope that some type of industry or small commercial businesses will be attracted to the City as well. For this reason, the City requests an extended time to make full beneficial use of their water permit as the City grows and thus additional residents and businesses affect future water demands.

g) Completion Date

Again, due to the fact that the economy has been in a continual slowdown, and not expected to turn around anytime soon, it is anticipated that it will take the next forty years to full put the water to full beneficial use. The City requests an extension until October 1, 2048 in order to meet the water needs of the community.

12. Provide a summary of the future plan and schedule to complete construction and/or perfect the water right.

Although the City of Halsey's Capitalization Policy designates infrastructure to have a useful life of 50-60 years, it is intended that the City will make full beneficial use of its water system within 40 years. The following table is a proposed schedule to perfect the water right.

Approximate Date Range	Work and Actions to be Accomplished	Estimated Cost
2009-2030	Planning Commission and Council work together to develop an organized plan for growth	
2010-2045	Demands for use due to growth	$200,000
2015-2020	Determine need for larger pump for Well#2 and Well#3 with assistance from the City Engineer	$20,000
2025-2030	Purchase of larger pump	$80,000
2020-2025	Work with City Engineer to develop a plan to replace old water lines	$25,000
2030-2032	Secure funding for replacement of water lines	
2032-2048	Replace water lines	$4,500,000
	TOTAL COST	$4,825,000

13. **Justify the time requested to complete the project and/or apply the water to full beneficial Use.**

The replacement of the remaining old water lines is extremely cost prohibitive for a small rural community of 780 residents and unfortunately even low cost loans would have a huge impact financially on the citizens. It will take time to develop a fundamental plan to fund this type of improvement. In addition, the City needs to continue to grow in order to fully make beneficial use of the water system. The community has begun to grow however development has been slower than earlier projected.

14. **Provide any other information you wish OWRD to consider while evaluating the Application For Extension of Time.**

The City has made every effort to comply with the conditions of this permit. City employees have contributed considerable time to the Water Master Plan, however much of the expertise must be left to our City Engineers. Unfortunately, until the Water Master Plan is finished, and the need of relying on another agency, the Water Management and Conservation Plan cannot be completed. In addition, the Water Master Plan will assist the City in determining the future water needs, including peak demands, in order to make full beneficial use of its permit.

15. **N/A**

Portland State
UNIVERSITY

College of Urban and Public Affairs
Population Research Center

Post Office Box 751
Portland, Oregon 97207-0751
570 Urban Center
506 SW Mill Street

503-725-3922 tel
503-725-5162 fax
askprc@pdx.edu
www.pdx.edu/prc/

– IMPORTANT NOTICE –

Preliminary 2008 Population Estimate

November 15, 2008

To: **Halsey city**

Listed below is the preliminary population estimate for July 1, 2008. Also included are the certified 2007 estimate and 2000 Census figure. The July 1, 2008 estimate will be certified by December 31, 2008.

PRELIMINARY POPULATION ESTIMATE:

JULY 1, 2008: **780**

CERTIFIED POPULATION ESTIMATE:

JULY 1, 2007: **780**

CERTIFIED CENSUS FIGURE:

APRIL 1, 2000: **724**

If you have any questions, please contact:

Risa S. Proehl
Population Research Center
Portland State University
PO Box 751
Portland, OR 97207-0751

Telephone: (503) 725-5103
Fax: (503) 725-5162
E-mail: proehlr@pdx.edu

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report are to be filed with the STATE ENGINEER, SALEM, OREGON 97310 within 30 days from the date of well completion.

WATER WELL REPORT
STATE OF OREGON
(Please type or print) (Do not write above this line)

LINN 13705 State Well No.

State Permit No. This is Well # 2 on Permit L-13998.

RECEIVED
SEP 5 1969
STATE ENGINEER
SALEM, OREGON

K. Wozniak

(1) OWNER:
Name City of Halsey
Address Halsey, Oregon

(2) TYPE OF WORK (check):
New Well ☑ Deepening ☐ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 12.

(3) TYPE OF WELL:
Rotary ☐ Driven ☐
Cable ☑ Jetted ☐
Dug ☐ Bored ☐

(4) PROPOSED USE (check):
Domestic ☐ Industrial ☐ Municipal ☑
Irrigation ☐ Test Well ☐ Other ☐

(5) CASING INSTALLED:
Threaded ☐ Welded ☑
12" Diam. from +1 ft. to 199 ft. Gage .250"
" Diam. from ft. to ft. Gage
" Diam. from ft. to ft. Gage

(6) PERFORATIONS:
Perforated? ☑ Yes ☐ No.
Type of perforator used Miles Knife
Size of perforations 1/4 in. by 3 in.
300 perforations from 40 ft. to 70 ft.
100 perforations from 85 ft. to 95 ft.
perforations from ft. to ft.
perforations from ft. to ft.
perforations from ft. to ft.

(7) SCREENS:
Well screen installed? ☐ Yes ☑ No
Manufacturer's Name
Type Model No.
Diam. Slot size Set from ft. to ft.
Diam. Slot size Set from ft. to ft.

(8) WATER LEVEL: Completed well.
Static level 14 ft. below land surface Date 8/28/69
Artesian pressure lbs. per square inch Date

(9) WELL TESTS:
Drawdown is amount water level is lowered below static level
Was a pump test made? ☑ Yes ☐ No If yes, by whom? W.W.
1st hr: 156 gal./min. with 32 ft. drawdown after 1 hrs.
" 200 " 58 " 5 "
" 200 " 66 " 8 "
Bailer test gal./min. with ft. drawdown after hrs.
Artesian flow g.p.m. Date
Temperature of water Was a chemical analysis made? ☐ Yes ☐ No

(10) CONSTRUCTION:
Well seal—Material used Cement
Depth of seal 20 ft.
Diameter of well bore to bottom of seal 16 in.
Were any loose strata cemented off? ☐ Yes ☐ No Depth
Was a drive shoe used? ☑ Yes ☐ No
Did any strata contain unusable water? ☐ Yes ☑ No
Type of water? depth of strata
Method of sealing strata off
Was well gravel packed? ☐ Yes ☑ No Size of gravel:
Gravel placed from ft. to ft.

(11) LOCATION OF WELL:
County Linn Driller's well number
¼ ¼ Section 1 T. 14S R. 4 W W.M.
Bearing and distance from section or subdivision corner

(12) WELL LOG:
Diameter of well below casing 12"
Depth drilled 200 ft. Depth of completed well 200 ft.

Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level as drilling proceeds. Note drilling rates.

MATERIAL	From	To	SWL
Blue clay	0	3'	
Brown Clay	3'	19'	
Brown clay & small gravel	19'	23'	
Fine Large Gravel	23'	27'	
Brown Cemented Gravel	27'	42'	
Fine Sandy Gravel - med.	42'	46'	
Brown cemented gravel	46'	69'	
Blue Sandy clay	69'	85'	
Fine Sandy clay & Gravel	85'	95'	
Blue Sandy Clay	95'	100'	
Brown Sandy clay	100'	104'	
Gray Sandy Clay	104'	130'	
Blue Sandy Clay	130'	145'	
Brown Sandy Clay	145'	164'	
Blue Sand	164'	168'	
Blue Sandy clay	168	200'	14'

RECEIVED
FEB 24 2003 app #G-15932
WATER RESOURCES DEPT.
SALEM, OREGON

Work started 8/4 1969 Completed 8/28 1969
Date well drilling machine moved off of well 8/28 1969

Drilling Machine Operator's Certification:
This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.
[Signed] Hank Wilson (Drilling Machine Operator) Date 8/28, 1969
Drilling Machine Operator's License No. 404

Water Well Contractor's Certification:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
NAME W.W. Drilling & Pump Ser. (Person, firm or corporation) (Type or print)
Address 2320 Main - Springfield Ore
[Signed] Walt Wilson (Water Well Contractor)
Contractor's License No. 248 Date Aug. 28, 1969

WATER RESOURCES

RECEIVED
APR 30 1998
WATER RESOURCES DEPT.
SALEM, OREGON

WELL I.D.# L10960

LINN 51585

STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765)

(START CARD) # 92262

Instructions for completing this report are on the last page of this form.

(1) OWNER: Well Number
Name CITY OF HALSEY
Address 773 First St. PO Box 10
City HALSEY State ORE Zip 97348

(2) TYPE OF WORK
☑ New Well ☐ Deepening ☐ Alteration (repair/recondition) ☐ Abandonment

(3) DRILL METHOD:
☐ Rotary Air ☐ Rotary Mud ☑ Cable ☐ Auger
☐ Other

(4) PROPOSED USE:
☐ Domestic ☐ Community ☐ Industrial ☐ Irrigation
☐ Thermal ☐ Injection ☐ Livestock ☑ Other: Municipal

(5) BORE HOLE CONSTRUCTION:
Special Construction approval ☐ Yes ☐ No Depth of Completed Well 836"
Explosives used ☐ Yes ☑ No Type ____ Amount ____

HOLE Diameter	From	To	SEAL Material	From	To	Sacks or pounds
16"	0'	105'	cement	0'	34'	69 sacks

How was seal placed: Method ☐ A ☐ B ☑ C ☐ D ☐ E
☐ Other
Backfill placed from 83.5 ft. to 105 ft. Material CEMENT
Gravel placed from 34 ft. to 64 ft. Size of gravel 3/4" round
Gravel from 64-83.5' size 6-9 Colorado silica

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	12"	+5'	499'	.375	☑	☐	☑	☐
	12"	70'	83.5'	.375	☑	☐	☑	☐
Liner:					☐	☐	☐	☐

Final location of shoe(s) NO SHOE

(7) PERFORATIONS/SCREENS:
☐ Perforations Method
☑ Screens Type V-SLOT Material 304 SS

From	To	Slot size	Number	Diameter	Telescoping like	Casing	Liner
499'	70'	090			P.SIDE	☐	☐

(8) WELL TESTS: Minimum testing time is 1 hour
☑ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
			1 hr.
250 GPM	43'		24 HRS.

Temperature of water 57° Depth Artesian Flow Found
Was a water analysis done? ☑ Yes By whom WATERLAB
Did any strata contain water not suitable for intended use? ☐ Too little
☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other
Depth of strata:

(9) LOCATION OF WELL by legal description:
County LINN Latitude ____ Longitude ____
Township 14S N or S Range 4W E or W. WM.
Section 1 SE 1/4 NW 1/4
Tax Lot 3300 Lot ____ Block ____ Subdivision ____
Street Address of Well (or nearest address) #### 1133
WEST 4TH ST., HALSEY, ORE

(10) STATIC WATER LEVEL:
5 ft. below land surface. Date 4-8-98
Artesian pressure ____ lb. per square inch. Date ____

(11) WATER BEARING ZONES:
Depth at which water was first found 45'

From	To	Estimated Flow Rate	SWL
45'	70'	250 GPM	5'

(12) WELL LOG:
Ground Elevation

Material	From	To	SWL
- BROWN CLAY	0'	12'	
- GRAY CLAY	12'	23'	
- GRAY CLAY W/SOME GRAVEL	23'	29'	
- GRAVEL, SMALL - MEDIUM, BROWN SAND W/ BROWN CLAY	29'	45'	
- SMALL - LARGE GRAVEL, BROWN FINE - COARSE SAND W/SOME BROWN CLAY W.B.	45	70'	5'
- BLUE GRAY ~~CLAY~~ CLAY W/ GRAVEL	70'	75'	
- BROWN + GRAY CLAY	75'	82'	
- GRAY SANDY CLAY W/ SOME SMALL GRAVEL	82'	100'	
- GRAY CLAY	100'	105'	

RECEIVED
FEB 24 2003
app # G-15932
WATER RESOURCES DEPT.
SALEM, OREGON

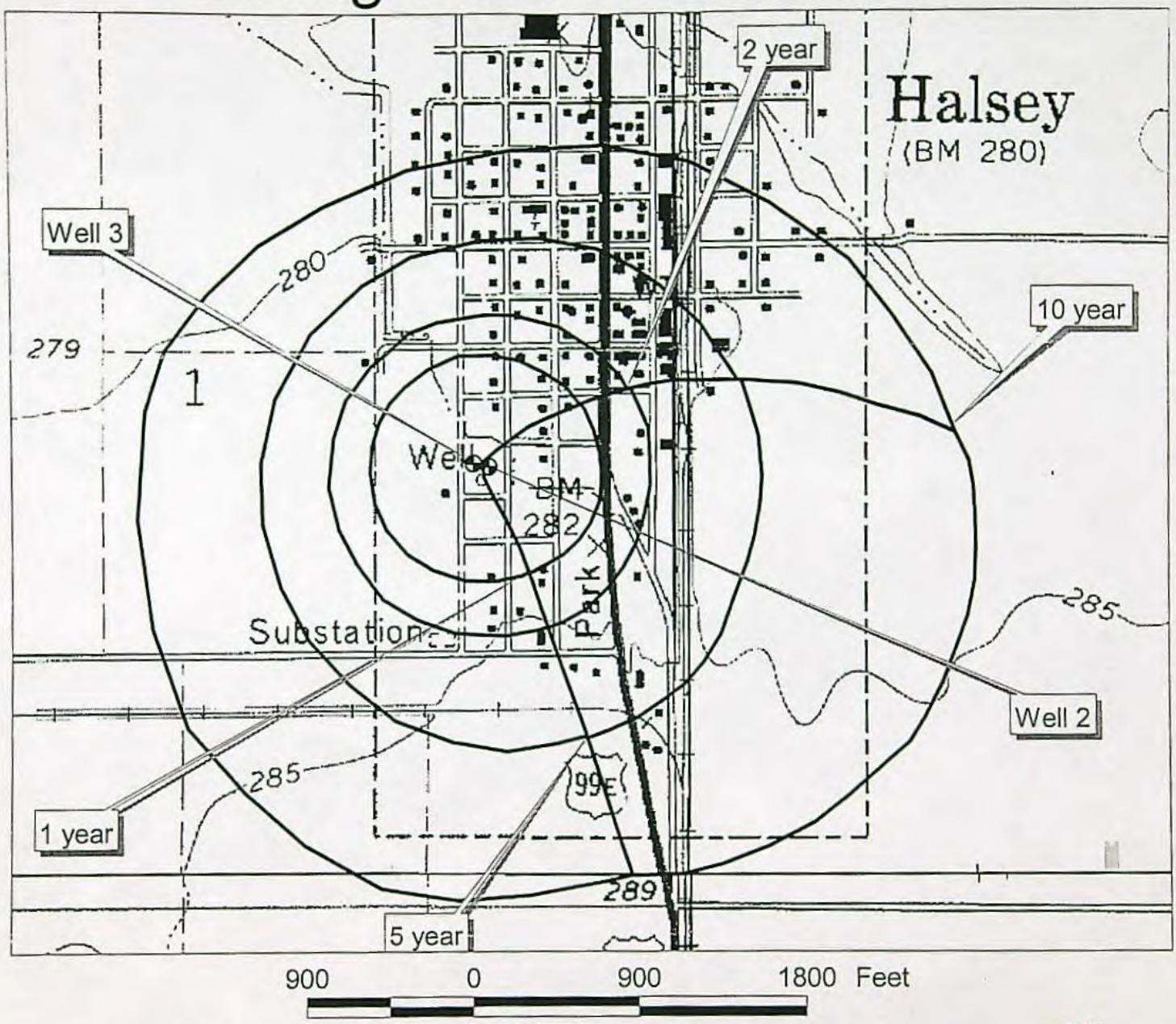
Date started DECEMBER 17, 1997 Completed APRIL 16, 1998

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.
WWC Number
Signed Date

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.
WWC Number 633
Signed Michael Woldroop Date APRIL 29, '98

ORIGINAL & FIRST COPY-WATER RESOURCES DEPARTMENT SECOND COPY-CONSTRUCTOR THIRD COPY-CUSTOMER

City of Halsey
Drinking Water Well Locations



Scale 1:10,000

N

Drinking Water Protection Areas with the 1-, 2-, 5- and 10-year time-of-travel for groundwater to move through the aquifer to the wells shown.
Delineation Areas (mi2): Well 3 = 0.34 Well 2 = 0.11
Model Used: RESSQC 2-D Analytical
Model Parameters:
- Hydraulic Conductivity: 24 ft/day
- Thickness of Water-Bearing Zone: 29 ft
- Groundwater flow directions: N15W to N65W
- Hydraulic Gradient: 0.0015 to 0.003
- Pumping Rates: Well 2: 25 gpm; Well 3: 102 gpm

Aquifer Character: confined
Aquifer Name: Sand and Gravel of the Willamette Aquifer

Well Locations:

Well 3: 44° 22' 50.948" N 123° 06' 45.094" W
Well 2: 44° 22' 50.763" N 123° 06' 43.934" W
Datum: WGS 1984
T 14 S R 4 W Section 1
USGS Halsey 7.5 minute topographic quadrangle
Linn County

QUADRANGLE LOCATION

Prepared by:
Dennis Nelson, RG1224
DHS Drinking Water Program
February 10, 2003
PWS# 4100364

app no G-15932
Permit No G-15551

Failed to meet A late 1-24-03

STATE OF OREGON

COUNTY OF LINN

PERMIT TO APPROPRIATE THE PUBLIC WATERS

THIS PERMIT IS HEREBY ISSUED TO ask to sign voluntary cancelation at time of new filing SCP

CITY OF HALSEY
773 W FIRST ST
HALSEY, OREGON 97348 (541) 369-2522

The specific limits and conditions of the use are listed below.

APPLICATION FILE NUMBER: G-13997

SOURCE OF WATER: WELL 3 WITHIN THE WILLAMETTE BASIN

PURPOSE OR USE: MUNICIPAL USE

MAXIMUM RATE: 0.724 CUBIC FOOT PER SECOND

PERIOD OF USE: YEAR ROUND

DATE OF PRIORITY: MARCH 3, 1995

POINT OF DIVERSION LOCATION: NE 1/4 SE 1/4, SECTION 1, T14S, R4W, W.M.; 640 FEET SOUTH AND 1065 FEET WEST FROM THE E 1/4 CORNER OF SECTION 1

THE PLACE OF USE IS LOCATED AS FOLLOWS:

WITHIN THE CITY OF HALSEY SERVICE AREA

Measurement, recording and reporting conditions:

A. Before water use may begin under this permit, the permittee shall install a meter or other suitable measuring device as approved by the Director. The permittee shall maintain the meter or measuring device in good working order.

B. The permittee shall allow the watermaster access to the meter or measuring device; provided however, where the meter or measuring device is located within a private structure, the watermaster shall request access upon reasonable notice.

C. The Director may require the permittee to keep and maintain a record of the amount (volume) of water used and may require the permittee to report water use on a periodic schedule as established by the Director. In addition, the Director may require the permittee to report general water use information, the periods of water use and the place and nature of use of water under the permit. The Director may provide an opportunity for the permittee to submit alternative reporting procedures for review and approval.

The water user shall develop a plan to monitor and report the impact of water use under this permit on water levels within the aquifer that provides water to the permitted well(s). The plan shall be submitted to the Department within one year of the date the permit is issued and shall be subject to the approval of the Department. At a minimum, the plan shall include a program to periodically measure static water levels within the permitted well(s) or an adequate substitute such as water levels in nearby wells. The plan shall also stipulate a reference water level against which any water-level declines will be compared. If a well listed on this permit (or replacement well) displays a total static water-level decline of 25 or more feet over any period of years, as compared to the reference level, then the water user shall discontinue use of, or reduce the rate or volume of withdrawal from, the well(s). Such action shall be taken until the water level recovers to above the 25-foot decline level or until the Department determines, based on the water user's and/or the Department's data and analysis, that no action is necessary because the aquifer in question can sustain the observed declines without adversely impacting the resource or senior water rights. The water user shall in no instance allow excessive decline, as defined in Commission rules, to occur within the aquifer as a result of use under this permit.

Within one year of permit issuance, the permittee shall submit a water management and conservation plan consistent with OAR Chapter 690, Division 86.

STANDARD CONDITIONS

The wells shall be constructed in accordance with the General Standards for the Construction and Maintenance of Water Wells in Oregon. The works shall be equipped with a usable access port, and may also include an air line and pressure gauge adequate to determine water level elevation in the well at all times.

The use shall conform to such reasonable rotation system as may be ordered by the proper state officer.

Prior to receiving a certificate of water right, the permit holder shall submit the results of a pump test meeting the department's standards, to the Water Resources Department. The Director may require water level or pump test results every ten years thereafter.

Failure to comply with any of the provisions of this permit may result in action including, but not limited to, restrictions on the use, civil penalties, or cancellation of the permit.

This permit is for the beneficial use of water without waste. The water user is advised that new regulations may require the use of best practical technologies or conservation practices to achieve this end.

By law, the land use associated with this water use must be in compliance with statewide land-use goals and any local acknowledged land-use plan.

The use of water shall be limited when it interferes with any prior surface or ground water rights.

The Director finds that the proposed use(s) of water described by this permit, as conditioned, will not impair or be detrimental to the public interest.

Actual construction of the well shall begin within one year from permit issuance, and shall be completed on or before October 1, 1998. Complete application of the water to the use shall be made on or before October 1, 1999.

