

KPU



Your Community, Your Utility

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TRANSMITTAL MEMORANDUM

TO: The Honorable Mayor and City Council

FROM: Karl R. Amylon, General Manager

DATE: January 13, 2021

RE: **Project Status Reports of the KPU Division Managers – December 2020**

Attached for City Council review are the project status reports of the KPU division managers for the month of December 2020. Should the City Council have questions regarding the division managers' reports, staff can respond accordingly.

MANAGER'S REPORT
SALES, MARKETING & CUSTOMER SERVICE DIVISION
December 2020

Verizon wireless new phone sales in December rose by 42% in dollars, and 19% in units. Most new customers to Verizon were customers who ported from AT&T, and did not purchase new phones, but there were a significant number of people chose to upgrade their phones in December, and the phones were primarily the more expensive Samsung and iPhone devices, particularly the iPhone 12.

KPU's combined active and vacation-hold internet accounts for November increased slightly from November, and were 4% higher than the same time last year, a reflection of the need for people to have internet for remote work, school, and entertainment. Standalone, no-phone internet subscribers increased by 3% over the prior month, as some customers cut the phone line in an attempt to save money. TV accounts fell by 1% as people chose to eliminate TV in an attempt to save money with the pandemic.

Division Manager Kim Simpson continues as Deputy PIO for the EOC, and Media Manager Abigail Stevenson jointed the EOC to assist with media. Work consists of daily media releases, social media posts, flyers, traveler handouts, and PSA videos for the EOC. Media for December focused on Holiday safety, Travel Safety, Mask wearing, Drive up and Airport Testing, and the new Vaccine. Kim continues to answer the the hotline questions for the Covid Traveler Testing (228-2464). Abigail and Kim both helped with two Facebook Live Events: The Covid-19 Vaccine, and Mental Health in Covid Times Q&A. Both featured local professionals, doctors and counselors. The events were livestreamed to the City facebook, as well as KPUtv.

The KPUtv Crew filmed local businesses in a series of Shop Local videos showcasing local businesses and their products. These were intended to educate the community about alternate shopping experiences local businesses were offering, as well as local specials. The hope is that they would encourage locals to spend their holiday gift dollars locally vs. online. Local businesses included Tongass, Fish from Trish, Studio 103, Ketchikan Dry Goods, Rain Country, Gold Rush, Monarch Jewels, Soho Coho, Simply Bella, Scanlons, Crazy Wolf, and more. The annual Shop with a Cop event was also filmed. This is the event where the local police shop for local families who were identified as being in need of assistance. KPU live-streamed the Boat Parade on the Live in Ketchikan Facebook page. This event was very popular and was shared many times on social media. The footage will be used for a show on KPUtv at a later date.

Local City Council meetings, including budget meetings were live streamed to KPUtv, Facebook, and YouTube utilizing WebEx.

KPU Marketing and KPUtv produced a virtual Holiday Tree Lighting event video to take place the Sunday after Thanksgiving. The video included the hanging of the holiday light garlands and snowflakes, the lighting of the 85 foot holiday tree, live pipe music with Misty Thistle, live holiday string music with Chaz and Dave, Cookie baking, and the reading of “A Ketchikan Night Before Christmas.” KPU Marketing coordinated the appearance of Santa on firetrucks the Sunday after Thanksgiving. Santa simultaneously appeared on North Tongass, South Tongass and in the City. Within the City limits, KPU Marketing livestreamed Santa’s location from a car following the City Fire Truck so that people would know where Santa currently was, and where he was going. This event was wildly popular with hundreds of people waiting in key locations to see Santa. The video of the live stream garnered 80 watchers at one time during the event, and was shared many times afterward. The Ketchikan Night Before Christmas video premiered at 6:30 pm, immediately following Santa’s appearance. It was also replayed on Christmas Eve. KPU Marketing also coordinated the “Letters to Santa” event which ran from late November to December 15th. Children dropped letters to Santa in a mailbox at the downtown Firehall #1, and Santa’s elves sent returned postcards to the children with personalized notes.

