

**City Council Study Session
October 26, 2015 - 4:30 PM
Auburn City Hall
AGENDA**

[Watch the meeting LIVE!](#)

[Watch the meeting video](#)

Meeting videos are not available until 72 hours after the meeting has concluded.

I. CALL TO ORDER

A. Roll Call

II. ANNOUNCEMENTS, REPORTS, AND PRESENTATIONS

III. AGENDA ITEMS FOR COUNCIL DISCUSSION

**A. Comprehensive Sewer Plan (10 Minute Presentation/10 Minute Q&A)*
(Snyder)**

**B. Comprehensive Water Plan (20 Minute Presentation/25 Minute Q&A)*
(Snyder)**

**C. Boeing Auburn Facility Groundwater Contamination Update (20 Minute
Presentation/10 Minute Q&A)* (Snyder)**

Representatives from the Washington State Department of Ecology will provide an update to City Council on the status and findings to date of the Boeing Auburn facility remedial investigation for groundwater contamination.

D. Angie O'Neill and Brittany Miller, students of the Masters of Social Work Program, University of Washington to brief the City Council on their advocacy project (15 Minute Presentation)

E. GIS Day Presentation (15 Minute Presentation/5 Minute Q&A) (Haugan)

**F. Water Supply Strategies (20 Minute Presentation/15 Minute Q&A)*
(Snyder)**

IV. OTHER DISCUSSION ITEMS

V. ADJOURNMENT

Agendas and minutes are available to the public at the City Clerk's Office, on the City website (<http://www.auburnwa.gov>), and via e-mail. Complete agenda packets are available for review at the City Clerk's Office.

**Denotes attachments included in the agenda packet.*



AGENDA BILL APPROVAL FORM

Agenda Subject:

Comprehensive Sewer Plan (10 Minute Presentation/10 Minute Q&A)

Date:

October 19, 2015

Department:

CD & PW

Attachments:

[2015 Draft Comprehensive Sewer Plan Memo](#)
[Powerpoint Presentation](#)

Budget Impact:

\$0

Administrative Recommendation:

For discussion only.

Background Summary:

The City has updated the Comprehensive Sewer Plan (Plan) in coordination with the update of the City's overall Comprehensive Plan. Its purpose is to guide the City with respect to future activities and improvements for the Sanitary Sewer Utility. The final plan will consist of one binder; containing the Executive Summary, Chapters 1-9, appendices, and a system map. Council reviewed the main body of the plan on March 23, 2015. The Planning Commission reviewed the plan on April 7, 2015, and then conducted a public hearing on April 21. The Planning Commission recommended approval of the Plan by the City Council.

A summary of the projects completed during the last Comprehensive Sewer Plan period, as well as an overview of future capital projects and other efforts will be presented during the study session meeting.

Agency Review:

Following the recommendation from the Planning Commission, the draft plan was sent to other agencies with a potential interest in its content. Overall, comments from reviewing agencies were minor. The Department of Ecology (DOE) did, however, request that the City modify its policy concerning private pump systems. Their goal is that the City be prepared to repair or take other action to prevent overflow due to the failure of such a system. To meet this requirement, staff is proposing the following changes to Chapter 3:

Policy 12 will be modified to read (additions are underlined):

Non-gravity services (e.g., grinder pumps and low-pressure force mains) are prohibited except in extenuating circumstances when service by gravity is infeasible. The cost of installation, operation, and maintenance of a low-pressure system shall be borne by the property owner, community association, developer, etc. The City will not install, own, or maintain (outside of emergencies) any part of a private non-gravity system. The property owner shall select the grinder pump system from a list of City-approved pump manufacturers and models. Prior to approval to install a non-gravity system, the property owner shall grant site access to the City for emergency repairs in circumstances where a prompt repair is necessary to reduce the risk of overflow. (See related Policy #20)

Additionally, a new policy will be added in the Protection and Improvement of the Environment and Public Health section:

Policy 20: To protect public health and the environment, the City will require a property owner to promptly repair any grinder pump system failure. If the property owner fails to do so, the City will take such action as it deems necessary to prevent or rectify an overflow, including but not limited to temporarily suspending occupancy of the premises or repairing the grinder pump system at the applicant's expense.

The memo included with this agenda item lists the changes to the Plan by page number from the previous version reviewed by the Council. Staff will prepare and distribute a final hard copy of the Plan, including all chapters, the system map, and all appendices prior to adoption with the overall City Comprehensive Plan. The most up-to-date version of the draft Plan can be found at the following links:

Main Document: <http://weblink.auburnwa.gov/External/docview.aspx?dbid=0&openfile=true&id=269324>

Appendices: <http://weblink.auburnwa.gov/External/docview.aspx?dbid=0&openfile=true&id=269327>

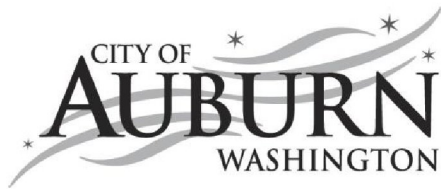
Reviewed by Council Committees:

Councilmember:

Staff: Snyder

Meeting Date: October 26, 2015

Item Number: DI.A



**Memorandum
Engineering Division**

To: City Council Members
Nancy Backus, Mayor

From: Bob Elwell, Sewer Utility Engineer

Cc: Kevin Snyder, Director of Community Development and Public Works
Ingrid Gaub, Assistant Director of Engineering/City Engineer
Randy Bailey, Assistant Director of Public Works Operations
Lisa Tobin, Utilities Engineering Manager

Date: October 19, 2015

Re: 2015 Draft Comprehensive Sewer Plan Update

Since the Council last reviewed the March 2015 Draft Comprehensive Sewer Plan, it has been reviewed by the Planning Commission, the King County Utilities Technical Review Committee (UTRC), the Washington State Department of Ecology (DOE), other government agencies, and adjacent sewer providers.

Based on those review comments and questions, this plan has been updated. Since most of the changes were minor, you are not being provided with a new hard copy of the updated version for this review. Below, we have summarized significant changes to the plan since that time, and are providing a link to an electronic version of the updated (October, 2015) plan.

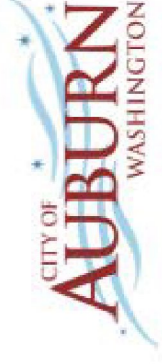
Location	Description	Reason
ES-1, 1-1	Added statement equating this Comprehensive Sewer Plan with the General Sewer Plan described in WAC 173-250-050.	DOE review comment
2-1	Added description of number of residential customer equivalents to Section 2.3	That data is used to address a DOE comment for Chapter 8.
Figures 2-2, 4-1, 4-2, 5-5	Noted an area of Pacific served by Auburn (A Street SE, just north of White River).	City staff review
Chapter 3	Removed references to specific City Comprehensive Plan Policies, as those are being revised/relocated	City staff review
3-3	Modified Policy #12, added policy 20 (and renumbered following items)-The text of these changes is shown on the agenda bill	DOE review comment.
Figure 4-2	Added some recently constructed Lakehaven Utility District infrastructure	Lakehaven Utility District review comment
4-13	Updated list of industrial waste discharge permits and added a reference to how the most current list can be found.	UTRC review comment
4-14	Added statement regarding upcoming adoption of reclaimed water rules	DOE review comment
5-11	Added table showing inflow/infiltration rates for various basins within Auburn	UTRC review comment
Figure 5-5	Revised the legend for clarity	Lakehaven Utility District review comment
Table 8-8	Added data showing projected operating expenses and debt services per RCE	DOE review comment

City of Auburn

Comprehensive Sewer Plan

Volume 1 // Report

March 2015



2009 Sanitary Sewer Plan Accomplishments

- 6 Projects

- | | |
|--|------------------------------------|
| 1. SCADA (Telemetry) Upgrades | completed |
| 2. Lea Hill Pump Station Decommissioning | completed |
| 3. Ellingson PS Replacement | completed |
| 4. Dogwood PS Replacement | completed |
| 5. Les Gove Area Improvements | completed |
| 6. Emergency Power Generators | under construction-almost complete |

- 3 Programs

- Sewer Repair & Replacement/System Improvements
- Arterial Preservation Utility Improvements
- Save Our Streets Utility Improvements

DIA

Page 6 of 51

Significant Changes from 2009 to 2015

- Updated hydraulic model calibrated to King County Decennial Flow Monitoring (2 wet seasons)
- Greater emphasis on Asset Management
- Increased monitoring

