

UTILITY ADVISORY BOARD AGENDA

Thursday, March 10, 2016 – 5:00 p.m.
Lemon Creek Facility
5433 Shaune Drive

I. CALL TO ORDER

II. APPROVAL OF AGENDA

III. APPROVAL OF MINUTES

February 11, 2016 Draft UAB Meeting

IV. PUBLIC PARTICIPATION

V. INFORMATION ITEMS

- A. JDTP Access Improvements Presentation (no attachment)
- B. CIP Discussion
- C. Water and Wastewater Operational Update

VI. NON-AGENDA ITEMS

VII. ADJOURNMENT – Next Meeting April 14th

**UTILITY ADVISORY BOARD
MEETING MINUTES**

February 11, 2016
Engineering & Public Works Department
Lemon Creek Facility
5433 Shaune Drive

Board Members Present: Leon Vance – Chair; Geoff Larson – Vice-Chair; Grant Ritter; David Hanna; Bill Brown; Bryan Farrell

Board Members Absent: Janet Hall-Schempf

Staff Present: Rorie Watt; Samantha Stoughtenger; Autumn Sapp; Holly Kveum

I. CALL TO ORDER

The meeting was called to order at 5:00 p.m. by Chairman Vance.

II. APPROVAL OF AGENDA

Agenda approved without amendment.

III. APPROVAL OF MINUTES

None.

IV. PUBLIC PARTICIPATION

None.

V. INFORMATION ITEMS

- A. Biosolids debrief from Assembly February 1, 2016 Committee of the Whole Meeting- CBJ staff provided a verbal overview to the board of the meeting and the expected proceedings. Board members emphasized that this was the beginning stage of the planning effort. Staff concurred and agreed that the following procedural steps would be provided at a later date.
- B. Updated Wastewater and Water Financial Dashboards- CBJ Staff reviewed the dashboards with various scenarios requested by the board. Staff encouraged the board to begin to brainstorm what would be appropriate to bring forward as a recommendation to the Assembly. The board asked staff clarifying questions regarding the specificity of sales tax allocation to the different utilities; staff explained that only the Wastewater Dashboard incorporates sales tax, but there is a possibility of requesting a portion of that funding to water should the board request it.

C. Overview of CIP & Budgeting Process- Staff provided a synopsis of the CIP process including both internal to the CBJ and external. Members requested the list of projects and noted that it would be helpful if there were clarifying points of the intent of the projects.

VI. **NON-AGENDA ITEMS**

None.

VII. **BOARD COMMENTS AND DISCUSSION**

The Chairman requested that both an operational and financial update be provided at the next regular meeting. Staff encouraged the members to think of their actions in the following year to be a balanced review by focusing on incorporating finances, operations, and budget.

VIII. **ADJOURNMENT**

The meeting was adjourned at 5:58 p.m.

City & Borough of Juneau, Alaska



Northland Street Reconstruction

Preliminary Capital Improvement Program

Fiscal Years 2017 through 2022

FY 2017 CIP RECOMMENDATIONS					
Department	Division	Priority	Project		
			Funding Source		
			Amount		
	Wastewater Utility	1	Pavement Management Utility Adjustments	Wastewater Reserves Fund	\$ 20,000
		2	McGinnis Subdivision Utility Adjustments	Wastewater Reserves Fund	\$ 20,000
		3	East Street - 5th to 6th Street Improvements	Wastewater Reserves Fund	\$ 50,000
		4	SCADA	Wastewater Reserves Fund	\$ 150,000
	\$550,000 Enterprise Funds	5	Douglas Side Streets - F St. (3rd to 5th)	Wastewater Reserves Fund	\$ 100,000
		6	Aspen Ave Improvements (Mend Blvd to Portage)	Wastewater Reserves Fund	\$ 100,000
		7	JD and Mendenhall TP Headworks	Wastewater Reserves Fund	\$ 110,000
		8	Biosolids Long Term Treatment & Disposal	Unscheduled - State Priority Requests	\$ 5,000,000
		9	Biosolids & Treatment Plant Headworks - ADEC Loan	Unscheduled - Other Requests	\$ 10,000,000
	Water Utility	1	Pavement Management Utility Adjustments	Water Reserves Fund	\$ 20,000
		2	McGinnis Subdivision Utility Adjustments	Water Reserves Fund	\$ 30,000
		3	Whittier Ave Improvements	Water Reserves Fund	\$ 150,000
		4	East Street - 5th to 6th Street Improvements	Water Reserves Fund	\$ 70,000
		5	W 8th St Reconstruction (Egan to Bridge Park)	Water Reserves Fund	\$ 70,000
	\$890,000 Enterprise Funds	6	Downtown Street Improvements (Franklin, Front, DT Core)	Water Reserves Fund	\$ 150,000
		7	Blueberry Hill Road - Pioneer to End	Water Reserves Fund	\$ 200,000
		8	SCADA System Upgrades/Improvements	Water Reserves Fund	\$ 150,000
		9	Douglas Side Streets - F St. (3rd to 5th)	Water Reserves Fund	\$ 50,000
			Public Works & Engineering Department Total Funding:	\$ 28,250,000	

