EXECUTIVE SUMMARY

The City of Lafayette (City) presents its Water Management and Conservation Plan (WMCP) to the Oregon Water Resources Department (OWRD). The City is submitting this plan in response to a condition contained in Permit G-13839. This plan is prepared under the provisions of Oregon Administrative Rule (OAR) 690-086 (Division 86).

The WMCP outlines a plan to effectively manage the City's current water rights and provides a means for developing a comprehensive strategy for meeting its municipal water supply needs over the next 20 years.

E.1 Meeting the WMCP Criteria

Approval of this WMCP is dependent on the City meeting the criteria outlined under OAR 690-086-0130. The following is a concise statement prepared by the City addressing how it has met each of the review criteria cited in that regulation.

- **Inclusion of specific elements under OAR 690-086-0125.** The following plan includes specific sections that provide a description of the City's water supply system, a conservation plan, a curtailment plan, a 20-year supply strategy, a list of affected local governments to whom the plan was made available, and a proposed schedule for an update to the plan in 2013.

- **Projections of future water need.** The City is projecting to need additional water over the next 20 years. The City's average daily demand and maximum daily demand are approximately 216 gpm and 647 gpm, respectively. At the end of the planning period, average daily demand is expected to increase to 388 gpm, while maximum daily demand is expected to increase to 1,163 gpm.

- **Water Conservation Measures under OAR 690-086-0150.** Due to its limited water sources, the City has developed a conservation plan targeted at reducing overall water use. The program is designed to incorporate each of the elements noted under OAR 690-086-0150 (4).

- **Identification of Resource Issues.** The Upper Willamette River and its tributaries (which would include Henry Creek) support two federal listed fish species, one of which is also state-listed. None of the City's surface water sources have been listed as water quality limited, nor have the groundwater sources been designated as critical groundwater areas.

- **Curtailment Plan.** The City has adopted a comprehensive water curtailment ordinance, Lafayette Municipal Code 4.250 through 4.270. The curtailment plan included in this WMCP includes the four stages of alert outlined in the City's ordinance, triggers for each stage, and curtailment actions that will satisfactorily promote conservation practices.

- **Use Beyond Permit Extension.** As part of its WMCP, the City has developed a schedule for using water under each of its water rights to serve its anticipated 20-year demand.

E.2 Proposed Schedule for Updating Plan

The City anticipates submitting an update of this WMCP within 10 years of plan approval. As required by the Commission's rules, a progress report will be submitted within 5 years from the approval of this WMCP.

SECTION 1
OVERVIEW

1.1 General System Description

The City of Lafayette is located on Highway 99W approximately two miles northeast of McMinnville and seven miles west of Newberg in Yamhill County, Oregon. The City serves drinking water to about 3,730 customers within its municipal boundary, which comprises approximately 550 acres.

The City was founded in 1878, and is primarily an agricultural and residential community with no major industries. Over 99 percent of its connections serve residential customers (99.1 percent), including both single and multi-family accounts. The residential class is also the largest class among the City's users, as measured by consumption - accounting for about 98.5 percent of all water consumed. By contrast, the commercial class has significantly fewer customers (0.09 percent), accounting for about 1.5 percent of all water consumed. Of the commercial accounts, the elementary school represents only about 0.3 percent of consumption.

The City currently obtains municipal water supply from three sources: the watershed, which is composed of springs and wells and serves as the City's primary water source; the City Park well; and the Dayton-Lafayette Wellfield. Water from the watershed is treated at the City's recently constructed (2005) control building, while water appropriated from the City Park well is treated on-site at that facility. Development of the Dayton-Lafayette Wellfield began in 2001 and has been ongoing as each city seeks reliable future water sources. A treatment plant for this source is located in Dayton and is co-owned by the cities.

The City has 4.4 mgd of water rights for municipal use. Operational constraints, however, limit dry season production capacity to about 0.396 mgd (0.61 cfs), with service provided by a single pressure zone. The well capacities are limited due to drawdown (hydraulic) restrictions within the watershed, and a decline in dry weather production of the watershed springs. A summary of the City's existing water rights is provided in Section 2.2.

1.2 Purpose

This plan has been prepared to satisfy a condition in the City's Permit G-13839, which was issued on September 11, 2000. The City previously submitted a plan to OWRD in 1999, which was conditionally approved on August 4, 1999. However, that conditional approval was based on uncertainties regarding certain aspects of the proposed Dayton-Lafayette Wellfield, including the then-pending acquisition of additional water rights and the preparation of an intergovernmental agreement with the City of Dayton. While those uncertainties have been rectified and the City has implemented several of the conservation measures included in the 1999 plan, OWRD has since updated the administrative requirements in Division 86 that govern the form and content of Water Management and Conservation Plans. Accordingly, this WMCP has been prepared under the revised provisions of Division 86 and is intended to supplant the plan submitted in 1999.

1.3 Proposed Progress Report and Update Schedule

The City anticipates submitting an update of this WMCP within 10 years of plan approval. As required by the Commission's rules, a progress report will be submitted within 5 years from the approval of this WMCP.

1.4 Summary of Data Sources

The data referenced in the WMCP was obtained from City records regarding water system development, pumping, customer billings, land use planning, operational controls, and conservation implementation. Historical data was obtained from the City's utility billing records and the Water System Master Plan completed by the City in 2007.

1.5 Input During Plan Development

Input necessary to prepare the WMCP was received from City staff; City engineers, Westech Engineering, Inc.; consultants, GSI Water Solutions, Inc; and the City's attorneys, Jordan Schrader Ramis, PC. A draft of the WMCP was made available for comment to the City of Dayton and Yamhill County, Oregon.

1.6 Document Organization

The WMCP is organized in a manner consistent with the Division 86 rules. Section 2 describes the water supply system, including information regarding customer demographics, water consumption, and the water system infrastructure. Section 3 identifies proposed conservation measures the City has or will implement with associated benchmarks for each new measure. Section 4 describes the City's Water Curtailment Ordinances and outlines the four stages of alert, triggers for each stage, and additional conservation measures implemented as a result of a water emergency. Section 5 compares the current water demand with the future demand forecast and assesses the need for additional water.

SECTION 2
MUNICIPAL SUPPLIER DESCRIPTION

2.1 Service Area and Population

2.1.1 Service Area

The City presently serves drinking water to approximately 3,730 customers within the City limits, covering approximately 550 acres. The area is roughly divided in land use by approximately 76 percent single and multifamily dwellings, 18 percent industrial and commercial enterprises, and 6 percent other. A map of the City's current service area is shown in Exhibit 2-1. The City's Water System Master Plan, which forms the basis for this WMCP, assumed that no significant changes to the City's Urban Growth Boundary or City limits, which are essentially the same in the near future. As a result, the City's current and future service areas are the same for the planning horizon of this WMCP.

2.1.2 Population Estimates

Population estimates used in this report were provided by Portland State University. These estimates are consistent with the City's Comprehensive Land Use Plan. As of 2007, the City served an estimated population of 3,730. A summary of population data for years 2000-2007 is provided in Table 2-1.

Table 2-1
City of Lafayette Population Estimates

Year	Total Population
2000	2,630
2001	2,600
2002	2,820
2003	3,010
2004	3,060
2005	3,105
2006	3,440
2007	3,730

2.2 Source of Supply

2.2.1 Summary of Existing Sources

The wells connected to the City's water distribution system consist of four watershed wells (Watershed Wells 1, 2, 8 & 10), one in-town well (City Park Well) and one well in the Dayton-Lafayette Wellfield (Well 4), with two more under construction in the Dayton-Lafayette Wellfield (Wells 2 & 5). In addition, the City has water rights on three springs in the City watershed (Pringle, Blue-bird, and Lafayette). The City has rights to additional springs in the watershed (Doug Nelson Spring) and wells (Wells 6 and 7). Doug Nelson Spring is not being used at this time due to concerns about water quality. Wells 6 and 7 have well construction issues and are not currently connected to the City system. A schematic of the City's water system is provided in Exhibit 2-2.