Issued November 22, 1996

Richard A. Bailey for
Martha O. Pagel, Director
Water Resources Department

Mailing List for FO Copies

Application # G-15932 Mailing List Print Date: December 31, 2003

Original mailed to(when permit issued, include copy of permit map):

Applicant: CITY OF HALSEY, ATTN: ANDY RIDINGER, PO BOX 10, HALSEY OR 97348

For FO w/Permit - Copies sent to:
1. WRD - File # G-15932
2. WRD - Ken Stahr

Copies Mailed
By: _____
(SUPPORT STAFF)
on: 1/12/04

For FO w/ Permit - FO and Map Copies sent to (Remember to reduce copy margins):
3. WRD - Data Center
4. WRD - Watermaster District #: 2
5. WRD - Regional Manager: NWR

For FO w/PERMIT, w/Permit, or for Denial - Copies to Other Interested Persons *(CWRE, Agent, Well Driller, Commenter, etc.)*
1. _____
2. _____
3. _____

For FO w/PERMIT or w/Permit - "$10 LETTER" sent to Interested Persons who have not protested or paid for copies
1. _____
2. _____

CASEWORKER: Gaineyjw

STATE OF OREGON

WATER RESOURCES DEPARTMENT

RECEIPT # 58431

158 12TH ST. N.E.
SALEM, OR 97310-0210
378-8455 / 378-8130 (FAX)

INVOICE #_____

RECEIVED FROM: City of Halsey

BY: _____

APPLICATION	G-15732
PERMIT	
TRANSFER	

CASH: ☐ CHECK: # ☒ 2072 ☐ OTHER: (IDENTIFY) _____

TOTAL REC'D $ 400.00

0417 WRD MISC CASH ACCT

	ADJUDICATIONS	$
	PUBLICATIONS / MAPS	$
_____	OTHER: (IDENTIFY) _____	$
_____	OTHER: (IDENTIFY) _____	$

REDUCTION OF EXPENSE

_____ CASH ACCT. $

_____ PCA AND OBJECT CLASS _____ VOUCHER #

0427 WRD OPERATING ACCT

	MISCELLANEOUS				
0407	COPY & TAPE FEES				$
0410	RESEARCH FEES				$
0408	MISC REVENUE: (IDENTIFY) _____				$
(New) TC162	DEPOSIT LIAB. (IDENTIFY) _____				$
	WATER RIGHTS:	**EXAM FEE**			**RECORD FEE**
0201	SURFACE WATER	$	0202		$
0203	GROUND WATER	$ 400.00	0204		$
0205	TRANSFER	$	0206		$
	WELL CONSTRUCTION	**EXAM FEE**			**LICENSE FEE**
0218	WELL DRILL CONSTRUCTOR	$	0219		$
	LANDOWNER'S PERMIT		0220		$

_____ OTHER (IDENTIFY) _____

0437 WELL CONST. START FEE

0211	WELL CONST START FEE	$	CARD #	
0210	MONITORING WELLS	$	CARD #	

_____ OTHER (IDENTIFY) _____

0539 LOTTERY PROCEEDS

1302	LOTTERY PROCEEDS	$

0467 HYDRO ACTIVITY

		LIC NUMBER	
0233	POWER LICENSE FEE (FW/WRD)		$
0231	HYDRO LICENSE FEE (FW/WRD)		$
_____	HRDRO APPLICATION _____		$

RECEIPT # 58431 DATED: 2/24/03 BY: Connie Vance

Distribution-White Copy-Customer, Yellow Copy-Fiscal, Blue Copy-File, Buff Copy-Fiscal

CITY OF HALSEY

8072

8072	Oregon Water Resources Department	2/19/2003	
0000000734	Well #3-Re-Application		400.00

RECEIVED
FEB 24 2003
WATER RESOURCES DEPT.
SALEM, OREGON

400.00

G-15932
CITY OF HALSEY
ATTN: ANDY RIDINGER
PO BOX 10
HALSEY OR 97348

G-15932
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G-15932
CITY OF HALSEY
ATTN: ANDY RIDINGER
PO BOX 10
HALSEY OR 97348

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STATE OF OREGON

WATER RESOURCES DEPARTMENT

725 Summer St. N.E.
SALEM, OR 97301-4172
378-8455 / 378-8130 (FAX)

RECEIPT # 64992

INVOICE # _____

RECEIVED FROM: City of Halsey

BY: _____

APPLICATION	G15932
PERMIT	
TRANSFER	

CASH: ☐ CHECK:# ☒ 3614 OTHER: (IDENTIFY) ☐ _____

TOTAL REC'D $ 250.00

1083 TREASURY 4170 WRD MISC CASH ACCT

0407	COPIES		$
_____	OTHER:	(IDENTIFY) _____	$
_____	OTHER:	(IDENTIFY) _____	$

4270 WRD OPERATING ACCT

MISCELLANEOUS

0407	COPY & TAPE FEES		$
0410	RESEARCH FEES		$
0408	MISC REVENUE: (IDENTIFY)	_____	$
TC162	DEPOSIT LIAB. (IDENTIFY)	_____	$
0240	EXTENSION OF TIME		$

		EXAM FEE		RECORD FEE
	WATER RIGHTS:			
0201	SURFACE WATER	$	0202	$
0203	GROUND WATER	$	0204	$ 250.00
0205	TRANSFER	$		
	WELL CONSTRUCTION	EXAM FEE		LICENSE FEE
0218	WELL DRILL CONSTRUCTOR	$	0219	$
	LANDOWNER'S PERMIT		0220	$

_____ OTHER (IDENTIFY) _____

0536 TREASURY 0437 WELL CONST. START FEE

0211	WELL CONST START FEE	$	CARD #	
0210	MONITORING WELLS	$	CARD #	

_____ OTHER (IDENTIFY) _____

0607 TREASURY 0467 HYDRO ACTIVITY

		LIC NUMBER	
0233	POWER LICENSE FEE (FW/WRD)		$
0231	HYDRO LICENSE FEE (FW/WRD)		$
_____	HYDRO APPLICATION		$

_____ TREASURY OTHER / RDX

FUND _____ TITLE _____

OBJ. CODE _____ VENDOR # _____

DESCRIPTION _____ $

RECEIPT: 64992 DATED: 12/26/03 BY: Leona Albin

Distribution – White Copy - Customer, Yellow Copy - Fiscal, Blue Copy - File, Buff Copy - Fiscal

CITY OF HALSEY

8614

8614	Oregon Water Resources Department	12/22/2003
INVOICE NO.:		
G-15932	Recording Fee-Permit G-15932	250.00

RECEIVED

DEC 26 2003

WATER RESOURCES DEPT
SALEM OREGON

250.00

Jerry Gainey G-15962 15962

Oregon Water Resources Department
Water Rights Division

Application for Extension of Time

In the Matter of the Application for an Extension of Time for Permit #G-12998, Water Right Application #G-13998 (City of Halsey)	)))))	PROPOSED FINAL ORDER

Permit Information

Application File #G-13998 / Permit #G-12998
Basin: #2 - Willamette Basin / Watermaster District: #02
Date of Priority: March 3, 1995

Authorized Use of Water

Source of Water:	One Well (Well #2) within the Willamette Basin
Purpose or Use:	Municipal Use
Maximum Rate:	0.613 cubic foot per second (cfs)

This Extension of Time request is being processed in accordance with Oregon Administrative Rule Chapter 690, Division 315.

Please read this Proposed Final Order in its entirety as it contains additional conditions not included in the original permit.

This Proposed Final Order applies only to Permit #G-12998, water right Application #G-13998. A copy of Permit #G-12998 is enclosed as Attachment 1.

Summary of Proposed Final Order for Extension of Time

The Department proposes to:

- grant the extension for complete construction of the water system from October 1, 1998, to October 1, 2025;
- grant the extension for complete application of water from October 1, 1999, to October 1, 2025; and
- make the extensions subject to certain conditions as set forth below.

AUTHORITY

1. ORS 537.230 and ORS 537.630(1) provide in pertinent part that the Water Resources Department shall, for good cause shown, order an extension of time within which irrigation or other works shall be completed or the right perfected. In determining the extension, the Department shall give due weight to the considerations described under ORS 539.010(5).

2. OAR 690-315-0080 provides in pertinent part that the Water Resources Department shall make findings to determine if an extension of time for municipal and/or quasi-municipal water use permit holders may be approved to complete construction and/or apply water to full beneficial use.

3. OAR 690-315-0090(3) allows the Department, under certain circumstances, to condition an extension of time for municipal and/or quasi-municipal water use permit holders to provide that diversion of water beyond the maximum rate diverted under the permit or previous extension(s) shall only be authorized upon issuance of a final order approving a Water Management and Conservation Plan under OAR Chapter 690, Division 86.

FINDINGS OF FACT

Background

4. Permit #G-12998 was granted by the Water Resources Department (Department) on November 27, 1996. The permit authorizes the use of up to 0.613 cfs of water from one well (Well #2) within the Willamette Basin, for municipal purposes. It specified that construction of the water development project should be completed by October 1, 1998, and that complete application of water was to be made on or before October 1, 1999.

5. Due to ongoing permit extension rulemaking, the Department placed all pending municipal and quasi-municipal permit extension of time requests on hold and did not require municipal and quasi-municipal water use permit holders to submit an extension application until the new rules were adopted.

6. Municipal and quasi-municipal water use permit extension rules were adopted by the Water Resources Commission and became effective on November 1, 2002 (OAR 690-315-0070 through 690-315-0100).

7. The permit holder submitted an "Application for Extension of Time" to the Department on February 20, 2003, requesting the time in which to complete construction of the water system be extended from October 1, 1998, to October 1, 2025, and the time in which to accomplish beneficial use of water to the full extent under the terms of Permit #G-12998 be extended from October 1, 1999, to October 1, 2025. This is the first extension of time request for Permit #G-12998.

8. Notification of the City of Halsey's extension of time request for Permit #G-12998 was published on the Department's Public Notice dated February 25, 2003. No public comment on the extension application was received.

Review Criteria for Municipal and Quasi-Municipal Water Use Permits *[OAR 690-315-0080(1)]*

The time limits to complete construction and/or apply water to full beneficial use may be extended if the Department finds that the permit holder has met the requirements set forth under OAR 690-315-0080(1).

Complete Extension of Time Application *[OAR 690-315-0080(1)(a)]*

9. The Department received a completed extension of time application and the statutory fee specified in ORS 536.050 from the permit holder.

Start of Construction *[ORS 537.630(1), OAR 690-315-0080(1)(b)]*

10. Construction of the well and water system began within the time specified in the permit, being November 27, 1997. The work accomplished thus far consists of complete construction of Well #2, installation of a water meter, preparation of a plan to monitor and report the impact of ground water use on the aquifer, construction of the water distribution system and securing federal financing to improve sections of water lines.

Duration of Extension *[ORS 539.010(5), OAR 690-315-0080(1)(c)(d)]*
Under OAR 690-315-0080(1)(c)(d), the Department shall find that the time requested is reasonable and the applicant can complete the project within the time requested.

11. The remaining work to be accomplished under Permit #G-12998 consists of complete construction of the system and complete application of water to beneficial use.

12. As of February 20, 2003, the permit holder has diverted 0.501 cfs of the 0.613 cfs of water allowed under Permit #G-12998 for municipal purposes.

13. Since the issuance of Permit #G-12998, the population of Halsey has grown from approximately 667 in 1990 to 724 in 2003. Based on data obtained from Portland State University's Center for Population Research and Census and from the Oregon Department of Transportation, the City of Halsey projects an average annual population increase of 2.85 percent per year over the next twenty-two years.

14. In addition to the 0.613 cfs of water from Well #2 allowed under Permit #G-12998, the City of Halsey held Permit #G-12997 for 0.724 cfs of water from Well #3. Due to delays in the beginning of construction under Permit #G-12997, the City authorized cancellation of the permit.

15. On February 24, 2003, the City submitted a new application for a permit (Application #G-15932) to replace Permit #G-12997. Application #G-15932 proposes to appropriate up to 1.0 cfs of water. The City plans to maintain Well #3 under Application #G-15932 as its primary water source. Well #2 under Permit #G-12998 will be used as the City's emergency backup water supply should Well #3 fail.

16. Based on the City's current water demands, their average growth projection of 2.85 percent per year, and due to the City's plan to utilize Well #3 (Application #G-15932) as the primary water supply and to maintain Well #2 (Permit #G-12998) as the backup emergency water source, full development of the remaining portion of Permit #G-12998 could take until the year 2025 to occur.

17. Given the amount of development left to occur, the City's projected annual growth rate and associated projected demands for water, and considering the City's current water supply situation, the permittee's request to have until October 1, 2025, to complete construction of the water system and to complete the application of water to beneficial use under the terms of Permit #G-12998 is reasonable.

Good Cause *[ORS 539.010(5), OAR 690-315-0080(1)(e) and (2)]*
The Department's determination of good cause shall consider the requirements set forth under OAR 690-315-0080(2).

Reasonable Diligence and Good Faith of the Appropriator *[ORS 537.230, ORS 537.630(1), ORS 539.010(5), OAR 690-315-0080(2)(a)(c) and (3)]*
Reasonable diligence and good faith of the appropriator during the permit period constitutes a continuing test of whether and under what conditions to grant an extension. In determining the reasonable diligence and good faith of a municipal or quasi-municipal water use permit holder, the Department shall consider activities associated with the development of the right including, but not limited to, the items set forth under OAR 690-315-0080(3).

18. Prior to October 1, 1999, the following had occurred: the City of Halsey had constructed Well #2, installed a water meter, prepared a plan to monitor and report the impact of ground water use on the aquifer, constructed the water distribution system and secured federal financing to improve sections of water lines.

19. As of February 20, 2003, the permit holder has invested 15 percent of the total projected cost for complete development of this project, being an approximate total of $169,197. An additional $1,000,000 investment is anticipated for the completion of this project.

20. Since the issuance of Permit #G-12998 on November 27, 1996, approximately 0.501 cfs of water has been diverted from Well #2 for beneficial municipal purposes under the terms of the permit.

21. Permit #G-12998 required the permit holder to submit a water management and conservation plan consistent with OAR Chapter 690, Division 86 to the Department by November 27, 1997.

22. On August 13, 1998, the City of Halsey requested an extension of time to complete and submit the required water management and conservation plan under OAR Chapter 690, Division 86. The Department approved the request on August 19, 1998, and extended the due date for submittal of the water management and conservation plan to September 1, 2001. To date, the required plan has not been submitted.

Financial Investment and Cost to Appropriate and Apply Water to a Beneficial Purpose *[ORS 539.010(5), OAR 690-315-0080(2)(b)]*

23. As of February 20, 2003, the permit holder has invested an approximate total of $169,197 into the project, consisting of construction of Well #2, installation of a water meter, preparation of a plan to monitor and report the impact of ground water use on the aquifer and construction of the water distribution system. An additional $1,000,000 investment is anticipated for the completion of this project.

The Market and Present Demands for Water *[OAR 690-315-0080(2)(d)]*

24. As described in findings #13 through #16 above, the City plans to maintain Well #3 under Application #G-15932 as its primary water source and maintain Well #2 under Permit #G-12998 will be used as the City's emergency backup water supply should Well #3 fail.

25. Based on data obtained from Portland State University's Center for Population Research and Census and from the Oregon Department of Transportation, the City of Halsey projects an average annual population increase of 2.85 percent per year over the next twenty-two years.

26. Demands for the use of water under Permit #G-12998 are expected to increase based upon plans currently in process to locate a new subdivision within the city's service area.

27. Given the City's current water supply situation, as well as, current and expected demands, there is a market and present demand for the water to be supplied under Permit #G-12998.

Fair Return Upon Investment *[ORS 539.010(5), OAR 690-315-0080(2)(e)]*

28. Use and income from the permitted water development project results in reasonable returns upon the investment made to date, as demonstrated by the City's schedule of rates established for water service outlined in Chapter 6 of their Water System Analysis, June 1992.

Other Governmental Requirements *[ORS 537.230(2), OAR 690-315-0080(2)(f)]*

29. Delay in the development of this project was caused, in part, by other governmental requirements. The City's plans to improve water distribution lines along several blocks has been delayed due to USDA requirements resulting in the city engineers needing to resubmit documentation to meet USDA specifications.

Events which Delayed Development under the Permit *[OAR 690-315-0080(2)(g)]*

30. Delay of development under Permit #G-12998 was due, in part, to the size and scope of the municipal water system, which was designed to be phased in over a period of years. Additionally, the City's financial constraints have lengthened the amount of time necessary to completely develop the project under Permit #G-12998.

Conclusions of Law

1. The applicant is entitled to apply for an extension of time to complete construction and/or completely apply water to the full beneficial use pursuant to ORS 537.230 and ORS 537.630.

2. The applicant has submitted a complete extension application form and the fee specified under ORS 536.050(1)(k), as required by OAR 690-315-0080(1)(a).

3. The applicant demonstrated that actual construction on the project began within the time specified in the permit, as required by OAR 690-315-0080(1)(b).

4. The time requested to complete construction and apply water to full beneficial use is reasonable, as required by OAR 690-315-0080(1)(c).

5. Completion of construction and full application of water to beneficial use can be completed by October 1, 2025[1], [OAR 690-315-0080(1)(d)].

6. After considering the reasonable diligence and good faith of the appropriator, the financial investment made, the market and present demands for water, the fair return upon the investment, the requirements of other governmental agencies and uncontrollable events which delayed development under the permit, the Department has determined that the applicant has shown good cause for an extension to complete construction and complete application of water to full beneficial use pursuant to OAR 690-315-0080(1)(e).

7. In accordance with OAR 690-315-0090(4), the Department determined that the permit holder shall submit a Water Management and Conservation Plan consistent with OAR Chapter 690, Division 86. Pursuant to OAR 690-315-0090(3), the Department has established, as specified under Item #1 of the "Conditions" section of this Proposed Final Order for an Extension of Time, that the diversion of water beyond 0.501 cfs under Permit #G-12998 shall only be authorized upon issuance of a final order approving a Water Management and Conservation Plan under OAR Chapter 690, Division 86. The required Water Management and Conservation Plan shall be submitted to the Department within 3 years from the date this extension is final.

---

[1] Pursuant to ORS 537.630(3), upon the completion of beneficial use of water allowed under the permit, the permittee shall hire a certified water rights examiner to survey the appropriation. Within one year after the complete application of water to a beneficial use (or by the date allowed for the complete application of water to a beneficial use), the permittee shall submit a map of the survey and the claim of beneficial use.

Proposed Order

Based upon the foregoing findings of fact and conclusions of law, the Department proposes to issue an order to:

Extend the time for complete construction of the water system under Permit #G-12998 from October 1, 1998, to October 1, 2025; and

Extend the time for complete application of water to beneficial use under Permit #G-12998 from October 1, 1999, to October 1, 2025.

Subject to the following conditions:

CONDITIONS

1. Development Limitations
   Diversion of water beyond 0.501 cfs under Permit #G-12998 shall only be authorized upon issuance of a final order approving a Water Management and Conservation Plan under OAR Chapter 690, Division 86. The required Water Management and Conservation Plan shall be submitted to the Department within 3 years from the date this extension is final.

DATED: October 14, 2003

Dwight French
Water Rights Section Manager

If you have any questions, please check the information box on the last page for the appropriate names and phone numbers.

Proposed Final Order Hearing Rights

1. Under the provisions of OAR 690-315-0100(1) and 690-315-0060, the applicant or any other person adversely affected or aggrieved by the proposed final order may request a contested case hearing on the proposed final order. Your request for contested case hearing must be in writing and must be received by the Water Resources Department no later than ***Friday, November 28, 2003,*** being 45 days from the date of publication of the proposed final order in the Department's weekly public notice.

2. A written request for contested case hearing shall include:
   a. The name, address and telephone number of the petitioner;
   b. A description of the petitioner's interest in the final order and if the protestant claims to represent the public interest, a precise statement of the public interest represented;
   c. A detailed description of how the action proposed in the final order would adversely affect or aggrieve the petitioner's interest;
   d. A detailed description of how the final order is in error or deficient and how to correct the alleged error or deficiency;
   e. Any citation of legal authority supporting the petitioner, if known;
   f. Proof of service of the petition upon the water right permit holder, if petitioner is other than the water right permit holder; and
   g. The protest fee required under ORS 536.050.

3. Within 60 days after the close of the period for requesting a contested case hearing, the Director shall:
   a. Issue a final order on the extension request; or
   b. Schedule a contested case hearing if a request for contested case hearing has been submitted, and:
      A. Upon review of the issues, the Director finds there are significant disputes related to the proposed agency action; or
      B. The applicant submitted a timely request for a contested case hearing.

If you have other questions about the Department, or any of its programs, please contact our Water Rights Information Group at (503)986-0900. Address all other correspondence to:

Water Rights Section
Oregon Water Resources Department
725 NE Summer Street, Suite A
Salem, OR 97301-1271
Fax #: (503)986-0901

This document was prepared by Lisa J. Juul. If you have any questions about any of the statements contained in this document, I am most likely the best person to answer your questions. You may contact me by telephone at (503)986-0808.

If you have questions about how to file a protest or if you have previously filed a protest and want to know the status, please contact Renee Moulon. Her telephone number is (503)986-0824.

If you have other questions about the Department or any of its programs, please contact our Water Rights Information Group at (503)986-0900.

Portland State
UNIVERSITY

College of Urban and Public Affairs
Population Research Center

Post Office Box 751
Portland, Oregon 97207-0751
570 Urban Center
506 SW Mill Street

503-725-3922
503-725-5162
askprc@pdx.edu
www.pdx.edu/prc/

– IMPORTANT NOTICE –

Certified 2007 Population Estimate

December 15, 2007

To: **Halsey city**

Listed below is the population estimate for July 1, 2007. Also included are the certified 2006 estimate and the 2000 Census figure. The July 1, 2007 estimate will be certified on December 15, 2007.

CERTIFIED POPULATION ESTIMATE:

JULY 1, 2007: **780**

CERTIFIED POPULATION ESTIMATE:

JULY 1, 2006: **780**

CERTIFIED CENSUS FIGURE:

APRIL 1, 2000: **724**

If you have any questions, please contact:

Risa S. Proehl
Population Research Center
Portland State University
PO Box 751
Portland, OR 97207-0751

Telephone: (503) 725-5103
Fax: (503) 725-5162
E-mail: proehlr@pdx.edu

Oregon Water Resources Department
Water Rights Division

Water Rights Application
Number G-15932

Final Order

Application History
On February 24, 2003, Andy Ridinger submitted an application to the Department for the City of Halsey for a water use permit. The Department issued a Proposed Final Order on November 11, 2003. The protest period closed December 26, 2003, and no protest was filed.

The proposed use would not impair or be detrimental to the public interest.

Order

Application G-15932 therefore is approved as proposed by the Proposed Final Order, and Permit G-15551 is issued as limited by the conditions proposed by the Proposed Final Order.

DATED January 16, **2004**

Paul R. Cleary, Director

This is a final order in other than a contested case. This order is subject to judicial review under ORS 183.484. Any petition for judicial review of this order must be filed within the 60 day time period specified by ORS 183.484(2).

This statement of judicial review rights does not create a right to judicial review of this order, if judicial review is otherwise precluded by law. Where no changes have been made to a Proposed Final Order on a water right application and no protests have been filed during the protest period, the final order is not subject to judicial review.

This document was prepared by Jerry Gainey. If you have any questions about any of the statements contained in this document I am the most likely the best person to answer your questions. You can reach me at 503-986-0812.

If you have questions about how to file a protest or if you have previously filed a protest and want to know the status, please contact Renee Moulun at 503-986-0824.

If you have other questions about the Department or any of its programs please contact our Water Rights Information Group at 503-986-0801.

Address all other correspondence to: Water Rights Section, Oregon Water Resources Department, 725 Summer St NE Ste A, Salem OR 97301-1271; Fax: 503-986-0901.

STATE OF OREGON

COUNTY OF LINN

PERMIT TO APPROPRIATE THE PUBLIC WATERS

THIS PERMIT IS HEREBY ISSUED TO

CITY OF HALSEY
PO BOX 10 (541)466-5421
HALSEY, OR 97348

The specific limits and conditions of the use are listed below.

APPLICATION FILE NUMBER: G-15932

SOURCE OF WATER: WELL 2 AND WELL 3 IN MUDDY CREEK BASIN

PURPOSE OR USE: MUNICIPAL USE

MAXIMUM RATE: 1.0 CUBIC FOOT PER SECOND

PERIOD OF USE: YEAR ROUND

DATE OF PRIORITY: FEBRUARY 24, 2003

WELL LOCATIONS:

WELL 2: NE ¼ SE ¼ SECTION 1, T14S, R4W, W.M.; 44 DEGREES 22 MINUTES 50.948 SECONDS NORTH, 123 DEGREES 6 MINUTES 45.094 SECONDS WEST

WELL 3: NE ¼ SE ¼ SECTION 1, T14S, R4W, W.M.; 44 DEGREES 22 MINUTES 50.763 SECONDS NORTH, 123 DEGREES 6 MINUTES 43.934 SECONDS WEST

THE PLACE OF USE IS LOCATED AS FOLLOWS:

WITHIN THE SERVICE BOUNDARIES OF THE CITY OF HALSEY

Measurement, recording and reporting conditions:

A. Before water use may begin under this permit, the permittee shall install a meter or other suitable measuring device as approved by the Director. The permittee shall maintain the meter or measuring device in good working order, shall keep a complete record of the amount of water used each month and shall submit a report which includes the recorded water use measurements to the Department annually or more frequently as may be required by the Director. Further, the Director may require the permittee to report general water use information,

including the place and nature of use of water under the permit.

B. The permittee shall allow the watermaster access to the meter or measuring device; provided however, where the meter or measuring device is located within a private structure, the watermaster shall request access upon reasonable notice.

The water user shall develop a plan to monitor and report the impact of water use under this permit on water levels within the aquifer that provides water to the permitted well(s). The plan shall be submitted to the Department within one year of the date the permit is issued and shall be subject to the approval of the Department. At a minimum, the plan shall include a program to periodically measure static water levels within the permitted well(s) or an adequate substitute such as water levels in nearby wells. The plan shall also stipulate a reference water level against which any water-level declines will be compared. If a well listed on this permit (or replacement well) displays a total static water-level decline of 25 or more feet over any period of years, as compared to the reference level, then the water user shall discontinue use of, or reduce the rate or volume of withdrawal from, the well(s). Such action shall be taken until the water level recovers to above the 25-foot decline level or until the Department determines, based on the water user's and/or the Department's data and analysis, that no action is necessary because the aquifer in question can sustain the observed declines without adversely impacting the resource or senior water rights. The water user shall in no instance allow excessive decline, as defined in Commission rules, to occur within the aquifer as a result of use under this permit.

Within 3 years of permit issuance, the permittee shall submit a Water Management and Conservation Plan consistent with OAR Chapter 690, Division 86. The Director may approve an extension of this time line to complete the required Water Management and Conservation Plan. The time line for submittal of a plan under this permit does not alter the time lines for submittal of a plan under any other order of the Department.

STANDARD CONDITIONS

If the number, location, or construction of any well deviates from that proposed in the permit application or permit conditions, the conclusions of the Proposed Final Order and Final Order under which this permit was granted may be revised, conditions may be appropriately revised, or this permit may not be valid.

