**Appendix H – Coordination with Cities, Towns, and State Reviewing Agencies**

Comments received by the Utility pertaining to the Unified Sewer Plan Update can be found here. The individual comments are listed with comments by the Utility. Unless specifically noted, all comments received have been incorporated into the text of the Unified Sewer Plan.

Local codes and ordinance sections other than Pierce County's are included as provided to the County by outside reviewing sources as excerpts or titles of individual sections and can be found in Appendix G.

## Comments City of Bonney Lake - Fax Reply 1/14/2011

I would like to propose the following addition to the Unified Sewer Plan on behalf of Bonney Lake. Thanks for your consideration. Don (Morrison)

**7.4.5 Potential Bonney Lake Connection to Cascadia Sub-Basin WWTP**
The Bonney Lake comprehensive sewer plan recommends that a membrane bioreactor (MBR) plant be established to serve the City's Southern sewer service area, some of which encompasses the CUGA and greater Cascadia Sub-Basin. It is unlikely that DOE would permit two separate MBR plants in the same vicinity to serve the same sub-basin. It may prove more cost-effective for Pierce County, Cascadia, and Bonney Lake to cooperate in the joint development of a shared WWTP.
***Comment: Noted and revised***

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## Comments City of DuPont – In Person 1/12/2011

Comments received from the City DuPont were reviewed and discussed with Utility Staff in person prior to the Basin Review Committee meeting on January 12, 2011. Minor edits were made to Sections 5.1, 7.2, 7.3, and Appendix G.

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## Comments City of Edgewood - Letter Received 12/29/2010

**Table 1.13-1 – Sewer Service Areas in Pierce County (page 1-10)**
**Comments:** City of Edgewood referenced should note City of Edgewood Sewer Service Area, with Lakehaven Utility District as the Wastewater Treatment Provider (under contract with the City) and the Facility Owner a the City of Edgewood (The City owns the utility but contracts with LUD for treatment so we do not have a treatment facility under our ownership but have, under contract with LUD, a specific amount of treatment capacity.
***Comment: Noted and revised***

**Section 2, 2.3 - Coordination with Sewer Utilities – (page 2-8)**
**Comments:** The list of general sewer plans omits the City of Edgewood adopted General Sewer Plan – adopted by the City of Edgewood in December 2007. The City's GSP was adopted by the City Council on December 11, 2007 via Ordinance 07-0298. Edgewood's GSP was approved by the Washington State DOE in November 2007.
***Comment: Noted and revised***

**Section 2.4 - Service Area Treatment and Conveyance Agreements (page 2-9)**
**Comments:** *"Agreements with individual cities establish ownership of collection facilities and collection systems…"* – For clarification the City of Edgewood owns its collection and conveyance system. The City has a contractual agreement with LUD for operations, maintenance and treatment capacity set under the terms of the agreement. The context of our agreement appears to be slightly different than presented in the draft. We wanted to offer the opportunity for clarification as appropriate.
***Comment: Noted and revised***

**Section 3 – 3.3.3 Puyallup WWTP Sewer Service Basin/Puyallup WWTP (page 3-15)**

Comments: The last sentence of that section references that the Puyallup Sewer Service Area includes…."*and the southern portion of the City of Edgewood"* – The City of Puyallup has recognized the revised service area boundaries and I believe the reference is an issue to be resolved in the next physical update. The City is attaching a copy of the City's GSP area boundaries that include the entire incorporated City limits of Edgewood. (Attachments)
***Comment: Noted and revised***

**Section 8 – 8.1 Introduction – (page 8-1)**
**Comments:** The City of Edgewood – via the interlocal agreement currently under development with Pierce County – does not envision flows of any substantive amount to go directly to Tacoma. The existing eight customers utilizing that service line are "emergency" type hook-ups following on-site septic failures. The PSD Northwood Elementary School will be connection into the new sewer utility that flows to LUD treatment facilities in the next few months. Since construction is complete and we expect hook-ups to be underway in the next few weeks, it may be better to note the primary treatment for Edgewood flows is to LUD's Lakota Wastewater Treatment facility with minor flows being accommodated by the PC system to Tacoma's Central Wastewater Treatment Plant. It may be worthwhile to mention that the City of Edgewood and Fife have developed a draft Interlocal Agreement to handle a smaller portion of future sewer treatment (approximately 350eru's) through Fife's existing treatment capacity with Tacoma.
***Comment: Noted and revised***

**Appendix G – Summary of Plans and Policies – (page G-57 through G-59)**
**Comments:** Beginning on page G-57 the draft USP describes the "existing" Edgewood comprehensive Plan. Please note that the Plan reference is to the older Pierce County North Hill Plan. The City of Edgewood adopted a Comprehensive Plan in 2002 in accordance with Growth Management Act requirements. Since this section requires quite a bit of overhaul to reflect the actual plan changes I will offer to work with staff to update this and also mention that the full text of the City's Comprehensive Plan is available online. In 2008 the City made an important update to its Comprehensive Plan via the Utilities and Capital Facilities Element and separated the General Sewer Plan from the Comprehensive Plan. While the Comprehensive Plan - Utilities Element – provides policy guidance on sewer the majority of substantive information related to the City's sewer planning is now inclusive of the City's adopted General Sewer Plan. The City also adopted Title 11 of Edgewood Municipal Code – Sewers – in 2006when the City formed the sewer Utility. The City of Edgewood Comprehensive Plan, Sewer Code, and General Sewer Plan (GSP) are available on the City's website at www.cityofedgewood.org. Please feel free to contact me if you would like more direct support to update Appendix G and references to the Edgewood underlying plans relevant to the Pierce County USP update.
***Comment: Noted and revised***

My intent was to provide meaningful comments relative to text where we found minor issues or a need for clarification. As I noted above please feel free to contact me with any questions about these comments or supportive documents necessary to track down updated information. We appreciate the opportunity to coordinate comments and work with Pierce County Public works and Utilities.