Exhibit 2-1

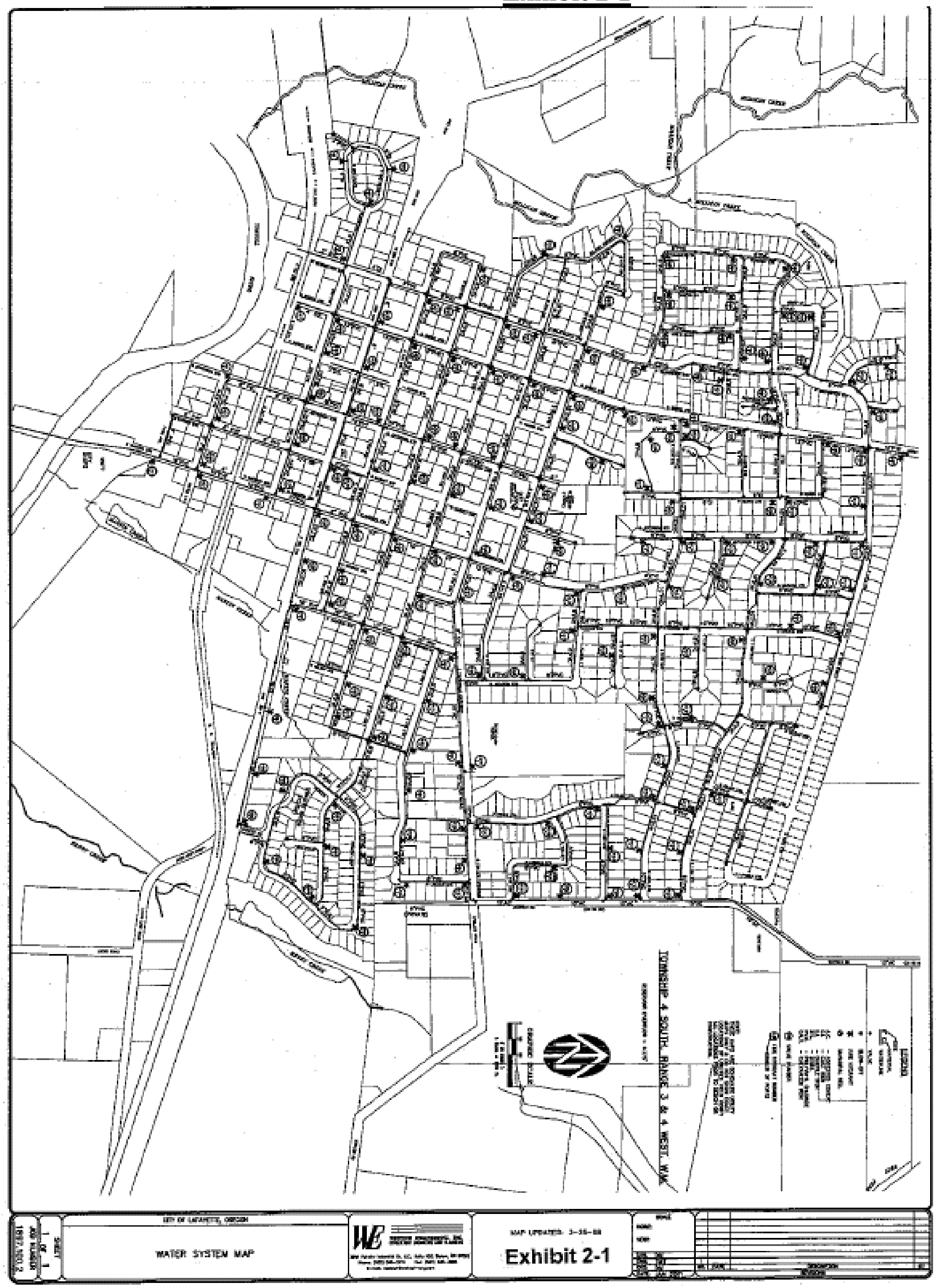
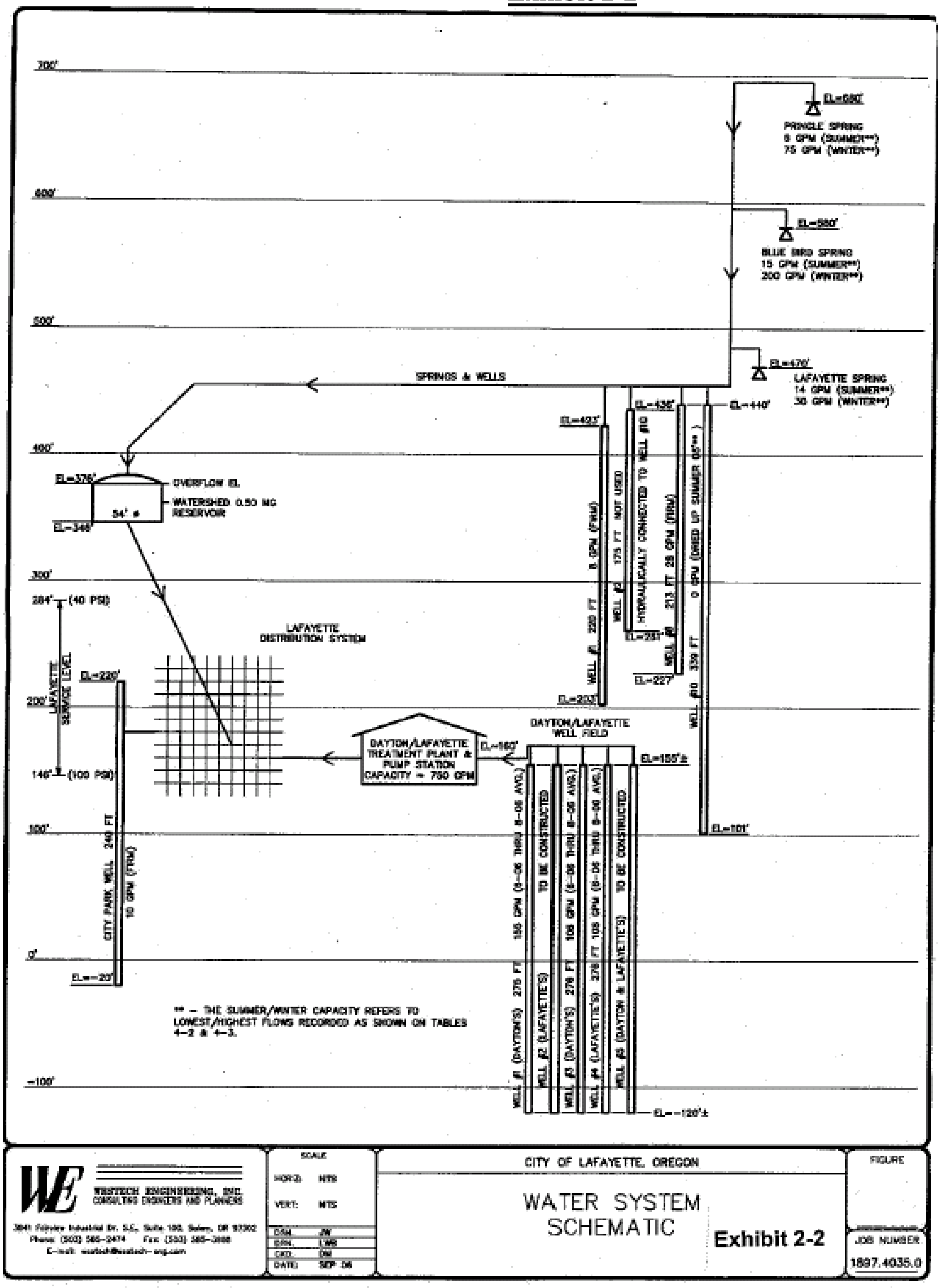


Exhibit 2-2


700'
600'
500'
400'
300'
200'
100'
0'
-100'
EL=680'
PRINGLE SPRING
6 GPM (SUMMER**)
75 GPM (WINTER**)
EL=580'
BLUE BIRD SPRING
15 GPM (SUMMER**)
200 GPM (WINTER**)
EL=470'
LAFAYETTE SPRING
14 GPM (SUMMER**)
30 GPM (WINTER**)
SPRINGS & WELLS
EL=440'
EL=436'
EL=423'
WELL #1 220 FT 8 GPM (FIRM)
WELL #2 175 FT NOT USED
HYDRAULICALLY CONNECTED TO WELL #10
WELL #8 213 FT 28 GPM (FIRM)
WELL #10 339 FT 0 GPM (DRIED UP SUMMER 05**)
EL=251'
EL=227'
EL=203'
EL=101'
EL=376'
OVERFLOW EL
WATERSHED 0.50 MG RESERVOIR
54' ø
EL=348'
284' (40 PSI)
146' (100 PSI)
LAFAYETTE SURFACE LEVEL
EL=220'
CITY PARK WELL 240 FT
10 GPM (FIRM)
EL=-20'
LAFAYETTE DISTRIBUTION SYSTEM
DAYTON/LAFAYETTE TREATMENT PLANT & PUMP STATION CAPACITY = 750 GPM
EL=160'
DAYTON/LAFAYETTE WELL FIELD
EL=155'±
WELL #2 (LAFAYETTE'S) TO BE CONSTRUCTED
WELL #5 (DAYTON & LAFAYETTE'S) TO BE CONSTRUCTED
EL=-120'±
** - THE SUMMER/WINTER CAPACITY REFERS TO LOWEST/HIGHEST FLOWS RECORDED AS SHOWN ON TABLES 4-2 & 4-3.
WESTECH ENGINEERING, INC.
CONSULTING ENGINEERS AND PLANNERS
SCALE
HORIZ: NTS
VERT: NTS
DSN. JW
DRN. LWB
CKD. DM
DATE: SEP 06
CITY OF LAFAYETTE, OREGON
WATER SYSTEM SCHEMATIC
Exhibit 2-2
FIGURE
JOB NUMBER
1897.4035.0

The watershed wells are served primarily by withdrawals from the basalt aquifer, while the wells in the Dayton-Lafayette Wellfield are served by withdrawals from the local sand and gravel aquifer south of the Yamhill River.

The City has municipal water rights with a total combined maximum authorized rate of 6.7 cfs (4.37 mgd or 3010 gpm). The City currently only has access to 3.44 cfs of this rate, taking into consideration the limitations on use of the City's extended permits (G-13839, G-10399 and G-10400). Moreover, the current source capacity during the period of the year with low (spring) flows and high demand is estimated to be 0.61 cfs (0.396 mgd, ±275 gpm). **Table 2-2** describes the City's water rights, including permit (or certificate) numbers, priority date, permitted rate, and other pertinent information.

