Clark Regional Wastewater District
(Formerly Hazel Dell Sewer District)
Clark County, Washington

Comprehensive General Sewer Plan
Amendment

Kennedy/Jenks Consultants
Prepared by
FINAL
REVISED SHEET (MAR 2013)
Clark Regional Wastewater District
Clark County, Washington

Comprehensive General Sewer Plan Amendment

Kennedy/Jenks Consultants

Prepared by:
MacKay & Sposito, Inc.
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II. NOT UPDATED

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<th>Abbreviation</th>
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<tbody>
<tr>
<td>CFP</td>
<td>Capital Facilities Plan</td>
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<tr>
<td>CFS</td>
<td>Cubic Feet per Second</td>
</tr>
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<td>Clark Public Utilities</td>
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<td>CRWWD</td>
<td>Clark Regional Wastewater District</td>
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<td>CUP</td>
<td>Conditional Use Permit</td>
</tr>
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<td>cy</td>
<td>cubic yards</td>
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<tr>
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<td>DCWTS</td>
<td>Discovery Corridor Wastewater Transmission System</td>
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<td>District</td>
<td>Clark Regional Wastewater District</td>
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<td>DNS</td>
<td>Determination of Nonsignificance</td>
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<td>Department of Health</td>
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<td>DWADF</td>
<td>dry weather average daily flow</td>
</tr>
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<td>Ecology</td>
<td>Department of Ecology (Washington State)</td>
</tr>
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<td>EPA</td>
<td>U.S. Environmental Protection Agency</td>
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<td>ERU</td>
<td>equivalent residential unit</td>
</tr>
<tr>
<td>ERUs</td>
<td>equivalent residential units</td>
</tr>
<tr>
<td>Ex.</td>
<td>Existing</td>
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<td>F.M.</td>
<td>Force Main</td>
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<tr>
<td>FOG</td>
<td>fats, oils, and grease</td>
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<tr>
<td>ft²</td>
<td>square feet</td>
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<td>gal</td>
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<tr>
<td>GFC</td>
<td>General Facility Charge</td>
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<td>Growth Management Act</td>
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<tr>
<td>gpcd</td>
<td>gallons per capita per day</td>
</tr>
<tr>
<td>gpd</td>
<td>gallons per day</td>
</tr>
<tr>
<td>gpm</td>
<td>gallons per minute</td>
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<td>hr</td>
<td>hour(s)</td>
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<td>I/I</td>
<td>infiltration and inflow</td>
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<td>LOS</td>
<td>level of service</td>
</tr>
<tr>
<td>MG</td>
<td>million gallons</td>
</tr>
<tr>
<td>MGD</td>
<td>maximum gallons per day</td>
</tr>
<tr>
<td>MMF</td>
<td>maximum month flow</td>
</tr>
<tr>
<td>MU</td>
<td>Mechanically Operated Valve Station</td>
</tr>
<tr>
<td>MPWRF</td>
<td>Marine Park Water Reclamation Facility</td>
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<tr>
<td>NGVD</td>
<td>national geodetic vertical datum</td>
</tr>
<tr>
<td>NPDES</td>
<td>National Pollutant Discharge Elimination System</td>
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<tr>
<td>O&amp;M</td>
<td>operations and maintenance</td>
</tr>
<tr>
<td>OFM</td>
<td>Office of Financial Management</td>
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<td>P.S.</td>
<td>Pump Station</td>
</tr>
<tr>
<td>PF</td>
<td>peak flow</td>
</tr>
<tr>
<td>POTW</td>
<td>publicly owned treatment works</td>
</tr>
<tr>
<td>Prop.</td>
<td>Proposed</td>
</tr>
<tr>
<td>PWTF</td>
<td>Public Works Trust Fund</td>
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<td>RCW</td>
<td>Revised Code of Washington</td>
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<td>S.T.E.G.</td>
<td>Septic Tank Effluent Gravity</td>
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<tr>
<td>S.T.E.P.</td>
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<tr>
<td>scfpm</td>
<td>standard cubic feet per minute</td>
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<td>SDC</td>
<td>system development charge</td>
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<tr>
<td>SEPA</td>
<td>State Environmental Policy Act</td>
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<td>SIU</td>
<td>Significant Industrial Users</td>
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<td>SPR</td>
<td>site plan review</td>
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<td>SWD</td>
<td>side water depth</td>
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<td>TAZ</td>
<td>Transportation Analysis Zone</td>
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<td>TDH</td>
<td>total dynamic head</td>
</tr>
<tr>
<td>TMDLs</td>
<td>total maximum daily loads</td>
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<td>TYP</td>
<td>typical</td>
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<td>UGA</td>
<td>Urban Growth Area</td>
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<td>UGB</td>
<td>Urban Growth Boundary</td>
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<td>ULID</td>
<td>Utility Local Improvement District</td>
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<td>USGS</td>
<td>U.S. Geological Survey</td>
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<td>VWWTP</td>
<td>Vancouver Westside Wastewater Treatment Plant</td>
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<tr>
<td>WAC</td>
<td>Washington Administrative Code</td>
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<tr>
<td>WWTP</td>
<td>Wastewater Treatment Plant</td>
</tr>
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<td>YR</td>
<td>year</td>
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REVISED SHEET (MAR 2013)
I. Introduction
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A. GENERAL – NOT UPDATED

B. PURPOSE

Through the early 2000s, Clark County experienced rapid population growth. Plans to support future development included significant growth in the City of Ridgefield, which has developable industrial property near I-5 along with ample residential and commercial property. Ridgefield’s existing wastewater treatment plant has a rated capacity of 0.7 mgd and discharges to Lake River. In order to grow beyond a capacity of 1.0 mgd, the Washington Department of Ecology (Ecology) will require the City to develop a new outfall to the Columbia River.

In 2007, discussion began with cities and counties in Clark County to determine how existing and planned infrastructure can best be used to benefit sewer customers in the county. The study determined that the most cost-effective alternative for providing the capacity required to support growth in Ridgefield was to convey flow to the Salmon Creek Treatment Plant for treatment and discharge.

To achieve this, flow from the City of Ridgefield will be pumped from the City of Ridgefield south along the I-5 corridor to the Gee Creek rest area, located in the northernmost basin in the District’s service area. Flow will be conveyed through existing and planned infrastructure in the Clark Regional Wastewater District’s collection system into the Salmon Creek Wastewater Management System (SCWMS). Conveyance improvements required to serve Ridgefield are collectively described as the Discovery Corridor Wastewater Transmission System (DCWTS). Infrastructure planned as part of the 2006 Comprehensive Plan Amendment provides the backbone system required to convey flows from Ridgefield through the District’s service area to the SCWMS; however, the sizing of system elements must be adjusted to accommodate current and projected flows from Ridgefield.

This General Sewer Plan amendment has been prepared to reflect changes required to planned upgrades in the District’s conveyance system to provide sufficient capacity for flows from local basins and from the City of Ridgefield.

C. SCOPE

The scope for this Comprehensive General Plan Amendment is to provide a plan for the District that complies with Title 173-240-050 WAC and Title 57 RCW, and is a useful tool for the management and staff of the District.

The 2001 Comprehensive Sewer Plan was amended in June 2006 based on new Urban Growth Boundaries, revised population projections, and planning horizon changes. In order to accommodate the upgrades to the District’s existing wastewater system as a result of the new DCWTS, some of the basins in the June 2006 Plan have been revised in 2013. These revisions are documented in this 2013 Amendment. The Comprehensive Sewer Plan - 2013 Amendment is not a stand alone document, but rather a supplement to the original 2001 Comprehensive Plan and the June 2006 Comprehensive Sewer Plan Amendment. The following symbol has been placed in the lower right corner of each page in the amendment to designate that a revision has been made to that sheet:

REVISED SHEET (MAR 2013)

Revised sheets reflect revised capital facility improvements, revised text, or other updates to the corresponding 2006 Comprehensive Sewer Plan Amendment page. Revised sheets update the information shown in corresponding 2006 Comprehensive Sewer Plan Amendment and supersede the 2006 Comprehensive Sewer Plan Amendment.