Sincerely,
(Signature)
Eric C Phillips, AICP
City of Edgewood Community Development Director
Attachments

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## Comments City of Fircrest - Fax Reply 9/28/2010

Steve,
I have reviewed the USP update, and appreciate you letting us have the opportunity to do so. As the City of Fircrest is currently being served by the City of Tacoma, our overall input at this time is limited, but we do appreciate you keeping us in your future planning in the event we ever wish to switch over to PC. The only comments I would have at this time is that the "Water and Sewer Rate Studies for 1995" were

completed and have been since updated to reflect our current GFC's and Connection Fees that were revised within the last year. Also for your information, the City of Fircrest has adopted a WSDOE approved Comprehensive Sewer System Plan in late 2002.
***Comment: Noted and revised***

If you have any other questions for me, feel free e-mail me or call me at my direct line in Fircrest at 238-4134. Trent Lougheed, P.E

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## Comments Lakehaven Utility District - Fax Reply 12/2/2010

Stefan,
Lakehaven has reviewed the Unified Sewer Plan Update dated November 2010. Lakehaven has the following comments:

1. Table 1.13-1: City of Edgewood: The "Wastewater Treatment Service Provider" will be Lakehaven Utility District; the "Facility Owner" is the City of Edgewood although per agreement Lakehaven will provide Operation and Maintenance of the facility.
   ***Comment: Noted and revised***

2. Figure 5.17-1 does not reflect Lakehaven's service agreement with Edgewood. See Exhibits B and C of the Agreement between City of Edgewood and Lakehaven Utility District attached.
   ***Comment: Noted and revised***

3. Figure 5.17-1 shows a Contract Service Area that appears to extend too far north into Lakehaven's service area. I have attached a sketch that I think will help. The attached sketch shows an area with pink hatching that flows westerly across I-5 to Lakehaven pump station 33 which is tributary to the Lakota WWTP. It does not flow to Pierce County. Essentially, it appears that S 369th St is approximately the northern boundary of Pierce County's contract Service Area.
   ***Comment: Noted and revised***

If you have any questions please give me a call or send an email to me.

Thank you.
Andy Wilt
Project Engineer
Lakehaven Utility District
253-946-5402

***Note: Service area revision map provided by Lakehaven also incorporated into the Update.***

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## Comments City of Lakewood - Fax Reply 1/11/2011

Review comments by Greg Vigoren
City of Lakewood January 2011

1) Sect. 1.12, 5th paragraph: I need a better understanding of the Rural Service Areas (RSAs) and how they were determined. I see a lot of areas on the maps that are RSAs that seem more urban than rural (Brookdale/Golden Given; Summit-Waller). These areas will not receive sewers unless already planned for?
   ***Comment: The rural service areas of the Pierce County Sewer Utility were established prior to the adoption of the Growth Management Act. After adoption in 1995, no further sewers could be located within a rural area unless contractually approved, approved by decision of the Pierce County Hearing Examiner, or mandated by the Tacoma-Pierce County Health Department. It is believed that there remain approximately 10 plats located in what is now rural zoned land that have prior approval to utilize Pierce County sewers.***

2) Sect. 1.13, 3rd paragraph, last sentence: add a period and space after "each area".
***Comment: Noted and revised***

3) Sect. 1.15: should read: "…used in this…"
***Comment: Noted and revised***

4) Sect. 2.1.9; last paragraph discusses infiltration and inflow. What is the 1.5 gal/1 gal ratio based on? Anecdotal evidence, experience, etc?
***Comment: Noted and revised***

5) Sect. 2.5, last paragraph: should read: "systems within the…"
***Comment: Noted and revised***

6) Sect. 2.6.3, 2nd paragraph: has the flow factor been reviewed recently for accuracy?
***Comment: Yes***

7) Sect. 2.6.5.: has I & I decreased over time with improved construction methods and materials, and monitoring?
***Comment: I&I has decreased due to rigorous I&I repair and replacement***

8) Sect. 3.1.4, American Lake: the last sentence should read: "On-site sewer systems predominate on the east side of the lake."
***Comment: Noted and revised***

9) Sect. 3.1.4, Lake Steilacoom: the last sentence should read: "…the lake continues to experience water quality problems." Suggest adding the following sentences, or some variation. A recent study conducted by URS on behalf of the City of Lakewood concluded that the biggest contributor of water quality problems is excess phosphorus entering the lake via Ponce de Leon and Clover creeks. According to the study the two main causes of the phosphorus are septic systems and naturally occurring phosphorus.
***Comment: Noted and revised***

10) Sect. 3.1.5, last paragraph: should read: "…refer to these…"
***Comment: Noted and revised***

11) Sects. 3.1.9 & 3.1.10: I'm confused on what the units of measure are for Tables 3.1-1 and 3.1-2 (e.g., units/acre, what sorts of units, etc); same thing applies to Tables 3.2-1 and 3.2-2. I read the definitions in the glossary but am still not clear. Some clarity would be helpful.
***Comment: Noted and revised***

12) Sect. 3.2.9, 2nd paragraph: better define the dilution factors listed.
***Comment: Noted***

13) Sects. 3.4.3 & 3.4.13: Sect. 3.4.3 indicates that sewer facilities for the Nisqually River Basin are a necessary consideration. Sect. 3.4.13 indicates the County has made no effort to move this forward. Can you shed any light on this subject?
***Comment: Noted the Park Junction Development (MBR) may provide future sewer availability***

14) Table 3.4-2: Suggest adding "…in MGD" to the table title. Also, verify the "Permitted Capacity" numbers are correct in the table and in the related sections. Sect. 3.4.9 states that 45,000 gals/day = .45 MGD. Shouldn't it be .045 MGD? Same question for numbers in Sects. 3.4.10, 3.4.12, Table 3.5-1, and Sects. 3.5.10 and 3.5.13.
***Comment: Noted and revised***

15) Table 4.3-1: Any thoughts on why flows are trending downward?

