

City of Falls City
City Council Regular Meeting
Thursday April 14, 2016
Meeting Location: 320 N Main Street, Falls City, Oregon 97344
Meeting Minutes

Council Present: Mayor Terry Ungricht, Lori Jean Sickles, Jennifer Drill, Tony Meier, Gerald Melin, Dennis Sickles, Julee Bishop

Staff Present: JoHanna Hewitt, City Clerk, Domenica Protheroe, City Clerk, Don Poe, Public Works Lead Worker, Renata Wakely, Council of Governments/Falls City Planner and Garret Jensen, Council of Governments Planner trainee

Mayor Ungricht called the meeting to order at 6:01 PM.

1) Roll Call

Clerk Hewitt took roll call. Councilor D. Sickles arrived at 6:02 pm and Councilor L. Sickles arrived at 6:04 pm.

2) Pledge of Allegiance

Mayor Ungricht led the pledge.

3) Motion to adopt the entire Agenda

A motion was made by Councilor Melin and seconded by Councilor Meier to adopt the entire agenda, with the addition of Item J, Notice of Violation 239 Sheldon Ave, and Item K, Debera Ellis Planning Commission Resignation. Motion carried 6-0-0. Ayes: Lori Jean Sickles, Jennifer Drill, Tony Meier, Gerald Melin, Dennis Sickles, Julee Bishop

4) Consent Agenda

Council questioned Peterson's Plumbing and Forbes' Plumbing bills listed on pages 3 & 4. Mayor Ungricht explained it was for repairs on a valve leak in the Community Center/Fire Station and an automatic handle replacement at the Upper Park restroom respectively.

A motion was made by Councilor Melin and seconded by Councilor Meier to adopt the Consent Agenda with the addition Item J, Notice of Violation- 239 Sheldon Avenue and Item K, Debera Ellis resignation from Parks and Recreation Committee. Motion carried 6-0-0. Ayes: Lori Jean Sickles, Jennifer Drill, Tony Meier, Gerald Melin, Dennis Sickles, Julee Bishop.

5) Public Comments

Patti Sample of Falls City requested Council permission to order a vinyl sign to advertise the upcoming annual Community Garage Sale. Mayor Ungricht asked that Ms. Sample attend the Parks and Recreation Committee meeting where the matter of signage will be discussed and a date determined to bring before Council.

Ms. Sample inquired on the status of the Wagner Library Trust Fund. Her understanding was that it had been dissolved. Mayor Ungricht stated that information was incorrect and urged Ms. Sample to attend the upcoming Budget Meeting of which she is a Committee Member where the Wagner Library Trust Fund status would be discussed in detail.

6) New Business

A. Script for Public Hearings

Mayor Ungricht proceeded to the public hearings for land use and read aloud the Script for Non-Conforming Use Public Hearings:

Now is the time set for public hearings to consider the alteration/replacement/restoration of two separate non-conforming structures. The first is for application # NCU-2016-01 at 246 South Main Street and the second is for application # NCU-2016-02 for the replacement of a non-conforming structure at 169 Fourth Street.

The Planning Commission is not able to act because of a lack of a quorum. Therefore, the Council must act as the Planning Commission for these two applications. Is there a motion for the Council to act in place of the Planning Commission?

A motion was made by Councilor D. Sickles and seconded by Councilor Meier that the City Council of the City of Falls City act in place of the Planning Commission. Motion carried 6-0-0. Ayes: Lori Jean Sickles, Jennifer Drill, Tony Meier, Gerald Melin, Dennis Sickles, Julee Bishop.

Mayor Ungricht continued reading aloud:

Now we will proceed with the hearings. Each hearing will be conducted separately, but I will introduce the procedures for each hearing only once.

We will start each application by receiving a staff report. When the staff report has been presented I will open the public hearing to public testimony. Members of the public who want to testify are asked to sign in, come up when called, and give their name and address for the record before they testify. We ask for your address so that we can notify you of the City's final decision. When public testimony has been concluded I will close the public hearing and open it up for council discussion and deliberation.

After the Council has deliberated, we will need a motion to approve or deny each application separately.

Are there any questions among the Council about the process?
There were no comments.

Mayor Ungricht resumed reading aloud:

Oregon land use law requires several items be read into the record at the beginning of each public hearing. I will read these provisions once, and they will be applicable to both public hearings tonight.

Conflicts of Interest/Ex-Parte Contacts/Bias

The Council is required to disclose any conflicts of interest and ex-parte contacts that we have with the proposals or applicants — this is whether we have any financial or other personal interest in either proposal and whether we have spoken with anybody about either proposal outside of this hearing. Also, Councilors may only participate if they can do so without un-due bias either for or against either application.

Do any Councilors wish to make disclosures?

Mayor Ungricht disclosed he and the applicant at 169 4th Street discussed the application process.

Mayor Ungricht declared he had stopped by and discussed the setback requirement and approval process with the applicant at 246 S. Main Street.

In both instances, these discussions led to the initiation of the application processes.

Councilor Meier declared he received a letter on behalf of the church due to its 250 feet proximity to the land use #NCU-2016-01 and stated he spoke to the applicant at 246 S. Main.

Councilor Drill offered to recuse herself due to her employment an employment and familial relationship with contractor, Bob Young working on 169 4th Street location. Councilor Drill stated she would recuse herself on the 169 4th Street portion of the public hearing.

Renata Wakely of Cog suggested to staff and Council that is ultimately up to the individual Councilor to make their decision to step down from participation on an issue. Ms. Wakely said she did not feel the connection of Councilor Drill and the contractor nor monetary gain was an issue of concern for Councilor Drill.

Councilor Drill chose not to recuse herself from Public Hearing- Type III Nonconforming Use 169 4th Street based on comments by Ms. Wakely.

Mayor Ungricht continued to read aloud:

Are there any challenges from the audience as to conflicts of interest, ex-parte contacts, or bias related to any member of the Council?

There were no comments.

Mayor Ungricht resumed reading aloud:

Required Statements

The applicable substantive criteria upon which this case will be decided are found in Section 3.205 of the Falls City Zoning and Development Ordinance.

Your testimony, arguments, and evidence must be directed toward these criteria or other criteria in the comprehensive plan or development code that you believe apply. (ORS 197.763(5)(b).)

Failure to raise an issue accompanied by statements or evidence sufficient to afford the decision maker or other people an opportunity to respond may preclude appeal of a decision on this application based on that issue. (ORS 197.763(5)(c).)

Failure of the applicant to raise constitutional or other issues relating to proposed conditions of approval with sufficient specificity to allow the local government or its designee to respond to the issue precludes an action for damages in circuit court. (ORS 197.796(3)(b).)

Public Hearings

B. Public Hearing- Type III Non-Conforming Use 246 S. Main Street

I now open the Public Hearing for application # NCU-2016-01 at 6:20 PM.

I call on our City Planner Renata Wakely to present the staff report for the first application.

Renata Wakely, COG/Falls City Planner stood and spoke. She summarized the land use staff report for application #NCU-2016-01 explaining the applicant desired to replace a porch that was originally built short of the required setback and in doing so, would simply be restoring an existing nonconforming use. This Type III process application must meet any of three specific criteria. 246 S. Main Street has been determined by staff to bear no increased impact on the neighborhood. Staff further interprets 246 S. Main Street meets the single applicable criteria of the three.

Mayor Ungricht continued reading aloud:

All persons speaking before the City Council must state their name and address for the record.

I invite the Applicant to present their case.

Repeated

David Radke, on behalf of the applicants had no comment.

I invite those in support of the application to speak.

Repeated

Janice Nuttall of 280 S. Main St., Falls City rose to speak regarding application #NCU-2016-01. Ms. Nuttall spoke in support of the reconstruction of the structure stating it is an improvement on a deteriorating building. She is happy to see the renovation. Squatters were another of her concerns from past observations.

Mayor Ungricht thanked Ms. Nuttall for her input. He suggested the issue of squatters be addressed at a regular Council meeting.

Mayor Ungricht resumed reading aloud:

I invite those opposed to the application to speak.

Repeated

No comments.

I invite those who are neither for nor against the application to speak.

Repeated

No comments.

I invite public agencies to comment.

Repeated

No comments.

I invite the Applicant to present any rebuttal to the testimony presented.

Repeated

No comments.

I close the Public Hearing for application # NCU-2016-01 at 6:30 PM.

[If there is no request to keep the record open] Now it is time for Council deliberation and discussion.

A motion was made by Councilor D. Sickles and seconded by Councilor Meier that the City Council of the City of Falls City approve the alteration/replacement/restoration of a nonconforming structure at 246 S. Main Street based upon the finding set forth in the staff report for application #NCU-20146-01. The Mayor is authorized to sign a final decision approving the application and incorporating the finding from the staff report. Motion carried 7-0-0. Ayes: Mayor Ungricht, Lori Jean Sickles, Jennifer Drill, Tony Meier, Gerald Melin, Dennis Sickles, Julee Bishop.

Renata Wakely clarified staff's recommendations and findings had been thoroughly researched and approved by COG. Council was not placed in a position to decide precedence on the land use items in question. Council's responsibility was to determine approval based on staff interpretation of the City's governing documents, findings and recommendation based thereon.

Mayor Ungricht proceeded to the next land use application public hearing reading aloud the Script for Non-Conforming Use Public Hearings:

C. Public Hearing- Type III Non-Conforming Use 169 4th Street

I now open the Public Hearing for application # NCU-2016-02 at 6:35 PM.

I call on our City Planner Renata Wakely to present the staff report for the second application.

Renata Wakely, COG/Falls City Planner stood and spoke. She summarized the staff report explaining the applicant desired to replace a structure of a nonconforming use. This Type III process application must meet any of three specific criteria. Two are not applicable and this application meets the one criterion that applies.

Mayor Ungricht continued reading aloud:

All persons speaking before the City Council must state their name and address for the record.

I invite the Applicant to present their case.

Bob Young, Contractor residing at 2300 Black Rock Road, Falls City spoke on behalf of Applicant regarding the accessory structure to be built on the same footprint and foundations as the prior structure built in the 1950's.

Mayor Ungricht resumed reading aloud:

I invite those in support of the application to speak
Repeated

I invite those who are neither for nor against the application to speak.
The invitation was repeated.

I invite public agencies to comment.
Repeated

I invite the Applicant to present any rebuttal to the testimony presented.

Repeated

I close the Public Hearing for application # NCU-2016-02 at 6:42 PM.

[If there is no request to keep the record open] Now it is time for Council deliberation and discussion.

A motion was made by Councilor D. Sickles and seconded by Councilor Melin that the City Council of the City of Falls City approve the replacement of a nonconforming structure at 169 4th Street based upon the finding set forth in the staff report for application #NCU-20146-02. The Mayor is authorized to sign a final decision approving the application and incorporating the finding from the staff report. Motion carried 7-0-0. Ayes: Mayor Ungricht, Lori Jean Sickles, Jennifer Drill, Tony Meier, Gerald Melin, Dennis Sickles, Julee Bishop.

Ms. Wakely spoke in regards to non-conforming needs that may be done by the City Recorder and Administrative review alone, specifically Section 3.205 G. of the Falls City Zoning and Development Ordinance-

NONCONFORMING USES

Alteration, Restoration, or Replacement

1. The City Recorder shall authorize restoration or replacement of a nonconforming use when restoration or replacement is made necessary by fire, casualty, or natural disaster and does not exceed 50 percent of the value of the original structure, provided the physical restoration or replacement is lawfully commenced within one year of the damage or destruction.
2. The Planning Commission, subject to the quasi-judicial review procedure, may extend the restoration or replacement period for an additional 6 months. In no Falls City ZDO 154 case shall the total restoration or replacement period exceed 18 months. Requests for extension of restoration or replacement period shall be submitted in writing 30days prior to the expiration date of the restoration or replacement period.
3. The alteration of a nonconforming use may be authorized by the Planning Commission, subject to the quasi-judicial review procedure, provided that the applicant demonstrates that the proposal satisfies the following criteria:
 - a. The alteration of structures would result in a reduction in nonconformity of the use, or would have no greater adverse impact on the neighborhood;
 - b. A change in use to another nonconforming use may be permitted if it is of the same or less intensity of use;
 - c. The alteration of a nonconforming single-family residence that does not involve a change in use is authorized without Planning Commission approval.

In the future Ms. Wakely said Council might wish to direct staff to amend the Code in order to allow staff to review these of applications without Public hearings. Council would consider her suggestion and thanked her for coming.

Renata Wakely and Garrett Jensen left the meeting at 6:54 pm.

D. Resolution 06-2016, Authorizing Application for Land Acquisition Grant

This resolution authorizes a grant application submittal for the funding of the Falls City Alliance portion of the Falls property adjoining Michael Harding Park.

A motion was made by Councilor Meier and seconded by Councilor L. Sickles that the City Council of the City of Falls City approve Resolution 06-2016, a resolution allowing the City Manager to sign the application for the Oregon Parks and Recreation 2016 grant cycle for land acquisition at the Michael Harding Park. Motion carried 6-0-0. Lori Jean Sickles, Jennifer Drill, Tony Meier, Gerald Melin, Dennis Sickles, Julee Bishop.

E. Volunteer Jail Cleanup Project

A person acting in the role of Project Manager would limit liability to the City and ensure worker's compensation coverage paperwork is properly completed for all volunteers as well as to oversee safety. Mayor Ungricht clarified this is a cleanup project to wash and bleach the interior of the jail in preparation for painting.

A motion was made by Councilor Meier and seconded by Councilor Bishop that that the City Council of the City of Falls City approve a volunteer cleanup of the jail building providing the Historic Landmarks Commission assign a project manager to serve as liaison to City Hall for worker's Compensation coverage reporting. Motion carried 6-0-0. Lori Jean Sickles, Jennifer Drill, Tony Meier, Gerald Melin, Dennis Sickles, Julee Bishop.

F. Resolution 07-2016 Republic Services Rate Increase

Republic Services has requested a 1.8% increase by June 1, 2016. Such increases are built into the City's contract with Republic Services and governed by guidelines not to exceed 4% per annum, as per Ordinance 533-2013. A positive aspect of this clause is a result in benefits including lower rates and recycling services within the city limits not offered elsewhere to customers. Mayor Ungricht noted that the City has no other option for solid waste service providers in close proximity.

Mayor Ungricht apologized for not including the contract for Council review and offered copies to those who wished to have one.

Brief discussion followed regarding the remaining 3-4 years length of the contract, the increase based on the Consumer Price Index for Urban Wage Earners and Clerical Workers for the Portland-Salem Area, and prior Council decision to accept the contract terms. In addition, it was noted that Republic Services is responsible for the City's annual Spring Clean event at no cost for services to the City.

Councilor Drill did not agree with the increase and requested a copy of the contract.

Mayor Ungricht opened the public hearing raising the fees for solid waste services at 7:06 pm.

Public comments-none.

Mayor Ungricht closed the public hearing raising the fees for solid waste services at 7:06 pm.

A motion was made by Councilor L. Sickles and seconded by Councilor Bishop that the City Council of the City of Falls City adopt resolution 07-2016, A Resolution establishing a schedule of solid waste rates, fees

and charges pursuant to Chapter 53; and repealing all prior fee schedules for solid waste, establishing a schedule of solid waste fees; providing an effective date. Motion carried 5-1-0. Ayes: Lori Jean Sickles, Tony Meier, Gerald Melin, Dennis Sickles, Julee Bishop. Nays: Jennifer Drill

G. Notice of Violation 673 Bryant Street

A motion was made by Councilor Drill and seconded by Councilor Meier that the City Council of the City of Falls City hereby determines that a nuisance has been found to exist at 673 Bryant Street and authorizes staff to post a notice and send a copy of the notice by registered mail to the owner of the property at the last known address. Motion carried 6-0-0. Ayes: Lori Jean Sickles, Jennifer Drill, Tony Meier, Gerald Melin, Dennis Sickles, Julee Bishop.

H. Notice of Violation 256 Pine Street

A motion was made by Councilor Drill and seconded by Councilor L. Sickles that the City Council of the City of Falls City hereby determines that a nuisance has been found to exist at 256 Pine Street and authorizes staff to post a notice and send a copy of the notice by registered mail to the owner of the property at the last known address. Motion carried 6-0-0. Ayes: Jennifer Drill, Tony Meier, Gerald Melin, Dennis Sickles, Julee Bishop

Mayor Ungricht noted that the squatters had the vacated 256 Pine Street location since the writing of this report. Mayor Ungricht thanked Sheriff Garton who was in attendance, for aiding in removing the squatters.

I. RFP City Engineer

Mayor Ungricht has been working with FEMA to replace the December storm damaged bridge at Dutch Creek Crossing. FEMA will pay for 75% of the replacement cost and another funding source will pay the remaining 25%. Due to the fish and aquatic life an alternative arch bridge or other design may be needed. He feels a City Engineer on retainer would be prudent at this stage. This would allow mitigations to take place on an expertise level and services would be paid on an as needed basis. Mayor Ungricht endeavors to set this project up to be accomplished over an expected long period of time. He has also been working with the County on this project and hopes they will step in and oversee the project. Mayor Ungricht could then direct his focus on the busy infrastructure of the City.

Mayor Ungricht noted that the RFP was merely in draft stage and that specific dates etc., would need to be inserted.

The Public Works Committee stated they would serve as the selection committee for obtaining a City Engineer of Record.

A motion was made by Councilor L. Sickles and seconded by Councilor Meier that the City Council of the City of Falls City approve staff to submit an RFP and advertise the RFP for obtaining a City Engineer of Record and appoint the following to serve on the selection Committee.

A motion was amended by Councilor L. Sickles and seconded by Councilor Meier to approve staff to submit an RFP and advertise the RFP for obtaining a City Engineer of Record and allow Mayor Ungricht to appoint members to serve on the selection committee. Motion carried 6-0-0. Ayes: Lori Jean Sickles, Jennifer Drill, Tony Meier, Gerald Melin, Dennis Sickles, Julee Bishop.