Table 2-2
City of Lafayette Water Rights*

Application/ Claim Number	Permit Number	Certificate or Transfer Number	Authorized Wells	Priority Date	Authorized Rate (cfs)	Authorized Rate (mgd)	Type of Beneficial Use	Maximum Withdrawal To Date		2007 Average Withdrawal		Authorized Date for Completion	Notes
								Instantaneous (cfs)	Annually* (MG)	Daily (MG)	Monthly (MG)		
Groundwater													
G-4108	G-3856	~~39554~~ T-8178	Well #1 Well #2 Well #8 Well #10	10/13/1967	0.28	0.18	Municipal	0.28	41.634	0.07	2.25	10/1/2004	Transfer T-8178 added Wells 2, 8 and 10
G-4724	G-4647	~~39561~~ T-8178	Well #1 Well #2 Well #8 Well #10	12/16/1968	0.32	0.21	Municipal	0.32				10/1/2004	Transfer T-8178 added Wells 1, 8 and 10
G-14386	G-13839		Dayton/Lafayette Well Field	9/27/1996	3.34**	2.20	Municipal	0.67	54.738	0.13	4.03	10/1/2025	The 3.34 cfs maximum authorized rate is shared with the City of Dayton, and it is expected that the City will not develop more than one-half of this rate (1.67 cfs) in the near term.
G-11257	G-10399		Well #6 (Lafayette Hwy)	4/10/1984	0.25	0.16	Municipal	0	0	0	0	10/1/2041	Extension of time pending with OWRD
G-11258	G-10400		Well 7 (Lafayette Hwy)	4/10/1984	0.49	0.32	Municipal	0.15	0	0	0	10/1/2041	Extension of time pending with OWRD
GR-1492			City Park Well	3/29/1915	0.45	0.29	Municipal	0.45	7.674	0.01	0.26	N/A	

* Maximum volume between 2003--2007

** In combination with the appropriation of water under any permit, transfer or certificate issued for Application G-14385, appropriation of water under this permit shall not exceed 3.34 cfs (1500 gpm) and shall not exceed 300 gpm per well. The extension order for this permit limits current diversion to 0.67 cfs.

Application Number	Permit Number	Certificate or Transfer Number	Source/ Location Name	Priority Date	Authorized Rate (cfs)	Authorized Rate (mgd)	Type of Beneficial Use	Maximum Withdrawal To Date		2007 Average Withdrawal		Authorized Date for Completion	Notes
								Instantaneous (cfs)	Annually* (MG)	Daily (MG)	Monthly (MG)		
Surface Water													
S-9416	S-6230	6135	Henry Creek and Pringle Spring***	3/14/1924	0.75	0.48	Municipal	0.75	16.717	0.04	1.32	N/A - Certificated	
S-16746	S-12598	16623	Big Spring (a.k.a. Blue Bird Spring)	1/13/1937	0.66	0.43	Municipal	0.66	34.173	0.09	2.85	N/A - Certificated	
S-32284	S-25666	35699	Lafayette Spring and Doug Nelson Spring	4/23/1958	0.16 (being 0.08 from each spring)	0.10	Municipal	0.16	10.943	0.03	0.79	N/A - Certificated	
S-87762	--	--	Willamette River	11/2/2011	44.18	28.5	Municipal	N/A	N/A	N/A	N/A	N/A	The Cities of Lafayette, Dayton, Carlton, and McMinnville Water and Light jointly filed this application requesting up to a total of 44.18 cfs. Application currently pending with OWRD.

*Maximum volume between 2003--2007

***According to a November 8, 1993 interoffice memo to the file for the City's certificate 6135, this water right authorizes the use of water the spring (Pringle Spring), as well as from Henry Creek.

2.2.2 Aquatic Resource Concerns

The City's surface water rights authorize the diversion of water from Henry Creek and Pringle Spring, Big Spring, Lafayette Spring and Doug Nelson Spring. These sources are tributary to the Yamhill River, which flows into the Willamette River.

The Upper Willamette River and its tributaries support two federal listed fish species, one of which is also state-listed. These listed species are summarized in **Table 2-3**.

Table 2-3
Native Fish Species that Occur within the Upper Willamette River and its Tributaries that are Listed as Sensitive, Threatened or Endangered under the Oregon or Federal Endangered Species Acts.

Species	ESU	Federal Listing	State Listing
Chinook salmon (*O. tshawytscha*)	Upper Willamette River	Threatened	*not listed*
Steelhead trout (*O. mykiss*)	Upper Willamette River	Threatened	Sensitive – Vulnerable
Pacific Lamprey (*L. tridentate*)	--	*not listed*	Sensitive - vulnerable

- Federal ESA listed species (T&E) were obtained from www.nmfs.noaa.gov/pr/species/esa/fish.htm
- Federal Sensitive species were obtained from the Interagency Special Status/Sensitive Species Program (Oregon and Washington) at www.fs.fed.us/r6/sfpnw/issssp/agency-policy/
- State ESA listed species (T&E) were obtained from www.dfw.state.or.us/wildlife/diversity/species/threatened_endangered_candidate_list.asp
- State Sensitive species were found at www.dfw.state.or.us/wildlife/diversity/species/docs/SSL-by-taxon.pdf

A search on the Oregon Department of Environmental Quality's (DEQ) 303(d) list of water quality limited streams for the source springs and Henry Creek shows no impairments. The City's groundwater sources are not within a critical groundwater area.

2.3 Summary of Recent Use

2.3.1 Average Annual Usage

Table 2-4 summarizes the average annual production from each of the City's wells and springs over the past five years and their relative percentage with regards to the City's total water production. No single well serves as the primary source for the City.

Table 2-4
City of Lafayette Summary of Recent Water Use

Source Name	2003 (MG)	2004 (MG)	2005 (MG)	2006 (MG)	2007 (MG)	% of 2006 Supply	% of 2007 Supply
Well # 1	2.122	0.892	0.000	0.726	0.823	1	1
Well # 2	0.812	0.000	0.000	0.000	0.000		
Well # 8	7.837	8.452	7.864	6.434	7.347	5	5
Well # 10	25.300	32.290	21.167	15.337	18.823	11	14
City Park Well	7.674	6.960	2.147	2.744	3.167	2	2
Dayton-Lafayette Wellfield Well # 4	n/a*	8.412	45.886	54.738	48.331	40	35
Pringle Spring	15.866	12.395	5.358	16.717	15.818	12	11
Blue Bird Spring a.k.a. Big Spring	34.009	27.536	15.441	29.466	34.173	22	25
Lafayette Spring	10.943	10.376	7.209	9.458	9.502	7	7
Totals (MG)	104.563	107.313	105.142	135.620	137.984	100%	100%
Average Day (mgd)	0.286	0.271	0.162	0.222	0.246		

*Not applicable.

The numbers shown in Table 2-4 are consistent with the City's annual water use reporting, as required under OAR 690-085.

2.3.2 Average Day Demand

The City's Water System Master Plan determined water demand from the finished water flow meter in the City's watershed and the Lafayette water meter at the joint Dayton-Lafayette treatment plant. Water demand information was only available for a portion of 2004 (October through December) and for 2005, as shown in Table 2-5.

Table 2-5
City of Lafayette Water Demand (2004-2005)

	Portion of 2004	**2005**
Total Demand (MG)	23.401	96.914
Average Day Demand (mgd)	0.254 mgd	0.265 mgd

2.3.3 Seasonal Usage

A review of usage data available through 2005 indicated a peak day demand of 0.45 mgd on August 4, 2005. In general, peak usage occurs each year between late July and early August. The resulting data indicate a peak day factor of about three (3) (i.e., peak day use compared to annual average use). This number is comparable to other communities of similar size and composition in the region. However, since the summer of 2005 was not abnormally dry, the peaking factor could trend higher if persistent periods of hot, dry weather were to be experienced in the future.

2.4 Water Customers Served

The City has not historically differentiated between residential and commercial accounts for water users. The number of commercial accounts was tabulated based on sewer billings.

As of 2007, the City had a total of 1,271 customer accounts. A summary of account history from 2004 to 2007 is provided in **Table 2-6**. The residential class currently makes up 97.6 percent of the total number of accounts.

Table 2-6
City of Lafayette Accounts per Customer Class

Customer Class	2004	2005	2006	2007
Residential	954	1058	1186	1241
Commercial/Industrial	30	30	30	30
Totals (MG)	984	1088	1216	1271

2.5 Facilities Description

2.5.1 Source/Treatment

All wells and springs are currently in compliance with state drinking water standards outlined under OAR 333-065. The City Park Well has high iron and manganese, and is treated with a pressure filter. The Dayton-Lafayette Wellfield wells have high iron, manganese and methane levels, and are treated by aeration at the wellheads (for methane) and by pressure filters (for iron/manganese removal). Withdrawals from all wells and springs are disinfected through the use of sodium hypochlorite. Watershed production is injected with soda ash for pH control in order to comply with the lead and copper corrosion control requirements of the Oregon Division of Health and Human Services Drinking Water Section.

2.5.2 Transmission/Distribution

The City's distribution system is composed of a network of pipe sizes ranging from 2-inch to 12-inch pipes. A map of the City's water system is provided in Exhibit 2-3 through 2-6, and indicates the general location and size of the transmission and distribution pipelines, as well as the location of the various water sources and storage facilities.

2.5.3 Finished Water Storage

The City presently has a single steel storage reservoir with a capacity of 0.5 MG. The reservoir is located north of town in the City watershed as shown on the water system maps (Exhibit 2-4). The overflow elevation for the reservoir is ±376' as shown on the system schematic (Exhibit 2-2).

2.5.4 Water Pump Stations

The only pump station within the City's water system (other than the well pumps) is located at the Dayton Water Treatment Plant (WTP). The flow rates from these pumps are controlled by Variable Frequency Drives (VFDs), which allow the City to limit the amount of water from the Dayton-Lafayette Wellfield and Dayton WTP to only that needed to supplement the City's other water sources.