***Comment: Noted decline due to drop in annual connections from 3.5-5% to 1.0-1.5% annually over the past three years***

16) Sect. 4.8, 2nd sentence: change "UPS" to "USP"
***Comment: Noted and revised***

17) Sect. 4.9, 4th paragraph: change "0.82 MGD" to "0.082 MGD"
***Comment: Noted and revised***

18) Sect. 5.2, 3rd paragraph: should read: "…USP Appendix K."
***Comment: Noted and revised***

19) Figure 5.6-1: Can you speak to why the neighborhoods directly south of Pierce College are not on sewers? There has been speculation that this area of septic systems contributes to the water quality problems at nearby Waughop Lake located in Ft. Steilacoom Park.
***Comment: Noted, these areas opted out of connection when sewer was made available***

20) Sect. 7.2.5, 2nd paragraph: Please define diffuser ports.
***Comment: Noted and revised***

21) Sect. 7.6, Tables 7.6-1 & 7.6-2: Conveyance Improvement capital cost totals differ in the tables.
22) ***Comment: Noted***

23) Sect. 8, Project 6a: It's difficult to tell where this work will occur. The location is stated as the treatment plant. It's part of the treatment plan expansion project but it sounds like the location is not at the treatment plant. A clearer explanation is needed.
***Comment: Noted***

24) Appendix G, pg. G-29: The City of Lakewood has updated its shoreline management regulations since incorporation. The current regulations are located in Title 14 of the Lakewood Municipal Code. Contact Marc Amrine, Senior Planner, for more info: 253.983.7753.
***Comment: Noted and revised***

25) Appendix G, pg. G-80: The City of Lakewood adopted a Comprehensive Plan in 2000. This plan replaced the Interim Comp Plan referenced here. The 2000 Comp Plan should be used. Contact Deborah Johnson, Senior Planner, for more info: 253.983.7770.
***Comment: Noted and revised***

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## Comments City of Sumner - Fax Reply 1/10/2011

On page 3-14 I believe it should state that "the City of Bonney Lake owns 2.295MGD capacity" The interlocal agreement between Bonney Lake and (the City of) Sumner provides that either city can use up 55% of the available capacity of the plant. This is a better statement of the relationship between the two cities.

Current capacity for the Wastewater Treatment Facility is 4.59MGD.
***Comment: Noted and revised***

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## Comments City of Tacoma - Hand Delivered 2/3/2011

Sec. 1.3 Biosolids Policy Statement should be included in this section.
***Comment: Noted***.

Sec. 1.4 Biosolids appears to have no role in the reclamation of the gravel mine.
***Comment: Noted***.

Table 3-3.2 CTP permitted capacity is 60MGD.
***Comment: Noted and revised***

Sec. 3.3.1 15% of TAGRO is sold as dry product, 15% applied as liquid or given away
***Comment: Noted and revised***

Sec. 6 State Biosolids Regs are WAC173-308
***Comment: Noted and revised***

Sec. 6-1 Tacoma has never had a significant dry Class B program.
***Comment: Noted and revised***

Appendix H Stakeholder list should be updated. Several are retired or have moved to other jobs.
***Comment: Noted***.

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## Comments City of University Place – Letter Received 2/2/2011

January 31, 2011

Stefan Kamieniecki
Sewer Utility Senior Planner
Pierce County Public Works and Utilities
9850 64th Street West
University Place, WA 98467

RE: Pierce County Unified Sewer Plan

Dear Mr. Kamieniecki:

Thank you for inviting me to serve as the Basin Review Committee (BRC) member representing the City of University Place. First let me say the Unified Sewer Plan (USP) is a well written, clear, and concise document that, although a bit long, is reader friendly.

As the BRC member representing University Place, most of my comments concern how the USP addresses the goals and policies, regulations, and permit conditions of University Place with regard to sewer service, the wastewater treatment facility and the Chambers Creek Properties. However, as University Place is concerned with the development of the County as a whole, my comments also address some larger county-wide issues.

The City's Comprehensive Plan includes the following Vision Statement:

> "Twenty years after incorporation …..
>
> ***Transportation, Capital Facilities, and Utilities***
> Street lighting, sidewalks, curbs/gutters and bicycle lanes on all arterial streets have improved safety and created better connections between residential and business areas. The entire City has access to sanitary sewers."

Fifteen years after incorporation, none of the twenty-two unsewered areas identified in 1998 have access to sewers. In accordance with our inter-local agreement (attached), the City and County agreed to work

cooperatively on future financing methods to lower the cost of serving the high-cost unsewered areas of the City. Although two studies have been conducted and the City Council adopted a mandatory hook-up ordinance in 2005 (which has since expired), so far the City and County have been unsuccessful in moving towards meeting the City's Vision statement regarding sewer service.

As expressed in the City's vision, major issues, goals and polices included in Appendix G, the City places a high priority on providing sewer service to accommodate growth, promote economic development, and extend service to un-served areas.

On Page 5-1 of the Unified Sewer Plan, Section 5.1.3 states: "There are several pockets in University Place, approximately 980 residences, without sanitary sewer service. The largest pocket lies in the vicinity of the 67th Avenue West Interceptor south of Fircrest to Cirque Drive, between Alameda and Orchard Street. The City of University Place has conducted feasibility studies to connect these remaining parcels to sanitary sewers. he studies have concluded that it is cost prohibitive to connect to the Pierce County system at this time."

However, neither study concluded that it is cost prohibitive to connect to the Pierce County system. The first study by Craig A. Peck and Associates (September 1998) concluded that all twenty-two areas studied had a feasible method of providing sanitary sewer service to individual parcels.

The second study by Art Griffith (December 2003) expanded on the Peck Study by identifying priorities and conducting a financial analysis of alternative methods for meeting the City's comprehensive plan goals (ULID, mandatory connection, sewer surcharge etc.).

Both studies were based on the Utility's unwritten policy not to subsidize or buy down the costs of ULID's or to proactively extend sewer lines into the unsewered areas in University Place. It is our understanding the Utility's unwritten policy is to construct only gravity-interceptor lines over 18" in diameter, gravity-trunk lines between 15" and 18" and forced mains over 18" in diameter (Page 7-1).
Sections 1.4 and 1.8 of the USP state the goal and objective of the USP and the mission of the Utility as follows (underline added for emphasis):

"The goal of the unified sewer plan is to continue to promote a jobs-based economy and growth management decision, in ways that utilize the lowest life cycle costs while continuing to protect water quality."