If substantial interference with a senior water right occurs due to withdrawal of water from any well listed on this permit, then use of water from the well(s) shall be discontinued or reduced and/or the schedule of withdrawal shall be regulated until or unless the Department approves or implements an alternative administrative action to mitigate the interference. The Department encourages junior and senior appropriators to jointly develop plans to mitigate interferences.

The wells shall be constructed in accordance with the General Standards for the Construction and Maintenance of Water Wells in Oregon. The works shall be equipped with a usable access port, and may also include an air line and pressure gauge adequate to determine water level elevation in the well at all times.

The use shall conform to such reasonable rotation system as may be ordered by the proper state officer.

Prior to receiving a certificate of water right, the permit holder shall submit the results of a pump test meeting the department's standards, to the Water Resources Department. The Director may require water level or pump test results every ten years thereafter.

Failure to comply with any of the provisions of this permit may result in action including, but not limited to, restrictions on the use, civil penalties, or cancellation of the permit.

This permit is for the beneficial use of water without waste. The water user is advised that new regulations may require the use of best practical technologies or conservation practices to achieve this end.

By law, the land use associated with this water use must be in compliance with statewide land-use goals and any local acknowledged land-use plan.

The use of water shall be limited when it interferes with any prior surface or ground water rights.

The Director finds that the proposed use(s) of water described by this permit, as conditioned, will not impair or be detrimental to the public interest.

Complete application of the water to the use shall be made on or before October 1, 2008. If the water is not completely applied before this date, and the permittee wishes to continue development under the permit, the permittee must submit an application for extension of time, which may be approved based upon the merit of the application.

Within one year after complete application of water to the proposed use, the permittee shall submit a claim of beneficial use, which includes a map and report, prepared by a Certified Water Rights Examiner (CWRE).

Issued January 16, 2004

Paul R. Cleary, Director
Water Resources Department

REAL ESTATE TRANSACTIONS: Pursuant to ORS 537.330, in any transaction for the conveyance of real estate that includes any portion of the lands described in this permit, the seller of the real estate shall, upon accepting an offer to purchase that real estate, also inform the purchaser in writing whether any permit, transfer approval order, or certificate evidencing the water right is available and that the seller will deliver any permit, transfer approval order or certificate to the purchaser at closing, if the permit, transfer approval order or certificate is available.

CULTURAL RESOURCES PROTECTION LAWS: Permittees involved in ground-disturbing activities should be aware of federal and state cultural resources protection laws. ORS 358.920 prohibits the excavation, injury, destruction or alteration of an archeological site or object, or removal of archeological objects from public and private lands without an archeological permit issued by the State Historic Preservation Office. 16 USC 470, Section 106, National Historic Preservation Act of 1966 requires a federal agency, prior to any undertaking to take into account the effect of the undertaking that is included on or eligible for inclusion in the National Register. For further information, contact the State Historic Preservation Office at 503-378-4168, extension 232.

HALSEY BUILDABLE LANDS ANAYSIS - FEBRUARY, 2003

Table 2.1: City of Halsey and Linn County
Population Comparison 1980-2020

Year	Halsey	Linn
1980	693	89,495
1990	667	91,227
2000	724	103,069
2020	1,000	133,508
AAGR*	1.1%	1.2%

Source: U.S. Bureau of the Census 1980, 1990, 2000.
Projection for 2020 from Linn County Coordinated Population Growth Estimate.
*Average Annual Growth Rate between 1980 and 2020.

2. Race and Ethnicity

According to the 2000 census, the racial composition of Halsey is predominantly white with roughly 91 percent of residents falling into that category.[5] Table 2.2 shows a complete racial breakdown by census category.

Table 2.2: City of Halsey Racial Characteristics

Census Category	Number	Percent
One Race	706	97%
White	661	91%
Some other race	35	5%
American Indian and Alaska native	8	1%
Black or African American	1	0%
Asian	1	0%
Two or more races	18	3%

Source: U.S. Bureau of the Census, 2000

In addition to racial statistics, Halsey residents reported belonging to 21 different ancestries (including the category "other ancestries") in the 2000 Census. The top three ancestry categories reported were German ancestry (20 percent of the population), English ancestry (14 percent of the population), and Irish ancestry (13 percent of the population). Interestingly, 22 percent of the population indicated having ancestries not listed by the census.

3. Age, Gender, and Marital Status

Gender in Halsey is fairly evenly distributed. There are 388 (53.6 percent) males and 336 (46.4 percent) females reported in the 2000 US Census. Roughly two-thirds

[5] The U.S. Census utilizes the Office of Management and Budget definition of ethnicity. According to the revised Office of Management and Budget standards, race is considered a separate concept from Hispanic or Latino origin (ethnicity). According to the 2000 census, 40 Halsey residents (5.5 percent of the population) identified themselves as having Hispanic or Latino origins.

Oregon Water Resources Department
WATER-USE IMPACT PLAN REPORTING

RE: Required Water-Use Impact Plans and Water-Level Reporting for Ground Water Permits

ANDY RIDINGER
PW LEAD UTILITY OPERATOR
CITY OF HALSEY
P.O. BOX 10
HALSEY OR 97348-0010

Due before April

Done 3-18-08

CITY OF HALSEY
FEB 28 2008
RECEIVED

Userid: 1124

RECEIVED
SEP 25 2008
WATER RESOURCES DEPT
SALEM, OREGON

2/21/2008

Dear Well Owner:

According to our records, you have a ground water use permit with a condition that requires a "plan to monitor and report the impact of water use" to the Water Resources Department. Generally, water-use impacts are monitored by measuring water-levels in the wells on your permit or in nearby wells. Your water-use impact plan must be submitted to the Department within a specified time, usually within one year after the permit has been issued. All of your permits that require a water-use impact plan, and associated wells, are listed on the following pages. The status of your plan is noted for each permit. If you have an approved plan on file with the Department and have been collecting and reporting the data as specified in the plan, please continue to do so. Otherwise, consider this to be a reminder that an approved plan is required by your permit and that once a plan is approved, the necessary data should be submitted in accordance with the plan. In general, a plan needs to include at least the following information in order to be approved:

1. A schedule for measuring water-levels in the wells, usually a minimum of one measurement per year;
2. The designation of a reference water level in the wells, usually the first measurement after water use begins, to which subsequent water levels will be compared;
3. An unambiguous naming convention that ties each water-level measurement to a well, its associated well logs, and the point of appropriation on each pertinent water right. Wells should be identified by an owner's site or well name, the OWRD Well Log ID (e.g. MARI 1234), and the Well Tag (e.g. L52045), if present on the well. Drillers are now required to attach a Well Tag to the well casing for all new or reconstructed wells. Well Tags are issued by OWRD with a unique tag number to enable the unique designation of wells. A Log ID is assigned to each well log on file at OWRD. Multiple well logs (deepenings, alterations, or reconstructions) for the same well should be identified by a list of Log IDs. Log IDs can be determined by searching our on-line well log database at the "Find a Well Log" link on our web page at: www.oregon.gov/OWRD;
4. The method used for obtaining the measurements (e.g. electric tape, steel tape, airline, pressure gauge, etc.);
5. The measurement resolution of the equipment (e.g. electric or steel tape data reported in feet and hundredths of a foot or in feet and inches to the nearest 0.25 inch, calibrated pressure gauge reported to the nearest 0.25 pound, etc.);
6. The operational circumstances under which the water level measurements would be obtained (e.g. the well will not be pumped for a specified number of hours or days prior to the measurement);
7. The qualifications of the person obtaining the measurements; and
8. A schedule for annual reporting of the data to the Measurements & Reporting Section of the Department, usually no later than 30 days after making the measurement.

The Department realizes that each well site is unique. Therefore, this permit condition allows for flexibility in the plan. If you have more than one permitted well, for example, the plan may only require measurements in some of the wells. Also, wells other than the permitted wells, if similarly constructed and impacted, may be approved for measurements. The overall goal is to design a water-level monitoring plan that will adequately assess the impact of your wells on the source aquifer(s). We will work with you to ensure that meaningful information is obtained without placing an undue burden on your operation.

All proposed water-use impact plans and all reported water levels should be mailed to Oregon Water Resources Department, Measurements & Reporting Section, 725 Summer St. NE, Suite A, Salem, OR 97301-1271.

Please use a copy of the attached Water-Level Measurement Report Form (or a functional equivalent) for reporting water levels on each well that requires a measurement under your plan. If you have any questions, please call Michael J. Zwart at 503-986-0844 or our Measurement and Reporting Section at 503-986-0834.

Additional forms may be obtained from our web sit at: www.oregon.gov/OWRD

Oregon Water Resources Department

WATER-USE IMPACT PLAN REPORTING

RE: Required Water-Use Impact Plans and Water-Level Reporting for Ground Water Permits

ANDY RIDINGER
PW LEAD UTILITY OPERATOR
CITY OF HALSEY
P.O. BOX 10
HALSEY OR 97348-0010

Userid: 1124

Summary of ground water right requiring a water-use impact plan:

Application G 13997 | Permit G 12997 | Certificate | Transfer | Priority date 3/3/1995
Impact Plan submitted: Y | Impact Plan approved: Y

Point of diversion number 1: | Well log ID: LINN 51585 | Well Tag: L-
Listed on water right as: WELL 3
Owner's Site Name (if any): CITY WELL #3
Location on water right (Proposed locations on permits, surveyed locations on certificates):
In the NE quarter of the SE quarter of Section 1, Township 14.00S, Range 4.00W
640 FEET SOUTH & 1065 FEET WEST FROM E1/4 CORNER, SECTION 1

Summary of ground water right requiring a water-use impact plan:

Application G 13998 | Permit G 12998 | Certificate | Transfer | Priority date 3/3/1995
Impact Plan submitted: Y | Impact Plan approved: Y

Point of diversion number 1: | Well log ID: LINN 13705 | Well Tag: L-
Listed on water right as: WELL 2
Owner's Site Name (if any): CITY WELL #2
Location on water right (Proposed locations on permits, surveyed locations on certificates):
In the NE quarter of the SE quarter of Section 1, Township 14.00S, Range 4.00W
340 FEET SOUTH & 1030 FEET WEST FROM E1/4 CORNER, SECTION 1

Summary of ground water right requiring a water-use impact plan:

Application G 15932 | Permit G 15551 | Certificate | Transfer | Priority date 2/24/2003
Impact Plan submitted: | Impact Plan approved:

Point of diversion number 1: | Well log ID: LINN 13705 | Well Tag: L-
Listed on water right as: A WELL WELL 2
Owner's Site Name (if any): CITY WELL #2
Location on water right (Proposed locations on permits, surveyed locations on certificates):
In the NE quarter of the SE quarter of Section 1, Township 14.00S, Range 4.00W
NONE GIVEN

Point of diversion number 2: | Well log ID: LINN 51585 | Well Tag: L-
Listed on water right as: A WELL WELL 3
Owner's Site Name (if any): CITY WELL #3
Location on water right (Proposed locations on permits, surveyed locations on certificates):
In the NE quarter of the SE quarter of Section 1, Township 14.00S, Range 4.00W
NONE GIVEN

Oregon Water Resources Department
WATER-USE IMPACT PLAN REPORTING

RE: Required Water-Use Impact Plans and Water-Level Reporting for Ground Water Permits

ANDY RIDINGER
PW LEAD UTILITY OPERATOR
CITY OF HALSEY
P.O. BOX 10
HALSEY OR 97348-0010

Userid: 1124

If you are no longer the holder of this permit or no longer have an interest in it, please contact our department. Consult your water-use impact plan to determine the required times for measuring and reporting, as well as any requirements regarding who may make the measurements. We recommend that you keep a copy of all measurement reports for your records. All measurements should be made to at least the nearest tenth of a foot or the nearest inch (e.g. 10.2 feet or 10 feet 3 inches).

WATER-LEVEL MEASUREMENT REPORT

(Complete one form for each well that requires measurement under your plan)

Well Identification:

Please provide as much information as possible if you do not know the Well Log ID or Well Tag numbers.

OWRD Well Log ID: _____

Well not yet drilled date: _____

Owners Site Name: _____

Well Tag on Well: L-_____ Date drilled: _____

Well Tag on Well Log: L-_____ Total well depth (ft): _____

Well drilled by: _____ Casing diameter (in): _____

Original owner on well log: _____

Show all water rights with water-level measurement conditions that list this well:

Application number(s): _____ _____ _____ _____ _____

Permit number(s): _____ _____ _____ _____ _____

Certificate number(s): _____ _____ _____ _____ _____

RECEIVED
SEP 25 2008
WATER RESOURCES DEPT
SALEM, OREGON

When did water use begin under this permit from this well? Date: Month/Yr _____

Measuring point (MP) is _____ feet above / below (circle one) land surface.

Description of measuring point (e.g. 1/2-inch access port in sub seal): _____

Water Level Measurement:

Well Log ID	Date Measured (mm/dd/yyyy)	Depth to Water Below Meas Point	Depth to Water Below Land Surface	Measurement Status	Measurment Method
				static __ pumping __ rising __ flowing __	e-tape __ airline __ other __

Specify other measurement method: _____

For airline measurements only: Airline pressure _____ psi Airline length _____ ft

For flowing artesian wells only: Shut-in pressure _____ psi

Length of time well was idle prior to water-level measurement: _____

Comments: _____

I hereby certify that, to the best of my ability, the information on this report is accurate and, at the time of measurement, representative of the static water level in the aquifer.

Person making measurement (print): Andy Ridinger

Signature of measurer: Andy Ridinger

Company: City of Halsey

License number (CWRE, RG, PE, WWC, Pump Installer): _____

Daytime phone number: 541-369-2550 Email address: _____

If you have any questions about this notice, please call the Measurement & Reporting Section of the Department at 503-986-0834 or 503-986-0843. Return this Form to: OWRD, Meas & Reptg Section, 725 Summer St. NE, Suite. A, Salem, OR 97301-1271.

Additional forms may be obtained from our web sit at: www.oregon.gov/OWRD OWRD 2/21/2008 GW/MJZ

City of Halsey

City of Halsey
P.O. Box 10
773 w. 1 st
Halsey, or 97348

City Hall (541) 369-2522
PW. Shop (541) 369-2550
Fax (541-369-2521)

3-18-08

ATT: Michael Swartz
Water Resources Department
725 Summer Street NE, Suite A
Salem, Or 97301-1271

CITY OF HALSEY
WATER USE IMPACT REPORT

1. Annual water level measurement Date 3-18-08
2. Water level measurement after wells have not been in use after15 hrs.7.17ft
3. Water level measurement after well has been in operation.41.38ft
4. Water draw down comparison.34.21ft
5. Methodology for obtaining the measurement is a depth transmitter.
6. Measurement done by the Halsey Public Works Department.
7. Well #2 application #G13997 Permit#12997

Sincerely,
Andy Ridinger
City of Halsey
Public Works

CITY OF HALSEY • HALSEY, OR 97348

11808

VENDOR: 413 WATER RESOURCES DEPARTMENT 9/11/2008 Check No: 11808

INVOICE #	INV DATE	DESCRIPTION	INV AMOUNT
SEPT	9/11/2008	Water Permit Extention Fee	350.00

RECEIVED
SEP 18 2008
WATER RESOURCES DEPT
SALEM, OREGON

RECEIVED
SEP 25 2008
WATER RESOURCES DEPT
SALEM, OREGON

TOTAL AMOUNT 350.00

Oregon
Theodore R. Kulongoski, Governor

Water Resources Department
North Mall Office Building
725 Summer Street NE, Suite A
Salem, OR 97301-1266
503-986-0900
FAX 503-986-0904

September 19, 2008

City of Halsey
PO Box 10
Halsey, OR 97348

REFERENCE: Application G-15932/Permit G-15551

Dear Permit Holder

On September 18, 2008, the Department received the City's application for extension of time and a check in the amount of $350. The City's request was submitted on the wrong form. The correct form is *Application for Extension of Time for Municipal and Quasi-Municipal Water Use Permits*. I apologize for the confusion. I have added a note in the "General Tips" section of the 'non-muni' extension form to alert permit holders of municipal or quasi-municipal water use permits to use the municipal / quasi-municipal extension form.

Because your request was not submitted on the appropriate extension application form, I am returning the City's application request and check in the amount of $350.

I e-mailed the extension form for municipal water uses to judy@cityofhalsey.com. You may also access the form at this website:
http://www1.wrd.state.or.us/pdfs/muni_quasi_ext_app_form_6_20_08.pdf

If you have any questions regarding this letter, please feel free to contact me. My telephone number is (503) 986-0827.

Sincerely,

Ann Reece
Extensions
Water Rights and Adjudications Division

Enclosures

cc: Application File G-15932

STATE OF OREGON

COUNTY OF LINN

PERMIT TO APPROPRIATE THE PUBLIC WATERS

THIS PERMIT IS HEREBY ISSUED TO

CITY OF HALSEY
773 W FIRST ST (541) 369-2522
HALSEY, OREGON 97348

The specific limits and conditions of the use are listed below.

APPLICATION FILE NUMBER: G-13997

SOURCE OF WATER: WELL 3 WITHIN THE WILLAMETTE BASIN

PURPOSE OR USE: MUNICIPAL USE

MAXIMUM RATE: 0.724 CUBIC FOOT PER SECOND

PERIOD OF USE: YEAR ROUND

DATE OF PRIORITY: MARCH 3, 1995

POINT OF DIVERSION LOCATION: NE 1/4 SE 1/4, SECTION 1, T14S, R4W, W.M.; 640 FEET SOUTH AND 1065 FEET WEST FROM THE E 1/4 CORNER OF SECTION 1

THE PLACE OF USE IS LOCATED AS FOLLOWS:

WITHIN THE CITY OF HALSEY SERVICE AREA

Measurement, recording and reporting conditions:

A. Before water use may begin under this permit, the permittee shall install a meter or other suitable measuring device as approved by the Director. The permittee shall maintain the meter or measuring device in good working order.

B. The permittee shall allow the watermaster access to the meter or measuring device; provided however, where the meter or measuring device is located within a private structure, the watermaster shall request access upon reasonable notice.

C. The Director may require the permittee to keep and maintain a record of the amount (volume) of water used and may require the permittee to report water use on a periodic schedule as established by the Director. In addition, the Director may require the permittee to report general water use information, the periods of water use and the place and nature of use of water under the permit. The Director may provide an opportunity for the permittee to submit alternative reporting procedures for review and approval.

The water user shall develop a plan to monitor and report the impact of water use under this permit on water levels within the aquifer that provides water to the permitted well(s). The plan shall be submitted to the Department within one year of the date the permit is issued and shall be subject to the approval of the Department. At a minimum, the plan shall include a program to periodically measure static water levels within the permitted well(s) or an adequate substitute such as water levels in nearby wells. The plan shall also stipulate a reference water level against which any water-level declines will be compared. If a well listed on this permit (or replacement well) displays a total static water-level decline of 25 or more feet over any period of years, as compared to the reference level, then the water user shall discontinue use of, or reduce the rate or volume of withdrawal from, the well(s). Such action shall be taken until the water level recovers to above the 25-foot decline level or until the Department determines, based on the water user's and/or the Department's data and analysis, that no action is necessary because the aquifer in question can sustain the observed declines without adversely impacting the resource or senior water rights. The water user shall in no instance allow excessive decline, as defined in Commission rules, to occur within the aquifer as a result of use under this permit.

Within one year of permit issuance, the permittee shall submit a water management and conservation plan consistent with OAR Chapter 690, Division 86.

STANDARD CONDITIONS

The wells shall be constructed in accordance with the General Standards for the Construction and Maintenance of Water Wells in Oregon. The works shall be equipped with a usable access port, and may also include an air line and pressure gauge adequate to determine water level elevation in the well at all times.

The use shall conform to such reasonable rotation system as may be ordered by the proper state officer.

Prior to receiving a certificate of water right, the permit holder shall submit the results of a pump test meeting the department's standards, to the Water Resources Department. The Director may require water level or pump test results every ten years thereafter.

Failure to comply with any of the provisions of this permit may result in action including, but not limited to, restrictions on the use, civil penalties, or cancellation of the permit.

This permit is for the beneficial use of water without waste. The water user is advised that new regulations may require the use of best practical technologies or conservation practices to achieve this end.

By law, the land use associated with this water use must be in compliance with statewide land-use goals and any local acknowledged land-use plan.

The use of water shall be limited when it interferes with any prior surface or ground water rights.

The Director finds that the proposed use(s) of water described by this permit, as conditioned, will not impair or be detrimental to the public interest.

Actual construction of the well shall begin within one year from permit issuance, and shall be completed on or before October 1, 1998. Complete application of the water to the use shall be made on or before October 1, 1999.

Issued November 12, 1996

Martha O. Pagel, Director
Water Resources Department

FO CHECKLIST

FILE # G-15932
PFO WEEK # 433
FO WEEK # 398

PFO TO FO CONVERSION

REVIEW DATE: 12/31 103
INITIALS: JWG
WM District 2
Region Mgr NWR
ODFW Bio ✓

Y/(N) Has applicant name and address changed, or has the file been reassigned?
If new: _____

In preparing to create the FO, you should check the following:

1. Y / (N) Were comments received? If so, **from whom** and **when**? _____
Respond to significant comments, issues, or disputes related to the proposed use of water (see notes, if any, listed above)

2. ✓ On the PFO CC list, verify names and mailing addresses of **ALL** commentors (regardless of comment date, **affected landowners**, and **those who paid the $10 fee**.

3. Y / N / (NA) Have affected land owners been notified? If not, refer to #9.

4. Y / N / (NA) Has ODFW asked for self certification of screening condition? If yes, include fish screening form

5. ✓ Correct PFO errors (such as POD or POU location (verify from map.)

6. ✓ Include or exclude permit conditions

7. ✓ Verify Payment of recording fees (*circle the appropriate option*)

(1) Issue FO w/permit if fees are paid — Prepare refund request for excess fees, **including standing fees if no protest is filed and no modifications are being made to the PFO.**

(2) Issue FO w/o permit if fees are lacking.

		Exam Fee Paid	250
		Q fee	150
1st CFS/AF	150	**Subtotal**	400
Addnl.		Recording Fee	~~175.00~~ or 250.00
TOTAL Q	150	**Total**	650
		Amount Paid	650
		Amount due/refund	~~650~~ 0

8 (Y) / N Is further processing possible? If not state reason: _____

FO Type: (circle types) DENIAL FO w/o PERMIT (REASON: Lacks Fees Lacks Easement
Lacks Approved Dam Plans and Specifications

FO & PERMIT (Permit # G-15551)

Once FO document is completed:

9. ____ Save WordPerfect document in M:\GROUPS\WR\FO\WEEK 398.

