RIDGEFIELD PLANNING COMMISSION
MEETING AGENDA

Wednesday, July 11, 2018
Ridgefield Community Center
210 N. Main, Ridgefield, WA 98642

I. GENERAL SESSION CALL TO ORDER - 6:30 PM

1. **Flag Salute**
2. **Roll Call**
3. **Late changes to the agenda**

II. PUBLIC COMMENT

Anyone requesting to speak to the Council regarding all items not subject to a specific Public Hearing may come forward at this time. Please state your name and address. Comments are limited to three minutes. Written comments may be submitted to the City Clerk prior to the meeting.

III. CONSENT AGENDA

1. **Approval of Minutes from Wednesday, 6/6/18 Meeting**

IV. BUSINESS

1. **Comprehensive General Sewer Plan - Jeff Niten, Community Development Director**
2. **Public Hearing on Ridgefield Development Code Updates - Jeff Niten, Community Development Director**

V. PUBLIC COMMENT

Anyone requesting to speak to the Council regarding all items not subject to a specific Public Hearing may come forward at this time. Please state your name and address. Comments are limited to three minutes. Written comments may be submitted to the City Clerk prior to the meeting.

VI. STAFF REPORTS

VII. FROM THE COMMISSION

VIII. ADJOURN

CITY OF RIDGEFIELD, WASHINGTON
Planning Commission MEETING MINUTES
June 6, 2018

Regular Meeting - 6:30 PM

GENERAL SESSION CALL TO ORDER - 6:30 PM

Flag Salute - 6:30 PM

ROLL CALL - 6:30 PM

Attendee Name	Title	Status	Arrived
Jerry Bush	Commissioner	Absent	
Jason Carnell	Chair	Present	
Stan Okinaka	Commissioner	Absent	
Victoria Haugen	Commissioner	Absent	
Paul Young	Commissioner	Present	
Jen Lindsay	Commissioner	Present	
Patrick Flynn	Commissioner	Present	

CHAIR CARNELL MOTIONED TO EXCUSE COMMISSIONERS BUSH, OKINAKA, AND HAUGEN. COMMISSIONER FLYNN SECONDED THE MOTION. APPROVAL WAS UNANIMOUS.

LATE CHANGES TO THE AGENDA

None

PUBLIC COMMENT - 6:31 PM

None

CONSENT AGENDA - 6:32 PM

1. **Approval of Minutes from Wednesday, 5/2/18 Meeting**

COMMISSIONER FLYNN MOTIONED TO APPROVE THE MINUTES AS PRESENTED. COMMISSIONER YOUNG SECONDED THE MOTION. APPROVAL WAS UNANIMOUS.

BUSINESS - 6:32 PM

1. **Road Re-Naming** - 6:32 PM

SUMMARY/BACKGROUND:

One element of the 2018 Community Development Department work program is to review and recommend name changes for streets in Ridgefield. The reason to pursue these street name changes is to avoid confusion when one street changes names multiple times within a short distance.

Two examples of streets the department is focused on in 2018 are the alignment of Hillhurst and S. 9th Avenue and Royle Road and S. 45th Avenue.

Claire Lust, Associate Planner, presented the Road Re-Naming agenda.

Commission and staff conducted discussion on road re-naming.

2. Gee Creek Plateau Code - 6:41 PM

SUMMARY/BACKGROUND:

In 2017 the Planning Commission and City Council discussed and adopted the Gee Creek Plateau sub-area plan that considers future land uses and design for an approximate 359 acre unincorporated area surrounded by Ridgefield city limits. Fundamental elements of the design include land designated for development that retains open space in an innovative attempt to keep part of the rural feel in urban neighborhoods. One element of the Community Development work program in 2018 is to develop regulations that implement the Gee Creek Plateau vision recommended by Planning Commission and adopted by City Council.
This version is a draft set of implementing rules for development of the cluster overlay area of the Plateau. Staff is seeking input from the stakeholder that helped develop the vision, the Planning Commission, and all property owners within the Plateau. This item will come back to the Planning Commission as part of a public hearing later this year.

Jeff Niten, Community Development Director, presented the Gee Creek Plateau draft code.

Commission and staff conducted discussion on the Gee Creek Plateau draft code.

PUBLIC COMMENT - 7:10 PM

Richard Amerman - resident

Two questions for clarification on Gee Creek Plateau plan. In regards to the clustering, is there anything specific that's part of this plan that allows direct encouragement of clustering beyond a single development to happen or is it pretty much a single development that's going to be clustering?
In regard to the annexation itself - is there any anything direct or proactive, like a dangling carrot to sweeten the pot that's being used to reach a success for annexation?

Staff responded to questions brought up during public comment.

STAFF REPORTS - 7:14 PM

Jeff Niten, Community Development Director - We have a new development activity map, the Permit Technician will email this map out to the Planning Commissioners. Development includes grading at the new Vancouver Clinic site, grading for Rosauers grocery store, the high school groundbreaking, and a tremendous number of single family home lots.

The July Planning Commission meeting has been moved from July 4th to July 11th. The Parks Board meeting has been cancelled for July 11th.

FROM THE COMMISSION - 7:17 PM

Commissioner Lindsay - attended the City Council meeting

ADJOURN - 7:19 PM

____
Yonya Deshiell

____
Jason Carnell

CITY OF RIDGEFIELD
PLANNING COMMISSION

MEETING DATE: July 11, 2018

ITEM:

AGENDA ITEM TITLE: Comprehensive General Sewer Plan

GOVERNING LEGISLATION:

WAC173-240 – General Sewer Plan

RCW 90.48 – Water Pollution Control

RCW 57.16 – General Comprehensive Plan

SUMMARY/BACKGROUND:

The District has prepared a document titled “Comprehensive General Sewer Plan” (Plan) to serve as both the General Comprehensive Plan and the General Sewer Plan for the collection system. In accordance with the requirements listed above, the District must adopt a Plan for the facilities that the District proposes to provide, *before* ordering any such facilities. All portions and sections of the District must be investigated and a Plan selected for a sewer system that is suitable and adequate for the present and reasonably foreseeable future needs, including a long-term plan for financing and distributing the cost and expense of the facilities and services (57.16.010 RCW). The District has prepared the proposed Plan accordingly, in consultation with BHC Consultants, LLC. The Plan is consistent with the 2016 update to the City’s Comprehensive Plan. It replaces the City adopted 2013 General Sewer Plan, which was later adopted and incorporated by the District as part of its General Sewer Plan. In accordance with RCW 57.16.010(7), the Plan must be approved by resolution of any City, all or a portion of which is included in the District’s Plan.

The Plan consolidates planning for the Districts current and future service areas in both Ridgefield and Vancouver urban growth areas into a single document. Thus providing for consistent assumptions, methodology and planning throughout. The Plan identifies the general location and size of sewer infrastructure and the estimated cost of the improvements. The capital improvements identified in the Ridgefield Urban Growth Area total $40.6 million in investment over the 20-year planning period. The improvements identified in the Plan promote the eventual decommissioning of the Ridgefield Treatment Plant within the 20-year planning horizon. Approximately $4.3 million is forecast for restoration and replacement projects (R&R) and $36.3 million in capital improvement projects. The grand total investment in the Plan, across the entire District, is $147.2 million.

A threshold determination of non-significance was issued for the plan on May 4, 2018. Public comments were invited for fourteen days, with only one comment received from Clark County. The District's response to the County comments is included in the Appendix of the Plan. A public hearing was held by the District Board of Commissioners on June 26, 2018. Clark County Public Health has reviewed and endorsed the plan.

STAFF CONTACT: Jeff Niten, Community Development Director

ATTACHMENTS:
District CGSP_Exec Summary (PDF)
CoR Planning Comm District GSP (PDF)

CLARK REGIONAL WASTEWATER DISTRICT

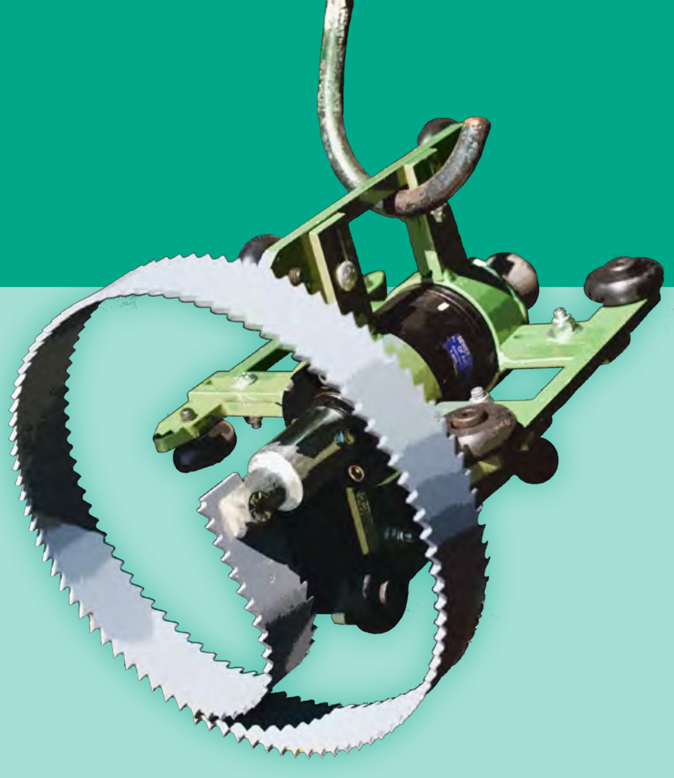
Comprehensive General Sewer Plan

December 2017

Attachment: District CGSP_Exec Summary (Comprehensive General Sewer Plan)

BHC

Executive Summary



A root saw is used to cut through large roots intruding into a sewer main using a rotating blade driven by hydraulic water pressure

Executive Summary

1.1 Introduction

Clark Regional Wastewater District (District) operates a public wastewater system extending more than 50 square miles and serving nearly 100,000 residents in Clark County, Washington. The District serves all of the City of Ridgefield, portions of the cities of Battle Ground and Vancouver and large portions of unincorporated Clark County.

The District's customer base has nearly doubled in 20 years, spurred by high rates of growth in Clark County. Over the next 20 years, the customer base is projected to continue to rise rapidly in the Ridgefield area and more moderately in the other urban areas served by the District. Consistent with local comprehensive planning efforts and the state statute regulating discharge of pollutants to waters of the State (Chapter 90.48 Revised Code of Washington (RCW)), the District has produced this Comprehensive General Sewer Plan (Plan) to present its plans for improving, operating, and extending its wastewater system through 2036.

The Plan is an integral part of the District's ongoing focus on reliability, and its commitment to environmental stewardship and fiscal responsibility. It evaluates the current capacity of the collection and conveyance system, predicts future wastewater flows based on projected population changes, evaluates future capacity and schematically illustrates sewer extensions into areas where new growth is expected. The Plan incorporates management and policy recommendations, a capital improvement program (CIP) and a financial analysis.

The Plan satisfies the requirements for a General Comprehensive Plan (GCP) and a General Sewer Plan (GSP). The GCP is prepared in accordance with the requirements of Section 57.16.010 RCW. The GSP is prepared in accordance with the requirements of Section 90.48.110 RCW and Sections 173-240-010, 173-240-020, and 173-240-050 Washington Administrative Code (WAC).

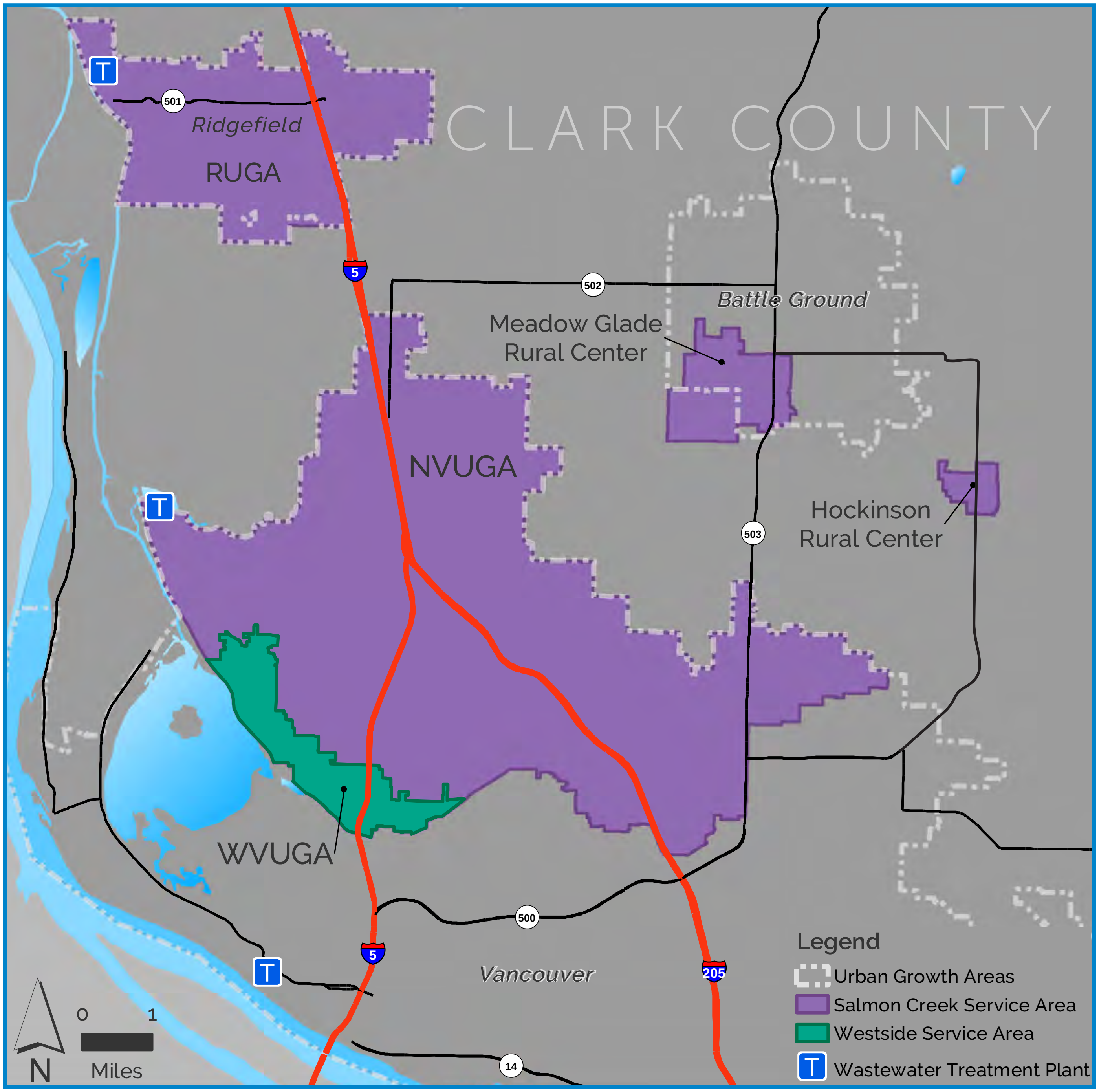
1.1.1 Service Area Description

The District is divided into 2 primary service areas, the Westside Service Area and the Salmon Creek Service Area, described below. The service area designations are based on the treatment facility ultimately receiving wastewater from the properties in each area.