FY 2017 CIP PROJECT DESCRIPTIONS		
Department	Division	Priority
		Project Description
	Wastewater Utility	1
		2
		3
		4
		5
		6
		7

PAVEMENT MANAGEMENT UTILITY ADJUSTMENTS - Adjust existing manhole lids and other minor improvements to the wastewater infrastructure in the streets being repaved.

MCGINNIS SUBDIVISION IMPROVEMENTS, PHASE II - This project will continue with the improvements to streets within the McGinnis subdivision. Improve the road sub-base and improve drainage systems as needed.

EAST STREET - 5TH TO 6TH STREET IMPROVEMENTS - Reconstruct roadway, sidewalk and curb and gutter. Replace water main, valves and service connects. Replace sewer main and service connects. Evaluate street light coverage and possible need for additional lighting.

SCADA - Evaluate and upgrade WW treatment plant SCADA physical hardware and software programming. Provide project scoping, scheduling, budgeting, and implementation of system improvements.

DOUGLAS SIDE STREETS - F STREET, 3RD TO 5TH - Reconstruct roadway, improve drainage and replace utilities as needed. Roadway base to be excavated and replaced with shot rock to improve drainage under roadway and new asphalt applied.

ASPEN AVENUE IMPROVEMENTS (MENDENHALL BLVD TO PORTAGE) - Reconstruct roadway and improve drainage. Add sidewalk, curb and gutter and evaluate street light coverage and possible need for additional lights or moving existing. Roadway base to be excavated a

JD AND MENDENHALL TP HEADWORKS - Provide improvements to the influent piping network and pretreatment of the wastewater entering the Juneau Douglas & Mendenhall treatment plants to provide for better treatment efficiency.

FY 2017 CIP PROJECT DESCRIPTIONS		
Department	Division	Priority
		Project Description
		8 BIOSOLIDS LONG TERM TREATMENT & DISPOSAL - this State Grant request will provide partial funding for the design and construction of the Biosolids drying facility.
		9 BIOSOLIDS & TREATMENT PLANT HEADWORKS - ADEC LOAN - This State Loan request will provide partial funding for both the Biosolids dryer facility and the long needed Treatment Plant Headworks upgrades. The headworks at both treatment plants are in need of replacement to continue improving treatment and reducing operating costs.
	Water Utility	1 PAVEMENT MANAGEMENT UTILITY ADJUSTMENTS - adjust existing valve boxes and other minor improvements to the water infrastructure in the streets being repaved.
		2 MCGINNIS SUBDIVISION UTILITY ADJUSTMENTS - This project will continue with the improvements to streets within the McGinnis subdivision. Improve the road sub-base and improve drainage systems as needed.
		3 WHITTIER AVE IMPROVEMENTS - The project will replace the water line, repair sewer/storm sewer lines and structures as needed, replace street lighting with efficient LED components and replace sidewalks which will include new ADA compliant accessible ramps. Roadway base to be excavated and replaced with shot rock to improve drainage under roadway and new asphalt.
		4 EAST STREET - 5TH TO 6TH STREET IMPROVEMENTS - Reconstruct roadway and improve drainage. Replace water main, valves and service connects. Replace sewer main and service connects. Evaluate street light coverage and possible need for additional lights or move existing lights. Roadway base to be excavated and replaced with shot rock to improve drainage under roadway and new asphalt applied.
		5 W 8TH STREET RECONSTRUCTION (EGAN TO BRIDGE PARK) - - Excavate substandard material and back fill to eliminate settling and road failure. Apply a shot rock base and pave. Evaluate and repair underground utilities.
		6 DOWNTOWN STREET IMPROVEMENTS (FRANKLIN, FRONT, DOWNTOWN CORE) - Reconstruct roadway, replace storm drain system, replace street lighting and improve pedestrian facilities and pedestrian movement.
		7 BLUEBERRY HILL ROAD - PIONEER TO END - Reconstruct roadway, and improve drainage. Roadway base to be excavated and replaced with shot rock to improve drainage under roadway and new asphalt applied. Water Utility main line, valves and service connects will also need replacing.
		8 SCADA SYSTEM UPGRADES/IMPROVEMENTS - Evaluate and upgrade Water Dept SCADA physical hardware and software programming. Provide project scoping, scheduling, budgeting, and implementation of system improvements.