J. Notice of Violation 239 Sheldon Avenue

A motion was made by Councilor Drill and seconded by Councilor L. Sickles that the City Council of the City of Falls City hereby determines that a nuisance has been found to exist at 239 Sheldon Ave and authorizes

staff to post a notice and send a copy of the notice by registered mail to the owner of the property at the last known address.

K. Debera Ellis resignation from the Planning Commission.
Informative. No vote needed.

7) Correspondence, Comments and Ex-Officio Reports

A. Mayors Report

Mayor Ungricht reported the Budget Committee packets would be released in the following week. He stated the budget process took considerably longer than he could have anticipated. He was confident the finished budget proposal would be pleasing to Council.

The South Main overlay project is coming along. Mayor Ungricht informed Council that ODOT has approved his proposal for contracting the work. Mayor Ungricht said he has three separate contractors who will most likely perform site visits May 7th, 2016 and follow up with bids.

Those required to submit SEI forms must do so by April 15 or be fined \$10.00 per day for the first two weeks, then \$50.00 per day thereafter until submitted.

Mike Henry HBH Project Engineer on the City's Master Water plan was present at the meeting. Mayor Ungricht hoped to have the Income Survey started soon by COG or PSU after their board meeting. Natalie James also with HBH handed out the first four sections of the Water Master Plan draft. Copies of the introduction, regulations and requirements, study area data and regulatory-health, and identifying the existing water system were given to Council and staff. The Project Engineer did not want to take time to discuss the information in depth but promised to keep Public Works & Council staff informed throughout the Master Plan process.

He did share the project was in the data gathering stage. Over the next few months, the firm will be digging deep into information related to the project. Measurements for pipes and fittings will be checked for accuracy. Intakes will get close review. Dead end piping will need to be looped. Leaks will be identified and discussed. HBH found PVC pipe joints were glued incorrectly. Transite or AC (asbestos-cement) piping is actually better in the system than PVC. However, even the Transite is reaching the end of its lifespan.

Council noted that pipes were identified on HBH Map 2 and asked if shut off valves had been located and identified. Mr. Henry responded no but discussion has taken place. HBH will be in contact with Don Poe, Lead Worker of Public Works to get a map showing shut off valve locations and verify correct coordinates.

Council thanked HBH for coming.

Sheriff Garton invited questions from Council. The recent community meeting held at the Breadboard brought attention to community needs and concerns. Brent DeMoe Manager of Polk County's Family & Community Outreach program will be a key contact for helping to get these needs met for the community. Sheriff Garton mentioned juveniles in parks and figuring out a strategy to approach these kids without them hiding or running off.

Council inquired as to the best way to report illegal activities to the Sheriff's office. A standard phone call or use online reporting which will generate an email law enforcement will respond to. The Sheriff encouraged citizens to report every time there is a violation. He stated if something is reported only one time, they are less likely to respond to that incident. Council asked if photos

could be taken of drug deals observed and submitted to authorities. Sheriff Garton responded yes, as long as one is comfortable doing so.

Councilor Meier commented that recent patrol car activity has greatly slowed traffic down. However, there was increased activity behind the Seventh Day Adventist Church and evidence of gas thefts. Councilor Drill added input confirming gas thefts in the community. The Sheriff had no knowledge of gas thefts in the area and stated that none had been reported.

Sheriff Garton informed Council there is only five or six long term Deputies on staff. Twelve that are new will need time to learn the area and we could be helpful in educating them. For example, where the Upper Park is located. Seven new Polk County Sheriff's Office staff members are due to graduate from the Police Academy in May & June. These latter law enforcement personnel do not have much experience outside of the Academy. They will also need help and support from the community.

Council thanked Sheriff Garton for coming.

B. Council Reports

Councilor D. Sickles said progress being made with the new school gymnasium project. He mentioned the upcoming Town Hall meeting and a School Board meeting. He urged everyone that could attend to do so.

Mayor Ungricht suggested a work session with Council and the School Board. He stressed the need to work together for mutual success.

Brief discussion took place. The School Board was to meet the following Monday April 18. Mayor Ungricht confirmed Town Hall was April 26.

Councilor Melin announced that the new EDC Committee will meet Friday April 15 and more projects are coming up.

Councilor Meier touched on the topic of ethics in regards to a Falls City Alliance. Mayor Ungricht assured him the City Attorney said no conflict of interest existed.

Councilor Drill gave a Town Hall follow up on Neighborhood Watch efforts. Block Captains were assigned to monitor 5-6 blocks each. Several will seek training from the sheriff's department. If anyone is interested, contact Councilor Drill, Ms. Houghtaling or Mayor Ungricht.

Councilor Drill also requested bark dust be placed in the lower park in wet areas. Mayor Ungricht informed Council plans were in process to have truckloads delivered from a mill in Willamina for \$10.00 per load to cover cost of fuel. KC Wagner, son of Corky Wagner of Public Works has obtained several vouchers for the City.

Councilor Drill requested a status update on the Falls Property. Mayor Ungricht referred to present Agenda Item D, Resolution 06-2016, Authorizing application for land acquisition grant. He added no further payments to the City have been made by the Alliance. The City should do a presentation in July and hear news of this grant decision by end of September 2016.

Councilor L. Sickles thanked everyone who helped with the annual Easter Egg Hunt. She looks forward to next year's event.

Clerk Hewitt announced Polk County's Hazardous Waste Collection date, May 7, 2016.

Mayor Ungricht issued a handout to Council and staff. He asked them to read the handout and formulate thoughts regarding Council direction on the City's Infrastructure projects. (Exhibit A)

8) Council Announcements

9) Adjourn

The meeting adjourned at 7:50 pm.



Mayor Terry Ungricht

Attested:



City Clerk JoHanna Hewitt

AGENDA REPORT

TO: CITY COUNCIL
FROM: DOMENICA PROTHEROE THROUGH MAYOR UNGRICHT
SUBJECT: NOTICE OF VIOLATION – 239 SHELDON AVE
DATE: 04/12/2015

SUMMARY

City Hall received a complaint about the property.

BACKGROUND

Staff prepared a Notice of Violation listing the code violations for the property (Exhibit A Notice of Violation for 239 Sheldon Ave). Municipal Code Chapter 90, Section 29 requires that Council makes a determination of the Nuisance prior to posting a Notice of Violation. **

Municipal Code Chapter 90: Nuisances, Section 29 Abatement Notice (1) Posting. Upon determination by the Council that a nuisance as defined in this or any other ordinance of the city exists, the council shall forthwith cause a notice to be posted on the premises where the nuisance exists, directing the owner or person in charge of the property to abate the nuisance.

(NOTE: ** Section 18. Weeds and Noxious Vegetation Notice of Violation may be approved by the city manager/code enforcement officer (authorized representative or their designee) under the Nuisance Code)

If Council determines that a nuisance has been found to exist at 239 Sheldon Ave, staff will register the Notice of Violation with Compliance Connections.

PREVIOUS COUNCIL ACTION

Council has discussed the condition of this property on several occasions.

ALTERNATIVES/FINANCIAL IMPLICATIONS

Take no action, the resulting cost of which is unknown.

STAFF RECOMMENDATION

Allow staff to post the Notice of Violation at 239 Sheldon Ave and send a copy to the owner of record.

EXHIBIT

Exhibit A – Notice of Violation 20160310A for 239 Sheldon Ave

PROPOSED MOTION

I move that the City Council of the City of Falls City hereby determines that a nuisance has been found to exist at 239 Sheldon Ave and authorizes staff to post a notice and send a copy of the notice by registered mail to the owner of the property at the last known address.



City of Falls City, Oregon
299 Mill Street, Falls City, Oregon 97344

www.fallscityoregon.gov
Phone: 503.787.3631
Facsimile: 503.787.3023

NOTICE OF VIOLATION

DATE OF REPORT: April 11, 2016 DATE POSTED: April 15, 2016
CASE NUMBER: 20160310 A
VIOLATION(S): Condition of property attracts rats, weeds and noxious vegetation, attractive nuisances, accumulation of objects.

PROPERTY OWNER: Ronald Lee Hagedorn ETAL
ADDRESS/LOCATION: 239 Sheldon Ave
MAP/TAX LOT: 08621CA02100 08621CA02100P1
ZONING: R Residential
SURROUNDING USES: Residential

COMPLAINT

03/10/2016 – Unsafe conditions of vacant property

INVESTIGATION RESULTS

Site visit performed 04/08/2016.

- Water at the property has been shutoff for nonpayment.
- Active Utility lien on property.
- Overgrown blackberry bushes.
- Weeds and grass over 10 inches high.
- Scattered lumber on property may be attractive, dangerous, and accessible to children.
- Several unguarded large wooden boxes that may be attractive, dangerous and accessible to children.
- Collapsed porch and unsecured nonconforming manufactured home presents a hazard and attractive nuisance.
- Large pile of tires.

CODE VIOLATIONS NOTED

Falls City Municipal Code Chapter 90.18. WEEDS AND NOXIOUS VEGETATION.

(1) Definitions. For purposes of this section the following definitions apply:

“Noxious vegetation” means:

- a. Poison oak;
- b. Poison ivy;
- c. Blackberry bushes that extend into public property or across a property line;
- d. Vegetation that is:
 - a. A health hazard,
 - b. A fire hazard,
 - c. A traffic hazard because it impairs the view of a public thoroughfare or otherwise makes use of the thoroughfare hazardous;
- e. Weeds or grass more than ten (10) inches high;

- f. Weeds or grass going to seed;
 - g. Noxious vegetation does not include agricultural crop grown on property zoned for agricultural purposes, unless that crop is a health, traffic or fire hazard.
2. Noxious vegetation is declared to be a nuisance.
 3. Owner Responsibility. No owner or person in charge of property may allow noxious vegetation to be on the person's or her property or on the parking strip or sidewalk area abutting the property. It is the duty of an owner or person in charge of property to cut down or to destroy noxious vegetation.

Abatement by the Owner:

a. Within the time allowed in this section the owner of the property shall remove the noxious vegetation or show that no nuisance exists.

b. The owner of property protesting that no noxious vegetation in fact exists shall file with the Authorized Representative a written statement that shall specify the basis for so protesting. Based upon a physical inspection of the property the Authorized Representative or designee shall make a written determination of whether or not the noxious vegetation exists. Should the Authorized Representative determine that the nuisance does exist, the owner or person in charge of the property may either abate the vegetation within five (5) days after notice of the Authorized Representative's decision or may appeal the decision to the City Council by filing a written notice of appeal with the City Recorder within five (5) days from the date of the decision. If the Council determines that noxious vegetation does in fact exist, the owner or person in charge of the property shall, within five (5) days after the council determination, abate the noxious vegetation.

a. Abatement by the City.

a. If the noxious vegetation has not been removed within the time permitted, the Authorized Representative shall cause the vegetation to be removed. The officer charged with abatement shall have the right to enter into or investigate or cause the removal of the noxious vegetation.

- a. The cost of abatement shall be charged at actual costs incurred by the city, including but not limited to costs of removal of the noxious vegetation, administrative costs and certified or registered letter mailing costs.

(f) Assessment of Costs. The Authorized Representative by registered or certified mail shall forward to the owner of the property a notice stating the total amount of the cost of abatement. At a minimum, the city shall utilize the records of the Polk County Assessor and the city utility department to determine the last known address.

If the owner of the property does not pay the costs of the abatement within thirty (30) days from the date of the notice of costs, the city may take whatever lawful means available to collect the costs.

Falls City Municipal Code Chapter 90.12. RATS. No person owning or occupying any property within the city shall allow a condition to exist upon the property that condition attracts wild rats, gives wild rats access to food, or creates shelter accessible to wild rats. Such prohibited conditions shall include, but are not limited to the following:

- (2) Allowing any accumulation of rubbish, trash, junk or other material that by reason of its decayed or unused condition affords shelter to wild rats.

(3) Maintain vacant (unsecured) or damaged structures, including out-buildings, dwellings,(including manufactured homes) and recreational vehicles that may afford shelter to wild rats.

Falls City Municipal Code Chapter 90.16 (1) ATTRACTIVE NUISANCES No Person or person in charge of any premises shall permit: a. Any unguarded machinery, equipment, or other devices on such premises that is attractive, dangerous, and accessible to children. b. Lumber, logs, or piling placed or stored on such property in a manner so as to be attractive, dangerous, and accessible to children.

Falls City Municipal Code Chapter 90.23 ACCUMULATION OF OBJECTS. It is unlawful for any person to place, leave, store, dump or permit the accumulation on any open lot or other premises, any lumber, yard debris, boxes, barrels, bricks, stones, scrap metal, motor vehicle bodies or parts, or similar materials, rubbish or any articles of junk, that are not removed within fourteen (14) days and that affect the health, safety or welfare of the city. Excepted from this prohibition are construction materials for ongoing construction projects, neatly stacked firewood and compost piles consisting of vegetable matter.

FALLS CITY MUNICIPAL CODE CHAPTER 90.28 DECLARATION OF NUISANCE, GENERAL NUISANCE.

(1) The acts, conditions, or objects specifically enumerated and defined in this Ordinance are declared to be public nuisances and such acts, conditions, or objects may be abated by any of the procedures set forth in Section 30 through Section 34 of this Ordinance.

(2) In addition to those nuisances specifically enumerated within this Ordinance, every other thing, substance, or act that is determined by the council to be injurious or detrimental to the public health, safety, or welfare of the city is hereby declared to be a nuisance and may be abated as provided in this Ordinance.

(D) Change of ownership or occupancy of premises found delinquent shall not be cause for reducing or eliminating these charges.

(Ord. 411, passed 6-4-1985)

CORRECTION REQUEST

The condition in which the property at 239 Sheldon Ave has been found is in violation of the aforementioned codes, and must be brought into compliance.

City code allots the time period of 10 days (**Municipal Code 90.30(1)**) for the removal of the nuisance or show that no nuisance exists. Therefore, please begin efforts to bring the property in question into compliance no later than April 25, 2016. Failure to comply with this request may result in City Abatement (Exhibit A).

Thank you for your cooperation in complying with city requirements. If you have any questions or concerns, please feel free to contact the City of Falls City (503) 787-3631.

Exhibit A – Abatement of Nuisance(s):

Section 30. ABATEMENT BY THE OWNER - Property Owner's Responsibility to Act.

- (1) Within ten (10) days after the posting and mailing of the notice as provided in Section 29, the owner or person in charge of the property shall remove the nuisance or show that no nuisance exists.
- (2) The owner or person in charge protesting that no nuisance exists shall file with the City Recorder a written statement that shall specify the basis for so protesting.
- (3) The statement shall be referred to the council as a part of the council's regular agenda at the next succeeding meeting. At the time set for consideration of the abatement, the owner or other person may appear and be heard by the council and the council shall thereupon determine whether or not a nuisance in fact exists and such determination shall be entered in the official minutes of the council. Council determination shall be required only in those cases where a written statement has been filed as provided.
- (4) If the council determines that a nuisance does in fact exist, the owner or other person shall within ten (10) days after such council determination abate such nuisance.

Section 31. ABATEMENT BY THE CITY

- (1) If within the time allowed the owner or person in charge of the property has not abated the nuisance, the council may cause the nuisance to be abated.
- (2) The officer charged with abatement of such nuisance shall have the right at reasonable times to enter into or upon property to investigate or cause the removal of a nuisance.
- (3) The Authorized Representative shall keep an accurate record of the expense incurred by the city in abating the nuisance and shall include therein a charge of twenty (20) percent of the expense for administrative overhead.

Section 32. ASSESSMENT OF COSTS.

- (1) The Authorized Representative, by registered or certified mail, postage prepaid, shall forward to the owner or person in charge of the property a notice stating:
 - (a) The total cost of abatement including the administrative overhead.
 - (b) That the cost as indicated will be assessed to and become a lien against the property unless paid thirty (30) days from the date of the notice.
 - (c) That if the owner or person in charge of the property objects to the cost of the abatement as indicated, the objector may file a notice of objection with the Authorized Representative not more than ten (10) days from the date of the notice.
- (2) Objections to Assessment. Upon the expiration of ten (10) days after the date of the notice, the council in the regular course of business shall hear and determine the objections to the costs to be assessed.
- (3) City liens. If the costs of the abatement are not paid within thirty (30) days from the date of the notice, an assessment of the costs as stated or as determined by council shall be made by resolution and shall thereupon be entered in the docket of city liens and, upon such entry being made, shall constitute a lien upon the property from that the nuisance was removed or abated.
- (4) Lien enforcement. The lien shall be enforced in the same manner as liens for street improvements are enforced, and shall bear interest at the rate allowed by law, or such lesser rate as the City Council may from time to time provide. Such interest shall commence to run from date of entry of the lien in the lien docket.
- (5) Assessment error. An error in the name of the owner of the property as listed with the Polk County Assessors Office and the City's utility department, shall not void the assessment nor will a failure to receive the notice of the proposed assessment render the assessment void, but it shall remain a valid lien against the property.
- (6) Recovery of Public Costs for On-site Assessment and Clean Up of Property Declared Public Health Nuisance.

(a) If, after service of notice of the Declaration of Public Health Nuisance, the property owner fails to arrange appropriate assessment and clean up, the Authorized Representative is authorized to proceed in a prompt manner to initiate the on-site assessment and clean up.

(b) If the city is unable to locate the property owner within ten days of the Declaration of Public Health Nuisance, the city is authorized to proceed in a prompt manner to initiate the on-site assessment and clean up.

(c) The city may abate the nuisance by removing the hazardous structure or building, or otherwise, according to Oregon Revised Statutes Chapter 475.

(d) If the city abates the public health nuisance, in addition to any other legal remedy, the city shall be entitled to recover all costs plus an additional 25 percent of the costs for administration. The city may recover costs by civil action against the person or persons who own the property.