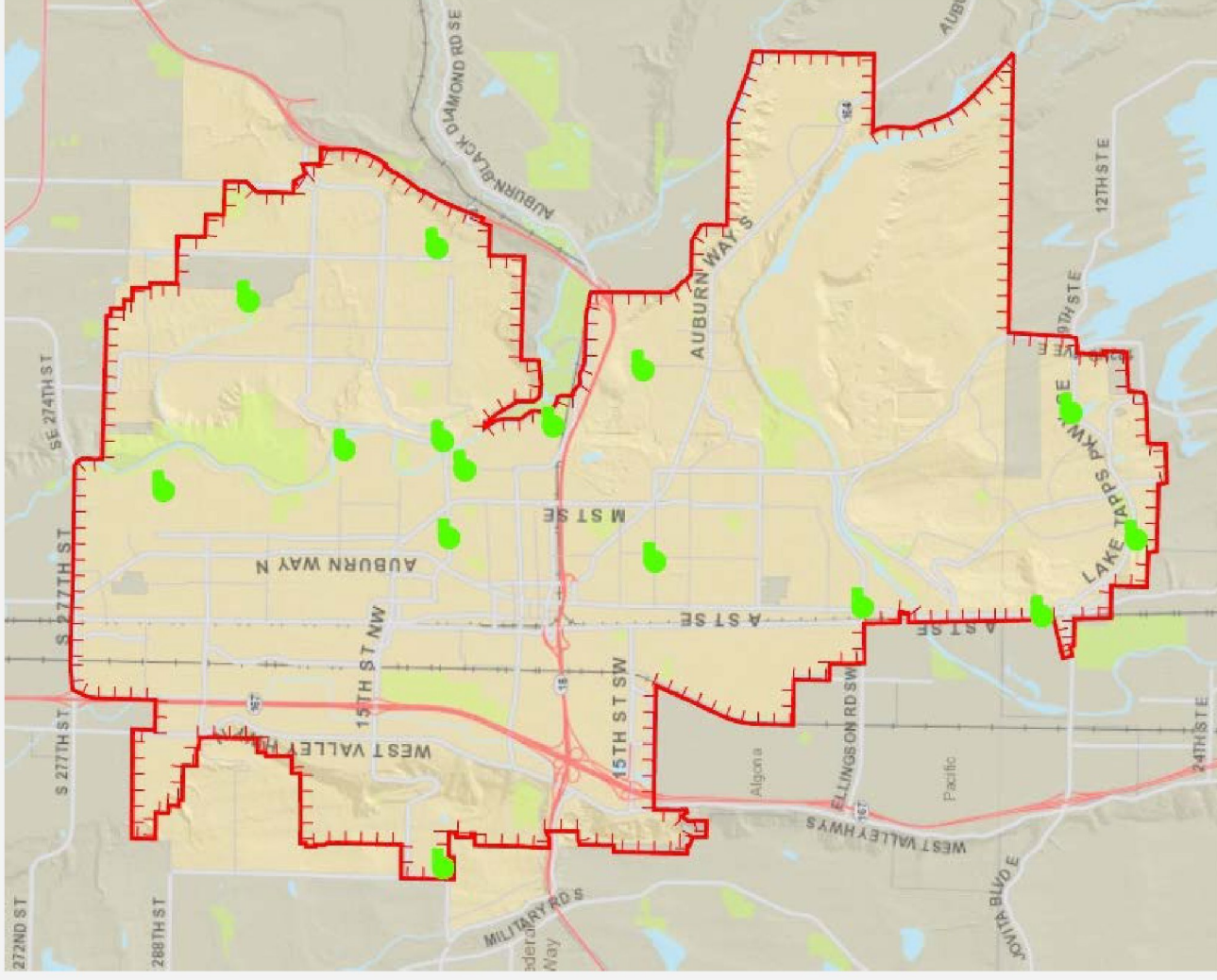
2015 Sewer Plan

2016-2021 Capital Improvement Plan

- 7 Projects Proposed
- 3 Programs

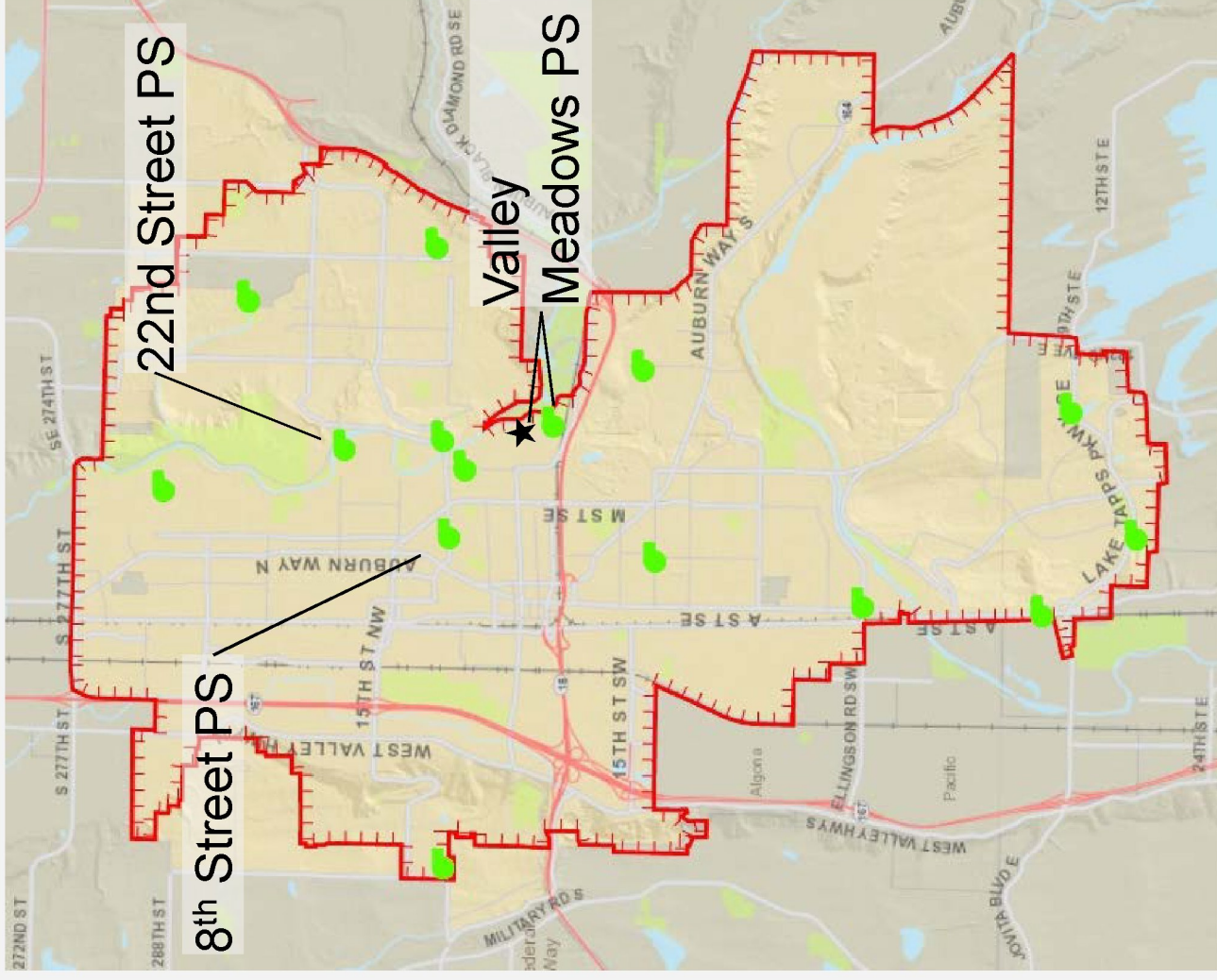
Pump Station Condition Assessment

- Assess all 15 utility owned pump stations
- Inspection of hydraulic/mechanical, electrical, control and safety systems
- Document condition/remaining useful life of components
- Used to clarify scope of the pump station replacement/improvement project