FY 2017 CIP PROJECT DESCRIPTIONS		
Department	Division	Project Description
		DOUGLAS SIDE STREETS - F STREET, 3RD TO 5TH - Reconstruct roadway, improve drainage and replace utilities as needed. Roadway base to be excavated and replaced with shot rock to improve drainage under roadway and new asphalt applied.
	9	

SIX-YEAR DEPARTMENT IMPROVEMENT PLANS

Division	Project	Priority	FY17	FY18	FY19	FY20	FY21	FY22	Future
Wastewater Utility	Biosolids Long Term Treatment and Disposal - State Legislative Grant	1	\$ 5,000,000						
	Biosolids & Treatment Plant Headworks - ADEC Loan	2	\$ 10,000,000						
	Pavement Management Utility Adjustments	3	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 60,000
	McGinnis Subdivision Utility Adjustments	4	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000

SIX-YEAR DEPARTMENT IMPROVEMENT PLANS

Division	Project	Priority	FY17	FY18	FY19	FY20	FY21	FY22	Future
	East Street - 5th to 6th Street Improvements	5	\$ 50,000						
	SCADA	6	\$ 150,000	\$ 100,000	\$ 100,000	\$ 100,000			
	Douglas Side Streets - F St. (3rd to 5th)	7	\$ 100,000						
	Aspen Ave Improvements (Mend Blvd to Portage)	8	\$ 100,000						
	JD and Mendenhall TP Headworks	9	\$ 110,000						
	MWWTP Treatment analysis	10		\$ 250,000					
	Auke Bay Tank Repairs	11		\$ 300,000					
	Calhoun Ave Imp - W 8th to Gold St	12		\$ 50,000					
	River Road Reconstruction LID - Utility Adjustments	13		\$ 50,000	\$ 25,000				
	Birch Lane Improvements	14		\$ 200,000	\$ 200,000				
	Shaune Drive Improvements	15		\$ 75,000					
	Douglas, Side Streets - "D" and "E" Streets	16		\$ 200,000					
	Energy Efficiency Improvements	17		\$ 100,000					
	Downtown - W 9th and Indian St Improvements	18			\$ 150,000				
	Poplar Ave (Mendenhall Blvd to Woodduck)	19			\$ 100,000				
	Radicliffe Road - Berner's to the End	20			\$ 35,000				
	Columbia Boulevard Improvements	21			\$ 300,000				
	Mountainside Estates, Abbey Way Improvements	22			\$ 100,000				
	Pine Street Improvements	23			\$ 45,000				
	Bayview s/d Starlight and Misty Improvements	24			\$ 100,000				
	JDTP Vactor Dump	25			\$ 250,000				
	JDTP Back up power supply	26			\$ 900,000				
	JDTP Aeration Basin Repairs and Treatment Upgrades	27			\$ 3,500,000				
	Delta Drive	28				\$ 75,000			
	Park Place Improvements	29				\$ 100,000			
	Hospital Drive	30				\$ 35,000			
	Foster Avenue Improvements	31				\$ 75,000			
	JDTP Facility Structural and Painting Projects	32				\$ 100,000			
	JDTP Office/Lab Building Updates	33				\$ 100,000			
	MWWTP Site Improvements (Lighting, Security, Access)	35				\$ 150,000			
	Pump & Motors Improvements/Lift Station Upgrades	37				\$ 150,000			\$ 150,000
	ABTP Disinfection Upgrades	38				\$ 450,000			
	ABTP Generator/Backup Power	39				\$ 900,000			
	ABTP Facility Structural and Painting Projects	40					\$ 100,000		
	MWWTP Above Ground Fuel System	41					\$ 150,000		
	MWWTP Furnace Oil Supply Upgrades	42					\$ 150,000		
	Street Rehab/DOT Projects Pipeline Upgrades	43					\$ 650,000	\$ 650,000	
	ABTP Instrumentation Upgrades	44					\$ 50,000	\$ 50,000	
	ABTP SCADA Upgrades	45					\$ 75,000	\$ 75,000	
	JDTP SCADA Upgrades	46					\$ 80,000	\$ 80,000	
	JDTP Instrumentation Upgrades	47					\$ 100,000	\$ 100,000	
	MWWTP Instrumentation	48					\$ 775,000	\$ 775,000	
	MWWTP SBR Basin Repairs (Structural)	49							\$ 1,600,000