MANAGER'S REPORT
ELECTRIC DIVISION
December 2020

Electric Shop and Meters

- Meters. During the month, there were thirty-seven (37) meter exchanges/installs:
 - Four (4) changes from manual meters to RFN (Radio Frequency Node) meters.
 - Eighteen (18) changes from PLC (Power-Line Carrier) meters to RFN meters.
 - One (1) change from RR (Radio Read) meter to RFN meter.
 - One (1) PLC meter exchange.
 - No changes from PLC meters to RR meters.
 - No changes from manual meters to PLC meters.
 - Twelve (12) manual meter exchanges.
 - One (1) RF meter exchange.
- Operations. Investigated, performed troubleshooting, and made repairs at KPU facilities:
 - Beaver Falls Unit No. 1 exciter, No. 3 generator pit alarm, and governor controls.
 - No. 1 Intake level transducers
 - Bailey Powerhouse lighting and No. 4 VAR/W transducer.
 - Fawn Lake batteries and charger.
 - Ketchikan Powerplant flow meters, No. 5 generator tach and bearing alarms system, and No. 4 generator excitation system.
 - Ketchikan substation voltage regulators.
 - Port West tap changer and relay alarm.
 - Silvis vibration monitoring system, brush holders, and flow meter.
 - North Point Higgins generators heating circuits, substation regulator alarms, line heaters.
 - Whitman generator vibration system and water strainer system.
 - Installed line shop, vehicle maintenance, and warehouse lighting.
 - Continued the metering upgrade for the Yukon system with Eaton/Cooper. Service disconnects/reconnects, meter disconnects and reconnects, system print updates and station readings.
- SCADA. Operations. Investigated, performed troubleshooting, and made repairs at KPU facilities and equipment:
 - SCADA OSI Failover Testing.
 - RTU system and communications backups.

- Ketchikan database audits.
 - DDIO & DCIO Configuration Backups – CAP Bank 1-10, Back Island, Whitman V7.
 - Port West RTU upgrades.
 - SCADA file server maintenance, system password verifications, and NTP server configurations. Supported SCADA upgrade meetings. Coordinated and worked with the electric shop on SCADA networks. Continuing training in the SCADA system. Records management activities and SCADA upgrade planning.
- Water Department. Investigated, performed troubleshooting, and made repairs to UV electric room fans and lighting.
 - Harbors. Cleared eleven (11) harbor trouble tickets and investigated, performed troubleshooting, and made repairs for harbor power systems.
 - Telecommunications. Investigated, performed troubleshooting, and made repairs for facility lighting.

Outages and Events

- On Tuesday, December 1, 2020, at 4:30 PM, a windblown tree near 13 mile North Tongass Highway fell into a North Point Higgins 12.47kV feeder causing an outage. Initially 559 customers were affected by the outage. Within fifty-five minutes, power was restored to all customers.
- On Wednesday, December 2, 2020, at 7:36 AM, a windblown tree near 13 mile North Tongass Highway fell into a North Point Higgins 12.47kV feeder causing an outage. Initially 559 customers were affected by the outage. Within two hours six minutes, power was restored to all customers.
- On Tuesday, December 15, 2020, at 11:03 PM, A SEAPA generator at Swan (Unit No. 1) tripped offline due to a governor issue after performing maintenance; this caused a loss of generation in the SEAPA system. The sudden loss of approximately 10 MW of generation caused system instability, resulting in load shedding in Ketchikan. Seven KPU system feeders opened during the event causing power outages. KPU and SEAPA operators quickly identified the issue and KPU immediately began power restoration. Initially 3,418 customers were affected by the outage. Within forty-five minutes, power was restored to all customers.
- On Friday, December 25, 2020, at 7:47 AM, a voltage regulator in the KTN substation had a massive internal fault; this cause protective relays to clear the fault causing all feeders to open and tripped Units No. 3 and No. 4 at Ketchikan Powerplant. The failure caused a power outage to all service from the KTN substation. Line crews along with support from engineering identified the issue, regulators were bypassed and power restoration began. Powerplant mechanics responded to assist with generation needs and the Bailey operator assisted with coordinating events and operating the system. Initially 2,333 customers were

affected by the outage. Within one hour forty-three minutes, power was restored to all customers.