D. GROWTH – NOT UPDATED
III. Capital Facilities Plan
III. CAPITAL FACILITIES PLAN

A. GENERAL – NOT UPDATED

B. GROWTH MANAGEMENT ACT (GMA) – NOT UPDATED

C. EXTENSION POLICY – NOT UPDATED

D. EXECUTIVE SUMMARY

1. Population Growth

a. Summary

Service area-wide population projections were evaluated as part of the 2006 Plan Amendment. These projections were based on Clark County’s residential growth projections by Transportation Analysis Zone (TAZ), as well as commercial and industrial growth determined based on areas zoned for those land uses and included on the County’s Vacant Land Inventory Map.

No changes to overall population projections were made as part of the 2012 Plan Amendment. For purposes of determining the required size for conveyance infrastructure serving both Ridgefield and District customers, current and buildout Equivalent Residential Units (ERUs) in Basins 01, 04, and 48 were evaluated using Clark County’s Vacant Buildable Lands Model (VBLM).

2. Projected Sanitary Sewer Flow

a. Summary

Flow projections were developed for the District’s planning period for the area tributary to the DCWTS projects and ensure capacity is provided for the flows anticipated in the District’s service area. Projections were developed by the District using a GIS program that uses zoning and other land use information to estimate the number of ERUs from properties within a basin or subbasin. Six separate subbasins were delineated as being tributary to the DCWTS within the District’s existing and future service area and are shown in Figure 1. These six basins were delineated based upon locations where flows needed to be estimated for sizing DCWTS components. Table 1 provides a description of each area.

Table 1. CRWWD Service Area Descriptions

<table>
<thead>
<tr>
<th>Area</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area A</td>
<td>This area is within the Urban Reserve and is included in the District’s Basin 48. This area is tributary to the new 209th Street pump station to be constructed in the Gee Creek rest area.</td>
</tr>
<tr>
<td>Area B</td>
<td>Area B is on the west side of Interstate-5 and is currently tributary to the Fairgrounds Pump Station. This pump station is to be decommissioned, and flows from this station will be conveyed in the Whipple Creek Trunk Sewer to the 15th Avenue Pump Station.</td>
</tr>
</tbody>
</table>

Existing and future ERUs were estimated for each area using the District’s records (for existing) and the County’s Vacant Buildable Lands Model to predict future ERUs. Flows were projected by applying unit flow rates of 250 gallons per ERU (annual average) to residential units, 1,200 gallons per day per acre for commercial property, and 1,800 gallons per acre per day for industrial property.

The resulting ERU and flow estimates are summarized on the individual wastewater basin summaries in Section V.

3. Design Criteria/Methodology

a-f – Not Updated

g. DCWTS Flow Projections

City of Ridgefield’s sewer planning documents list their planning period from 2008 through 2028, and the maximum month flow rate projected in 2028 is 4.76 mgd. Based on recent economic conditions and slower than anticipated growth, it is unlikely that this flow will be generated by 2028. However, as required by the Washington Department of Ecology, the DCWTS provides capacity to convey this flow, and a plan has been developed to treat up to this flow rate at the Salmon Creek Treatment Plant.

The District’s 2006 Amendment to the Comprehensive General Sewer Plan lists its planning period from 2006 through 2026. The DCWTS collects flows from Basins 48, 01, and 04, and the year 2026 flow projections from these three basins were accommodated in the DCWTS. Flow projections for these three basins were estimated based on the number of ERUs projected using the County’s Vacant Buildable Lands Model. Table 2 lists the maximum month flows at the end of each jurisdiction’s service area. These flows were used for sizing DCWTS components.

Table 2. Flow Projections

<table>
<thead>
<tr>
<th>Service Area</th>
<th>MM Flow (mgd)</th>
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<tbody>
<tr>
<td>City of Ridgefield</td>
<td>4.76</td>
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<tr>
<td>CRWWD</td>
<td>2.92</td>
</tr>
<tr>
<td>Total to SCWMS</td>
<td>7.68</td>
</tr>
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</table>
4. Capital Facilities Improvements

a. Summary

Based on the projected flows from the District’s service area and the Ridgefield UGA, improvements will be required in Basins 01, 04, and 48. Improvements within the District are shown with the individual basin summaries in Section V.

Estimated costs were prepared for the improvements within each basin. The unit costs for all estimates in this plan are based on 2011 estimated prices for the projected improvements. Where appropriate, capital improvements have been phased to minimize ratepayer impacts and match infrastructure capacity with anticipated flows.

The capital improvements have been developed to serve projected growth through the planning horizon; however, given the current economic conditions and uncertainty in projecting future development rates, the timing of the improvements is uncertain. Rather than projecting capital improvements by year, flow triggers are provided for each project. These flow triggers will allow the District to adjust the implementation schedule for projects based on actual need. To aid in planning for future design and construction efforts, Table 3 also shows the anticipated timeframe in which capacity is needed.

Total capital improvement costs and flow triggers are shown in Table 3 on the following page. The capacities mentioned as flow trigger in Table 3 reflect actual capacity limitations. The trigger for some projections is based on the DCWTS construction.
### Table 3. Total Capital Improvement Costs for Basins 1, 4, and 48

<table>
<thead>
<tr>
<th>Basin/Project</th>
<th>Cost</th>
<th>Trigger¹</th>
<th>Anticipated Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 - Whipple Creek East</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>199th Street Pump and Discharge</td>
<td>$1,909,000</td>
<td>Initial basin development</td>
<td>2014-2019</td>
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<tr>
<td>199th Street Pump Station Trunk Sewer</td>
<td>$511,000</td>
<td>Initial basin development</td>
<td>2014-2019</td>
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<tr>
<td>Whipple Creek Trunk Sewer</td>
<td>$745,000</td>
<td>Development south of NE 179th and west of NE 15th Avenue</td>
<td>2014-2019</td>
</tr>
<tr>
<td>15th Avenue Pump Station and Discharge</td>
<td>$1,596,000</td>
<td>Whipple Creek Trunk Sewer Expansion</td>
<td>2014-2019</td>
</tr>
<tr>
<td>Whipple Creek North Pump Station Force Main Upgrade</td>
<td>$672,000</td>
<td>Existing force main capacity</td>
<td>2024</td>
</tr>
<tr>
<td>15th Avenue Trunk</td>
<td>$1,060,000</td>
<td>Existing system capacity</td>
<td>2024</td>
</tr>
<tr>
<td>Union Road Pump Station Force Main Upgrade</td>
<td>$358,000</td>
<td>Existing force main capacity</td>
<td>2018</td>
</tr>
<tr>
<td>Packard Creek Pump Station and Discharge</td>
<td>$3,530,000</td>
<td>Initial basin development</td>
<td>2018-2023</td>
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<tr>
<td>04 – I-5 North</td>
<td></td>
<td></td>
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<tr>
<td>Legacy Pump Station Upgrade</td>
<td>$1,000,000</td>
<td>1.84 MGD; 2.9 MGD</td>
<td>2013-2018; 2023-2028</td>
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<tr>
<td>$340,000</td>
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<tr>
<td>20th Avenue Trunk Sewer Upgrade</td>
<td>$855,000</td>
<td>0.9 MGD</td>
<td>2013-2018</td>
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<td>$2,423,000</td>
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<td>1.8 MGD</td>
<td>2018-2023</td>
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<td>48 – I-5 Corridor</td>
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<td>NE 209th Street Pump Station</td>
<td>$3,748,000</td>
<td>DCWTS Construction</td>
<td>2016</td>
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<td>$358,000</td>
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<td>1.4 MGD system flow</td>
<td>2016</td>
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<td>$584,000</td>
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<td>5.0 MGD system flow</td>
<td>2016</td>
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<tr>
<td>209th Street Pump Station Force Main</td>
<td>$9,939,000</td>
<td>DCWTS Construction</td>
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<td>$7,676,000</td>
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<td>2.2 MGD system flow</td>
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<td>219th Street Trunk</td>
<td>$241,000</td>
<td>Initial basin development</td>
<td>2016-2023</td>
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<td>209th Street Trunk</td>
<td>$343,000</td>
<td>Initial basin development</td>
<td>2016-2023</td>
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<tr>
<td>Gee Creek Pump Station Improvements</td>
<td>$1,105,000</td>
<td>Initial basin development</td>
<td>2016</td>
</tr>
</tbody>
</table>