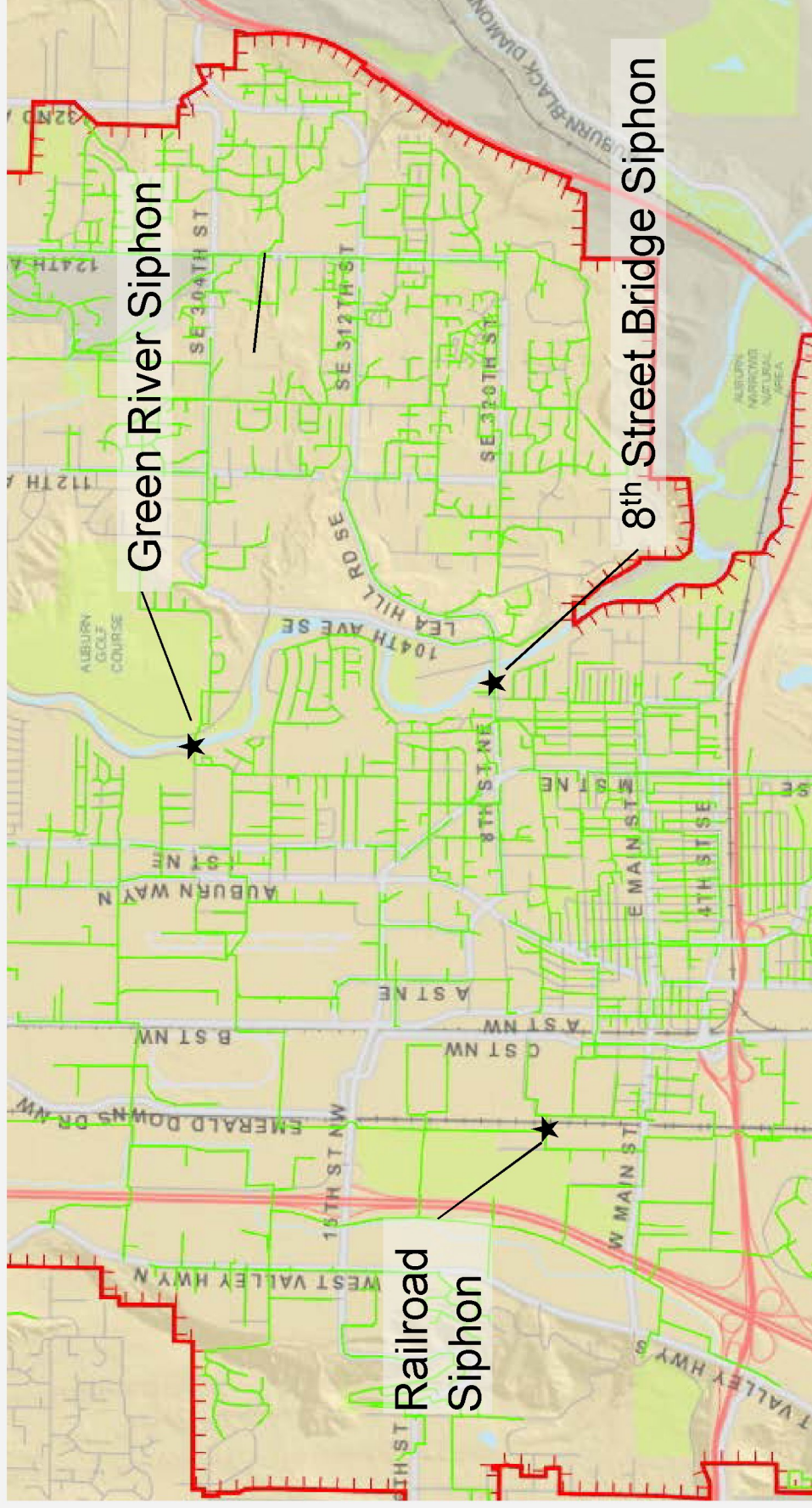


Pump Station Replacement/ Improvements

- Anticipated to replace or improve 3 stations
 - 8th Street
 - Valley Meadows
 - 22nd Street
- Exact scope and sequence of work to be determined following condition assessment project

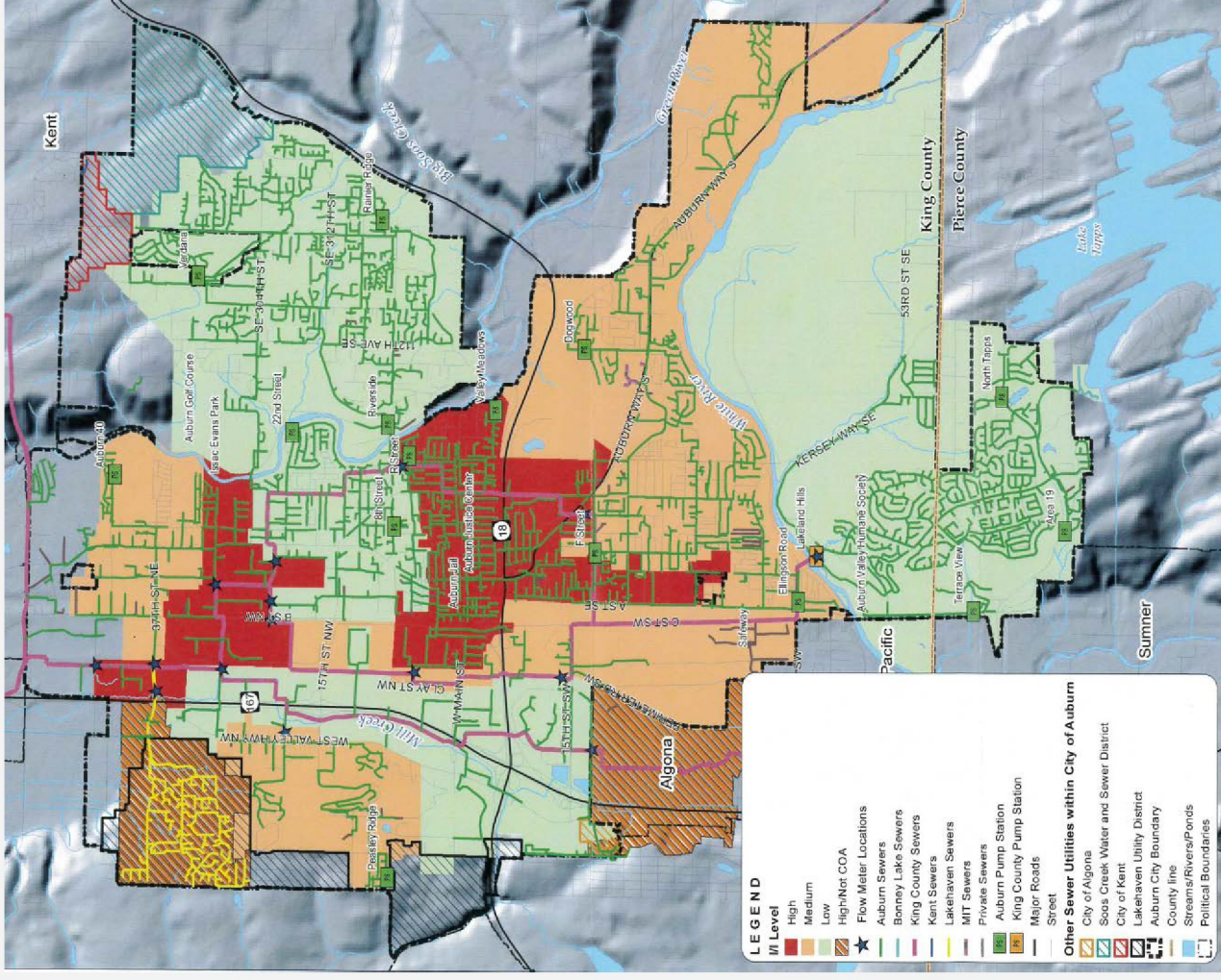


Siphon Assessment



Infiltration/Inflow (I/I) Study

- Flow monitoring of smaller basins
- Correlation of flow rates to rainfall data
- Isolate areas of high I/I

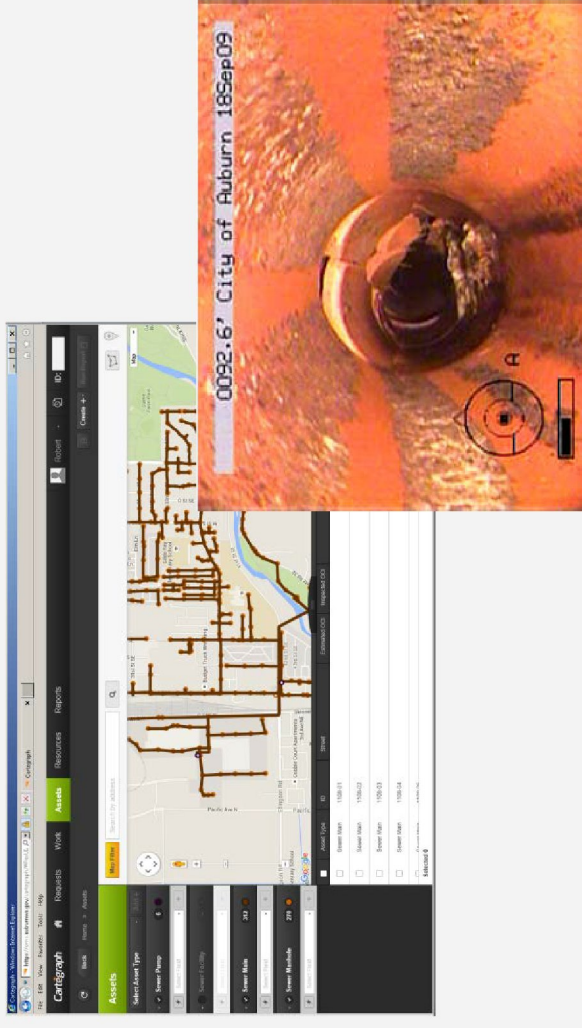


Ongoing Programs

- Asset Management
 - Data Collection/Assembly
 - Condition Assessment
 - Establish Asset Criticality
- Discharge Quality Control
 - Fats, Oils, and Grease (FOG) program
 - Industrial waste
 - Public Education

DIA

Page 13 of 51



Financial Considerations

- Adopted annual City rate increase ~ 2.5% 2015-2017
- Projected annual City rate increase ~ 3.6% (average) 2018-2021

Future Staffing Needs

- Staffing
 - 2 Full-Time Equivalent (FTE) employees by 2020
 - Support Asset Management and Level-of-Service Goals

Plan Review

- Planning Commission
- Adjacent Providers
 - City made some minor mapping clarifications related to legend
- King County Utility Technical Review Committee
 - City provided clarification of infiltration/inflow quantities
- Department of Ecology
 - City to address ownership/responsibility for private pumps → Revised policy language

Private Pressure System Policy

- **Previously Proposed Policy**
 - Owner is responsible for all maintenance and repair of the system.
- **Revised Policies**
 - Owner is still ultimately responsible
 - Owner must choose from list of approved systems
 - City will take action, if necessary, to address an overflow

Questions?