Section 34. APPLICATION OF ORDINANCE The procedure provided by this Ordinance is not exclusive but is in addition to procedures provided by other city ordinances.

Polk County Real Property Assessment Overview

FOR ASSESSMENT YEAR 2016
 ASSESSMENT QUESTIONS: (503) 623-8391 *** TAX QUESTIONS: (503) 623-9264
 NOT OFFICIAL VALUE

Mailing Name HAGEDORN RONALD LEE ETAL
Agent
In Care Of
Mailing Address 5127 NIGHTCAP ST SE
 SALEM, OR 97306

Account Status Active
Legal Description See record.

Property Class 101 **Unit Info** View Floorplan
RMV Class 101 17204-2

Situs Addresses

239 SHELDON AVE FALLS CITY, OR 97344

Value Summary

Code Area		AV	RMV	MAV		RMV Exception
5701	Land		\$37,180		Land	\$0
	Improvements		\$4,100		Improvements	\$0
Code Area Total		\$41,280	\$41,280	\$76,060		\$0
GRAND TOTAL		\$41,280	\$41,280	\$76,060		\$0

Land Breakdown

Code Area	Plan Zone	Value Source	Size	Land Class
5701	R	Residential Site	1.00 acres	
	R	Residential Site	0.17 acres	
Code Area Total			1.17	
GRAND TOTAL			1.17	

Improvement Breakdown

Stat Class 131 | Residence | One story

Site	Building	Code Area	Year Built	Sq Ft	Image
1	1	5701	1935	1,152	View Improvement Image
First Floor - 1,152 sq ft			[Bsbrd/Wall]		
1	Living Room	1 Kitchen	2 Bedroom	1 Full Bath	
Garage (Attached) - 540 sq ft			[Unfinished]		

Stat Class 300 | Farm bldg | GP BUILDING

Site	Building	Code Area	Year Built	Sq Ft	Image
1	2	5701		672	View Improvement Image

Tax Information

Tax Account	Tax Year	Code Area	Original Tax Due
296214	2015	5701	519.89

This tax information does not include adjustments or corrections. Please contact the Tax Office for additional information.

City, School Districts, and Fire Districts

Code Area	District Name	Type
5701	FALLS CITY	CITY
	CHEMEKETA COMMUNITY COLLEGE	SCHOOL
	FALLS CITY SD 57	SCHOOL
	FALLS CITY SD 57 LOCAL OPTION	SCHOOL
	WILLAMETTE ESD	ESD

This report does not display every tax district that may apply to this account. Please contact the Tax Office for additional information.

Sales History

Date	Document (Source ID)	Type	Price	Grantor (Seller)	Grantee (Buyer)
25-Jan-2011	2011-844	B&S		HAGEDORN RONALD L & MARLENE J	HAGEDORN RONALD LEE ETAL
21-Jul-2010	2010-6950	B&S		HAGEDORN RONALD	HAGEDORN RONALD L & MARLENE J
12-May-2010	2010-6744	SHRF	\$95,430	SCHONING MICHELLE A	HAGEDORN RONALD
14-Mar-2006	2006-4121	DEED	\$61,000	YARBROUGH LAURA MAXINE	SCHONING MICHELLE A

Special Assessments

Code Area	Description	Year	Acres	Amount
5701	OR FORESTRY FIRE SURCHARGE	2016	0.00	47.50
5701	OR FORESTRY FIRE TIMBER	2016	1.17	18.75

Notations

Code Area	Notation	Years	Value	Tax
5701	FP/RFPD OVERLAP ZONE - NO CODE SPLIT FORESTRY PER ACRE PROTECTION CHARGE			

Manufactured Structure Account(s) (5701) P-451033

Account 451033 Map 08621CA02100P1 Code Area - Tax ID

Polk County Real Property Assessment Overview

FOR ASSESSMENT YEAR 2016

ASSESSMENT QUESTIONS: (503) 623-8391 *** TAX QUESTIONS: (503) 623-9264

NOT OFFICIAL VALUE

Mailing Name
Agent
In Care Of
Mailing Address

Account Status Active
Legal Description See record.

Property Class 019 Unit Info View Floorplan
RMV Class 109 17204-2

Situs Addresses

Value Summary

Code Area	AV	RMV	MAV	RMV Exception
GRAND TOTAL	\$0	\$0	\$0	\$0

Land Breakdown

Code Area	Plan Zone	Value Source	Size	Land Class
Code Area Total			0.00	
GRAND TOTAL			0	

Improvement Breakdown

Stat Class 442 | Manf strct | MS Double wide

Site	Building	Code Area	Year Built	Sq Ft	Image
1	1	5701	1986	1,152	View Improvement Image

Tax Information

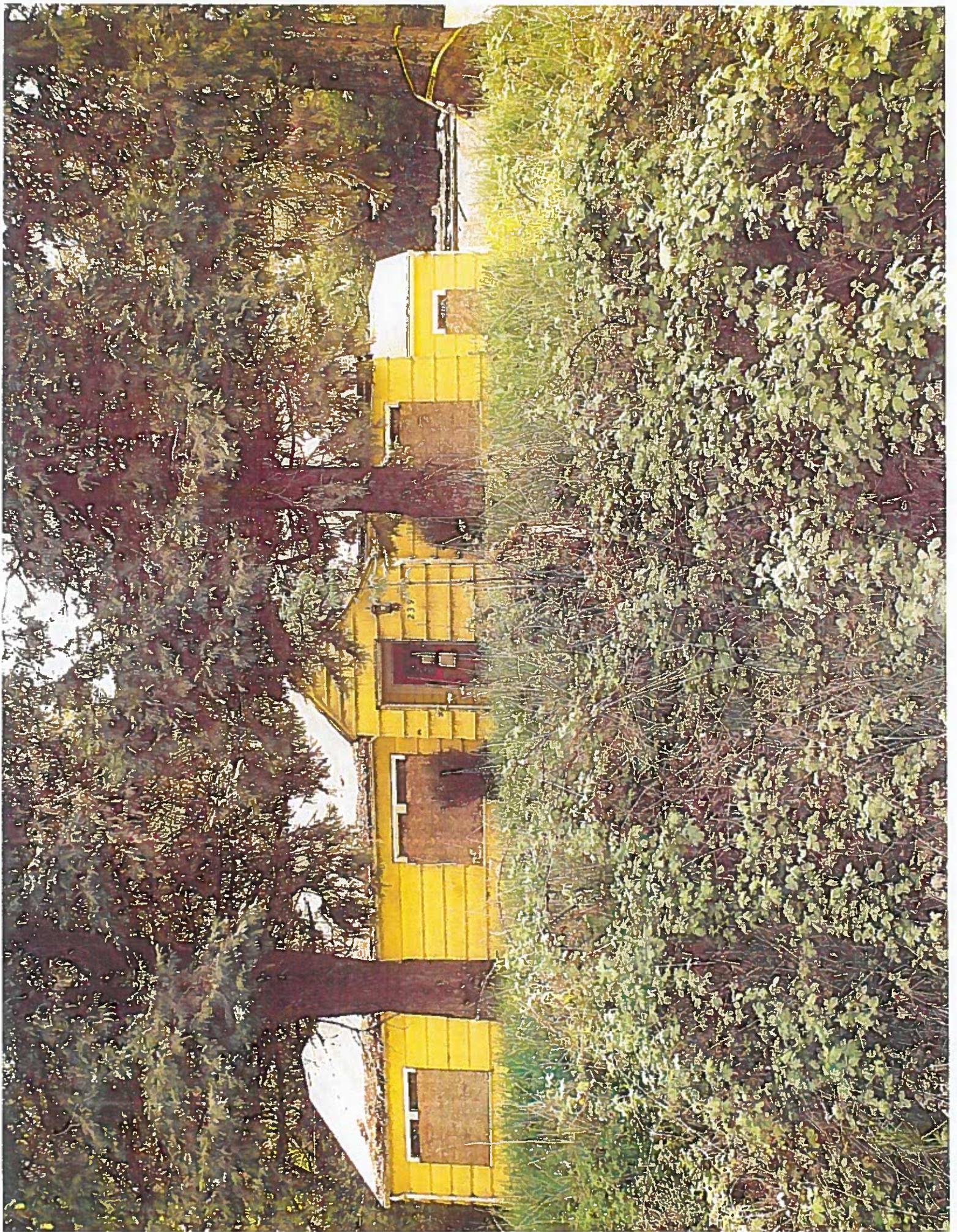
Tax Account	Tax Year	Code Area	Original Tax Due
451033	2015	5701	18.50

This tax information does not include adjustments or corrections. Please contact the Tax Office for additional information.

Sales History

Date	Document (Source ID)	Type	Price	Grantor (Seller)	Grantee (Buyer)
25-Jan-2011	2011-844	B&S			

Disclaimer: The information presented on this report was generated to support county business. The county makes every effort to keep this information current and accurate. However, the county is not responsible for errors, misuse, omissions, or misrepresentations. Please contact the Assessor's Office for additional information.

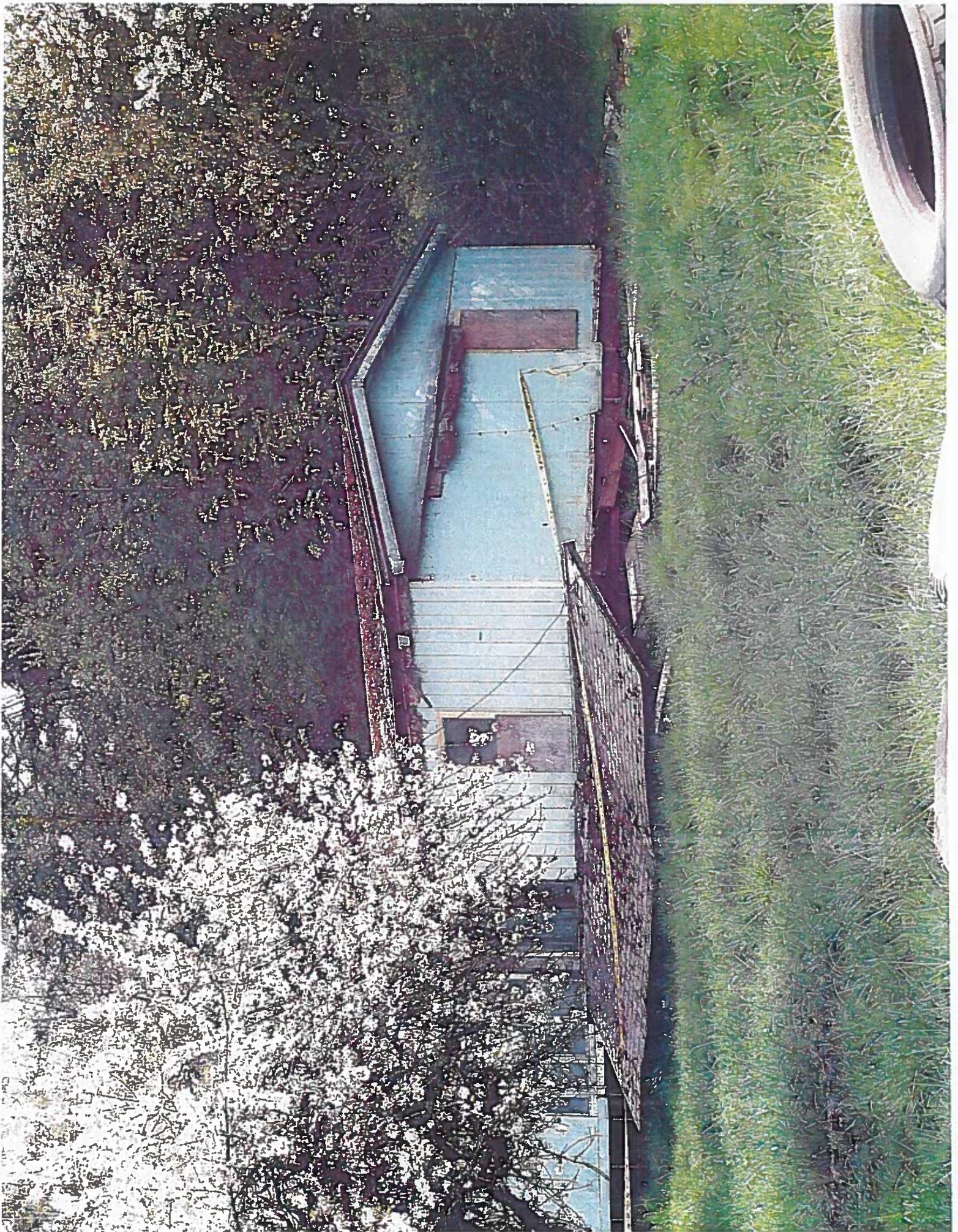


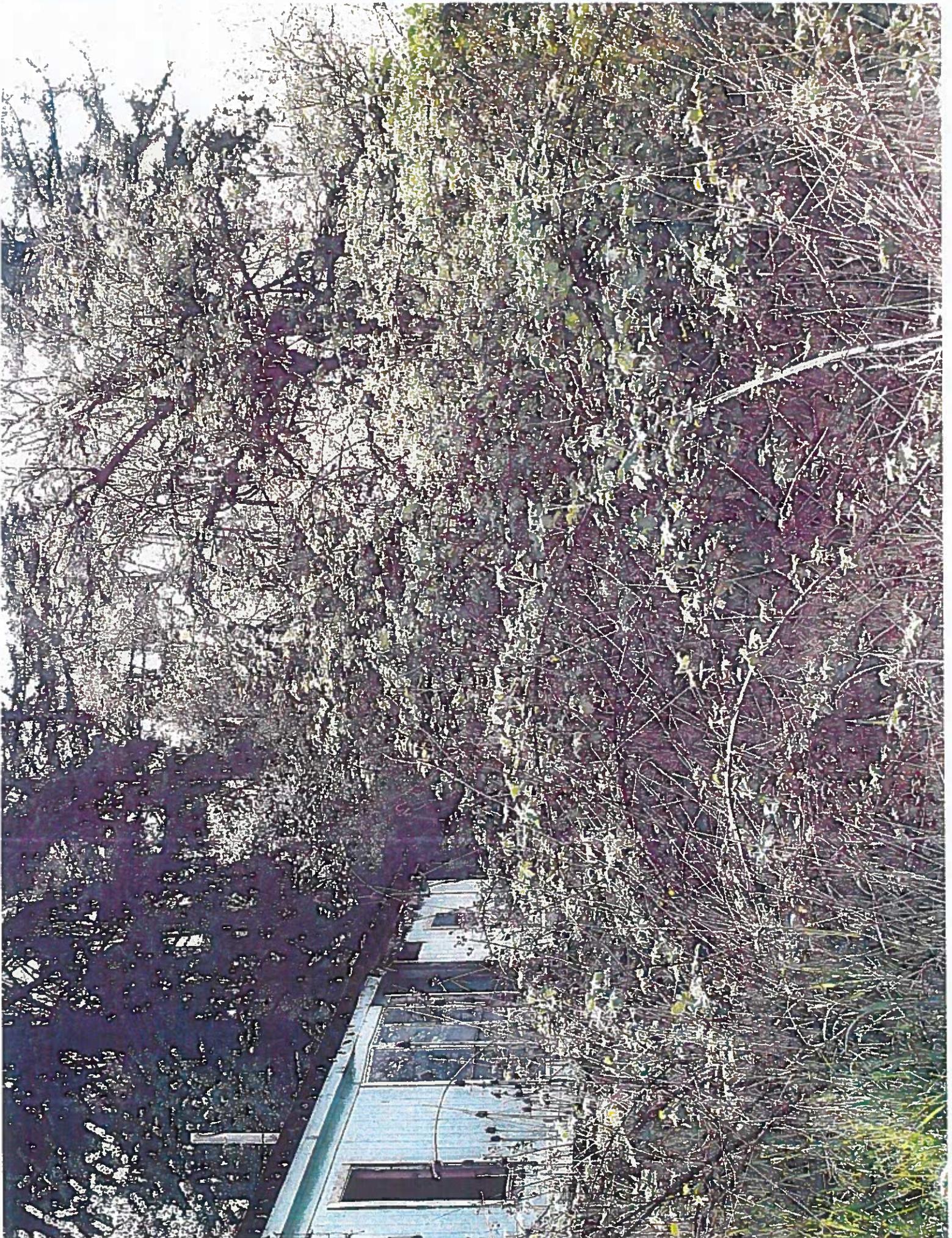












AGENDA REPORT

TO: City Council
FROM: Mayor Ungricht
SUBJECT: Debera Ellis resignation from the Parks and Recreation Committee
DATE: April 14, 2016

SUMMARY

Debera Ellis submitted his letter of resignation from Planning Commission effective April 14, 2016.

BACKGROUND AND CONSIDERATIONS

The Planning Commission is not an active Commission at this time, due to a lack of quorum.

PREVIOUS COMMITTEE ACTION	N/A
STAFF RECOMMENDATION	N/A
EXHIBIT	N/A
PROPOSED MOTION	N/A

April 14, 2016

RE: Council direction on infrastructure projects.

To: City of Falls City Councilors.

At the March meeting we discussed some of the infrastructure projects that staff is currently working on and when discussion moved to the Wastewater system upgrades there seemed to be some confusion on the process moving forward on the 2014 Facility Plan. So I wanted to open a discussion on the projects I have understood that Council wanted to move forward on. I am writing this to get all Councilors and staff on the same direction for where we want the City to be in 5, 10, and 20 years. I will list the projects by what I think is most crucial to the future viability of the City, these are my interpretations of what Council has directed as priorities. I hope that all Councilors will give input on where they prioritize these projects, keeping in mind that we are setting up projects that will take many years to accomplish.

