


# Public Works Department Level of Service

City of Camas

**04/23/2018 Council Special Meeting**

Public Works Mission Statement:

“...To provide quality community services for the health and safety of its citizens and the environment.”



Public Works

Who do we  
serve?

## EXTERNAL CUSTOMERS

- Residents, Businesses, Industries
- Intergovernmental – State, Clark County, other Cities, School Districts, Utility Districts
- Economic Development Agencies CREDC, CWEDA, DCA
- Contractors, Developers, Attorneys, Planners, Engineers, Title Companies, Real Estate Brokers, Vendors, Students

## INTERNAL CUSTOMERS

- Mayor & Council
- Boards & Commissions
- All City Departments
- Employees

Public Works

# What defines what we do?

- Public & Citizen Input
- CMC Titles 3, 10, 12, 13, 14, 15, 16, 17 & 18
- City of Camas Design Standards Manual
- City of Camas Comprehensive Plan (2035 Plan)
- Administration/Budgets/Staffing
- WA State Permits – Health, Ecology, Clean Air
- Economy & Development Trends
- Professional Ethics
- WA State Auditor's Office

General Fund		Enterprise Funds
<u>Engineering</u>	<u>Operations</u>	<u>Operations</u>
Development	Streets	Water
Capital	Parks	Sewer
Traffic Management	Cemetery	Stormwater
Operations Support	Central Services	Solid Waste
		Equipment Rental

Public Works

What services do we provide?

Public Works

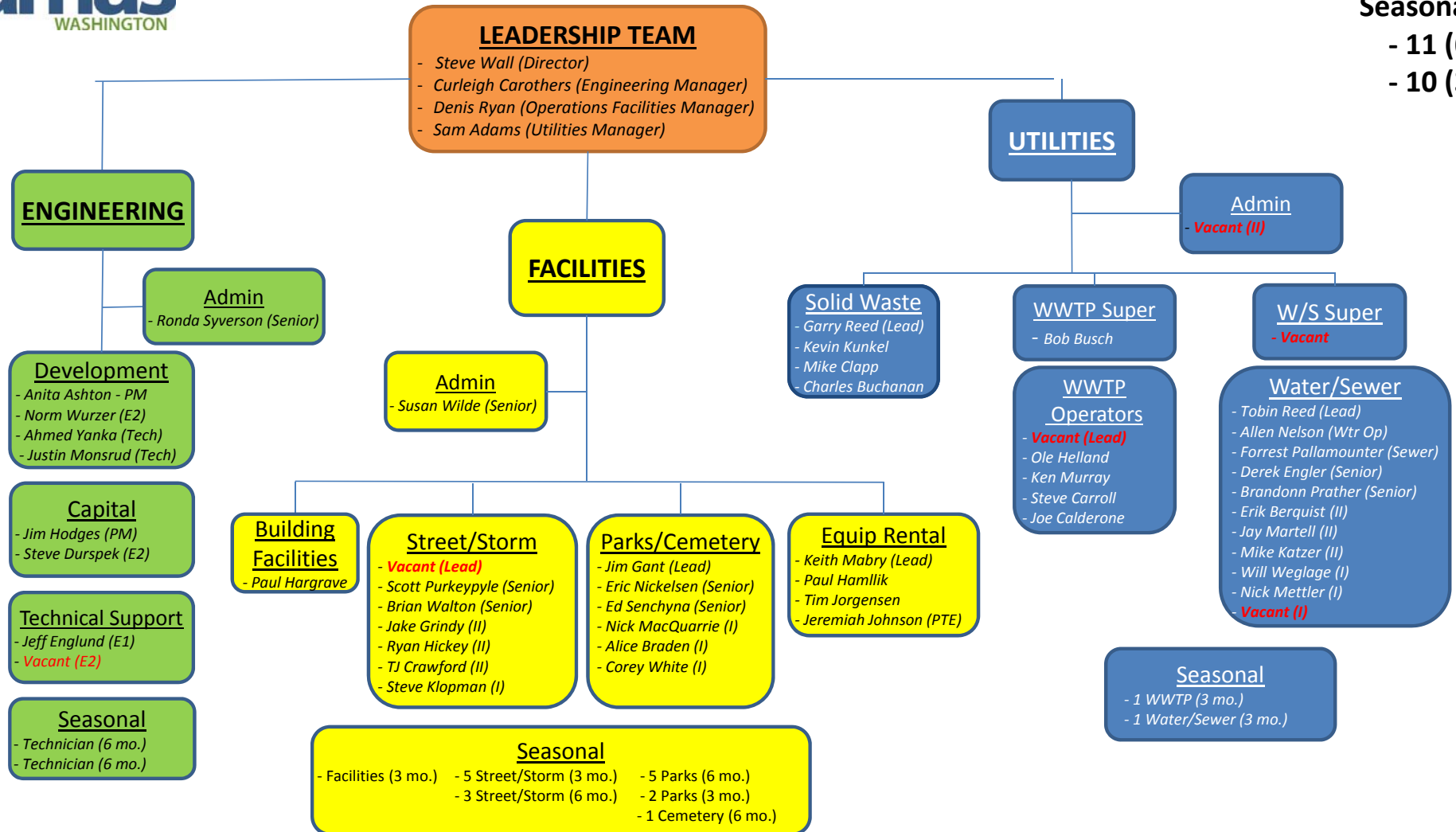
What staffing  
do we have?