10. ____ Print final draft of document and submit for peer review

11. Complete routing list

The purpose of this checklist is to be used as a working document by Department staff to aid in the production of the related Initial Review, Proposed Final Order, or Final Order. It is not intended to be a complete record of all factors which were considered to produce the document, nor is it intended to serve any purpose other than that stated above. The related Initial Review, Proposed Final Order, or Final Order is intended to stand alone as the record of factors considered in its production

PFO CHECKLIST

APPLICATION # G-15932 SAVE IN PFO WORK WEEK: 434

✓10. IR Date 8/15/03 Public Notice Date 8/19/03 Comment Rec'd NO

✓20. Filed after **10/23/99**? (Y) / N (if N A date should be included)

Changes from IR determinations: /

Agencies and Additional People to Notify: /

✓30. **Shortcomings** preventing PFO, FO, or permit? Y / (N) Should process continue (Y) / N

✓40. Is second groundwater review complete? Y / (N) necessary? Y / (N)

✓50. IR identifies as on DEQ **303d** List? Y / N / (NA) Comments received? Y / (N)

Initials: JWG Date: 11/3/03

Revised 3/7/02

FEES:	EXAM:	250
	Q	150
	SUBTOTAL	400
	RECORD	250
	TOTAL	650
	PD	400
	(OWE)/REFUND	250

Per Review Ready

IR CHECKLIST

Application #: G 15932

County LINN Basin: 2 - WILLAMETTE WAB: _____

Township 13S/14S 13S/14S Range 3W 4W Section 31/6 36/1 1/4 1/4 SEEMAP

10. Groundwater Review A B (C) D River/Stream Name _____
    a. Groundwater Availability A B (C)
    b. Is the well located in a GWLA or CGWA or T1N R3E? (If applicable, include map with POD) Y / (N)

25. Use MUNI Priority Date(s) 2/24/03 (If muni or quasi-muni use send to Doug Parrow) copy Sent.

30. Allowed under Basin Program (Y) / N Limitations? Y / (N)

40. Withdrawn? Y / (N) season allowed _____

45. Basin Maps have been checked. Y / (N) River Mile _____

50. SWW Y / (N) (if Y notify state parks)

60. Surface water Availability (80% live flow / 50% storage) (NA)

70. Divis 33: Y / N / (NA) Above Bonn Y / N Not allowed April 15 - September 30 Y / N
    Below Bonn Y / N If Y add PISPC
    Statewide Y / N

80. Rate _____ / Duty _____ Rate: Max _____ Req 1 CFS (448.83 GPM)
    Season: Normal YR Req YR

90. B.O.R. or Doug Co. project Y / (N) contract # _____

100. Small (≤0.1cfs, ≤9.2AF), Medium (>0.1 or <1.5cfs, >9.2 or <100AF, Contract Stored Water) or Large (≥1.5 cfs, ≥100 AF)
     condition 7I and municipal require the Large conditions 7A

110. Land use approval (OK'd) needs approval county notified NA

120. Watermaster Dist: (1 2) 16 18 20 - NWR) (3 4 5 21 - NCR) (6 8 9 10 - ER) (11 12 17 - SCR) (13 14 15 19 - SWR)

125. Conflict? Yes No _____

130. per interactive mapping DOA Y / (N) (NO COPY TO PAUL MEASLES) 303D Y / (N) / NA CTUIR Y / (N)
     (Check DOA map to determine if Y / N)

140. within Oregon Streamflow Restoration Area? Y / N / (NA)

150. Letter format = =(Good) = =Limited= =Bad= =Bad w/ IRshort= =Bad w/ HC Opportunity

NA 155. Attach basin map indicating point of diversion?

160. CWRE, representative, etc. to notify? Y / N See Doug Parrow comment/review.

See Review - Amita

Name: JERRY GAINEY Date: 7/16/03 c:\myfiles\forms\checkirnew 5/9/03

Analysis for Application: G15932

Location: 13S-3W-31-SWSW

Uses: MU P

Basins

BASIN_NUM	BASIN_NAME
2	Willamette

Records Found: 1

WaterMaster Districts

WATERDIST	REGION	ACRES	SQ_MILES	WMASTER	ADDRESS	CITY
2	NW	4068592	6357	Mike Mattick	Central Lane Justice Court, 220 North Fifth	Springfield

Records Found: 1

WAB

BASIN	WID	LINK1	LINK2
2	30200303	Water Availability: 50% 80%	Flood Frequency Analysis

Records Found: 1

County

COUNTY	FIPS
Linn	41043

Records Found: 1

Groundwater Restricted Records Found: 0

Divison 33 Area

DIV33
In a Div33 area

Records Found: 1

Rule 4D

RULE4D
In a Rule4D Area

Records Found: 1

303D Streams Records Found: 0

303D Lakes Records Found: 0

Location: 13S-4W-36-SESE

Uses: MU P

Basins

BASIN_NUM	BASIN_NAME
2	Willamette

Records Found: 1

WaterMaster Districts

WATERDIST	REGION	ACRES	SQ_MILES	WMASTER	ADDRESS	CITY
2	NW	4068592	6357	Mike Mattick	Central Lane Justice Court, 220 North Fifth	Springfield

Records Found: 1

WAB

BASIN	WID	LINK1	LINK2
2	30200303	Water Availability: 50% 80%	Flood Frequency Analysis

Records Found: 1

County

COUNTY	FIPS
Linn	41043

Records Found: 1

Groundwater Restricted Records Found: 0

Divison 33 Area

DIV33
In a Div33 area

Records Found: 1

Rule 4D

RULE4D
In a Rule4D Area

Records Found: 1

303D Streams Records Found: 0

303D Lakes Records Found: 0

Location: 14S-3W-6-NWNW

Uses: MU P

Basins

BASIN_NUM	BASIN_NAME
2	Willamette

Records Found: 1

WaterMaster Districts

WATERDIST	REGION	ACRES	SQ_MILES	WMASTER	ADDRESS	CITY
2	NW	4068592	6357	Mike Mattick	Central Lane Justice Court, 220 North Fifth	Springfield

Records Found: 1

WAB

BASIN	WID	LINK1	LINK2
2	30200303	Water Availability: 50% 80%	Flood Frequency Analysis

Records Found: 1

County

COUNTY	FIPS
Linn	41043

Records Found: 1

Groundwater Restricted Records Found: 0

Divison 33 Area

DIV33
In a Div33 area

Records Found: 1

Rule 4D

RULE4D
In a Rule4D Area

Records Found: 1

303D Streams Records Found: 0

303D Lakes Records Found: 0

Location: 14S-3W-6-SWNW

Uses: MU P

Basins

BASIN_NUM	BASIN_NAME
2	Willamette

Records Found: 1

WaterMaster Districts

WATERDIST	REGION	ACRES	SQ_MILES	WMASTER	ADDRESS	CITY
2	NW	4068592	6357	Mike Mattick	Central Lane Justice Court, 220 North Fifth	Springfield

Records Found: 1

WAB

BASIN	WID	LINK1	LINK2
2	30200303	Water Availability: 50% 80%	Flood Frequency Analysis

Records Found: 1

County

COUNTY	FIPS
Linn	41043

Records Found: 1

Groundwater Restricted Records Found: 0

Divison 33 Area

DIV33
In a Div33 area

Records Found: 1

Rule 4D

RULE4D
In a Rule4D Area

Records Found: 1

303D Streams Records Found: 0

303D Lakes Records Found: 0

Location: 14S-3W-6-NWSW

Uses: MU P

Basins

BASIN_NUM	BASIN_NAME
2	Willamette

Records Found: 1

WaterMaster Districts

WATERDIST	REGION	ACRES	SQ_MILES	WMASTER	ADDRESS	CITY
2	NW	4068592	6357	Mike Mattick	Central Lane Justice Court, 220 North Fifth	Springfield

Records Found: 1

WAB

BASIN	WID	LINK1	LINK2
2	30200303	Water Availability: 50% 80%	Flood Frequency Analysis

Records Found: 1

County

COUNTY	FIPS
Linn	41043

Records Found: 1

Groundwater Restricted Records Found: 0

Divison 33 Area

DIV33
In a Div33 area

Records Found: 1

Rule 4D

RULE4D
In a Rule4D Area

Records Found: 1

303D Streams Records Found: 0

303D Lakes Records Found: 0

Location: 14S-3W-6-SWSW

Uses: MU P

Basins

BASIN_NUM	BASIN_NAME
2	Willamette

Records Found: 1

WaterMaster Districts

WATERDIST	REGION	ACRES	SQ_MILES	WMASTER	ADDRESS	CITY
2	NW	4068592	6357	Mike Mattick	Central Lane Justice Court, 220 North Fifth	Springfield

Records Found: 1

WAB

BASIN	WID	LINK1	LINK2
2	30200303	Water Availability: 50% 80%	Flood Frequency Analysis

Records Found: 1

County

COUNTY	FIPS
Linn	41043

Records Found: 1

Groundwater Restricted Records Found: 0

Divison 33 Area

DIV33
In a Div33 area

Records Found: 1

Rule 4D

RULE4D
In a Rule4D Area

Records Found: 1

303D Streams Records Found: 0

303D Lakes Records Found: 0

Location: 14S-4W-1-NENE

Uses: MU P

Basins

BASIN_NUM	BASIN_NAME
2	Willamette

Records Found: 1

WaterMaster Districts

WATERDIST	REGION	ACRES	SQ_MILES	WMASTER	ADDRESS	CITY
2	NW	4068592	6357	Mike Mattick	Central Lane Justice Court, 220 North Fifth	Springfield

Records Found: 1

WAB

BASIN	WID	LINK1	LINK2
2	30200303	Water Availability: 50% 80%	Flood Frequency Analysis

Records Found: 1

County

COUNTY	FIPS
Linn	41043

Records Found: 1

Groundwater Restricted Records Found: 0

Divison 33 Area

DIV33
In a Div33 area

Records Found: 1

Rule 4D

RULE4D
In a Rule4D Area

Records Found: 1

303D Streams Records Found: 0

303D Lakes Records Found: 0

Location: 14S-4W-1-SENE

Uses: MU P

Basins

BASIN_NUM	BASIN_NAME
2	Willamette

Records Found: 1

WaterMaster Districts

WATERDIST	REGION	ACRES	SQ_MILES	WMASTER	ADDRESS	CITY
2	NW	4068592	6357	Mike Mattick	Central Lane Justice Court, 220 North Fifth	Springfield

Records Found: 1

WAB

BASIN	WID	LINK1	LINK2
2	30200303	Water Availability: 50% 80%	Flood Frequency Analysis

Records Found: 1

County

COUNTY	FIPS
Linn	41043

Records Found: 1

Groundwater Restricted Records Found: 0

Divison 33 Area

DIV33
In a Div33 area

Records Found: 1

Rule 4D

RULE4D
In a Rule4D Area

Records Found: 1

303D Streams Records Found: 0

303D Lakes Records Found: 0

Location: 14S-4W-1-NESE

Uses: MU P

Basins

BASIN_NUM	BASIN_NAME
2	Willamette

Records Found: 1

WaterMaster Districts

WATERDIST	REGION	ACRES	SQ_MILES	WMASTER	ADDRESS	CITY
2	NW	4068592	6357	Mike Mattick	Central Lane Justice Court, 220 North Fifth	Springfield

Records Found: 1

WAB

BASIN	WID	LINK1	LINK2
2	30200303	Water Availability: 50% 80%	Flood Frequency Analysis

Records Found: 1

County

COUNTY	FIPS
Linn	41043

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Divison 33 Area

DIV33
In a Div33 area

Records Found: 1

Rule 4D

RULE4D
In a Rule4D Area

Records Found: 1

303D Streams Records Found: 0

303D Lakes Records Found: 0

Location: 14S-4W-1-SESE

Uses: MU P

Basins

BASIN_NUM	BASIN_NAME
2	Willamette

Records Found: 1

WaterMaster Districts

WATERDIST	REGION	ACRES	SQ_MILES	WMASTER	ADDRESS	CITY
2	NW	4068592	6357	Mike Mattick	Central Lane Justice Court, 220 North Fifth	Springfield

Records Found: 1

WAB

BASIN	WID	LINK1	LINK2
2	30200303	Water Availability: 50% 80%	Flood Frequency Analysis

Records Found: 1

County

COUNTY	FIPS
Linn	41043

Records Found: 1

Groundwater Restricted Records Found: 0

Divison 33 Area

DIV33
In a Div33 area

Records Found: 1

Rule 4D

RULE4D
In a Rule4D Area

Records Found: 1

303D Streams Records Found: 0

303D Lakes Records Found: 0

Location: 14S-4W-1-SWSE

Uses: MU P

Basins

BASIN_NUM	BASIN_NAME
2	Willamette

Records Found: 1

WaterMaster Districts

WATERDIST	REGION	ACRES	SQ_MILES	WMASTER	ADDRESS	CITY
2	NW	4068592	6357	Mike Mattick	Central Lane Justice Court, 220 North Fifth	Springfield

Records Found: 1

WAB

BASIN	WID	LINK1	LINK2
2	30200303	Water Availability: 50% 80%	Flood Frequency Analysis

Records Found: 1

County

COUNTY	FIPS
Linn	41043

Records Found: 1

Groundwater Restricted Records Found: 0

Divison 33 Area

DIV33
In a Div33 area

Records Found: 1

Rule 4D

RULE4D
In a Rule4D Area

Records Found: 1

303D Streams Records Found: 0

303D Lakes Records Found: 0

talk to Marc, looks like only log w/ construction issue is CIWN 51529- which is not included in application. Correct

EROFFICE MEMORANDUM
Water Rights Section

ub

July 10, 2003

er G-15932, City of Halsey

is being referred to you as recommended by Marc Norton.

Please route to me when finished.

Thanks.

7/16/03

Per discussion with Tracy, the well ID referenced for enforcement review is not associated with this application.

Jerry Gainey

INTEROFFICE MEMORANDUM
Water Rights Section

TO: Tracy Eichenalub

July 10, 2003

FROM: Jerry Gainey

RE: GW File Number G-15932, City of Halsey

The attached application file is being referred to you as recommended by Marc Norton.

Please route to me when finished.

Thanks.

7/16/03

Per discussion with Tracy, the well ID referenced for enforcement review is not associated with this application.

Jerry Gainey

Water Right Conditions Tracking Slip

Groundwater/Hydrology Section

FILE ## G-15932

ROUTED TO: WR

TOWNSHIP/
RANGE-SECTION: 145/4W-1

CONDITIONS ATTACHED? [X] yes [ ] no

REMARKS OR FURTHER INSTRUCTIONS:

Reviewer: Mark A Norton

Water Resources Department

MEMO June 30, 2003

TO Application G- 15932

FROM GW: Marc A Norton
(Reviewer's Name)

SUBJECT **Scenic Waterway Interference Evaluation**

☐ Yes
☐ No
The source of appropriation is within or above a Scenic Waterway

☐ Yes
☐ No
Use the Scenic Waterway condition (Condition 7J).

PREPONDERANCE OF EVIDENCE FINDING: (Check box only if statement is true)

☐ At this time the Department is unable to find that there is a preponderance of evidence that the proposed use of ground water will measurably reduce the surface water flows necessary to maintain the free-flowing character of a scenic waterway in quantities necessary for recreation, fish and wildlife.

FLOW REDUCTION: *(To be filled out only if Preponderance of Evidence box is not checked)*

Exercise of this permit is calculated to reduce monthly flows in _____ Scenic Waterway by the following amounts expressed as a proportion of the consumptive use by which surface water flow is reduced.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

TO: Water Rights Section Date June 30, 2003

FROM: Ground Water/Hydrology Section Marc Norton
Reviewer's Name

SUBJECT: Application G-15932 Supersedes review of
Date of Review(s)

PUBLIC INTEREST PRESUMPTION: GROUNDWATER

OAR 690-310-130 (1) *The Department shall presume that a proposed groundwater use will ensure the preservation of the public welfare, safety and health as described in ORS 537.525.* Department staff review ground water applications under OAR 690-310-140 to determine whether the presumption is established. OAR 690-310-140 allows the proposed use be modified or conditioned to meet the presumption criteria. **This review is based upon available information and agency policies in place at the time of evaluation.**

A. GENERAL INFORMATION: Applicant's Name: City of Halsey
448.83

A1. Applicant(s) seek(s) 1.0 cfs from 2 well(s) in the Willamette Basin, subbasin Quad Map: Halsey

A2. Proposed use: Municipal Seasonality: Year Round

A3. Well and aquifer data **(attach and number logs for existing wells; mark proposed wells as such under logid):**

Applic. # 2 3

Well	Logid	Proposed Aquifer*	Proposed Rate(cfs)	Location (T/R-S QQ-Q)	Location, metes and bounds, example: 2250' N, 1200' E fr NW cor S 36
1	LINN 13705	Alluvium	1.0	14S/4W-1 NE/SE	
2	LINN 51585	"	"	"	
3					
4					
5					

* Alluvium, CRB, Bedrock

Well	Well Elev ft msl	First Water ft bls	SWL ft bls	SWL Date	Well Depth (ft)	Seal Interval	Casing Intervals	Liner Intervals	Perforations ~~Or Screens~~	Well Yield GPM	Draw Down	Test Type
1	283	—	14	8/28/69	200	0-20	+1 to 199	—	40-70, 85-95	200	66'/8HR	Pumptest
2	283	45	5	4/8/98	83'6"	6-34	+5 to 50, 70-83'6"	—	50-70 Screen	250	43'/24HR	Pumptest

Use data from application for proposed wells.

A4. Comments: Water Well Report LINN 51529 drilled & cased to 98 feet - NO SEAL
Same driller as LINN 51585 (#3 on Application)(#2 on review)
SEE Reviews G-13997 & G-13998 C-date was not met - had to refile

A5. ☐ Provisions of the Willamette Basin rules relative to the development, classification and/or management of ground water hydraulically connected to surface water ☐ **are**, *or* ☒ **are not**, activated by this application. (Not all basin rules contain such provisions.)
Comments: Hydrogeologic Setting

A6. ☐ Well(s) # _____, _____, _____, _____, _____, tap(s) an aquifer limited by an administrative restriction.
Name of administrative area:
Comments:

Application G- 15932 continued Date June 30, 2003

B. GROUND WATER AVAILABILITY CONSIDERATIONS. OAR 690-310-130, 400-010, 410-0070

B1. Based upon available data, I have determined that ground water* for the proposed use:

a. ☐ is over appropriated, ☐ is not over appropriated, *or* ☒ **cannot be determined to be** over appropriated during any period of the proposed use. * This finding is limited to the ground water portion of the over-appropriation determination as prescribed in OAR 690-310-130;

b. ☐ **will not** *or* ☒ will likely be available in the amounts requested without injury to prior water rights. * This finding is limited to the ground water portion of the injury determination as prescribed in OAR 690-310-130;

c. ☐ **will not** *or* ☒ will likely to be available within the capacity of the ground water resource; or

d. ☒ **will, if properly conditioned,** avoid injury to existing ground water rights or to the ground water resource:
   i. ☒ The permit should contain condition #(s) 7A, 7B;
   ii. ☐ The permit should be conditioned as indicated in item 2 below.
   iii. ☐ The permit should contain special condition(s) as indicated in item 3 below;

B2. a. ☐ **Condition** to allow ground water production from no deeper than _____ ft. below land surface;

b. ☐ **Condition** to allow ground water production from no shallower than _____ ft. below land surface;

c. ☐ **Condition** to allow ground water production only from the _____ ground water reservoir between approximately_____ ft. and_____ ft. below land surface;

d. ☐ **Well reconstruction** is necessary to accomplish one or more of the above conditions. The problems that are likely to occur with this use and without reconstructing are cited below. Without reconstruction, I recommend withholding issuance of the permit until evidence of well reconstruction is filed with the Department and approved by the Ground Water Section.

Describe injury –as related to water availability– that is likely to occur without well reconstruction (interference w/ senior water rights, not within the capacity of the resource, etc): _____

B3. Ground water availability remarks: _____

Application G- 15932 continued Date June 30, 2003

C. GROUND WATER/SURFACE WATER CONSIDERATIONS, OAR 690-09-040

C1. **690-09-040 (1):** Evaluation of aquifer confinement:

Well	Aquifer or Proposed Aquifer	Confined	Unconfined
1	Alluvial	☐	☒
2	"	☐	☒
		☐	☐

Basis for aquifer confinement evaluation: Hydrogeologic Setting

C2. **690-09-040 (2) (3):** Evaluation of distance to, and hydraulic connection with, surface water sources. All wells located a horizontal distance less than ¼ mile from a surface water source that produce water from an unconfined aquifer shall be assumed to be hydraulically connected to the surface water source. Include in this table any streams located beyond one mile that are evaluated for PSI.

Well	SW #	Surface Water Name	GW Elev ft msl	SW Elev ft msl	Distance (ft)	Hydraulically Connected? YES	NO	ASSUMED	Potential for Subst. Interfer. Assumed? YES	NO
1	1	UN Named Trib	270	282	<500'	☐	☒	☐	☐	☒
	2	Muddy Creek	278	262	5700	☒	☐	☐	☐	☒
2	1	Same as Well #1			→	☐	☒	☐	☐	☒
	2				→	☒	☐	☐	☐	☒
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐

Basis for aquifer hydraulic connection evaluation: Hydrogeologic Setting

C3a. **690-09-040 (4):** Evaluation of stream impacts for each well that has been determined or assumed to be **hydraulically connected and less than 1 mile** from a surface water source. Limit evaluation to instream rights and minimum stream flows that are pertinent to that surface water source, and not lower SW sources to which the stream under evaluation is tributary. Compare the requested rate against the 1% of 80% *natural* flow for the pertinent Water Availability Basin (WAB). If Q is not distributed by well, use full rate for each well. Any checked ☒ box indicates the well is assumed to have the potential to cause PSI.

Well	SW #	Well < ¼ mile?	Qw > 5 cfs?	Instream Water Right ID	Instream Water Right Q (cfs)	Qw > 1% ISWR?	80% Natural Flow (cfs)	Qw > 1% of 80% Natural Flow?	Interference @ 30 days (%)	Potential for Subst. Interfer. Assumed?
1	~~1~~	~~☒~~	~~☐~~			☐		☐		☐
	2	☐	☐			☐		☐		☐
2	~~1~~	~~☐~~	~~☐~~			☐		☐		☐
	2	☐	☐			☐		☐		☐
		☐	☐			☐		☐		☐
		☐	☐			☐		☐		☐
		☐	☐			☐		☐		☐
		☐	☐			☐		☐		☐
		☐	☐			☐		☐		☐
		☐	☐			☐		☐		☐

Application G- 15932 continued Date June 30, 2003

C3b. **690-09-040 (4):** Evaluation of stream impacts by total appropriation for all wells determined or assumed to be hydraulically **connected and less than 1 mile** from a surface water source. **Complete only if Q is distributed among wells.** Otherwise same evaluation and limitations apply as in C3a above.

	SW #		Qw > 5 cfs?	Instream Water Right ID	Instream Water Right Q (cfs)	Qw > 1% ISWR?	80% Natural Flow (cfs)	Qw > 1% of 80% Natural Flow?	Interference @ 30 days (%)	Potential for Subst. Interfer. Assumed?
			☐			☐		☐		☐
			☐			☐		☐		☐
			☐			☐		☐		☐
			☐			☐		☐		☐

Comments: Stream #2 > 1 mile

C4a. **690-09-040 (5):** Estimated impacts on hydraulically connected surface water sources greater than one mile as a percentage of the proposed pumping rate. Limit evaluation to the effects that will occur up to one year after pumping begins. This table encompasses the considerations required by 09-040 (5)(a), (c) and (d), which are not included on this form. For simple analytical models, model non-distributed wells once as a single well at the full rate using the closest hydraulically connected stream beyond one mile. For distributed wells, model each well once at the identified rate per well using the closest hydraulically connected stream beyond one mile. Adjust aquifer parameters to reflect uncertainties in streambed conductance, partial penetration, etc. Calculate the difference of the **1% WAB flow – Interference as CFS.** Negative numbers indicate those months where calculated interference exceeds 1% of natural stream flow. Under "basis" identify which WAB was used and attach the ground water model parameters/results and water availability table to this review.

Non-Distributed Wells													
Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Well Q as CFS													
Interference CFS													

Distributed Wells													
Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Well Q as CFS													
Interference CFS													
Well Q as CFS													
Interference CFS													
Well Q as CFS													
Interference CFS													
Well Q as CFS													
Interference CFS													
Well Q as CFS													
Interference CFS													

Total Interf. CFS												
1 % WAB Nat. Q												
1%WAB – Interf.												

Application G- 15932 continued Date June 30, 2003

Basis for impact evaluation: Stream #2 greater than 1 mile.

C4b. **690-09-040 (5) (b) The potential to impair or detrimentally affect the public interest is to be determined by the Water Rights Section.**

C5. ☐ **If properly conditioned,** the surface water source(s) can be adequately protected from interference, and/or ground water use under this permit can be regulated if it is found to substantially interfere with surface water:

i. ☐ The permit should contain condition #(s)_____;

ii. ☐ The permit should contain special condition(s) as indicated in "Remarks" below;

C6. **SW / GW Remarks**

Application G- 15932 continued Date June 30, 2003

D. WELL CONSTRUCTION, OAR 690-200

D1. Well #: LINN 51529 Logid: LINN 51529

D2. **THE WELL does not meet current well construction standards based upon:**

a. ☒ review of the well log;
b. ☐ field inspection by _____;
c. ☐ report of CWRE _____;
d. ☐ other: (specify) _____

D3. **THE WELL construction deficiency:**

a. ☒ constitutes a health threat under Division 200 rules;
b. ☐ commingles water from more than one ground water reservoir;
c. ☐ permits the loss of artesian head;
d. ☐ permits the de-watering of one or more ground water reservoirs;
e. ☐ other: (specify) NO SEAL

D4. **THE WELL construction deficiency is described as follows:** NO SEAL

D5. **THE WELL**

a. ☐ **was,** *or* ☒ **was not constructed according to the standards in effect at the time of original construction or most recent modification.**

b. ☐ I don't know if it met standards at the time of construction.