1. The Falls City Wastewater system. The current system was installed in the 1980's and has received very little upgrading and has some maintenance issues. We currently operate under a permit from Oregon DEQ and have had compliance issues in the past, Exhibit 1, shows notices of non-compliance issued by DEQ. The City has breached the Football field with raw sewage surfacing on the field in July of 1998, September of 2001, August 2011, and there is a good chance we will have raw sewage on the field in July 2016. I assume that one of Councils goals is to remove the drain field under the football field, as stated in the Facility Plan. We have had multiple non-compliance issues with the amount of waste we have discharged to the Little Luckiamute, we are allowed so many gallons of discharge to run through the UV filter and be discharged to the river during the Winter Months, all discharges in the summer need to not exceed the permitted amount and go through the drain field. Falls city cannot discharge to the River in the summer months, June through October.

Falls City has adopted 3 or 4 Master Plans for upgrading and maintaining the system without moving on them. The Wallis report of 2002 was a Master Plan that gave five alternatives. The City adopted the Plan but did not move it through the funding stage before it expired; you have 5 years to move on a plan. The City then adopted the McGee Facility Plan in 2013 and this is what we have to move forward on. We need to understand that the City has equipment issues, pumps in the recirculation tank, condition of gravel filter, need for a new electric panel, problems with onsite septic tanks, problems with ini (ground water leaking into the system), a past agreement to abandon the Fair Oaks lift station, problems with the Carey Court lift station, and running up to the daily load limits on our permit. Just to bring the system into compliance for the future will exceed a million dollars, this still does not address any new users onto the system, especially business users.

Council decided to move on the facilities plan option 3, construct lagoons. This would eliminate the drain field and the gravel filter from School property. The recirculation tank would stay and become a pump station. Staff also thought we should fix some of the ini problems that were addressed by option 1 of the plan. Total cost will be in the neighborhood of 2.5 million. This will

give the city the Capacity to add new users, including businesses with heavier discharges, within the wastewater boundaries we currently have. This project will also allow the City to perform a second phase to add the majority of the South side of the City onto the system.

What happens if we decide not to move forward; we will keep exceeding portions of the DEQ permit, the system will keep degrading due to lack of maintenance and upgrading portions of the system, properties on the South side that have failing septic systems will need to upgrade their systems to the new regulations that require a bigger drain field and to have a second drain field, so many of the lots will not be able to put in a new septic field, they could still install a sand filter system but these are real expensive to install and maintain. Bottom line some of these lots will become unsalable. DEQ will be forced to come in and mandate a new system be installed and all of the expenses will be on the users of the system.

So either way we will be forced to upgrade our system, we can do it and have a say in the design or we can wait and have it mandated by the State and lose control of the design. I even asked what if we decided to dis-incorporate; under State law before we could dis-incorporate there would have to be a sewer and water district established, they would be facing the same regulations and problems. So my opinion is that we have no choice but to explore every available avenue to increase capacity and make sure we stay compliant with State and Federal Wastewater regulations.

We have a Facility plan that had problems through the development, but I have been assured that under the plan we can make sure that this problem is taken care for our fellow citizens for many years into the future. Staff is working in every way to seek funding that will keep the costs to our users as low as possible, but there will be a significant rate increase. The Council needs to understand the issue and defend the reasons, need, and regulations that are forcing us to move forward. I am moving forward, under your direction, on setting up an income survey. We need to show that we are 51% low to moderate income in order to qualify for Community Development Block Grant funding. This would allow us to apply for an outright grant for a majority of the funding. My dream is that we can qualify for 2 million and finance \$500,000.00, keeping rate in the low 60 dollar range. If we do not qualify for the CDBG funding, I do not know what we will do. I estimate that the rates will exceed \$85.00 without the grant. Once again the bottom line is we attempt to move forward, qualify for the grants and loans, or we wait for the State to mandate the project and pay the higher rates.

We had Public Hearings on the adoption of the Facility Plan. This was the time for the Public to have their input into the direction. We will have Public Hearings on the CDBG funds, but ultimately this decision is the Councils. Staff needs to know if this project is going to have the Councils support and backing, if not we will save the many hours of staff time and sit back and wait for the State to handle the project.

2. The Water System; it is the jewel of our town. Don and Corky have kept the treatment plant in excellent condition but it is aging. We are currently semi-non-compliant on having an updated

Master Plan, but we are in the process of updating the plan now. I foresee the plan identifying projects in distribution, intakes, and storage. In distribution the good news is we no longer have wooden transmission pipes, but we do have some old asbestos/metal pipes that will need replacing and some areas that were not looped together in the last distribution project. The intakes are in very remote areas with some above ground pipes in areas. Once the plan is done we will know what will have to be done to the intakes side. The plan will also identify maintenance issues at the plant and storage needs for fire protection. I am guessing that we will have a list of projects identified that we will need to prioritize and submit for funding, I would not be surprised to have a million to 2 million in identified projects.

We currently have budgeted to upgrade the turbidity and ph readers for around \$20,000 to \$25,000. We are going to try and clean and paint the reservoir, have not gone out for bids but probably looking at \$20,000 for this project. We also are going to try and start a program to replace and maintain hydrants in the system, would be nice to budget \$10,000 a year for this. So we are trying to keep the water in the best condition possible. My hopes was when we sought financing for identified projects we would consolidate our current loan, \$970,000, into the new financing for a lower interest rate. But, I just found out that current rates are 1% and we are paying 4.5%, so I have requested from USDA to refinance our current loan now. I will let Council know what I find out.

3. Dutch Creek Culverts; as Council knows we had another wash out of the road on the December 7, 2015 storm event. We filed with Polk County to request an Emergency designation with FEMA for storm damage. We were successful and our currently working with FEMA to mitigate this problem with a new bridge or modified culvert system. I have attended many meetings and am still in the confusion stage. I have submitted an application for an emergency funding grant with IFA to cover the 25% that is not covered by FEMA. I hope to have this long standing problem taken care of with little funds required from the City. I will say that with the Fed money there are a lot of rules, especially on projects that exceed \$150,000 of which this does. I worry having continuity of staff for the length of time this project will take and I am searching for a project manager that will handle the project for the city. I am still trying to have the County manage, but if not we will explore every opportunity of finding a competent manager that will keep the City out of trouble.
4. Dayton Street Walking Bridge; this bridge has reached its expected life expectancy. The wooden pilings are still in fair shape, but this needs to be a priority for replacement due to our sewer and water lines crossing here. Depending on when we can move on this and if there is more vandalism on the structure, we might need to close the bridge to the public. This might be a project identified in the Water Master Plan that we can seek funding for at that time. Rough guesses on the cost of replacement are in the \$80,000 to \$140,000 cost range. When we have a City Engineer we can work on a replacement design which will identify costs.

5. Streets; we bring in a little over \$50,000 a year that is mandated to streets from the gas tax. This is not enough to address the needs. We have over 7 miles of paved roads and I would say that all of them need work. North Main is in the best shape, but if we do not overlay it within a few years it will start to be in the same shape as the rest. Identified Streets in order of priority are South Main, 5th Street, Fair Oaks, Bridge/Chamberlain Road, Prospect, Parry; all are in need of work.

We have budgeted around \$100,000 to overlay as much distance as possible and address some drainage issues. \$50,000 of this was from the Small City Allotment, we kept projects down in the 15-16 year in anticipation of this project, and transferred some money from water for other road repairs do to water breaks. I will be submitting the 2016 Small Cities Grant on South Main again to try and have all of it resurfaced when we qualify for the grant again. There is no good answer for the needed paving we have.

Our gravel roads are in good shape, we have a little over 7 miles, but we are going to need to replace our 1963 model road grader. I have submitted a wish list to State surplus and they are currently looking for a Federal Surplus road grader for us. If we are successful we would have to pay a finder's fee and for transportation from where the grader is to Falls City.

I have also asked for a street sweeper, we are currently paying the City of Dallas \$3600 a year to sweep North Main it would be great to have our own so we could sweep all of the paved streets. I also asked for a street broom, this would at least allow us to brush the materials off our streets to the edge, and I asked for a used public works truck. With Surplus you never know what will come in and what the cost is going to be, so I recommend having at least \$10,000 available to move on when the opportunity presents itself.

In closing I have identified the Infrastructure problems facing our City, steps we are taking to mitigate the problems, and tried to explain the needs and reasons why we need to move forward. This document does not address day to day operations like code enforcement which is a top priority, but is meant to open a discussion on infrastructure weaknesses and the development of priorities and plans to address those priorities. We all need to be part of developing a road map to ensure that the City is protecting the resources and developing future resources for all of our citizens and the elected officials that will come after us.



1.1 BACKGROUND AND NEED

The City of Falls City is located approximately 7 miles southwest of Dallas and approximately 20 miles southwest of Salem in Polk County. The City has a population of approximately 950 residents and has experienced a small amount of growth over the past decade.

The majority of the City's current water system was upgraded in 1998. Water is provided from surface water intakes at Glaze Creek and Teal Creek. Raw water is diverted from the creeks and conveyed to the water treatment plant. Water is treated using a three sill slow sand filter and then gravity fed to the treated water reservoir which feeds the majority of City's distribution system. The rest of the system is fed from the reservoir feed line. The current system has a design capacity of 183 gpm or 0.26 MGD per filter, but the City reports that it only produces 360 gpm with all filters active.

Parts of the system are near or at the end of their useful life and need replacement. Other facilities lack the needed capacity or volume. The City of Falls City is in need of this *Water System Master Plan* to evaluate the system, identify needs, estimate improvement costs, and generally provide planning guidance for the water system over the next 20 years.

1.2 STUDY OBJECTIVE

This document will serve as both the *Water System Master Plan* (Plan) and the *Water Management & Conservation Plan* (WMCP).

The purpose of this *Water System Master Plan* (Plan) is to furnish the City of Falls City with a comprehensive planning document that provides engineering assessment of system components and guidance for planning and management of the water system over the next 20 years. This document satisfies the Oregon Drinking Water Program (DWP) requirements for water master plans. See Appendix A for these requirements.

The purpose of this *Water Management & Conservation Plan* (WMCP) is to develop a strategy to more effectively manage and conserve the City's valuable water sources. The City has voluntarily prepared this WMCP in accordance with revised rules described under OAR 690-086 in order to create a long term water management and conservation tool for the City's water system.

This Plan details infrastructure improvements required to maintain compliance with State and Federal standards. Capital improvements are presented as projects with estimated costs to allow the City to plan and budget as needed. Supporting technical documentation is included to aid in grant and loan funding applications and meet the requirements of the Oregon Business Development Department (OBDD), the Oregon Water Resource Department (WRD), the Rural Utilities Service (RUS), and the Oregon Drinking Water Program (DWP).

1.3 SCOPE OF STUDY

1.3.1 Planning Period

The planning period for this *Water System Master Plan* is 20 years, ending in the year 2036.

1.3.2 Planning Area

The primary planning area generally coincides with the City of Falls City's urban growth boundary (UGB), which is shown in Figure 2-4. Adjacent lands and waters that are affected by the system, or will be affected by proposed improvements, will also be included. The City services several users outside City Limits as well as the Luckiamute Water District.

1.3.3 Work Tasks

In compliance with Oregon Drinking Water Program and Water Resource Department plan elements and standards, this Plan provides descriptions, analyses, projections, and recommendations for the City's water system over the planning period. The following elements are included:

- Study area characteristics including land use and population trends and projections
- Existing regulatory environment including regulations, rules, and plan requirements
- Description of the existing water system including supply, treatment, storage, and distribution
- Current water usage quantities and allocations
- Projected water demands
- Existing system capacity analysis and evaluation, including hydraulic model of distribution system
- Improvement alternatives and recommendations
- A summary of recommendations with associated costs
- Funding options
- Rate Study
- Water Management and Conservation Plan
- Maps of the existing system and recommended improvements

1.4 AUTHORIZATION

The City of Falls City contracted with HBH Consulting Engineers, Inc. on December 14, 2015 to prepare this Water System Master Plan. Included in the contract is a Scope of Engineering Services on which the scope of this Plan is based.

1.5 ACKNOWLEDGMENT

This Master Plan is the result of contributions made by a number of individuals and agencies. In particular, the following persons should be acknowledged for the important roles they played in the preparation, review, and development of this Plan:

Terry Ungricht City of Falls City
Domenica Protheroe..... City of Falls City
Don Poe..... City of Falls City

In addition to these key personnel, we wish to thank the City of Falls City's City Council for providing support and input on this project.

DRAFT



2.1 PHYSICAL ENVIRONMENT

2.1.1 Location

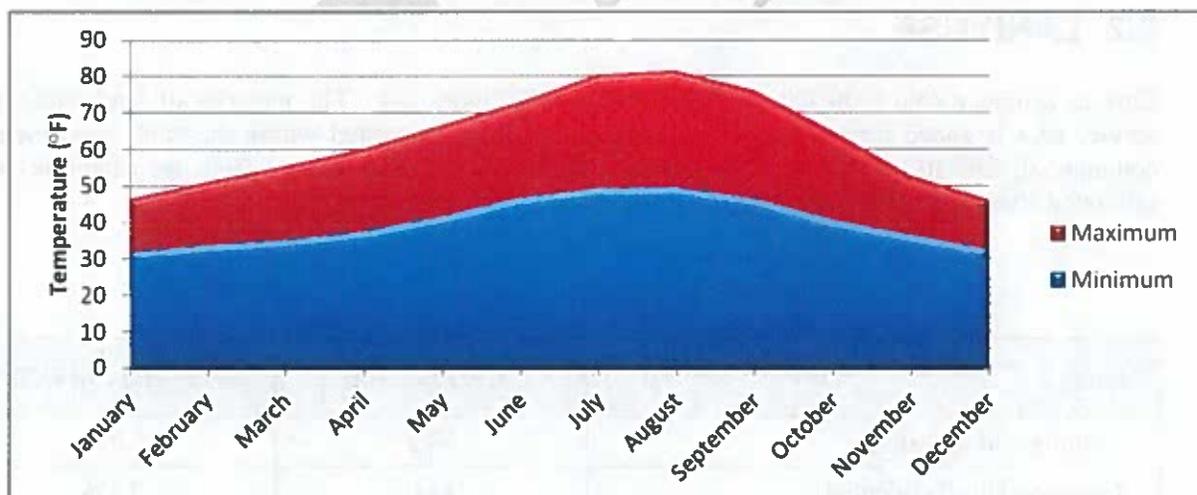
The City of Falls City is approximately 20 miles southwest of the City of Salem in Township 8 South, Range 6 West W.M. in Polk County (See Location Map, Figure 2-3). The City is situated along both sides of the Little Luckiamute River.

The service area for the Falls City water system generally coincides with the Falls City Urban Growth Boundary (UGB), which encompasses the majority of the water users, is approximately 770 acres (1.2 square miles). The Falls City UGB is depicted in Figure 2-4.

2.1.2 Climate

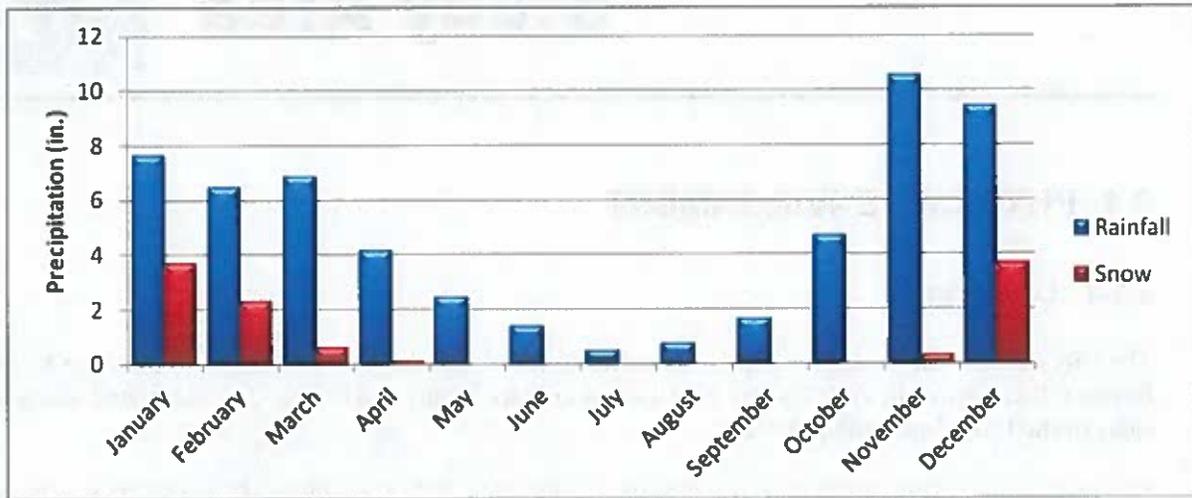
Climate information for Falls City was obtained using records collected at the nearby weather station (WRCC Station ID: OR352805). The area generally has mild summers and winters. Annually, the average temperature is 51.4°F.

Figure 2-1: Historical Temperature Data for Study Area (1961-2001)



Most of the annual 67 inches of precipitation is in the form of rainfall. The average annual snowfall is 10.8 inches. Almost half (66%) of yearly precipitation occurs during the wet weather months (Nov. - Feb.) On average, about 6% of the annual precipitation occurs during the dry weather months (Jun.-Sept.).

Figure 2-2: Average Precipitation for Study Area (1971 – 2000)



2.1.3 Topography

The terrain within the water distribution system varies from an elevation of 732 feet at the WTP to 679 at the treated water storage tank to approximately 329 near the river. The City’s primary water sources are located at elevations of 898 feet and 1276 feet. The majority of the system’s customers are at an elevation between 329 feet and 588 feet. Drainage generally runs towards the river, which bisects the City.

2.2 LAND USE

Current zoning within Falls City’s UGB is shown in Figure 2-4. The majority of land within the service area is zoned for residential use. Other land uses permitted within the study area include commercial, forestry, industrial, and public. Table 2-1 lists the various land use categories and estimated area within the study area.