- **Engineering**
  - 10 FTE
  - 2 Seasonal (6 mo.)
- **Operations - General Fund Supported**
  - 16 FTE
  - 9 Seasonal (6 mo.); 8 Seasonal (3 mo.)
- **Operations – Utilities**
  - 27.5 FTE
  - 2 Seasonal (3 mo.)
- **= 53.5 FTE Total + Seasonal Employees**



## PUBLIC WORKS DEPARTMENT – CURRENT ORGANIZATIONAL CHART

**FTE: 53.5**  
**Seasonal:**  
 - 11 (6 mo.)  
 - 10 (3 mo.)



Public Works

What Budget  
do we have?

## 2018 Operating Budget

- Engineering = \$1.29M
- Parks Maintenance = \$1.03M
- Central Services = \$228K
- Streets = \$2.86M
- Cemetery = \$229K
- Stormwater = \$1.57M (Stormwater Rates)
- Solid Waste = \$2.7M (Garbage/Recycling Rates)
- Water/Sewer = \$8.17M (Water & Sewer Rates)
- Equipment Rental = \$1.13M (Equipment Interfund Rates)
- **Total 2018 Operating Budget = \$19.21M**  
(Does not include any Capital)



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# Streets

General Fund		Enterprise Funds
<u>Engineering</u>	<u>Operations</u>	<u>Operations</u>
Development	<b>Streets</b>	Water
Capital	Parks	Sewer
Traffic Management	Cemetery	Stormwater
Operations Support	Central Services	Solid Waste
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Streets

What services do we provide?

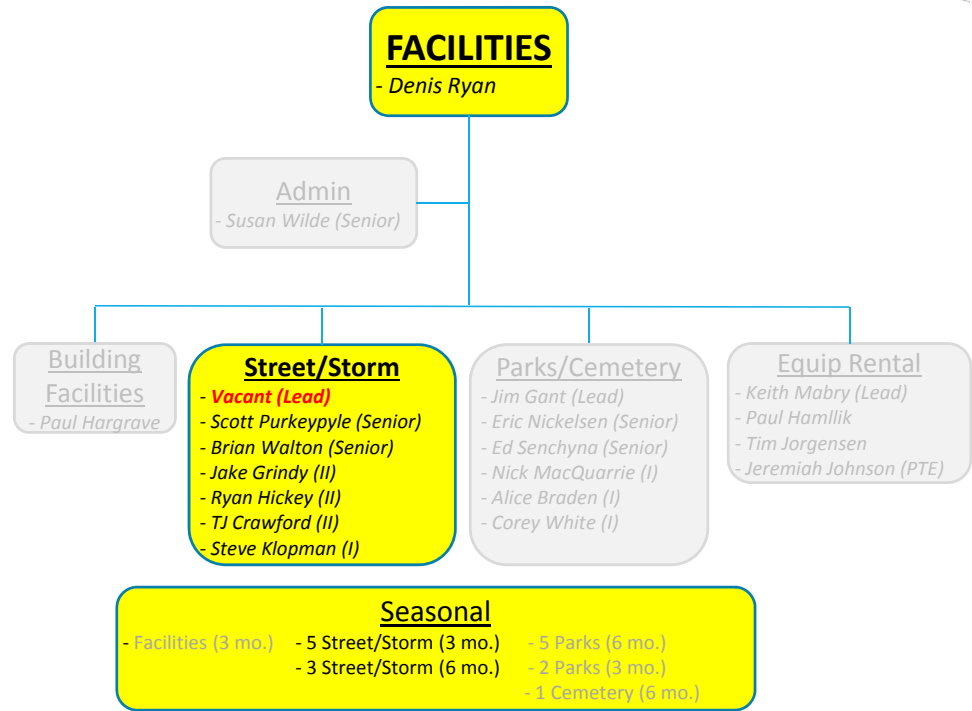
Streets

## Quick Facts

- 110+/- Centerline Miles of Pavement
- 3,200+/- Street Lights
- 4,000+/- Signs (estimated)
- 50+/- Downtown Flower Baskets + other Planter Boxes
- Banner Poles & Pennants (Downtown/at Gateways)
- Public Sidewalks & Street Trees
- Miles of Guardrail, Striping, Raised Pavement Markers, Roadside Vegetation
- Responsible for Support of Events