A map of the District is presented in Figure 1.1.

FIGURE 1.1

Clark Regional Wastewater District



WESTSIDE SERVICE AREA

The Westside Service Area consists largely of a portion of the Vancouver UGA immediately north of Vancouver along Interstate 5 (I-5). A few parcels served by the District within the City limits are also included. This area is referred to in this Plan as the West Vancouver UGA (WVUGA), and it covers a total of 1,936 acres. Wastewater flows are conveyed to a point of connection to the City-owned conveyance system and ultimately to the Vancouver Westside Wastewater Treatment Plant (VWTP).

SALMON CREEK SERVICE AREA

The Salmon Creek Service Area is the largest component of the District's system, both in terms of number of customers and acreage. The area includes Ridgefield and its UGA (RUGA) and a portion of the Vancouver UGA referred to as the North Vancouver UGA (NVUGA) in this Plan. The Salmon Creek Service Area covers more than 30,000 acres (about 48 square miles). The RUGA is 6,314 acres. Wastewater flows from the RUGA are currently conveyed either to the Salmon Creek Wastewater Treatment Plant (SCTP) or to the Ridgefield Wastewater Treatment Plant (RTP). The NVUGA is 24,624 acres. Wastewater flows from the NVUGA are directed to the SCTP.

The designated rural centers of Hockinson and Meadow Glade in unincorporated Clark County are also a part of the Salmon Creek Service Area. For planning purposes, the rural centers are included with the NVUGA. Both areas are served with a residential scale Septic Tank Effluent Pumping (STEP) system. Hockinson is a standalone area of approximately 280 acres at NE 159th Street and NE 182nd Ave. Meadow Glade covers approximately 1,389 acres near and in Battle Ground.

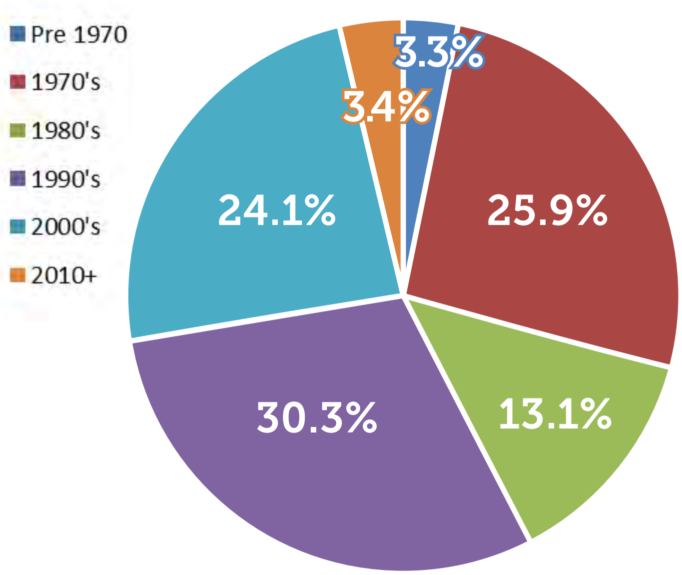
1.1.2 Land Use

The State of Washington adopted the Growth Management Act (GMA), Chapter 36.70A RCW, with the intent of concentrating new development and population gains within designated urban areas. Counties planning under GMA define a UGA within which urban services such as sewers can be provided. The District serves those areas where Clark County has designated it as the sewer purveyor. The service area is suburban in nature and is located within the UGA, except for isolated sites outside of the UGA where Clark County authorizes sewer service in accordance with local and state regulations.

The District relies on GMA-compliant land use planning by local governments to help predict where demand for its services will increase. Comprehensive plan and zoning designations regulate the types of development and densities allowed. The demand for wastewater varies depending upon these and other factors. Today, the service area is predominantly residential with a mix of commercial, retail, light industrial and institutional uses. Approximately 70% of the District's customer accounts are single-family residential, 15% are multi-family residential and 15% are non-residential. Continued growth in the non-residential sectors is expected over the planning horizon in accordance with adopted land use plans.

FIGURE 1.2

Gravity Sewer Pipe Aging



1.1.3 System Inventory & Age

The District owns and operates a modern collection and conveyance system of gravity sewers, pump stations (with associated force mains) and STEP systems, including more than 370 miles of main-line gravity sewers and 67 pump stations. The system is in good condition and is relatively young. More than 50% of the District's gravity pipe inventory has been constructed since 1990. The aging of the District gravity pipes is shown in Figure 1.2. Pump station aging is similar, and approximately 80% of existing pump station inventory has been constructed since 1990.

Modern pipes are expected to have a typical usable life of 100 years. Modern pump station structures typically last 75 years; however, the control and mechanical equipment requires replacement every 10 to 20 years. Age is one of several factors used in determining maintenance levels and schedules for restoration and replacement of infrastructure.

1.2 Growth of Population and Wastewater Flows

The District must plan to collect and convey wastewater flows generated from expected future populations within its service area. Growing populations will generate related increases in wastewater flows, placing increased demand on the wastewater system. This Plan's demographic projections and engineering analyses anticipate continued growth of the customer base and associated increases in flows. Between 2016 and 2036 the WVUGA population will grow by 14%, NVUGA by 69%, and RUGA by 277%. On average, the District population is forecast to grow by 86%.

Future wastewater flows are estimated from population using a ratio of flow per capita. The unit flow values in Table 1-1 are used to estimate sewer flows. The values are based on observations of flows within the District's system and a review of values used around the region. Unit flow values are assigned to each of the 4 population segments studied in this Plan.

Expressed in gallons per day (gpd), average annual flows (AAF) in the District's systems are expected to rise from 8.3 million gpd in 2016 to nearly 16 million gpd in 2036. Table 1-2 presents expected flows by service area. By 2066, total District flows may rise to nearly 26.6 million gpd.

The unit values presented in Table 1-1 reflect an observed decrease in per capita flow within the District's system. Future populations are expected to generate less wastewater per capita. This trend is due in part to water conservation efforts and the promulgation of more efficient fixtures and equipment. Residential unit flows are forecast at 25% below planning values used in prior plans. If the unit values used in prior plans had been applied to this Plan's population projections, projected future wastewater demand would have been much higher.

TABLE 1-1

Flow Rates per Population Segment

SEGMENT	AAF (WITH BASELINE INFILTRATION AND INFLOW INCLUDED)
Residential	75 gal/capita/day
Employment	15 gal/employee/day
Student	15 gal/student/day
Industrial	1,500 gal/acre/day

TABLE 1-2

Predicted Flows, 2016 and 2036

	2016 AAF (MILLION GPD)	2036 AAF (MILLION GPD)
Westside Service Area (WVUGA)	*0.8*	*0.9*
Salmon Creek Service Area	*7.5*	*15.1*
RUGA	0.6	3.5
NVUGA	6.9	11.6
GRAND TOTAL	**8.3**	**16**

1.3 System Capacity Analysis

A hydraulic model is used to evaluate the capacity of the District's system to collect and convey wastewater flows under current and future projected flow conditions. The model constructed for this Plan shows that the majority of the District's existing pipes and pump stations are able to convey wet weather flows in the 2016 and 2036 modeled scenarios without surcharging. This result is influenced by conservative past engineering practices and the evident decline in wastewater flows per capita.

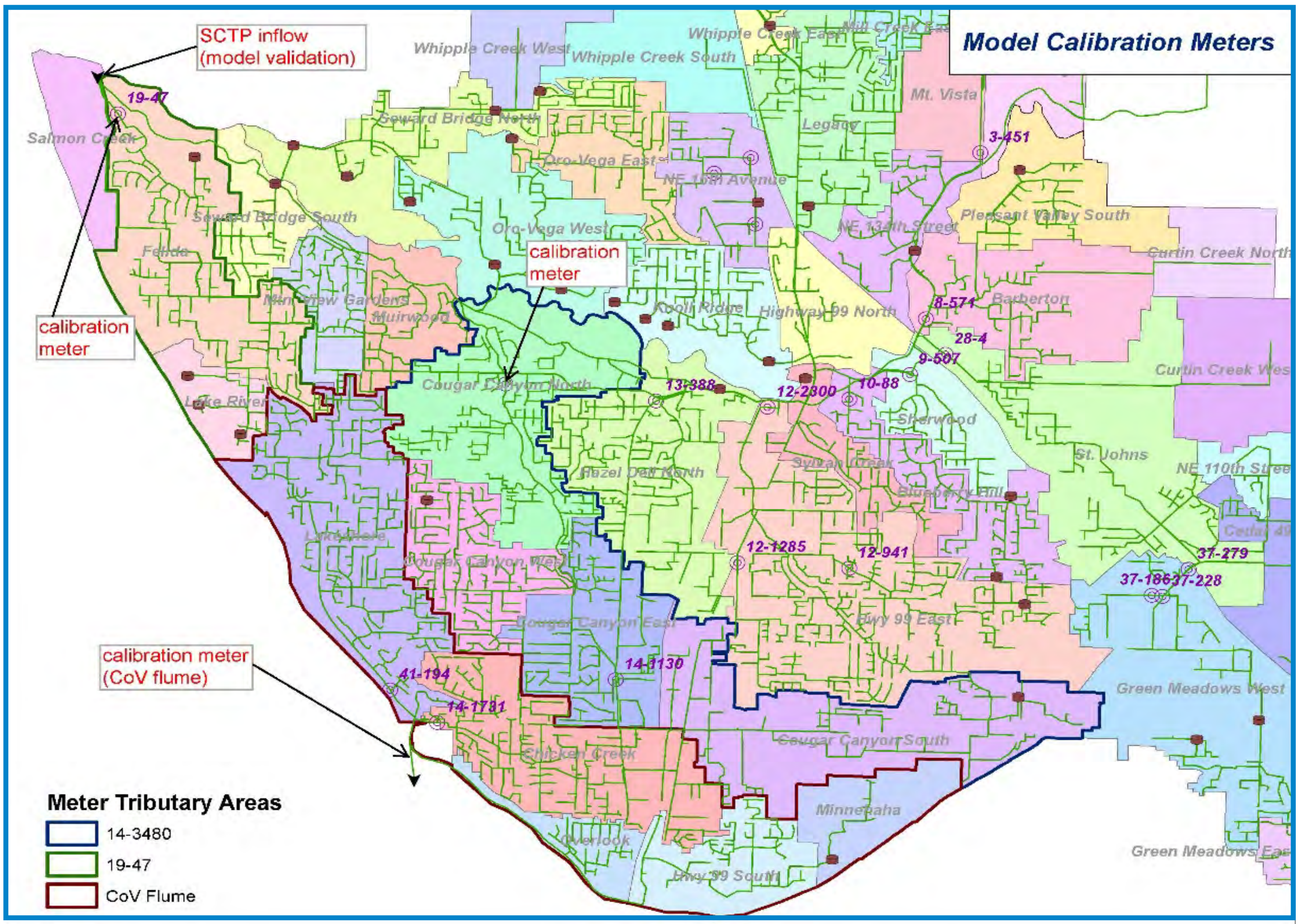
1.3.1 Hydraulic Modeling

The hydraulic model is a simplified digital simulation of the existing wastewater conveyance system. The model simulates wastewater flows through the system using a combination of flows projected based on population and flows simulated from a theoretical rain storm ("design storm").

The model is calibrated to ensure that the simulated collection system is an accurate representation of the physical system and its hydraulic response. The calibrated model output matches measured real world data within acceptable limits. Data from an inflow meter at the SCTP is used to validate the model after calibration at selected flow meters. Calibration flow meters and their respective contributing areas are shown in Figure 1.2.

FIGURE 1.2

Calibration Flow Meter Locations



1.3.2 Modeled Capacity

In the 2016 simulated scenario, only a few isolated locations are nearing capacity during the design storm. Only 3 gravity pipe segments, or less than 0.5% of the system, are capacity limited in the model. And only 4 pump stations, or approximately 6% of existing stations, are capacity limited.

In the 2036 simulated scenario, 13 locations in the District's wastewater system have capacity limitations during the design storm. These include 4 gravity pipe segments representing approximately 1% of the total system and 9 pump stations, or 13% of stations. Of the pump stations, 5 capacity limitations also include associated force mains and 1 includes an associated gravity pipe.

1.3.3 Conveyance Capacity Projects

Conveyance capacity limitations may be remedied by increasing the size of the infrastructure (upsizing) or by decreasing demand at the location by re-routing some or all flows directed to the pipe or pump station. Recommended capital projects include a mix of upsizing and diversion solutions for those pipes and pump stations with anticipated capacity limitations. Each capacity limitation has been resolved with the improvements proposed in this Plan

1.3.4 Treatment Plant Capacity

The District solely provides wastewater collection and conveyance, and it coordinates with local partners for treatment of its wastewater flows. Because it does not own a wastewater treatment plant, the District is not directly responsible for plant capacity planning, and the treatment plants are not a part of this Plan. However, the District's 20-year planning assumptions rely on certainty that it can continue to direct flows to two wastewater treatment plants in Clark County – the VWTP and the SCTP. Future flows predicted by the hydraulic model have been compared to plant capacity using information from approved facility plans provided by their operators. Both the VWTP and the SCTP will have adequate capacity to receive and treat projected District flows through 2036.

1.4 Operations Programs

District operations contribute to maintaining system functions and optimum capacity of conveyance components. A standardized level of service plan has been adopted throughout the service area providing for service at or above industry standards. The District uses an industry-standard maintenance management software to track inspections and work orders. The District maintains its conveyance system regularly and inspects components routinely. Maintenance and preventative activities are targeted where inspections show system functions are compromised by grease and grit or by deteriorating system conditions.