Exhibit 2-3

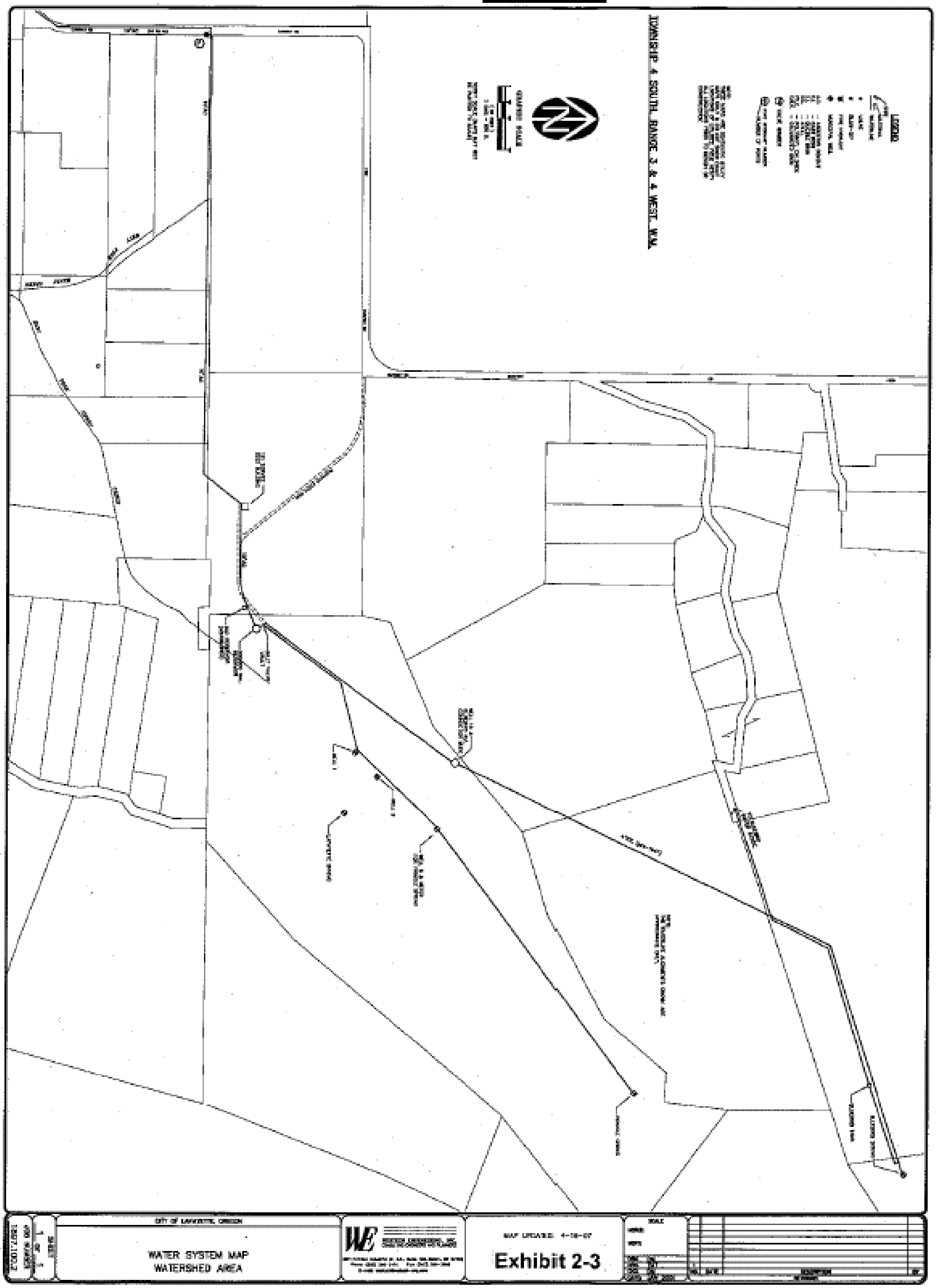

TOWNSHIP 4 SOUTH, RANGE 3 & 4 WEST, W.M.
WATER SYSTEM MAP
WATERSHED AREA
Exhibit 2-3

Exhibit 2-4

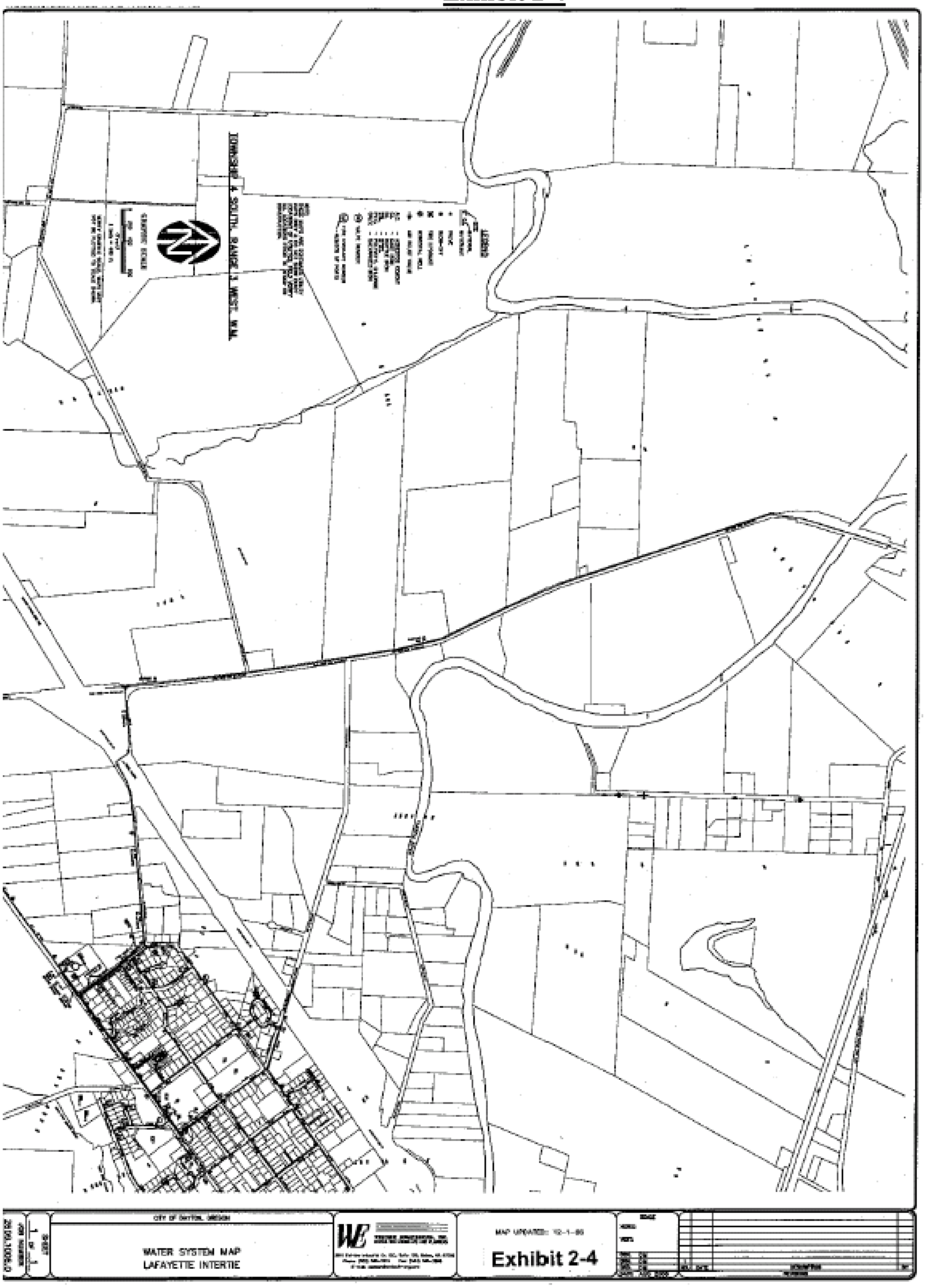


Exhibit 2-5

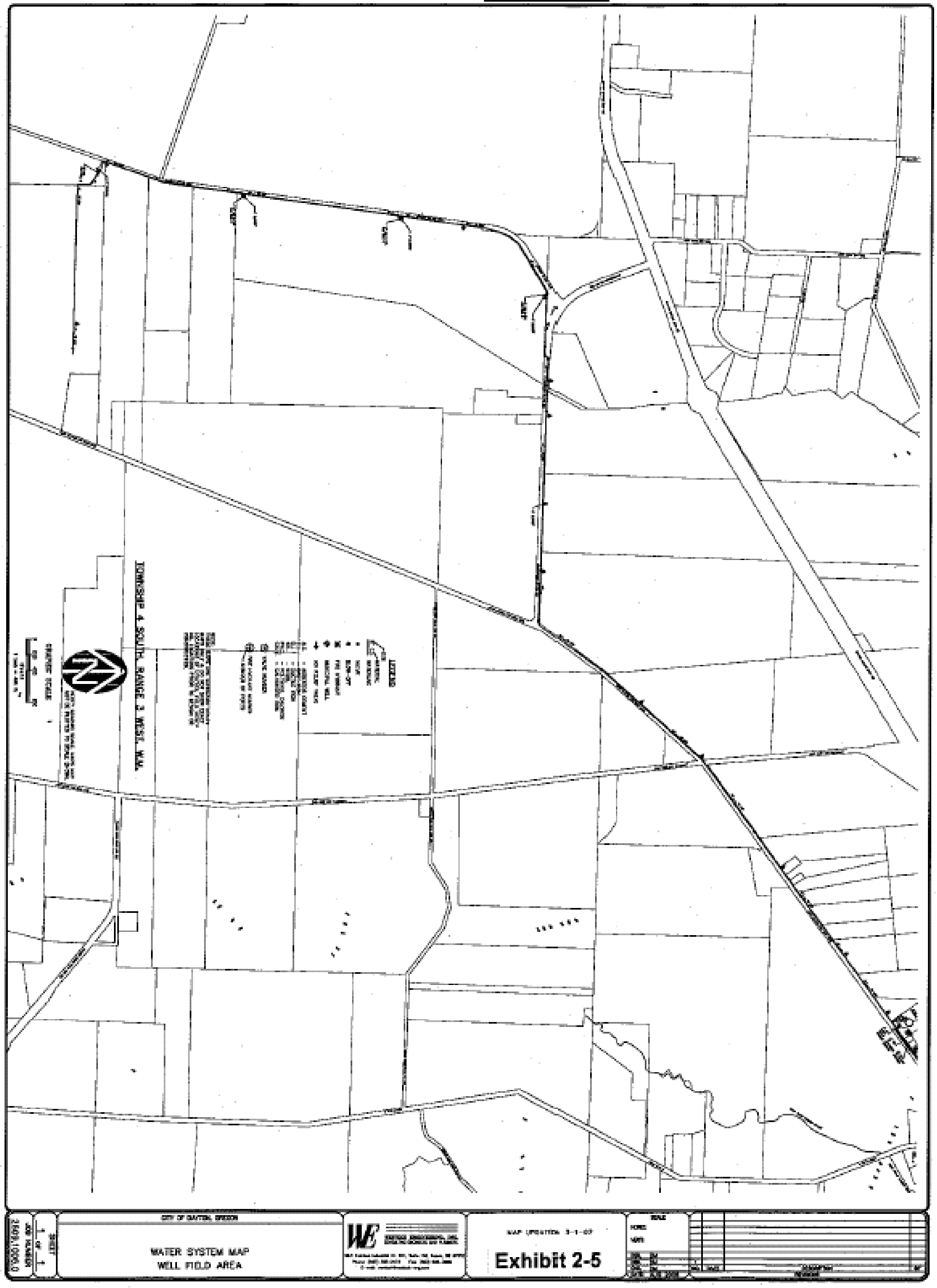

TOWNSHIP 4 SOUTH, RANGE 3 WEST, W.M.
WATER SYSTEM MAP
WELL FIELD AREA
Exhibit 2-5

Exhibit 2-6


WATER SYSTEM MAP
Exhibit 2-6
TOWNSHIP 4 SOUTH, RANGE 3 & 4 WEST, W.M.

2.6 Interconnections

The City has a cooperative water agreement with the City of Dayton and receives supplemental groundwater on an as-needed basis. The basis for this agreement is an Intergovernmental Agreement (IGA) that outlines the cities' respective interests in the various assets developed, or to be developed, as part of the Dayton-Lafayette Wellfield. The IGA is currently in the process of being updated.

The City currently has an intertie with the City of Dayton. The two cities share the Dayton-Lafayette Wellfield, which currently includes three operational wells (well nos. 1, 3 and 4). The City currently owns one of these wells (well no. 4). Well nos. 2 and 5 were recently drilled but are not yet ready for production. The City will develop well no. 2 and will jointly develop well no. 5 with the City of Dayton. The City's Permit G-13839 allows the diversion of up to 3.34 cfs from the five wells, in combination with use under the City of Dayton's Permit G-13838.

Water from the Dayton-Lafayette Wellfield is treated at the Dayton WTP. The water then enters the City's distribution system.

Although the City and the Bluebird Water Association (BWA) share a common water supply source (Blue Bird Spring, a.k.a. Big Spring), the City does not supply water to the BWA.

2.7 System Efficiency

Between 1999 and 2001, the City spent $1,423,311 to replace approximately 75 percent of the original distribution system. These improvements significantly reduced water loss through leakage in the system. The City has determined unaccounted for water since approximately 2005, and strives to maintain an average annual unaccounted for water percentage of approximately 15 percent. The City determines the amount of unaccounted for water by monthly examination of the difference between metered withdrawals from the City's wells and recorded use data from the City's billing accounts. In many cases, it is not possible to definitively determine the amount of water used during a fire or lost by an identified leak, but when the percentage of unaccounted for water rises above normal levels, the City aggressively attempts to identify system leaks or other types of unmetered uses.

SECTION 3
CONSERVATION ELEMENT

3.1 Current Efforts

While this is the City's first WMCP since the development of the Dayton-Lafayette Wellfield, regional water supply limitations required the City to implement conservation measures prior to the preparation of this plan. Because limited resources prevent the City from offering a full-scale conservation program as seen in larger cities, the City's plan presents a targeted approach based on the City's experience in encouraging its customers to conserve.

The City has made progress toward the conservation benchmarks included in its previously-approved WMCP. The City has also implemented conservation measures that were not contemplated in its last plan. The City has implemented the following measures designed to encourage conservation:

- In 1999, the City adopted and has enforced a water rate structure designed to award conservation and penalize waste. The City's water rates are the highest in Yamhill County. This was an on-going measure at the time the City's previously-approved plan.

- Monthly analysis of water use data for a determination of system efficiency and leak detection. This measure was implemented under the City's previously-approved WMCP.

- In the mid-1990s, the City began participating in the Save Water and Energy Education Program (SWEEP), which resulted in the installation of low-flow fixtures and high-efficiency appliances. This program is, however, not currently active.

- The City has implemented the Water Reuse benchmarks in its previously approved WMCP. The City uses treated effluent for multiple purposes at its wastewater treatment plant (WWTP). The City uses treated effluent for washing tanks, and tractors and other equipment at the WWTP. Additionally, treated effluent is used for rinsing screening at the WWTP's head works.

- The City uses treated effluent as "carrier water" for the addition of chemicals for process water. This measure was not contemplated in the City's last WMCP.

- In 1998, the City implemented the Washwise Water Conservation Program designed to offer a one-time $40 credit to customers that purchase a qualifying water-saving appliance. This measure was ongoing at the time of the City's previous plan.

- From 1999 through 2001, the City replaced approximately 75 percent of its original distribution system with PVC piping, which significantly reduced system leakage and increased reliability. The City continually assesses the existing system to determine if future improvements are needed.

- To date, funding has not allowed the City to implement its benchmark to provide residential customers with home water audit kits.

These measures, some of which form the core elements of the City's WMCP, have had a dramatic impact on conservation, both during peak and off-peak usage months.