Streets

# Staffing & Budget



- 5 FTE in Streets Budget, 8 Seasonal
  - 20+/- yrs since hiring new crew member
- Operations + Stormwater w/1 Lead Worker
- 2018 Operating Budget = \$2.86M
  - Includes \$0.775M in Pavement Preservation

# Streets



## General Streets

- Street Lighting
- Pavement Repairs
- Roadside Mowing/Brush Cutting
- Signs & Striping
- CRMs
- Debris/Litter
- Crack Sealing
- Code Enforcement & Engineering Support
- Pavement Mgmt. Program
- Weather related response

## Downtown Mall

- Landscaping
- Flower Baskets - 50+ takes 6 mo.. seasonal
- Events – 12 First Fridays; 11 other major events
- Farmers Market
- Tree Maintenance & Tree Lights

## Snow & Ice

- De-icing & Plowing of Priority 1 Routes
- Emergency Response Assistance
- Repair of damaged assets
  - Street lights; guard rails; trees

What We Do

## Streets

- Significant /Ongoing Preventative Pavement Maint.
- Shoulder Work & Enhancement
- Roadside Spraying (Contract out to County)
- Sign Maintenance & Replacement
- Guardrail Maintenance
- Curb & Sidewalk Repairs
- Contracted Work: Striping; Signal Preventative Maint; Street Light Electrical

## Snow & Ice

- Priority 2 & 3 Roads During Events Often Not Maintained
- Residential Roads Rarely Receive Maintenance During Events

What We're Not Able to Do

Streets

## Current State

Current staffing levels  
do not meet demands

## Challenges & Risks

- Most Work - Corrective vs. Preventative (repairs, CRMs)
- Small Crew on Streets & Stormwater Maintenance
- Vacation, Comp & Sick Leave (PTO) Reduce Crew Size
  - Any given day ~20% use PTO
  - Minimum 6 FTE for roadway projects
  - “Only able to do one project at a time”
- Downtown Mall & Events = Sizeable Time Commitment
  - Ex. – Blowing & sweeping every week
- Not All CRMs/Requests Easy to Address!
  - Ex. – Downtown planter boxes
- Development & Encroachment Permit Trickle Down
- Operations Center Space

Streets

Future State

## SERVICE DELIVERY GOALS

- Stand-Alone Streets Maintenance & Stormwater Maintenance Crews
- More Pavement Preventative Maintenance
  - Crack sealing, patching
- Signal & Lighting Program w/Trained Staff
- Sign Inventory & Maintenance Program
- Discussion
  - Snow & Ice Removal
  - Downtown Mall
  - Sidewalk Removal Program
  - Pavement Management Program – fully fund?



Streets

# Strategy for Streets

## REQUESTED SUPPORT

- **2018 (Immediately)**
  - Fill Vacant Lead Worker Position (zero budget impact)
- **2019-2020 Budget**
  - Stand-Alone Streets Maintenance Division
    - Add 2 New FTEs - fill gap, stand-alone Stormwater Division
    - Reduce Seasonal Staff - offset budget impacts
  - Purchase asphalt maintenance equipment
- **Level of Service Considerations**
  - Snow & Ice?
  - Downtown Mall?
  - Sidewalk Removal Program?
  - Pavement Management Program?
    - \$775k/yr. - Need \$1.1M min. keep Pavement Condition Rating