1. Flows are expressed as maximum month
V. Individual Wastewater Basin Summaries
TRIBUTARY TREATMENT PLANT:

SALMON CREEK (SCWWTP)

TOTAL AREA  1547 AC

BASIN DESCRIPTION:
Whipple Creek East basin is located between NE 199th Street and NE 159th Street, from NW 11th Avenue to NE 29th Avenue; and includes the Clark County Fairgrounds area from NE 184th Street to NE 174th Street and from NW 2nd Avenue to Interstate-5.

GENERAL BASIN INFORMATION:
The Whipple Creek East basin has the potential to be a fast growing basin with a large undeveloped commercial and industrial area around the NE 179th Street interchange as well as large undeveloped residential areas east of the freeway. Clark County estimates a moderate residential growth rate of 6.4% and job growth of 10.2%. Key infrastructure in this basin will convey local flows from the District’s service area. One new pump station is proposed in the northern portion of this basin. It is anticipated that based on the proposed improvements, the District will be able to serve areas adjacent to this basin.

BASIN GROWTH TABLE:

<table>
<thead>
<tr>
<th>Item</th>
<th>Year 1997</th>
<th>Year 2006</th>
<th>Year 2012</th>
<th>Year 2018</th>
<th>Year 2026</th>
<th>Ultimate</th>
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<tbody>
<tr>
<td>Population</td>
<td>702</td>
<td>1162</td>
<td>1621</td>
<td>2539</td>
<td>5783</td>
<td>9027</td>
</tr>
<tr>
<td>E.R.U.s</td>
<td>289</td>
<td>478</td>
<td>667</td>
<td>1045</td>
<td>2380</td>
<td>3715</td>
</tr>
<tr>
<td>Peak Flow (MGD)</td>
<td>0.18</td>
<td>0.30</td>
<td>0.42</td>
<td>0.65</td>
<td>1.49</td>
<td>2.32</td>
</tr>
</tbody>
</table>

Note: The population, E.R.U.s, and Peak Flow represent the status of the basin at the end of the year shown. The capital improvements shown are the sum of the proposed improvements for the years prior to and including the year shown. Flow and ENU projections are based on projections in the City of Ridgefield General Sewer Plan/Wastewater Facility Plan and The CRWWD Planning and Land Use Model for Sewer (PLUMIS) model using Clark County’s Comprehensive Plan (2007, with amendments) and Vacant Buildable Lands Model.

PROPOSED IMPROVEMENTS:

1. 199th Street Pump Station and Discharge: Construct a new pump station (NE 199th Pump Station) at the corner of NE 199th Street and NE 10th Avenue. Construct approximately 2075’ of 6” force main from the proposed pump station south along NE 199th Street to the terminus of the 10” Whipple Creek sewer trunk line ($1,989,000).

2. 199th Street Sewer: Construct approximately 2285’ of 12” sanitary sewer trunk line from the intersection of NE 147th Avenue and NE 179th Street north to approximately NE 187th Street. Construct approximately 635’ of 10” sanitary sewer trunk line from the terminus of the previously described 12” sewer trunk line west to NE 10th Avenue. ($551,000).

3. Whipple Creek Trunk Sewer: Construct approximately 775 LF of new 12” sanitary sewer trunk line in NE 179th Street from the Fairgrounds Pump Station to NE 10th Avenue, and 1450 LF of new 18” sanitary sewer trunk line from NE 10th Avenue to the new 15th Avenue Pump Station. Following construction of the Whipple Creek Trunk Sewer, the Fairgrounds Pump Station can be decommissioned. ($745,000).

4. 15th Avenue Pump Station and Discharge: Construct a new 1.0 mgd pump station (NE 15th Avenue Pump Station) southwest of the 179th Street/15th Avenue intersection. Construct a new 2300 LF force main from the 15th Avenue Pump Station to the 18” sanitary trunk downstream in NE 15th Street. ($1,596,000).

5. Whipple Creek North Pump Station Force Main Upgrade: Construct 2900 LF of 10” force main parallel to the existing 8” force main, increasing the maximum combined flow to 3800 gpm. ($372,000).

6. 15th Avenue Trunk: Construct 1600 LF of new 18” sanitary sewer trunk parallel to the existing 12” trunk in NE 15th Avenue. ($1,006,000).

7. Union Road Pump Station Force Main Upgrade. Construct 1380 LF of 12” force main parallel to the existing force main, increasing maximum combined flow to 4100 gpm (5.9 mgd). ($358,000).

8. Packard Creek Pump Station and Discharge. Construct approximately 3870’ of 10” sewer trunk line from the existing fairgrounds pump station site, then north to NE 184th Street, and west along NE 184th Street. Construct approximately 2525’ of 6” force main north from the end of the 10” sewer trunk to approximately NW 192nd Street, then west to Packard Creek Pump Station. Construct a new pump station (Packard Creek Pump Station) at the end of the new 6” Force Main. Construct approximately 1360’ of 15” sewer trunk in NE 179th Street from I-5 to the existing Fairgrounds Pump Station. ($3,530,000).

PERTINENT DATA

Public Wells Yes___________  No         X
Purveyor:
Location:

Public Reservoirs Yes___________  No         X
Purveyor:
Location:

LAND USES WITHIN THE BASIN:
The northern part of this basin and areas along the Interstate-5 corridor are generally zoned for commercial, light industrial and mixed uses. In the southern part of the basin and areas away from the Interstate-5 corridor, land use is predominantly residential.

FINANCING OF IMPROVEMENTS:

<table>
<thead>
<tr>
<th>AVAILABLE FUNDING MECHANISMS</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRWWD Capital Improvement Fund</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Public Grants</td>
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</tr>
<tr>
<td>Revenue Bonds</td>
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<td></td>
</tr>
<tr>
<td>Public Loans (e.g., PWTF)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Utility Local Improvements Districts (Revenue Bonds-ULID)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Developer Extensions (privately financed)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Individual Extensions (privately financed)</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

REVISED SHEET (MAR 2013)
TRIBUTARY TREATMENT PLANT:
SALMON CREEK (SCWWTP)
TOTAL AREA 619 AC

BASIN DESCRIPTION:
The Interstate-5 North basin is bounded by Interstate-5 on the west, NE 29th Avenue on the east, NE 159th Street on the north, and NE 134th Street on the south.

GENERAL BASIN IMPROVEMENT INFORMATION:
Capital improvement is required in the Interstate-5 North basin. A larger trunk sewer in NE 20th Avenue will be required to accommodate the flow from this basin as well as flow from the 209th Street Force Main. The Legacy Pump Station can discharge to both 8" and 16" force mains (the 16" force main contains a small segment of 14" pipe at the SR 205 crossing). Currently the Legacy Pump Station discharges to the 8" diameter force main based on flow demand. Once the inflow to the pump station reaches approximately 2.9 mgd, the pump station will discharge to the existing 16" force main. When flows exceed 4.3 mgd, both force mains will be used. Ultimately, a new 12" force main will be provided. Current operational practice is to switch discharge back and forth between the two force mains. It is anticipated that based on the proposed improvements, the District will be able to serve all areas adjacent to this basin.