"The objective of the unified sewer plan is to provide a blueprint for the expansion and operations of the adopted wastewater sewer service area and treatment facilities."

"The mission of the Utility is to provide customers with a high quality, cost effective sanitary sewer service by collecting and treating all wastewater from County services areas in accordance with applicable Local, State and Federal permit requirements."

Section 1.14 Policies

With the exception of cost effectiveness, none of the policies in Section 1.14 reflect the goal or objective of the USP or mission of the Utility. We recommend the Utility and BRC consider adding policies regarding.

1. Expanding the collection system in a manner that promotes a jobs-based economy. For example, the B Street Phase 2 Interceptor should be routed up Pacific Avenue through a commercial zone rather than up B Street, a relatively low density undeveloped residential area.
   ***Comment: Noted, Pacific Avenue can be served from B Street***

2. Extending the collection system to promote economic development rather than relying on developer extensions in all cases.
   ***Comment: Noted***

3. Mandatory connection programs with assistance and/or incentives.
   ***Comment: Noted***

4. Establishing a fund to help pay for collection system expansion and improvements to commercial areas within the service area. (This fund already exists).
   ***Comment: Noted***

5. Protect water quality from the use of septic systems (Page 3-6, Section 3.1.11 On-Site Septic Systems: "Decline in groundwater quality with the basin was the reason for construction of the WWTP").
   ***Comment: Noted***

.

6. Extending the collection system into areas where existing developments are served by on-site septic systems where geologic conditions typically lead to septic system failure and/or where infiltration rates are high.
   ***Comment: Noted***

7. Once larger mains are completed in a given area, extend smaller lines into unserved areas completing a fine network capable of serving all properties within the service area.
   ***Comment: Noted***

8. Work with local governments and customers to serve their communities and property by providing financial assistance or other financial tools to lower the cost of expanding the collection system. For example, with financial assistance the cost to benefit ratio of a ULID can be equalized allowing a ULID to be formed.
   ***Comment: Noted***

9. Establishing a fund to help pay for collection system expansion and improvements to residential areas within the service area where sewers are unavailable because they are more than XXX feet from an existing sewer line.
   ***Comment: Noted***

10. Joint improvements with sewer lines/facilities to maximize public investments. For example, sewer facilities easements can serve a dual role as parks and trails where appropriate.
    ***Comment: Noted***

In Section 1.14.6, the USP lists three "policies" that are in fact required mitigation measures or conditions of approval associated with the Environmental Impacts Statement and Master Plan for the Chambers Creek Properties and Wastewater Treatment Plant.
***Comment: Noted***

The purpose of the Chambers Creek Properties and the reason these documents and plans were created was for the treatment, disposal, and mitigation of wastewater and solid waste from the Chambers Creek Waste Water Treatment Plant (WWTP). Polices associated the Properties and Regional WWTP should express this purpose. A policy stating the improvements to the properties such as those included in the master plan are intended to provide mitigation should be added.
***Comment: Noted***

Page and section numbers precede the following comments for ease of reference.

Page 1-4 Section 1.5
Delete second “in 1992”
***Comment: Noted and revised***

Page 1-4 Section 1.5
Is the entire 930 acres is owned by the Utility? Does the 930 acres include properties in the Canyon? According to Pierce County Assessors’ records, some County properties in the Canyon are owned by Pierce County Parks.
***Comment: Noted and revised***

Page 2-6 Section 2.2.2
Check County population increase with Dan Cardwell of Pierce County Planning and Land Services. This number may not be current or consistent with other County plans and/or Vision 2040.
***Comment: Noted***

Page 2-10 Section 2.6.3
Check the persons per household number with Dan Cardwell of Pierce County Planning and Land Services. This number may not be current or consistent with other County plans and/or Vision 2040.
***Comment: Noted and revised***

Title Page Section 4
In the Title, change “Plan” to “Plant”
***Comment: Noted and revised***

Title Page Section 4
In Subtitle 4.1, change “Plan” to “Plant”
***Comment: Noted and revised***

Page 4-4 Table 4.3.1
Why are flows decreasing?
***Comment: Noted and revised***

Page 5-6 Section 5.3
This section indicates a study has been funded to determine how best to repair or replace the Day Island Trunk Line. Should this improvement be added to Section 7, Future Expansion, and Improvements?
***Comment: Noted only listed in Section 5 because it is not an expansion of the system***

Figure 5.4.1
The arrow indicating flow direction of the Cirque Drive Interceptor appears to be reversed.
***Comment: Noted and revised***

Page 6-8 Section 6.9 Air Quality
There is nothing specific in this section. Consider adding text describing the Utilities’ efforts to control odor.
***Comment: Noted***

Page 7-1 Introduction
The introduction states in part “These improvements were identified as necessary to provide service to as yet undeveloped parts of the sewer service area.” Rather than extending service into undeveloped areas, the Utility should make it a priority to expand service to developed areas not yet served!
***Comment: Noted, Extension of the system without mandatory connection to that new extension runs contrary to Utility policy.***

Page 7-1 Section 7.1
The conveyance system consists of all sewer lines and infrastructure outside the treatment facilities. This section indicates the conveyance system only includes gravity interceptors 18” or larger, gravity trunk lines 15” to 18” and forced mains 8” or larger. To meet the goal, objective and policies of the USP and the mission of the Utility as stated, the Utility should not limit itself to constructing only these larger lines apart from exceptions.
***Comment: Noted, Utility policy is to install lines 15” or larger, 8” if a force main. Smaller collectors are the responsibility of developers or groups through the ULID process.***

Page 7-4 Section 7.2.3
The Environmental Impact Statement (EIS) for the WWTP and the existing Conditional Use Permit indicate the WWTP has been designed to treat up to 56 million gallons per day (mgd). This section indicates the maximum monthly flows are projected to be 81 mgd under built out conditions with peak flows of 109 mgd. The USP needs to be consistent with the EIS. If flows are indeed projected to be 81 mgd then a supplement to the EIS and Conditional Use Permit will be necessary.
***Comment: Noted and revised***