Powerhouse & Fleet Maintenance

Ketchikan Hydro Project

- Provided critical support efforts during emergency action plan event (EAP)
- Replaced Unit #4 governor drive coupling
- Troubleshoot Unit #5 bearing over-temperature alarm
- Repaired Unit #5 oil/water separator
- Cleaned & flushed Granite Basin diversion intake
- Cycled tunnel blow-down valve
- Replaced overhead crane cables
- Inspected Ketchikan & Fawn Lake propane generators

Beaver Falls (Silvis) Hydro Project

- Inspected Upper Silvis dam & spillway structure
- Serviced & maintained No. 1 Intake flow allowing Unit #1 to generate
- Performed annual maintenance on penstock valve structure "Octopus House"
- Rebuilt Unit #3 governor
- Painted Howell-Bunger components (Silvis)
- Plowed & cleared Silvis access road

Whitman Hydro Project

- Troubleshoot intake high-vacuum issues
- Conducted dam inspection

Bailey Powerhouse

- Replaced vent hoses on BAG3
- Fabricated cooling pipe supports for BAG4
- Ground & machined spare BAG4 cylinder heads
- Completed weld repairs to powerhouse air shrouds
- Conducted annual overhead door inspections
- Diesel generator support for outage restoration
- Serviced auxiliary/black-start generator

Facilities

- Welded & repaired Telephone warehouse vehicle gate
- Completed annual Warehouse overhead door inspections
- Repaired doors at Port West Substation
- Replaced Bailey Maintenance shop overhead crane cables
- Conducted services on Water Division's UV Facility generator

Fleet

- Troubleshoot hydraulics on digger/derrick #98
- Installed new injectors in dump truck #66
- Vehicle inspections

Regulatory and Dam Safety

- Annual agency consultation for the Ketchikan Lakes project.
- Annual agency meeting for the Whitman Lake project held on December 11.
- Coordinated with the Forest Service to draft a new collection agreement for Silvis Trail Maintenance.
- Prepared and filed Beaver Falls 2019 Dam Safety Surveillance and Monitoring Report

SEAPA

- The next regular board meeting is scheduled for February 26, 2020 via videoconference; due to current Covid-19 conditions, meetings are via videoconference.
- For additional information please visit SEAPA's web site at:
<https://www.seapahydro.org/>

Transmission & Distribution Work

- Completed build of new three-phase overhead line to The Mill at Ward Cove, replaced padmounted transformers, re-worked overhead secondary lines, and began wreck-out of old three-phase overhead line along waterfront
- Pulled primary conductor, set two padmount transformers and a switch cabinet at the airport ferry terminal project
- Set two new primary poles and one new secondary pole; replaced a back-yard transformer & secondary pole
- Completed emergency repairs on Pennock Island
- Responded to numerous storm and outage events



The Mill at Ward Cove wreck-out



Conduit install for new transformer at The Mill



Transformer replacement

Water Management/Diesel Supplement

- For December, generation finished just a bit below average. Average for a December is 17.9 GWh, with this December finishing at 17.3 GWh. Winter loads are very much dependent on temperature and temperatures for this December stayed above freezing for the most part.
- Precipitation for the month was twice as high as average for December. An average December in Ketchikan, brings about 15 inches in precipitation. Like last month, this December brought just over 30 inches! Again the rains overcame heavy drafting and left lake levels at or near spill.
- Diesel generation for the month was very small, limited to only short runs necessary to restore power from two outages. Diesel generation for December was only 7.6 MWh.
- Lake levels and "net" generation are shown in a separate report.