1.5 Policy Recommendations

Over time, the District's knowledge of its wastewater system has improved. Industry standards for modeling assumptions and risk assessment have also changed over the years. For instance, the hydraulic model used to simulate system capacity in 2036, carried out to support this Plan, demonstrates that previous design and planning policies have been conservative. This has allowed the District to, where appropriate, amend existing and adopt new policies as part of this Plan. In addition to unit flow values previously discussed, the following policies that influence the design and analysis of the collection system are adopted in this Plan:

- A 25-year simulated storm is selected as the basis of design; infrastructure is sized to carry peak flows associated with the design storm.
- Gravity sewer pipes may surcharge within established limitations during the peak flow conditions.
- A flow trigger for managing pump station capacity has been established. Capital planning measures are initiated when the run time for the lead pump in a pump station approaches 45 minutes per hour under peak flow conditions.

1.6 Staffing Assessment

The District employs 55.5 full-time equivalent (FTEs) employees. Of these, 14 FTE are assigned to operation and maintenance of the collection system, including 7 assigned to gravity sewers and 7 assigned to pump station/force main facilities. Table 1-3 compares District staffing level to several similar utilities in western Washington.

The District has comparable or slightly higher staffing levels than the other wastewater service providers. Economy of scale normally suggests that agencies with smaller systems, fewer linear feet of pipe, typically would have a higher ratio of personnel to pipe length. Other variables, however, have a substantive impact on staffing needs. These include the numbers of pump stations and STEP systems, both of which increase staffing needs, and levels of service. This is evidenced clearly with the data presented in Table 1-3. Given these and other factors, the District staffing levels are reasonable and appropriate.

TABLE 1-3

O&M Staffing Comparison

AGENCY	PUMP STATIONS	CURRENT STAFF	LENGTH PIPE (LF)	FTE / 100,000 LF
City of Lacey*	47	6	898,000	0.67
Southwest Suburban Sewer District	11	6	1,219,000	0.49
Alderwood Water and Wastewater District	14	10	1,942,900	0.50
District*	67	14	1,971,700	0.71

**Substantial STEP systems*

1.7 Capital Improvement Program (CIP)

The development of a realistic, feasible, and defensible CIP is one of the primary goals of this Plan. Based on analyses of population growth as well as system capacity, age and condition, the CIP includes projects falling into two categories: restoration and replacement (R&R) and capital projects.

R&R projects address improvements to the existing collection system. These are commonly related to operations and maintenance (O&M), poor condition or obsolescence of existing infrastructure.

Capital projects are those construction projects that, in general, address system improvements that are necessary to accommodate growth. Capital projects can be further categorized as capacity or expansion related projects. Capacity projects increase the size of infrastructure to accommodate increased flow resulting from population growth. Expansion projects construct new infrastructure required to extend service to undeveloped areas.

1.7.1 CIP Summary

Over a 20-year planning period, the District identifies a grand total of $147.22 million in projects by 2036. The 6-year 2017 to 2022 CIP identifies a total of approximately $47.10 million in capital and R&R projects.

The 6-year and 20-year CIPs are summarized in Table 1-4 and Figure 1.4.

TABLE 1-4

CIP Summary

	(MILLIONS OF $)		
	R&R PROJECTS	CAPITAL PROJECTS	GRAND TOTAL
6-YEAR CIP (2017-2022)	**10.34**	**36.76**	**47.10**
Salmon Creek Service Area	*8.19*	*36.13*	*44.32*
NVUGA	7.73	22.08	29.81
RUGA	0.46	14.05	14.51
Westside Service Area (WVUGA)	*2.15*	*0.63*	*2.78*
20-YEAR CIP (2036)	**35.32**	**64.80**	**100.12**
Salmon Creek Service Area	*31.97*	*64.44*	*96.41*
NVUGA	28.13	42.15	70.28
RUGA	3.84	22.29	26.13
Westside Service Area (WVUGA)	*3.35*	*0.36*	*3.71*
GRAND TOTAL	**45.66**	**101.56**	**147.22**

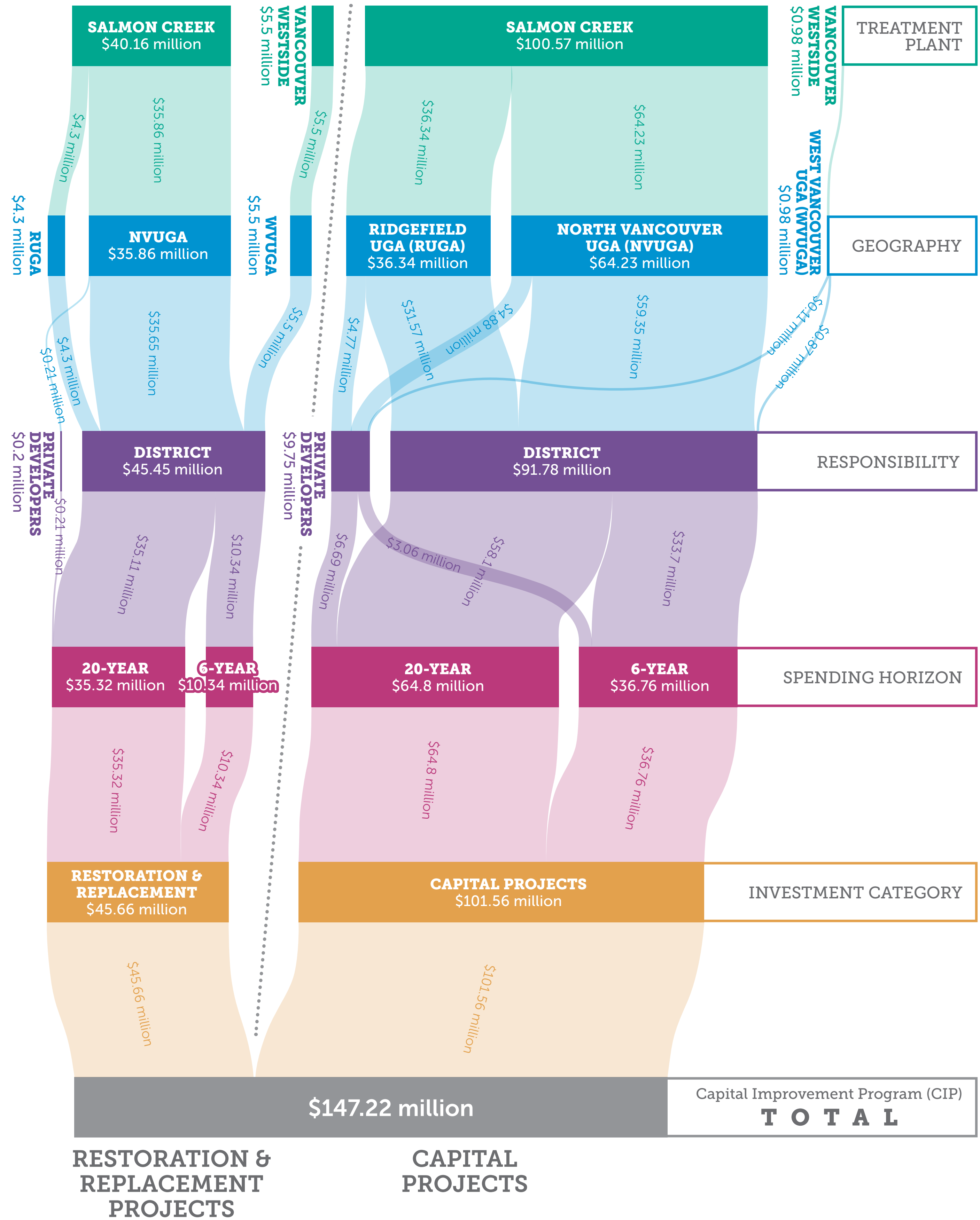


FIGURE 1.4

Capital Improvement Program Flow Diagram

1.8 Financial Analysis

The Plan includes the required 6-year financial analysis. The analysis estimates the total cost of providing wastewater service, including execution of the CIP, and defines a financial program of rates and charges to fund operations. The District Board has a practice to fund debt service on capital from rates, and to fund future capital needs from system development charges (SDCs) or debt undertaken to fund major discrete capital projects.

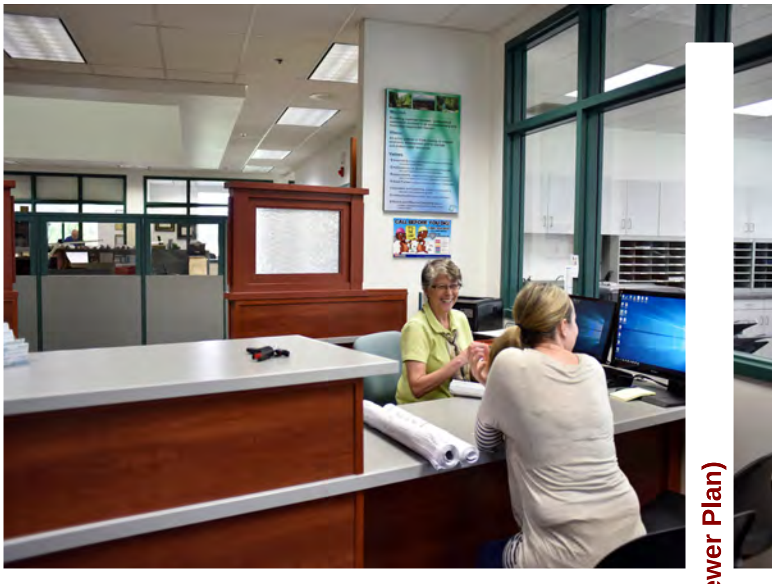
1.8.1 Financial Performance

The District has a long history of strong financial performance. Through the combination of customer growth and periodic rate increases, sewer rate revenue has increased to fund annual operating expenses. In addition, the District has maintained positive and healthy liquidity. Modest future rate increases are necessary to avoid eroding net income and to keep pace with inflation.

1.8.2 Sources of Funding (Resources)

To fund the CIP, the District will use its internal resources such as existing cash and investments, capital-related revenues and rate revenue. Ongoing revenues from rates are best suited to fund ongoing capital repair/replacement and maintenance needs. Furthermore, grant, loan, and bond opportunities can be available to the District through federal and state agencies to fund capital projects in the CIP. The District's revenue sources are:

- Rates
- SDCs
- Local facilities charges
- Developer extensions/latecomer agreements
- Local improvement districts/utility local improvement districts
- Government programs, such as the Public Works Trust Fund and the State Revolving Fund
- Public debt (e.g. revenue bonds/private placements)



1.8.3 Financial Forecast

The financial forecast is developed from the 2017 budget. Rate revenue is projected based on actual 2016 rate collections and expected growth. The following assumptions are made in the analysis:

- » Growth. From a baseline 1,550 ERUs in 2017, strong growth continues in the next 5 years.
- » Revenue. Other (non-rate) revenues of $1.6 million are forecast based on the 2017 Budget.
- » O&M Expenses. General cost inflation (3% per year), salary costs (5% per year), and benefit costs (6% per year) are expected.
- » Capital. Capital project costs are forecast to increase at 5% per year over the 6-year planning window based on the recent inflation in the ENR Construction Cost Index.
- » Debt. No new debt is forecast over the 6-year planning period; the District has an outstanding revenue bond and 3 outstanding loans.

A 6-year revenue requirement forecast is presented in Table 1-5. Annual revenue requirements based on the forecast of revenues, expenditures, fund balances and fiscal policies are summarized in Table 1-5. Planning period rate revenues and other revenues are forecast to incrementally grow over the following 5 years from 19.4 million and $1.6 million in 2017 to $23.5 million and $1.8 million in 2022, respectively. SDC revenue is projected to be $7.6 million.

As shown in Table 1-5, the combined fund balance will decrease over the planning period, beginning 2017 at $35.2 million and ending 2022 with $32.0 million. The District reserves are adequate to meet all financial needs and to permit the drawdown of fund balances while complying with all District financial policies.

TABLE 1-5

Revenue Requirement Forecast

	2017	2018	2019	2020	2021	2022
Revenues						
Charges for Services	$19,387,581	$19,997,241	$20,710,606	$21,868,151	$22,415,551	$23,470,808
Other operating revenues	1,593,500	1,689,234	1,601,405	1,650,504	1,697,066	1,758,222
Total Revenues	**20,981,081**	**21,686,475**	**22,312,011**	**23,518,655**	**24,112,617**	**25,229,030**
Expenses						
Operating expenses	18,286,500	19,373,791	19,758,880	20,319,825	21,379,864	22,019,457
Debt service	1,921,089	1,914,544	1,907,998	1,901,452	1,894,906	1,888,360
Rate funded capital	1,335,204	3,122,688	1,348,974	1,961,639	1,331,270	1,240,225
Total Expenses	**21,542,793**	**24,411,023**	**23,015,852**	**24,182,916**	**24,606,040**	**25,148,042**
Surplus/(Deficiency)	**$(561,712)**	**$(2,724,548)**	**$(703,841)**	**$(664,261)**	**$(493,423)**	**$80,988**
Annual Rate Adjustment	**0.00%**	**0.00%**	**0.00%**	**2.63%**	**0.00%**	**2.56%**
Collection/(Use) of Reserves for Rate Management	$(695,233)	$(3,036,817)	$(838,738)	$(860,425)	$(626,550)	$(43,034)
Coverage Ratio Realized	**1.10**	**1.10**	**1.10**	**1.10**	**1.10**	**1.10**
Coverage Ratio Required	***1.10***	***1.10***	***1.10***	***1.10***	***1.10***	***1.10***
Ending Combined Fund Balance	**$35,194,407**	**$38,240,466**	**$35,138,730**	**$33,639,810**	**$32,849,218**	**$32,024,020**
Combined Minimum Target Balance	*$23,239,252*	*$22,910,455*	*$23,261,978*	*$23,672,194*	*$25,286,397*	*$25,634,404*

1.8.4 Current and Projected Rates

EXISTING AND PROJECTED RETAIL RATES

The District's current and projected rate structure for residential customers is a fixed monthly charge per Equivalent Residential Unit (ERU) (see Table 1-6). The fixed base rate applies to all residential customers. Residents in Ridgefield pay the base rate plus a system integration charge. Eligible low-income senior customers pay a discounted rate depending on their specific qualifying income levels. Multi-family residential units are charged 0.80 ERU per unit.