AGENDA BILL APPROVAL FORM

Agenda Subject:

Comprehensive Water Plan (20 Minute Presentation/25 Minute Q&A)

Date:

October 19, 2015

Department:

CD & PW

Attachments:

[2015 Draft Comprehensive Water Plan Memo](#)
[Powerpoint Presentation](#)

Budget Impact:

\$0

Administrative Recommendation:

For discussion only.

Background Summary:

The City has completed the update to the Comprehensive Water Plan (Plan) in coordination with the update to the City's overall Comprehensive Plan. The preliminary draft was reviewed with Council during three study sessions between November 2014 and February 2015, and by the Planning Commission in March and April of 2015.

Summary of the Plan

The City's Retail Water Service Area serves over 56,000 people in both South King County and Pierce County. The City's water facilities consist of ten wells, two springs, two Tacoma wholesale water supply interties, eight reservoirs, eight pump stations, two corrosion control treatment facilities, and nearly 250 miles of pipeline. The City currently provides wholesale water supply to the City of Algona and to King County Water District #111. The City of Bonney Lake, Lakehaven Utility District, and King County Water District #111 (WD#111) also provide water service within Auburn's city limits where such service predated Auburn's annexation of those areas.

City policies are established to provide a framework for the design, operation, and reliability of the City's water utility. Two key policy statements pertaining to redundancy provide guidance for development of the capital improvement program:

- The City's goal is to have sufficient system-wide supply facilities to meet the maximum daily demand (MDD) of the entire system with the largest active water supply source out of service.
- The City's goal is to have sufficient capacity to allow full service with any single pump out of service.

The City's water supply facilities must be augmented before 2035 to meet the maximum day demand and redundancy criteria. The City has identified options for increasing Auburn's supply facilities and for utilizing additional Tacoma water. These options are presented in the Capital Improvement Plan (CIP). The CIP also identifies system improvements that are needed to meet customer demands and levels of service through the 20-year planning period in the areas of supply, storage, pumping, distribution system, and general utility projects. Significant projects will be highlighted during the Study Session. No changes in the current adopted rate structure through 2017 is proposed. Rate increases are anticipated beginning in 2018.

Plan Review

The Planning Commission's recommendation for City Council approval of the Plan was conditional on "showing the cost of the [capital improvements] program without using wholesale water from Tacoma Public Utilities purchase". This purchase is referring to the reserve water supply block offered by Tacoma Public Utilities that is in addition to the amount the City has already purchased. The Council has until June 30, 2017 to make the final decision on whether or not to purchase this additional water; therefore, the Plan was developed with this option included until a decision by the City is made.

The draft Plan was submitted to the Washington Department of Health (DOH), King County, Pierce County, and adjacent purveyors for their review and comment. Minor comments were received from DOH and both counties. No comments were received from adjacent purveyors.

The memo included with this agenda item lists the changes to the Plan by page number from the previous version reviewed by the Council. Staff will prepare and distribute a final hard copy of the Plan, including all chapters and appendices prior to adoption with the overall City Comprehensive Plan. An electronic version of the updated Comprehensive Water Plan can be found on the City's website at:

Main Document: <http://weblink.auburnwa.gov/External/docview.aspx?dbid=0&openfile=true&id=269363>

Appendices Part 1 (A - I): <http://weblink.auburnwa.gov/External/docview.aspx?dbid=0&openfile=true&id=269364>

Appendices Part 2 (J - U):
http://www.auburnwa.gov/Assets/PW/AuburnWA/Docs/comp_water_plan_part_2.pdf

Plan Approval

DOH has established December 31, 2015 as the deadline for approval of Auburn's Comprehensive Water Plan. To meet this deadline staff intends to bring the Plan forward for approval by the City Council through a resolution on November 2, 2015. This will allow the appropriate time for the necessary King County and DOH approvals to be completed by the deadline. The Plan will also be included in the Ordinance for the adoption of the overall Comprehensive Plan later this year.

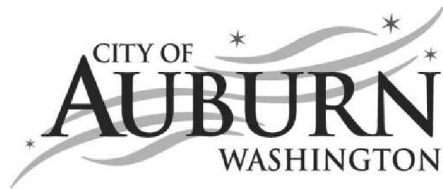
Reviewed by Council Committees:

Councilmember:

Staff: Snyder

Meeting Date: October 26, 2015

Item Number: DI.B



**Memorandum
Engineering Division**

To: City Council Members
Nancy Backus, Mayor

From: Susan Fenhaus, Water Utility Engineer

Cc: Kevin Snyder, Director of Community Development and Public Works
Ingrid Gaub, Assistant Director of Engineering/City Engineer
Randy Bailey, Assistant Director of Public Works Operations
Lisa Tobin, Utilities Engineering Manager

Date: October 19, 2015

Re: 2015 Draft Comprehensive Water Plan Update

Since the Council last reviewed the February 2015 Draft Comprehensive Water Plan, it has been reviewed by the Planning Commission, the King County Utilities Technical Review Committee (UTRC), the Washington State Department of Health (DOH), other government agencies, and adjacent water providers.

Based on those review comments and questions, this plan has been updated. Since most of the changes were minor, you are not being provided with a new hard copy of the updated version for this review. Below, we have summarized significant changes to the plan since that time, and are providing a link to an electronic version of the updated (October, 2015) plan.

Location	Description	Reason
Pages 1-3 and 1-4	Section 1.7 was updated to indicate no adjacent purveyor comments were received.	DOH review comment
Pages 2-9 and 2-10	Figure 2.2 was updated to include wholesale sales and descriptive text was added to Section 2.4.	DOH review comment
Pages 2-21 through 2-23	Section 2.9 was updated to add applicable water resource plans.	UTRC review comment
Page 3-8	Policy in Table 3.3, Section 3.3.4 was revised to clarify development within the Retail Water Service Area.	UTRC review comment
Pages 7-5 and 7-4	Section 7.2 was updated to reference the E. coli Response Plan.	DOH review comment
Page 9-18	Section 9.4.4 was updated to reference King County code.	UTRC review comment
Pages 10-1 and 10-2	Section 10.1 was updated to better reflect how the City is implementing the asset management program.	DOH review comment
Pages 12-27 and 12-28	Section 12.12 was updated to include the Construction Completion Reports.	DOH review comment
Appendix A	State Environmental Policy Act (SEPA) and Determination of Non-significance (DNS) were added.	DOH requirement
Appendix B	Agency comment letters were added.	DOH review comment
Appendix C	Government Consistency Checklists were added.	DOH requirement
Appendix L	Coliform Monitoring Plan 2015 was added	DOH review comment
Appendix T	Cross Connection Control Program was added.	DOH requirement
Appendix U	2014 Water Shortage Contingency Plan was added.	DOH requirement