Table 2-1 - Land Use

Zoning	Area (acres)	Percentage of UGB
Commercial Industrial	39.2	5.0%
Commercial - Residential	16.0	2.1%
Forestry	121.9	15.7%
Public Open Space	16.9	2.2%
Public Assembly Institutional	6.0	0.8%
Residential	485.9	62.6%
Roads, ROW	90.6	11.7%
Total UGB Land	776.5	100.0%

2.3 Demographics

2.3.1 Existing Population

The 2000 census data indicated the City of Falls City had a population of 966. The population remained relatively unchanged since the last census. The 2015 certified population for the City is 1950 persons. Population data for the City is provided in the following table.

Table 2-2 – Population Estimates

Year	City Population
2010	947
2011	945
2012	945
2013	950
2014	950
2015	950

*2010 population based on US Census data
 2011 to 2015 are populations certified by the Portland State University Population Research Center*

2.3.2 Projected Population

Future population in the City was projected based on information obtained from the *City of Falls City Wastewater Facilities Plan*. That plan used the City's adopted average annual population growth within the City of Falls City of 0.63% per year. Based on this rate, the population should increase to 1280 residents by the year 2035. This represents a growth of 330 persons or an average of 16.5 persons per year over the next 20 years. It should be noted that in last five years, the population has only increased by 0.3% total. This population figure will likely provide a conservative plan for future growth.

Table 2-3 – Projected Population

Year	Projected Population ¹
2015	950
2020	1023
2025	1103
2030	1188
2035	1280

¹ Based on City's Adopted Average Annual Growth Rate of 1.5%



Regulatory Conditions

3.1 RESPONSIBILITIES OF A WATER SUPPLIER

Per OAR 333-061-0025, water suppliers are responsible for taking all reasonable precautions to assure that the water delivered to water users does not exceed maximum contaminant levels, water system facilities are free of public health hazards, and water system operation and maintenance are performed as required by these rules. This includes, but is not limited to, the following:

- Routinely collect and submit water samples for laboratory analyses at the frequencies and sampling points prescribed by OAR 333-061-0036 “Sampling and Analytical Requirements”;
- Take immediate corrective action when the results of analyses or measurements indicate that maximum contaminant levels have been exceeded and report the results of these analyses as prescribed by OAR 333-061-0040 “Reporting and Record Keeping”;
- Continue to report as prescribed by OAR 333-061-0040, the results of analyses or measurements which indicate that maximum contaminant levels have not been exceeded;
- Notify all customers of the system, as well as the general public in the service area, when the maximum contaminant levels have been exceeded;
- Notify all customers served by the system when the reporting requirements are not being met, or when public health hazards are found to exist in the system, or when the operation of the system is subject to a permit or a variance;
- Maintain monitoring and operating records and make these records available for review when the system is inspected;
- Maintain a pressure of at least 20 pounds per square inch (psi) at all service connections (at the property line) at all times;
- Follow-up on complaints relating to water quality from users and maintain records and reports on actions undertaken;
- Conduct an active program for systematically identifying and controlling cross connections;
- Submit, to the Drinking Water Program (DWP), plans prepared by a professional engineer registered in Oregon for review and approval before undertaking the construction of new water systems or major modifications to existing water systems, unless exempted from this requirement;
- Assure that the water system is in compliance with OAR 333-061-0235 “Operator Certification Requirements, Levels 1-4” relating to certification of water system operators.

3.2 PUBLIC WATER SYSTEM REGULATIONS

Water providers should always be informed of current standards, which can change over time, and should also be aware of pending future regulations. This Section is not meant to be a comprehensive list of all requirements but a summary of the general requirements.

Specific information on the regulations concerning public water systems may be found in the Oregon Administrative Rules (OAR), Chapter 333, Division 61. The rules can be found on the Internet at http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_333/333_061.html where copies of all the rules and regulations can be printed out or downloaded for reference.

Drinking water regulations were established in 1974 with the signing of the Safe Drinking Water Act (SDWA). This act and subsequent regulations were the first to apply to all public water systems in the United States. The Environmental Protection Agency (EPA) was authorized to set standards and implement the Act. With the enactment of the Oregon Drinking Water Quality Act in 1981, the State of Oregon accepted primary enforcement responsibility for all drinking water regulations within the State. Requirements are detailed in OAR Chapter 333, Division 61. The SDWA and associated regulations have been amended several times since inception with the goal of further protection public health.

SDWA requires EPA to regulate contaminants which present health risks and are known, or are likely, to occur in public drinking water supplies. For each contaminant requiring federal regulation, EPA sets a non-enforceable health goal, or maximum contaminant level goal (MCLG). This is the level of a contaminant in drinking water below which there is no known or expected risk to health. EPA is then required to establish an enforceable limit, or maximum contaminant level (MCL), which is as close to the MCLG as is technologically feasible, taking cost into consideration. Where analytical methods are not sufficiently developed to measure the concentrations of certain contaminants in drinking water, EPA specifies a treatment technique, instead of an MCL, to protect against these contaminants.

Water systems are required to collect water samples at designated intervals and locations. The samples must be tested in state approved laboratories. The test results are then reported to the State, which determines whether the water system is in compliance or violation with the regulations. There are three main types of violations:

1. **MCL Violation** — Occurs when tests indicate that the level of a contaminant in treated water is above EPA or the state's legal limit (states may set standards equal to, or more protective than, EPA's). These violations indicate a potential health risk, which may be immediate or long-term.
2. **Treatment Technique Violation** — Occurs when a water system fails to treat its water in the way prescribed by EPA (for example, by not disinfecting). Similar to MCL violations, treatment technique violations indicate a potential health risk to consumers.
3. **Monitoring and Reporting Violation** — Occurs when a system fails to test its water for certain contaminants, or fails to report test results in a timely fashion. If a water system does not monitor its water properly, no one can know whether or not its water poses a health risk to consumers.

If a system violates EPA/state rules, it is required to notify the state and the public. States are primarily responsible for taking appropriate enforcement actions if systems with violations do not return to compliance. States are also responsible for reporting violation and enforcement information to EPA quarterly.

There are now EPA-established drinking water quality standards for 88 contaminants, including seven microbials and turbidity, seven disinfection byproducts and residuals, 16 inorganics (including lead and copper), 53 organics, and five radiologic contaminants. These standards either have established MCLs or treatment techniques.

The following provides a general summary of current rules for a surface water system using conventional filtration treatment and serving less than 10,000 persons.

3.2.1 Total Coliform Rule

Routine samples collected by Oregon public water suppliers are analyzed for total coliform bacteria. Compliance is based on the presence or absence of total coliforms in any calendar month (or quarter). Sample results are reported as "coliform-absent" or "coliform-present". If any sample is coliform-present, a set of at least three repeat samples must be collected within 24 hours. Small water systems that collect one routine sample per month or fewer must collect a fourth repeat sample. Repeat sampling continues until the maximum contaminant level is exceeded or a set of repeat samples with coliform-absent results is obtained.

Small systems (fewer than 40 samples/month) are allowed no more than one coliform-present sample per month, including any repeat sample results. Larger systems (40 or more samples/ month) are allowed no more than five percent coliform-present samples in any month, including any repeat sample results. Confirmed presence of fecal coliform or *E. coli* presents an acute health risk and requires immediate notification of the public to take protective actions such as boiling or using bottled water.

3.2.2 Surface Water Treatment Rules

Water systems must provide a total level of filtration and disinfection treatment to remove/inactivate 99.9 percent (3-log) of *Giardia lamblia*, and to remove/inactivate 99.99 percent (4-log) of viruses. In addition, filtered water systems must physically remove 99 percent (2-log) of *Cryptosporidium*.

Filtered water systems must meet specified performance standards for combined filter effluent turbidity levels, and water systems using conventional and direct filtration must also record individual filter effluent turbidity and take action if specified action levels are exceeded. Continuous turbidity monitoring of individual filters must be recorded every 15 minutes. The combined flow from combined conventional filters must have a turbidity measurement at least every four hours by grab sampling or continuous monitoring.

- Compliance for conventional filter systems is based on the combined filter effluent and 100% of measurements must be less than or equal to 1 NTU and 95% of the readings taken in any month must be less than or equal to 0.3 NTU.
- Compliance for alternative filter systems (slow sand, membrane, etc.) is based on the combined filter effluent and 100% of measurements must be less than or equal to 5.0 NTU and 95% of the readings taken in any month must be less than or equal to 1.0 NTU.

All water systems must meet specified CxT [concentration x time] requirements for disinfection, and meet required removal/inactivation levels. In addition, a disinfectant residual must be maintained in the distribution system.

- Continuous recording of disinfectant residual at entry point to the distribution system. Small system may be allowed to substitute 1-4 daily grab samples.
- Daily calculation of CxT at highest flow (peak hourly flow)
- Provide adequate CxT to meet needed removal/inactivation levels
- Maintain a continuous minimum 0.2 mg/L disinfectant residual at entry point to the distribution system
- Maintain a minimum detectable disinfectant residual in 95% of the distribution system samples (collected at coliform bacteria monitoring points)
- Conduct disinfection profiling and benchmarking

3.2.3 Long Term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR); & Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR)

These additions to the SWTR have been implemented to reinforce the SWTR and increase public health protections by increasing the effectiveness of disinfection in addition to reducing the risk of *Giardia* and *Cryptosporidium* infection.

The LT1SWTR require that combined filtered water turbidity be less than 0.3 NTU in 95% of all samples collected each month in order to demonstrate compliance with the regulation. This applies to both conventional and direct filtration treatment plants. The maximum turbidity allowed is 1 NTU. The Rule requires individual filters to be monitored for turbidity and triggers additional reporting if performance limits are exceeded. The regulation assumes 2 log removal of *Cryptosporidium* when these standards are met. The LT1ESWTR applies to systems serving less than 10,000.

LT2ESWTR also applies to all surface water or ground water under the direct influence of surface water systems. The rule requires 2 years of *Cryptosporidium* sampling to define the requirement for additional treatment. Additional treatment options are identified in Microbial Toolbox. Additional treatment is required to be in place as of 2012 for systems serving 50,000 or more people, and as of 2013 or 2014 for smaller systems.

3.2.4 Disinfectants and Disinfection Byproducts

The Disinfectants/Disinfection By-Products (D/DBPs) rule and the Stage 1 D/DBP rule apply to all Community Water Systems and Non Transient Non Community Water Systems that treat water with a chemical disinfectant for primary or residual treatment. This rule is currently in effect and regulates Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAA5s), which include:

TTHMs:

- *Trichloromethane (chloroform)*
- *Tribromomethane (bromoform)*
- *Bromodichloromethane*
- *Dibromochloromethane*

HAA5s:

- *Monochloroacetic acid*
- *Dichloroacetic acid*
- *Trichloroacetic acid*
- *Monobromoacetic acid*
- *Dibromoacetic acid*

Compliance is determined based on meeting maximum contaminant levels (MCLs) for disinfection byproducts and maximum levels for disinfectant residual (MRDLs) over a running annual average of the sample results, computed quarterly.

- For water supplies under direct influence of surface water, TTHM/HAA5 monitoring is required in distribution system. One sample per quarter for systems serving 500-9,999 persons. One sample per year in warmest month required for systems serving less than 500.
- MCL for TTHM is 0.080 mg/L. MCL for HAA5 is 0.060 mg/L.
- System using surface water and conventional filter treatment must monitor for TOC and alkalinity. Enhanced coagulation if TOC is greater than 2.0 mg/L
- Comply with MRDLs. Limit for chlorine (free Cl_2 residual) is 4.0 mg/L. Limit for chloramines is 4.0 mg/L (as total Cl_2 residual). Limit for chlorine dioxide is 0.8 mg/L (as ClO_2)
- Bromate MCL of 0.010 mg/L
- Chlorite MCL of 1.0 mg/L

The Stage 2 D/DBPs rule is currently being implemented. This rule maintains the MCL levels established in Stage 1 D/DBP rule and adds MCLGs for four TTHMs and three HAA5s. The compliance sites consist of locations where high TTHMs are found, locations where high HAA5s are found and average detention time sites within the distribution system. The number of sites is based on the type of source water and population served. The rule provides for reduced monitoring for systems with very low disinfection by-products based on two years of existing data.

3.2.5 Lead and Copper

Excessive levels of lead and copper are harmful and rules exist to limit exposure through drinking water. Lead and copper enter drinking water mainly from corrosion of plumbing materials containing lead and copper. Lead comes from solder and brass fixtures. Copper comes from copper tubing and brass fixtures. Protection is provided by limiting the corrosivity of water sent to the distribution system. Treatment alternatives include pH adjustment, alkalinity adjustment, or both, or adding passivating agents such as orthophosphates.

Samples from community systems are collected from homes built prior to the 1985 prohibition of lead solder in Oregon. One-liter samples of standing water (first draw after 6 hours of non-use) are collected at homes identified in the water system sampling plan. Two rounds of initial sampling are required, collected at 6-month intervals. Subsequent annual sampling from a reduced number of sites is required after demonstration that lead and copper action levels are met. After three rounds of annual sampling, samples are required every 3 years. The number of initial and reduced samples required is dependent on the population served by the water system.

In each sampling round, 90% of samples from homes must have lead levels less than or equal to the Action Level of 0.015 mg/L and copper levels less than or equal to 1.3 mg/L. Water systems with lead above the Action Level must conduct periodic public education, and either install corrosion control treatment, change water sources, or replace plumbing.

3.2.6 Inorganic Contaminants

The level of many inorganic contaminants is regulated for public health protection. These contaminants are both naturally occurring and can result from agriculture or industrial operations. Inorganic contaminants most often come from the source of water supply, but can also enter water from contact with materials used for pipes and storage tanks. Regulated inorganic contaminants include arsenic, asbestos, fluoride, mercury, nitrate, nitrite, and others. Compliance is achieved by meeting the established MCLs for each contaminant. Systems that cannot meet one or more MCL must either install treatment systems (such as ion exchange or reverse osmosis) or develop alternate sources of water.

- Sample quarterly for nitrate (reduction to annual may be available) for surface water systems and sample annually for groundwater sources
- Communities with asbestos cement (AC) pipe must sample every 9 years for asbestos
- Sample annually for arsenic for surface water systems and sample every three years for groundwater sources.
- Sample surface water annually and groundwater sources every three years for all other inorganics. Waivers are available based on monitoring records showing three samples below MCLs. MCLs vary based on contaminant.

3.2.7 Organic Chemicals

Organic contaminants are regulated to reduce exposure to harmful chemicals through drinking water. Examples include acrylamide, benzene, 2,4-D, styrene, toluene, and vinyl chloride. Major types of organic contaminants are Volatile Organic Chemicals (VOCs) and Synthetic Organic Chemicals (SOCs). Organic contaminants are usually associated with industrial or agricultural activities that affect sources of drinking water supply, including industrial and commercial solvents and chemicals, and pesticides. These contaminants can also enter from materials in contact with the water such as pipes, valves, and paints and coatings used inside water storage tanks.

At least one test for each contaminant from each water source is required during every 3-year compliance period. Public water systems using surface water sources must test for VOCs annually. Compliance is achieved by meeting the established MCL for each contaminant. Quarterly follow up testing is required for any contaminants that are detected above the specified MCL. Only those systems determined by the State to be at risk must monitor for dioxin. Water systems using polymers containing acrylamide or epichlorohydrin in their water treatment process must keep their dosages below specified levels. Systems that cannot meet one or more MCL must either install or modify water treatment systems (such as activated carbon and aeration) or develop alternate sources of water.

3.2.8 Radiologic Contaminants

Radioactive contaminants, both natural and man-made, can result in an increased risk of cancer from long-term exposure and are regulated to reduce exposure through drinking water. Monitoring is required every three, six, or nine years depending on the initial results, with a return to quarterly monitoring if the MCL is exceeded. Compliance with MCLs is based on the average of the four initial test results, or subsequent quarterly tests. Community water systems that cannot meet MCLs must install treatment (such as ion exchange or reverse osmosis) or develop alternate water sources.

Existing Water System



4

The City of Falls City owns and operates a community water system (OR4100394) serving approximately 950 persons through 445 active connections. The system's water supply includes surface water from Gaze and Teal Creeks. Water from the creeks is diverted to the water treatment Plant (WTP). The WTP consists of a triple sill sand filter treatment plant. Treated water is disinfected and gravity feeds the City's distribution system.

Information on the existing system was obtained from WTP daily reports, previous studies, operation manuals, as-built drawings, interviews with operating staff, and site investigations.

4.1 WATER SOURCE

4.1.1 Description

The City of Falls City relies on Glaze and Teal Creeks as its primary drinking water supply sources. Glaze Creek is a tributary of Teal Creek. Both creeks are tributaries to the Luckiamute River.

The watershed for the intakes is located in Townships 8-9S, Ranges 6-7W and is approximately 3084± acres. The most predominant land use in the area appears to be logging from the aerial photograph. Logging operations appear to affect turbidity in the surrounding creeks. The aerial images show various stages of logging, cutting, and replanting in the watershed. Soil data for the area is currently available from the Natural Resource Conservation Service (NRCS). The soils in the area, are primarily steep all slopes are at least 3%, and 39% of the area is steeper than 30%. Most of the area is silty clay loam, gravelly clay loam, very shaly loam, or stony loam.

4.1.2 Falls City Water Rights

The City of Falls City holds seven water rights totaling 6.06 cfs or 2720 gpm (1.89 mgd). Table 4-1 provides a summary of these water rights. Appendix C provides copies of the water right permits and certificates.