3.2 Water Use and Reporting

The City's water use and reporting is done in compliance with OAR 690-085. The City submits annual, detailed water use reports to OWRD on the form supplied for this purpose.

Water use meters are located at each source and at all customer locations served by the City. City personnel record meter readings for all sources at least monthly (twice a month for the springs, daily for wells when running) and monthly meter readings throughout the distribution system. Data collected from these efforts is tabulated and used to generate month-to-month and year-to-year water use comparisons, calculate per capita water usage, and determine system leakage, maintenance and repair needs.

3.3 Rate Structure and Metering

The City reviews its rate structure on an annual basis and updates its rate structure on an as-needed basis depending on conservation needs. The City evaluates whether the rate structure is successful in curbing water use and whether system charges are meeting the system's revenue requirements. **Table 3-1** outlines the City's rate structure for 2007.

Table 3-1
City of Lafayette Water Rate Structure for 2007

Cubic Feet (cf)	Within City Boundaries	Outside City Boundaries
0-300	$36.00	$42.25
301-500	$1.30 per 100 cf	$1.63 per 100 cf
501-700	$1.75 per 100 cf	$2.19 per 100 cf
701-900	$2.25 per 100 cf	$2.19 per 100 cf
901 & up	$2.75 per 100 cf	$3.44 per 100 cf

All customer use served by the City is monitored under metered accounts.

3.4 Planned Conservation Measures

The conservation measures described below incorporate many of the measures already implemented by the City. Based on historical data available to the City at this time, these measures have substantially reduced per capita water usage. In 1993, average per capita daily demand during the peak summer months was approximately 152.2 gallons. By 2005, this demand was reduced to 121.4 gallons. In 2007, average per capita daily demand was 116.2 gallons. Similar results were observed for off-peak, winter usage.

3.4.1 Water Auditing

The City has performed annual water audits since approximately 2004. While consistent records of historical water use were not previously kept by the City, the City strives to maintain an average annual unaccounted for water percentage of approximately 15 percent. The City calculates this percentage monthly based on the difference between metered withdrawals from the City's wells and recorded use data from the City's billing accounts.

The City has been trying to account for unmetered uses or leaks discovered in the water audits since about 2005. In many cases, it is not possible to definitively determine the amount of water used during a fire or lost by an identified leak, but when the percentage of unaccounted for water rises, the City aggressively attempts to identify system leaks or other types of unmetered uses. The City believes that further efforts to identify unmetered uses, both authorized and unauthorized, will further reduce unaccounted for water. The City will begin a program of identifying and inventorying authorized, unmetered water use (i.e., fire flows, construction water usage, etc.) and system leaks starting in January 2009.

3.4.2 Meter Testing and Maintenance

Meters were replaced in 1999 as part of the City's distribution system improvements and testing and maintenance is performed on an "as needed" basis. If meters consistently read less than typical consumption levels, the meters are tested and repaired/replaced as appropriate. In 2009, the City will begin a program that inventories meter repairs and maintenance work in order to develop a replacement schedule for all existing meters.

3.4.3 Leak Detection and Repair

The City currently relies on monthly usage data to detect system leakage. In 1999, the City replaced approximately 75 percent of the original distribution system with PVC piping, which significantly reduced water loss through leakage. The City plans to replace most of the remaining old transmission and distribution lines by 2026 pursuant to its 2007 Water System Master Plan. In order to minimize water losses, the City will also implement a program for routinely exercising valves throughout the system. This will enhance the City's ability to efficiently isolate leaks or line breaks for repair purposes.

3.4.4 Public Education

Public education is an important component of the City's overall water conservation program. The following public education measures are currently in use and will continue to be used as part of the WMCP:

- Conservation reminder in monthly billing statements sent to each customer.
- Use of the reader board at City Hall to alert customers to the current status of the City's water supply and to urge customers to conserve water.
- Use and enforcement of aggressive water rate structure designed to encourage conservation and penalize waste.

3.4.5 Technical and Financial Assistance

The City does not currently have funding available to provide its customers with technical and financial assistance to encourage implementation of conservation measures. During the next five years, the City will explore opportunities to obtain grants or other funding to purchase home water audit kits and provide them to its residential customers. The City will also evaluate a program to provide toilet tank leak detection dye tablets to its customers.