Comprehensive Water Plan

October 26, 2015
City Council Study Session

2009 Water Plan Accomplishments – Significant projects

- New Lakeland Hills

Reservoir 6



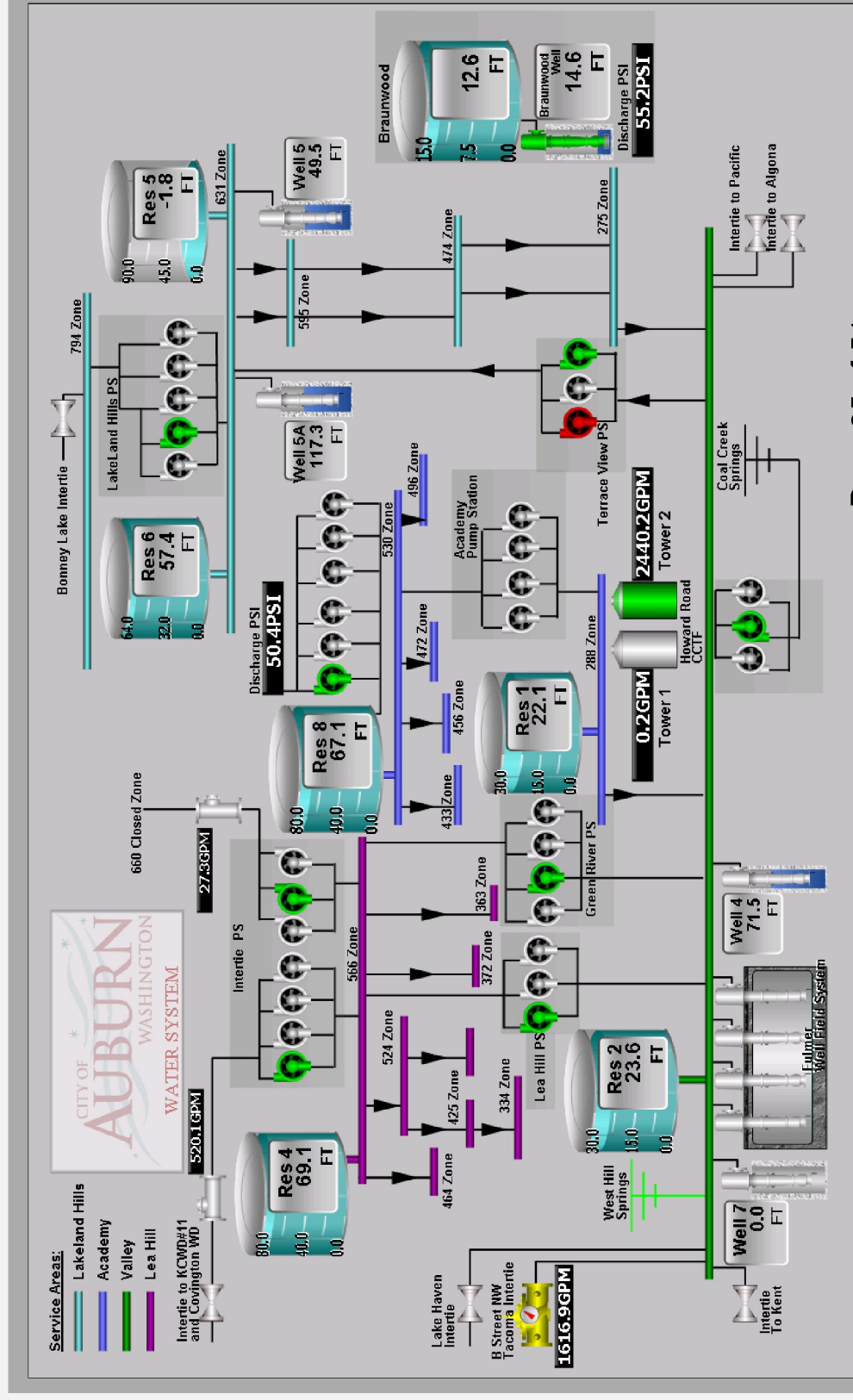
2009 Water Plan Accomplishments – Significant projects

- New Lakeland Hills and Academy East Booster Pump Stations



2009 Water Plan Accomplishments – Significant projects

- SCADA System Upgrades



2009 Water Plan Accomplishments – Significant projects

- Well 4 Chlorination and Back-up Power



2009 Water Plan Accomplishments – Significant projects

- Lakeland Hills
Reservoir 5
Improvements



2009 Water Plan Accomplishments – Significant projects

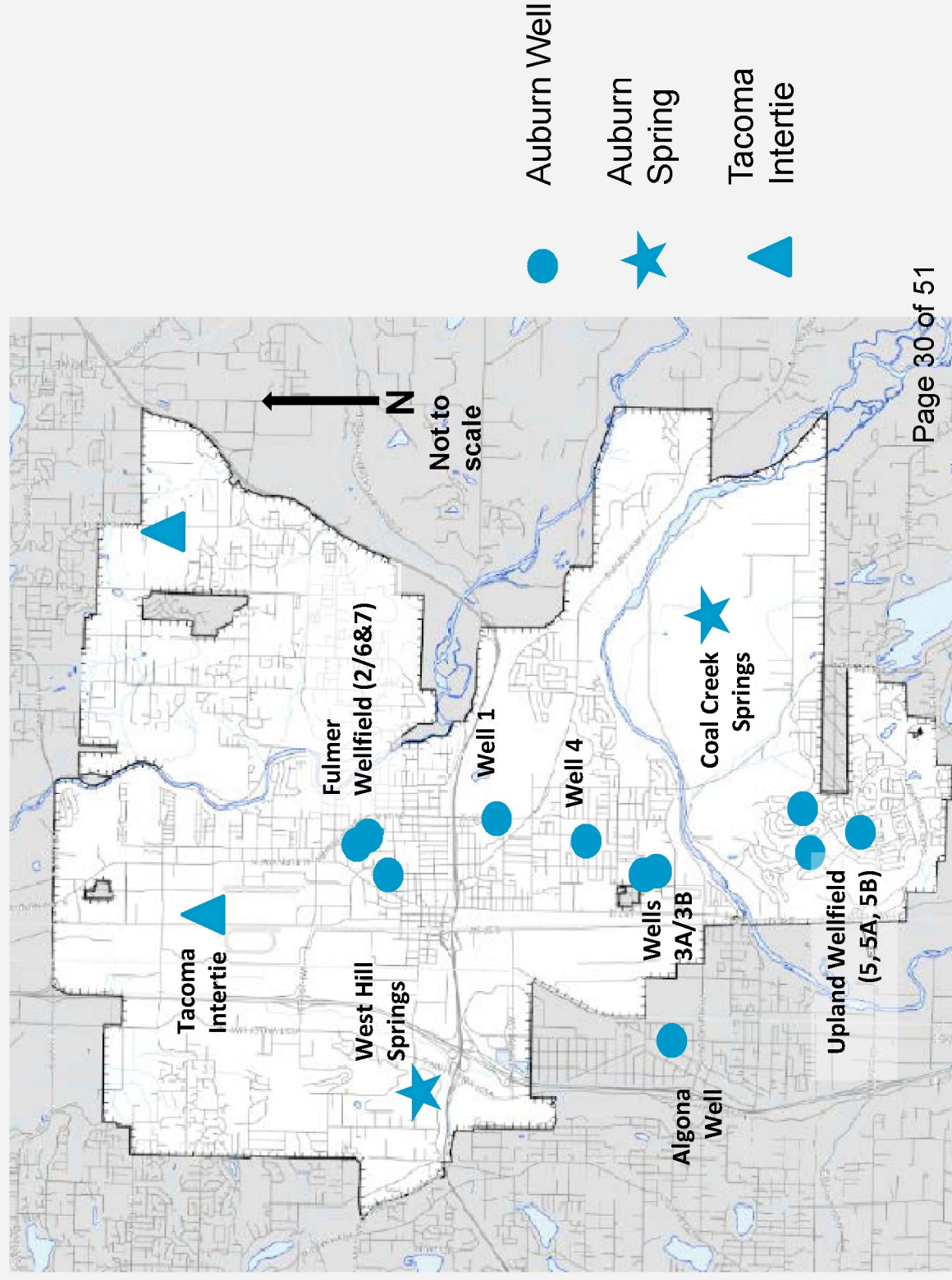
- Well 1 Improvements



Changes to the Plan from 2009 to 2015

- Policies focus on business practices
- Completion of Tacoma water purchase and interties provides additional supply and redundancy to system
- New regulatory requirements will increase our monitoring
- Asset management utilized to incorporate repair & rehabilitation projects into Capital Improvements Plan

Existing Water Supply Sources



Fulmer Wellfield – Wells 2, 6, and 7

- Study found corrosion and iron and manganese clogging
- Solution - Continuous operation
- Well 6 in 2016
- Well 2 in 2017



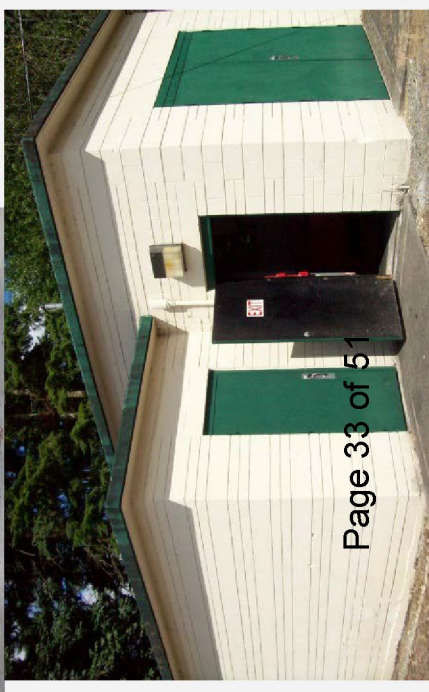
Proposed Significant Projects

- Coal Creek Springs Collector Improvements



Proposed Significant Projects

- West Hill Springs Improvements
- Green River Pump Station Back-up Power
- Academy 1 Pump Station Improvements