BASIN GROWTH TABLE:

<table>
<thead>
<tr>
<th>Item</th>
<th>Year 1997</th>
<th>Year 2006</th>
<th>Year 2012</th>
<th>Year 2018</th>
<th>Year 2026</th>
<th>Ultimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>2416</td>
<td>3398</td>
<td>4052</td>
<td>4707</td>
<td>5579</td>
<td>6452</td>
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<tr>
<td>E.R.U.s</td>
<td>994</td>
<td>1398</td>
<td>1668</td>
<td>1937</td>
<td>2296</td>
<td>2665</td>
</tr>
<tr>
<td>Peak Flow (MGD)</td>
<td>0.62</td>
<td>0.87</td>
<td>1.06</td>
<td>1.20</td>
<td>1.43</td>
<td>1.65</td>
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</table>

Note: The population, E.R.U.s, and Peak Flow represent the status of the basin at the end of the year shown. The capital improvements shown are the sum of the proposed improvements for the years prior to and including the year shown. Flow and ERU projections are based on projections in the City of Ridgefield General Sewer Plan/Wastewater Facility Plan and The CRWWD Planning and Land Use Model for Sewer (PLUMS) model using Clark County’s Comprehensive Plan (2007, with amendments) and Vacant Buildable Lands Model.

PROPOSED IMPROVEMENTS
1. The Legacy Pump Station will be upgraded in several phases to provide a maximum month capacity of 6.0 mgd. The first phase includes wetwell modifications, three new 60 hp pumps providing firm maximum month capacity of 3.0 mgd, a new generator, odor control, and site improvements ($1,158,000). In the second phase, the 60 hp pumps will be replaced with 140 hp pumps to increase the firm maximum month pumping capacity to 6.0 mgd, and a new 12" force main will be constructed. The new force main will follow the alignment of the existing 16" force main and connect to the existing gravity sewer at NE 129th, ($1,780,000).

2. Replace approximately 3800' of existing 10", 12", 15" and 18" sanitary sewer trunk with a 30" sanitary trunk in NE 20th Avenue between the Legacy Pump Station and NE 152nd Street. This project will be completed in two phases. Phase 1 will replace 10" and 12" diameter segments with 30" pipe ($855,000) and Phase 2 will replace the remaining 15" and 18" segments with 30" ($2,423,000).

PERTINENT DATA
Public Wells: Yes
Public Reservoirs: Yes

LAND USES WITHIN THE BASIN:
This basin is currently within the Urban Growth Area. Area in the south and west are zoned commercial and high density residential. Areas in the north and east are zoned low density residential.

FINANCING OF IMPROVEMENTS:

<table>
<thead>
<tr>
<th>AVAILABLE FUNDING MECHANISMS</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRWWD Capital Improvement Fund</td>
<td>X</td>
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<tr>
<td>Public Grantees</td>
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<tr>
<td>Revenue Bonds</td>
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</tr>
<tr>
<td>Public Loans (e.g., PWTF)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Utility Local Improvements, Districts (Revenue Bonds-ULID)</td>
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<td></td>
</tr>
<tr>
<td>Developer Extensions (privately financed)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Individual Extensions (privately financed)</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
TRIBUTARY TREATMENT PLANT:
SALMON CREEK (SCWWTP)

TOTAL AREA  1018 AC

BASIN DESCRIPTION:
The basin is bounded approximately by NE 229th Street on the north, NE 199th Street on the south, and between NW 11th Avenue on the west and NE 22nd Avenue on the east.

GENERAL BASIN IMPROVEMENT INFORMATION:
There are currently no sanitary sewer facilities within the Interstate-5 Corridor basin except the privately owned (State of Washington) Gee Creek Rest Area for north bound Interstate-5 traffic. The southbound facility also pumps to the north bound facility and is currently served by a private pump station and force main which flows along the I-5 median to the Fairgrounds Pump Station. The Washington State Department of Transportation is interested in directly connecting this facility to CRWWD sanitary sewer facilities. Service to this basin will be achieved through the installation of several lift stations. This basin is divided into several subbasins by existing creeks and large drainages within the basin. Sanitary service to much of the basin will likely require the use of alternate (grinder) systems. A proposed 209th Street pump station and force main will receive flow from the City of Ridgefield’s Pioneer Canyon Pump Station as well as from the Gee Creek Rest Area, and will serve future development in Basin 48. Dual force mains from the proposed 209th Street Pump Station will discharge to the 20th Avenue Trunk upstream of the Legacy Pump Station. The majority of the basin is outside of the Urban Growth Area (UGA). It is anticipated that based on the proposed improvements, the District will be able to serve additional areas adjacent to this basin.

Most of this basin has been zoned rural residential with urban reserve overlay. Portions of the basin not assigned urban zoning designations by Clark County were assumed to be a mix of residential, multi-family, and urban reserve.

BASIN GROWTH TABLE:

<table>
<thead>
<tr>
<th>Item</th>
<th>Year 1997</th>
<th>Year 2006</th>
<th>Year 2012</th>
<th>Year 2018</th>
<th>Year 2026</th>
<th>Ultimate</th>
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<tbody>
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<td>Population</td>
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<td>952</td>
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<td>E.R.U.s</td>
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<td>CRWWD Peak Flow (MGD)</td>
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<td>Ridgefield Peak Flow (MGD)</td>
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<td>8.52</td>
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<td>Total Peak Flow (MGD)</td>
<td>10.07</td>
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</tbody>
</table>

Note: The population, E.R.U.s, and Peak Flow represent the status of the basin at the end of the year shown. Flow and ERU projections are based on projections in the City of Ridgefield General Sewer Plan/Wastewater Facility Plan and The CRWWD Planning and Land Use Model for Sewer (PLUMS) model using Clark County’s Comprehensive Plan (2007, with amendments) and Vacant Buildable Lands Model.

PROPOSED IMPROVEMENTS

1. NE 209th Street Pump Station: Construct the 209th Street pump station in the low area in the vicinity of the Gee Creek North Rest Area east of Interstate 5. The pump station will be constructed in three phases, with the first phase including two pumps with a total firm capacity of 2.5 mgd peak (1.4 mgd max month) ($3,748,000), a second phase installing a third pump for a total firm pumping capacity of 4.0 mgd peak (2.2 mgd max month) ($358,000), and a third phase adding a fourth pump and larger generator ($548,000). This pump station provides service to Gee Creek Rest Area, allowing the existing private pump station to be decommissioned.

2. NE 209th Street Force Mains: Construct approximately 8350’ of dual 16” and 22” force mains from the 209th Street Pump Station southeast and south to NE 209th Street, east on NE 209th Street to NE 10th Avenue, and south on NE 10th Avenue, to the 20th Avenue Trunk Sewer. The force mains will be constructed in two phases, with the 16” force main built in conjunction with the first phase of the pump station ($9,939,000) and the 22” force main built when maximum month system flow reach 2.2 mgd ($7,676,000).

3. 219th Street Trunk: Construct approximately 2750’ of 10” sanitary sewer trunk line along the future right of way heading west from NE 10th Avenue and then turning south to the Proposed 209th Street Pump Station ($241,000).

4. 209th Avenue Trunk: Construct approximately 2350’ of 10” sanitary sewer trunk line in NE 209th Avenue from NE 10th to the east side of Gee Creek, then turning north to the proposed 209th Street Pump Station. Construct approximately 4000’ of 8” sanitary sewer trunk line to serve the south east section of Basin 48, along NE 15th Ave, turning west along NE 209th Street to join the 10” 209th Street Sanitary Sewer Trunk ($343,000).