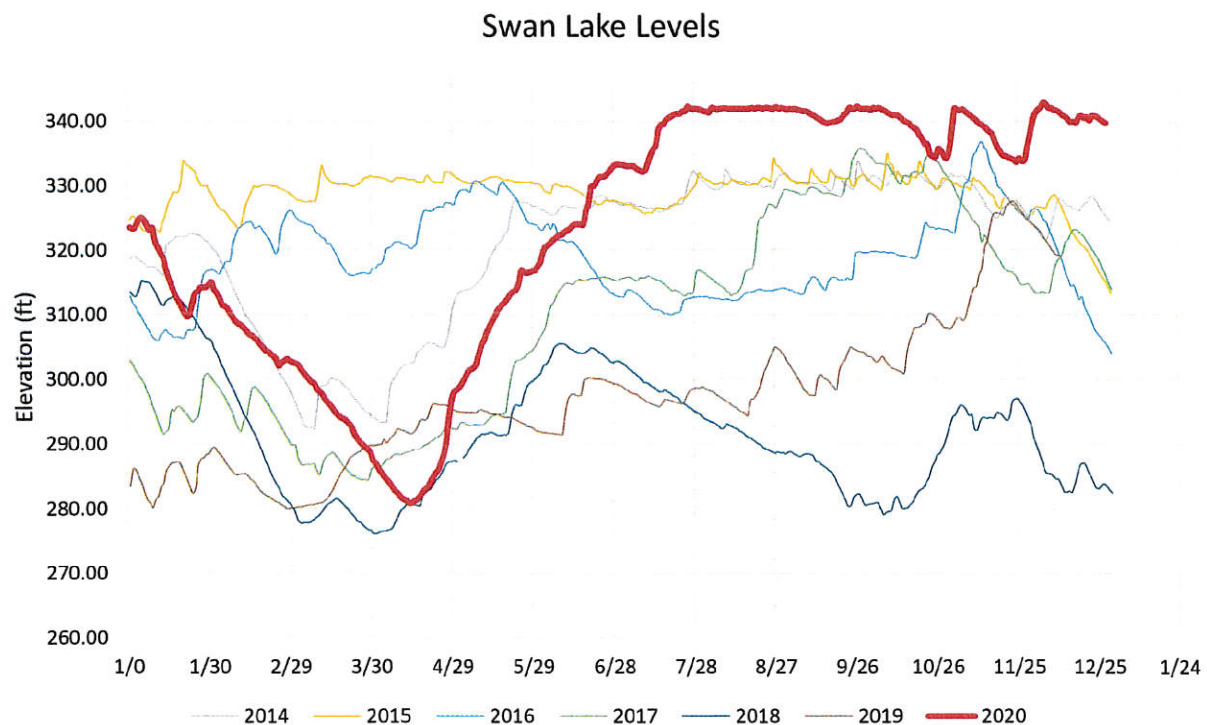
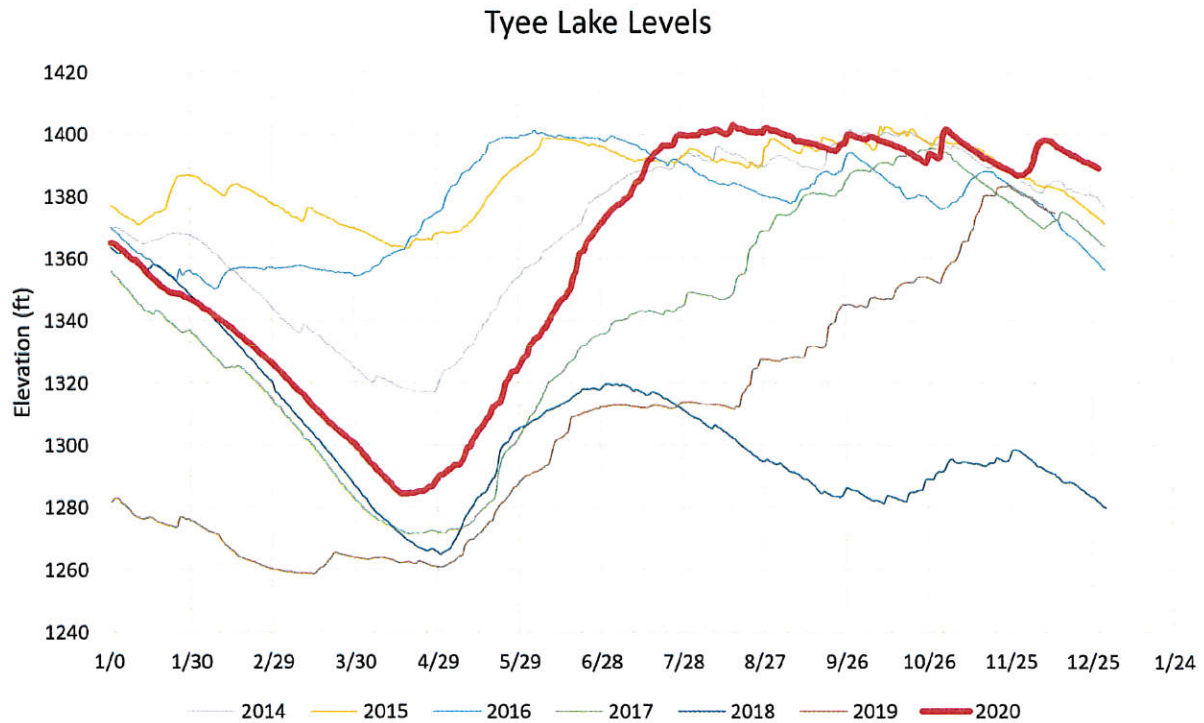
Year end perspective