3.4.6 Water reuse, recycling, and non-potable water opportunities

The City currently uses 2,500 to 10,000 gallons per day of treated effluent for a variety of purposes at the WWTP. These uses include washing tanks, tractors, mowers, and other equipment. Treated effluent is also used as rinse water for screens at the head works. Finally, the City uses treated effluent as “carrier water” for the addition of chemicals for process water. During the next five years, the City will evaluate the opportunity to irrigate Perkins Park with non-potable water from the Park Well.

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3.5 Summary of 5-Year Benchmarks

A summary of the relevant benchmarks for the City’s on-going and planned conservation activities is provided in Table 3-2.

Table 3-2
5-Year Conservation Benchmarks

Benchmark	Date	Frequency
On-Going Efforts		
Leak detection and repair	2004	Monthly, as-needed
Visual inspection of reservoir	2004	Annually
Audit of water usage	2004	Annually
Meter testing program	1999	On-call
Public Education	-	On-going
Assess effectiveness of water rate structure	-	Annually
Continued implementation of Washwise (water-saving appliance) program	1998	On-going
Use of treated effluent at WWTP for washing, and other purposes	various	On-going
Planned Programs		
Improved water auditing (non-metered uses)	Jan 2009	Annually

Assess need to replace remainder of original distribution system	By 2013	On-going
Implement valve exercise program	Jan 2009	Annually
Meter repair/maintenance inventory program	June 2009	On-going
Establish meter replacement schedule	Jan 2010	On-going
Evaluate providing toilet tank leak detection dye tablets	During next 5 years	On-going
Explore opportunities to obtain funding to purchase home water audit kits	During next 5 years	On-going
Evaluate park irrigation using non-potable water	During next 5 years	On-going

SECTION 4
CURTAILMENT ELEMENT

Curtailment planning is the development of proactive measures to reduce demand during supply shortages due to prolonged drought, landslides, earthquakes, or source contamination. In order to protect its limited water supply, the City adopted a curtailment ordinance.

Lafayette Municipal Code 4.250 through 4.270 allows the City Administrator, in consultation with the Mayor, to declare a water emergency and implement the water curtailment plan outlined below. *See* the Lafayette Municipal Code 4.250-4.270 that was in effect in when this WMCP was submitted to OWRD (June 2008), which is attached as App. A. The goal of the City's curtailment plan is to provide objective criteria that trigger actions to ensure sufficient water is available to meet water demands without jeopardizing the health, safety or welfare of the community.

4.1 History of Curtailment Episodes

Over the last ten years, the City has experienced declining water levels and reduced flow from its water supply wells during late summer. Prior to the adoption of the City's curtailment ordinance, the City responded to water shortages by implementing voluntary water use restrictions. In August 2007, the City responded to its wells' decreased ability to meet the City's water demands by initiating Level 1 curtailment, which institutes an odd/even day watering schedule based on street address.

4.2 Stages of Alert

Lafayette Municipal Code 4.255 outlines the four stages of alert. *See* App. A. The four stages are identified as Level 1 – Odd/Even Watering; Level 2 – Limited; Level 3 – Moderate; and Level 4 – Severe.

4.3 Triggers for Each Stage of Alert

The curtailment stages outlined in Lafayette Municipal Code 4.255 are triggered by the criteria outlined in Table 4-1 below.

Table 4-1
City of Lafayette Curtailment Plan

Stage of Alert	Initiating Condition
Level I - Odd/Even Watering	Use reaches 80% of capacity
Level II - Limited	Use reaches 85% of capacity
Level III - Moderate	Use reaches 90% of capacity
Level IV - Severe	Use reaches 95% of capacity

4.4 Specific Curtailment Actions

Lafayette Municipal Code 4.255 outlines specific curtailment actions for each stage of alert. *See* App. A. Water use restrictions range from implementation of an odd/even day watering schedule at Level 1 to residential limitations and discretionary restrictions as identified by the City Administrator or Fire Chief at Level 4.

4.5 Staff Responsibilities

The City Administrator, Public Works Director, and City staff will be responsible for implementing the water curtailment plan outlined above. Enforcement will be undertaken by the County Sheriff in conjunction with information provided by City staff.

SECTION 5
WATER SUPPLY ELEMENT

5.1 Future Service Area

5.1.1 Population

The City's present population is estimated at 3,730. Twenty-year forecasts have been developed as part of the City's Water Master Plan for population increases through year 2026. By 2026, the City is expected to support about 5,575 people. Exhibit 5-1 provides a summary of population data and estimates from 2005 through 2026. These estimates provide the basis for long-term water supply forecasting.

5.1.2 Employment

The City has continued to develop as a bedroom community for persons employed in the Portland metropolitan area or in nearby cities such as McMinnville. As of 2007, current employment in the City was estimated at approximately 201 persons. With no current plans for future industrial or commercial development, it is anticipated that job growth will be minimal.

5.1.3 Land Use Development

Land use zoning in the City is comprised primarily of residential uses, although the Comprehensive Plan sets aside a relatively large undeveloped area for industrial development in the southeast corner of town (approximately 66.5 acres). Lesser amounts of land are designated for commercial and public uses.

The total areas contained under each zoning designation are listed in Table 5-1. Due to recent subdivision approvals, there are only small areas of residential land within the City limits that are currently undeveloped.

Table 5-1
Approximate Areas by Land Use Zone

Land Use Category	Area (Acres)
Low Density Residential (R1)	217
Medium Density Residential (R2)	180
Residential Commercial (RC)	26
Commercial Core District (C-1)	13
Commercial General (C-2)	5
Industrial (I)	84
Public, Semi-Public (P)	9
TOTAL	**± 553**

Exhibit 5-1

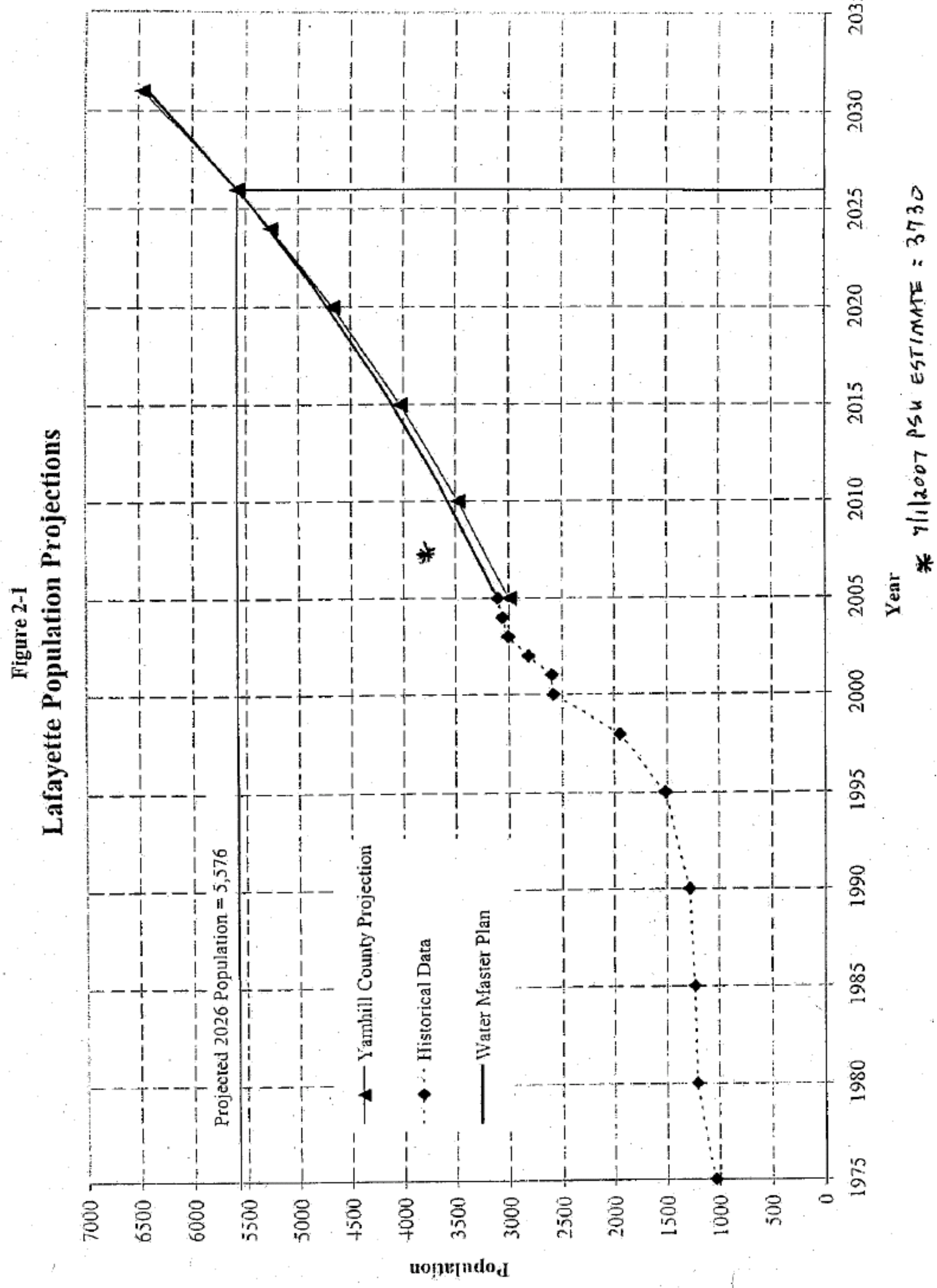

Exhibit 5-1

It is anticipated that the City's major land use category will continue to be single-family residential. The City's long-term growth should not significantly affect the current distribution of land use categories. Thus, it is anticipated that each customer class will continue to exhibit the same share of the City's total water consumption.