SIX-YEAR DEPARTMENT IMPROVEMENT PLANS

Division	Project	Priority	FY17	FY18	FY19	FY20	FY21	FY22	Future
	JDTP Site Improvements (Lighting, Security, Access)	50							\$ 120,000
	MWWTP Facility Structural & Painting Projects	51							\$ 500,000
	Wastewater Utility All Facilities Plan Update	52							\$ 675,000
	Wastewater Utility Division Total:		\$ 15,550,000	\$ 1,365,000	\$ 5,845,000	\$ 2,275,000	\$ 1,070,000	\$ 1,750,000	\$ 3,105,000
Water Utility	Pavement Management Utility Adjustments	1	\$ 20,000	\$ 20,000	\$ 20,000	\$ 22,000	\$ 22,000	\$ 24,000	\$ 77,000
	McGinnis Subdivision Utility Adjustments	2	\$ 30,000	\$ 20,000	\$ 20,000	\$			
	Whittier Ave Improvements	3	\$ 150,000						
	East Street - 5th to 6th Street Improvements	4	\$ 70,000						
	W 8th St Reconstruction (Egan to Bridge Park)	5	\$ 70,000						
	Downtown Street Improvements (Franklin, Front, DT Core)	6	\$ 150,000	\$ 50,000	\$ 50,000	\$ 50,000			
	Blueberry Hill Road - Pioneer to End	7	\$ 200,000						
	SCADA System Upgrades/Improvements	8	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000			
	Douglas Side Streets - F St. (3rd to 5th)	9	\$ 50,000						
	Last Chance Basin Well Field Upgrades	10		\$ 750,000	\$ 1,000,000				
	Birch Lane Utility Adjustments	11		\$ 20,000	\$ 20,000				
	River Road Reconstruction LID	12		\$ 20,000	\$ 20,000				
	Shaune Drive Utility Adjustments	13		\$ 20,000					
	Douglas Highway Water Replacement	14		\$ 750,000	\$ 750,000	\$ 1,500,000			
	Capital Avenue, Willoughby to 9th Street	15		\$ 150,000					
	Pinewood Drive Improvements	16		\$ 100,000					
	Calhoun, West 8th to Gold Creek	17		\$ 200,000					
	Metering System Upgrades, MIU's Replacement 10 year Life Span 1500 MIU's	18		\$ 225,000					
	Douglas Side Streets D and E Streets	19		\$ 100,000					
	Well #3 Onsite Chlorine Generation Replacement	20		\$ 225,000					
	Areawide Water Repairs / Replacement	21		\$ 100,000					
	Lee Street Pump Station Upgrades to Provide Fire Flows 4" VFD's	22			\$ 200,000				
	Crow Hill Reservoir Pax Mixer and improvements	23			\$ 140,000				
	Abby Way	24			\$ 50,000				
	Melrose Street Reconstruction & Drainage	25			\$ 22,000				
	Radclyffe Road - Berner's to the End	26			\$ 22,000				
	Columbia Boulevard Mendenhall to Birch	27			\$ 100,000				
	W 9th and Indian St	28			\$ 150,000				
	Bayview s/d Starlight and Misty Improvements	29			\$ 150,000				
	Sharon Street - Killewich to Riverside	30			\$ 22,000				
	La Perouse Avenue and Ladd St	31			\$ 50,000				
	Poplar Ave (Mendenhall Blvd to Woodduck)	32			\$ 100,000				
	Cedar Park Pump Station Improvements/Backup Generator	33				\$ 400,000			
	Savikko Road Waterline Replacement	34				\$ 200,000			
	Melissa Drive	35				\$ 50,000			
	Mendenhall Watermain/Services Replacement	36				\$ 500,000			