Table 4-1– City of Falls City Water Rights

Source	Tributary of	Water Rights, cfs (gpm)	Priority Date	Permit No.	Certificate No.
Teal Creek	Little Luckiamute River	1.00 (449)	11/4/1915	S2700	1832
Boughey creek (attempted transfer in 1939, but it was denied. Where is it now?)	Teal Creek	0.5 (224)	5/11/1920	S4592	5072
Little Luckiamute River>Luckiamute	Big Luckiamute River	0.5 (224)	8/12/1939	S13970	14247
Albert Teal Spring>Teal Creek	Teal Creek	0.26 (117)	8/6/1970	S35215	39319
Rattling Spring > Teal Creek	Teal Creek	0.8 (359)	4/13/1974	S42509	---
Berry Creek > Little Luckiamute	Little Luckiamute River	1.00(449)	10/14/1970	S35222	---
Glaze Creek>Teal Creek	Teal Creek	2.00 (898)	3/4/1982	S46807	82931

Currently, the City only utilizes the Glaze and Teal Creeks' water rights.

4.1.3 Water Quality Data

Influent turbidities from the City's water sources are recorded at the treatment plant daily in a log book. This book was not available for analysis since it must remain in the treatment plant. The City reports that it manually controls the plant based on the influent turbidity. If turbidity rises past 5NTU, then the plant is shut off.

4.1.4 Intake & Transmission Description

The City's intake and raw water transmission lines are located within an **easement granted on private lands.**

Teal Creek Intake

The existing Teal Creek intake was constructed in the early 1900s with a water right granted in 1915. and is located at 270 feet south and 1200 feet west from the northeast corner of Section 31, Township 8S, Range 6W. Water is diverted in accordance with the conditions established under water right Permit S2700. The intake consists of a concrete box with metal trash grate that converges into a pipe. The top of the inlet is angled perpendicular to the water surface. The intake is situated such that it takes up the majority of the flow in the summer. Water flows through the trash grate and into the concrete box where it is then conveyed to the WTP via an 8" gravity water line.

The existing intake has a number of operational and maintenance concerns. Due to the water quality of Teal Creek, sedimentation accumulates in the box of the intake and requires annual dredging to maintain function. Additionally, there is no automatic cleaning system for the screen and consequently staff have to manually remove leaves, branches, and other debris that periodically clogs the intake. The intake is not equipped with an alarm to notify operating when a problem existing (i.e. clogged screen) and it may be several days before staff are aware of an issue. This is especially problematic during rainy times when there is limited or no access to the intake.

This intake is used in times of the year when turbidities are low, and Glaze Creek flows are limited (typically summer and fall).

Glaze Creek Intake Intake

The existing Glaze Creek intake was constructed in the 1980s with a water right granted in 1982, and is located at 3500 feet south and 1700 feet west from the northeast corner of Section 31, Township 8S, Range 6W. Water is diverted in accordance with the conditions established under water right Permit S2700. The intake consists of a concrete box with metal trash grate that converges into a pipe. The top of the inlet is angled perpendicular to the water surface. The intake is situated such that it takes up the majority of the flow in the summer. Water flows through the trash grate and into the concrete box where it is then conveyed to the WTP via an 8" gravity water line.

The existing intake has a number of operational and maintenance concerns. Due to the water quality of Teal Creek, sedimentation accumulates in the box of the intake and requires annual dredging to maintain function. Additionally, there is no automatic cleaning system for the screen and consequently staff have to manually remove leaves, branches, and other debris that periodically clogs the intake. The intake is not equipped with an alarm to notify operating when a problem existing (i.e. clogged screen) and it may be several days before staff are aware of an issue. This is especially problematic during rainy times when there is limited or no access to the intake.

This intake is used in times of the year when turbidities are high in Teal Creek, and Glaze Creek has sufficient flows (typically winter and spring).

Transmission System

Water is transported from either Teal or Glaze Creek to the WTP via a 12"/10" gravity main. The original pipeline from Teal Creek was installed in the early 1900s. Much of this transmission line is composed of approximately half PVC and half AC piping, however a short section of ductile iron exists. This transmission line runs approximately 5,000 feet across steep terrain with portion of the pipeline exposed. The City does not own most of the land the along the pipe route.

Visual inspection of the transmission main has not been completed in several years; however, there are no know pipeline problems. The majority of the pipe is difficult or impossible to access.

4.2 WATER TREATMENT

The Falls City water treatment plant (WTP) utilizes a triple silt slow sand filtration treatment plant. No chemical addition is required besides chlorine for disinfection. Treated water is disinfected using

hypochlorination then pumped to the City's treated water reservoir. Operation of the plant is primarily automated, but is also equipped with manual over-rides. The WTP has a design capacity of 130 gpm/ filter.

The existing WTP was originally constructed in 1999. The City made a number of upgrades to improve treatment performance including replacing monitoring equipment as needed, and skimming pond per O&M instructions.

WTP filtration system is credited with 2.5-log *giardia* and a 2.0-log *cryptosporidium* removal. Chlorine disinfection provides an addition 0.5-log *giardia* removal credit.

4.2.1 Plant Operation

Raw water feeds the WTP via a 6" gravity pipeline from Glaze Creek and an 8" gravity pipeline from Teal Creek. Under automated operation, plant operations are controlled based on an altitude valve set to respond to water level readings in the City's treated water reservoir. As the water level in the reservoir drop, an automated control valve at the reservoir opens and initiates plant operations. The WTP will automatically shutdown based on high effluent turbidity levels. The plant was designed to automatically turn off when the influent turbidities are too high, but the City reports that that feature doesn't work, so the plant must be started and stopped manually when influent turbidities change.

4.2.2 Treatment Processes

Treatment processes at the Falls City WTP include a slow sand filter and disinfection. A *Process Control & Instrumentation Diagram* of the WTP is show in Figure 4-4.

Manual Filter Screens

Each intake has a screen that removes large particles. Glaze creek screen has openings of about 0.5" square, and Teal Creek has openings of 2" square. The Glaze creek screen is manually cleaned approximately monthly and the teal Creek Screen is dug out every year before use, as winter storms burry the entire intake and screen in sediment.

Soda Ash

The City has an installed system for soda ash addition, but does not currently use the system.

Slow Sand Filters

The City of Falls City water treatment system utilizes a three sill slow sand filter system. The filtration cell has a treatment area of ?? ft². The design filtration rate for the filter is ??? gpm/ft² resulting in a maximum flow rate of 183 gpm/ filter.

Filter media consists of gravels, sands, and anthracite for a total media depth of up to 36" inches. When filter reached 12", it should be refilled to 36". The City last skimmed the filters 2.5 years ago in sills 1 & 2 and sill 3 is offline currently due to lack of need.

Hach Model 1720D turbidimeter constantly monitor each of the filter's effluent turbidity, and plant effluent turbidity and records it on the system computer. There is also a direct read of the NTU on the

meter. If the filter exceeds ?? NTUs, an autodialer alarm will notify the operator and the system will automatically shut down until it is manually restarted.

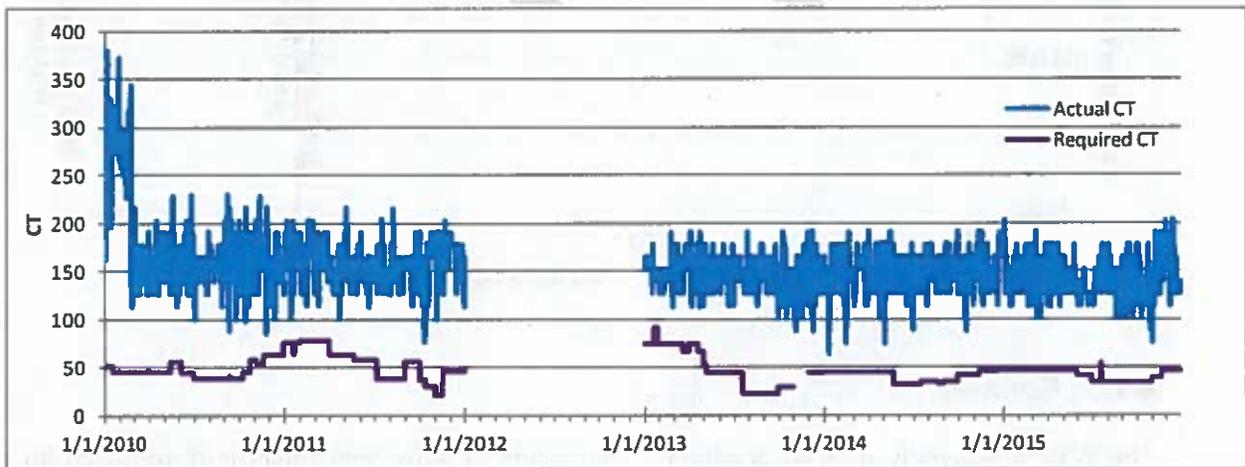
The filters are cleaned by skimming 1/2" to 1" of sand off the top when the filters start to back up.

Disinfection

Sodium Hypochlorite is used for disinfection. It comes in drums pre-mixed to 12.5% concentration of hypochlorite. A metering pump injects the solution into the treated water stream at the beginning of the clearwell is baffled and serves as the chlorine contact chamber. The water gravity flows from the clearwell to zone 1 and the reservoir.

The inactivation ratio is determined based on "CT" which is the residual concentration (C) in mg/L multiplied by the contact time (T) in minutes. Required CT values are published in OAR and are dependent on the water temperature, pH, and chlorine residual. This information is collected in the clearwell chlorine monitoring station, which transmits monitored parameters back to the WTP. A Disinfection Contact Time Tracer Study was conducted in 2008. It measured the contact time to be 127 minutes. This value is used for daily calculations, as there is no way to measure this daily. The following figure compares required CT times (based on temperature and pH) with the systems calculated CT (based on residual at first user).

Figure 4-1 – Comparison of Calculated and Required CT Values for Falls City WTP



Clearwell Storage

text

Table 4-2 – Violation History for Falls City’s Water System

Violation	Date	Analyte Group	Returned to Compliance	Points
DBP Late/Nonreporting	6/2013	DBP	9/2013	1
Monthly Sampling Report –L/N	5/2013	SWTR	7/2013	1
DBP Late/Nonreporting	9/2011	DBP	12/2011	1
Total Non-Compliance Points				3

L/N – Late/Nonreporting

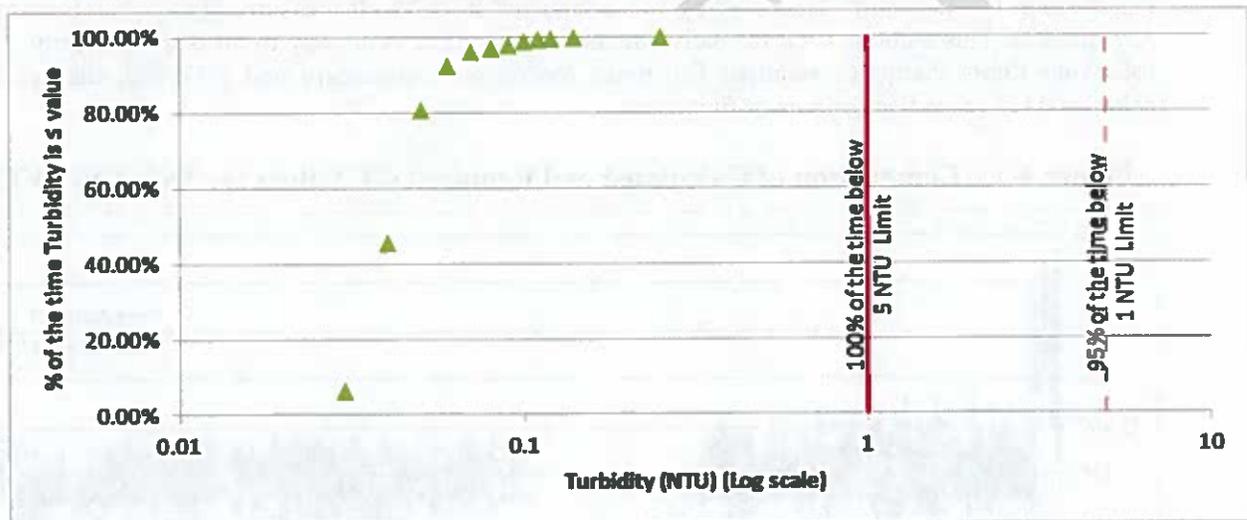
Although reporting is important to monitor public safety by the state, none of these violations constituted a public health risk after the monitoring results were presented.

Turbidity

Treated water must have turbidity level less than 1 NTU or less 95% of the time. Based upon the data supplied by the City, turbidity levels post filtration have ranged from 0.003 to 0.25 NTU over the five years analyzed with an average of 0.049 NTU with , 100% of the turbidity readings less than or equal to 0.25 NTU and 96 % less than or equal 0.07 NTU (Figure 4-3).

To avoid poor finished water quality, the WTP is shut off following heavy rains, when raw water turbidity levels spike. The WTP currently is be shut down when the raw water turbidity exceeds 5 NTU.

Figure 4-2 – Cumulative Percentage of Recorded WTP Effluent Turbidity



4.2.3 General

The WTP is generally in good condition. The nature of slow sand filters is if you keep up with maintenance, they will function properly for a long time. The City has been proactive with replacing monitoring equipment as needed and maintains an active contract with Hach to keep their equipment up to date. The turbidity monitoring equipment is set for replacement in 2016. The chlorine analyzer and pH controllers have been replaced within the last five years. No leaks in the treatment sills or clearwell are known, but concrete is starting to show some signs of wear and should be resealed, and patched as necessary to slow damage.

4.3 WATER STORAGE

Treated water is gravity fed from the WTP through an 8-in pipeline through zone 1 to the City’s 600,000 gallon water storage reservoir located on Chamberlin Rd. as shown in Figure 4-5. The reservoir consists of a steel tank constructed in 1999. Although the tank has a nominal capacity is

600,000 gallons, operating capacity is only **XXX,000 gallons** due to the overflow level. The reservoir site is fenced and the access road is gated.

The reservoir is equipped with an altitude valve to control water levels in the tank. When the water level drops, pumps at the WTP will activate and begin filling the tank. The pumps automatically shut off when water levels reach a set point. Treated water stored in the reservoir tank flows to the distribution system through a 12-in pipeline. The elevation of the tank is sufficient to provide adequate pressures to all users without the need for additional pumping. Pressures in some areas are higher than 100 psi, so some residences have individual PRVs.

Tank dimension and volume information is provided in the tables below.

Table 4-3 – Treated Water Reservoir

Radius	?
Nominal Capacity	600,000 gallons
Operating Capacity	?
Top Elevation	?
Floor Elevation	?
Inlet Elevation	?
Outlet (?” above bottom)	?
Overflow (?” below rafters)	?

The exterior of the tank appears to be in good condition. A three scratches apparently from bullets were found. The roof needs to be repainted as the paint is starting to peel off. The interior of the reservoir has not been recently inspected or cleaned, so it is recommended to get this done every three years to monitor the internal conditions of the reservoir.

4.4 DISTRIBUTION SYSTEM

4.4.1 Piping Network

The Falls City water system has approximately 16 miles of distribution and transmission piping ranging in size from 1 inch to 12 inches in diameter (Table 4-5). The system is generally configured with a number of disconnected service areas with limited looping. The existing transmission and distribution piping for the water system networks are shown in Figure 4-5.

Table 4-4 – Pipe Inventory

Pipe Size	Distribution Piping (ft)	Transmission Piping (ft)	Total Piping (ft)	Percent of Piping
< 4"	10,357		10,357	12.14%
4"	8,382		8,382	9.83%
6"	21,554	2,429	23,983	28.11%
8"	15,034	662	15,696	18.40%
10"	9,103	11,951	21,054	24.68%
12"	4,865	970	5,836	6.84%
Total	69,295	16,013	85,308	100.00%

The original distribution system was installed in 1933. Major improvements to the system were made in 1997, but a large portion (28%) of the system is still AC pipe which is more likely to break especially under high pressure conditions. Portions of the downtown area have pressures far in excess of recommended pressure ranges in order to provide pressure to the homes in the higher elevations. Falls City experiences frequent water main breaks due to these high pressures and old pipes.

4.4.2 Water Meters

Water meters are installed on nearly all connections. Only two City parks are connected to the system without a meter. This is primarily where the watermain runs under the building. Many of the existing water meters have not been replaced since their original installation in 1993, in most cases, over 20 years ago.

Figure 4-3 – PID

Figure 4-4 – Existing System

DRAFT

Design Criteria & Level of Service

Section



6

6.1 DESIGN LIFE OF IMPROVEMENTS

The design life of a water system component is sometimes referred to as its useful life or service life. The selection of a design life is a matter of judgment based on such factors as the type and intensity of use, type and quality of materials used in construction, and the quality of workmanship during installation. The estimated and actual design life for any particular component may vary depending on the above factors. The establishment of a design life provides a realistic projection of service upon which to base an economic analysis of new capital improvements.

As discussed in Section 1, the planning period for this Water System Master Plan is 20 years ending in the year 2036. The planning period is the time frame during which the recommended water system is expected to provide sufficient capacity to meet the needs of all anticipated users. The required system capacity is based on population, water demand projections, and land use considerations.

The planning period for a water system and the design life for its components may not be identical. For example, a properly maintained steel storage tank may have a design life of 60 years, but the projected fire flow and consumptive water demand for a planning period of 20 years determine its size. At the end of the initial 20-year planning period, water demand may be such that an additional storage tank is required; however, the existing tank with a design life of 60 years would still be useful and remain in service for another 40 years. The typical design life for system components are discussed below.

6.1.1 Treatment Plant Equipment

The design life of most motorized equipment and pumps is typically 20 years. Filter media should be replaced after 15 years of service. Buildings and major structures should have a design life of 50 years. Steel components exposed to weather or submerged can deteriorate within 10 to 15 years if not properly maintained. Periodic maintenance and painting will provide a useful life of more than 20 years unless larger facilities are required. Flowmeters typically have a design life of 10 to 15 years. Valves usually need to be replaced after 15 to 20 years of use.