Page 7-5 Bioselector Basins:
What does “Base construction” mean?
***Comment: Noted and revised***

Page 7-5 Section 7.2.5
The Conditional Use Permit for the WWTP expansion required the Level of Service (LOS) 3 or higher as described in the EIS. Lower levels of service will result in unavoidable adverse environmental impacts and are not allowed. This Section needs to reflect a treatment of LOS 3 or greater.
***Comment: Noted and revised***

Page 7-6 Section 7.3.1
The University Hills Sewer Project is shown on Figures 7.3.1 and 7.3.2 but not included in the Tables 7.3.1 or 7.3.2 The City has obtained a $500,000 State and Tribal Assistance Grant (STAG) to provide service to the first of these un-served areas while promoting economic development of the Town Center. The City is pleased the Utility is considering using money generated by the Sewer Connection Fund to extend this new sewer pipeline through the unsewered University Hills, Westridge and Broback subdivisions to serve the City’s Town Center development. This project serves two important purposes, both of which further the goal of the USP to promote a jobs-based economy and protect water quality.

This is one example where the Utility can help resolve the inequity of investment within its service areas. University Place represents 20% of the sewer utility’s accounts and 12.6% of the population served. However, future USP projects that expand the collection system in University Place account for less than 1.5% of the USP investment in the collection system service area wide!
***Comment: Noted and revised***

Page 8-10 Section 8.7.3
Project No. 43. Please mention improvements to mitigate plant expansion including trails, boat launch and off leash dog area.
***Comment: Noted, the USP is not a planning document for the Chambers Creek Properties (CCP) The WWTP is situated on a 200 acre area within the CCP please refer to the February 2007 Chambers Creek Properties Master Plan Update for trails, boat launch, and off leash dog area discussion for the CCP.***

Appendix D Inter-local Agreements:
The City entered into an inter-local agreement with Pierce County in January 1999 (attached). This agreement is not noted in Appendix D.
***Comment: Noted and revised***

Appendix F Major Industrial Users
Page 19
The Denny's Restaurant at 3501 Bridgeport Way has been closed for more than a decade. The City retains credit for this use. Should this entry be modified to reflect the change in use? Consider reviewing this list to determine where other updates may be needed.
***Comment: Noted and revised***, ***Appendix F has been removed from this Update and Minor industrial and Priority Industrial Use data has been added to Section 4***

Appendix G Summary of Plans and Policies:
1. Add the following Vision Statement:

> "Twenty years after incorporation …..
>
> *Transportation, Capital Facilities, and Utilities*
> Street lighting, sidewalks, curbs/gutters and bicycle lanes on all arterial streets have improved safety and created better connections between residential and business areas. The entire City has access to sanitary sewers."
> ***Comment: Noted***

2. Insert under the title "Major Land Use Issues"
"The redevelopment of the Chambers Creek properties (700 acres within the City limits), including the reclamation of the former Lone Star Northwest gravel mine and the scope of future sewage treatment facilities on the site will create opportunities as well as impacts for the community."
***Comment: Noted***

3. Change "Chambers Creek Properties Element" to "Chambers Creek Properties Special Planning Area."
***Comment: Noted***

4. Delete LU10 and LU10A and replace with:
LU11:

> Become a Strategic Economic Development partner with Pierce County in Planning Chambers Creek Properties.
> ***Comment: Noted***

Policy LU11A:

> Establish a Chambers Creek Properties Overlay Area that allows existing and planned uses subject to development processes and design standards that promote the development of the master plan, mitigate impacts and maintain consistency with the City's Goals.
>
> **Discussion:** The City, Pierce County, and Lakewood have adopted the Master Plan for Chambers Creek Properties and a joint procedural agreement. Establishing a special Overlay Area for the Chambers Creek properties will allow the City and County to manage the development of the Chambers Creek Properties in a way that is most beneficial to the County and community. By identifying allowed uses, and specifying development standards and mitigation measures now, the City and County can avoid costly future delays and more quickly obtain the goals of more parks and increase economic return. The City should "seek a place at the table" to evaluate potential revenue generators including lodging, expediting the golf course and restaurant development, and the completion of Phase I projects.

The mix of uses proposed will add traffic to City streets, may increase noise, affect air quality and have other impacts. Overall, the project potentially will provide many long-term benefits to residents, but it is important that negative impacts are understood by the public and that improvements also include necessary mitigation. The City should work with Pierce County to review, and when necessary, revise the overlay to ensure continued uniformity and consistency for all Master Site Plan developments and ensure that projects are developed at a level of quality commensurate with community standards.
***Comment: Noted***

5. Re-label Policy LU10B as Policy LU11B
***Comment: Noted***

6. Delete Policy LU10C and replace with:

Policy LU 11C
Encourage the development of park and recreation facilities at the Chambers Creek Properties.
**Discussion:** Some in the Community have coined the phrase "more parks sooner" when referring to their desired development of the Chambers Creek Properties. The City should work with Pierce County to more quickly develop park and recreation facilities.
***Comment: Noted***

7. Insert under the title "Major Capital Facility Issues"

"When the City incorporated (August 1995) University Place had a long list of capital facilities needs. Previous under-investment in urban infrastructure to serve urban growth left the area with major needs for street improvements, sewers, parks, and recreation facilities."