TABLE 1-6

Rate Forecast

	2017	2018	2019	2020	2021	2022
SALMON CREEK SERVICE AREA						
NVUGA						
Monthly Sewer Rates	$38.00	$38.00	$38.00	$39.00	$39.00	$40.00
Senior Discount - 20%	30.40	$30.40	$30.40	31.20	31.20	32.00
Senior Discount - 35%	24.70	$24.70	$24.70	25.35	25.35	26.00
Multi-family Unit	30.40	$30.40	$30.40	31.20	31.20	32.00
RUGA						
Monthly Sewer Rates	55.70	$55.00	$54.10	54.30	53.70	54.10
Senior Discount - 20%	44.56	$44.00	$43.28	43.44	42.96	43.28
Senior Discount - 35%	36.21	$35.75	$35.17	35.30	34.91	35.17
Multi-family Unit	44.56	$44.00	$43.28	43.44	42.96	43.28
WESTSIDE SERVICE AREA (WVUGA)						
Monthly Sewer Rates	38.00	$38.00	$38.00	39.00	39.00	40.00
Senior Discount - 20%	30.40	$30.40	$30.40	31.20	31.20	32.00
Senior Discount - 35%	24.70	$24.70	$24.70	25.35	25.35	26.00
Multi-family Unit	30.40	$30.40	$30.40	31.20	31.20	32.00

EXISTING AND PROJECTED SYSTEM DEVELOPMENT CHARGES

SDCs are a form of connection charge authorized by Section 57.08.005 RCW. SDCs are imposed on new customers connecting to the system as a condition of service. The underlying premise of the SDC is that new growth (i.e. future customers) will pay an equitable share of existing and future system costs through an upfront charge for system capacity. SDC rates are reviewed periodically to ensure the revenues generated from new connections will sufficiently fund new infrastructure (or capital purchases) added to the District's collection system. SDCs are forecast to remain level over the study period 2017-2022 as noted in Table 1-7 below.

TABLE 1-7

System Development Charge Forecast

	2017	2018	2019	2020	2021	2022
Salmon Creek Service Area						
RUGA	$4,708	$4,708	$4,708	$4,708	$4,708	$4,708
NVUGA	$7,550	$7,550	$7,550	$7,550	$7,550	$7,550
Westside Service Area (WVUGA)	$1,720	$1,720	$1,720	$1,720	$1,720	$1,720

1.9 Conclusion

Ample system capacity and a strong financial position suggest the District is in a position to provide excellent service to existing and future customers. Plans are in place to proactively accommodate expected growth and increasing demand for sewer services over the next 20 years. The 6-year capital projects may be funded without increasing SDCs, while the 6-year R&R projects and operating expenses may be funded with modest changes to monthly customer rates. District rates will remain competitive both locally and regionally.

A summary of the planning sequence and selected conclusions is presented in Figure 1.5.

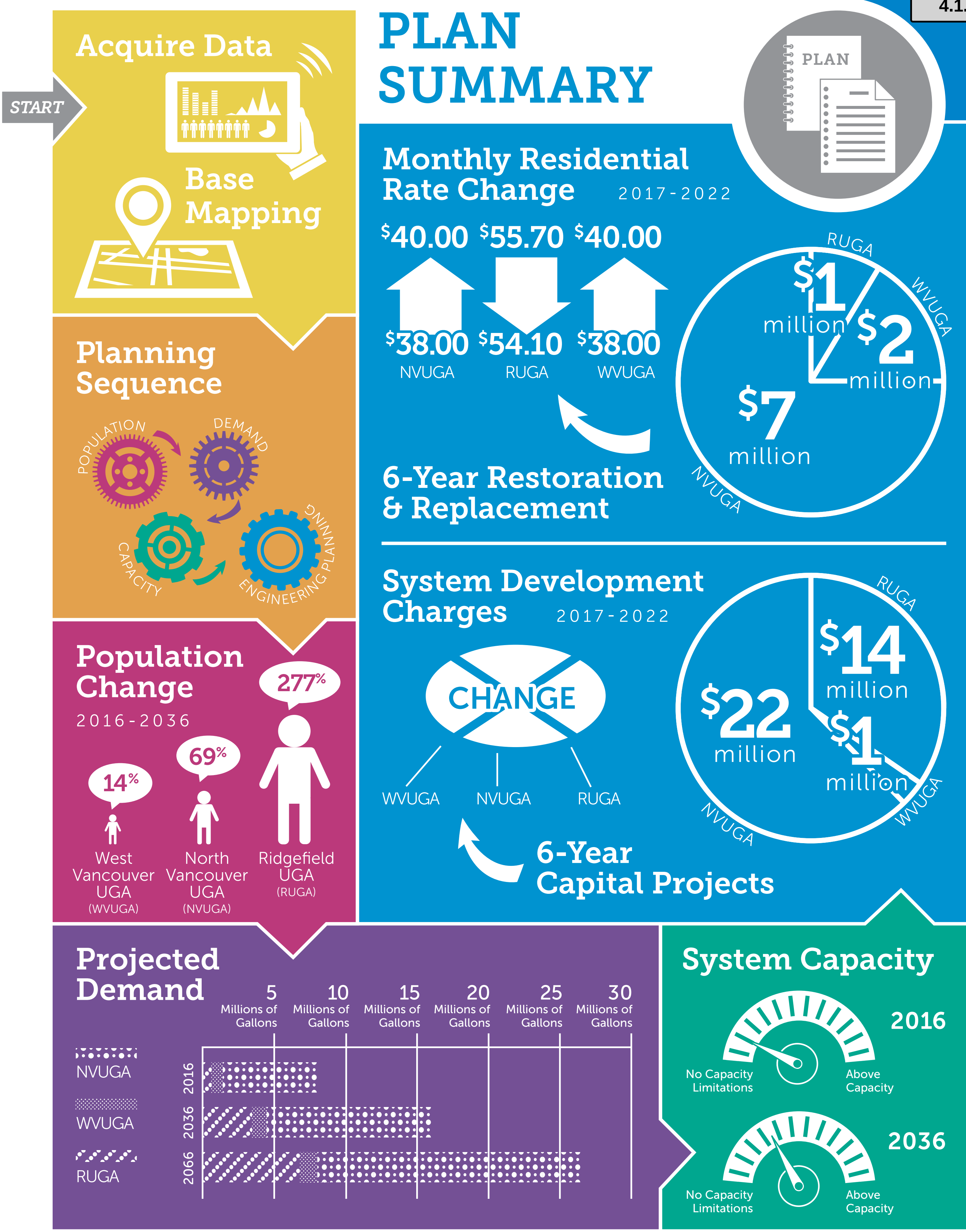


FIGURE 1.5
Plan Summary

Comprehensive General Sewer Plan

City of Ridgefield
Planning Commission
July 11, 2018

Agenda

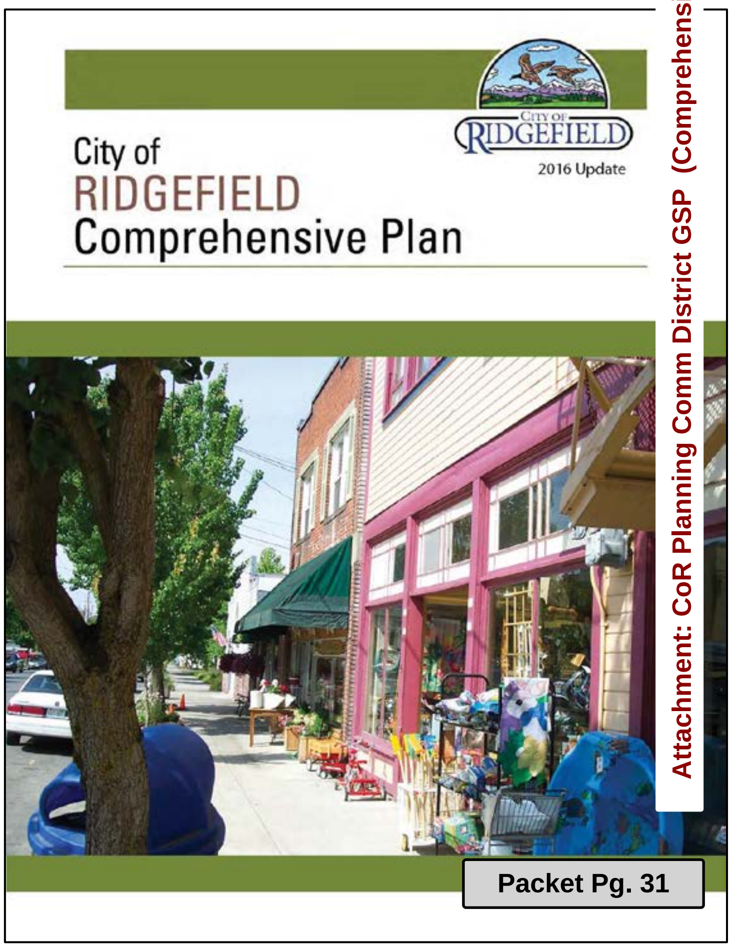
- Goals & Objectives
- District History & Context
- Study Area Overview
- Growth Projections
- Infrastructure Planning
- Financial Analysis
- Summary & Conclusions

Goals & Objectives

Goals & Objectives

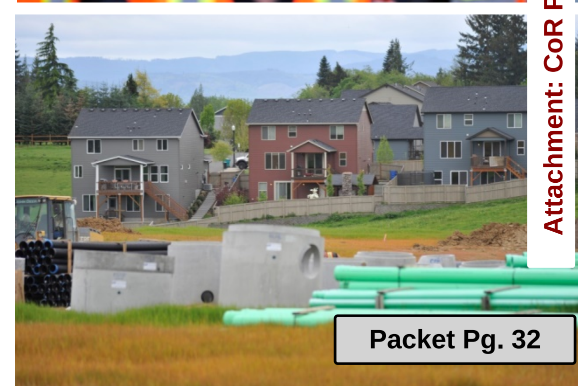
Strategic Infrastructure Planning & Investment is a foundational element of the District's Mission & Vision

- Plan Goals
  - Regulatory Compliance
  - Support County and City Comprehensive Plan Achievement
  - Provide a framework for future Capital Investment



Goals & Objectives

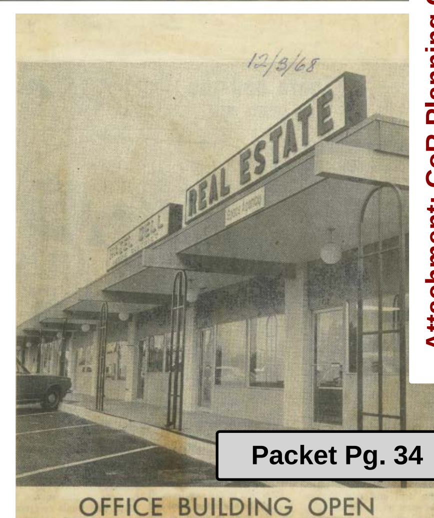
- Policy Objectives
  - Provide Affordable & Reliable Service
  - Protect Public Health & the Environment
  - Support Economic Development



District History & Context

District History & Context

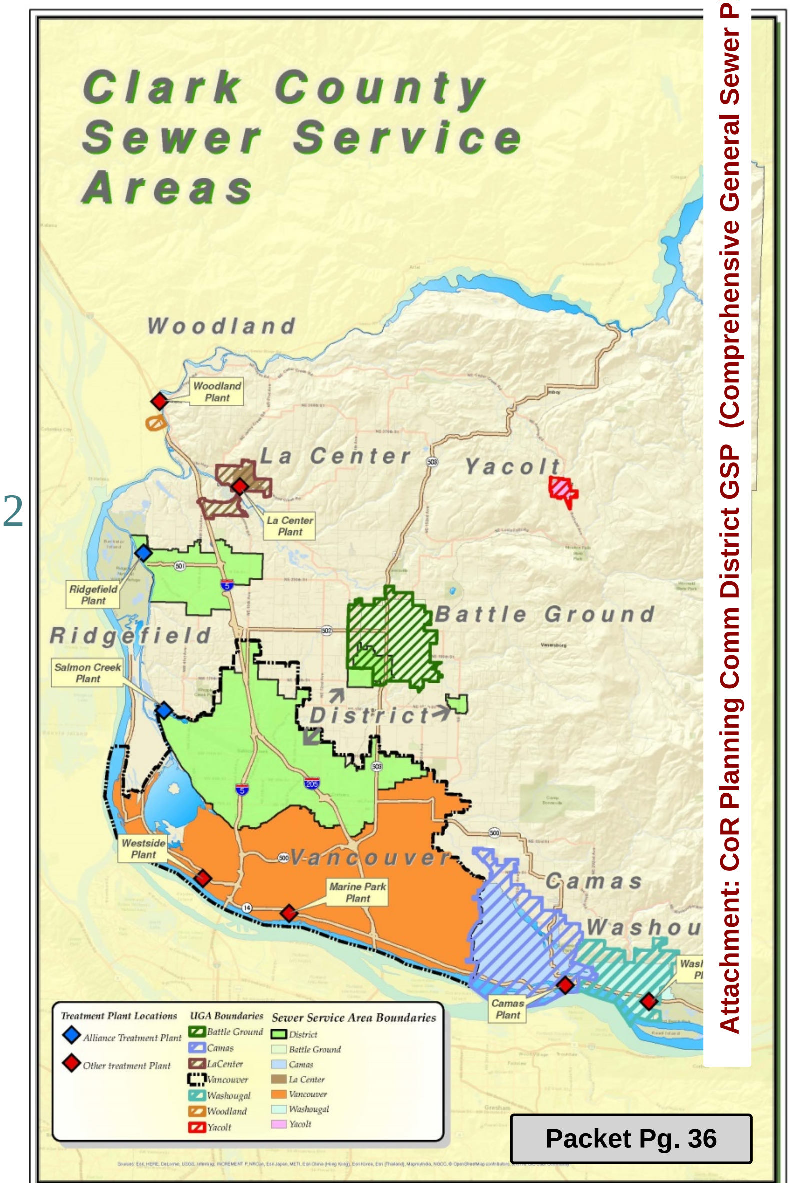
- Title 57 RCW "Water-Sewer District"
- Founded 1958
  - Clark County Sewer District No. 1
  - Hazel Dell Sewer District
  - Clark Regional Wastewater District