The City's water service area boundaries largely coincide with the City limits. However, a few services exist along Bridge Street and Stoller Road that were installed prior to the adoption of the current policy of no outside water service.

5.2 Future Demand

5.2.1 Average Annual and Peak Day Demand

The rate of growth in water demand is presumed to be driven primarily by population growth within the City, since commercial/industrial users represent a very small portion of the water use. It is also presumed that the character of the residential and commercial/industrial class will remain relatively the same. It is assumed that new commercial and industrial developments will not be large water users (i.e., dry industries). However, a large area of undeveloped industrial land exists in the southeast corner of town and industrial development could occur at this site if desired.

Future demands were calculated by the City based on anticipated population growth and applying a typical rate of per capita use. As previously noted, the City's available water supply is limited during the summer months when the demands (and per capita water use) are substantially higher. Therefore, the average annual demand does not represent the critical element of the supply versus demand issue.

The City's Water Master Plan contains demand projections as summarized below. The Water Master Plan water demand projections used typical consumption values and peaking factors to calculate average annual demand and maximum day demand as shown in Table 5-2 below, due to the limited availability of actual water production and consumption data. For example, 100 gpcd was used for average day demand (ADD), a typical value and close to the City's 2007 summertime ADD value of 116 gpcd. A peaking factor of three (3) times ADD was used to estimate the MDD (maximum daily demand). This peaking factor is a commonly accepted value in engineering literature and is often used for water and sewer system analysis and master planning. It should be noted that in accordance with the recommendations in the Water Master Plan, the City has been working on improving its ability to more accurately measure actual water production and consumption.

Maximum daily demands have special significance because they can put stress on the water supply capabilities of the system. The water sources should be able to supply the entire water demand during the maximum day of the year in addition to any required fire flows. Table 5-3 shows the projected water demands based on the peaking factors and population projections in the Water Master Plan. Currently, ADD and MDD are approximately 216 gpm (0.48 cfs) and 647 gpm (1.4 cfs), respectively. At the end of the planning period, ADD is expected to increase to 388 gpm (0.86 cfs), while MDD is expected to increase to 1,163 gpm (2.59 cfs).

Table 5-2
Summary of Projected Water Demands

Year	2005	2006	2011	2016	2021	2026
Population	3,105	3,193	3,670	4,219	4,851	5,576
Avg. Day Demand (ADD)[1]						
Mgd	0.311	0.319	0.367	0.422	0.485	0.558
(gpm)	(216)	(222)	(255)	(293)	(337)	(388)
Max. Day Demand (MDD)[2]						
mgd	0.932	0.957	1.101	1.266	1.455	1.674
(gpm)	(647)	(665)	(765)	(879)	(1,010)	(1,163)

[1] Based on 100 gpcd.
[2] Based on peaking factor of 3 x ADD

It is anticipated that as the City completes improvements to its water supply metering program, reduces unmetered water use, and continues the public education campaign (coupled with summertime water use restrictions similar to those imposed during the summer of 2007), the future maximum water demands will decrease to values lower than those assumed in the Water Master Plan.

5.2.2 Peak Day and Conservation Measures

As discussed in Section 3, the City has implemented a number of conservation measures designed to encourage conservation and penalize waste during peak and non-peak months. These conservation measures have resulted in a 24 percent reduction in average per capita daily demand during the peak summer months from 1993 to 2007, or approximately 1.7 percent annually. If this trend continues, the City could expect the average per capita daily demand during peak summer months to be reduced to 99.2 gallons by the year 2017 (which closely matches the future consumption projection of 100 gpcd).

5.3 Long-Range Supply Plan

5.3.1 Capacity Assessment

The nature of the City's water supply sources (wells & springs) results in less water being available during the late summer months, which coincides with the peak demand periods. Therefore, the City's available capacity is based on the source capacity during the late summer months.

The City's maximum capacity during the late summer months is currently ±275 gpm (0.61 cfs). The City is in the process of developing two additional wells in the Dayton-Lafayette Wellfield, which are provided for under Permit G-13839. Even with these two additional wells, however, the projected peak demand will exceed projected supply within the 20-year planning period.

Therefore, the City will either need to find ways to fully develop its existing water use permits, or find alternate sources of supply. The City has been active in participating on the task force for the proposed regional water supply study being conducted by Yamhill County. This task force is examining options for regionalization of the water supply systems throughout the Yamhill Valley. Nonetheless, a regional water supply system will not meet the City's near-term water demands.

The City also plans to explore the option of implementing an Aquifer Storage and Recovery (ASR) project in the Lafayette watershed to increase the availability of water from the watershed wells during the late summer months. In concept, this would allow spring water produced during the winter months when demand is lowest to be stored in the aquifer for recovery during the summer months when demand is highest. This will increase the City's available water supply during critical demand periods without having to acquire additional water rights or increase withdrawals from other existing sources. Development of an ASR project may help the City meet its long-term water supply needs, but will not provide a source of supply for the City in the near term.

To meet its near-term future water supply needs, the City will need to diligently manage its existing water supply, including development of its existing permits. The City is committed to achieving minimal impact, while maintaining a high level of service to customers.

5.3.2 Schedule to Fully Exercise the City's Permits and Comparison of Projected Need to Available Sources

The City holds water rights authorizing use of up to 5.13 cfs from groundwater and up to 1.57 cfs from surface water, for a combined maximum rate of diversion of 6.7 cfs. The City currently only has access to 3.44 cfs of this rate, taking into consideration the limitations on use of the City's extended permits (G-13839, G-10399 and G-10400). The City's water supply capacity is, however, limited during low stream flow, high demand periods to approximately 0.61 cfs. These capacity limitations include reduced surface water flows and limited well capacity. The City's water rights subject to Transfer T-8178 authorize the use of Wells #1, #2, #8 and #10, but Well #2 is not used due to hydraulic connection with Well 10. In addition, the City is not currently using groundwater under Permits G-10399 or G-10400, or its Doug Nelson Spring source.

The City's total source capacity of 0.61 cfs during low flow, high demand time periods is 1.98 cfs less than the 2026 MDD of 2.59 cfs identified in the City's Water System Master Plan. The City recognizes that this demand projection was developed during a time of high growth. Due to the economic down turn, it may take an additional five to ten years for the City to reach this MDD. In either situation, the City's current source capacity 0.61 cfs is clearly insufficient to meet its projected MDD turning the planning period for this WMCP.

As described in Section 2, the City currently has three permits (G-13839, G-10399 and G-10400). The City has not yet fully developed these permits, but intends to fully develop them under the schedule described below.

Permit G-10399 (Well 6-Lafayette Hwy), which is an extended permit, authorizes the City to divert up to 0.25 cfs from one well. To date, the City has not diverted water under this permit. Although the City is not currently utilizing this well, the City intends to pursue development under this permit.

Permit G-10400 (Well 7a/b-Lafayette Hwy), which is an extended permit, authorizes the City to divert up to 0.49 cfs from one well. To date, the City has developed 0.15 cfs of the total authorized rate of this permit. Although the City is not currently utilizing this well, the City intends to pursue development under this permit.

Permit G-13839 authorizes the use of up to 3.34 cfs from five wells, further limited to 300 gpm per well. In addition, this permit is a duplicate of Permit G-13838, which is held by the City of Dayton, and combined use of water under Permit G-13838 and G-13839 cannot exceed the maximum rate described (3.34 cfs). Permit G-13839 is an extended permit currently limited to 0.67 cfs.

The City is requesting access to the 0.25 cfs undeveloped portion of extended Permit G-10399, which is the entire maximum authorized rate for this permit. The City is also requesting access to the remaining 0.34 cfs undeveloped portion of extended Permit G-10400, which would provide the City access to the entire 0.49 cfs maximum authorized rate for this permit. Finally, the City is requesting access to 1.00 cfs under extended Permit G-13839. This will provide the City with access to a total of 1.67 cfs, or one-half of the maximum authorized rate for Permit G-13839, which authorizes the City's use of water from the shared Dayton-Lafayette Wellfield. (The current strategy for use of the well-field and the City's Permit G-13839 if that the maximum authorized rate of 3.34 will be divided between Lafayette and Dayton.)

The City is requesting access to a total additional rate of 1.59 cfs under its extended permits. Combining this additional rate with the City's total source capacity of 0.61 cfs during low flow, high demand time periods yields a rate of 2.2 cfs. This rate is 0.39 cfs less than the City's projected 2026 MDD of 2.59 cfs included in its 2007 Water System Master Plan (although the current economic downturn is expected to delay the City reaching this demand by five to ten years). The City is assessing opportunities to obtain additional water supply to meet future demands projected in its Water System Master Plan. In addition to developing its existing permits, the City is also considering opportunities to maximize its water supply from its existing sources, develop an ASR project, increase conservation, and participate in regional water supply solutions. The City anticipates being able to provide OWRD with additional information about its strategy for meeting its future water demands when it submits its five-year progress report.

5.3.3 Alternative Sources

OAR 690-086-0170(5) requires an analysis of alternative sources of water if an expansion or initial diversion of water allocated under existing permits is necessary to meet future water demand. The City will expand diversion of water under Permit G-13839, G-10399 and G-10400 to meet future water demands described above.

The City's implementation of conservation measures is described in Section 5.2.2 above.

As described in Section 2.6, the City has an interconnection and a cooperative agreement with the City of Dayton. Additionally, during the past several years, the City has participated in efforts to evaluate alternatives for meeting its future water supply needs, such as the task force associated with the *Yamhill County Water Supply Analysis, HDR, April 2008* (YCWSA). The analysis evaluates a number of regional water supply options. The YCWSA considers source availability, source reliability for municipal water suppliers in Yamhill County. The analysis also evaluates the various supply alternatives by considering water availability, environmental impacts, raw water quality, vulnerability to catastrophic events, ease of implementation, treatment requirements and capital and operating costs.