D6. ☒ **Route to the Enforcement Section.** I recommend withholding issuance of the permit until evidence of well reconstruction is filed with the Department and approved by the Enforcement Section and the Ground Water Section.

THIS SECTION TO BE COMPLETED BY ENFORCEMENT PERSONNEL

D7. ☐ Well construction deficiency has been corrected by the following actions: _____

_____ _____, 200____.

(Enforcement Section Signature)

D8. ☐ **Route to Water Rights Section (attach well reconstruction logs to this page).**

RECEIVED

APR 3 0 1998

WATER RESOURCES DEPT.
SALEM, OREGON

WELL I.D.# L10960

LINN 51585 #3

STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765)

(START CARD) # 92262

Instructions for completing this report are on the last page of this form.

(1) OWNER: Well Number
Name CITY OF HALSEY
Address 773 First St. ; P.O. Box 10
City HALSEY State ORE Zip 97348

(2) TYPE OF WORK
☑ New Well ☐ Deepening ☐ Alteration (repair/recondition) ☐ Abandonment

(3) DRILL METHOD:
☐ Rotary Air ☐ Rotary Mud ☑ Cable ☐ Auger
☐ Other

(4) PROPOSED USE:
☐ Domestic ☐ Community ☐ Industrial ☐ Irrigation
☐ Thermal ☐ Injection ☐ Livestock ☑ Other Municipal

(5) BORE HOLE CONSTRUCTION:
Special Construction approval ☐ Yes ☐ No Depth of Completed Well 83'6"
Explosives used ☐ Yes ☑ No Type ____ Amount ____

HOLE Diameter	From	To	SEAL Material	From	To	Sacks or pounds
16"	0'	105	cement	0'	34'	69 sacks

How was seal placed: Method ☐ A ☐ B ☑ C ☐ D ☐ E
☐ Other
Backfill placed from 83.5 ft. to 105 ft. Material cement
Gravel placed from 34 ft. to 64 ft. Size of gravel 3/8" round

(6) CASING/LINER: ~~Gravel From 64-83.5' SIZE: 6-9~~ Colorado Silica

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	12"	+5'	49.9'	.375	☑	☐	☑	☐
	12"	70'	83.5'	.375	☑	☐	☑	☐
Liner:					☐	☐	☐	☐

Final location of shoe(s) no shoe

(7) PERFORATIONS/SCREENS:
☐ Perforations Method
☑ Screens Type V-SLOT Material 304 SS

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
49.9'	70'	90			P. SIZE	☐	☐

(8) WELL TESTS: Minimum testing time is 1 hour
☑ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
			1 hr.
250 GPM	43'		24 HRS.

Temperature of water 57° Depth Artesian Flow Found
Was a water analysis done? ☑ Yes By whom WATERLAB
Did any strata contain water not suitable for intended use? ☐ Too little
☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other
Depth of strata:

(9) LOCATION OF WELL by legal description:
County LINN Latitude Longitude
Township 14S N or S Range 4W E or W. WM.
Section 1 SE 1/4 NW 1/4
Tax Lot 3300 Lot Block Subdivision
Street Address of Well (or nearest address) ~~#33~~ 1133 West 4 TH ST., HALSEY, ORE

(10) STATIC WATER LEVEL:
5 ft. below land surface. Date 4-8-98
Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES:
Depth at which water was first found 45'

From	To	Estimated Flow Rate	SWL
45'	70'	250 GPM	5'

(12) WELL LOG:
Ground Elevation

Material	From	To	SWL
- BROWN CLAY	0'	12'	
- GRAY CLAY	12'	23'	
- GRAY CLAY W/SOME GRAVEL	23'	29'	
- GRAVEL, SMALL-MEDIUM, BROWN SAND W/ BROWN CLAY	29'	45'	
- SMALL-LARGE GRAVEL, BROWN FINE-COARSE SAND W/SOME BROWN CLAY W.B.	45	70'	5'
- BLUE GRAY CLAY W/ GRAVEL	70'	75'	
- BROWN+GRAY CLAY	75'	82'	
- GRAY SANDY CLAY W/ SOME SMALL GRAVEL	82'	100'	
- GRAY CLAY	100'	105'	

Date started DECEMBER 17, 1997 Completed APRIL 16, 1998

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.
WWC Number
Signed Date

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.
WWC Number 633
Signed Michael Waldroop Date April 29, '98

ORIGINAL & FIRST COPY-WATER RESOURCES DEPARTMENT SECOND COPY-CONSTRUCTOR THIRD COPY-CUSTOMER

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report are to be filed with the STATE ENGINEER, SALEM, OREGON 97310 within 30 days from the date of well completion.

#2 (#1) #4

WATER WELL REPORT

STATE OF OREGON
(Please type or print)
(Do not write above this line)

LINN 13705

State Well No. 11/4W-1

State Permit No. .....

RECEIVED
SEP 5 1969
STATE ENGINEER
SALEM, OREGON

(1) OWNER:

Name City of Halsey

Address Halsey, Oregon

(2) TYPE OF WORK (check):

New Well ☑ Deepening ☐ Reconditioning ☐ Abandon ☐

If abandonment, describe material and procedure in Item 12.

(3) TYPE OF WELL:

Rotary ☐ Driven ☐
Cable ☑ Jetted ☐
Dug ☐ Bored ☐

(4) PROPOSED USE (check):

Domestic ☐ Industrial ☐ Municipal ☑
Irrigation ☐ Test Well ☐ Other ☐

(5) CASING INSTALLED:

Threaded ☐ Welded ☑

12" Diam. from +1 ft. to 199 ft. Gage .250"

....." Diam. from ..... ft. to ..... ft. Gage .....

....." Diam. from ..... ft. to ..... ft. Gage .....

PERFORATIONS:

Perforated? ☑ Yes ☐ No.

Type of perforator used Miles Knife

Size of perforations 1/4 in. by 3 in.

300 perforations from 40 ft. to 70 ft.

100 perforations from 85 ft. to 95 ft.

..... perforations from ..... ft. to ..... ft.

..... perforations from ..... ft. to ..... ft.

..... perforations from ..... ft. to ..... ft.

(7) SCREENS:

Well screen installed? ☐ Yes ☒ No

Manufacturer's Name .....

Type ..... Model No. .....

Diam. ..... Slot size ..... Set from ..... ft. to ..... ft.

Diam. ..... Slot size ..... Set from ..... ft. to ..... ft.

(8) WATER LEVEL: Completed well.

Static level 14 ft. below land surface Date 8/28/69

Artesian pressure ..... lbs. per square inch Date .....

(9) WELL TESTS:

Drawdown is amount water level is lowered below static level

Was a pump test made? ☑ Yes ☐ No If yes, by whom? W.W.

Yield: 156 gal./min. with 32 ft. drawdown after 1 hrs.

" 200 " 58 " 5 "

" 200 " 66 " 8 "

Bailer test ..... gal./min. with ..... ft. drawdown after ..... hrs.

Artesian flow ..... g.p.m. Date .....

Temperature of water ..... Was a chemical analysis made? ☐ Yes ☐ No

(10) CONSTRUCTION:

Well seal—Material used Cement

Depth of seal 20 ft.

Diameter of well bore to bottom of seal 16 in.

Were any loose strata cemented off? ☐ Yes ☐ No Depth .....

Was a drive shoe used? ☒ Yes ☐ No

Did any strata contain unusable water? ☐ Yes ☒ No

Type of water? ..... depth of strata .....

Method of sealing strata off .....

Was well gravel packed? ☐ Yes ☒ No Size of gravel: .....

Gravel placed from ..... ft. to ..... ft.

(11) LOCATION OF WELL:

County Lynn Driller's well number .....

¼ ¼ Section 1 T. 14S R. 4W W.M.

Bearing and distance from section or subdivision corner .....

(12) WELL LOG:

Diameter of well below casing 12"

Depth drilled 200 ft. Depth of completed well 200 ft.

Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level as drilling proceeds. Note drilling rates.

MATERIAL	From	To	SWL
Blue clay	0	3'	
Brown clay	3'	19'	
Brown clay & small gravel	19'	23'	
Fine Large Gravel	23'	27'	
Brown Cemented Gravel	27'	42'	
Fine Sandy Gravel - med.	42'	46'	
Brown cemented Gravel	46'	69'	
Blue Sandy clay	69'	85'	
Fine Sandy clay & Gravel	85'	95'	
Blue Sandy Clay	95'	100'	
Brown Sandy clay	100'	104'	
Gray Sandy clay	104'	130'	
Blue Sandy clay	130'	145'	
Brown Sandy Clay	145'	164'	
Blue Sand	164'	168'	
Blue Sandy clay	168'	200'	14'

Work started 8/4 1969 Completed 8/28 1969

Date well drilling machine moved off of well 8/28 1969

Drilling Machine Operator's Certification:

This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.

[Signed] Frank Wilson (Drilling Machine Operator) Date 8/28, 1969

Drilling Machine Operator's License No. 404

Water Well Contractor's Certification:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME W.W. Drilling & Pump Ser. (Person, firm or corporation) (Type or print)

Address 2320 Main - Springfield Ore.

[Signed] Walt Wilson (Water Well Contractor)

Contractor's License No. 268 Date Aug. 28, 1969

(USE ADDITIONAL SHEETS IF NECESSARY)

7

LINN 5152 9

RECEIVED
FEB 24 1998
WATER RESOURCES DEPT.
SALEM, OREGON

STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765)

(START CARD) # 92260

Instructions for completing this report are on the last page of this form.

(1) OWNER: Well Number
Name CITY OF HALSEY
Address 773 W. FIRST ST. P.O. BX 10
City HALSEY State ORE. Zip 97348

(2) TYPE OF WORK
☑ New Well ☐ Deepening ☐ Alteration (repair/recondition) ☐ Abandonment

(3) DRILL METHOD:
☐ Rotary Air ☐ Rotary Mud ☑ Cable ☐ Auger
☐ Other

(4) PROPOSED USE:
☐ Domestic ☐ Community ☐ Industrial ☐ Irrigation
☐ Thermal ☐ Injection ☐ Livestock ☑ Other MUNICIPAL

(5) BORE HOLE CONSTRUCTION:
Special Construction approval ☐ Yes ☑ No Depth of Completed Well 115'6" ft.
Explosives used ☐ Yes ☑ No Type Amount

HOLE Diameter	From	To	SEAL Material	From	To	Sacks or pounds
16"	0'	115'	NO SEAL			

How was seal placed: Method ☐ A ☐ B ☐ C ☐ D ☐ E
☐ Other
Backfill placed from ft. to ft. Material
Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	16"	+1'	98'	.250"	☐	☐	☑	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
Liner:					☐	☐	☐	☐
					☐	☐	☐	☐

Final location of shoe(s)

(7) PERFORATIONS/SCREENS:
☐ Perforations Method NONE
☐ Screens Type Material

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐

(8) WELL TESTS: Minimum testing time is 1 hour
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
			1 hr.
NONE	- NO TESTING DONE		

Temperature of water Depth Artesian Flow Found
Was a water analysis done? ☐ Yes By whom
Did any strata contain water not suitable for intended use? ☐ Too little
☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other
Depth of strata:

(9) LOCATION OF WELL by legal description:
County LINN Latitude Longitude
Township 14S N or S Range 4W E or W. WM.
Section 1 SE 1/4 NW 1/4
Tax Lot 3200 Lot Block Subdivision
Street Address of Well (or nearest address) SITE OFF INTER-SECTION OF 4th & 'M' STREETS

(10) STATIC WATER LEVEL:
11'-4" ft. below land surface. Date 12-4-97
Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES:
Depth at which water was first found

From	To	Estimated Flow Rate	SWL
22'	64'	30+ GPM	11'-4"

(12) WELL LOG:
Ground Elevation

Material	From	To	SWL
- Brown topsoil	0'	1'	
- Gray clay	1'	6'	
- Brown clay	6'	13'	
- Gray clay	13'	15'	
- Brown clay w/gravel	15'	19'	
- Brown clay w/large gravel	19'	22'	
- Brown clay w/smaller gravel	22'	39'	
- Gravel w/ brown clay	39'	64'	
- Gray clay + Gravel	64'	67'	
- Light-gray clay	67'	73'	
- Dark-gray clay	73'	78'	
- Dark-Gray clay w/some sand + small gravel	78'	82'	
- Gray clay w/brown streaks	82'	86'	
- Blue clay	86'	98'	
- Soft Gray clay	98'	100'	
- Gray clay w/black sd @ 101'	100'	103'	
- Brown silty clay w/some Gray	103'	115'6"	

Date started NOVEMBER 10 '97 Completed DECEMBER 4, 1997

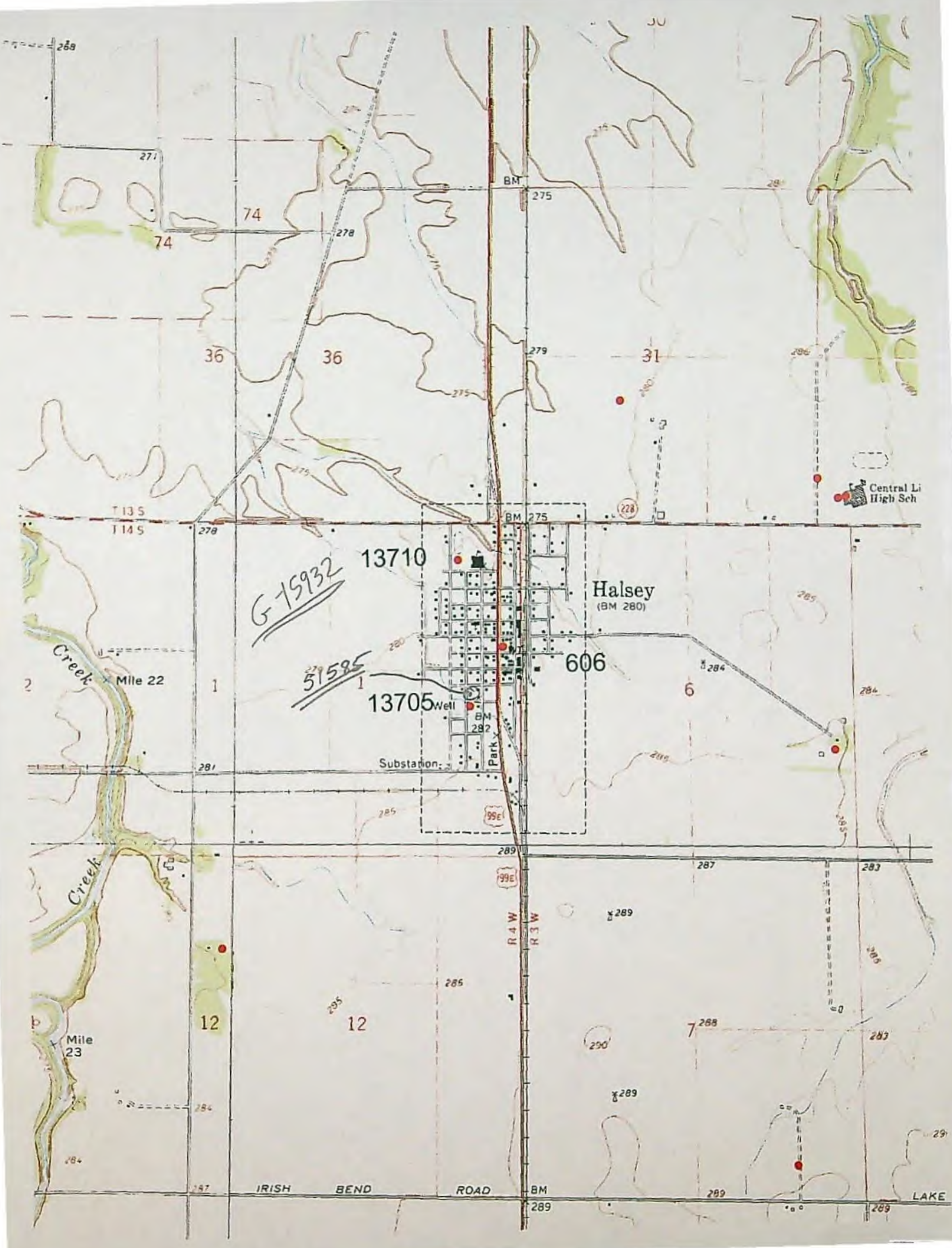
(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

WWC Number
Signed Date

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.

WWC Number 633
Signed Michael Waldsoop Date FEB. 22, 1998

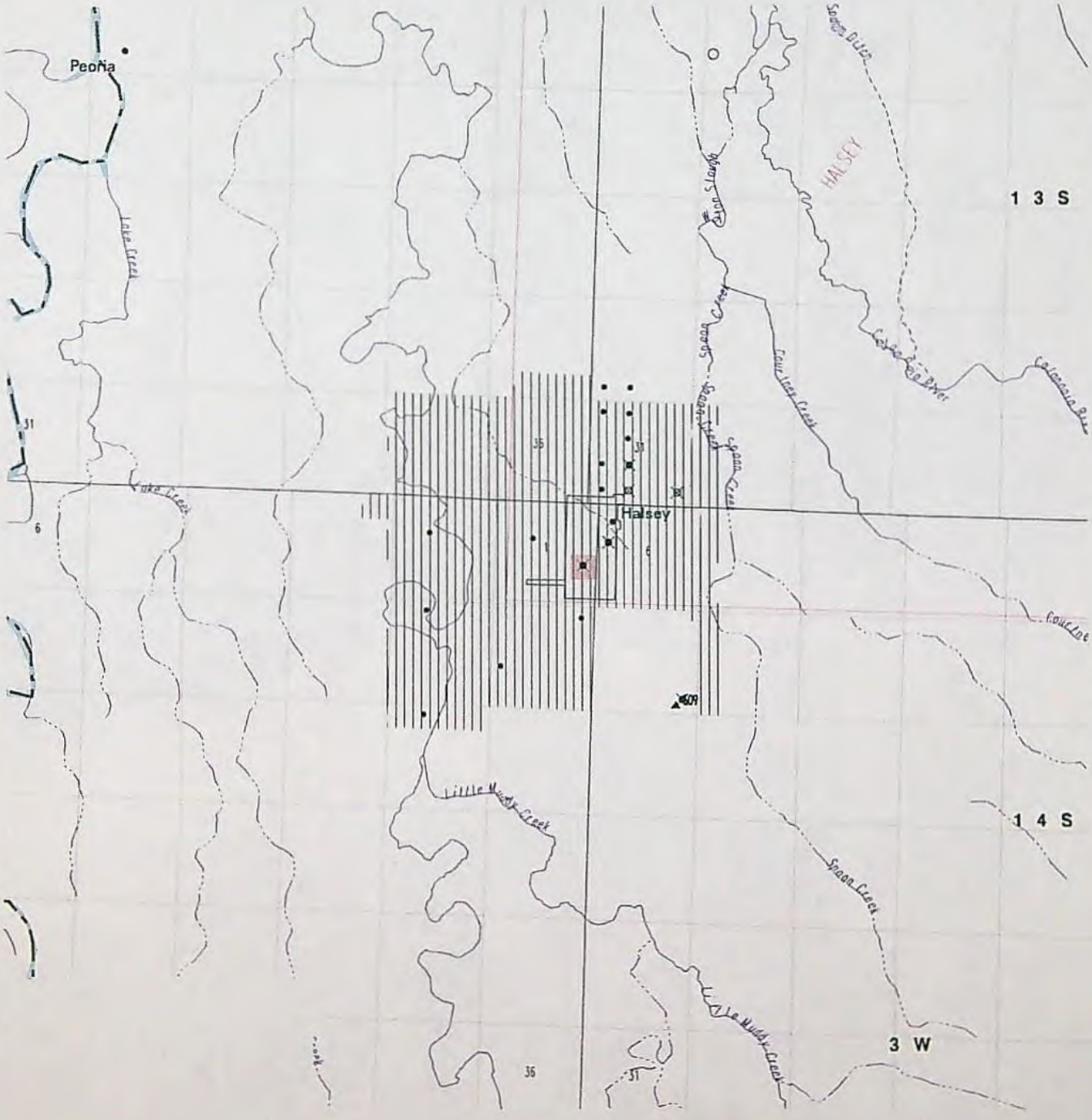
ORIGINAL & FIRST COPY-WATER RESOURCES DEPARTMENT SECOND COPY-CONSTRUCTOR THIRD COPY-CUSTOMER



Halsey
(BM 280)
13710
G-15932
51585
13705
Well
606
Substation
Park
Central Li
High Sch
T 13 S
T 14 S
R 4 W
R 3 W
BM 275
BM 282
BM 289
Mile 22
Mile 23
Creek
Creek
IRISH BEND ROAD
LAKE
74
74
36
36
31
1
1
2
6
7
12
12
228
99E
99E
278
281
287
283
289
284
285

Wells in the vicinity of application G 15932

- Application well(s) in this 1/4-1/4 section
- Well(s) identified in this section from OWRD's well log database within 1 mi. radius of application well(s)
- Well(s) identified in this 1/4-1/4 section from OWRD's well log database within 1 mi. radius of application well(s)
- Permitted well(s) in this 1/4-1/4 section within 1 mi. radius of application well(s)
- Conditioned, permitted well(s) in this 1/4-1/4 section within 5 mi. radius of application well(s)
- OWRD Observation well and well-id within 5 mi. radius of application well(s)
- Critical GW Area
- Regulated GW Area



WELL LOGS WITHIN 1 MILE OF APPLICATION G 15932

ABANDON:	4
RECONDITIONED:	0
REPAIRED:	0
CONVERSION:	0
DEEPENINGS:	4
NEW CONSTRUCT:	43
COMMUNITY USE:	2
DOMESTIC USE:	34
INDUSTRIAL USE:	2
INJECTION USE:	0
IRRIGATION USE:	7
THERMAL USE:	0
LIVESTOCK USE:	0

****

PERMITTED WELLS WITHIN 1 MILE OF APPLICATION G 15932

$RECNO	APPLICATION	PERMIT	CLAIM	LOC-QQ	USE_CODE
1	0	0	GR 101	13.00S 3.00W31NESW	IR
2	G 9008	G 8363	0	13.00S 3.00W31SESW	IR
3	G 1688	G 1548	0	13.00S 3.00W31SESE	IR
3	G 7039	G 6526	0	13.00S 3.00W31SESE	IS
4	G 13998	G 12998	0	14.00S 4.00W 1NESE	MU
4	G 13997	G 12997	0	14.00S 4.00W 1NESE	MU
4	0	0	GR 1042	14.00S 4.00W 1NESE	MU
5	0	0	GR 2792	14.00S 3.00W 6SWNW	IR
5	0	0	GR 3332	14.00S 3.00W 6SWNW	IR
6	0	0	GR 184	14.00S 3.00W 7SESE	IR

****

CONDITIONED WELLS WITHIN 5 MILES OF APPLICATION G 15932

$RECNO	APPLICATION	PERMIT	LOC-QQ	CONDITION-CODE
1	G 13115	G 12050	13.00S 3.00W 8NWSW	4IG
1	G 13115	G 12050	13.00S 3.00W 8NWSW	4IR

****

APPLICATION G 15932 FALLS WITHIN THESE QUAD(S)

HALSEY

****

690-502-0160 - Groundwater Classifications and Conditions

(2) Groundwater Classification: The ground-water resources of the Willamette Basin are classified for domestic, livestock, irrigation, **municipal**, industrial, agricultural, commercial, power, mining, recreation, fish life, wildlife, pollution abatement, wetland enhancement and statutorily exempt groundwater uses with the following exceptions:

Oregon Water Resources Department
Water Rights Division

Water Rights Application
Number G-15932

Proposed Final Order

Prior to issuance of a permit, recording fees in the amount of $250.00 must be submitted to the Department. In order to increase Department efficiency and expedite the processing of your application, please submit the necessary fees prior to the protest deadline of December 26, 2003. Please include your application number on your check made out to the Oregon Water Resources Department. If this fee is not paid prior to December 26, 2003, issuance of a permit will be delayed.