Study Area Overview

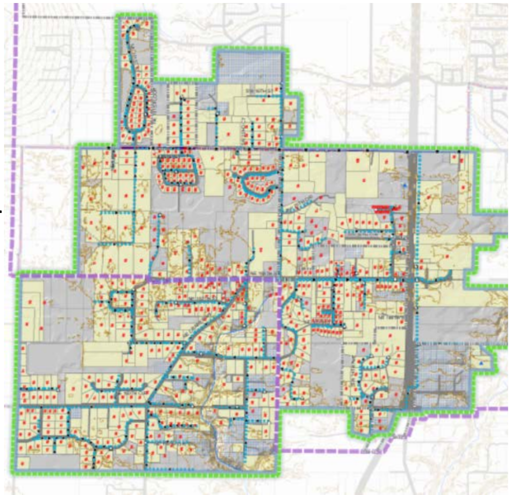
Study Area Overview

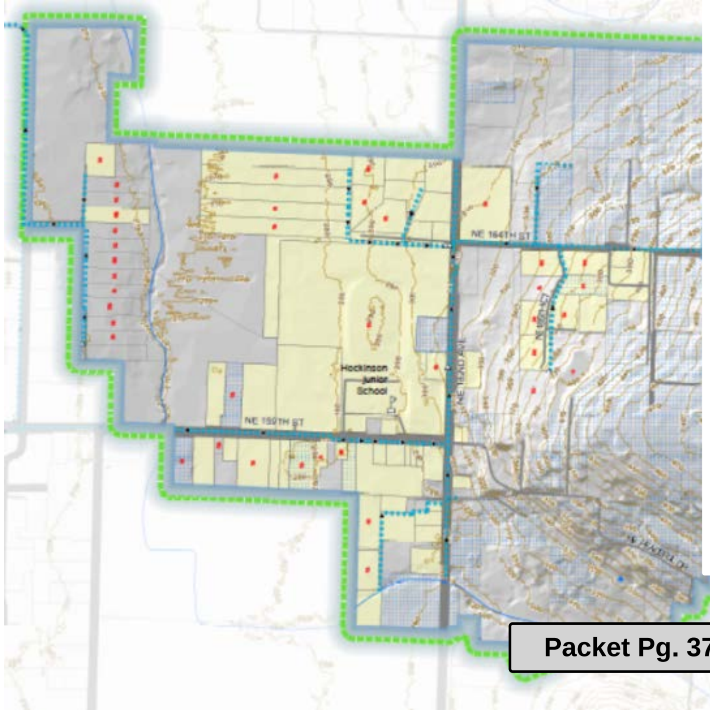
- Size – 50+ mi²
  - 82 Sewer Basins
- Urban Growth Areas
  - City of Vancouver - 39 mi²
  - City of Ridgefield – 9 mi²
  - City of Battle Ground – 1.4 mi²



Study Area Overview

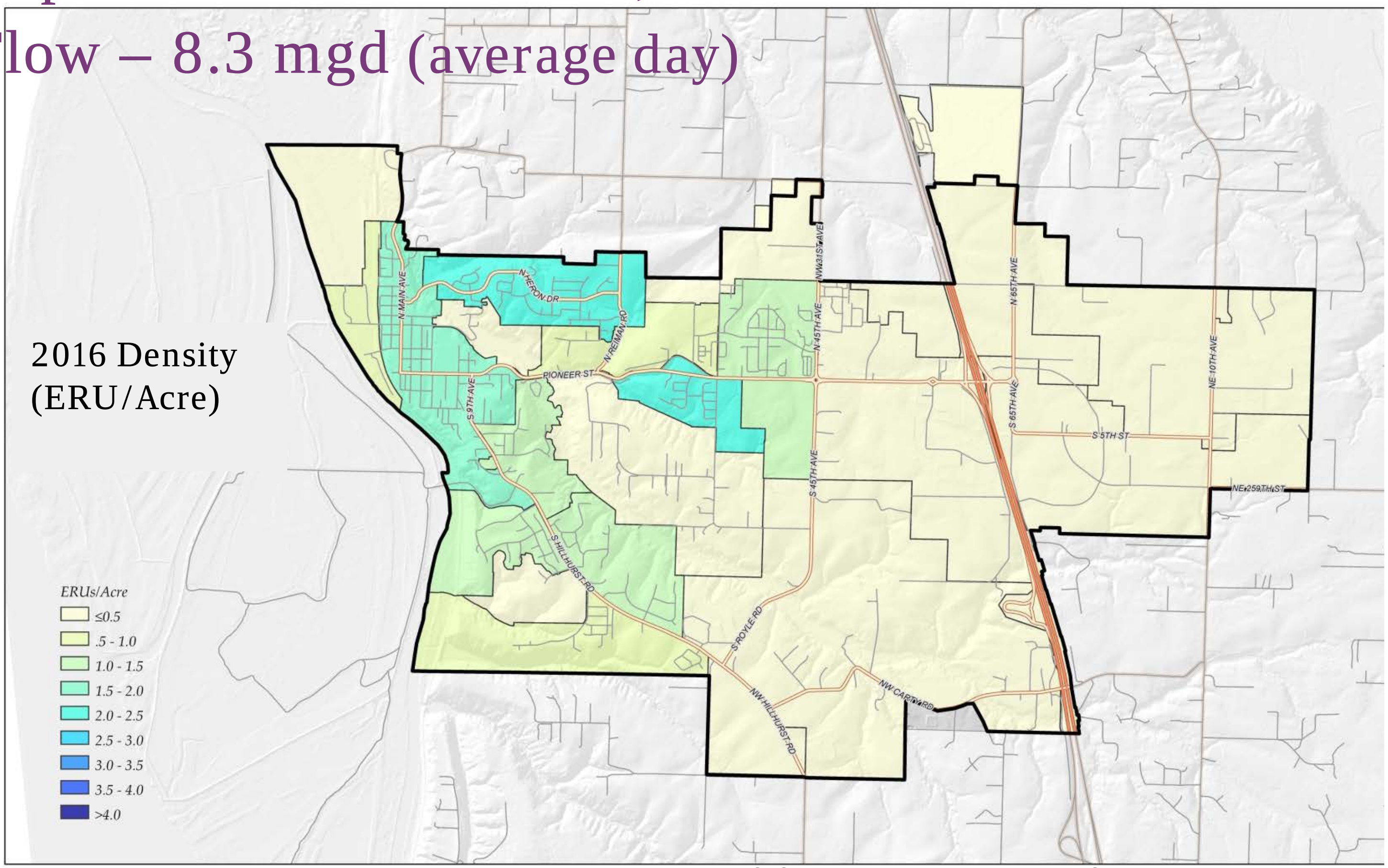
- Existing Areas Outside of the UGA (40.370 CC Unified Development Code)
  - Rural Centers
    - Meadow Glade & Hockinson
  - Individual Parcels
    - 4 schools, 3 public facilities, 7 private





Study Area Overview

- Total ERU – 43,000+
- Total Population Served – 100,000±
- Total Flow – 8.3 mgd (average day)



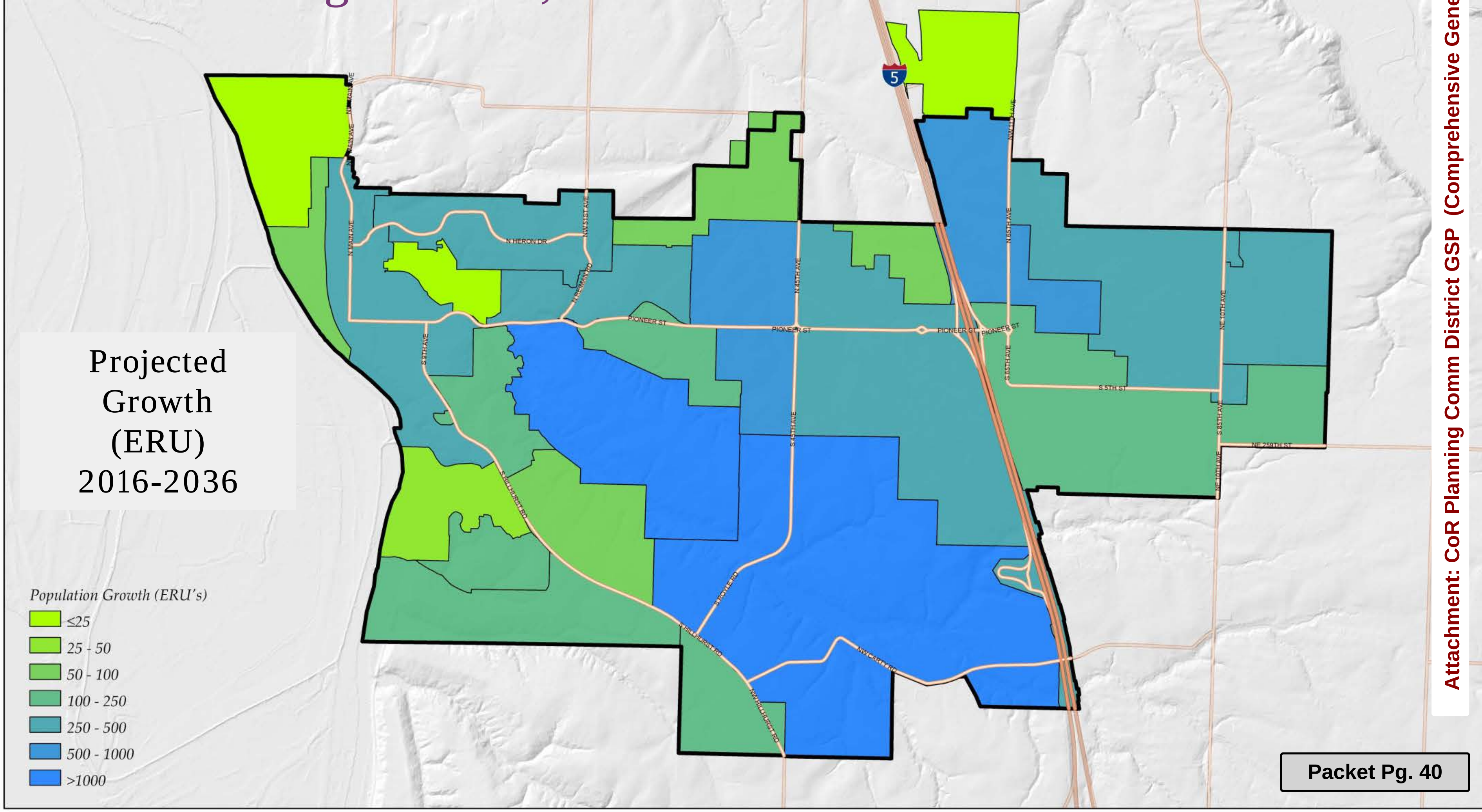
‘ERU’ – Equivalent Residential Unit: the volume of flow generated from a single family household

‘mgd’ – millions of gallons per day

Growth Projections

Growth Projections

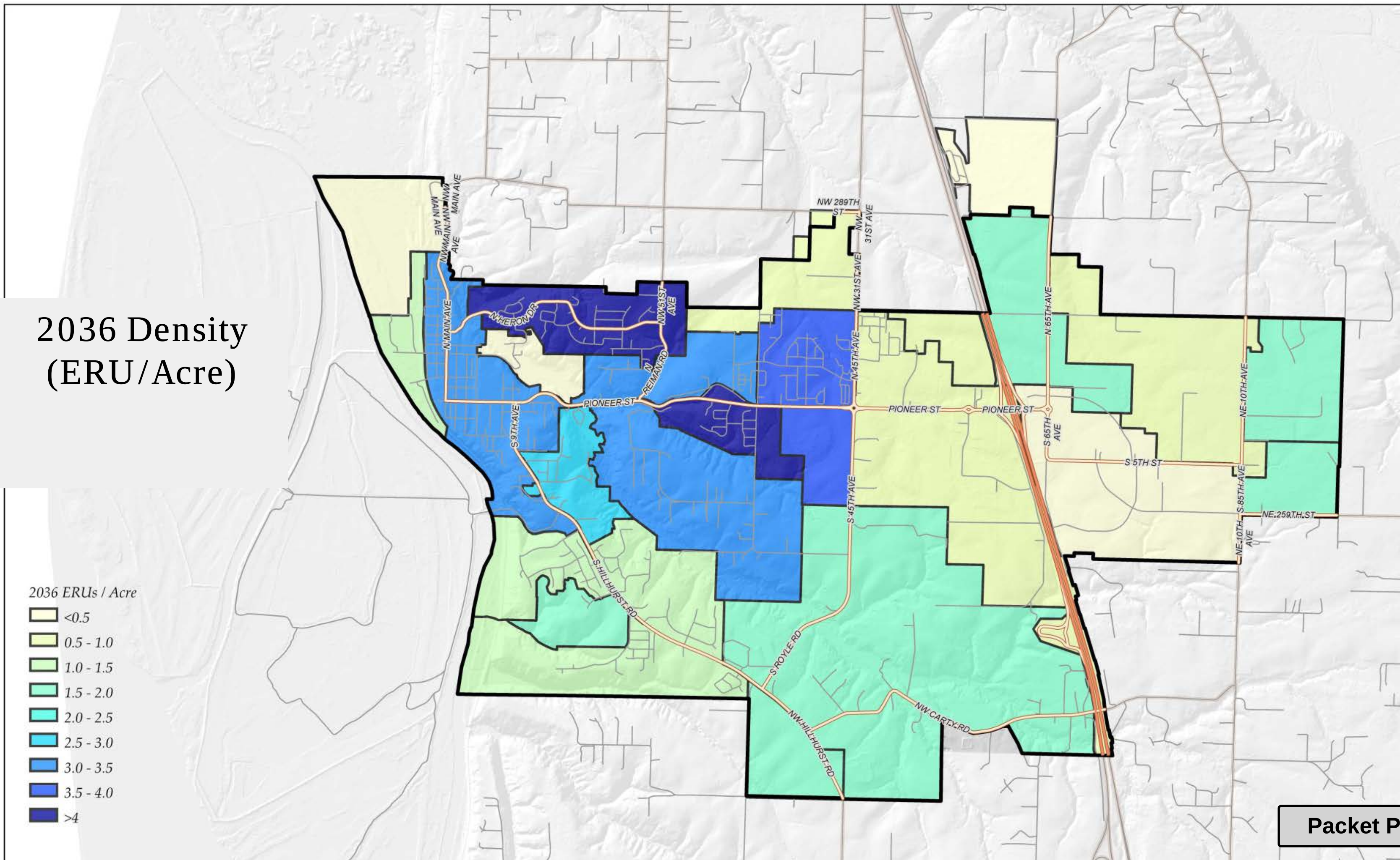
- Total New ERU – 22,000+
  - Ridgefield - 7,500+