5. Gee Creek Pump Station, pressure main and trunk: Construct the Gee Creek pump station near the terminus of NW 214th Circle west of I-5. Construct approximately 2,000’ of 6” pressure main and 1580’ of 10” sanitary sewer trunk line to the NE 209th pump station west paralleling Gee Creek to NE 219th Street. ($1,105,000) The proposed project S84012 will be replaced by this construction.

PERMITTING AND FINANCING:

<table>
<thead>
<tr>
<th>Item</th>
<th>Year 1997</th>
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<th>Year 2026</th>
<th>Ultimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Wells</td>
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<td>No</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purveyor</td>
<td>Location</td>
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</tr>
<tr>
<td>Public Reservoirs</td>
<td>Yes</td>
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<tr>
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FINANCING OF IMPROVEMENTS:

<table>
<thead>
<tr>
<th>Available Funding Mechanisms</th>
<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td>CRWWD Capital Improvement Fund</td>
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<tr>
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</tbody>
</table>

REVISED SHEET (MAR 2013)

007757
VI. Environmental
Please find enclosed an environmental Determination of Non-Significance issued pursuant to the State Environmental Policy Act (SEPA) Rules (Chapter 197-11), Washington Administrative Code.

You may comment on this DNS by submitting written comments within fifteen (15) days of this notice as provided for by WAC 197-11-408 and RCW 36.70.810.

Please address all correspondence to:

Clark Regional Wastewater District
PO Box 8979
Vancouver, WA 98668-8979
Attn: Steve Bacon

DISTRIBUTION LIST

Federal Agencies
- US Army Corps of Engineers, Portland District
- Northwest Power Planning Council
- Bonneville Power Administration
- US Fish and Wildlife Service, Ridgefield Refuge

Native American Interests
- Chinook Indian Tribe
- Cowitz Indian Tribe
- Yakima Indian Nation

State Agencies
- Department of Archaeology and Historic Preservation
- Department of Community Development
- Department of Ecology – SEPA Review Section
- Department of Health
- Department of Natural Resources – SEPA Center
- Department of Fish and Wildlife
- Department of Transportation
- Department of Commerce

Regional Agencies
- Fort Vancouver Regional Library
- Battle Ground Branch-FV Library
- Three Creeks Branch-FV Library
- Southwest Clean Air Agency
- Southwest Washington Regional Transportation Council

Local Agencies
- City of Battle Ground
- City of Camas
- City of La Center
- City of Ridgefield
- City of Vancouver
  - Administration
  - Community Preservation and Development
  - Public Works
- City of Washougal
- City of Woodland
- Clark County Department of Community Development
  - Administration
  - Building Division
  - Central Files
  - Community Planning
  - Historic Preservation
  - Water Quality Division
- Clark County Department of Public Works
  - Administration
  - Environmental Public Health Service
  - Water Resources Program
- Clark County Public Health
- Clark County Conservation District
- Clark County Sheriff’s Office
- Port of Camas-Washougal
- Port of Ridgefield
- Port of Vancouver
- Port of Woodland
- Town of Yacolt
- Vancouver-Clark Parks and Recreation

Special Purpose Agencies
- C-Tran
- CRESA
- Clark Public Utilities
- Battle Ground School District
- Vancouver School District
- Evergreen School District
- Hockinson School District
- Ridgefield School District
- La Center School District
- Washington State University – Vancouver Campus
- Fire Protection District 3
- Fire Protection District 5
- Fire Protection District 6
- Clark County Fire and Rescue
- Clark County Conservation District
- Vancouver Fire Department
Interest Groups
- Building Industry Association
- Southwest Washington Contractors Association
- Neighborhood Associations Council of Clark County
- Clark County Natural Resources Council
- Vancouver Housing Authority
- Columbia River Economic Development Council
- Fish First
- Sequoyah Institute
- Sierra Club - Loa Wit
- Vancouver Audubon Society
- Andresen/St. Johns Neighborhood Association
- Daybreak Neighborhood Association
- East Minnehaha Neighborhood Association
- Fairgrounds Neighborhood Association
- Felida Neighborhood Association
- Fern Prairie Neighborhood Association
- Greater Brush Prairie Neighborhood Association
- Green Meadows Neighborhood Association
- Hazel Dell/Salmon Creek Business Association
- Heritage Neighborhood Association
- Maple Tree Neighborhood Association
- Meadow Glade Neighborhood Association
- NE Hazel Dell Neighborhood Association
- North Salmon Creek Neighborhood Association
- Pleasant Highlands Neighborhood Association
- Ramblin' Creek Estates/South Salmon Creek Ave. Neighborhood Association
- Ridgefield Junction Neighborhood Association
- Roads End Neighborhood Association
- Sherwood Hills Neighborhood Association
- Sitton Neighborhood Association
- Sunnyside Neighborhood Association
- West Hazel Dell Neighborhood Association

DETERMINATION OF NONSIGNIFICANCE

Description of proposal:
The Clark Regional Wastewater District encompasses approximately 40 square miles of land ranging from single-family residential to industrial uses. The Comprehensive General Sewer Plan (GSP) identifies infrastructure required to provide sanitary sewer service within the District's Service area. This Comprehensive GSP Amendment addresses the individual needs of four sanitary sewer drainage basins associated with conveying flow from the City of Ridgefield through the District's collection system to the Salmon Creek Treatment Plant. Infrastructure needs for the 20-year horizon are estimated, and the cost of the improvements is used to estimate sewer system development charges for the District. Flow triggers are provided for the required improvements so that the timing of future design and construction activities can be adjusted to reflect actual growth in the impacted basins.

Proponent:
Clark Regional Wastewater District

Location of proposal, including street address, if any:
Interstate-5 North Subarea of Clark Regional Wastewater District service area

Lead Agency: Clark Regional Wastewater District

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. The environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

There is no comment period for this DNS.

Responsible Official: John M. Peterson, P.E.
Position/Title: General Manager
Telephone: (360) 993-8819
Fax: (360) 750-7510
Address: Clark Regional Wastewater District
8000 NE 52nd Ct.
PO Box 8979
Vancouver, WA 98668-8979

Date: 05-16-2012

You may appeal this determination to John M. Peterson within fourteen (14) calendar days of the date of this notice. The notice of appeal shall be sufficiently detailed to provide reasonable notice to the Clark Regional Wastewater District of how the person or the person's property is adversely affected by the proposal; any new facts, which would be important to and affect the determination and the reasons why the determination was incorrect.

Any appeal, which is timely filed, shall be scheduled for hearing by the Board of Commissioners no later than 45 days after filing. Within 30 days of the conclusion of the hearing, the Board shall render its decision accompanied by appropriate findings of fact and conclusions of law.
ENVIRONMENTAL CHECKLIST

A. BACKGROUND

1. Name of Proposed Project, if applicable:
   Non-project Action: Comprehensive General Sewer Plan (GSP) Amendment for Clark Regional Wastewater District

2. Name of Applicant: Clark Regional Wastewater District

3. Address and Phone Number of Applicant and Contact Person:
   8000 NE 52nd Ct.
   PO Box 8979
   Vancouver, WA 98668-8979
   (360) 993-8819
   Attn: Steve Bacon, P.E., Development Planning Engineer

4. Date Checklist Prepared:
   May 4, 2012

5. Agency Requesting Checklist:
   Washington State Department of Ecology

6. Proposed Timing or Schedule (including phasing, if applicable):
   Adoption of this Comprehensive GSP Amendment for Clark Regional Wastewater District will occur in 2012 following approval by the Washington State Department of Ecology. The schedule for actual capital improvements will be in accordance with individual basin wastewater needs. The GSP includes an estimate of the improvements necessary and the timing of those improvements; however, these are projections and will be adjusted as appropriate to provide the required capacity needed to serve growth. Separate SEPA documents will be prepared for each non-exempt project.