The year 2020 finished out as another unique water year relative to KPU generation. Both 2018 and 2019 were drought years, forcing record diesel generation, surcharge, air quality permit limitations, and additional rental generation units to support load. What was missing in those two years was the estuary of an atmospheric river (now named the Pineapple Express) terminating or landing right on Ketchikan. As we moved into January of 2020 we were greeted with heavy snowfalls and copious amounts of rain. Several record generation peaks were set in January, attributed to very low temperatures which persisted through most of the month. A new record demand peak was set at 35.7MW, and a monthly generation record for January of 19.3 GWh. Near record generation and relatively average precipitation continued for the first quarter. Then, a COVID-19 Pandemic set in to change the work place and life styles forever.

For the second quarter of 2020 we saw a strong rebound in lake or reservoir levels along with a decline in load due to the absence of cruise ship traffic and the onset of a poor fishery season. This continued into the third quarter of 2020.

Third quarter saw some of the lightest loads in our KPU history. The lack of tourism and poor fisheries combined with above normal precipitation (the return of the Pineapple Express), offered a different opportunity for KPU generation. Normally, KPU can only support about 50% of its demand requirement. The other 50% or remaining demand is fulfilled by SEAPA, our bulk power supplier, through a power sales agreement. With lighter loads and plenty of water much of the demand could be supported by KPU generation requiring much less purchased power from SEAPA. July and August provided seasonal records for precipitation, along with record monthly KPU generation while requiring minimal additional purchased power.

Fourth quarter showed continued heavy precipitation, full reservoirs, and the opportunity for KPU to maximize its hydro generation. The quarter finished with KPU breaking another record, its annual generation, a record previously set in 2015 with 91.9 GWh. The 2020 record has now been set at 93 GWh.



MANAGER'S REPORT
TELECOMMUNICATIONS DIVISION
December 2020
Operational Issues

TELECOMMUNICATIONS DIVISION MANAGER

KetchCan1

The undersea cable network continues to perform flawlessly. As planned, the new cable has enabled us to equip the network with more than sufficient capacity to ensure the absence of network 'blockages' or slowdowns during peak traffic periods.

Personnel

We recently experienced several resignations (Plant Manager, OSP foreman, Accounting Technician), all of whom are moving 'south' or 'north' due to combination of family, health, and/or promotional opportunities.

REGULATORY UPDATE
Summary

The Consolidated Appropriations Act of 2021 created a \$3.2 billion Emergency Broadband Benefit Program to help low-income consumers access the Internet. Participating providers will make available to eligible households a monthly discount off the standard rate for an Internet service offering and associated equipment, up to \$50 per month. On Tribal lands, the monthly discount may be up to \$75 per month. All of Alaska is considered Tribal lands.

Other regulatory issues of interest are as follows:

The FCC released a 2020 communications marketplace report on December 31, 2020, which fulfills the Commission's requirement set forth in RAY BAUM'S Act of 2018 to provide a comprehensive evaluation of the state of competition in the communications marketplace in the United States. The report assesses the state of all forms of competition in the communications marketplace; the state of deployment of communications capabilities; and barriers to competitive entry. The report also discusses the actions taken by the FCC in the previous two years to address challenges and opportunities in the communications marketplace and help Americans in the face of the pandemic, and the FCC's agenda for continuing to address the challenges and opportunities for the next two years.

Reports and Filing:

FUSC Rate Change

On December 17, 2020, NECA filed a revised tariff based on the FCC Public Notice released on December 14, 2020, increasing the Federal Universal Service Charge (FUSC) from 27.1% to 31.8%, effective January 1, 2020.

TELECOMMUNICATIONS PLANT DEPARTMENT Summary

Outside Plant Construction and Splicing:

Projects Completed in December 2020:

- Started Ward Cove Group feeder fiber build
- High Mountain radio repair
- Fiber terminal placed and spliced to Loon Dr.
- Additional fibers spliced into Walmart

Installation and Repair:

- The installation and repair crews completed
 - 65 service orders
 - 96 trouble tickets
 - 30 fiber drops

2020	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Total
SO	53	58	59	34	68	67	84	81	94	78	71	65	812
TT	95	76	54	77	87	115	76	100	104	99	93	96	1072
FD	19	24	17	5	35	14	17	19	30	18	26	30	254
Total	167	158	130	116	190	196	177	200	228	195	190	191	2138
2019 Total - 2130							2020 Total - 2138						

OSP Installation & Repair Scorecard:	SO	TT	FD
Month of: December 2020			
Employee			
Brad C.	0	47	0
Nathan L.	0	0	0
Ryan J.	19	13	5
Roger M.	16	16	10
Chad W.	0	0	0
Alan M.	30	12	4
Line Crew	0	8	11
Total	65	96	30

Safety:

Due to meeting restrictions and the ESCI safety instructor cancellation caused by the Covid-19 environment, the safety/staff meeting was canceled during December.