SIX-YEAR DEPARTMENT IMPROVEMENT PLANS

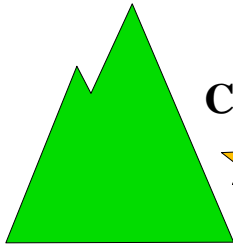
Division	Project	Priority	FY17	FY18	FY19	FY20	FY21	FY22	Future
	PRV Station Improvements/Upgrades, Crowhill, 5th Street Douglas	37				\$ 500,000			
	Bonnie Brae Pump Station VFD's For Fire Flows	38				\$ 200,000			
	Last Chance Basin Well Rehab	39				\$ 75,000	\$ 100,000	\$ 100,000	\$ 125,000
	MOV Installations & Communications Mill Tunnel, W. Juneau, Crowhill	40				\$ 800,000			
	Lawson Creek Road, Watermain, Services, Hydrant	41				\$ 180,000			
	Egan Drive Water Crossings, Norway Point, Highland Drive, Salmon Creek P.S.	42					\$ 500,000		
	Water Utility GIS Mapping/GPS Improvements	43					\$ 300,000		
	9th Street, Behind Gov. Mansion, and Federal Building Mainline Replacement	44					\$ 350,000		
	Street CIPs	45					\$ 1,000,000	\$ 500,000	\$ 500,000
	Outer Drive Watermain Replacement Main Street South To Admiral Way/S. Franklin	46						\$ 250,000	\$ 500,000
	Metering Upgrades, Radio Read, Master Station, Mobile Pack	47						\$ 500,000	
	Mill Tunnel PRV Station Access	48						\$ 85,000	\$ 250,000
	Cope Park Pump Station Upgrades, Pumps, Motors, and Communications	49						\$ 200,000	
	Salmon Creek Onsite Chlorine Generation Replace/Upgrade	50						\$ 260,000	
	Glacier Hwy Replace 12" mainline with 30" HDPE Mainline Highland Dr. to Hosp.	51							\$ 1,800,000
	Downtown Stairway/Easements 3rd St. Franklin to Gold Street	52							\$ 220,000
	4th Street Douglas Watermain Replacement	53							\$ 250,000
	I Street Douglas Watermain Replacement	54							\$ 185,000
	First Street Douglas from D Street to H Street Watermain Replacement	55							\$ 300,000
	Harris Street 4th to 5th Watermain Replacement	56							\$ 140,000
	Water Utility Division Total:		\$ 890,000	\$ 2,900,000	\$ 3,036,000	\$ 4,647,000	\$ 2,272,000	\$ 1,919,000	\$ 4,347,000
	Public Works & Engineering Department Total:		\$ 28,250,000	\$ 18,965,000	\$ 18,931,000	\$ 15,572,000	\$ 12,142,000	\$ 11,269,000	\$ 7,452,000

FINANCIAL SUMMARY OF CURRENT PROJECTS

This section of the CIP provides a financial summary for the capital improvements that were active on February 13, 2016. A table is presented showing the project name, budget, commitments, expenditures to date, and the funds available to complete each improvement. This financial information is obtained from Infor (formally known as Lawson), CBJ's official accounting system.