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# Stormwater

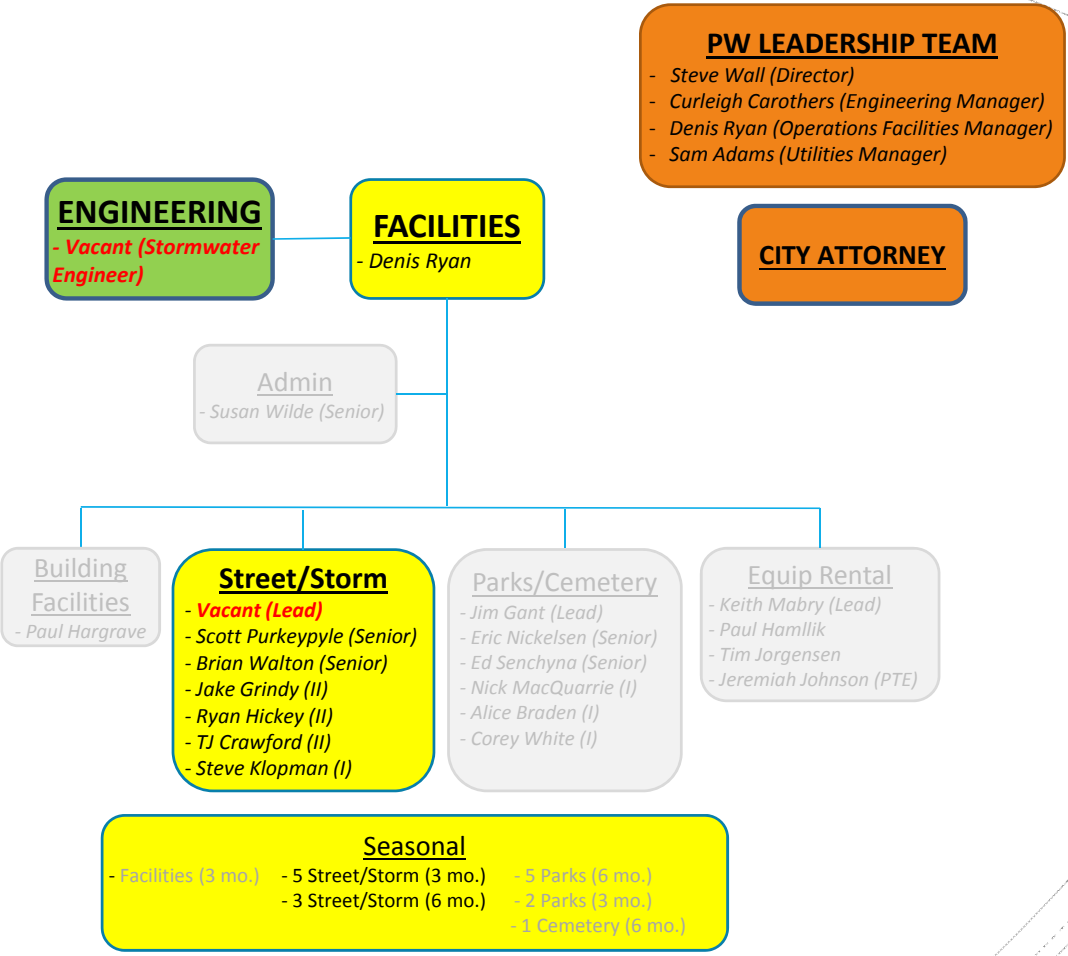
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Traffic Management	Cemetery	<b>Stormwater</b>
Operations Support	Central Services	Solid Waste
		Equipment Rental

Stormwater

What services do we provide?

Stormwater

# Staffing & Budget



Stormwater

## Staffing & Budget

- **No Dedicated Stormwater Operations Crew or Technical Support Staffing**
  - Operations – w/Streets share 1 Lead Worker
- **No Dedicated Stormwater Engineer to Manage NPDES Permit**
  - Tracking by Development Project Manager w/Leadership Team support
  - Vacant Engineering position for Stormwater Program with Leadership Team oversight
- **2018 Operating Budget = \$1.57M**
  - Same budget w/Maintenance, Operation & NPDES Permit monitoring

# Operations & Maintenance

## Stormwater

What we do &  
what we can't  
always get to



- Public stormwater facility inspections
- Catch basin maintenance
- Public stormwater pond & bio-swale maintenance
- Emergency inclement weather response
- Spill response
- Catch basin & street sweeping debris disposal
- Public storm filter cartridge inspection & replacement
- Street sweeping



### Ongoing & Preventative:

- Drainage Ditch Maintenance
- Storm line preventative maintenance
- Routine TV Inspections
- Major Repairs
- Manhole inspections
- Outfall inspections
- Private facility inspections & follow-up

Stormwater

# What our Permit Requires us to do

- **NPDES - National Pollutant Discharge Elimination System**
  - “Authorizes discharge of Stormwater to surface waters of the State”
- **Western WA Phase II Municipal Stormwater Permit Regulated “MS4s”**
  - MS4 = Municipal Separate Storm Sewer Systems
  - Phase II for Communities >10K population
- **Requirements**
  - **Management Program**
    - Education & Outreach
    - Public Involvement & Participation
    - Illicit Discharge Detection & Elimination
    - Controlling New Development/Redevelopment Runoff
    - Municipal Operations & Maintenance (identified on prior slide)
  - **Monitoring & Assessment**
  - **Reporting & Tracking**

Stormwater

## Current State

Current staffing levels  
do not meet demands

# Challenges & Risks

- NPDES Permit Requirements (barely meeting)
  - “G.20 Letter” issued 2017
- No Dedicated Maintenance Crew
- No Dedicated Technical/Professional Staff
  - No support to maintenance staff, inspectors, etc.
- Consultant Reliance - inspection & other tasks (no staff availability)
- Limited Technology Availability
  - No true GIS support
  - Inspection tools outdated
- Office Space