Proposed Significant Projects

- Coal Creek Springs
24" Transmission Main

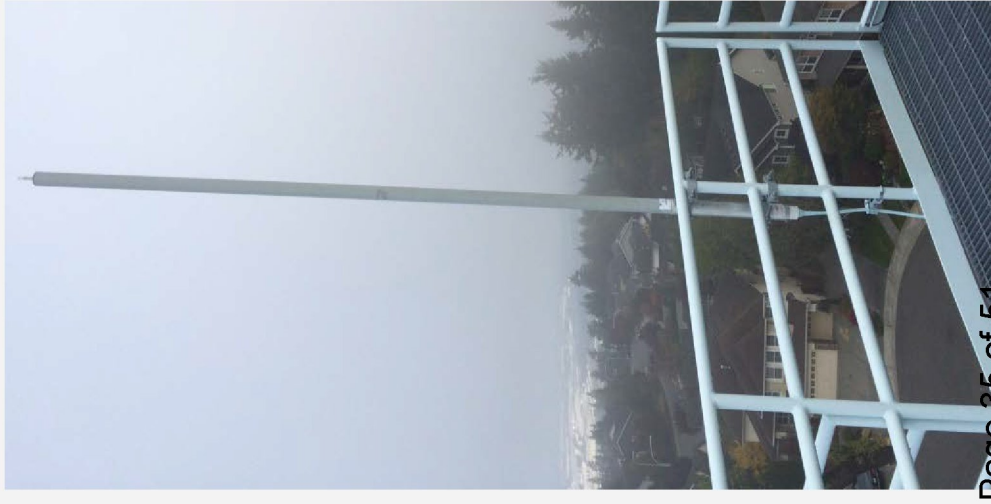


Significant Projects in Progress

- Advanced Metering Infrastructure (AMI)



D.I.B



Page 35 of 51

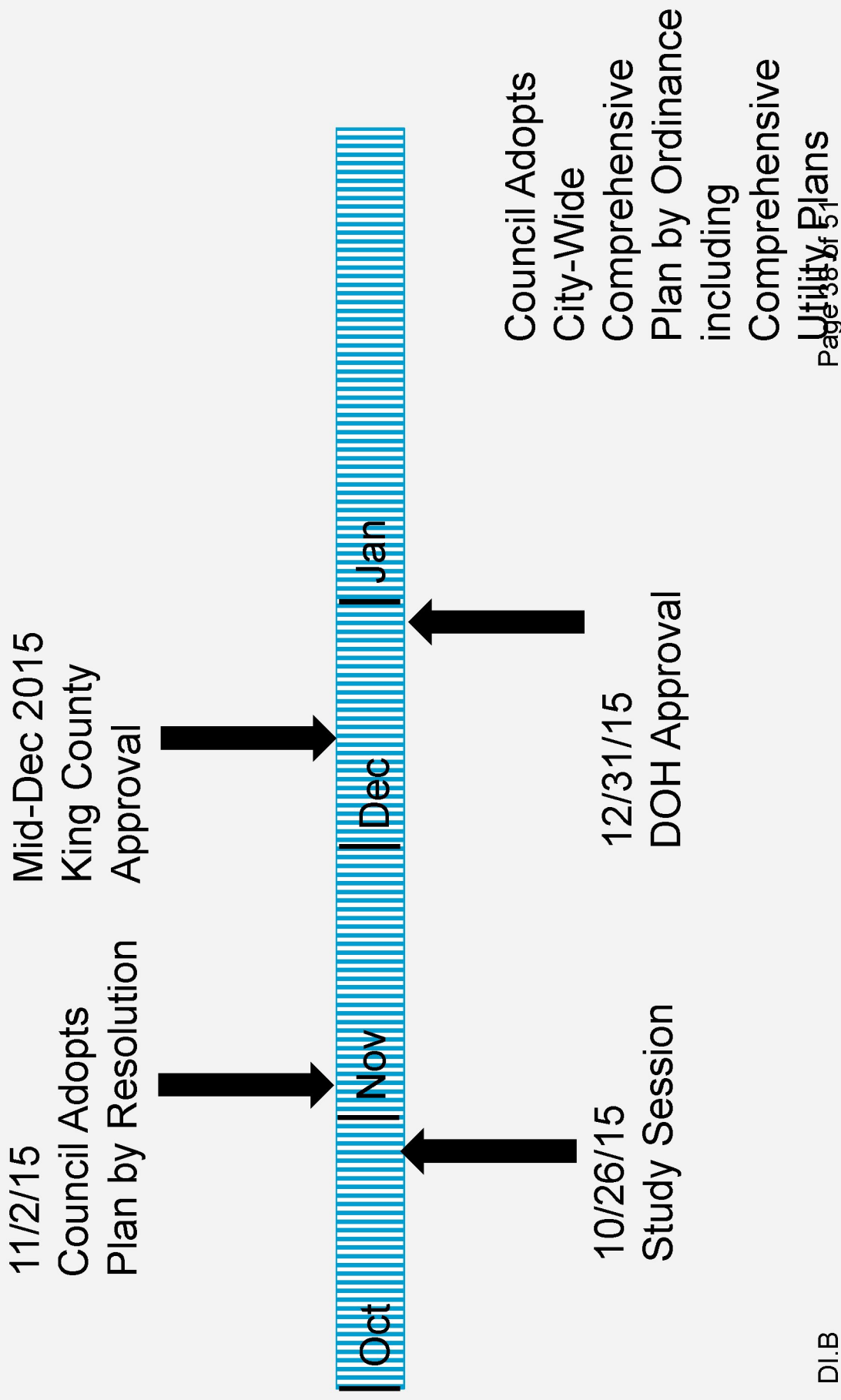
Financial Considerations

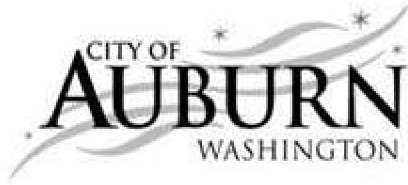
- No rate changes proposed beyond those already adopted by Council through 2017
- No additional staff need identified before 2020

Review Comments

- No significant comments from regulatory agencies.
- No comments from peer agencies
- April 4, 2015 Planning Commission review and recommendation

Next Steps





AGENDA BILL APPROVAL FORM

Agenda Subject:

Boeing Auburn Facility Groundwater Contamination Update
(20 Minute Presentation/10 Minute Q&A)

Date:

October 21, 2015

Department:

Community Development &
Public Works

Attachments:

[Department of Ecology backup materials](#)

Budget Impact:

\$0

Administrative Recommendation:**Background Summary:**

At the regular City Council study session on October 26, 2015, representatives from the Washington State Department of Ecology will provide an update to the City Council regarding the remedial investigation of groundwater contamination related to historic releases of an industrial degreaser called Trichloroethene (TCE) at the Boeing Auburn facility. The presentation will be given by the Department of Ecology's Boeing Auburn site remedial investigation Co-Managers Neal Hines, P.E., Ph.D., and Robin Harrover, LHG.

Please find attached a summary document prepared by the Department of Ecology that provides background information about the remedial investigation and future clean-up efforts.

Reviewed by Council Committees:**Councilmember:****Staff:**

Snyder

Meeting Date: October 26, 2015

Item Number: DI.C



Boeing Auburn Fabrication Site Cleanup



Project Background

In parts of Auburn and Algonia, groundwater—the water that flows under the ground through the soil—is contaminated with a degreaser called trichloroethene (TCE) and its breakdown products. It is believed that the chemicals originated from the Boeing Auburn facility. The contaminated groundwater (called a plume) flows north and northwest away from the Boeing property into portions of southwest Auburn and northeast Algonia. To date, the chemicals found are at low levels that are not expected to pose a risk to human health and the environment. If chemicals are found to be an immediate risk, Ecology will direct Boeing to implement interim actions to reduce risk.

The Department of Ecology (Ecology) is overseeing the Boeing Company's investigation of the contamination and will select and review a plan for cleanup.

The Remedial Investigation

The contaminated groundwater (called a plume) flows north and northwest away from the Boeing property into portions of southwest Auburn and northeast Algonia. A Remedial Investigation is necessary to understand the source and extent of the contamination at the site. The map to the left shows the shallow and intermediate groundwater contamination.