Summary of Recommendation: The Department recommends that the attached draft permit be issued with conditions.

Application History

On February 24, 2003, Andy Ridinger for the City of Halsey submitted an application to the Department for the following water use permit:

- Amount of Water: 1.0 cubic foot per second (CFS)
- Use of Water: Municipal use
- Source of Water: Well 2 and Well 3 in Muddy Creek Basin
- Area of Proposed Use: Linn County within Section 31, Township 13 South, Range 3 West, W.M.; Section 36, Township 13 South, Range 4 West, W.M.; Section 6, Township 14 South, Range 3 West, W.M.; and Section 1, Township 14 South, Range 4 West, W.M.

On August 15, 2003, the Department mailed the applicant notice of its Initial Review, determining that "*A maximum cumulative total of 1.0 cubic foot per second from Well 2 and Well 3 in Muddy Creek Basin for municipal water use is allowable year round.*" The applicant did not notify the Department to stop processing the application within 14 days of that date.

On August 19, 2003, the Department gave public notice of the application in its weekly notice. The public notice included a request for comments, and information for interested persons about both obtaining future notices and a copy of the proposed final order.

No written comments were received within 30 days.

In reviewing applications, the Department may consider any relevant sources of information, including the following:

- comments by or consultation with another state agency
- any applicable basin program
- any applicable comprehensive plan or zoning ordinance
- the amount of water available
- the rate and duty for the proposed use
- pending senior applications and existing water rights of record
- designations of any critical groundwater areas
- the Scenic Waterway requirements of ORS 390.835
- applicable statutes, administrative rules, and case law
- any general basin-wide standard for flow rate and duty of water allowed
- the need for a flow rate and duty higher than the general standard
- any comments received

Findings of Fact

The Willamette Basin Program allows the use of water for municipal use.

Well 2 and Well 3 in Muddy Creek Basin is not within or above a State Scenic Waterway.

The Groundwater Section finds, per OAR 390.835(9), there is not a preponderance of evidence that the proposed use of groundwater will measurably reduce the surface water flows necessary to maintain the free-flowing character of a scenic waterway in quantities necessary for recreation, fish and wildlife.

Groundwater Findings Under OAR 690-09

The Department determined, consistent with OAR 690-009-0040(4), that the proposed ground water use will not have the potential for substantial interference with the nearby surface water sources.

In making this determination, the Department considered whether:

(a) There is a hydraulic connection from the proposed well(s) to any surface water sources.
(b) The point of appropriation is a horizontal distance less than one-fourth mile from the surface water source;
(c) The rate of appropriation is greater than five cubic feet per second, if the point of appropriation is a horizontal distance less than one mile from the surface water source;
(d) The rate of appropriation is greater than one percent of the pertinent adopted minimum perennial streamflow or instream water right with a senior priority date, if one is applicable, or of the discharge that is equaled or exceeded 80 percent of

time, as determined or estimated by the Department, and if the point of appropriation is a horizontal distance less than one mile from the surface water source;

(e) The ground water appropriation, if continued for a period of 30 days, would result in stream depletion greater than 25 percent of the rate of appropriation, if the point of appropriation is a horizontal distance less than one mile from the surface water source.

According to the Department's rules, the potential for substantial interference is assumed if (a) and either (b) or (c) or (d) or (e) are met. For this application, the Department determined that there is no potential for substantial interference because in reviewing this application (a) was met but (b), (c), (d) or (e) were not met.

An assessment of groundwater availability has been completed by the Department's Groundwater/Hydrology section. A copy of this assessment is in the file. The proposed use of groundwater will, if properly conditioned, avoid injury to existing rights and the resource.

The Department finds that the amount of water requested, 1.0 CFS, is an acceptable amount.

The proposed well is not within a designated critical ground water area.

Conclusions of Law

Under the provisions of ORS 537.621, the Department must presume that a proposed use will ensure the preservation of the public welfare, safety and health if the proposed use is allowed in the applicable basin program established pursuant to ORS 536.300 and 536.340 or given a preference under ORS 536.310(12), if water is available, if the proposed use will not injure other water rights and if the proposed use complies with rules of the Water Resources Commission.

The proposed use requested in this application is allowed in the Willamette Basin Plan, or a preference for this use is granted under the provisions of ORS 536.310(12).

Water is available for the proposed use.

The proposed use will not injure other water rights.

The proposed use complies with other rules of the Water Resources Commission not otherwise described above.

The proposed use complies with the State Agency Agreement for land use.

No proposed flow rate and duty of water higher than the general

basin-wide standard is needed.

For these reasons, the required presumption has been established.

Under the provisions of ORS 537.621, once the presumption has been established, it may be overcome by a preponderance of evidence that either:

(a) One or more of the criteria for establishing the presumption are not satisfied; or

(b) The proposed use would not ensure the preservation of the public welfare, safety and health as demonstrated in comments, in a protest . . . or in a finding of the department that shows:

(A) The specific aspect of the public welfare, safety and health under ORS 537.525 that would be impaired or detrimentally affected; and

(B) Specifically how the identified aspect of the public welfare, safety and health under ORS 537.525 would be impaired or be adversely affected.

In this application, all criteria for establishing the presumption have been satisfied, as noted above. The presumption has not been overcome by a preponderance of evidence that the proposed use would impair or be detrimental to the public interest.

The Department therefore concludes that water is available in the amount necessary for the proposed use; the proposed use will not result in injury to existing water rights; and the proposed use would ensure the preservation of the public welfare, safety and health as described in ORS 537.525.

When issuing permits, ORS 537.628(1) authorizes the Department to include limitations and conditions which have been determined necessary to protect the public welfare, safety, and health. The attached draft permit is conditioned accordingly.

Recommendation

The Department recommends that the attached draft permit be issued with conditions.

DATED November 11, 2003

Dwight French
Water Rights Section Manager

If you have any questions, please check the information box on the last page for the appropriate names and phone numbers.

Protest Rights and Standing

Under the provisions of 537.621(7), you have the right to protest this proposed final order. Your protest must be in writing, and must include the following:

- Your name, address, and telephone number;
- A description of your interest in the proposed final order, and, if you claim to represent the public interest, a precise statement of the public interest represented;
- A detailed description of how the action proposed in this proposed final order would impair or be detrimental to your interest;
- A detailed description of how the proposed final order is in error or deficient, and how to correct the alleged error or deficiency;
- Any citation of legal authority to support your protest, if known; and
- If you are not the applicant, the protest fee of $250 required by ORS 536.050 and proof of service of the protest upon the applicant.
- If you are the applicant, a statement of whether or not you are requesting a contested case hearing. If you do not request a hearing, the Department will presume that you do not wish to contest the findings of the proposed final order.
- <u>If you do not protest this Proposed Final Order and if no substantive changes are made in the final order, you will not have an opportunity for judicial review, protest or appeal of the final order when it is issued.</u>

Requests for Standing

Under the provisions of 537.621(6), persons other than the applicant who support a proposed final order may request standing for purposes of participating in any contested case proceeding on the proposed final order or for judicial review of a final order. A request for standing shall be in writing, include a statement that the requester supports the proposed final order, and a statement of how the requester would be harmed if the proposed final order is modified. The fee required at the time of submitting this request is $50.00. If a hearing is scheduled, an additional fee of $200.00 must be submitted along with a request for intervention. Forms to request standing are available from the Department.

Your protest or request for standing must be received in the Water Resources Department no later than **December 26, 2003.**

After the protest period has ended, the Director will either issue a

final order or schedule a contested case hearing. The contested case hearing will be scheduled only if a protest has been submitted and if

- upon review of the issues, the director finds that there are significant disputes related to the proposed use of water, or
- the applicant requests a contested case hearing within 30 days after the close of the protest period.

This document was prepared by Jerry Gainey. *If you have any questions about any of the statements contained in this document I am most likely the best person to answer your questions. You can reach me at* 503-986-0812.

If you have questions about how to file a protest or if you have previously filed a protest and want to know the status, please contact Renee Moulun at 503-986-0824.

If you have other questions about the Department or any of its programs please contact our Water Rights Information Group at 503-986-0801.

Address all other correspondence to: Water Rights Section, Oregon Water Resources Department, 725 Summer St NE Ste A, Salem OR 97301-1271, Fax: 503-986-0901.

Gaineyjw- WEEK 433

STATE OF OREGON

COUNTY OF LINN

DRAFT PERMIT TO APPROPRIATE THE PUBLIC WATERS

THIS DRAFT PERMIT IS HEREBY ISSUED TO

CITY OF HALSEY
PO BOX 10 (541)466-5421
HALSEY, OR 97348

The specific limits and conditions of the use are listed below.

APPLICATION FILE NUMBER: G-15932

SOURCE OF WATER: WELL 2 AND WELL 3 IN MUDDY CREEK BASIN

PURPOSE OR USE: MUNICIPAL USE

MAXIMUM RATE: 1.0 CUBIC FOOT PER SECOND

PERIOD OF USE: YEAR ROUND

DATE OF PRIORITY: FEBRUARY 24, 2003

WELL LOCATIONS:

WELL 2: NE ¼ SE ¼ SECTION 1, T14S, R4W, W.M.; GPS - 44 DEGREES 22 MINUTES 50.948 SECONDS NORTH, 123 DEGREES 6 MINUTES 45.094 SECONDS WEST

WELL 3: NE ¼ SE ¼ SECTION 1, T14S, R4W, W.M.; GPS - 44 DEGREES 22 MINUTES 50.763 SECONDS NORTH, 123 DEGREES 6 MINUTES 43.934 SECONDS WEST

THE PLACE OF USE IS LOCATED AS FOLLOWS:

WITHIN THE SERVICE BOUNDARIES OF THE CITY OF HALSEY

Measurement, recording and reporting conditions:

A. Before water use may begin under this permit, the permittee shall install a meter or other suitable measuring device as approved by the Director. The permittee shall maintain the meter or measuring device in good working order, shall keep a complete record of the amount of water used each month and shall submit a report which includes the recorded water use measurements to the Department annually or more frequently as may be required by the Director. Further, the Director may require the permittee to report general water use information,

including the place and nature of use of water under the permit.

B. The permittee shall allow the watermaster access to the meter or measuring device; provided however, where the meter or measuring device is located within a private structure, the watermaster shall request access upon reasonable notice.

The water user shall develop a plan to monitor and report the impact of water use under this permit on water levels within the aquifer that provides water to the permitted well(s). The plan shall be submitted to the Department within one year of the date the permit is issued and shall be subject to the approval of the Department. At a minimum, the plan shall include a program to periodically measure static water levels within the permitted well(s) or an adequate substitute such as water levels in nearby wells. The plan shall also stipulate a reference water level against which any water-level declines will be compared. If a well listed on this permit (or replacement well) displays a total static water-level decline of 25 or more feet over any period of years, as compared to the reference level, then the water user shall discontinue use of, or reduce the rate or volume of withdrawal from, the well(s). Such action shall be taken until the water level recovers to above the 25-foot decline level or until the Department determines, based on the water user's and/or the Department's data and analysis, that no action is necessary because the aquifer in question can sustain the observed declines without adversely impacting the resource or senior water rights. The water user shall in no instance allow excessive decline, as defined in Commission rules, to occur within the aquifer as a result of use under this permit.

Within 3 years of permit issuance, the permittee shall submit a Water Management and Conservation Plan consistent with OAR Chapter 690, Division 86. The Director may approve an extension of this time line to complete the required Water Management and Conservation Plan. The time line for submittal of a plan under this permit does not alter the time lines for submittal of a plan under any other order of the Department.

STANDARD CONDITIONS

If the number, location, or construction of any well deviates from that proposed in the permit application or permit conditions, the conclusions of the Proposed Final Order and Final Order under which this permit was granted may be revised, conditions may be appropriately revised, or this permit may not be valid.

If substantial interference with a senior water right occurs due to withdrawal of water from any well listed on this permit, then use of water from the well(s) shall be discontinued or reduced and/or the schedule of withdrawal shall be regulated until or unless the Department approves or implements an alternative administrative action to mitigate

the interference. The Department encourages junior and senior appropriators to jointly develop plans to mitigate interferences.

The wells shall be constructed in accordance with the General Standards for the Construction and Maintenance of Water Wells in Oregon. The works shall be equipped with a usable access port, and may also include an air line and pressure gauge adequate to determine water level elevation in the well at all times.

The use shall conform to such reasonable rotation system as may be ordered by the proper state officer.

Prior to receiving a certificate of water right, the permit holder shall submit the results of a pump test meeting the department's standards, to the Water Resources Department. The Director may require water level or pump test results every ten years thereafter.

Failure to comply with any of the provisions of this permit may result in action including, but not limited to, restrictions on the use, civil penalties, or cancellation of the permit.

This permit is for the beneficial use of water without waste. The water user is advised that new regulations may require the use of best practical technologies or conservation practices to achieve this end.

By law, the land use associated with this water use must be in compliance with statewide land-use goals and any local acknowledged land-use plan.

The use of water shall be limited when it interferes with any prior surface or ground water rights.

The Director finds that the proposed use(s) of water described by this permit, as conditioned, will not impair or be detrimental to the public interest.

Complete application of the water to the use shall be made on or before October 1, 2008. If the water is not completely applied before this date, and the permittee wishes to continue development under the permit, the permittee must submit an application for extension of time, which may be approved based upon the merit of the application.

Within one year after complete application of water to the proposed use, the permittee shall submit a claim of beneficial use, which includes a map and report, prepared by a Certified Water Rights Examiner (CWRE).

Issued _____, 2003

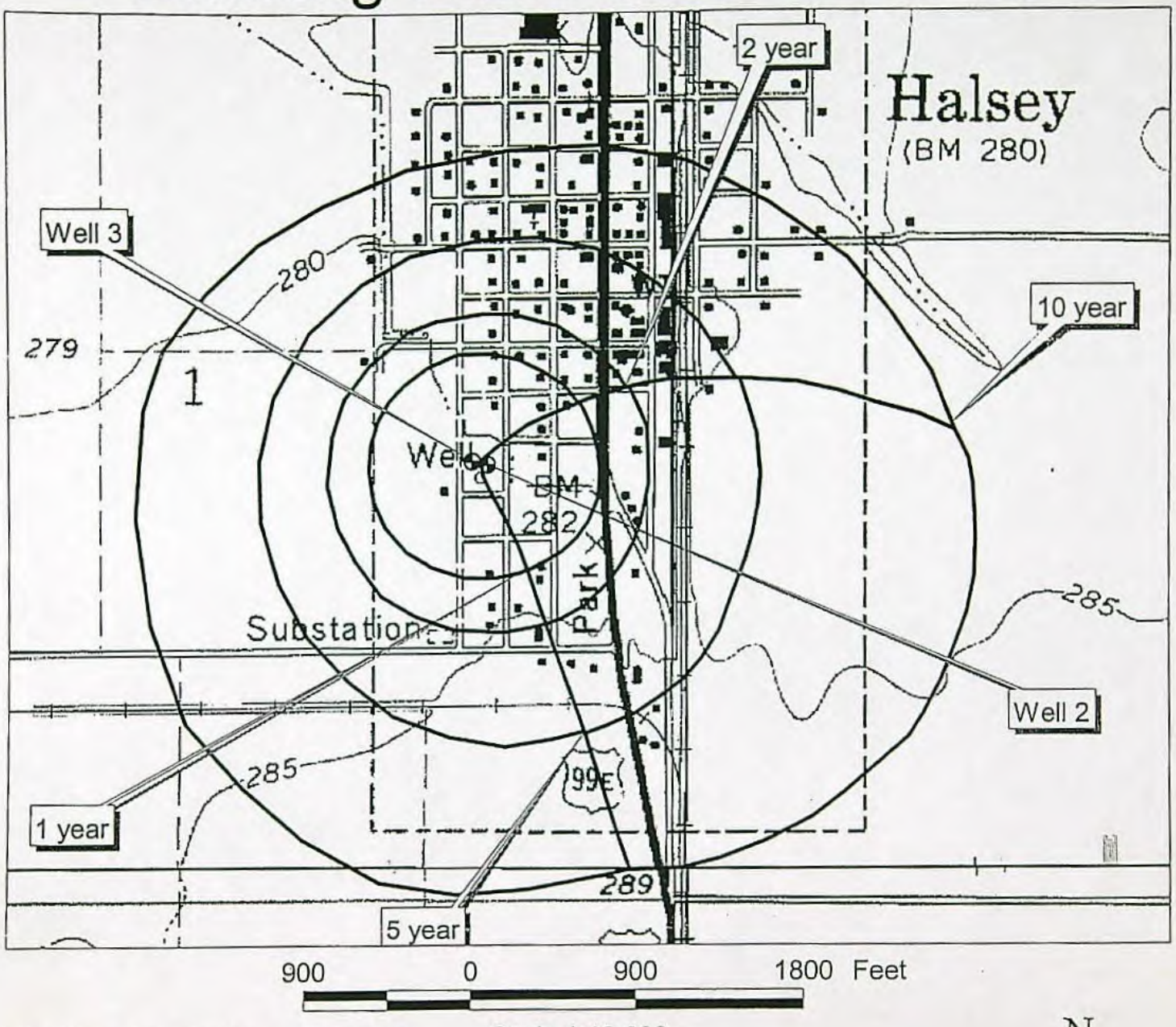
DRAFT - THIS IS NOT A PERMIT

_____
Paul R. Cleary, Director
Water Resources Department

REAL ESTATE TRANSACTIONS: Pursuant to ORS 537.330, in any transaction for the conveyance of real estate that includes any portion of the lands described in this permit, the seller of the real estate shall, upon accepting an offer to purchase that real estate, also inform the purchaser in writing whether any permit, transfer approval order, or certificate evidencing the water right is available and that the seller will deliver any permit, transfer approval order or certificate to the purchaser at closing, if the permit, transfer approval order or certificate is available.

CULTURAL RESOURCES PROTECTION LAWS: Permittees involved in ground-disturbing activities should be aware of federal and state cultural resources protection laws. ORS 358.920 prohibits the excavation, injury, destruction or alteration of an archeological site or object, or removal of archeological objects from public and private lands without an archeological permit issued by the State Historic Preservation Office. 16 USC 470, Section 106, National Historic Preservation Act of 1966 requires a federal agency, prior to any undertaking to take into account the effect of the undertaking that is included on or eligible for inclusion in the National Register. For further information, contact the State Historic Preservation Office at 503-378-4168, extension 232.

City of Halsey
Drinking Water Well Locations



Scale 1:10,000

N

Drinking Water Protection Areas with the 1-, 2-, 5- and 10-year time-of-travel for groundwater to move through the aquifer to the wells shown.
Delineation Areas (mi2): Well 3 = 0.34 Well 2 = 0.11
Model Used: RESSQC 2-D Analytical
Model Parameters:
- Hydraulic Conductivity: 24 ft/day
- Thickness of Water-Bearing Zone: 29 ft
- Groundwater flow directions: N15W to N65W
- Hydraulic Gradient: 0.0015 to 0.003
- Pumping Rates: Well 2: 25 gpm; Well 3: 102 gpm

Aquifer Character: confined
Aquifer Name: Sand and Gravel of the Willamette Aquifer

Well Locations:

Well 3: 44° 22' 50.948" N 123° 06' 45.094" W
Well 2: 44° 22' 50.763" N 123° 06' 43.934" W
Datum: WGS 1984
T 14 S R 4 W Section 1
USGS Halsey 7.5 minute topographic quadrangle
Linn County

QUADRANGLE LOCATION

Prepared by:
Dennis Nelson, RG1224
DHS Drinking Water Program
February 10, 2003
PWS# 4100364

app no G-15932
Permit no

Jerry Gaviney

G-15933

Oregon Water Resources Department
Water Rights Division

Water Rights Application
Number G-13998

Final Order[1]
Extension of Time for Permit Number G-12998

Application History
On FEBRUARY 20, 2003, the CITY OF HALSEY submitted an application to the Department for an extension of time for permit number G-12998. The Department issued permit number G-12998 on NOVEMBER 27, 1996. The permit called for completion of construction of the water development project by OCTOBER 1, 1998, and complete application of water to the full beneficial use by OCTOBER 1, 1999. In accordance with OAR 690-315-0050(2), on OCTOBER 14, 2003, the Department issued a Proposed Final Order proposing to extend the time to complete construction of the water development project and the time to fully apply water to beneficial use to OCTOBER 1, 2025. The protest period closed NOVEMBER 28, 2003, in accordance with OAR 690-315-0060(1). No protest was filed.

The applicant has demonstrated good cause for the permit extension pursuant to ORS 537.230, 537.248, 537.630, 539.010(5) and/or OAR 690-315-0040(2).

At time of issuance of the Proposed Final Order the Department concluded that, based on the factors demonstrated by the applicant, the permit may be extended subject to the following conditions:

CONDITIONS

1. **Development Limitations**
Diversion of water beyond 0.501 cfs under Permit #G-12998 shall only be authorized upon issuance of a final order approving a Water Management and Conservation Plan under OAR Chapter 690, Division 86. The required Water Management and Conservation Plan shall be submitted to the Department within 3 years from the date this extension is final.

---

[1] ***Appeal Rights***
Under the provisions of ORS 536.075, the applicant may appeal this order by filing a petition for review in the Circuit Court for Marion County or the circuit court for the county in which the applicant resides or has a principal business office. The petition for review must be filed within 60 days after the date this order is served. ORS 183.484.

Order

The extension of time for Application Number G-13998, Permit Number G-12998, therefore, is approved. The deadline for completing construction is extended to OCTOBER 1, 2025. The deadline for applying water to full beneficial use is extended to OCTOBER 1, 2025.

DATED: December 10, 2003

Dwight Ford for

Paul R. Cleary, Director

Oregon
Theodore R. Kulongoski, Governor

Water Resources Department
Commerce Building
158 12th Street NE
Salem, OR 97301-4172
503-378-3739
FAX 503-378-8130

August 15, 2003

CITY OF HALSEY
ATTN: ANDY RIDINGER
PO BOX 10
HALSEY, OR 97348

(541)466-5421

Reference: File G-15932

Dear Mr. Ridinger:

THIS IS NOT A PERMIT AND IS SUBJECT TO CHANGE AT THE NEXT PHASE OF PROCESSING.

This letter is to inform you of the preliminary analysis of your water use permit application and to describe your options. In determining whether a water use permit application may be approved, the Department must consider the factors listed below, all of which must be favorable to the proposed use if it is to be allowed. Based on the information you have supplied, the Water Resources Department has made the following preliminary determinations:

Initial Review Determinations:

1. The proposed use is not prohibited by law or rule except as otherwise noted below.

2. The use of water from Well 2 and Well 3 in Muddy Creek Basin for municipal water use **is allowable** under OAR 690-502, the Willamette Basin Program.

3. The Department has determined, based upon OAR 690-09, that the proposed groundwater use will, if properly conditioned, adequately protect the surface water from interference.

4. The Department has also determined, based upon available data, that the use of groundwater if properly conditioned, will not injure existing rights or the groundwater resource.

Summary of Initial Determinations

A maximum cumulative total of 1.0 cubic foot per second from Well 2 and Well 3 in Muddy Creek Basin for municipal water use is allowable year round.

Because of these favorable determinations, the Department can now move your application to the next phase of the water rights application review process. This phase is where public interest factors will be evaluated.

Please reference the application number when sending any correspondence regarding the conclusions of this initial review. Comments received within the comment period will be evaluated at the next phase of the process.

To Proceed With Your Application:

If you choose to proceed with your application, you do not have to notify the Department. Your application will automatically be placed on the Department's Public Notice to allow others the opportunity to comment. After the comment period the Department will complete a public interest review and issue a proposed final order.

Withdrawal Refunds:

If you choose not to proceed, you may withdraw your application and receive a refund (minus a $50 processing charge per application.) To accomplish this you must notify the Department in writing by **Friday, August 29, 2003**. For your convenience you may use the enclosed "STOP PROCESSING" form.

If A Permit Is Issued It Will Likely Include The Following Conditions:

1. Measurement, recording and reporting conditions:

   A. Before water use may begin under this permit, the permittee shall install a meter or other suitable measuring device as approved by the Director. The permittee shall maintain the meter or measuring device in good working order, shall keep a complete record of the amount of water used each month and shall submit a report which includes the recorded water use measurements to the Department annually or more frequently as may be required by the Director. Further, the Director may require the permittee to report general water use information, including the place and nature of use of water under the permit.