## SERVICE DELIVERY GOALS – NPDES PERMIT

Stormwater

Future State  
NPDES Permit

- **Develop Stormwater Management Program**  
(dedicated staff)
  - **Technical staff & Operations/Maintenance staff**
- **NPDES Permit Requirements Full Compliance**
  - **Manage & track maintenance needs**
  - **Work w/HOAs - Stormwater facility inspections & follow up**
  - **Work w/Stormwater Partners group - provide citizen outreach & education**
  - **Annual reports, documents, & mapping updates**
  - **Ongoing staff training re: Permit requirements**
  - **Illicit Discharge screening & removal**
- **Building & Operations Staff Technical Support**

# SERVICE DELIVERY GOALS - MAINTENANCE

Stormwater

Future State  
Maintenance

- **Dedicated Stormwater Maintenance Division**
- **Preventative Maintenance Program**
  - Mainline & Manhole inspection
  - Public facility maintenance
  - Ditch cleaning
  - “Hotspot” corrections
  - Repair & Replacement projects
- **Stormwater Utility Maintenance & Asset Management Programs**



Stormwater

# Strategy for Stormwater

## Requested Support

- **2018 (Immediately)**
  - Fill Vacant Engineer Position (Stormwater Rates funded)
- **2019-2020 Budget**
  - Lead Worker (new FTE)
    - Stormwater Utility Rates Funded
  - Stand-Alone Stormwater Maintenance Division
    - May require Streets 2 New FTEs (General Fund impact)
  - Technology Requests
    - Field staff tables to record activities
    - GIS/Mapping Support
  - Equipment Requests - Mini Excavator, Trailer & 5-yd Dump
- **2020-2023**
  - Additional Maintenance Worker (new FTE)
    - Stormwater Utility Rates Funded
- **Level of Service Considerations**
  - Reduce Street Sweeping frequency - free up staff

The background features a series of concentric, curved lines in shades of gray, creating a sense of motion or a circular path. A large, solid blue shape, resembling a speech bubble or a callout box, is centered on the page. It has a rectangular top and a pointed bottom. The text "Solid Waste" is written in white, sans-serif font within this blue shape.

# Solid Waste

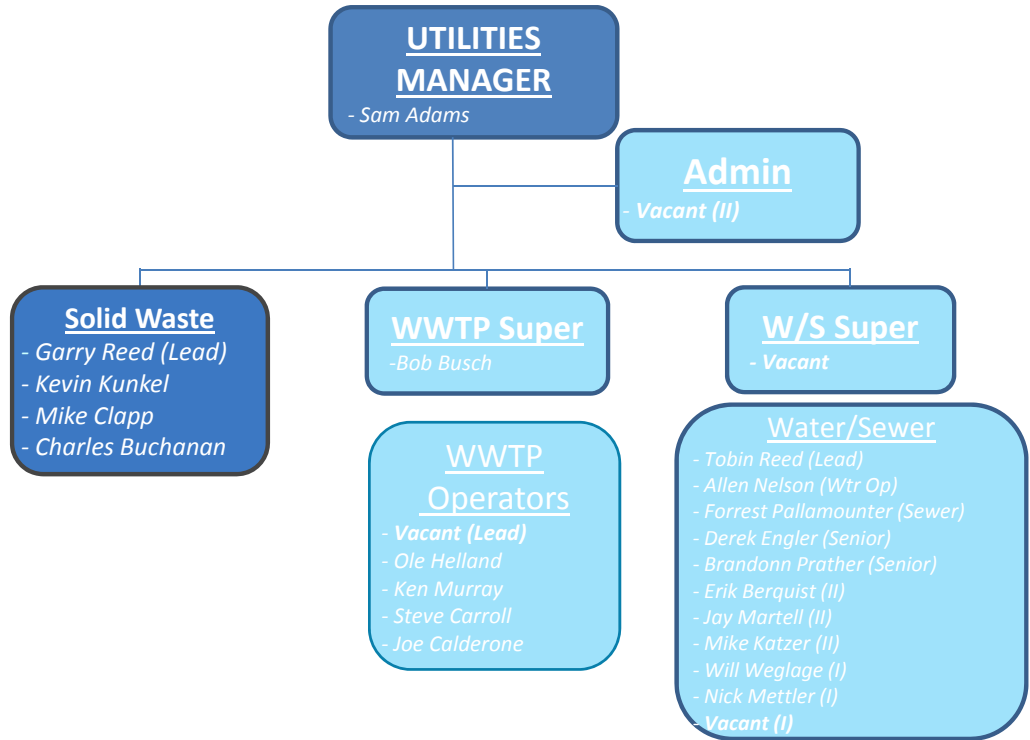
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Operations Support	Central Services	<b>Solid Waste</b>
		Equipment Rental

Solid Waste

What services do we provide?