TELECOMMUNICATIONS ENGINEERING DEPARTMENT

Summary

Engineering:

- 4G/LTE
 - Hospital cell site awaiting final fiber cut on January 20th
 - No KPI misses for month of December
- IP Engineering
 - Upgrade of all Fiber customers to new speed tiers on Adtran
 - KGB monitoring in ExtraHop security appliance
 - Monitoring enhancements using IXIA packet broker switch
 - Ward Cove Group network design in-progress
- Video Engineering
 - Continued Minerva M10 and Edgware VOD migration and testing
 - Legacy RGB transcode migration to new DVEO server 75% completed
- Voice Engineering
 - 988 – Suicide Prevention ready for implementation on T7000
 - Preparation for migration of Broadworks to new hardware platform
- Systems Engineering
 - Patches and updates to Domain Controllers
 - Full upgrade of ExtraHop to latest GA release
 - ExtraHop basic training completed
 - Complete OS rebuild and upgrade of Solarwinds Orion to latest code
 - Continued assistance to City Clerks for Council Meetings
- Facility
 - Repair of failed AC in Main CO and in the Datacenter

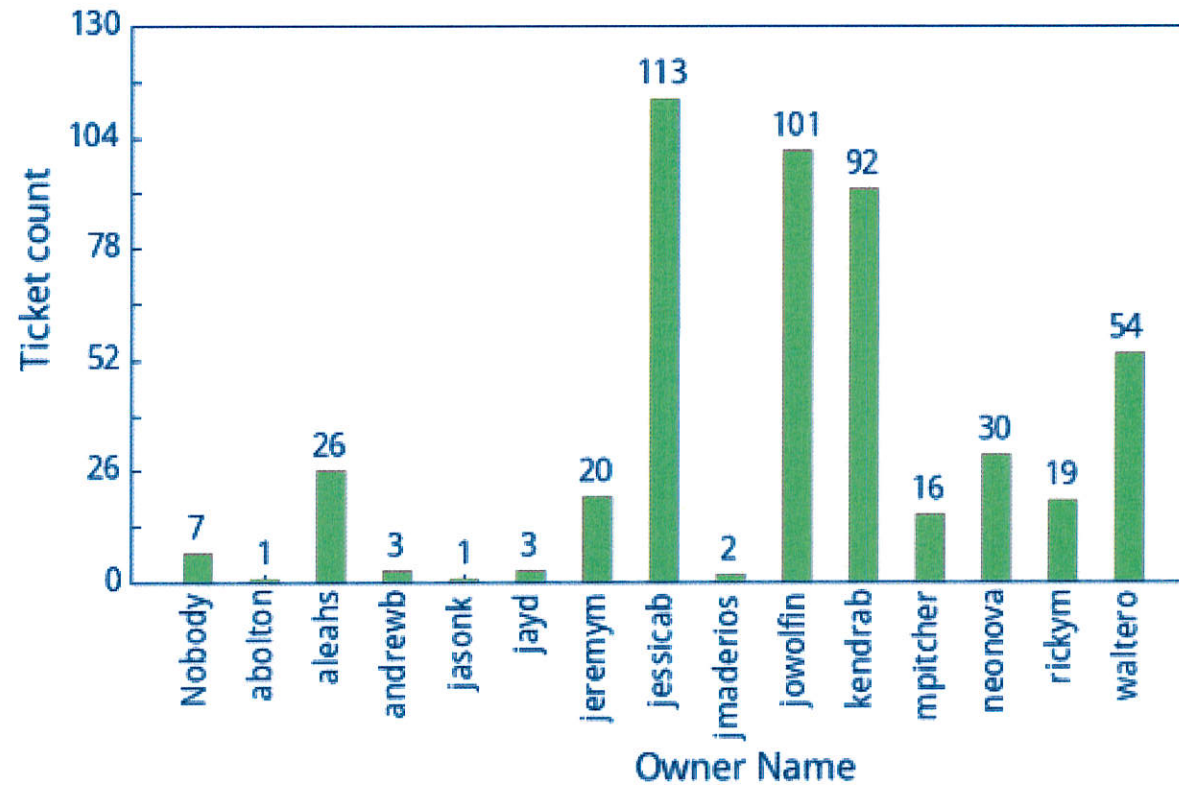
Service Delivery & Network Operations.