Growth Projections

	Residental	Employment	Student	Industrial	TOT[illegible]L
Service Area	ERUs	ERUs	ERUs	ERUs	ER[illegible]
Ridgefield	9,344	894	519	6,510	17[illegible]7

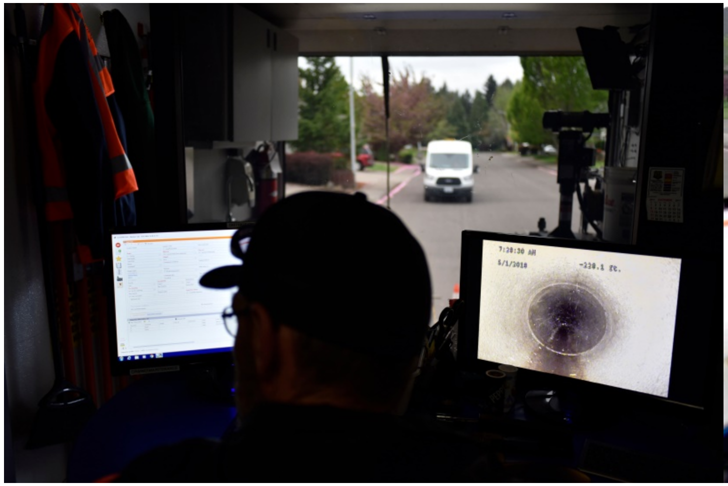
2036 Density (ERU/Acre)



Infrastructure Planning

Infrastructure Planning

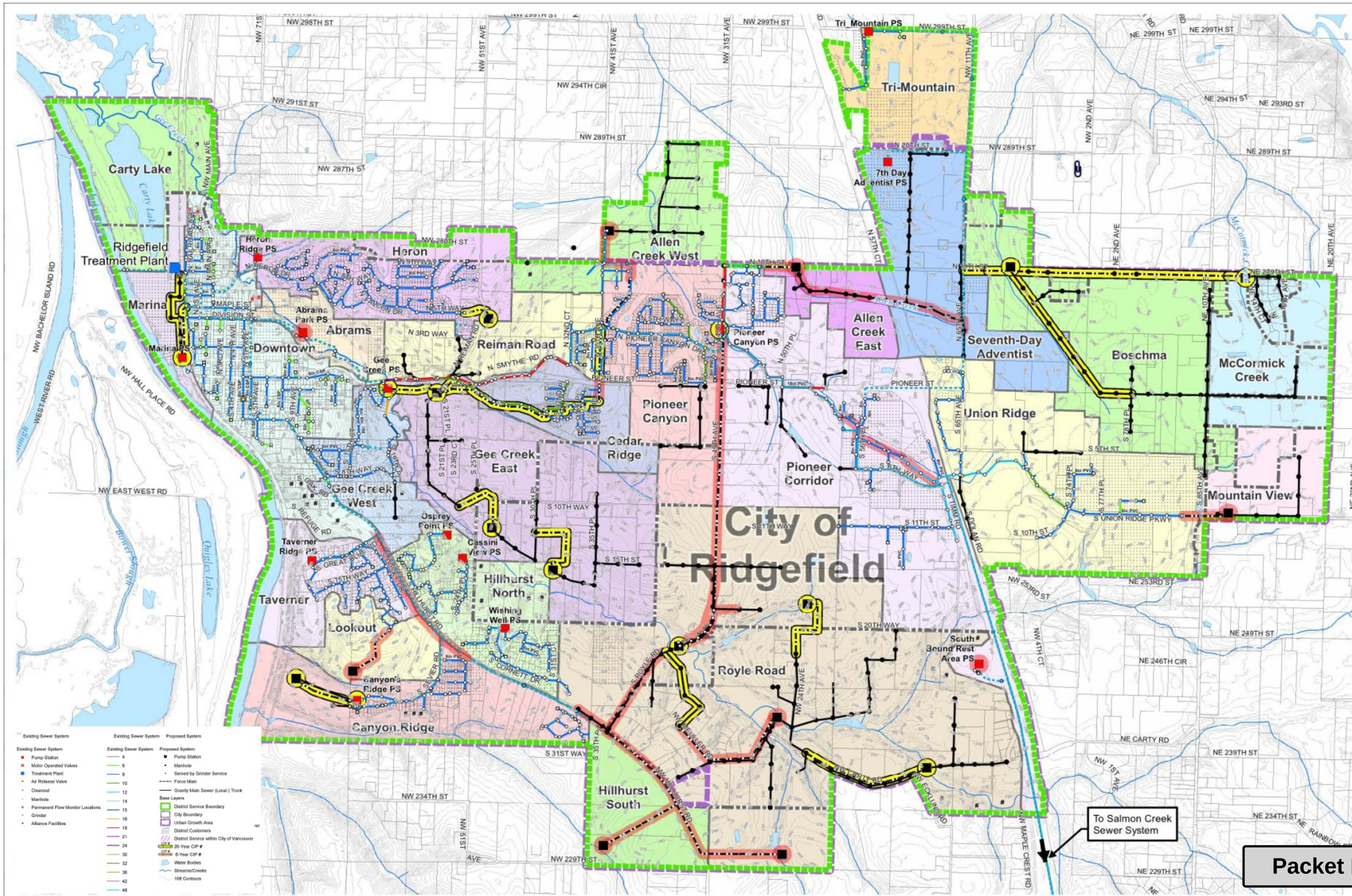
- Capacity Assessment
  - 25-yr Design Storm (Dec 7-8, 2015)
  - Calibrated Hydraulic Model
  - Existing System – Flow Constraints
    - 2016 Flow Assessment
      - < 1% of gravity sewer
      - 6% pump stations
    - 2036 Flow Assessment
      - 1 % of gravity sewer
      - 13% pump stations



4.1.b

Infrastructure Planning

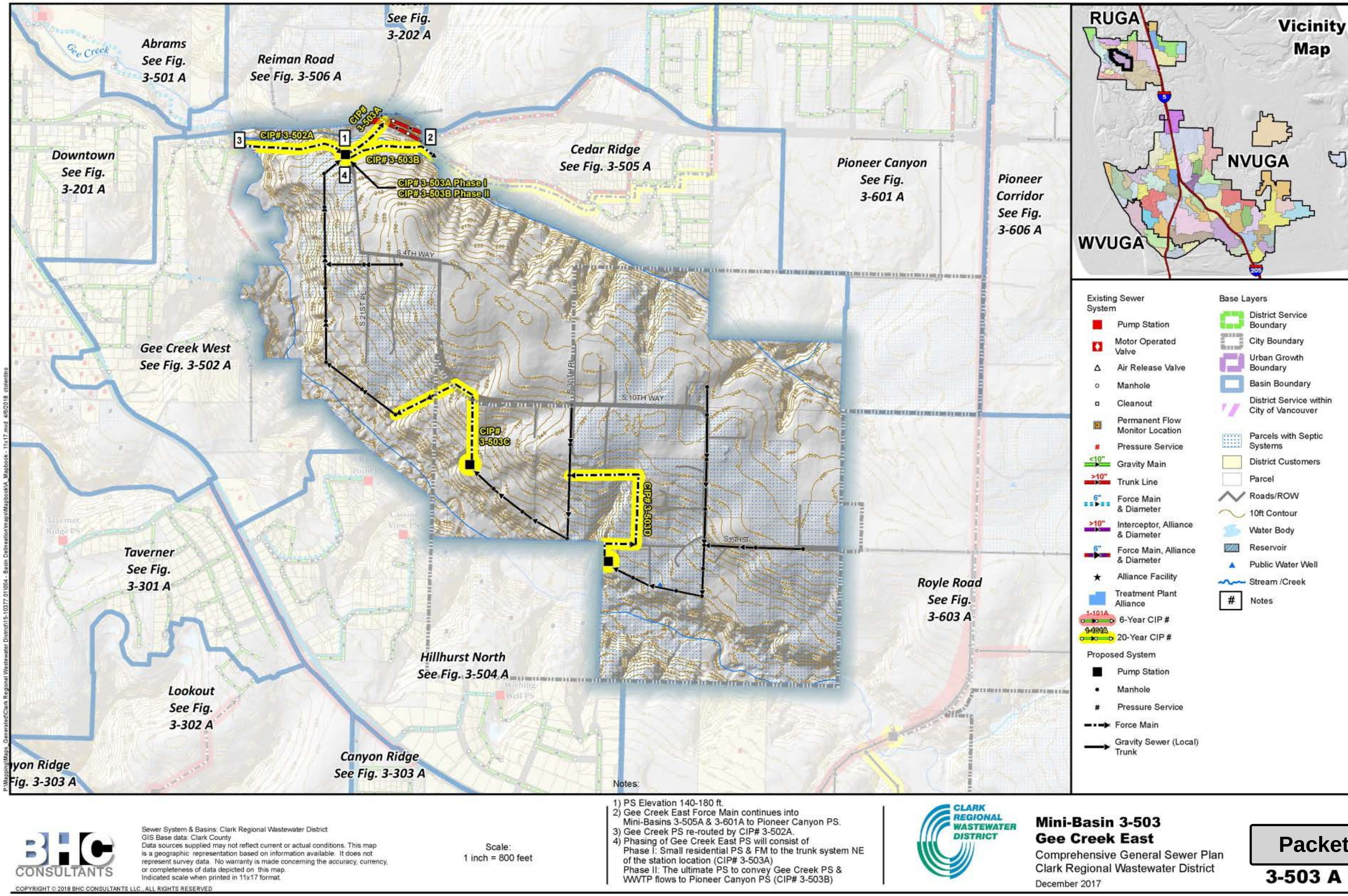
- Schematic Planning for System Expansion



Attachment: CoR Planning Comm District GSP (Comprehensive General Sewer Plan)

Infrastructure Planning

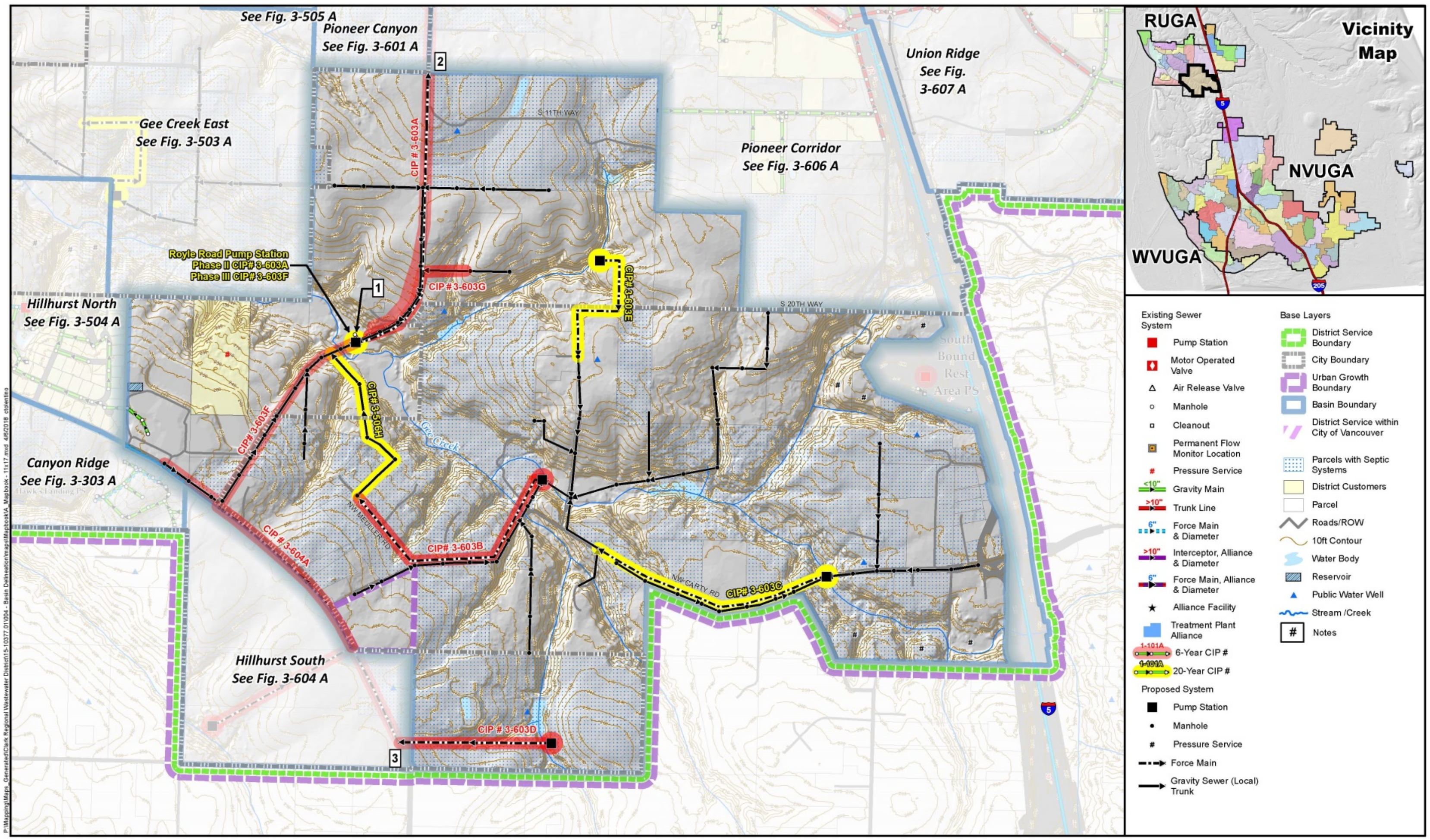
- Schematic Planning for System Expansion



4.1.b

Infrastructure Planning

- Schematic Planning for System Expansion



BHC CONSULTANTS

Sewer System & Basins: Clark Regional Wastewater District
GIS Base data: Clark County
Data sources supplied may not reflect current or actual conditions. This map is a geographic representation based on information available. It does not represent survey data. No warranty is made concerning the accuracy, currency, or completeness of data depicted on this map.
Indicated scale when printed in 11x17 format.

Scale:
1 inch = 1,000 feet

Notes:

1) Royle Road PS & FM Under Construction 2016-2017. Phase 2 to be 20-Year CIP# 3-603A.
2) Force main continues to Mini-Basin 3-606A.
3) CIP# 3-603D continues to Mini-Basin 3-604A.