6.1.2 Pumping Equipment and Structures

Major structures and buildings should have a design life of approximately 50 years. Pumps and equipment usually have a useful life of about 15 to 20 years. The useful life of some equipment can be extended, when properly maintained, if additional capacity is not required. Properly maintained pumps can sometimes last 30 years or longer.

6.1.3 Water Transmission and Distribution Piping

Water transmission and distribution piping should easily have a useful life of 40 to 60 years if quality materials and workmanship are incorporated into the construction and the pipes are adequately sized. Steel piping used in the 1950's and 60's that has been buried, commonly exhibits significant corrosion and leakage within 30 years. Cement mortar lined ductile iron piping can last up to 100 years when properly designed and installed.

6.1.4 Water Storage

Distribution storage tanks should have a design life of 60 years (painted steel construction) to 80 years (concrete construction). Steel tanks with a glass-fused coating can have a design life similar to concrete construction. Actual design life will depend on the quality of materials, the workmanship during installation, and the timely administration of maintenance activities. Several practices, such as the use of cathodic protection, regular cleaning and frequent painting can extend or assure the service life of steel reservoirs. Ground settlement, earthquakes, and inadequate quantities of reinforcing steel can all lead to a substantially reduced life for concrete structures.

6.2 SIZING AND CAPACITY CRITERIA

Demand projections presented in Section 5.6 are used to size improvements. Various components of the system demand are used for sizing different improvements. Methods and demands used are discussed below.

6.2.1 Water Treatment Plant Capacity

Treatment plants must be able to successfully treat quantities of raw water equal to the MDD. The 20-year MDD is used as the design flow. A WTP should produce this MDD with 18 hours or less operation time required.

6.2.2 Treated Water Storage

Total storage capacity must include reserve storage for equalization storage, emergency storage, and fire suppression:

- **Equalization Storage** - Typically set at 25% of the MDD to balance out the difference between peak hourly demand and supply capacity so that these variations in demand are not imposed on the water supply source.
- **Emergency Storage** - Required to protect against a total loss of water supply such as would occur with a broken transmission line, an electrical outage, equipment breakdown, or natural disaster. At a minimum, emergency storage should be equal to 75% of the MDD assuming that water use would be restricted during times of emergencies. Falls City has selected to provide 200% of the ADD for emergency

storage, due to the unreliability of the intake water quality during certain portions of the year.

- Fire Suppression Storage - Falls City, a fire flow of 1,500 gpm would be needed for residential areas and a fire flow of **????** gpm would be needed for commercial areas. Based upon the Oregon Fire Code, a duration of 2 hours would be required for the fire flows. This would equate to a total fire storage requirement of 180,000 gallons.

For Falls City, an emergency storage of 200% of the ADD will be used in addition to equalization storage and fire storage. T

Another important design parameter for reservoirs is elevation. Different portions of the City can be better served by different elevations of reservoirs. Distribution reservoirs should be located at an elevation that maintains adequate water pressure throughout the system, sufficient water pressures at high elevations and reasonable pressures at lower elevations. The pressure range in the system should stay within the range of 30 to 80 psi. Pressures below 30 psi cause annoying flow reductions when more than one water-using device is in service. High pressures may cause faucets to leak, valve seats to wear out quickly, and system leakage to increase. The Uniform Plumbing Code requires that water pressures not exceed 80 psi at service connections, unless the service is provided with a pressure-reducing device. Another pressure criterion, related to fire flows, commonly requires a minimum of 20 psi at the hydrant used for fire fighting. OHD also requires that service connection pressures never drop below 20 psi.

6.2.3 Distribution System

Distribution mains are typically sized for fire flow and 20-year population demand, or fire flow and saturation development demand. The mains should be at least six inches in diameter to provide minimum fire flow capacity. All pipelines should be large enough to sustain a minimum line pressure of approximately 30 psi at maximum flow rates. The State of Oregon requires a water distribution system be designed and installed to maintain a pressure of at least 20 psi at all service connections at all times. The distribution system must be sized to handle the peak hourly flows and to provide fire flows while maintaining minimum pressures.

In addition to the above design criteria, the following guidelines are recommended for the design of water distribution systems:

- Six-inch (6") diameter lines - minimum sized lateral water main for gridiron (looped) system and dead-end mains.
- Eight-inch (8") diameter lines - minimum size for permanently dead-ended mains supplying fire hydrants and for minor trunk mains.
- Ten-inch diameter (10") and larger - as required for trunk (feeder) mains based on hydraulic analysis.

The distribution system lateral mains should be looped whenever possible. A lateral main is defined as a main not exceeding eight-inches in diameter, which is installed to provide water service and fire protection for a local area including the immediately adjacent property. The normal size of lateral mains for single-family residential areas is six-inches in diameter. However, eight-inch lateral mains may be required to meet both the domestic and fire protection needs of an area.

The installation of permanent dead-end mains and dependence of relatively large areas on a single main should be avoided. For the placement of a fire hydrant on a permanently dead-ended main, the minimum size of such laterals should be eight inches in diameter. Six-inch diameter mains may be used for a stub-out not exceeding 500 feet in length supplying a single fire hydrant not on a public street and for internal fire protection. On new construction, the minimum size lateral main for supplying fire hydrants within public ways should be six-inches provided six-inch mains are looped.

A computer model of the distribution system is part of this study. The model incorporates actual pipe sizes and materials as well as system pipe junction elevations and storage tank elevations. The system is checked for ability to provide fire flows during times when the system demand is at the 20-year MDD. The system will also be checked at the 20-year PHD. System pressure must remain above 20 psi at all conditions. The model will be developed using a software program called WaterCAD®.

6.3 BASIS FOR COST ESTIMATES

The cost estimates presented in this Plan will typically include four components: construction cost, engineering cost, contingency, and legal and administrative costs. Each of the cost components is discussed in this section. The estimates presented herein are preliminary and are based on the level and detail of planning presented in this Study. Construction costs are based on competitive bidding as public works projects. As projects proceed and as site-specific information becomes available, the estimates may require updating. System improvements that are recommended are summarized in Section 8 along with associated costs. Detailed cost estimates are provided in Appendix F.

6.3.1 Construction Costs

The estimated construction costs in this Plan are based on actual construction bidding results from similar work, published cost guides, and other construction cost experience. Reference was made to system maps of the existing facilities to determine construction quantities, elevations of the reservoirs and major components, and locations of distribution lines. Where required, estimates will be based on preliminary layouts of the proposed improvements.

Future changes in the cost of labor, equipment, and materials may justify comparable changes in the cost estimates presented herein. For this reason, common engineering practices usually tie the cost estimates to a particular index that varies in proportion to long-term changes in the national economy. The Engineering News Record (ENR) construction cost index is most commonly used. This index is based on the value of 100 for the year 1913. Cost estimates prepared in this plan are based on the **June 2016** index. Future costs should be compared to a baseline ENR Index value of **????**. If specific ENR index figures are not available, the historical ENR growth pattern has been around 3% per year.

6.3.2 Contingencies

A contingency factor equal to approximately twenty percent (20%) of the estimated project cost has been added. In recognition that the cost estimates presented are based on conceptual planning, allowances must be made for variations in final quantities, bidding market conditions, adverse

construction conditions, unanticipated specialized investigation and studies, and other difficulties which cannot be foreseen at this time but may tend to increase final costs.

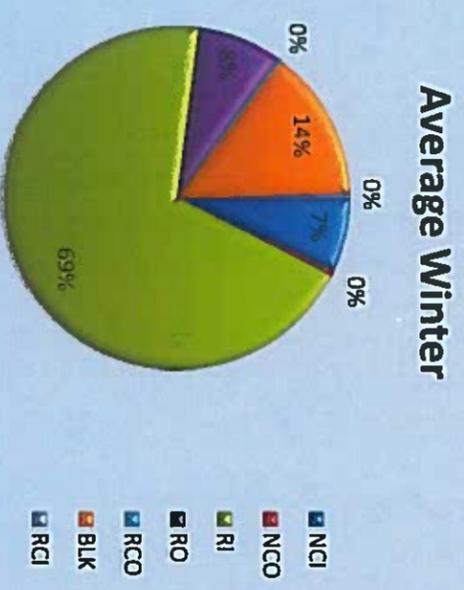
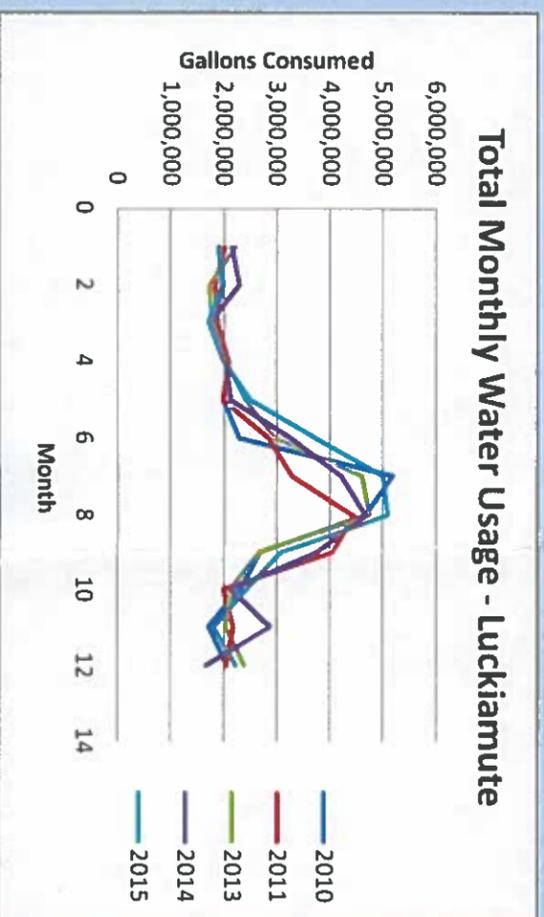
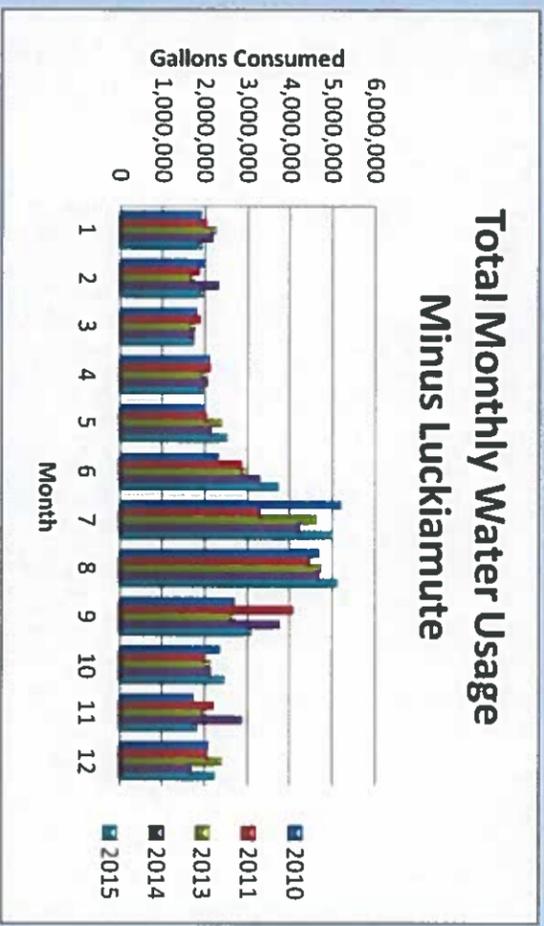
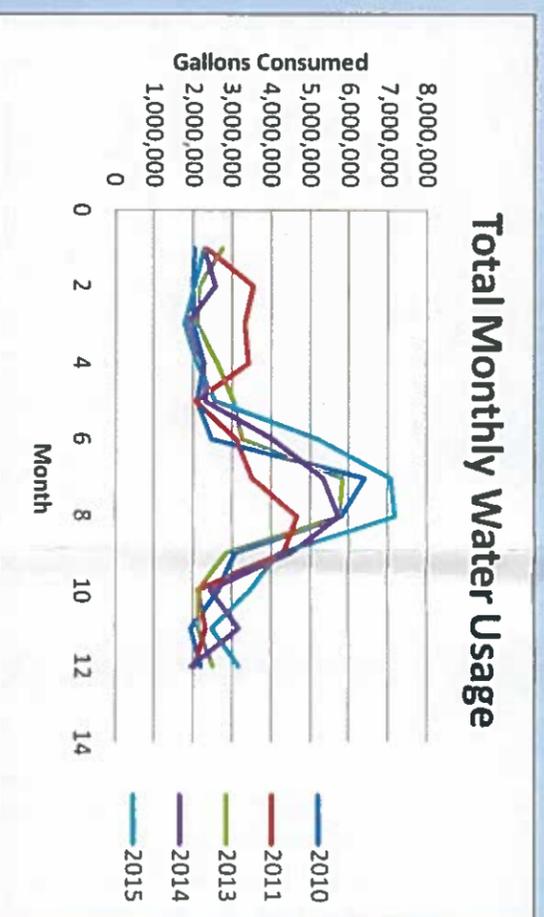
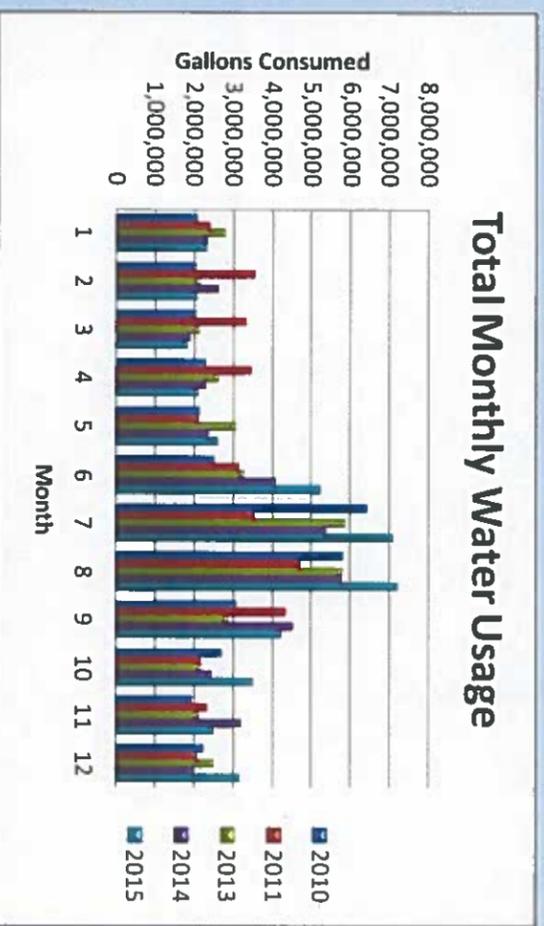
6.3.3 Engineering

The cost of engineering services for major projects typically include special investigations, a predesign report, surveying, foundation exploration, preparation of contract drawings and specifications, bidding services, construction management, inspection, construction staking, start-up services, and the preparation of operation and maintenance manuals. Depending on the size and type of project, engineering costs may range from 15 to 25% of the contract cost when all of the above services are provided. The lower percentage applies to large projects without complicated mechanical systems. The higher percentage applies to small, complicated projects. Engineering costs for design and construction presented in this Plan should average 20% of the estimated construction costs.