   B. The permittee shall allow the watermaster access to the meter or measuring device; provided however, where the meter or measuring device is located within a private structure, the watermaster shall request access upon reasonable notice.

2. The priority date for this application is February 24, 2003.

3. The water user shall develop a plan to monitor and report the impact of water use under this permit on water levels within the aquifer that provides water to the permitted well(s). The plan shall be submitted to the Department within one year of the date the permit is issued and shall be subject to the approval of the Department. At a minimum, the plan shall include a program to periodically measure static water levels within the permitted well(s) or an adequate substitute such as water levels in nearby wells. The plan shall also stipulate a reference water level against which any water-level declines will be compared. If a well listed on this permit (or replacement well) displays a total static water-level decline of 25 or more feet over any period of years, as compared to the reference level, then the water user shall discontinue use of, or reduce the rate or volume of withdrawal from, the well(s). Such action shall be taken until the water level recovers to above the 25-foot decline level or until the Department determines, based on the water user's and/or the Department's data and analysis, that no action is necessary because the aquifer in question can sustain the observed declines without adversely impacting the resource or senior water rights. The water user shall in no instance allow excessive decline, as defined in Commission rules, to occur within the aquifer as a result of use under this permit.

4. Within 3 years of permit issuance, the permittee shall submit a Water Management and Conservation Plan consistent with OAR Chapter 690, Division 86. The Director may approve an extension of this time line to complete the required Water Management and Conservation Plan. The time line for submittal of a plan under this permit does not alter the time lines for submittal of a plan under any other order of the Department.

If you have any questions:

Questions about the status of your application, processing timelines, or your upcoming Proposed Final Order should be directed to our Water Right Information Group at 503-378-8455 extension 201. Feel free to call me at 503-378-8455 extension 458 if you have any questions regarding the contents of this letter. Please have your application number available if you call. Address all other correspondence to: Water Rights Section, Oregon Water Resources Department, 158 12th ST. NE Salem, OR 97301-4172, Fax: 503-378-6203.

Sincerely,

Jerry W Gainey

Jerry W. Gainey
Water Right Processing Technician

enclosures: Flow Chart of Water Right Process
Stop Processing Form

G-15932
wab 2-30200303
pou 2-30200303
gw c

APPLICATION FACT SHEET

Mail to: Applicant, Watermaster, District Biologist (ODFW)
If necessary, also mail to : Regional Water quality manager (DEQ), and DOA

Application File Number: G-15932

Applicant: ANDY RIDINGER FOR THE CITY OF HALSEY

County: Linn

Watermaster: 2

Priority Date: February 24, 2003

Source: WELL 2 AND WELL 3 IN MUDDY CREEK BASIN

Use: MUNICIPAL WATER USE

Quantity: 1.0 CUBIC FOOT PER SECOND

Basin Name & Number: Willamette, #2

Stream Index Reference: Volume 4 MUDDY CR & MISC

Well Locations:

Well #2: NESE, SECTION 1, T14S, R4W, W.M.; GPS - 44 DEGREES 22 MINUTES 50.948 SECONDS NORTH, 123 DEGREES 6 MINUTES 45.094 SECONDS WEST

Well #3: NESE, SECTION 1, T14.0S, R4.0W, W.M.; GPS - 44 DEGREES 22 MINUTES 50.763 SECONDS NORTH, 123 DEGREES 6 MINUTES 43.934 SECONDS WEST

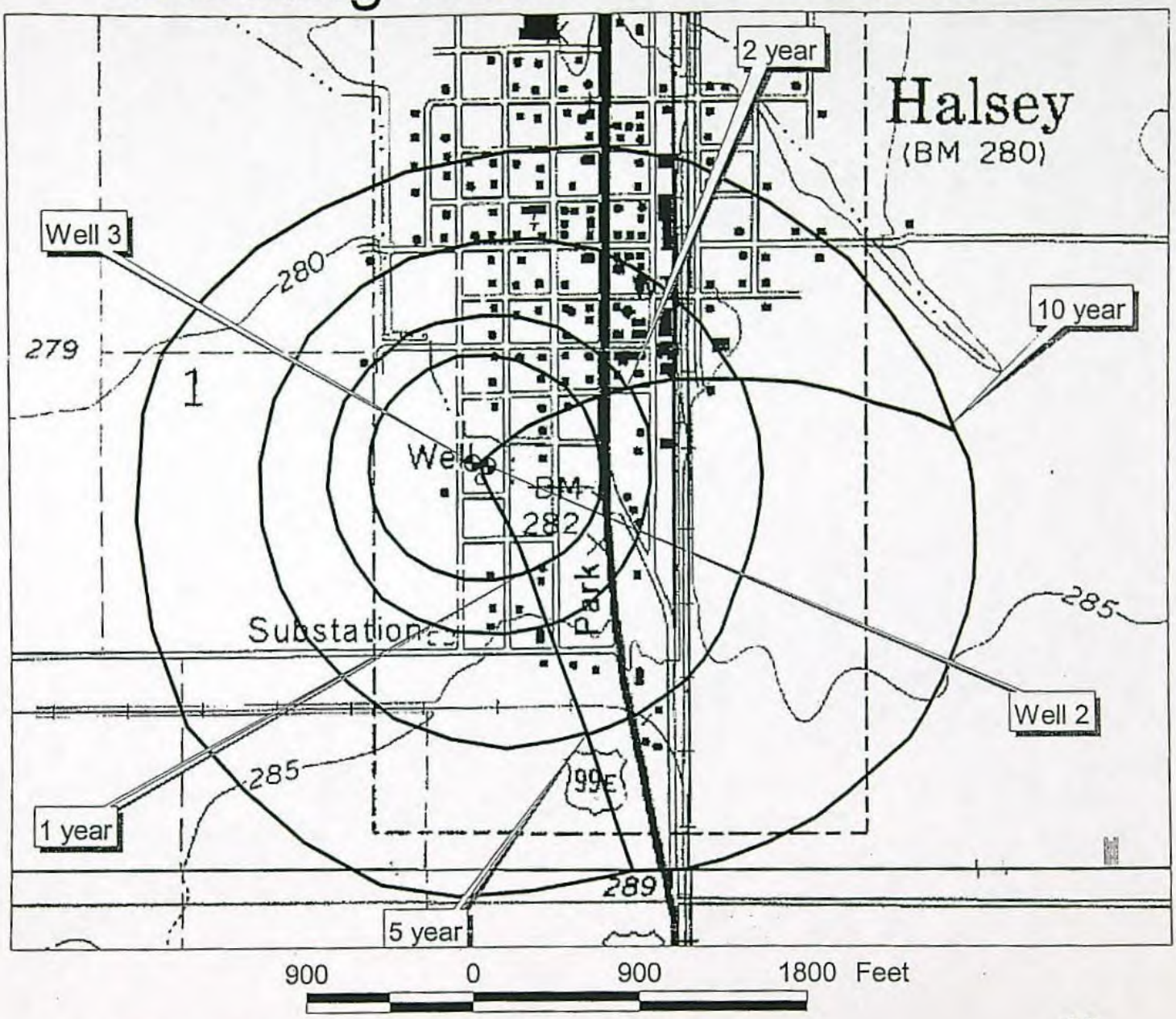
Place of Use: WITHIN THE SERVICE BOUNDARIES OF THE CITY OF HALSEY

14 DAY STOP PROCESSING DEADLINE DATE: Friday, August 29, 2003

PUBLIC NOTICE DATE: Tuesday, August 19, 2003

30 DAY COMMENT DEADLINE DATE: Thursday, September 18, 2003

City of Halsey
Drinking Water Well Locations



Scale 1:10,000

N

Drinking Water Protection Areas with the 1-, 2-, 5- and 10-year time-of-travel for groundwater to move through the aquifer to the wells shown.
Delineation Areas (mi2): Well 3 = 0.34 Well 2 = 0.11
Model Used: RESSQC 2-D Analytical
Model Parameters:
- Hydraulic Conductivity: 24 ft/day
- Thickness of Water-Bearing Zone: 29 ft
- Groundwater flow directions: N15W to N65W
- Hydraulic Gradient: 0.0015 to 0.003
- Pumping Rates: Well 2: 25 gpm; Well 3: 102 gpm

Aquifer Character: confined
Aquifer Name: Sand and Gravel of the Willamette Aquifer

Well Locations:

Well 3: 44° 22' 50.948" N 123° 06' 45.094" W
Well 2: 44° 22' 50.763" N 123° 06' 43.934" W
Datum: WGS 1984
T 14 S R 4 W Section 1
USGS Halsey 7.5 minute topographic quadrangle
Linn County

QUADRANGLE LOCATION

Prepared by:
Dennis Nelson, RG1224
DHS Drinking Water Program
February 10, 2003
PWS# 4100364

app no G-15932
Permit no

State of Oregon
Water Resources Department
158 12th Street NE, Salem, OR 97301-4172
(503)378-8455 •(503)378-3739
www.wrd.state.or.us

Application for a Permit to Use Ground Water

Please type or print in dark ink. If your application is found to be incomplete or inaccurate, we will return it to you. If any requested information does not apply to your application, insert "n/a." Please read and refer to the instructions when completing your application. Thank you.

1. APPLICANT INFORMATION

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A. Individuals

Applicant: _____ (First) _____ (Last)

Co-applicant: _____ (First) _____ (Last)

Mailing address: _____

_____ (City) _____ (State) _____ (Zip)

Phone: _____ (Home) _____ (Work) _____ (Other)

*Fax: _____ *E-Mail address: _____

B. Organizations

(Corporations, associations, firms, partnerships, joint stock companies, cooperatives, public and municipal corporations)

Name of organization: CITY OF HALSEY

Name and title of person applying: ANDY RIDINGER, LEAD UTILITY PLANT OPERATOR

Mailing address of organization: P.O. BOX 10

HALSEY (City) OR (State) 97348 (Zip)

Phone: 541-369-2550 (Day) 541-466-5421 (Evening)

*Fax: 541-369-2521 *E-Mail address: recorder@cityofhalsey.com

**Optional information*

For Department Use

App. No. G-15932 Permit No._____ Date_____

2. PROPERTY OWNERSHIP

Do you own all the land where you propose to divert, transport, and use water?

☒ Yes *(Skip to section 3 "Ground water Development.")*

☐ No Please check the appropriate box below.

- ☐ I have a recorded easement or written authorization permitting access.
- ☐ I do not currently have written authorization or easement permitting access.

List the names and mailing addresses of all affected landowners.*

If more than 25 landowners are involved, a list is not required. See instructions.

3. GROUND WATER DEVELOPMENT

A. Number of well(s): 2 (WELLS ARE WITHIN 30 FEET OF ONE ANOTHER) **B.** Name of nearest surface water body: LITTLE MUDDY CREEK

C. Distance from well(s) to nearest stream or lake: 1) 1.2 MILES FROM LITTLE MUDDY CREEK

2) 1.9 MILES FROM STOCK CREEK 3) 3.2 MILES FROM COURTNEY CREEK 4) _____

D. If distance from surface water is less than one mile, indicate elevation difference between nearest surface water and well head. 1) _____

2) _____ 3) _____ 4) _____

E. Well Characteristics

Wells must be constructed according to standards set by the Department for the construction and maintenance of water wells. If the well is already constructed, please enclose a copy of the well constructor's log and the well ID number, if available, for each well with this application. Identify each well with a number corresponding to the wells designated on the map and proceed to question F in this section of the form. If the well has not been constructed, or if you do not have a well log, please complete the following:

Well(s) will be constructed by: _____

Address: _____

_____

Completion date: _____

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2. Please provide a description of your well development. *(Attach additional sheets if needed.)*

Well No.	Diameter	Type and size of casing	No. of feet of casing	Intervals casing is perforated (in feet)	Seal depth	Est. depth to water	Est. depth to water bearing stratum	Type of access port or measuring device	Total well depth
	SEE ATTACHED WELL LOGS FOR WELL #2 AND WELL #3								

F. Artesian Flows

If your water well is flowing artesian, describe your water control and conservation works:

N/A

4. WATER USE

Please read the instruction booklet for more details on "type of use" definitions, how to express how much water you need and how to identify the water source you propose to use. You must fill out a supplemental form for some uses as they require specific information for that type of use.

A. Type(s) of Use(s)

See list of beneficial uses provided in the instructions.

- If your proposed use is **domestic**, indicate the number of households to be supplied with water: _____
- If your proposed use is **irrigation**, please attach Form **I**
- If your proposed use is **mining**, attach Form **R**
- If your proposed use is **municipal or quasi-municipal**, attach Form **M**
- If your proposed use is **commercial/industrial**, attach Form **Q**

B. Amount of Water

Provide the production rate in gallons per minute (gpm) and the total annual amount of water you need from each well, from each source or aquifer, for each use. You do not need to provide source information if you are submitting a well log with your application.

Well No.	Source or aquifer	Type of use	Total rate of water requested (in gpm)	Total annual quantity (in gallons)	Production rate of well (in gpm)
2		MUNICIPAL	448.83	87,048,000	225
3		MUNICIPAL	448.83	87,048,000	275
				(* BASED ON MAXIMUM USE FOR JULY, 2003)	

C. Maximum Rate of Use Requested

What is the maximum, instantaneous rate of water that will be used? 448.83 GALLONS AT ANY ONE TIME

(The fees for your application will be based on this amount.)

D. Period of Use

Indicate the time of year you propose to use the water: YEAR ROUND

(For seasonal uses like irrigation give dates when water use would begin and end, e.g. March 1–October 31.)

E. Acreage

If you will be applying water to land, please give the total number of acres where water will be applied or used: N/A

(This number should be consistent with you application map.)

5. WATER MANAGEMENT

A. Diversion

What equipment will you use to pump water from your well(s)?

☒ Pump (give horsepower and pump type) WELL #2 - 10 HP / BERKELEY VERTICLE TURBINE SUBMERSIBLE WELL #3 - 20 HP / CROWN VERTICLE TURBINE SUBMERSIBLE

☐ Other means (describe) _____

NOTE: THE CITY ANTICIPATES GOING TO LARGER PUMPS IN THE FUTURE TO ACCOMMODATE GROWTH.

B. Transport

How will you transport water to your place of use?

☐ Ditch or canal (give average width and depth)

Width _____ Depth _____

Is the ditch or canal to be lined? ☐ Yes ☐ No

☒ Pipe (give diameter and total length)

WELL #2 DIAMETER 12" LENGTH 200'

WELL #3 Diameter 12" Length 80'

☐ Other (describe) _____

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C. Application/Distribution Method

What equipment will you use to apply water to your place of use? _____

_____

Irrigation or land application method (check all that apply):

- ☐ Flood
- ☐ High-pressure sprinkler
- ☐ Low pressure sprinkler
- ☐ Drip
- ☐ Water cannons
- ☐ Center pivot system
- ☐ Hand lines
- ☐ Wheel lines
- ☐ Siphon tubes or gated pipe with furrows
- ☐ Other, describe _____

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Distribution method

- ☒ Direct pipe from source
- ☒ In-line storage (tank or pond)
- ☐ Open canal

D. Conservation

What methods will you use to conserve water? Why did you choose this distribution or application method? For example, if you are using sprinkler irrigation rather than drip irrigation, explain. If you need additional space, attach a separate sheet.

THE CITY OF HALSEY REQUIRES METERS FOR ANYONE USING CITY WATER. IN ADDITION, ALL PIPES INSTALLED MUST BE IN ACCORDANCE WITH THE CURRENT CODES AND ONLY ONE CONNECTION IS ALLOWED PER SINGLE FAMILY RESIDENCE. THE DISTRIBUTION METHOD WAS CHOSEN AS IT WAS THE MOST EFFECTIVE WAY TO PROVIDE WATER TO THE CITIZENS OF HALSEY.

6. PROJECT SCHEDULE

Indicate the anticipated dates that the following construction tasks should begin. If construction has already begun, or is completed, please indicate that date.

Proposed date construction will begin _____

Proposed date construction will be completed WELL #2 COMPLETED 8/28/69 WELL #3 COMPLETED 4/16/98

Proposed date beneficial water use will begin UPON PERMIT ISSUANCE

7. REMARKS

If you would like to clarify any information you have provided in the application, please do so here and reference the specific application question you are addressing.

THE ORIGINAL PERMIT APPLICATION FOR WELL #3 WAS IN NOVEMBER, 1996 WITH CONSTRUCTION TO BE BEGIN BY NOVEMBER 27, 1997. CONSTRUCTION DID NOT BEGIN UNTIL DECEMBER 17, 1997 DUE LARGELY TO DELAYS WITH THE CONTRACTOR WHICH HAS ULTIMATELY LED TO ONGOING LITIGATION. THE CITY IS HAVING TO REAPPLY FOR A PERMIT FOR WELL #3 BECAUSE OF THE TIME CONSTRAINT THAT WAS REQUIRED AT THE TIME WHEN THE ORIGINAL APPLICATION WAS SUBMITTED TO BEGIN CONSTRUCTION WITHIN ONE YEAR. THE CITY IS ADDING WELL #2 TO THIS PERMIT TO INCREASE THE FLEXIBILITY IN THE WATER DISTRIBUTION SYSTEM PARTICULARLY IF ONE OF THE WELLS NEEDS TO BE TAKEN DOWN FOR ANY REASON.

8. MAP REQUIREMENTS

The Department cannot process your application without accurate information showing the source of water and location of water use. You must include a map with this application form that clearly indicates the township, range, section, and quarter/quarter section of the proposed well location and place of use. The map must provide tax lot numbers. See the map guidelines sheet for detailed map specifications.

9. SIGNATURE

By my signature below I confirm that I understand:

- I am asking to use water specifically as described in this application.
- Evaluation of this application will be based on information provided in the application packet.
- I cannot legally use water until the Water Resources Department issues a permit to me.
- If I get a permit, I must not waste water.
- If development of the water use is not according to the terms of the permit, the permit can be canceled.
- The water use must be compatible with local comprehensive land use plans.
- Even if the Department issues a permit to me, I may have to stop using water to allow senior water right holders to get water they are entitled to, and

I swear that all information provided in this application is true and correct to the best of my knowledge:

Andrew W. Rudinger Lead public works — 2-21-03
Signature of Applicant — Date

Judy Cleeton / City Administrator — 2/21/2003
Signature of Co-applicant — Date

Before you submit your application be sure you have:

- Answered each question completely.
- Attached a legible map which includes township, range, section, quarter/quarter and tax lot number.
- Included a Land Use Information Form or receipt stub signed by a local official.
- Included the legal description of all the property involved with this application. You may supply a copy of the deed, land sales contract, or title insurance policy, to meet this requirement.
- Included a check payable to the Oregon Water Resources Department for the appropriate amount.

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INSTRUCTIONS FOR FILLING OUT
MUNICIPAL WATER USES AND PROJECTED NEEDS FORM

1. Please list your current population along with your current population growth. Under the designated years, please list your projected population numbers and projected growth.

2. Please list all existing water right certificates and permits.

3. Please fill out the information for existing and future water uses for the current year (in cfs, gpm, mgd) and include a 20 year projection for water use (in cfs, gpm, mgd).

4. Please give a detailed explanation for the projected growth rate listed in question 1.

5. Please give a detailed explanation for the amount of time being requested under the extension application.

6. It would be beneficial to submit a chart with the projected population growth and water use over time. The chart should include all water right certificates and permits currently held. An example is attached for your convenience.

app #G-15932

WATER USES, PROJECTED NEEDS

1. POPULATION AND GROWTH:

	Current (year: 2002)	2020	2030	2040	2050	2060	2070
Population:	724	1000					
Growth rate:		8.1%					

2. EXISTING WATER RIGHTS AND PERMITS:

Groundwater:

Permit/Application number	Description	Amount	Priority Date
G12998/G13998	MUNICIPAL	.613	3/3/1995
* G12997/G13997	MUNICIPAL	.724	3/3/1995

* MISSED A DATE, REAPPLYING UNDER THIS APPLICATION

Surface Water:

Permit/Application number	Description	Amount	Priority Date

Pending permits:

Permit/Application number	Description	Amount	Priority Date

3. EXISTING AND FUTURE WATER USE: FOR BOTH WELLS

Current (year: 2002)

Current peak demand: JULY .143

Current water use: JANUARY, 2003 - .111 gpd

	Current (year: 2002)	2020
Peak day demand (gallons/capita/day):	143,000/20	
Peak daily demand (MGD):		
Average daily demand (gallons/capita/day):	70301/97	
Average summer demand (gallons/capita/day):	3,481,335/152	

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4. EXPLANATION FOR PROJECTED GROWTH RATE:

THIS POPULATION FORECAST WAS DEVELOPED BY LINN COUNTY IN RESPONSE TO HB2709 WHICH PASSED IN 1996. THIS BILL REQUIRED A COORDINATING BODY TO ESTABLISH AND MAINTAIN A POPULATION FORECAST FOR THE ENTIRE AREA WITHIN ITS BOUNDARY FOR USE IN MAINTAINING AND UPDATING COMPREHENSIVE PLANS.

5. EXPLANATION FOR EXTENSION TIME PERIOD:

FROM 1980 TO 1990 HALSEY LOST 26 RESIDENTS. HOWEVER, FROM 1990 TO 2000 THE CITY HAS HAD AN 8.5% INCREASE IN POPULATION. OVER THE NEXT 20 YEARS THE CITY'S POPULATION IS PROJECTED TO INCREASE BY 276 PEOPLE, REACHING ROUGHLY 1000 PEOPLE BY THE YEAR 2020.

Oregon Water Resources Department

FORM M

FOR MUNICIPAL AND QUASI MUNICIPAL WATER SUPPLIES

Unless otherwise noted, water use information should be in acre-feet per year (AFY).
1 acre-foot is equal to 325,851 gallons.

Background Information

Name of water supplier: CITY OF HALSEY

Name and size of area to be served: .75 SQUARE MILES
(in square miles)

Present population of service area: 724
(Contact county planning staff, if needed.)

Projected population in 20 years: 1000 BASED UPON HB2709 PASSED IN 1996.
(Cite source and year. For example: "20,595 Based upon 1995 Portland State University projections.")

List present water rights and permits held:

Date of Issuance:	Natural Source of Water:	Amount Permitted:	Utilization:
MARCH 3, 1995	WILLAMETTE BASIN	.613	.502 (G12998)
MARCH 3, 1995	WILLAMETTE BASIN	.724	.613 (G12997)

Water Use

FOR BOTH WELLS

Average **yearly** demand: 78.75 AFY Year: 2002

Per-capita daily consumption (in gallons): 97 GALLONS
(Divide average annual water sales by population to arrive at consumption, then divide by 365 to get daily values.)

Peak season (by month/day): 7/1 to 7/31 Total **peak season** demand: 11.37 Acre-feet

Peak season per-capita daily consumption: 165
(Divide total peak season demand by population and the number of days during the peak.)