As described in Section 5.2.2, the City's efforts to increase water conservation have yielded significant results. Nonetheless, since the City's reliable water supply is currently approximately 0.61 cfs during the peak demand periods of the year, the City cannot conserve sufficient water to meet the 2026 projected MDD of 2.59 cfs included in its Water System Master Plan, even with conservation methods that exceed the costs of other identified sources. Thus, while conservation measures may delay the need for additional water, it will not eliminate the need to use water under existing Permits G-13839, G-10399, and G-10400. Increased water use under these permits, in addition to conservation, will be required to provide the water needed to meet the City's projected MDD during the next 20 years.

5.4 Quantification of Maximum Rate and Monthly Volume

OAR 690-086-0170(6) requires a quantification of the maximum rate of withdrawal and maximum monthly use if expansion or initial diversion of water allocated under an existing permit is necessary to meet demands in the 20-year planning horizon. The City is projected to require up to 0.25 cfs under Permit G-10399, 0.49 cfs under Permit G-10400 and 1.67 cfs under-Permit G-13839 within the next 20 years to meet its projected water demands. Assuming that Permits G-10399 and G-10400 are used at their maximum rates 24 hours per day for 30 days during the maximum month, the maximum monthly volume for Permit G-10399 would be approximately 4.85 million gallons and the maximum monthly volume for permit G-10400 would be approximately 9.51 million gallons. Assuming that Permit G-13839 is used at the rate of 1.67cfs 24 hours per day for 30 days during the maximum month, the maximum monthly volume would be approximately 32.41 million gallons.

5.5 Mitigation Actions under State and Federal Law

Under OAR 690-086-0179(7), for expanded or initial diversion of water under an existing permit, the water supplier is to describe mitigation actions it is taking to comply with legal requirements of the Endangered Species Act, Clean Water Act, and other applicable state of federal environmental regulations. The City currently is not required to take any mitigation actions under state or federal law.

The City has submitted permit extension applications to OWRD requesting more time to develop Permits G-10399 and G10400, which will likely be subject to permit extension conditions. The Oregon Department of Fish and Wildlife has identified flows necessary to "maintain the persistence" of listed fish, and "fish persistence" conditions are expected to be included in OWRD's final orders on the extensions.

5.6 Analysis of Alternative Sources

OAR 690-086-0170(8) requires an analysis of alternative sources of water if acquisition of new water rights will be necessary within the next 20 years to meet future water demand. Even after obtaining access to the undeveloped portions of the City's existing permits, the City may not have sufficient water supply to meet demands during low flow, high demand time periods. The City is in the process of pursing a regional water supply system that would require the acquisition of a new water right. The schedule for developing the new water source through the regional water supply system will be dependent on numerous factors including the timing of permit issuance, funding of necessary infrastructure construction, and future municipal demands.

The City's implementation of conservation measures is described in Section 5.2.2 above.

As described in Section 2.6, the City has an interconnection and a cooperative agreement with the City of Dayton. The City's existing interconnection, however, cannot provide sufficient water to meet its projected demands. Additionally, during the past several years, the City has participated in efforts to evaluate alternatives for meeting its future water supply needs, such as the task force associated with the *Yamhill County Water Supply Analysis, HDR, April 2008* (YCWSA). The City anticipates meeting its future demands, in part, through a new regional water supply system, which will require acquisition of a new water right.

As described in Section 5.2.2, the City's efforts to increase water conservation have yielded significant results. Nonetheless, since the City's reliable water supply is currently approximately 0.61 cfs during the peak demand periods of the year, the City cannot conserve sufficient water to meet the 2026 projected MDD of 2.59 cfs included in its Water System Master Plan, even with conservation methods that exceed the costs of other identified sources. Thus, while conservation measures may delay the need for water under a "new" water right, it will not eliminate it.

Appendix A. City of Lafayette Municipal Code 4.250 – 4.270

4.245 Limitations on Use. The city administrator shall have full power and authority at any time to declare that a shortage of water exists and to prescribe definite hours for use or nonuse of water through hose or other sprinkling devices; such regulations are to be immediately effective and are to be enforced by the superintendent of public works. Violation of these rules may be cause for turning off water service.

4.250 Findings and Declaration of a Water Emergency. Upon a finding that the municipal water supply system is incapable of providing an adequate water supply for normal usage due to a prolonged drought, system failure, or any other event, the city administrator, after consultation with the mayor, may declare that water usage must be curtailed. The declaration shall include the effective date, the reason for the declaration, and the level of prohibition declared. After the city administrator's declaration, the city council shall examine the declaration and any curtailment actions. The council may there after take whatever steps it deems necessary to address the water emergency, including continuing the restrictions and limitations imposed by the city administrator, modifying them, or eliminating them if the council finds that the emergency has been abated or eliminated. The city council may include an estimated time for review or revocation of the declaration.
(1) If the city administrator fails or is unable to declare a water emergency, the city council has the right to do so, providing it makes the necessary written findings and sets out the facts giving rise to the water emergency.

4.255 Levels of Prohibition.

(1) Level I- Odd/Even Watering- The following activities are required under a Level I declaration:
  (a) Even numbered addresses can only water on even numbered days of the month.
  (b) Odd numbered addresses can only water on odd numbered days of the month.

[Amended by Ord. 565 on Jan. 8, 2004]

(2) Level II - Limited. The following activities or actions are prohibited under a Level II declaration:

(a) Watering, sprinkling or irrigating lawn, grass or turf; exceptions:
  i. New lawn, grass or turf that has been seeded or sodded 90 days prior to declaration of a water shortage may be watered as necessary until established;
  ii. High-use athletic fields that are used for organized play.

(b) Watering, sprinkling or irrigating flowers, plants, shrubbery, groundcover, crops, vegetation, or trees except from 6:00 p.m. to 10:00 a.m.;

(c) Washing, wetting down, or sweeping with water, sidewalks, walkways, driveways, parking lots, open ground or other hard surfaced areas; exceptions:
  i. Where there is a demonstrable need in order to meet public health or safety requirements, such as: to alleviate immediate fire or sanitation hazards; for dust control to meet air quality requirements mandated by the Oregon Department of Environmental Quality;

ii. Power washing of buildings, roofs and homes prior to painting, repair, remodeling or reconstruction, and not solely for aesthetic purposes.

(d) Washing trucks, cars, trailers, tractors or other land vehicles or boats or other water-borne vehicles, except by commercial establishments or fleet washing facilities which recycle or reuse the water in their washing processes, or by bucket and hose with shut-off mechanism; exceptions:

i. Where the health, safety and welfare of the public is contingent upon frequent vehicle cleaning, such as: to clean garbage trucks and vehicles that transport food and other perishables, or otherwise required by law. Owners/operators of these vehicles are encouraged to utilize establishments which recycle or reuse the water in their washing process.

(e) Cleaning, filling or maintaining decorative water features, natural or manmade, including but not limited to, fountains, lakes, ponds and streams, unless the water is recirculated through the decorative water feature. Water features which do not include continuous or constant in-flowing water are not included.

(f) Wasting water by leaving unattended hoses running.

(g) Other actions deemed necessary by the city administrator.

(3) Level III - Moderate. The following activities or actions are prohibited under a Level III declaration; where not covered, the Level II restriction still applies:

(a) Watering of any lawn, grass or turf, regardless of age or usage.

(b) Watering, sprinkling or irrigating flowers, plants, shrubbery, groundcover, crops, vegetation, or trees.

(c) Washing of vehicles other than in establishment which recycles its water.

(d) Power washing of buildings, regardless of purpose, is prohibited.

(4) Level IV - Severe. In addition to the restrictions in Level III, the following actions <u>may</u> be taken under Level IV:

(a) Restriction or limitation of residential usage.

(b) Restriction or limitation of activities which require or may require the need for water supplies. By way of example, this restriction might be placed upon a fireworks display which would otherwise be allowed under state law and local ordinance.

(c) Any restriction which is identified by the city administrator.

(d) Any restriction which is identified by the fire chief.

(5) Failure of any water user to receive actual notice of the declaration of a water emergency or the actions deemed necessary by the city administrator to address the emergency shall not relieve the user of obeying any restrictions or restrictions on the use of water imposed by the city administrator.

4.260 Enforcement.

(1) Warning. Each violation of sections 4.245 to 4.255 shall receive a warning. The letter of warning shall be in writing, shall specify the violation, may require compliance measures, and shall be served upon the resident either personally, by office or substitute service, or by certified or registered mail, return receipt requested.

(2) Citation. After the resident has received a warning letter, any subsequent violation of sections 4.245 to 4.255 shall be treated as a civil infraction pursuant to sections 1.215 to 1.260 of the Lafayette Municipal Code. No forfeiture assessed for violation of this ordinance shall be less than $100 nor more than $500 for each violation.

[Amended by Ord. 583 on Jan. 12, 2006]

4.265 Penalties.
The penalties for violations of sections 4.245 to 4.255 shall be as follows:
(1) First violation - Warning letter.
(2) Second violation of same type - Class C infraction $100.
(3) Third violation of same type - Class B infraction $250.
(4) Fourth and subsequent violation- Class A infraction $500.
(5) Third and subsequent violations under Level IV may include water shut-off.
(6) In addition, the city may bring an action against any person, entity, or other water user violating the terms of any restriction or limitation imposed by the city pursuant to sections 4.245 to 4.255. In such event, the city shall be entitled to all costs and expenses (including attorney's fees) caused or resulting from the user's failure or refusal to comply with the terms of the restrictions imposed by the city administrator or council.
[Amended by Ord. 583 on Jan. 12, 2006]

4.270 Amendments, Special Rules, Contracts. The city council shall have the power, at any time, to amend, change, or modify any rule, rate, or charge, and to make special rules, and contracts, and all water service is subject to such power.