Solid Waste

# Staffing & Budget



- 4 FTEs
- 2018 Operating Budget = \$2.7M
  - \$744K Garbage Disposal - Columbia Resource Co.
  - \$440K Recycling - Waste Connections

Solid Waste

# What We Do



- **4 Garbage Trucks / Drivers**
- **City Collects Garbage** (Waste Connections collects Recycling & Yard Debris)
- **City Bills Customers for Garbage & Recycling** (Waste Connections bills City for Recycling)
- **Only Clark County “Public Garbage Hauler”**
- **7,500+/- Customers**
  - 2019 Annexation Areas customers immediately increase by 940
- **11 Routes / 5 Days**
- **Cart Washing, Maintenance & Delivery**
- **Special Services Provided**
  - “Extra Items” List
  - Carry-out/Driveway Service (by request/approval)
  - Manual Downtown & Park Service
  - Every-Other-Week Service (800+/- customers)
  - “Unsolicited” Walk-Up Service

Solid Waste

## Current State

**Current staffing  
levels meet demands  
until 7/2019**

## Challenges & Risks

- 4-Person Crew Long-Term Employees (PTO reduces to 3)
- 2019 Annexation Areas
- Routes Not Distributed Evenly Throughout Week
- Every-Other-Week Collection (many set out weekly)
- Carry-Out/Driveway Service Unsafe (2017 improvements)
- No New-Drivers Process/Maps Training
- Lack of Technology - “Route Sheets” & Recording Extras Manually
- Operations Center Lacks Trucks & Cans Space
- Garbage Trucks Mechanics Time is Significant
- Curbside Recycling Collection Not Enough for Waste Connections Cost of Service



Solid Waste

Future State

## SERVICE DELIVERY GOALS

- **New Driver & Truck - 2019 Annexations & Growth**
  - Assists with PTO issues
  - Option - Contract w/Waste Connections to continue collection a period of time
- **Balance Routes, Coordinate Recycling/Yard Debris**
  - Process underway
- **Technology**
  - Automate Route Sheets & Extras records (links to Finance)
  - Route Maps to train new drivers
- **Education, Outreach & Communication Strategy**

Solid Waste

# Strategy for Solid Waste

## REQUESTED SUPPORT

- **2018 (Immediately)**
  - Rebalance Routes
- **2019-2020 Budget**
  - New Driver (FTE) & Garbage Truck
  - Technology
    - Field staff tablets to record activities
    - GIS/Mapping Support
- **Solid Waste Rates Funds**
- **Level of Service Considerations**
  - Reduce/Remove “Extra Items” Pick-up
  - Cart Size Options
  - Every-Other-Week Service
  - Downtown Mall Area – Solar Trash Compactors?
- **New Mechanic**
- **Other Considerations - looking at Rate Structure**

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Utilities  
Water & Sewer  
Divisions

General Fund		Enterprise Funds
<u>Engineering</u>	<u>Operations</u>	<u>Operations</u>
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Water / Sewer