7. Do you have any plans for future additions, expansions, or further activity related to or connected with this proposal? If yes, please explain.
   The District's Comprehensive GSP is reviewed every seven years and amended as needed to adjust for changes in land use regulations.

8. List any environmental information you know about that has been or will be prepared related to your proposal. If yes, please explain.
   The District's current General Sewer Plan included a SEPA checklist, which was reviewed by the responsible lead agency. A Determination of Non-Significance was made. Individual improvement projects may require project specific SEPA checklists and lead agency determinations.

9. Are other applications pending for governmental approvals affecting the property covered by your proposal? If yes, please explain.
   Within the Clark Regional Wastewater District service area, individual private development and capital facility projects are pending governmental approvals. Improvements identified in the GSP Amendment will allow flow from the City of Ridgefield to be conveyed to the

Salmon Creek Treatment Plant; a separate Engineering Report describing that project will be submitted to Ecology for approval.

10. List any government approvals or permits that will be needed for your proposal.
   Acceptance by Clark County Long Range Planning
   Approval by Clark Regional Wastewater District Commissioners
   Approval by Washington State Department of Ecology

11. Give a brief, complete description of your proposal, including the proposed uses and size of the project and site. There are several questions addressed later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description).
   The District encompasses approximately 40 square miles of land ranging from single-family residential to industrial uses. The GSP uses population and employment projections in the County to allocate projected growth into 56 sanitary sewer drainage basins. This Comprehensive GSP Amendment addresses the individual needs of four of these sanitary sewer drainage basins associated with conveying flow from the City of Ridgefield through the District's collection system to the Salmon Creek Treatment Plant. Infrastructure needs for the 20-year horizon are estimated, and the dollar cost of the improvements is used to establish sanitary sewer service General Facilities Charges for the District. Flow triggers are provided for the required improvements so that the timing of future design and construction activities can be adjusted to reflect actual growth in the impacted basins.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including street address, section, township, and range. If this proposal occurs over a wide area, please provide the range or boundaries of the site. Also, a legal description, site plan, vicinity map, and topographic map. You are required to submit any plans required by the agency, but not required to submit duplicate maps or plans submitted with permit applications related to this checklist.
   The District is comprised of 56 individual sewer basins. The GSP uses population and employment projections in the County to allocate projected growth into 56 sanitary sewer drainage basins. This Comprehensive GSP Amendment addresses the individual needs of four of these sanitary sewer drainage basins associated with conveying flow from the City of Ridgefield through the District's collection system to the Salmon Creek Treatment Plant. Infrastructure needs for the 20-year horizon are estimated, and the dollar cost of the improvements is used to establish sanitary sewer service General Facilities Charges for the District. Flow triggers are provided for the required improvements so that the timing of future design and construction activities can be adjusted to reflect actual growth in the impacted basins.

B. ENVIRONMENTAL ELEMENTS
1. EARTH

A. General description of the site (circle one): (flat), (rolling), (hilly), (steep slopes), mountainous, other.

All of these conditions exist within the areas covered in this Comprehensive GSP Amendment.

B. What is the steepest slope on the site and the approximate percentage of the slope?
   Not Applicable to this proposal.

C. What general types of soils are found on the site (e.g., clay, sand, gravel, peat, muck)?
   Please specify the classification of agricultural soils and note any prime farmland.

The basins covered in this Comprehensive GSP Amendment are tributary to the Salmon Creek Wastewater Treatment Plant. A major tributary to the Salmon Creek Wastewater treatment Plant consists of the Sauvie-Puyallup association adjacent to Salmon Creek and the Hillsboro-Gee-Odne association in the upland areas from Vancouver Lake to approximately NE 50th Avenue.

D. Are there surface indications or history of unstable soils in the immediate vicinity? If so, please describe.

There are portions of the areas covered in this Comprehensive GSP Amendment which have a history of slope instability. Any projects proposed in those areas would address slope stability concerns at the time of project development.

E. Describe the purpose, type and approximate quantities of any filling or proposed grading. Also, indicate the source of fill.
   Not applicable to this proposal. Grading may be required for individual capital improvement projects. These projects will be approved by the Clark Regional Wastewater District for a specific project scope and area.

F. Could erosion occur as a result of clearing, construction or use? If so, please describe.
   Not applicable to this proposal. Separation of project specific plans for construction will be required, and any erosion prevention and sediment control mitigation measures will be addressed on the construction plans or as a condition of the right-of-way utility permit.

G. What percentage of the site will be covered with impervious surfaces after the project construction (e.g., asphalt or buildings)?
   Not applicable to this proposal. For specific improvement projects, erosion and sediment control practices will limit the amount of sediment leaving the work areas.

H. Proposed measures to reduce or control erosion, or other impacts to the earth include:
   Not applicable to this proposal. For specific improvement projects, erosion and sediment control practices will limit the amount of sediment leaving the work areas. Plans for capital facility improvements will typically incorporate practical Best Management Practices (BMPs) into the project specific erosion control plans. Other measures will be selected based on particular site requirements.

2. AIR

A. What types of emissions to the air would result from the proposal (e.g., dust, automobile, odors, and industrial wood smoke) during construction and after completion? If yes, describe and give approximate quantities.
   Not applicable to this proposal.

B. Are there any off-site sources of emissions or odor that may affect your proposal? If so, please describe:
   Not applicable to this proposal.

C. Proposed measures to reduce or control emissions or other impacts to air:
   Not applicable to this proposal.

3. WATER

A. Surface

1. Is there any surface water body on or in the vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names and into which stream or river it flows into.
   The streams within the areas covered in this GSP amendment are Salmon Creek, Whipple Creek, Mill Creek and Gee Creek. Within the boundary, Mill Creek is tributary to Salmon Creek; and Whipple Creek and Gee Creek are tributary to Lake River. All of the surface water bodies within the District's service area eventually drain into the Columbia River.

Wetlands exist throughout the area, many in close proximity to the above named surface water bodies.

2. Will the project require any work within 200 feet of the described waters? If yes, please describe and attach available plans.
   Not applicable to this proposal. Conceptual alignments for capital facilities are shown in this Comprehensive GSP Amendment. Individual projects may be proposed within 200 feet of surface water bodies and would be subject to separate environmental review. Separate SEPA documents will be prepared for each individual project.

3. Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.
   Not applicable to this proposal.

4. Will the proposal require surface water withdrawals or diversions?
   Not applicable to this proposal.

5. Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.
   Within the areas covered in this GSP amendment, Gee Creek, Salmon Creek, and Mill Creek, have flood profiles prepared by the Federal Emergency Management Agency (FEMA), and include the 100-year flood plain elevation. Specific construction projects will be considered individually as they relate to construction activities within the 100-year floodplain.
year floodplain. Separate SEPA documents will be prepared for each individual project.

6. Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

Not applicable to this proposal.

B. Ground

1. Will ground water be withdrawn, or will water be discharged to ground water? Please give description, purpose, and approximate quantities.

Not applicable to this proposal. Dewatering for individual projects will be addressed in plans specific to the project being proposed.

2. Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (e.g., domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the size and number of the systems, houses to be served; or, the number of animals or humans the system are expected to serve.

Not applicable to this proposal. Abandonment of existing septic systems as public sewer becomes available will decrease the amount of waste currently discharging to the ground.

C. Water Runoff (including storm water):

1. Describe the source of runoff (including storm water) and the method of collection and disposal. Include quantities, if known. Describe where water will flow, and if it will flow into other water.

Not applicable to this proposal. The future construction of capital facilities anticipated in this GSP amendment is not anticipated to appreciably increase the amount of surface water runoff. Separate SEPA documents will be prepared for each individual project.