And

"Many public facilities that serve the residents of University Place are owned and operated by other jurisdictions that have their own capital facilities plans and priorities for investment, which may limit the City's ability to "remedy deficiencies."
***Comment: Noted***

8. Delete Policy CF1A and replace with:
Policy CF1A
Establish level of service (LOS) standards for certain City owned and operated public facilities. The City shall work with owners and operators of non-City owned and operated facilities to establish levels of service standards necessary to provide for growth and achieve the City's vision. Levels of service should be established in interlocal or contractual agreements between the City and the service provider.
**Discussion:** Level of service (LOS) standards are benchmarks for measuring the amount of a public facility and/or services provided to the community. Level of service means an established minimum capacity of public facilities or services that must be provided per unit of demand or other appropriate measure of need (WAC 365-195-210). Level of service standards will be a determining factor for when and where development will occur. This is because level of service is intricately tied to concurrency.
***Comment: Noted***

9. Delete Policy CF6A and replace with:
Policy CF6C
Make sewers available to all properties in 20 years.

**Discussion:** The City's vision is that the entire City has access to sewers. There are several areas of the City where sewers are not currently available. For the purpose of this policy "available" means within 300 feet of all properties allowing individual property owners to extend the sewer line or hook up for a reasonable cost. However, the costs and State laws regarding formation of Utility Local Improvement Districts make it difficult to provide sewers. The City and sewer providers need to work together on creative solutions if the vision is to be achieved. The established level of service may need to be adjusted in the future to reflect the financial ability to provide the service.

Policy CF6D
Work with Pierce County Public Works and Utilities, the City of Fircrest, and the City of Tacoma to develop a phased plan to offer sewer service to remaining areas without sewers. Give priority to areas with failing or aging septic systems.
**Discussion:** Many areas in the City still remain without sewers. The absence of a sanitary sewer system can create health concerns, particularly when an aging septic system fails. Providing immediate sanitary sewer in direct response to a septic tank failure is not often feasible. The City needs to work with the Pierce County Public Works and Utilities, the City of Fircrest, and the City of Tacoma to develop a phased sewer plan which directs improvements to remaining areas without sewers.
***Comment: Noted***

and

Policy CF6E
Encourage properties to hook up to sewers if they are currently available and require new development to connect to sewers.

**Discussion**: There are numerous properties where sewers are available to the property but not connected or required to connect to the sewer system. Connecting these properties will help alleviate long term environmental problems when septic systems fail or groundwater becomes contaminated. If more properties hook up to sewer systems when sewers are installed, sewer providers will be more likely to install facilities based on future revenue.
***Comment: Noted***

Utilities Element

10. Insert the following policies:

GOAL UT1
Encourage provision of adequate facilities and cost-effective services, which meet the needs of the City and accommodate future population and economic growth.
***Comment: Noted***

Policy UT1A
Work with providers to appropriately site new utility facilities to maintain a reliable level of service and accommodate growth.

**Discussion:** The Growth Management Act requires that cities provide facilities and services to accommodate projected growth. Services including utilities must be provided at a reasonable level of service to both existing and new customers. Cooperation between the City and utility providers can benefit both. It can result in timely provision of required new services, minimize adverse impacts for the City, and offer more efficiency for the utility provider. Siting considerations are important to the preservation of neighborhood character.
***Comment: Noted***

Policy UT1C
Work with utility providers and policy makers to improve service while maintaining the lowest possible utility rates.

**Discussion:** Utilities typically have a governing body, which oversees how the utility operates, provides service, and establishes rates. The City should actively monitor services provided by each utility provider and assess these services against the applicable rate structure. Franchise negotiations also provide opportunities to assure quality services to residents.
***Comment: Noted***

Policy UT2H
Protect the City's rights-of-way from unnecessary damage and interference and ensure restoration to pre-construction condition or better.

**Discussion:** The use of the public right-of-way by utilities requires construction in some manner or another. This may include trenching for the installation, repair, or maintenance of facilities; installation of poles and streetlights; boring; or patching or restoring streets where work has just been completed. Specific standards for how utilities should construct or repair facilities in the right-of-way should be enforced. Bonds or other financial guarantees will ensure that restoration is performed properly and that failed repairs will be corrected. Work in the right-of-way will also be governed by franchise agreements with various utilities.
***Comment: Noted***

GOAL UT3
Reduce demand for new resources through support of conservation policies and strategies.
***Comment: Noted***

Policy UT3A
Encourage resource saving procedures in facilities and services used by the City.

**Discussion:** The City can set an example for citizens in the area of conservation. Coordination with utility providers to identify and implement resource saving procedures in City facilities and services is encouraged. City facilities might also be used as demonstration sites for innovative resource conservation techniques.
***Comment: Noted***

Policy UT3B
Cooperate with other agencies in encouraging resource conservation by local citizens and businesses.

**Discussion:** Utilities encourage and realize the benefit of resource conservation. Energy utilities often subsidize programs, which promote home and hot water heater insulation, conversion of lighting systems, and other conservation methods. Water utilities often provide information on water saving devices and techniques. To encourage conservation by local residents and businesses, the City can coordinate with utilities to ensure that citizens obtain appropriate information and education materials. Such materials, for example, may be placed at City Hall for public distribution.
***Comment: Noted***

Should you have any questions regarding our comments, please do not hesitate to contact me at (253) 460-2519.

Sincerely,
(Signature)
David Swindale, AICP
Director Planning and Development Services

1. Section 1.5. Page 1-4. The first bulleted item following, “Essential for the USP are the following features:”, states “Biosolids and its role in reclamation of the gravel mines (production and use of Class A “Exceptional Quality” biosolids).”

   Please provide additional information how Pierce County plans to use Class A biosolids for reclamation of gravel mines.
   ***Comment: Noted and Revised***

2. Table 1.13-1. Page 1-10. Wastewater from Rainier School receives treatment at the city of Buckley wastewater treatment plant. The Rainier School wastewater treatment plant no longer operates.
   ***Comment: Noted and Revised***

3. Section 2.5. Page 2-9. “For systems handling between 3,500 and 14,500 gallons per day, the DOH issues permits. For large on-site sewer systems of over 14,500 gallons per day, the DOE issues permits.”

   The responsibilities for onsite treatment systems changed on July 1, 2011, with the promulgation of Chapter 246-272B WAC. The Department of Health has review, approval, and permitting authority for domestic onsite systems that discharge subsurface and have a capacity between 3,500 and 100,000 gallons per day. Ecology has responsibility for onsite systems with capacity greater than 100,000 gallons per day.
   ***Comment: Noted and Revised***

4. Section 2.7.4. Page 2-12. “It is anticipated that the Sumner WWTP may exceed limits for ammonia, chlorine, copper, mercury, and zinc. To continue discharging to the Puyallup River, it is expected that the Sumner WWTP would be required to provide advanced treatment.”