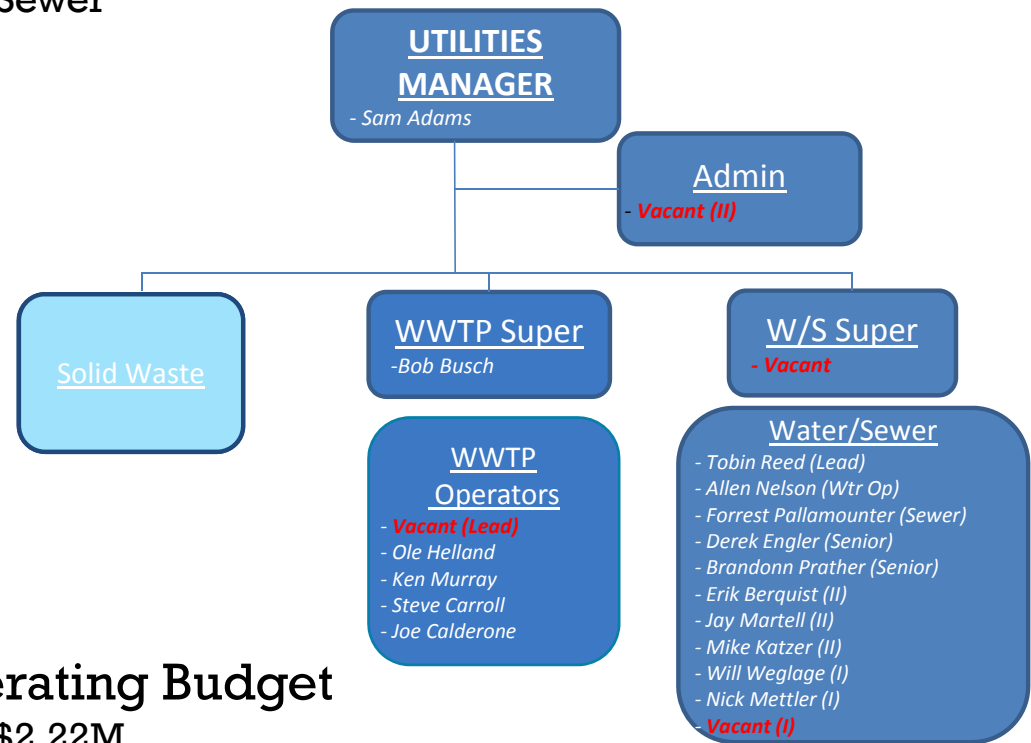
**What services do we provide?**

Water-Sewer Division

# Staffing & Budget

## 20 Total FTEs

- 12 Water-Sewer
- 6 WWTP
- 2 Admin



## 2018 Operating Budget

- WWTP = \$2.22M
- Water-Sewer = \$3.9M
- Admin = \$2.05M
- **Total = \$ 8.17M**

\*Does not include any Capital

## Water-Sewer

# Quick Facts

- 9,000+ Water/Sewer Customers
- Class IV 6.1 MGD WWTP w/ Class-A Biosolids
- 27 Pump Stations (3 new N. Shore)
- 5,300+/- STEP Systems (Septic Tank Effluent Pumping Systems)
- 7 Reservoirs (8.45 MG Storage), 10 Wells (14.8 MGD pumping capacity), 8 Water Booster Pump Stations
- 2.26mgd Slow Sand Water Treatment Plant
- 1,700+ Acre Watershed & Forest Management Area
- 120+ Sewer Main Miles / 120+ Waterline Miles
- 900 +/- Fire Hydrants
- PLUS, Water Valves, Air Release Valves, Pressure Reducing Valves

**Water-Sewer**

**Water System Tasks**

What We Do		What We're Not Able to Do
Utility Locate Services	CRMs	Valve Exercising
Water Quality Testing	Emergency Repairs	Backflow "Program"
Slow Sand Wastewater Treatment Plant Operations	Backflow data entry –minimum necessary	Fire Hydrant Maintenance & Flow Testing
Water Meter Installs/ Reading / Shut-off / Turn on	Watershed & Headworks Maintenance	Repair & Replacement Program
Well Maintenance & Regulatory Compliance	Customer & Finance/billing requests	Maintenance Management /Asset Management
Reservoir Site Maintenance	Pressure Reducing Valve Maintenance	Create/Update Standardized Mapping
Booster Pump Stations	Development Plan Review	Leak Detection & Repair
Mainline Flushing		

Water-Sewer

## Water System Current State

**Current staffing not keeping up; growth, maintenance management & special programs require more staff**

## Challenges & Risks

- Minimum Regulatory Compliance (Backflow Program)
- Mostly Corrective Work (Reactionary) vs. Preventative
- Rapidly Growing Customer Base
- New Slow Sand WTP Requires Additional FTE Support
- Significant Capital System Expansion Needed – keep up w/development (rate pressure)
- Water Loss - Meters Need Replacing (replacement program in process)
  - Large meters challenging
- No Work Activity Tracking – Maintenance/Asset Management Programs Needed
- Combined Water & Sewer Division (one or the other focus)
- WWTP Electrical Systems Outdated



Water-Sewer

# Sewer System Tasks

What We Do		What We're Not Able to Do
Utility Locate Services	CRMs	Gravity Sewer Flushing Program
STEP Tank pumping	Emergency Repairs	Gravity Sewer Repair & Replacement
STEP tank Emergency Services	Customer & Finance/billing requests	STEP Tank Preventative Maintenance & Inspection Program
New STEP Tank Inspections	Development Plan Review	Advanced & Ongoing Odor & Corrosion Control
Regulatory Compliance		Maintenance / Asset Management
Air Relief Valve Maintenance		Create/Update Standardized Mapping
		Fats, Oils & Grease (FOG) Program

Water-Sewer

# Sewer Collection System Current State

Current staffing does  
not meet demands

## Challenges & Risks

- **Mostly Corrective Work** (Reactionary) vs. Preventative
- **Rapidly Growing Customer Base**
- **STEP System** – Complex; emergency call-outs; maintenance needs; odors; impacts on WWTP
- **No Work Activity Tracking** – Maintenance/Asset Management Programs Needed
- **Combined Water & Sewer Division**

Water-Sewer

# WWTP & Pump Station System Tasks

## **Routine Maintenance**

- Wastewater Treatment Plant
  - Process control
  - Laboratory & sampling
  - Solids handling
  - Mechanical/electrical maintenance
- Pump Stations
  - Daily checks & monitoring
  - Draw downs

## **Unique Maintenance**

- Breakdowns & repairs
- Repair & replacement projects

## **What We're Not Able To Do**

- Running Solids Handling System Long Enough
- Preventative Maintenance
- Generally keep up with work load!