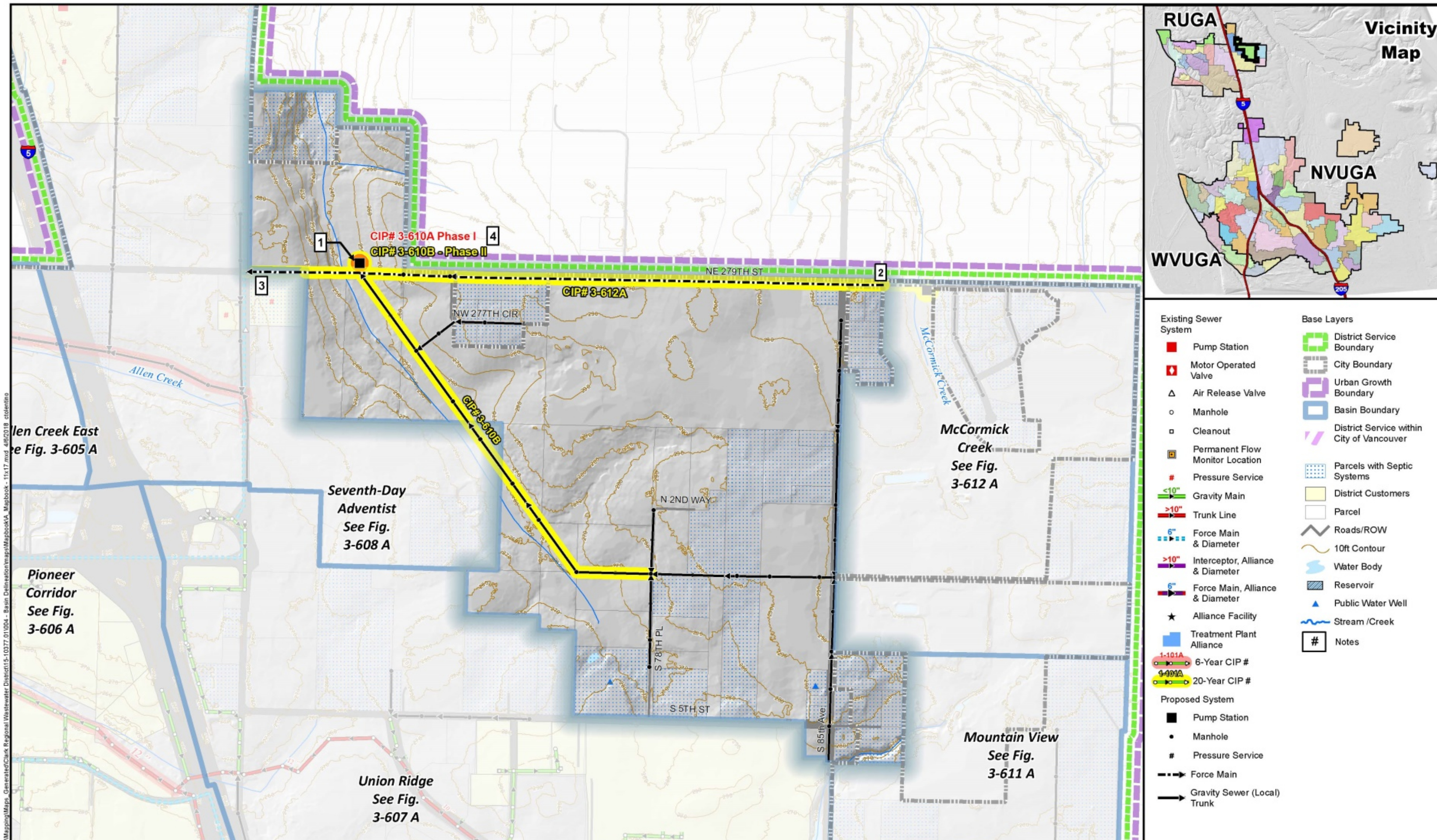
CLARK REGIONAL WASTEWATER DISTRICT

Mini-Basin 3-603
Royle Road
Comprehensive General Sewer Plan
Clark Regional Wastewater District
December 2017

3-603 A

Infrastructure Planning

- Schematic Planning for System Expansion



BHC CONSULTANTS

Sewer System & Basins: Clark Regional Wastewater District
GIS Base data: Clark County
Data sources supplied may not reflect current or actual conditions. This map is a geographic representation based on information available. It does not represent survey data. No warranty is made concerning the accuracy, currency, or completeness of data depicted on this map.
Indicated scale when printed in 11x17 format.

Scale:
1 inch = 800 feet

Notes:

1) Easement Acquired for Future Pump Station - 2016.
2) FM from McCormick Creek(aka Walker-Roher PS) PS.
3) CIP# 3-612A, FM from McCormick Creek PS (aka Walker-Roher PS) continues to Fig 3-608A.
4) Boschma PS consists of 2 phases.
   Phase I: initial residential PS.
   Phase II: increase capacity.

CLARK REGIONAL WASTEWATER DISTRICT

Mini-Basin 3-610
Boschma
Comprehensive General Sewer Plan
Clark Regional Wastewater District
December 2017

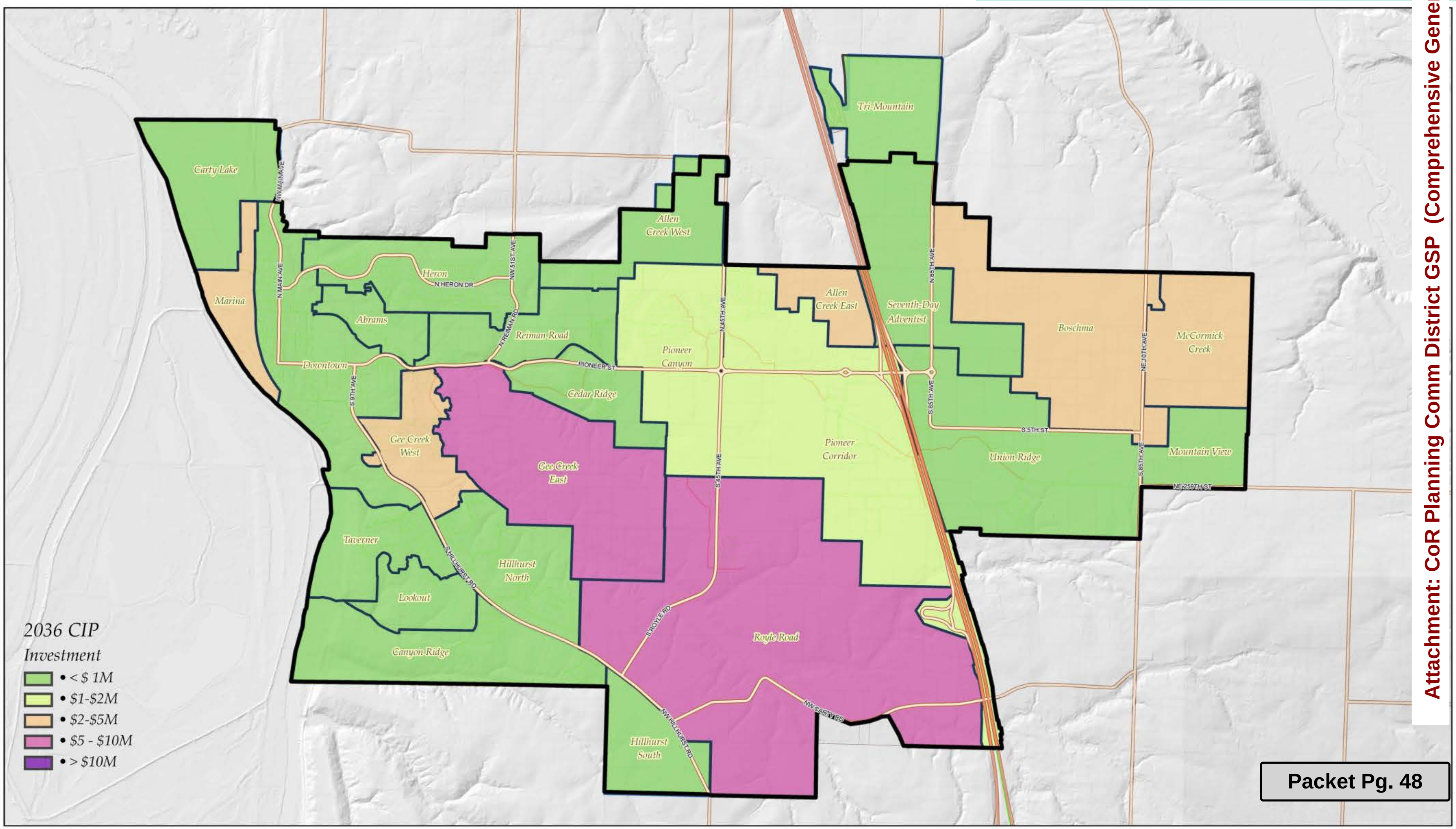
3-610 A

Attachment: CoR Planning Comm District GSP (Comprehensive General Sewer Plan)

Infrastructure Planning

- Capital Projects: $36 M

Ridgefield	CAPITAL PROJECT (MILLIONS O
6-YEAR (2017-2022)	14
20-YEAR (2036)	22
GRAND TOTAL	36



Attachment: CoR Planning Comm District GSP (Comprehensive General Sewer Plan)

Infrastructure Planning

- Capital Projects: $36 M

Ridgefield	CAPITAL PROJECTS (MILLIONS O
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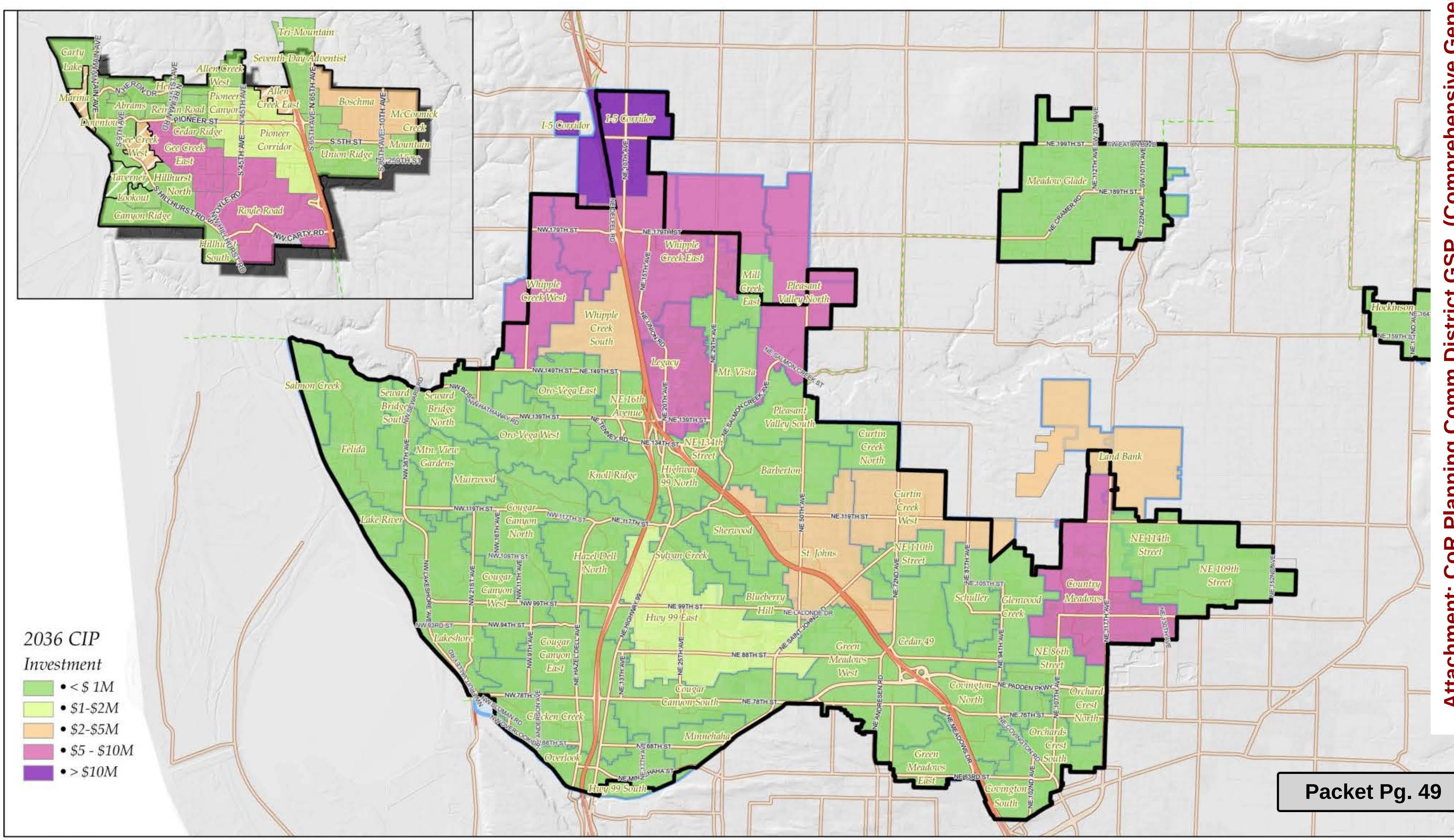
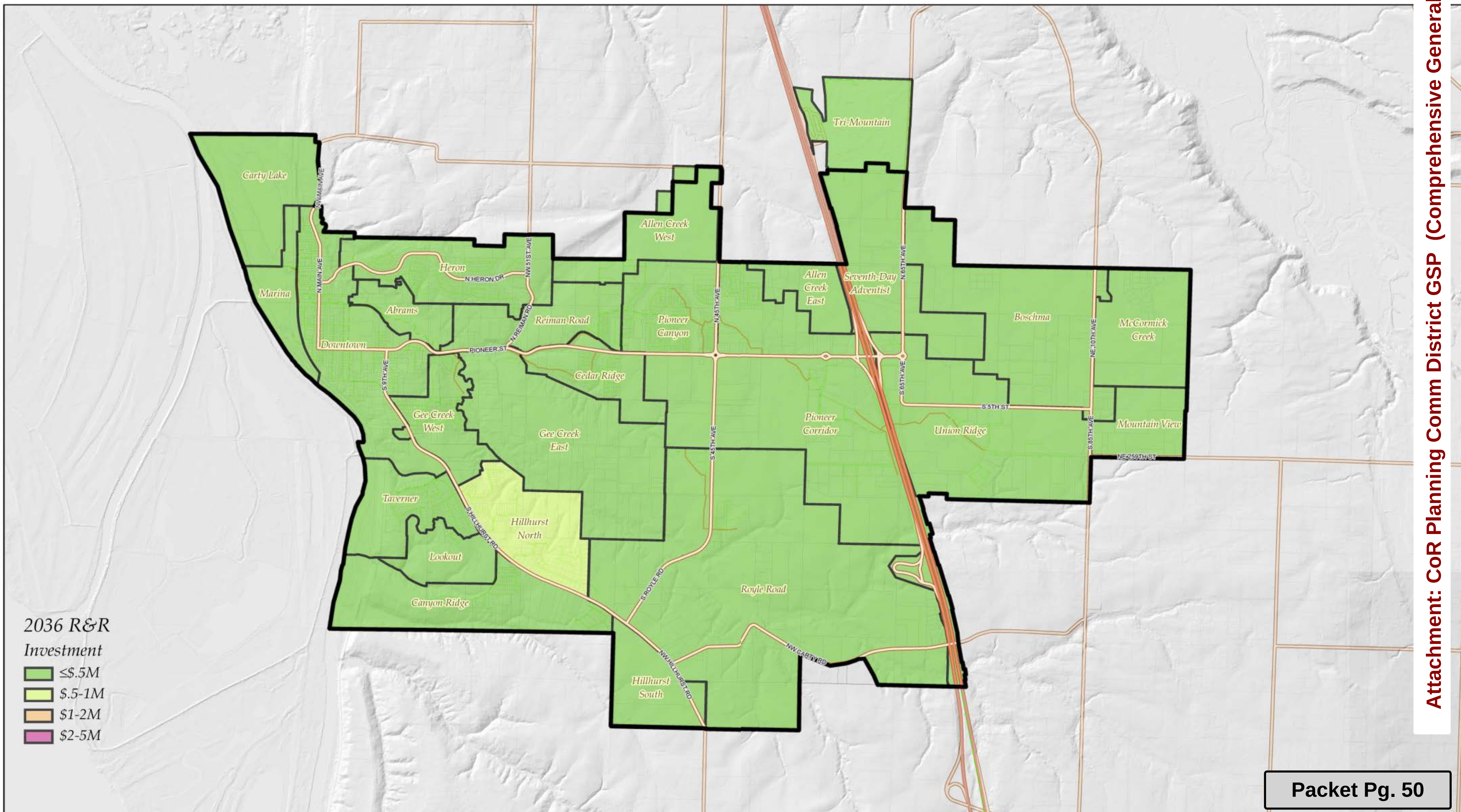
GRAND TOTAL	36