   The city of Sumner conducted an effluent mixing study in 2009. Ecology used the results of that study and conducted a dynamic simulation to calculate the critical condition acute and chronic dilution factors. Ecology then used those dilution factors along with treatment plant effluent and receiving water data to evaluate the reasonable potential of the Sumner treatment plant effluent to cause a violation of the water quality standards. The discharge did not have a reasonable potential to violate water quality standards so Ecology did not establish any water quality based limitations in the NPDES permit. Ecology modified the NPDES permit on July 18, 2011, to include the acute and chronic dilution factors calculated by dynamic simulation.
   ***Comment: Noted and Revised***

5. Section 3.2.3. Page 3-9. “***Lake Tapps*** – Puget Sound Power & Light Company retains water in Lake Tapps and the Electron Reservoir for hydroelectric power generation at the Dieringer and Electron Powerhouses. The Lake Tapps reservoir was formed with the diking of the natural lake in 1910 and storage began in 1911 with flow diverted from the White River using the Lake Tapps Flume. Flow diverted from the White river is limited to not more than 2,000 cubic feet per second (cfs) or all flow in the river with the exception of 30 cfs.”

   Puget Sound energy stopped using Lake Tapps for power generation in January 2004. Cascade Water Alliance purchased Puget Sound Energy’s White River hydroelectric project and water rights in 2008. Cascade Water Alliance will eventually use the water for water supply. An agreement between Cascade Water Alliance, the Muckleshoot Indian Tribe, and the Puyallup Tribe of Indians, requires maintaining minimum flow in the White River based on the time of year. The minimum flow specified in the agreement for the river low flow period, typically early fall, is 500 cfs.
   ***Comment: Noted and Revised***

6. Sections 3.3.4 and 3.3.5. Page 3-15. The maximum month design capacity of the Buckley wastewater treatment plant is 2.4 million gallons per day (MGD). Again, the Rainier School wastewater treatment plant no longer operates since wastewater from the school was routed to the Buckley wastewater treatment plant.

***Comment: Noted and Revised***

7. Section 3.5.11. Page 3-23. “Treated wastewater is discharged into Gig Harbor.” The city of Gig Harbor constructed a new outfall from the treatment plant that discharges to the Tacoma Narrows.
   ***Comment: Noted and Revised***

8. Section 3.6. Page 3-34. “It (Tacoma North End wastewater treatment plant) has a permitted average wet weather design capacity of 10MGD.” The Ecology approved design capacity is 7.2 million gallons per day.
   ***Comment: Noted and Revised***

9. Section 4.5. Page 4-6. “Treatment is considered adequate by the United States Environmental Protection Agency (EPA) and Washington State Department of Ecology (DOE) when water quality standards are met.”

   The NPDES permit issued by Ecology for the Chambers Creek wastewater treatment plant does not have water quality based limitations. The limitations in the permit, 5-day carbonaceous biochemical oxygen demand ($CBOD_5$), total suspended solids (TSS), pH, and fecal coliform bacteria, are technology based limits.

   Technology based limitations are specified in federal and state regulation and are based on a reasonable level of treatment that a municipal wastewater treatment plant can achieve without considering the effect of the discharge to the receiving water. Water quality based limitations result from a potential for the discharge to cause a violation of a water quality standard in the receiving water. The existing NPDES permit does not have a water quality based limitation.
   ***Comment: Noted and Revised***

10. Table 4.3-1. Page 4-4. Please include 5-day biochemical oxygen demand ($BOD_5$) loadings in the table.
    ***Comment: Noted and Revised***

11. Section 4.6. Page 4-6. A bullet describing the requirements of the Chambers Creek NPDES permit states the permit includes monitoring the receiving water (Puget Sound). The existing permit does not require receiving water testing or monitoring.
    ***Comment: Noted and Revised***

12. Section 4.10. Page 4-8. “Identification of capacity restrictions is driven by a State of Washington regulation that requires planning for additional conveyance capacity when peak flows reach 85 percent of the peak flow a pipeline was designed to carry.”

    The requirement to address capacity when a facility reaches 85 percent of design capacity is not codified in regulation. The requirement to submit a plan and schedule to maintain capacity when the flow or loadings to a treatment plant reach 85 percent of the design capacity is a condition in NPDES permits issues by the Ecology. Ecology initially added this condition to NPDES permits in the late 1990s because the loadings to several treatment plants were nearing the design capacities but the owners were not engaged in planning ot provide treatment for additional loadings.
    ***Comment: Noted and Revised***

13. Figure 5.3-1 and all subsequent sub-basin conveyance figures. It would be helpful to Ecology if the maps distinctly show all force mains, regardless of diameter. The maps have the same line and color for force mains smaller than 7 inches in diameter and 14-inch diameter and smaller gravity sewers.
    ***Comment: Noted and Revised***

14. Table 7.2-2 and 7.2-3. Pages 7-3 and 7-4. “Per the approved Conditional Use Permit February 2010, the approved flow for the WWTP is 56MGD.”