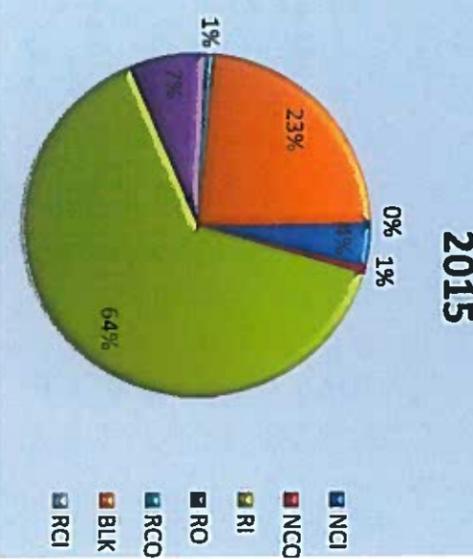
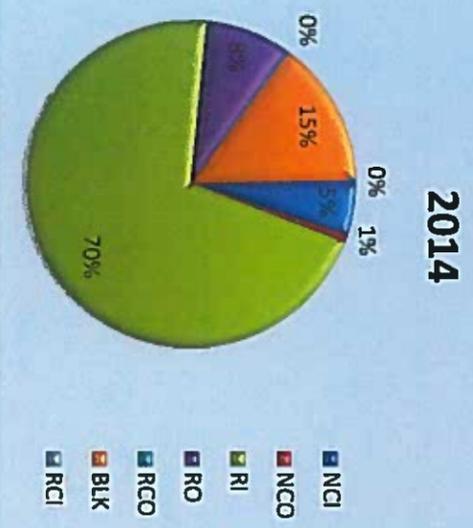
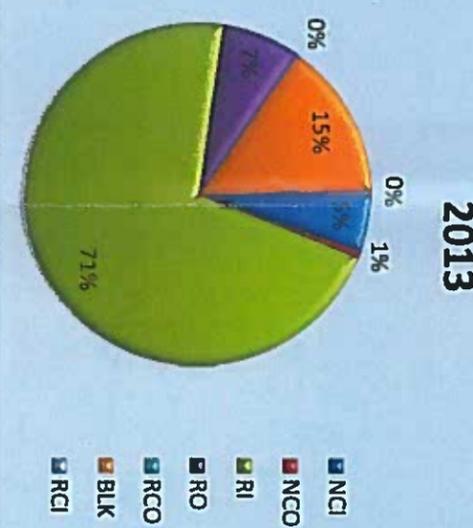
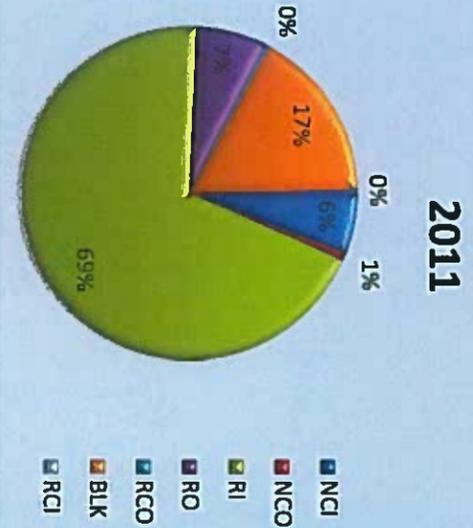
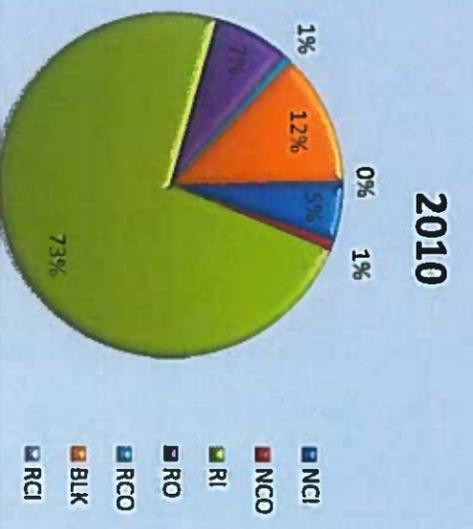
6.3.4 Legal and Administrative

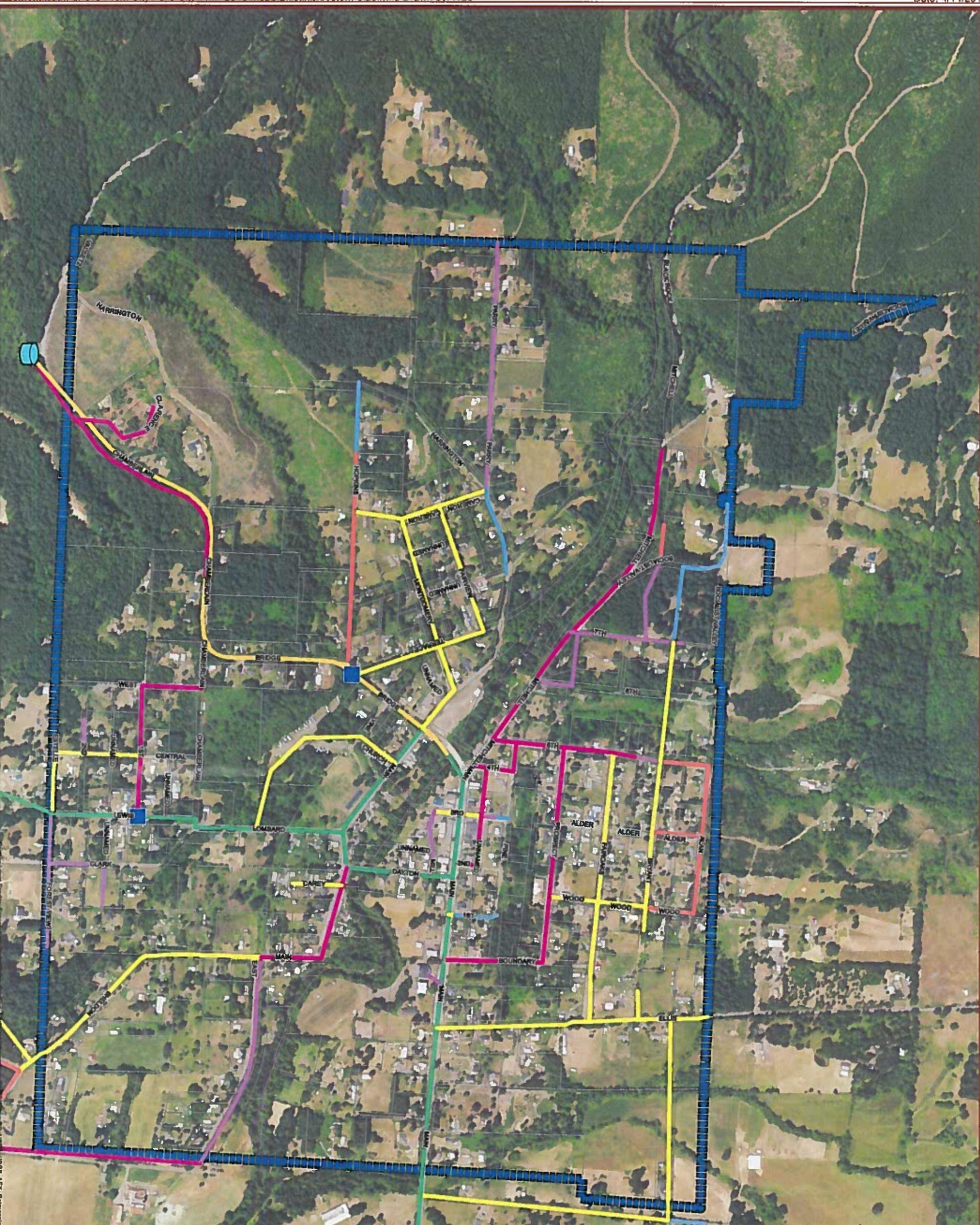
An allowance of five percent (5%) of construction cost has been added for legal and administrative services. This allowance is intended to include internal project planning and budgeting, grant administration, liaison, interest on interim loan financing, legal services, review fees, legal advertising, and other related expenses associated with the project that the City could incur.

Water Consumption Data



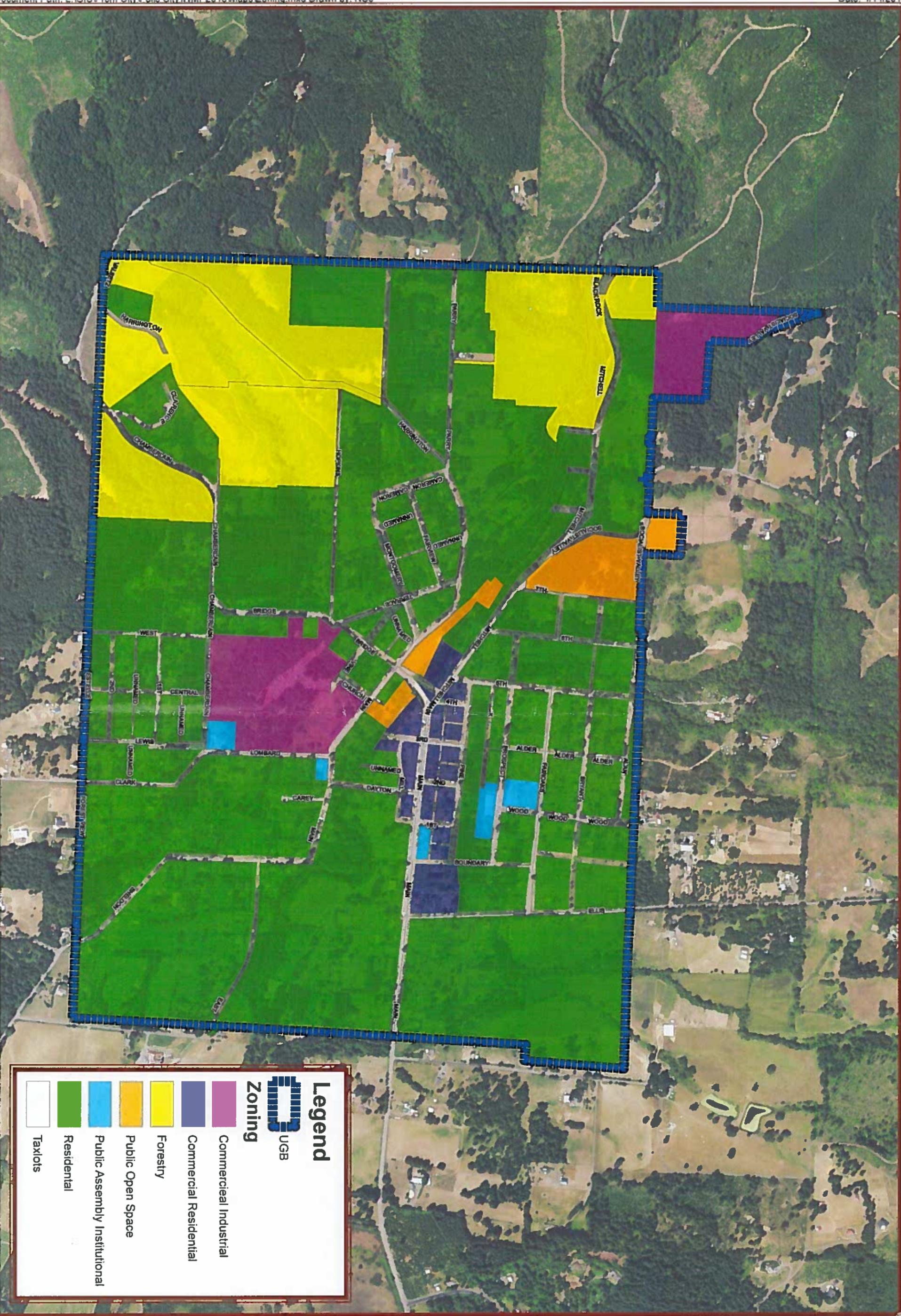
Key
Prefix
NC-Commercial
R-Residential
RC-Residential
Commercial
Suffix
I-inside city limits
O-outside City Limits





Legend

- WTP
- PRV
- Intakes
- Interconnections
- Reservoir
- 2" Pipe or smaller
- 3" Pipe
- 4" Pipe
- 6" Pipe
- 8" Pipe
- 10" Pipe
- 12" Pipe
- UGB
- Taxlots

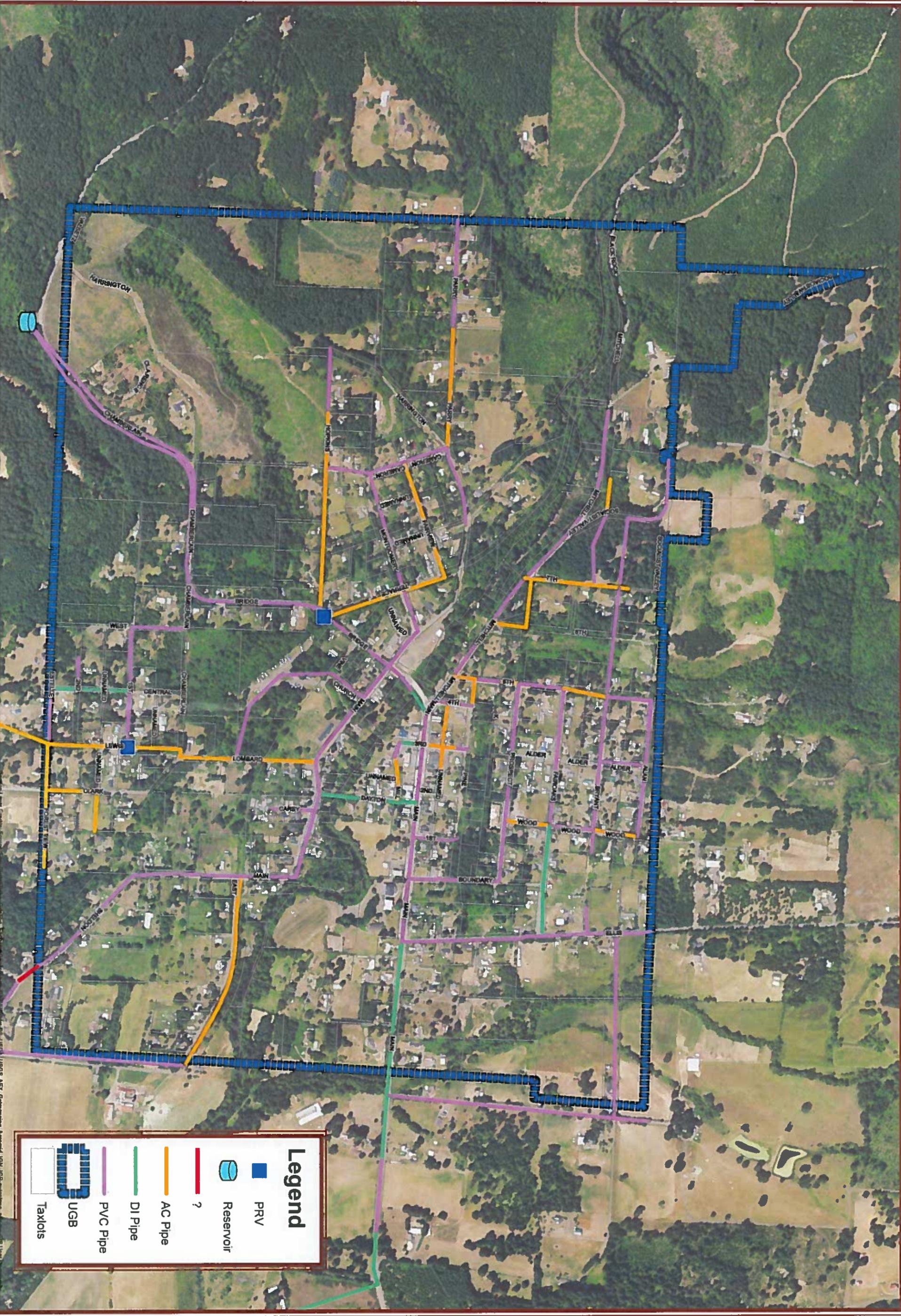


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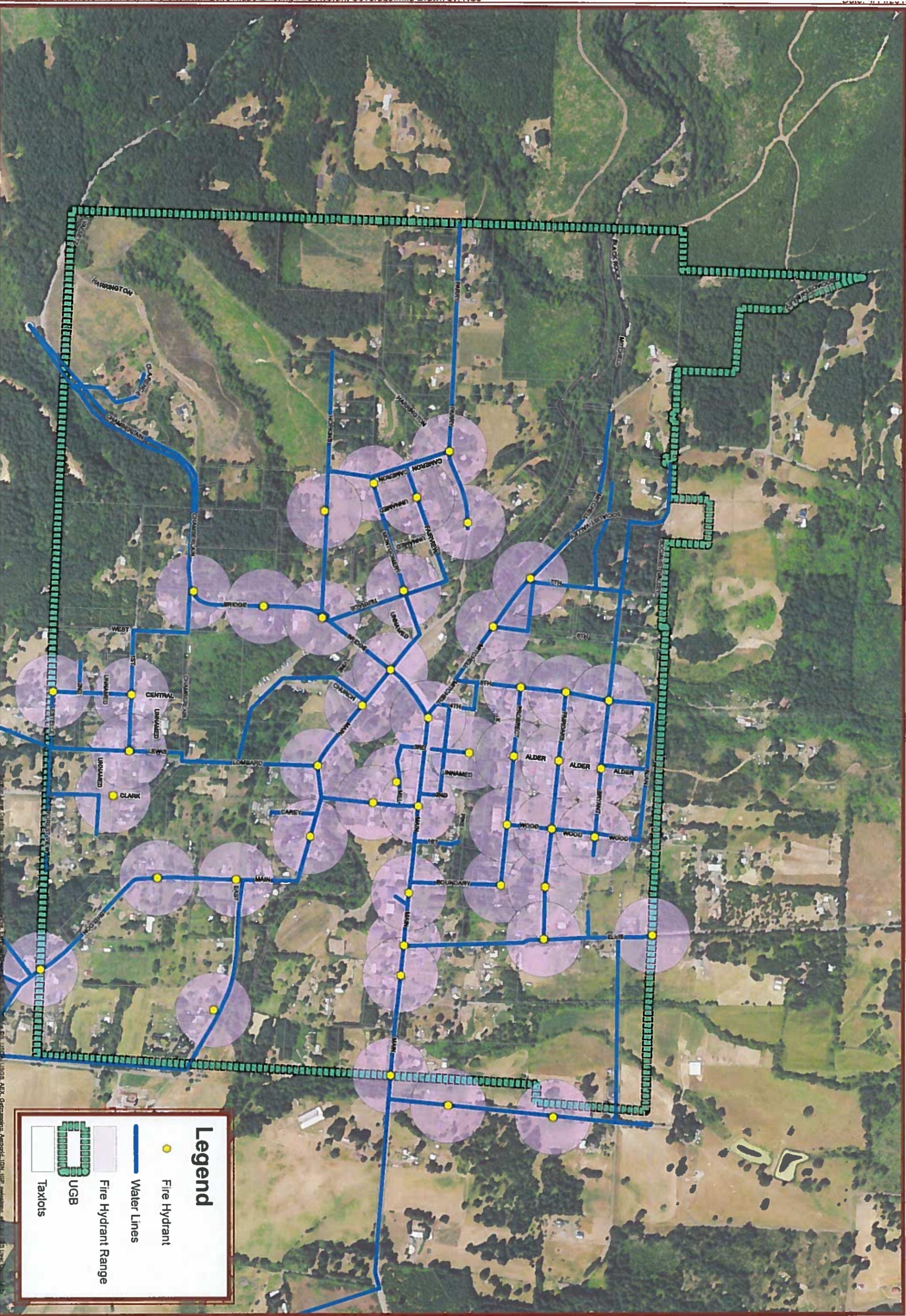
Zoning

-  Commercial Industrial
-  Commercial Residential
-  Forestry
-  Public Open Space
-  Public Assembly Institutional
-  Residential
-  Taxlots



Legend

-  PRV
-  Reservoir
-  ?
-  AC Pipe
-  DI Pipe
-  PVC Pipe
-  UGB
-  Taxlots



Legend

- Fire Hydrant
- Water Lines
- Fire Hydrant Range
- UGB
- Taxlots