Infrastructure Planning

- Restoration & Replacement: $4 M

Ridgefield	R&R PRO TS (MILLIONS $)
20-YEAR (2036)	4

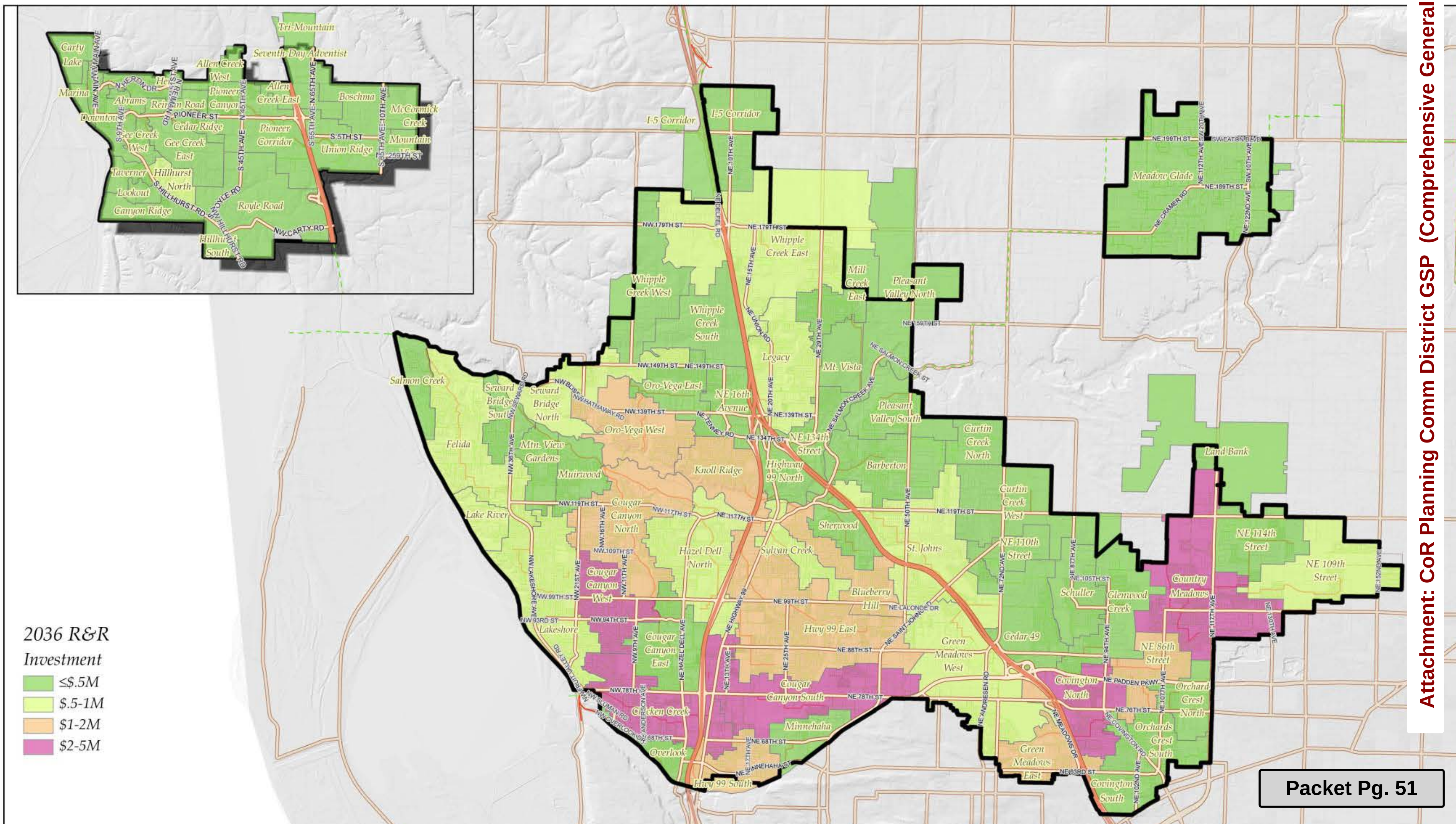


Attachment: CoR Planning Comm District GSP (Comprehensive General Sewer Plan)

Infrastructure Planning

- Restoration & Replacement: $4 M

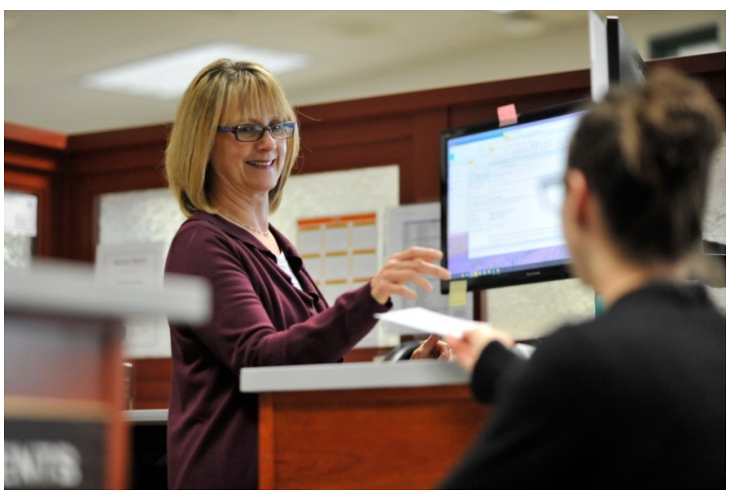
Ridgefield	R&R PRO TS (MILLIONS $)
20-YEAR (2036)	4



Financial Analysis

Financial Analysis

- Sources of Funding – Rates & Charges
- Capital projections are scale appropriate
- Stable and competitive rates and charges
  - Rates – Modest, inflationary adjustments
  - Charges – Incremental adjustments needed over time
  - Ridgefield capital – 25% of total 6-year capital



Summary & Conclusions

Summary & Conclusions

- Plan Goals
  - Regulatory Compliance
    - General Comprehensive Plan – Chapter 57.16 RCW
    - General Sewer Plan – Chapter 90.48 RCW & Chapter 173-240 WAC
  - Supports County and City Comprehensive Plan Achievement
    - Capacity Available for 50+ % increase in flow
  - Provide a framework for future Capital Investment
    - $40 M future CIP and R&R investment

Summary & Conclusions

- Policy Objectives
  - Economic Development
    - Capacity planned for all Employment Lands
    - Flow allowances for Wet Industrial
  - Affordable & Reliable Service
    - Competitive rates & charges, locally and regionally
    - Maintain District Levels of Service
  - Protecting Public Health & Environment
    - $4 M R&R Projects
    - $36 M Capital Projects

Questions?

Shawn Moore, P.E.
Assistant Manager
Clark Regional Wastewater District
(360) 993-8849
smoore@crwwd.com

For more information and to view the GSP, go to https://www.crwwd.com/projects/gensewer.php

CITY OF RIDGEFIELD
PLANNING COMMISSION PUBLIC HEARING

MEETING DATE: July 11, 2018

ITEM:

AGENDA ITEM TITLE: Public Hearing on Ridgefield Development Code Updates

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GOVERNING LEGISLATION:

RCW 36.70A

SUMMARY/BACKGROUND:

The City is proposing a series of housekeeping amendments and changes to the Ridgefield Development Code (RDC), which establishes zoning regulations for residential and nonresidential development throughout the City. This update to the code focuses on code refinements to clarify the interpretation of certain sections, adjust the details of a policy, reflect desired design standards, or simplify review procedures. The majority of updates relate to issues identified by staff and code users during implementation over the past year, or looking ahead to future applications.

MOTION AND RECOMMENDATION TO CITY COUNCIL:

Staff recommends approval. A suggested motion is "**I move to recommend approval of updates to the Ridgefield Development Code to the City Council".**

STAFF CONTACT: Jeff Niten, Community Development Director

ATTACHMENTS: 2018RDCAmendment_part 2_Matrix_07112018_PC (DOCX)

Code Section	Code Language	Rationale
RDC 14.03.050 – International Fire Code Amendments		
Section 903.2	Automatic Sprinkler Systems - Where required. In all new buildings containing a total floor area, above or below grade, exceeding 5,000 square feet, and additions that result in a total building area of 5,000 square feet or greater, and in all conversions when the occupancy class of the converted building moves to a higher classification based on the adopted edition of the Washington State Building Code. <u>This requirement shall not apply to covered play areas or similar buildings where no equipment is stored.</u>	Allow covered play areas, where exiting is not an issue, to be constructed without sprinkler systems.
18.100 - Definitions		
18.100.024 – H definitions	Horizontal Mixed Use – A mixed use development with a variety of uses in separate buildings located on the same site.	Define term
18.205 - Uses		
18.205.020 Use Table	See attached Use Table	Allow gasoline fueling stations in the Employment zone with limitations.
	See attached Use Table.	Allow Animal Kennels in the Employment zone and restrict Animal Kennels in the Commercial zones. Areas zoned for Employment uses are generally further removed from residential property enhancing compatibility with surrounding uses.
18.205.030 Limitations	D. Animal Kennel and Shelter. 1. In the ~~CRB and~~ E zone~~s~~, animal kennels and shelters are allowed subject to a Type I limited use review provided the following standards are met: a. Run areas shall be completely surrounded by an eight-foot solid wall or fence; b. Kennels and shelters shall be on sites of thirty-five thousand square feet or more,	Require Animal Kennels and Shelters in the Employment zone subject to a limited use review.

	and buildings used to house animals shall be a minimum distance of fifty feet from property lines abutting residential zones.	
	Q. Gasoline Fueling Stations. Gasoline Fueling Stations are permitted in Employment zones "E" within 1,000 feet of an intersection of two road alignments classified arterial or greater. (See attached use table for full strikethrough/underlined code.)	Limit fueling stations to within a certain distance of major roadways in the "E" zone.
18.230 – Commercial Districts.		
18.230.055 Building Design and Features	F. Siding and trim. 1. Building siding materials shall be wood, brick, stone, stucco, or terra cotta. 2. Metal siding materials shall not exceed ~~ten~~ thirty five percent of the total wall area of any wall. a. Only high quality architectural metals are permitted, subject to approval by the Community Development Director.	Allow outdoor storage on lots with unique geometry in the Employment zone.
18.240 – Employment District.		
18.240.060 Site and Building Design	7. Outdoor storage of materials shall generally be located to the rear or side of the site and shall not be located adjacent to any street with a classification of "collector" or higher or any street that is projected to carry more than two thousand average daily trips. Adjacent in this context shall mean without an intervening element such as a building or parking area, but not including a fence or wall, between the street right-of-way and the outdoor storage area. If the location of outdoor storage areas to the rear	Allow outdoor storage on lots with unique geometry in the Employment zone.

	or side of the site is not practical due to site constraints additional landscaping immediately adjacent to the Right of Way to a L5 standard fifteen (15) feet in depth shall apply.	
RDC 18.350 Modifications to Standards		
18.350.020 Adjustments	18.350.020 - Adjustments. Adjustments are limited to modifications of twenty percent or less to any numerical standard in this title or the Ridgefield Engineering Standards, except in the downtown core where adjustments are limited to forty percent or less when necessary for the preservation or rehabilitation of existing structures. For the purposes of this section the downtown core is west of 5th Street, east of Lake River, north of S. Shobert St., and south of N. Depot St. The cumulative modification to any numerical standard shall be calculated to determine whether the request shall be reviewed as an adjustment or variance, including all previous modifications approved for the proposed project or previous development on the site. Adjustments cannot be used in lieu of a zone change or to modify explicit policy provisions of the RUACP.	Allow for adjustments to numerical code requirements to enhance the viability of restoration and rehabilitation of housing stock in the downtown area.