Please provide a copy of the Conditional Use Permit, presumably issued by the city of University Place, and explain how the approved flow of 56 MGD was developed. We assume that value may be referenced to build-out of the service area or site footprint. Presently, the Ecology approved design capacity for the Chambers Creek wastewater treatment plant is 28.7 MGD (average daily flow for the maximum month).
***Comment: Noted and Revised***

15. Table 7.2-3. Page 7-4. The table presents mass loadings of BOD and TSS to the wastewater treatment plant for various flow rates. The table does not indicate what data were used to calculate the loadings. Due to some difficulty in obtaining representative influent samples, treatment plant personnel relocated the influent sampler. Since relocating the sampler the ratio of $BOD_5$:TSS has been more closer to 1:1, typical of domestic wastewater. Please consider evaluating the recent influent data to project future loadings to the treatment plant.
***Comment: Noted and Revised***

16. Section 7.7. Pages 7-55 to 60. Several of the discussions financing of improvements refer to “Facilities Report Appendix M” for additional information. Appendix M in the general sewer plan is blank. Is the “Facilities Report” another report?
***Comment: Noted and Revised***

**Pierce County Unified Sewer Plan Update**
**Washington State Department of Health Review Comments**

1. Section 2.1.8: Wellhead protection regulatory requirements for Group A public water systems is regulated by the Washington Department of Health, Office of Drinking Water.
   Group A water system regulations require that water system purveyor to assure adequate sanitary protection for all water sources. These regulations require the purveyor to assure protection by prohibition construction of sources of contamination within a sanitary control area. The protection is established by creating protective or restrictive covenants for the land within 100 feet of a well or 200 feet of a spring. Existing regulations allow for a smaller area if engineering justification shows an adequate level of source water protection.
   ***Comment: Noted and Revised***

2. Section 2.5: The 2007 legislature passed SB 5894 into law in 2007 which expanded WDOH authority over large on-site sewage systems (LOSS) up to a maximum design flow of 100,000 gallons per day (0.1MGD). These new authorities are codified in WAC 246-272B
   ***Comment: Noted and Revised***

3. Section 3.2.10: Please clarify the meaning of "Class A reuse effluent limits" as related to TMDL allocations. Class A reclaimed water is defined in the 1997 *Water Reclamation and Reuse Standards (Standards)* by treatment requirements plus process and use area reliability requirements in addition to specific water quality criteria limits. The only specific reclaimed water quality limit defined by the *Standards* is the microbiologic limit for *total* coliform levels.
   ***Comment: Noted and Revised***

4. Section 3.4.12: The plan should be revised regarding the City of Yelm. Yelm constructed one of the first water reclamation and reuse facilities in Washington. The plant was one of five demonstration projects authorized by RCW 90.46.110 in 1997. The plant was permitted in 1999 to produce Class A reclaimed water using sequencing batch reactors for aeration, coagulation, continuous backwash sand filters and chlorination for disinfection. The water is used for residential lawn, public area irrigation at Yelm High School, Yelm Middle School, City Park and Cochrane Park, water features in Cochrane Park, wetlands, fish pond and aquifer recharge. In addition the city can provide limited fire protection through a dedicated reclaimed water fire system.
   ***Comment: Noted and Revised***

5. Section 5.21: The original concept for the Cascadia development was to provide reclaimed water for nonpotable uses within the development to reduce the water supply demands from the City of Tacoma.
   ***Comment: Noted and Revised***

6. Section 6.6: The plan should be revised to accurately describe the current statutory and regulatory authority for the production, distribution and use of reclaimed water. Currently the State of Washington does <u>not</u> have specific reclaimed water regulations. The implementation of a draft rule has been suspended until after June 30, 2013. The current program authorities are based on RCW 90.46 which requires a permit be issued to use reclaimed water and the use of that water to be based on standards and guidance which is the 1997 *Water Reclamation and Reuse Standards (Standards)*.
   ***Comment: Noted and Revised***

7. Section 6.7: The 1997 *Standards* identify four (4) classes of reclaimed water, that no general permits exists for use of reclaimed water and there are <u>no</u> "+" categories of reclaimed water. The *Class A* "+" water quality referenced is presumed to be water quality limits apply to the use of reclaimed water for aquifer recharge. RCW 90.46.080 requires that reclaimed water used for aquifer recharge by surface percolation conform to the "state drinking water contaminant criteria"

which are defined as being the maximum contaminant levels adopted by the State Board of Health and state Department of Health for drinking water, which limits nitrate + nitrate ($NO_3$ + $NO_2$) to 10.0 mg/L. RCW 90.46.042 requires that use of reclaimed for direct recharge conforms to standards and guidance (Section 3 of the 1997 *Standards*) which limits total nitrogen to less than 10 mg/L for recharge of potable aquifers. The plan should be revised to correct this misinterpretation.
***Comment: Noted and Revised***

8. Section 6.8: RCW 90.46 allows reclaimed water as opposed to *treated wastewater*. Reusing treated wastewater is not allowed by current state law. Wastewater treatment and disposal of the effluent (e.g. treated wastewater) is governed under RCW 90.48 and WAD 173-200, 201A, 216 & 221.
***Comment: Noted and Revised***

9. Section 7.2.5: The plan should consider future requirements from the Puget Sound Partnership initiative that could more strictly limit marine wastewater disposal and wastewater quality limits.
***Comment: Noted and Revised***

10. Section 8.1: While the USP addresses water reclamation and reuse and commits to future consideration of the resource, the plan should also acknowledge that the development of a water reclamation and reuse program and initial projects requires a significant time frame, often 15 or more years. We recommend the plan reconsider the need to begin development and initial implementation of a water reclamation program in the event water supply projections are accurate and additional water supplies are necessary to supplement existing supplies with the 20-year planning period.
***Comment: Noted***

11. Sections 8.11 – 8.13: The financial and economic planning for capital improvements should incorporate revenues derived from the sale of any reclaimed water produced and used under the plant. RCW 90.46.120(1) requires that “any revenues derived from the reclaimed water facility shall be used only to offset the cost of operation of the wastewater utility fund or other applicable source of systemwide funding”. In addition, avoided costs of potable water and wastewater improvements such as non-potable related system storage (e.g. fire flow), large diameter water line replacement, reduction in peak-day water supply and water treatment capacity, water rights acquisitions, wastewater treatment capacity, marine outfall upsizing and disposal permit development could be considered in the economic assessment.
***Comment: Noted***

12. Appendix C (Pg 17-18): Please note that Washington Department of Health developed new regulations for greywater use (WAC 246-274) effective July, 2011. These rules allow for subsurface irrigation of greywater. Interior building use such as toilet flushing is <u>not</u> allowed by these rules. Internal building use is considered a commercial use of reclaimed water which requires Class A reclaimed water.
***Comment: Noted and Revised***