CAPITAL IMPROVEMENT PROJECTS Financial Summary as of February 13, 2016						
Activity	Project Name	Budget	Commitments	Actuals	Funds Available	
U76-001	Energy Efficiency & Sec. Improvements	\$ 275,000.00	\$ 4,655.25	\$ 276,268.66	\$ (5,923.91)	
U76-003	Lawson Creek Lift Station Design	\$ 1,507,792.00	\$ 6,842.04	\$ 1,343,225.38	\$ 157,724.58	
U76-004	Wastewater SCADA Improvements	\$ 662,284.21	\$ -	\$ 102,112.73	\$ 560,171.48	
U76-005	West Juneau Sewer	\$ 394,016.00	\$ -	\$ 247,248.97	\$ 146,767.03	
U76-006	Auke Lake Sewer	\$ 563,400.00	\$ 540.00	\$ 561,662.81	\$ 1,197.19	
U76-012	Incinerator Repairs/Biosolids	\$ 3,393,883.00	\$ 1,000,000.00	\$ 1,822,767.58	\$ 571,115.42	
U76-014	Auke Bay Sewer Extension	\$ 75,000.00	\$ -	\$ 49,728.01	\$ 25,271.99	
U76-015	JD Plant Infrastructure Improvements	\$ 204,245.00	\$ 6,796.74	\$ 131,608.78	\$ 65,839.48	
U76-084	Lower W. Mend Valley Sewer LID	\$ 4,720,004.00	\$ -	\$ 4,275,774.63	\$ 444,229.37	
U76-086	N Douglas Sewer Areas D,E & F	\$ 10,004,726.00	\$ -	\$ 8,793,989.94	\$ 1,210,736.06	
U76-091	Lower W Mend - Pederson Phase	\$ 2,499,390.85	\$ -	\$ 2,150,833.01	\$ 348,557.84	
U76-094	Outer Drive & N Juneau Pump St Repairs	\$ 550,000.00	\$ -	\$ 352,178.65	\$ 197,821.35	
U76-100	Glacier Hwy Sewer-Anka to Walmart	\$ 1,505,766.00	\$ -	\$ 11,592.97	\$ 1,494,173.03	
U76-101	JDWW Plant Facility Plan Update	\$ 100,000.00	\$ -	\$ -	\$ 100,000.00	
U76-102	MWW Plant Facility Plan Update	\$ 190,000.00	\$ -	\$ -	\$ 190,000.00	

CAPITAL IMPROVEMENT PROJECTS						
Financial Summary						
as of February 13, 2016						
Activity	Project Name	Budget	Commitments	Actuals	Funds Available	
U76-103	Facilities Planning	\$ 250,000.00	\$ -	\$ -	\$ 250,000.00	
U76-104	Areawide Sewer Cleanout Replacement	\$ 150,000.00	\$ -	\$ -	\$ 150,000.00	
U76-105	Long Run Drive Lift Station Improvements	\$ 300,000.00	\$ -	\$ -	\$ 300,000.00	
U76-106	Treatment Plants Headworks Imp	\$ 1,500,000.00	\$ 17,318.80	\$ 68,760.34	\$ 1,413,920.86	
U76-107	MWWTP Instrumentation Upgrades	\$ 300,000.00	\$ -	\$ -	\$ 300,000.00	
U76-108	MWWTP Roof Repair	\$ 500,000.00	\$ -	\$ -	\$ 500,000.00	
W75-034	Pump Station and System Improvements	\$ 850,000.00	\$ 5,000.00	\$ 801,645.91	\$ 43,354.09	
W75-036	Areawide Water Main Repairs	\$ 440,433.00	\$ -	\$ 335,718.21	\$ 104,714.79	
W75-037	Last Chance Basin Hydro-Geo Inv	\$ 6,269,136.00	\$ 46,586.27	\$ 3,342,248.95	\$ 2,880,300.78	
W75-039	Jordan Creek/East Valley Res Rest	\$ 853,623.02	\$ 14,477.38	\$ 752,579.92	\$ 86,565.72	
W75-041	Reservoir Painting & Repairs	\$ 850,000.00	\$ -	\$ 720,031.21	\$ 129,968.79	
W75-043	Water Utility Shop & Office EE	\$ 457,597.00	\$ 912.50	\$ 441,450.32	\$ 15,234.18	
W75-044	Salmon Creek Secondary Disinfection.	\$ 11,847,000.00	\$ 1,127,086.74	\$ 4,100,490.85	\$ 6,619,422.41	
W75-046	SCADA Upgrades	\$ 220,000.00	\$ 9,036.25	\$ 78,740.82	\$ 132,222.93	
W75-047	JD-Bridge Waterline	\$ 530,000.00	\$ -	\$ 237,942.38	\$ 292,057.62	
W75-048	Back Loop Rd Auke Bay Waterline	\$ 815,000.00	\$ -	\$ 282,826.59	\$ 532,173.41	
W75-050	Egan Drive Water - Main to Ten	\$ 2,080,939.00	\$ 16,905.00	\$ 74,907.29	\$ 1,989,126.71	
W75-051	Brotherhood Bridge Waterline	\$ 50,000.00	\$ 10,708.10	\$ 26,338.97	\$ 12,952.93	
W75-052	Crow Hill Reservoir improvements	\$ 500,000.00	\$ 40,642.11	\$ 24,896.32	\$ 434,461.57	
W75-053	W Juneau Reservoir Improvement	\$ 140,000.00	\$ -	\$ -	\$ 140,000.00	



CITY & BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY



TO: Leon Vance, Utility Advisory Board Chair
FROM: Samantha Stoughtenger, PE, Utilities Superintendent
Autumn Sapp, Engineering & PW Business Unit Manager
DATE: 08 March 2016
SUBJECT: Operational Update for Water and Wastewater Utilities through January 2016

WASTEWATER TREATMENT

- Onsite CH2MHill contractor ended contract work for plant standardization, optimization and staff development.
- CBJ Public Works and Engineering has begun plans for final biosolids dryer.