- 81 Resolved PBX tickets
- Harbormaster Condos installation of fiber MDU switch
- Yorktown Drive installation of fiber MDU switch
- Public Health Center fiber connected switch install
- Delta Western installations at Ward Cove Campus
- SEAFAC service installation and upgrade

Customer Support:

- Total Calls to Support Line 225-2111 = 533
- Calls forwarded to NeoNova 984-244-5721 = 254
- Calls Answered by Customer Support = 279

CSS Overview:



Owner Name	Ticket count
Nobody	7
abolton	1
aleahs	26
andrewb	3
jasonk	1
jayd	3
jeremym	20
jessicab	113
jmaderios	2
jowolfin	101
kendrab	92
mpitcher	16
neonova	30
rickym	19
waltero	54
Total	488

Total CSS Calls:

Users



USER	RECORDED CALLS	DURATION (HOURS)
Jessica	487	16
Jo Ann	351	13
Kendra	534	29
Walter	320	25

**MANAGER'S REPORT
WATER DIVISION
December 2020**

FILTRATION AVOIDANCE

On April 16, 2020 Ketchikan sent a proposal outline to the Alaska Department of Environmental Conservation (ADEC) that meets the Federal criteria for the submission of a Limited Alternative to Filtration (LAF) and has asked ADEC for their approval before making the LAF submission. As noted, the LAF must address two elements of the water supply; the disinfection treatment process, and the source raw water quality including the surrounding control of the watershed. In addition, the LAF requires that the disinfection treatment process provide greater removal and/or inactivation of regulated microbial contaminants and organisms including cryptosporidium oocysts, giardia lamblia cysts, and viruses than would be achieved by a combination of filtration with chlorine disinfection alone.

However, since the LAF only appears in the federal Safe Drinking Water Act, as reauthorized in 1996, and doesn't also appear in the Federal Regulations, Part 141 National Primary Drinking Water Regulations, the matter is complicated as there is no guidance on how to implement a LAF. Fortunately, the State of Washington Administrative Code does include the necessary language allowing implementation of this provision and a LAF was granted to the City of Seattle for their Cedar River project. The State of Alaska has already prepared a draft LAF implementation document with similar provisions although it has not been adopted.

Further complicating the matter, when the City Council approved ADEC's Compliance Order by Consent (COBC) on December 4, 2014, it included notice of Ketchikan's violation of a section of the Code of Federal Regulations, 40 CFR 141.71 (a)(1) which applies to all unfiltered water systems. It contains the requirement that, on a 6-month running average, at least 90% of the raw water samples that are collected from a sample point located just before the first point of chlorine injection cannot exceed a maximum contaminant level (MCL) of total or fecal coliform forming colonies.

The EPA regulation for a community our size and avoiding filtration is that 3 raw water samples must be collected each week and be taken on separate days. At a minimum, 90% of Ketchikan's raw water samples must contain 20 or less fecal colonies per 100 milliliter sample (that is, a sample of only 3.4 ounces or a little less than ½ cup of raw water). A total of 5 of the 78 samples collected between the months of April to September had already exceeded this permissible level with 3 of these samples suddenly occurring in late September. Consequently, beginning the last week of September, multiple samples were collected throughout the watershed on 3 separate days each week attempting to identify the contaminating sources.

What we soon discovered was that, after a period of comparatively minimal rainfall followed by a sudden storm with heavy rainfall, that the raw water was sluicing high numbers of fecal coliform colonies from the Granite Basin watershed into Fawn Lake. Several samples collected from the Granite Basin stream were found to be in the 30 – 40 colony range with one sample identified as "too numerous to count" (something over 200 colonies). With the concurrence of the Electric

Division, Granite Basin was bypassed several times before the arrival of the next major fall storm which permitted all of October and November's raw water samples to remain below the maximum permissible fecal level.