Annual amount of water:

produced: 27,883,480
(diverted or pumped)

delivered: 25,659,919 / 78.75 AFY

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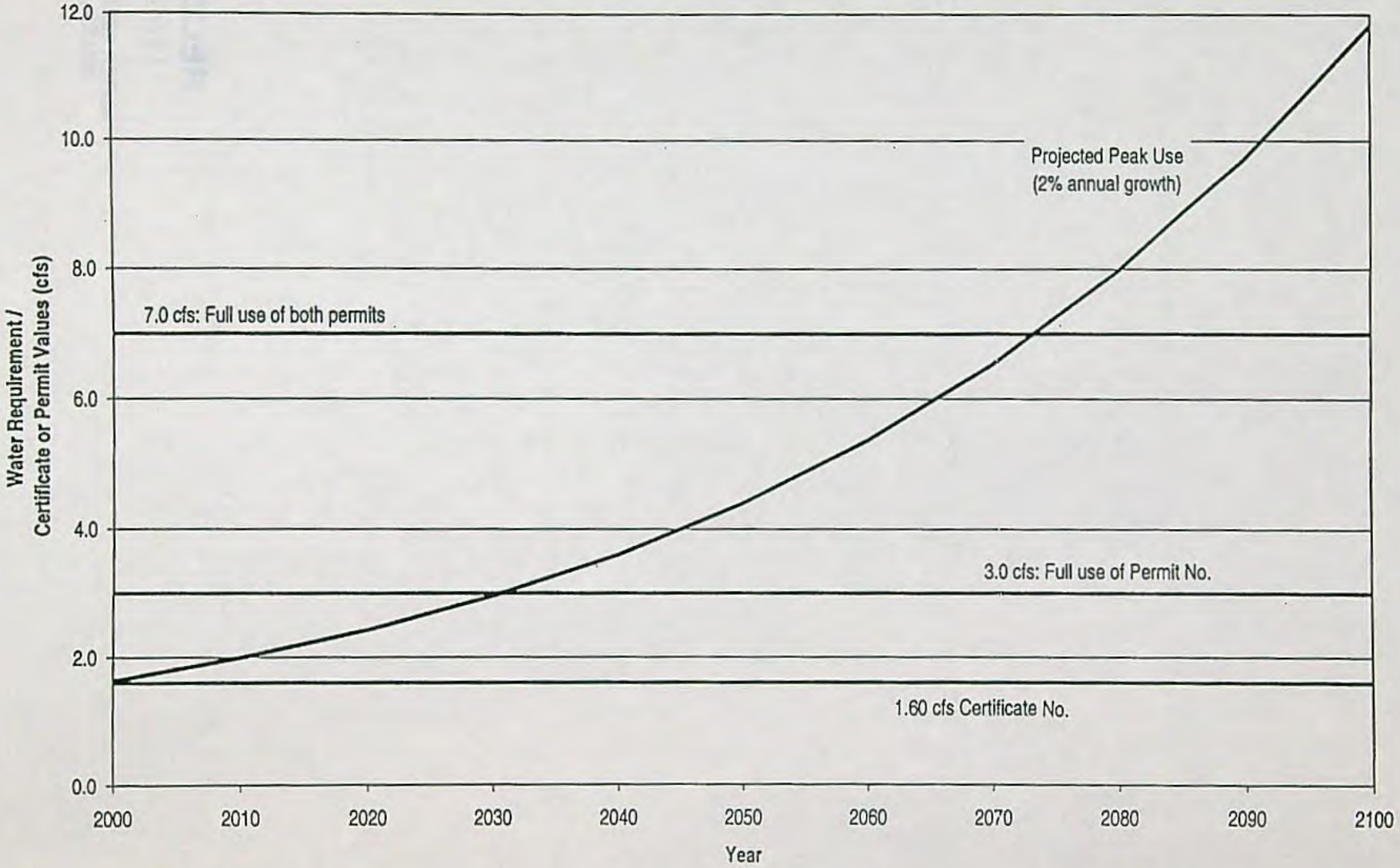
Is your system fully metered? ☒ Yes ☐ No

Describe your rate structure: MINIMUM CHARGE PLUS INCREASING TIER RATE BASED ON CONSUMPTION.
(e.g. flat rate, increasing or decreasing block rate or combination of different systems)

MUNICIPALITY



Request for Water

A. Discuss the reason(s) for your request for additional water
(e.g. loss of current supply, peak demand, growth, or other): WITH A NEW SUBDIVISION OF 39 HOMES PRESENTLY BEING REVIEWED, THE CITY IS LOOKING AT SLOW, CONTINUAL GROWTH AND THE NEED FOR THE FULL UTILIZATION OF THIS PERMIT.

B. How long is the amount of water requested in this application expected to meet future needs?

(e.g. until the year 2040) 2035

C. Briefly discuss operation of water system and the most constraining component of the system:
THE OPERATION OF THE CITY'S WATER SYSTEM CONSISTS OF TWO WELLS AND TWO RESERVOIRS WITH THE HOLDING CAPACITY OF 750,000 GALLONS. THE SYSTEM HAS THREE DIRECT FILTRATION PRESSURE FILTERS FOR REMOVAL OF IRON AND MANGANESE. THERE IS A JOCKEY PUMP WITH THREE FIRE DEMAND PUMPS ALSO.

D. Percentage of water use by type:

Residential:	85%	Commercial:	13%
Public Authority:	2%	Agricultural:	
Unaccounted for use:	1%	Industrial:	
Other (specify use):			

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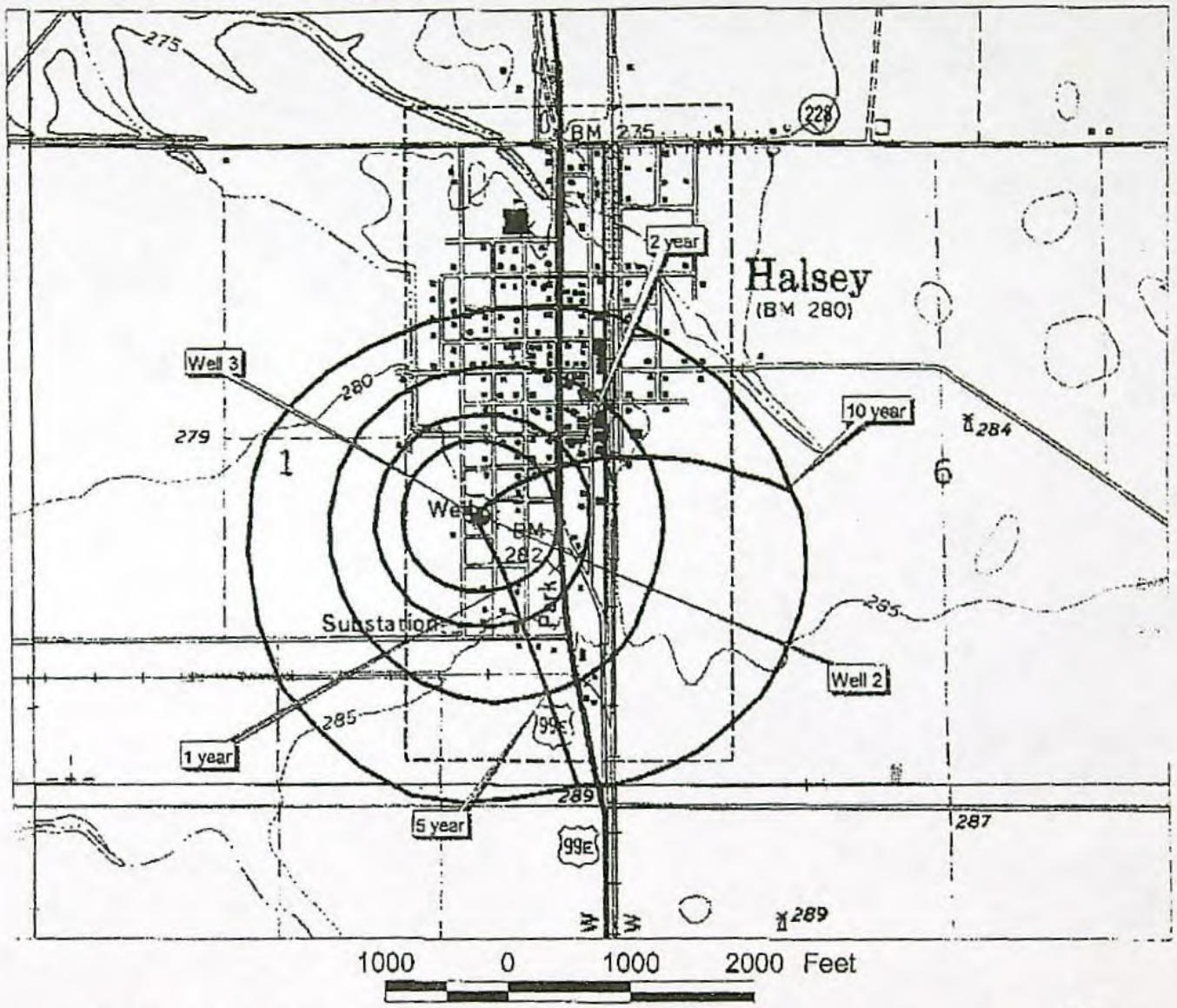
E. List cost to implement proposed request.
Compare cost and benefits with other water supply, or combination of supply options. This should include water efficiency measures such as replacing current showerheads with low-flow types. (Attach documentation, as available.)

IT WOULD BE COST EFFECTIVE TO THE CITIZENS OF HALSEY TO MAKE FULL UTILIZATION OF BOTH WELL #2 AND WELL #3 BY INCREASING THE PUMP SIZE TO PROVIDE MORE WATER VERSUS HAVING TO PURSUE THE NEED FOR AN ADDITIONAL WELL AS THE POPULATION GROWS. WATER METERS HAVE BEEN PLACED AT ALL SERVICES TO INCREASE EFFICIENCY.

F. How and by how much will your proposed water use efficiency programs increase efficiency?
(Express as a percentage of per-capita consumption.)

THE CITY HAS SECURED FEDERAL FUNDING TO REPLACE A SECTION OF OLD WATERLINE THIS REDUCING THE PROBABILITY OF POTENTIAL LEAKS AND INCREASING THE EFFICIENCY OF WATER PRODUCED IN THE SYSTEM. ONLY COMMERCIAL BUSINESSES WERE METERED PRIOR TO THE CONSTRUCTION OF WELL #3. CURRENTLY, ALL RESIDENCES AND BUSINESSES USING CITY WATER ARE METERED AND INCLUDE BACKFLOW DEVICES AS WELL AS SHUTOFF VALVES. WITH THE ADDITION OF METERS AT ALL LOCATIONS SERVICED BY THE CITY WATER SYSTEM, POSSIBLE LEAKS ARE NOTED AND ADDRESSED IMMEDIATELY. THESE IMPROVEMENTS HAVE ALLOWED THE CITY TO UTILIZE THE PERMIT FOR BENEFICIAL USE OF THE WATER WITHOUT WASTE.

City of Halsey
Drinking Water Well Locations



Scale 1:15,000

Drinking Water Protection Areas with the 1-, 2-, 5- and 10-year time-of-travel for groundwater to move through the aquifer to the wells shown.
Delineation Areas (mi2): Well 3 = 0.34 Well 2 = 0.11
Model Used: RESSQC 2-D Analytical
Model Parameters:
- Hydraulic Conductivity: 24 ft/day
- Thickness of Water-Bearing Zone: 29 ft
- Groundwater flow directions: N15W to N65W
- Hydraulic Gradient: 0.0015 to 0.003
- Pumping Rates: Well 2: 25 gpm; Well 3: 102 gpm

Aquifer Character: confined
Aquifer Name: Sand and Gravel of the Willamette Aquifer

Well Locations:

Well 3: 44° 22' 50.948" N 123° 06' 45.094" W
Well 2: 44° 22' 50.763" N 123° 06' 43.934" W
Datum: WGS 1984
T 14 S R 4 W Section 1
USGS Halsey 7.5 minute topographic quadrangle
Linn County

N

Prepared by:
Dennis Nelson, RG1224
DHS Drinking Water Program
February 10, 2003
PWS# 4100364

App# G-15932
Permit #

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INTRA-AGENCY MEMO
Field Services Division

TO: File G-15932 **DATE:** March 5, 2003

FROM: Doug Parrow

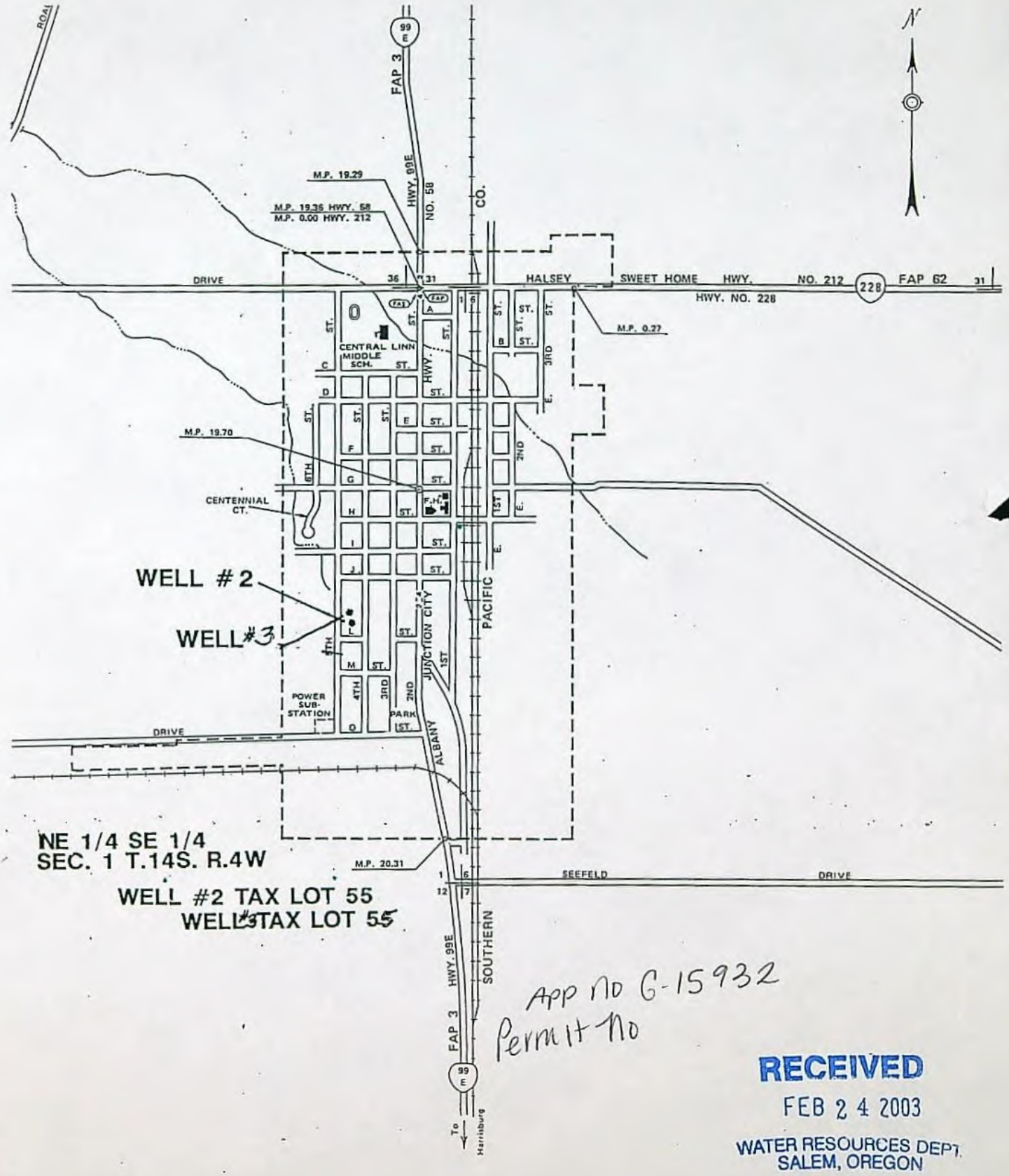
SUBJECT: City of Halsey Water Use/Conservation

The City of Halsey appears to have a system in good condition with measurement and metering both at the source and at all service connections. Per capita water use is reasonable (97 gpd). Unaccounted for water is just 8 percent. The request for water is reasonable given the current population and the growth that the City is experiencing. The new permit would allow use of additional water from wells developed under permits issued in 1996.

Our files indicate that the City does not have an approved water management and conservation plan. Given the water management practices and size of the city, the water management and conservation planning permit condition may not be necessary in similar situations.

However, the 1996 permits required preparation of a plan within one year after issuance of the permits. The City apparently has failed to comply with that condition. One of the permits is currently up for extension. Given the size of the city, a water management and conservation plan would not automatically be required under the extension rules. We understand that the other permit may be cancelled for failure to meet the "A" date.

To ensure that the existing planning requirement could not be eliminated by the City's surrender of both of the existing permits, we recommend that the plan be required as a condition of any new permit issued pursuant to Application G15932. The due date for the plan should be established in coordination with the extension process and with any enforcement activities related to the failure of the City to comply with the conditions in Permits G-12997 and G-12998, as applicable.



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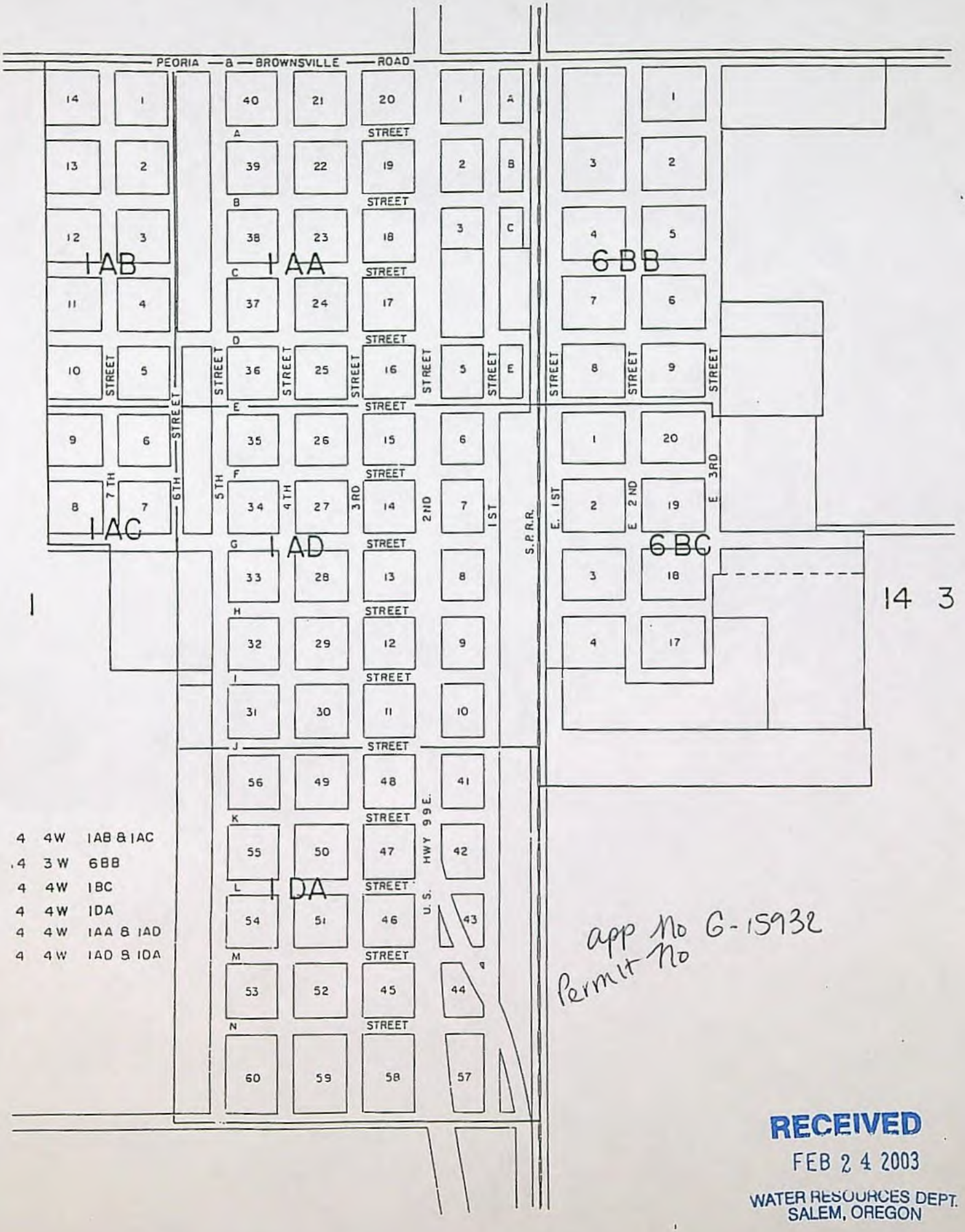
T 13-14 S R 3-4 W W.M.

HALSEY

LINN COUNTY, OREGON

PREPARED BY THE
OREGON DEPARTMENT OF TRANSPORTATION
IN COOPERATION
U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

HALSEY



4 4W 1AB & 1AC
4 3W 6BB
4 4W 1BC
4 4W 1DA
4 4W 1AA & 1AD
4 4W 1AD & 1DA

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Oregon Water Resources Department
Land Use Information Form

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This information is needed to determine compatibility with local comprehensive plans as required by ORS 197.180. The Water Resources Department will use this and other information to evaluate the water use application. DO NOT fill out this form if water is to be diverted, conveyed, or used only on federal lands.

To Be Completed By Applicant

The following section includes information about proposed water use. This section must be completed by the individual or group that is filing an application for a water right with the Water Resources Department.

A. Applicant

Name: CITY OF HALSEY

Address: P.O. BOX 10

City: HALSEY State: OR Zip: 97348 Day Phone: 541-369-2522

B. Land and Location

Please provide information as requested below for all tax lots on or through which water will be diverted, conveyed, or used. Check "diverted" if water is diverted (taken) from its source on tax lot, "conveyed" if water is conveyed (transported) on tax lot, and "used" if water will be put to beneficial use on tax lot. More than one box may be checked. (Attach extra sheets as necessary.) Applicants for municipal use, or irrigation uses within irrigation districts, may substitute existing and proposed service area boundaries for the tax lot information requested below.

Tax Lot I.D.	Plan Designation (e.g. Rural Residential/RR-5)	Water to be: *(check all that apply)*		
		❑ Diverted	❑ Conveyed	❑ Used
		❑ Diverted	❑ Conveyed	❑ Used
		❑ Diverted	❑ Conveyed	❑ Used

List counties and cities where water is proposed to be diverted, conveyed, or used. LINN COUNTY / CITY OF HALSEY

C. Description of Water Use

Indicate what the water will be used for. Include the beneficial use (found in the instruction booklet for your water right application) and use the space below to describe the key characteristics of the project.

Beneficial Use(s): MUNICIPAL

Briefly describe: DELIVERY AND USE OF WATER THROUGH THE WATER SERVICE SYSTEM FOR ALL WATER USES SUCH AS DOMESTIC WATER USE, IRRIGATION OF LAWNS AND GARDENS, COMMERCIAL AND INDUSTRIAL USE, FIRE PROTECTION AND CITY WATER USE FOR THE PARK AND STREET WASHING.

D. Source

Indicate the source for the proposed water use:

❑ Reservoir/Pond ☒ Ground Water ❑ Surface Water _____ (source)

E. Quantity

Indicate the estimated quantity of water the use will require:

448.83 ❑ CFS ❑ GPM ❑ Acre-Feet

For Local Government Use Only

The following section must be completed by a planning official from each county and city listed unless your project will be located entirely within the city limits. In this case, only the city planning agency must complete this form. Please request additional forms as needed or feel free to copy.

A. Allowed Use

Check the appropriate box below and provide requested information.

☒ Land uses to be served by proposed water uses (including proposed construction) are allowed outright or are not regulated by your comprehensive plan. Cite applicable ordinance section(s): ORD 278 SEC 5. Go to section B "Approval" below

☐ Land uses to be served by proposed water uses (including proposed construction) involve discretionary land use approvals as listed in the table below.

Type of Land Use Approval Needed (e.g. plan amendments, rezones, conditional use permits, etc.)	Cite Most Significant, Applicable Plan Policies & Ordinance Section References	*Check the item that applies:* Land Use Approval:	
		☐ Obtained ☐ Denied	☐ Being pursued ☐ Not being pursued
		☐ Obtained ☐ Denied	☐ Being pursued ☐ Not being pursued
		☐ Obtained ☐ Denied	☐ Being pursued ☐ Not being pursued
		☐ Obtained ☐ Denied	☐ Being pursued ☐ Not being pursued

Note: *Please attach documentation of applicable local land use approvals which have already been obtained. (Record of Action plus accompanying findings is sufficient.)*

B. Approval

Please provide printed name and written signature.

Name: JUDY CLEETON Date: 2/21/2003

Title: CITY ADMINISTRATOR/PLANNER Phone: 541-369-2522

Signature: Judy Cleeton

C. Additional Comments

Local governments are invited to express special land use concerns or make recommendations to the Department regarding this proposed use of water below, or on a separate sheet.

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Note: *If this form cannot be completed while the applicant waits, sign and detach the receipt stub as instructed below. You will have 30 days from the Water Resources Department's notice date to return the completed Land Use Information Form or WRD will presume the land use associated with the proposed water right is compatible with local comprehensive plans. (See attached letter.)*

appl#G-15932