Mendenhall WWTP (MWWTP):

- Senior staff continue weekly meetings with the Utilities Production & Treatment Manager and the WW Treatment Plant Supervisor to discuss operations enhancement, maintenance scheduling, and other related issues.
- Randy Brown is serving as position of Acting Wastewater Treatment Plant Section Supervisor.
- 88 preventive work orders completed.
- Staff held a monthly safety meeting (subject: housekeeping).
- Shipped 29 biosolids containers to the Arlington, Oregon landfill.
- MWWTP treatment data and removal efficiencies for biochemical oxygen demand (BOD) and total suspended solids (TSS):

Month	Treated Effluent (MG)	BOD (% removal)	TSS (% removal)
Jan 2016	53.6	94	94
Dec 2015	58.7	94	92
Nov 2015	67.8	95	92

- MWWTP operational performance summary data:

Parameter	Units	Design Limit	Influent Loading		Effluent Monthly Average	Variance (Loading vs Design) Monthly Average
			Monthly Average	Annual Average		
Flow	MGD	2.70	2.15	2.27		
BOD	mg/L	260	349	336	21	1.29
BOD	lbs/day	7653	6326	6199	343	0.81
TSS	mg/l	220	236	212	15	1.07

Note: Influent samples are from the West SBR, not Influent Pump Station

Auke Bay WWTP (ABTP):

- A total of 53,250 gallons of digested activated sludge was transported to the MWWTP for processing.
- Waste grease and fry oils continue to enter the plant. Combatting filamentous bacteria overgrowth by increasing the waste and cycling the blower off/ on. The plant continued to produce a quality effluent.
- Southeast Fire Extinguisher Services completed the annual maintenance and testing of all the fire extinguishers.
- 25 preventive work orders completed.
- Continue work on the ABTP Spill Prevention and Response Plan for the Operations and Maintenance Manual (O&M).
- ABTP treatment data and removal efficiencies for BOD and TSS:

Month	Treated Effluent (MG)	BOD (% removal)	TSS (% removal)
Jan 2016	1.93	97.4	98.2
Dec 2015	1.70	97.6	98.7
Nov 2015	2.24	95.4	97.6

Juneau-Douglas WWTP (JDTP):

- Quarterly CU effluent composite sampling conducted.
- Auxiliary pumps magnetic flow meter and transfer piping manifold installed.
- Annual solid waste disposal permit report filed with ADEC.
- 50 preventative work orders completed.
- JDTP treatment data and removal efficiencies for BOD and TSS:

Month	Treated Effluent (MG)	BOD (% removal)	TSS (% removal)
Jan 2016	36	98	99
Dec 2015	23	98	98
Nov 2015	37	98	99

- JDTP operational performance summary data:

Parameter	Units	Design Limit	Influent Loading		Effluent Monthly Average	Variance (Loading vs Design) Monthly Average
			Monthly Average	Annual Average		
Flow	MGD	2.76	36	0.97		
BOD	mg/L	200	136	294	2	68%
TSS	mg/L	200	162	245	25	81%
COD	mg/L	500	394	408	34	79%

Wastewater Plant Maintenance/Instrumentation:

- Replaced main shaft bearings in MWWTP air handler 102.
- Replaced influent actuator in MWWTP #2 SBR.
- Completed installation of JDTP aerators independent start circuits.
- Plumbed in new non-potable water pump for belt filter press at MWWTP.
- Started new installation of flow meter at JDTP plant for the aux pump system so plant could monitor accurate transfer flows.
- SBR #3 cleaning and inspections at MWWTP.
- Replace ABTP grinder; in service for 4 years.
- Install new air monitor calibration station at JDTP.
- Performed the following maintenance and instrumentation work orders for the three wastewater treatment plants:

Plant	Completed WOs	Open WOs	Delinquent WOs
MWWTP	117	7	5
JDTP	15	4	4
ABTP	21	1	1
TOTAL	153	12	10

Wastewater Utility Source Control Sampling:

- Source Control Sampling conducted throughout the month of January:
 - Biochemical Oxygen Demand (BOD)
 - Total Suspended Solids (TSS)
 - Total Kjeldahl Nitrogen (TKN)
 - Total Phosphorous (TP)
 - Chemical Oxygen Demand (COD)
 - Ammonia (NH₃)
- Sampling was done at several locations including: Fred Meyers, Old Dairy Farm Road F10, Costco, Ralph Way GX1, and Upper Fred Meyers E10.
- Some results were above normal domestic wastewater strengths.
- Completed Source Control Sample Events per month:

Month	Sample Events
Jan 2016	32
Dec 2015	24
Nov 2015	24
Oct 2015	36
Sept 2015	34
Aug 2015	14
Feb 2015	15
Jan 2015	8



Photo of sampler inside a manhole.

WASTEWATER COLLECTIONS

- Switzer Creek Subdivision, Cope Park Phase II Improvements, Stephen Richards Memorial Drive Reconstruction, Meadow Lane Drainage Improvements, Montana Creek West Phase II CIP's all in progress.
- The Lucity project continues. Developing Categories – “Work Flow modules and GIS mapping”.
- Rebuilt Flygt 3127 pump and bench test.
- Assisted with water service repair on Channel Drive.
- Assisted the Bergman building and adjacent homeowners with a service lateral issue.
- Repair service lateral on Decker Way.
- Annual crane inspections.
- Monthly safety meeting “Blood Borne Pathogens”.
- Lance Woodward achieved his ADEC WWC level II certification.
- Performed the following number of site visits to the 45 CBJ lift stations:

Month	Weekdays	Weekends	Holidays	TOTAL
Jan 2016	855	190	38	1093
Dec 2015	945	152	38	1135
Nov 2015	810	171	57	1038

- Fielded the following direct customer service calls/locates for the community:

Month	Service Calls	Locates	Lat Camera	CCTV	Adj/Pave MH's
Jan 2016	20	3	2	0	0
Dec 2015	4	10	1	4	1
Nov 2015	3	16	1	30	3

WATER DISTRIBUTION

- Performed quarterly DBP samples.
- Cleaned and painted shop offices.
- Fixed leak on Well #3 hypo generator.
- Leak detection on Garnet Street and Stephen Richards Drive.
- New employee: Laborer Ryan Herman-Haywood.
- Rebuilt leaking seat valve on hydrant near Dzantik'i Heeni Middle School.
- Assisted with customer leak on Mint Way.
- Replaced copper lines in Hospital Vault.
- Crow Hill PRV #5: Rebuilt CRA, CDHS pilot valve and speed controllers.
- Documented City-wide hydrant list for ISO reporting.
- Fielded the following service calls/locates for the community:

Month	Service Calls	Locates
Jan 2016	6	5
Dec 2015	3	6
Nov 2015	8	17

WATER TREATMENT

- Developed Salmon Creek SCADA RFP.
- Helped develop FY 17/18 training budget.
- Drafted Emergency Action Plan Update.
- Performed weekly coliform sampling
- Cleaned and calibrated Cl2 analyzers in system.
- Hosted WW Collections and WU yearly OSHA required safety meeting on blood borne pathogens
- Submitted monthly ADEC reports.
- Attended weekly construction progress meetings for Salmon Creek Filtration project.

UTILITY BUSINESS UNIT

Month	Utility Billing Calls	Collections Calls	Public Works Calls	Accounts Receivable Calls	Misc Calls	Total Calls	Bills Generated
Jan 2016	223	7	0	5	3	238	8366
Dec 2015	245	10	7	4	0	266	8375
Nov 2015	255	5	10	8	0	278	8433

Month	Meter Installs	Meter Assessments, Register, Meter, MIU Replacement	Door-hangers for non-payment	Shut-offs for non-payment	Other routine On/Off requests	Exception Report Calls and Investigations	Leaks	Misc Calls
Jan 2016	223	7	-	5	3	238	8366	3
Dec 2015	245	10	7	4	0	266	8375	3
Nov 2015	255	5	10	8	0	278	8433	5