2. Could waste materials enter ground or surface waters? If so, please describe.

Not applicable to this proposal. Upon construction of future sanitary sewer systems, overflows could occur due to clogged or damaged pipes or pumping systems and acts of nature. Spills are regulated by the Department of Ecology. Spill response procedures are in place.

D. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

Proper planning, design, construction, and maintenance of infrastructure minimizes the potential for impacts to surface, ground, and runoff water. The Comprehensive GSP and this Amendment provide the planning required to ensure adequate capacity to minimize potential impacts. District Specifications and emergency response plans help to minimize impacts during construction and maintenance operations.

4. PLANTS

A. Check or circle types of vegetation found on the site:

- Deciduous tree: alder, maple, aspen, other
- Evergreen tree: fir, cedar, pine, other
- Shrub
- Grass

- Pasture
- Crop or grain
- Wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other
- Water plants: water lily, reed grass, milfoil, other
- Other types of vegetation

B. What kind and amount of vegetation will be removed or altered?

Not applicable to this proposal. Specific projects will be considered individually.

C. List any threatened or endangered species known to be on or near the site.

None known.

D. List proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site:

Not applicable to this proposal. Specific projects will be considered individually.

5. ANIMALS

A. Circle any birds and animals which have been observed on or near the site:

Birds: (hawk), (heron), (eagle), (songbirds), other: monk parrot
Mammals: (deer), (bear), elk, (beaver), other: raccoons, opossums
Fish: (bass), (salmon), (trout), herring, shellfish, other:

B. List any threatened or endangered species known to be on or near the site.

Bald Eagles may reside within the areas shown in this Comprehensive GSP Amendment.

C. Is the site part of a migration route? If so, please explain.

The entire region is part of the Pacific Flyway.

D. List proposed measures to preserve or enhance wildlife:

Not applicable to this proposal. Individual site assessment may be required as specific projects are proposed.

6. ENERGY AND NATURAL RESOURCES

A. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Not applicable to this proposal. Gas, oil, and diesel will be used by equipment during specific project construction. Electrical power will be used for pumping, lighting, heating, ventilation, and other mechanical needs at pump stations.

B. Would your project affect the potential use of solar energy by adjacent properties? If so, please describe.

No.

C. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts:
New or expanded pump stations will be designed to operate at optimum efficiency. New buildings, if any, will comply with Washington State Nonresidential Energy Code requirements.

7. ENVIRONMENTAL HEALTH

A. Are there any environmental hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, please describe.

Not applicable to this proposal.

1. Describe special emergency services that might be required.

None anticipated.

2. Proposed measures to reduce or control environmental health hazards, if any?

Not applicable to this proposal.

The installation of public sewers may reduce health hazards, as homes with failing septic systems are given the opportunity to connect to public sewer.

B. Noise

1. What types of noise exist in the area which may affect your project (e.g., traffic, equipment operation, other)?

None.

2. What types and levels of noise are associated with the project on a short-term or a long-term basis (e.g., traffic, construction, operation, other)? Indicate what hours the noise would come from the site.

Not applicable to this proposal.

3. Proposed measures to reduce or control noise impacts:

Not applicable to this proposal.

8. LAND AND SHORELINE USE

A. What is the current use of the site and adjacent properties?

Land use within the areas covered in this Comprehensive GSP Amendment is a variety of low, medium, and high density residential; commercial and industrial applications; and agricultural uses.

B. Has the site been used for agriculture? If so, describe.

Some properties within the areas covered in this Comprehensive GSP Amendment are used for pasture and gardens. These areas are not anticipated to be impacted by construction of the proposed sewers and pump stations. Agriculturally-zoned properties are located adjacent to, but outside of, the District’s service area boundary.

C. Describe any structures on the site.

Structures within the areas covered in this Comprehensive GSP Amendment are typical of the uses listed in section 8A above.

D. Will any structures be demolished? If so, please describe.

Not applicable to this proposal.

E. What is the current zoning classification of the site?

Commercial (C-2, C-3), Highway Commercial (CH, CH-12), Limited Commercial (CL), Freeway Commercial (CF), Office Commercial (OC), Business Park (BP), Limited Industrial (MI), Office Residential (CR-43), Single-Family residential (R1-5, R1-6, R1-7.5, R1-10, R1-20), multi-family residential (R-12, R-18, R-22, R-30, R-43), and Public Facilities.

F. What is the current comprehensive plan designation of the site?

Urban Low Density Residential, Urban Medium Density Residential, Urban High Density Residential, Mixed Use, Office Park, Light Industrial, Open Space, and Public Facilities.

G. What is the current shoreline master program designation of the site?

Not applicable to the Comprehensive GSP Amendment. Specific projects will be evaluated for the shoreline master program designation.

H. Has any part of the site been classified as an "environmentally sensitive" area? If so, please specify.

Yes, there are areas of sensitive lands within the areas covered in this GSP amendment. Examples include the 100-year flood plain, shoreline management areas, wetlands and wetland buffers, and critical habitat areas. Improvements within these areas will address the impacts on a project specific basis.

I. How many people would reside or work in the completed project?

Not applicable to this proposal.

J. How many people would the completed project displace?

None.

K. Please list proposed measures to avoid or reduce displacement impacts:

Not applicable to this proposal.

L. List proposed measures to ensure the proposal is compatible with existing and projected land uses and plans:

The Comprehensive GSP Amendment purpose is to plan for the provision of sanitary sewer at a level of service adequate for the projected land uses and populations. The plan is created to ensure that service and land uses proposed are compatible.

9. HOUSING

A. Approximately how many units would be provided? Indicate whether it's high, middle, or low income housing.

Not applicable to this proposal.

B. Approximately how many units, if any, would be eliminated? Indicate whether it’s high, middle, or low-income housing.

None.
C. List proposed measures to reduce or control housing impacts:
   Not applicable to this proposal.

10. AESTHETICS
   A. What is the tallest height of any proposed structure(s), not including antennas? What is proposed as the principal exterior building materials?
      Not applicable to this proposal. Pump station enclosures are the only above ground structures likely to be constructed relative to the improvements outlined in this Comprehensive GSP Amendment. Structures will not exceed one story in height.
   B. What views in the immediate vicinity would be altered or obstructed?
      None.
   C. Proposed measures to reduce or control aesthetic impacts:
      None.

11. LIGHT AND GLARE
   A. What type of light or glare will be proposed? What time of day would it mainly occur?
      Not applicable to this proposal.
   B. Could light or glare from the finished project be a safety hazard or interfere with views?
      No.
   C. What existing off-site sources of light or glare may affect your proposal?
      None.
   D. Proposed measures to reduce or control light and glare impacts:
      Not applicable to this proposal.

12. RECREATION
   A. What designated and informal recreational opportunities are in the immediate vicinity?
      County parks, ball fields, school yards, neighborhood parks, and trail systems offer recreational opportunities within the areas covered in this GSP amendment.
   B. Would the project displace any existing recreational uses? If so, please describe.
      No.
   C. Proposed measures to reduce or control light and glare impacts:
      Not applicable to this proposal.

13. HISTORIC AND CULTURAL PRESERVATION
   A. Are there any places or objects listed on or near the site which are listed or proposed for national, state, or local preservation registers? If so, please describe.
      Not applicable to this proposal. Specific projects will be evaluated for areas of historical and/or cultural significance.
   B. Please describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.
      Not applicable to this proposal. Clark County’s Historic Preservation Ordinance (40.250.030) identifies, protects, and preserves eligible historic and cultural resources. Individual project proposals would include a pre-determination request to Clark County to evaluate if further study of specific project areas is required.
   C. Proposed measures to reduce or control impacts:
      Not applicable to this proposal. During project-level environmental review, a thorough records search will be conducted to identify potential historic or archeological resources. In the event potential cultural resources are discovered during excavations at the site, work will be suspended immediately. Artifacts uncovered would be evaluated by a professional archaeologist or historian before construction in the area of discovery is allowed to resume.