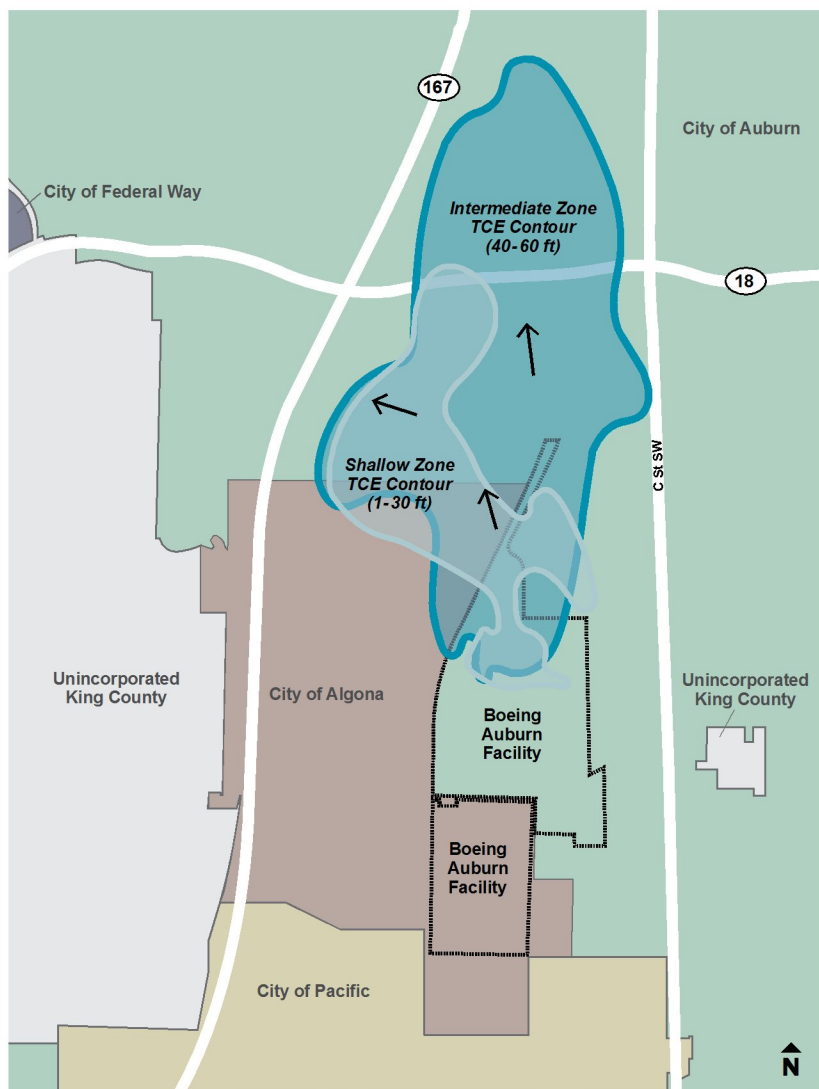
Chemicals could enter the body three ways:

- Breathing
- Touching
- Swallowing

This is referred to as exposure. To date, the environmental samples collected have demonstrated that human exposure to the chemicals released is very low.*

What is TCE?

- An industrial degreaser and volatile organic compound (VOC), also found in common household products like paints, glues, spot removers and pepper spray.
- Able to break down into other chemicals, such as vinyl chloride (VC) and less toxic by-products.

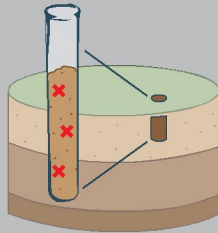


The site includes areas where the groundwater investigation has occurred.

The Cleanup Process

Boeing's cleanup must follow the Washington State Model Toxics Control Act (MTCA) cleanup regulations. Currently, the project is in the Remedial Investigation phase.

Remedial Investigation



A Remedial Investigation defines the nature, extent, and magnitude of pollution at a site in order to identify the best method for cleanup.

Interim Action

If the contaminants are found to pose a risk to human health or the environment, Ecology will direct Boeing to take immediate action to reduce this risk. **This happened on the Boeing property in 2004, when an Interim Action was taken to contain a known source for the plume.** Since that time, chemicals found have been at low levels and not expected to pose a risk to human health or the environment.



Feasibility Study



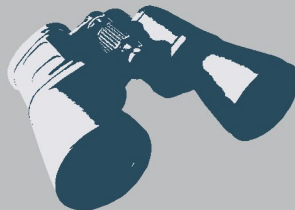
The Feasibility Study takes the information from the Remedial Investigation to identify and evaluate cleanup alternatives. Then an optimal alternative will be selected and incorporated into the Cleanup Action Plan.

Cleanup Action Plan



The Cleanup Action Plan specifies cleanup standards, methods, and schedule, describes the steps to be taken, and includes any additional environmental monitoring required during and after the cleanup.

Cleanup & Monitoring



Implementation of the Cleanup Action Plan includes design, construction, operations and monitoring.

 Opportunities for public comment

What is being investigated?

Groundwater

An extensive network of wells has been installed throughout the site to monitor the locations and concentrations of contaminants over time. The Department of Health monitors the drinking supplies regularly, which are located a safe distance away from the contamination.

Surface Water

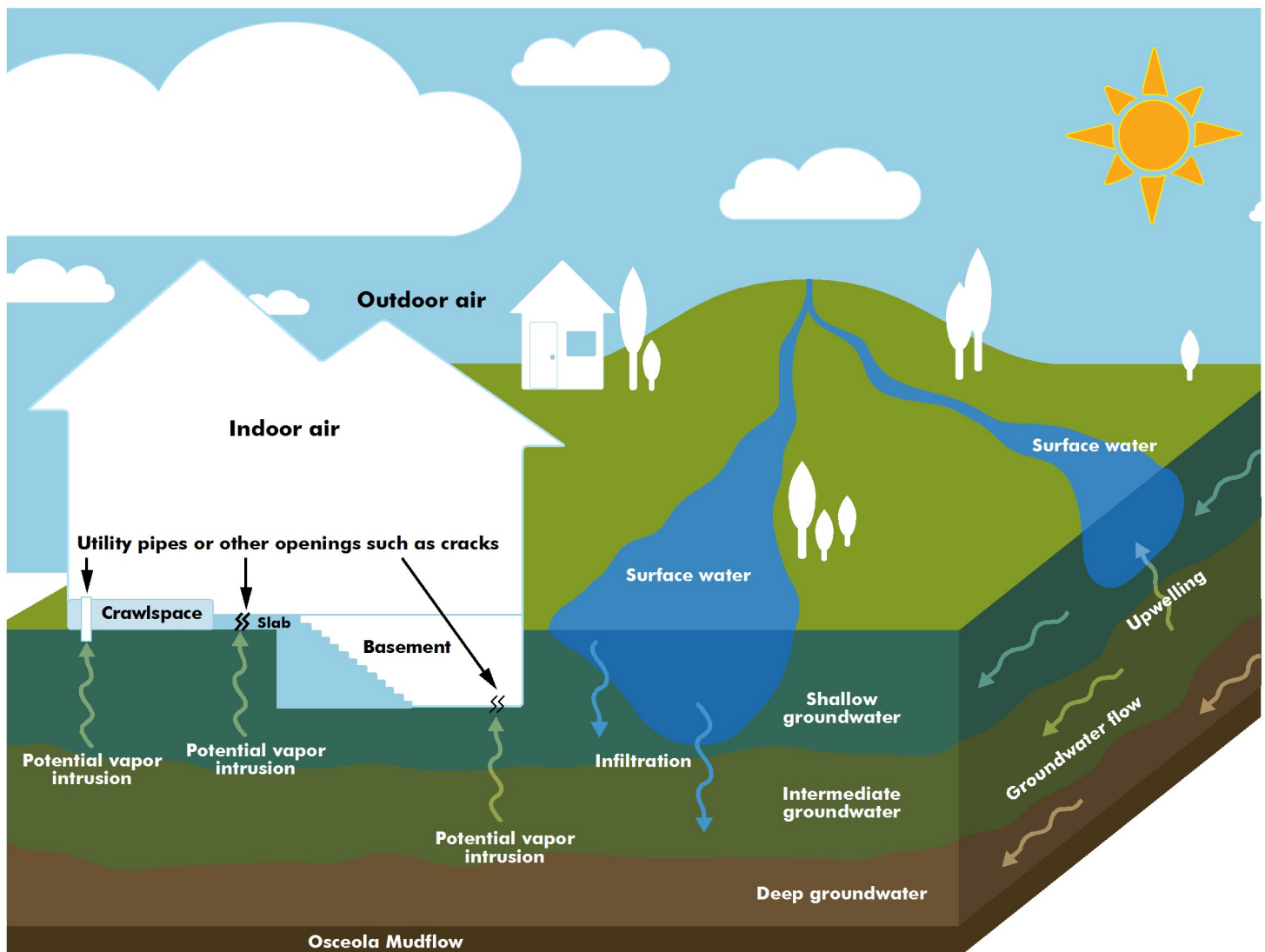
Water samples are collected from ditches and yards to determine if the chemicals are present.

Air Quality

Indoor air and the air above surface water is tested to determine whether chemicals pass from the groundwater to the air as vapor.*



Drilling for groundwater samples in northeast Algona.



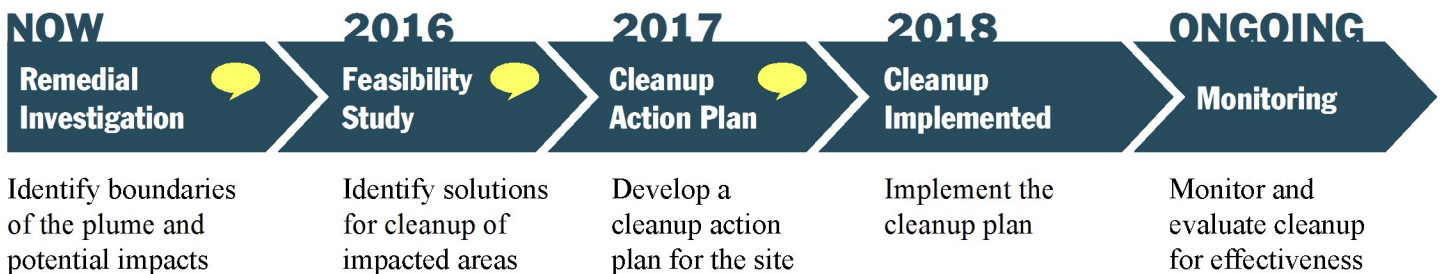
How contaminants can move through groundwater, surface water and air.