Water-Sewer

## WWTP & Pump Stations Current State

Current staffing does  
not meet demands

### Challenges & Risks

- VERY Complex System – especially for City size
- Mostly Corrective Work (Reactionary) vs. Preventative
- Lack Pump Stations Telemetry & SCADA (except N. Shore)
- Lack Pump Stations Security Fencing
- Little, if any, WWTP & Pump Stations Preventative Maintenance in the past
- Not Running Solids Dryer Enough w/Current Staffing
- WWTP Electrical Systems Outdated
- Imminent Future WWTP Upgrade Project
- Need Significant Pump Station Repair & Replacement
- WWTP Not Connected to City Hall Server

# CELEBRATE OUR SUCCESS!

## Sewer

- WWTP & Pumps Stations Major Equipment Condition Assessment Completed in 2017!
- New N. Shore Pump Stations SCADA & Telemetry System
- Nearing WWTP Maintenance Management System Purchase

## Water

- All Major Water System Equipment Condition Assessment Completed in 2017

Water-Sewer



Water & Sewer Utilities

Future State

## SERVICE DELIVERY GOALS

- **Develop Maintenance/Asset Management Programs**
- **Water-Sewer**
  - Develop full STEP system maintenance Program
  - Complete Radio-Read Meters Transition
  - Develop Large-Meter replacement/Testing program
  - Reinstate Backflow Prevention Program
- **Asset Inventory & Condition Assessments - lead to Asset & Maintenance Management Program**
- **Reorganize Water & Sewer Utilities to Stand-Alone Water & Sewer Divisions (dedicated personnel for each)**
- **Complete Water System Plan Update & General Sewer Plan Update**
- **GIS Support (Mapping, Inventory, Easements & Rights-of-Way)**

Water & Sewer Utilities

Future State

## SERVICE DELIVERY GOALS

- **WWTP & Pump Stations**
  - Follow Condition Assessment Recommendations
  - Improve Remote Capabilities
  - Increase Solids Handling System Runtime
  - Systems Optimized for Right Conditions
- **Ops Center to WWTP Fiber Connection Completions**

Water & Sewer Utilities

# Strategy for Water & Sewer Utilities

## REQUESTED SUPPORT

### Immediate

- Fill Admin, Lead WWTP Operator & Utility Maintenance Worker Vacancies
- Evaluate Filling Water-Sewer Supervisor

### 5-year Rate Study Model timeframe (2019-2023)

- Add FTE Support for Higher Level of Service
  - Water – 2 More Maintenance Workers
    - Backflow Specialist & Maintenance Worker - backfill WTP Operator
  - Sewer - 2 More Maintenance Workers
    - STEP Program & general Maintenance
  - WWTP – 2 Additional Operators
    - “Maintain minimum chaos”
- Rate Model/Rate Setting Process to Support Positions



Water & Sewer Utilities

# Strategy for Water & Sewer Utilities

## REQUESTED SUPPORT

### 5-Year Rate Study Model Timeframe (2019-2023)

- Inventories & Condition Assessments Funds per Strategic Plan
- Asset/Maintenance Management System(s) Funds
  - Invest in GIS system & technician
- Pump Station & WWTP SCADA/Telemetry Upgrades Funds
- WWTP & Pump Station R&R Plan Funds
- STEP System Program Funds
- Fiber Connection to WWTP Funds
- Level of Service Considerations
  - STEP System Program
    - Full program - additional staff & equipment to pump & maintain systems



Almost Done!

Public Works

## Big Picture Thoughts

- **Invest in Staff! – Training & Resources**
- **Try to Turn Corner on Preventative & Corrective Maintenance**
  - **Asset & Maintenance Mgmt. Systems key!**
- **Currently Unable to Track Performance**
- **GIS Services Must Play Role Moving Forward**
  - **Propose addition of FTE & System**
- **Operations Center Needs Expansion**
  - **Second location - North Shore??**
- **Equipment Rental Division Not in Presentation**
  - **Needs are just as important**

Public Works

## Big Picture Thoughts

### REPRESENTATIVE QUOTES

- “Preventative Maintenance has been sacrificed through the years...”
- Many areas of Department are “managed chaos”
- “Don’t forget – with new bodies comes new vehicles, computers, etc.”
- “GIS Support sorely needed in all Departments across the City...”
- “Can’t take care of things when you’re understaffed...can’t do training because too busy to get training”