14. TRANSPORTATION
   A. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.
      Please refer to individual basin maps in the Comprehensive GSP Amendment or the Clark Regional Wastewater District service map.
   B. Is the site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?
      Yes, C-Tran has routes within the areas covered in this GSP amendment.
   C. How many parking spaces would the completed project have? How many would the project eliminate?
      Not applicable to this proposal.
   D. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, please describe and indicate whether it’s public or private.
      No.
   E. Will the project use water, rail, or air transportation? If so, please describe.
      No.
   F. How many vehicular trips per day would be generated by the completed project? Indicate when peak traffic volumes would occur.
      Not applicable to this proposal.
   G. Proposed measures to reduce or control transportation impacts:
      None.
15. PUBLIC SERVICES

A. Would the project result in an increased need for public services (e.g., fire protection, police protection, health care, schools, other)? If so, please describe.
   No.

B. Proposed measures to reduce or control direct impacts on public services.
   Not applicable to this proposal.

16. UTILITIES

A. Circle the utilities currently available at the site: (Electricity), (natural gas), (water), (refuse service), (telephone), (sanitary sewer), (septic system), other.
   Most of these utilities are available to specific areas covered in this Comprehensive GSP Amendment.

B. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on or near the site.
   None with this proposal. Sanitary sewer service from Clark Regional Wastewater District would be added with any future projects.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: 

Date Submitted: 5-15-2012

D. SEPA Supplemental sheet for non-project actions

INSTRUCTIONS:
Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment. When answering these questions, be aware of the extent of the proposal and the types of activities likely to result from this proposal. Please respond briefly and in general terms.

1. How would the proposal increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

The Comprehensive General Sewer Plan (GSP) Amendment provides a list of projects necessary to accommodate the projected 20-year sewer flow. The basis for the GSP is the Clark County Comprehensive Plan and the growth projections provided by the Washington State Office of Financial Management. The increase in population, and the resultant specific improvement projects will increase the potential discharges to water and air, and produce some construction related noise. Without the projects identified in the GSP Amendment, sanitary sewer service to residential, commercial, or industrial users would be difficult or impossible. These users would then rely on septic systems that pose a higher risk of polluting the ground and waters of the State than public sewer. This plan provides for sanitary sewer service to areas designated as urban areas.

Proposed measures to avoid or reduce such increases are:
   Specific projects will be required to identify and address any adverse impacts created. Mitigation of the impacts will be evaluated on a project-by-project basis. Construction work will be performed in compliance with applicable local ordinances.

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

This proposal will not adversely impact plants, animals, fish, or marine life. Specific projects will identify and address possible adverse impacts.

Proposed measures to protect or conserve plants, animals, fish, or marine life are:
   Specific projects will be required to identify and address any adverse impacts created. Mitigation of the impacts will be evaluated on a project-by-project basis. Construction work will be performed in compliance with applicable local ordinances and project specific permits.

3. How would the proposal be likely to deplete energy or natural resources?

This proposal will not deplete energy or natural resources. The improvements identified in the Comprehensive GSP Amendment maximize the use of gravity sanitary sewer service. Where this is not feasible, alternatives such as pump stations and force mains have been proposed. Pump stations use energy to pump raw sewage to treatment facilities or other gravity sewers; however, the amount of energy required is not significant.

Proposed measures to protect or conserve energy and natural resources are:
   Improvements will be designed to operate as efficiently as possible and will use energy efficient fixtures where practical and cost effective. (e.g. lights, pumps, etc.)
4. How would the proposal use or affect environmentally sensitive areas or those designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

This proposal takes into account environmentally sensitive areas as part of the master-planning of the capital facilities. Some capital facilities proposed within the 20-year planning horizon may use or affect some of these sensitive areas; however, the impacts of individual projects will be considered against the environmental regulations adopted at the time the specific improvement plans are developed.

Proposed measures to protect such resources or to avoid or reduce impacts are:

Projects will be designed to avoid impacts to environmentally sensitive areas to the extent possible. Prior to construction, project-specific environmental reviews or environmental impact statements will be prepared as required and appropriate mitigation implemented.

5. How would the proposal be likely to affect land and shoreline use? Will it allow or encourage land or shoreline uses incompatible with existing plans?

This proposal will not affect land and shoreline use. Interceptor and trunk sewer construction may occur within 200' of surface water bodies within the areas covered in this GSP amendment. When capital facilities identified in the Comprehensive GSP Amendment become necessary, project review will consider various construction alternatives including placement of facilities near shorelines. All projects must receive appropriate permits prior to commencing construction.

Proposed measures to avoid or reduce shoreline and land use impacts are:

Some conventional construction projects adjacent to surface water bodies may prove too costly to construct, and alternatives (e.g., pump stations and force mains constructed in less sensitive areas) may be considered and analyzed for economic benefit and environmental impact.

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

This plan provides a framework that outlines the needed improvements to the public sanitary sewer within the area of Clark County designated for urban development. The increase in demand on other services is correlated to the increase in demand for sanitary sewer; however, one does not cause the other.

Proposed measures to reduce or respond to such demand(s) are:

Not applicable to this proposal.

7. Identify whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

This proposal is not in conflict with local, state, or federal laws or requirements for the protection of the environment. The work outlined in the Comprehensive GSP Amendment must be planned within the framework of the existing environmental laws.
Affidavit of Publication

STATE OF WASHINGTON

County of Clark

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3185233 DETERMINATION OF NON

I, the undersigned, say,

That I am one of eight persons and not
interested in the above entitled matter; that I am
now, and at all time embraced in the publication
therein mentioned, was, the principal clerk of the
printers of The Columbian, a daily newspaper
printed, published and circulated in the said
county and adjudged a newspaper of general
 circulation by the Superior Court of the County of
 Clark, State of Washington, under Proceeding No.
(2006-15) that the advertisement, of which the
 above is a true printed copy, was published in the
above-named newspaper on the following dates,

Published On: 05/21

TOTAL COST: 178.12
FILE ON: 05/29/12

I Certified for declared under penalty of perjury
that the foregoing is true and correct.

Signature: [Signature]

Bernie Dundas
360.993.8823

----Original Message-----
From: Bernie Dundas
Sent: Friday, May 18, 2012 2:23 PM
To: Steve Bacon (Sbacon@crwd.com)
Subject: RE: SEPA Notification: CR&WD 052112 Comprehensive GSP Amendment DMS 02-12

FYI. I thanked them for their response.

Bernie Dundas
360.993.8823

----Original Message-----
From: Brad Windler [mailto:brad.w.tran.org]
Sent: Friday, May 18, 2012 2:17 PM
To: Bernie Dundas
Subject: RE: SEPA Notification: CR&WD 052112 Comprehensive GSP Amendment DMS 02-12

C-TRAN has no comment

----Original Message-----
From: Bernie Dundas [mailto:bdundas@crwd.com]
Sent: Wednesday, May 16, 2012 5:17 PM
To: Phil.kuest@ci.vancouver.wa.us; clarissa.bowen@cityofvancouver.us; scott.sayer@ci.battle-ground.wa.us; smarta@clarkcd.org; cccouncil@yahoo.com; clarkcountynetwork@nrcmail.com; permitreview@clowlitz.org; culture@clowlitz.org; DevRev; kary1dkcomcast.net; gaudeamus@earthlink.net; friendsofclarkcounty@gmail.com; sdsgp@hotmail.com
Cc: Steve Bacon; Linda Bauer
Subject: SEPA Notification: CR&WD 052112 Comprehensive GSP Amendment DMS 02-12

Please find attached Clark Regional Wastewater District's "052112 Comprehensive General Sewer Plan Amendment DMS 02-12."

Address all correspondence to:
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Attn: Steve Bacon, P.E. Development Planning Engineer
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