What's next?

After the Remedial Investigation is complete, the Feasibility Study will evaluate options for cleanup. Throughout the cleanup process there will be opportunities for public comment.



Anticipated Schedule



 **Opportunities for public comment** Ecology encourages feedback from the community. Public comment periods are held at key points throughout the cleanup process.

For more information

Call our hotline: (253) 219-7645

Email the project: BoeingAuburnSite@ecy.wa.gov

Visit the website: Bit.ly/EcyBoeingAuburn

*To learn more about the Washington Department of Health consultations and results of the Remedial Investigation to date, visit the Document Library on our website!

<https://fortress.wa.gov/ecy/gsp/CleanupSiteDocuments.aspx?csid=5049>

To request ADA accommodation including materials in a format for the visually impaired, call Ecology at 425-649-7000. Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call TTY at 877-833-6341.

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਪੰਜਾਬੀ ਵਿੱਚ ਲੈਣੀ ਚਾਹੋ, ਤਾਂ ਈਕੋਲੋਜੀ ਸਟਾਫ਼ ਦੇ ਕਸਿ ਮੈਂਬਰ ਅਤੇ ਇੱਕ ਦੁਭਾਸ਼ੀਏ ਨਾਲ ਗੱਲ ਕਰਨ ਵਾਸਤੇ ਕਰਿਪਾ ਕਰਕੇ 425-649-7181 'ਤੇ ਕਾਲ ਕਰੋ। ਕਰਿਪਾ ਕਰਕੇ ਨੋਟ ਕਰੋ, ਦੁਭਾਸ਼ੀਏ ਤਕ ਪਹੁੰਚਣ ਲਈ ਈਕੋਲੋਜੀ ਨੂੰ ਕਸਿ ਬਾਹਰੀ ਪਾਰਟੀ ਨੂੰ ਕਾਲ ਕਰਨ ਦੀ ਲੋੜ ਹੋਵੇਗੀ, ਜਿਸ ਵਿੱਚ ਇੱਕ ਮਿਟਿ ਤਕ ਲੱਗ ਸਕਦਾ ਹੈ।

Kung nais mo ang impormasyon na ito sa Tagalog, pakitawagan ang 425-649-7181 upang makipag-usap sa isang tauhang miyembro ng Ekolohiya at isang tagapagsalin ng wika. Pakibigyang pansin, mangangailangan ang Ekolohiya na dumayal ng isang nasa labas na partido upang maabot ang isang tagapagsalin ng wika, na maaring abutin ng hanggang isang minuto.

Якщо ви хочете отримати цю інформацію українською мовою, будь ласка, зателефонуйте 425-649-7181, щоб поговорити зі співробітником Департаменту Екології та перекладачем. Будь ласка, зверніть увагу, що співробітнику Департаменту Екології необхідно буде запросити для розмови перекладача, що може зайняти до однієї хвилини.

Si necesita información en español, favor de contactar a Luis Buen Abad al 425 649-4485.



AGENDA BILL APPROVAL FORM

Agenda Subject:

Water Supply Strategies (20 Minute Presentation/15 Minute Q&A)

Date:

October 19, 2015

Department:

CD & PW

Attachments:

[Water Supply Strategies Powerpoint Presentation](#)

Budget Impact:

\$0

Administrative Recommendation:

For discussion only.

Background Summary:

The City of Auburn 2015 Comprehensive Water Plan (Water Plan) identifies options for meeting future supply demands and for providing redundant supplies when existing supplies are out of service for maintenance and rehabilitation. These options fall into two basic categories:

- Investing in Auburn-owned supplies
- Purchasing additional supply from Tacoma Public Utilities (Tacoma)

The Water Plan includes both options to give the City Council the flexibility to evaluate both options before deciding on the best course of action to meet Auburn's needs. These options will be discussed at the Study Session on October 26th.

History

During preparation of the 2009 Comprehensive Water Plan, a deficiency in our ability to meet the projected future water demands led to the City executing agreements with Tacoma to secure the right to up to 3.5 million gallons per day (mgd) annual average daily use (5.12 mgd maximum daily use) of wholesale water supply, at a cost of \$15.3 million.

The City is also required to pay for the actual water used from Tacoma. The current rates for purchasing Tacoma water are a winter rate of \$2.12 per 100 cubic feet (ccf) and a summer rate of \$2.64 per ccf.

Current and Future Projected Water Demands

The 2015 maximum day water demand is 15 million gallons per day (mgd), and is expected to increase to 19.2 mgd by 2035. The City will complete the rehabilitation

and reconstruction of some of its sources (Wells 1, 2, 4, and 6) by 2017, increasing supply capacity to 24 mgd, including the use of the existing Tacoma supply. Additional supply sources are needed to meet future peak demands and to provide redundancy when Auburn's sources need to be removed from service for maintenance or rehabilitation during the 20-year planning period.

Reviewed by Council Committees:

Councilmember:

Staff: Snyder

Meeting Date: October 26, 2015

Item Number: DI.F

City of Auburn Water Supply Strategies

October 26, 2015
City Council Study Session

Auburn Water Supply & Demand

- 2015 Water supply sources = 15 million gallons per day (mgd)
 - ❖ Meets current demand of 15 mgd
 - ❖ Includes 5.1 mgd block purchased from Tacoma for \$15.3 million (paid between 2012 and 2029)
 - ❖ Purchase only pays System Development Charge, Auburn still has to pay for daily quantity of Tacoma water used
- 2016 Water supply sources = 21 mgd
 - ❖ 16 mgd Auburn + 5 mgd Tacoma sources
- 2017 Water supply sources = 24 mgd
 - ❖ 19 mgd Auburn + 5 mgd Tacoma sources

Key Question = Which water supply service strategy should Auburn pursue to ensure sufficient redundancy?

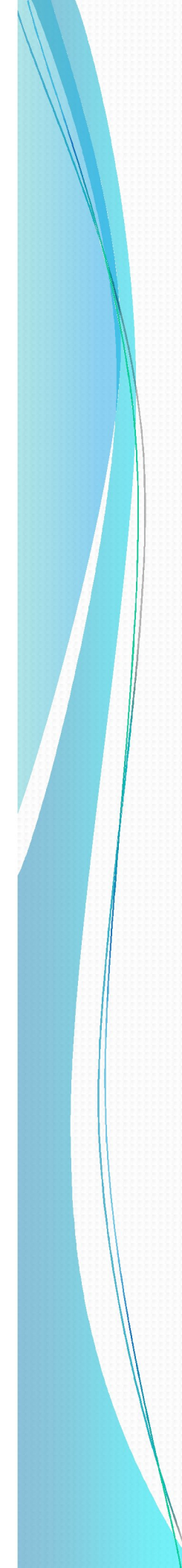
- Invest in expanding Auburn's water supply sources and minimize Tacoma purchases

OR

- Purchase additional block of water from Tacoma

OR

- Utilize Tacoma's take-or-pay ^{Page 48 of 51} alternative



Staff Recommendations:

- Make capital investment to increase Auburn's water supply capacity by 4.3 mgd for \$5.8 million = **Highest ROI**
- Do not purchase additional 3.7 mgd from Tacoma for \$10.9 million
- Do not utilize Tacoma's take-or-pay option

Cost/Benefit Analysis – Auburn Capital Investment vs. Tacoma Block Purchase

	Auburn	Tacoma
Additional source capacity	Coal Creek Springs Improvements	Existing interties
Availability of sources	2020+	Now
Existing staff resources	0.2 FTE (2018-2020)	Minimal
Additional quantity, mgd*	4.3 mgd	3.7 mgd
Capital Cost (2015 \$)	\$5.8 million (\$1.35 million per mgd)	\$10.9 million (\$2.96 million per mgd)
Operating Cost, \$/ccf**	\$0.36	\$2.12-2.64
Utility rate impact	Lower (2.6% average annually over 20 years)	Higher (3.0% average annually over 20 years)
Reliability	Medium to High	Medium to High
Risk	Low	Medium

* mgd = million gallons per day

** ccf = 100 cubic feet

Tacoma's Take-or-Pay Option:

- Tacoma has offered City the option to purchase water on a take-or-pay basis
- Costs range from \$2.64/ccf for 2.5 mgd to \$0.77/ccf for 8 mgd
- Tacoma market rate would have to be less than \$0.77/ccf to be more cost-effective than expanding/improving City sources