Despite rainy weather that has continued through all of December, at the higher elevations of Granite Basin, the snow and subfreezing conditions have reduced the probability of high fecal levels occurring. As a result, based on the July to December computed 6-month rolling average, 94% of these raw water samples have continued to meet the EPA regulation and Ketchikan has remained in compliance.

OPERATIONAL ISSUES

Contract 19-45 - Schoenbar Raw Water Transmission Main Design

DOWL Engineers, who have already completed the earlier design work for the replacement for Schoenbar Road's distribution water and wastewater mains are now designing a replacement for the failing portion of the 36-inch raw water transmission main in Schoenbar Road. It will be a single, permanent 42-inch HDPE pipeline to be located between the southwesterly edge of Norman Walker Field (adjacent to Park Avenue parking area), and the Ketchikan Charter School. Beginning at the westerly edge of Norman Walker Field, it will cross above Schoenbar Creek adjacent to where Schoenbar Creek's 96-inch multi-plate culvert begins, and then remain buried under Schoenbar Middle School's driveway, passing beneath the School District's Maintenance Shop parking area and the Ketchikan Charter School's playground before reconnecting to the remainder of the existing raw water transmission main.

Authorization has already been received from the City Council to seek property easements for the proposed alternative alignment from the Ketchikan Gateway Borough (KGB) and the School District. In early December DOWL completed the necessary easement drawings which have been discussed with KGB and School District representatives. The metes and bounds descriptions for these easements are now being prepared by DOWL for transmittal to the property owners. If satisfactory, the easements will next be considered as action items for approval by the KGB Assembly and the School District.

Contract No. 20-24 - Materials Procurement – Schoenbar Road HDPE Raw Water Connection Points

The ADEC Drinking Water Loan that is providing the financing for this project includes the Buy American requirement for all iron and steel products. Now that DOWL has completed the final details for their design of the upstream and downstream 42-inch HDPE connection points, KPU began discussions with potential vendors for the materials that are needed to construct these two connection points and comply with the Buy American requirement. From their responses, it has become apparent that there are a number of long-delivery items needed. Their estimated deliveries

in Ketchikan are all between 20 – 26 weeks after receipt of order which is equivalent to arrival in mid-2021.

Besides the six 42-inch butterfly valves, there are also twelve heavy 42-inch ductile iron fittings needed with a combined weight of almost 22 tons. Most of these fittings will be used in assembly of the two connection points although four fittings will be assembled later as the 42-inch HDPE raw water main is constructed. These fittings are necessary to construct an above-grade, self-supporting, 36-inch ductile iron crossing of Schoenbar Creek adjacent to the Schoenbar Middle School driveway. The reason for using ductile iron here is any driver who is attempting to safely turn left and enter Schoenbar Road from Schoenbar Middle School's driveway needs to have a clear view of any on-coming traffic. Had HDPE pipe been chosen instead for the crossing, it would have also required a large overhead steel support structure and obstructed the driver's view.

Contract 20-24 for these items was awarded to the firm of Core and Main in the amount of \$537,117 by affirmative action by the City Council at their December 3rd Council Meeting. Submittals for the valves and fittings have been received and all are now approved for construction.

Contract 20-25 – Continuation of Water Meter Design / Build - Business & Commercial Customers

This month, Ketchikan Mechanical Inc. (KMI) satisfactorily completed Contract 20-12 to install water meters in a contract more along the lines of a design-build contract. In this project, KMI conducted individual audits of each of the businesses that were identified in the Bid Documents. From these audits, the contractor then prepared a simplified design for each individual meter installation for review and approval by KPU. After KPU's approval is issued, the contractor began installation of the new meter. As before, this contract was limited in size to allow everyone involved to both gain experience and to obtain better knowledge of the difficulties that are encountered while installing individual meters.

This step-by-step method of installing water meters has proven to be entirely satisfactory for everyone. Contract 20-25 is the next design-build contract for the installation of another 50 meters and began advertisement on December 24th with a bid opening scheduled for January 25, 2021. Achieving the goal of having all of these business and commercial buildings and large residential apartment complexes fully metered before the end of 2021 will still require continued significant effort as there are still approximately 215 unmetered businesses and large apartment buildings remaining. In addition, the 2016 Water/ Wastewater Rate Study will need to be updated as well as amendments made to the Ketchikan Municipal Code.