



2014 Report on Activities



ALASKA NATIVE
TRIBAL HEALTH
CONSORTIUM



Our Purpose is to provide good drinking water to rural Alaska every day.



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FY14 ARUC Advisory Committee



Back Row:

Frank Neitz Bethel Office
Scott Jones Ambler
Grace Hill Quinhagak
Greg Anelon Newhalen
Chris Cox Maniilaq Office
Elmer Melton Noorvik
Chuck Peterson New Stuyahok
Paul Chimiugak Toksook Bay
Pete Mellick Sleetmute
Yago Evan Lower Kalskag
Carl Pelowook Savoonga
Larry McCormick Chignik Lagoon

Front Row:

Jon Savage Dillingham Office
Francine Moreno ARUC Office
Martha Foster Selawik
Dora Davis Golovin
Mary Ann Mike Kotlik
Loreen Steeves Upper Kalskag
Myron Kingeekuk Savoonga
Agnes Housler Russian Mission
Rebecca Demientieff Holy Cross
Shalene O'Domin Chignik Lake
George Bright, Sr. Goodnews Bay

About the Advisory Committee

The ARUC Advisory Committee serves as the liaison between ARUC and the participating communities, and provides advice and recommendations to ANTHC and to participating communities. The functions of the Advisory Committee are to:

- Promote functional, safe and well-maintained sanitation facilities for participating communities.
- Promote greater community and regional involvement in ARUC programs and activities.
- Promote fair and equitable representation of utility customers.
- Support development of comprehensive plans to assist participating communities in assuming responsibility of sustainable utility operation and annual generation of revenue to cover necessary community expenses.
- Annually review and set financial, rate and policy recommendations for ARUC's budget and individual budgets for participating communities based on the level of service provided.
- Facilitate communications between the ARUC and participating communities.
- Promote sustainability and community and customer involvement in ARUC communities.

ARUC Member Start Dates

Toksook Bay August 2004	Newhalen August 2009
Upper Kalskag August 2004	Tyonek August 2009
Russian Mission August 2004	Kiana February 2010
Goodnews Bay September 2005	Kotlik June 2010
Chevak October 2005	New Stuyahok July 2010
Lower Kalskag October 2006	Ambler August 2010
Sleetmute October 2008	Kobuk September 2010
South Naknek November 2008	Holy Cross May 2011
Chignik Lake December 2008	Noorvik June 2011
Savoonga January 2009	Pitka's Point November 2011
St. Michael June 2009	Quinhagak July 2012
Chignik Lagoon August 2009	Deering September 2012
Golovin August 2009	Shungnak September 2013
Selawik August 2009	Scammon Bay July 2014

Message from the Program Administrator



ARUC continues to grow and 2014 was no exception. Management changes have helped us transition essential duties while continuing to provide our members with exceptional service.

Many of you know John Nichols as the ARUC Manager and main point of contact. In October 2014, Nichols accepted a promotion and now manages both ARUC and the Operations and Maintenance department. Nichols' efforts include improving and maintaining systems statewide, in addition to ensuring 28 community systems are well maintained for the life of the system. Nichols' previous duties have been assigned to Chris Mercer, ARUC Operations Manager and myself, Francine Moreno, ARUC Program Administrator.

Chris Mercer has worked with ARUC as our lead Operations Engineer for the last two years and focused largely on system upgrades and energy projects. He transitioned to overseeing all ARUC operations, maintenance, minor upgrades and sustainability of the water/sewer systems, as well as training ARUC water plant operators. Chris has worked with water systems throughout Alaska for the past six years, and is now leveraging his experience to make our systems as efficient and sustainable as possible.

I have assumed ARUC's business and financial side. Communication and building relationships are, and always have been, very important to me. Luckily for me, my new role will involve exactly that. To continue to improve ARUC we want to listen to what our communities need, share what the limitations are, and work together as a team to make decisions. I will also share information with our ARUC Advisory Committee so they can continue to make decisions for their communities. At the end of the day, what's important to us is our communities have affordable, safe, clean water to keep their families healthy.

Lastly, I want to thank the water plant operators, community members, councils, and the ARUC Advisory Committee members within each of our 28 communities. 2014 was a good year and we couldn't have been successful without you.

Quyana,

A handwritten signature in black ink that reads "Francine Moreno". The script is cursive and fluid, with the first name and last name clearly legible.

Francine Moreno

Message from the Operations Manager



2014 was an exciting year for ARUC in our efforts to make member community water systems stronger and more sustainable. Although we've been working towards this goal for a long time, the resources are now coming together to produce lasting changes. We are focused on the long-term viability of the collaborative and are committed to working with our member communities to improve efficiency.

A critical element of smart growth is increasing the strength of our water plant operator network. This year we captured opportunities to allow many operators to participate on work crews in different communities. This is a win-win, when operators contribute their knowledge to the effort, they also take away new skills and ideas while gaining a communication line with other operators who share their challenges. Understanding other systems, overlapped with training courses and familiarity with outside resources, have made the operator network stronger than ever and we look forward to watching it expand.

ARUC uses the collective knowledge gained from operator feedback to identify what works well and what needs improvement in the future. Effective solutions demonstrated by our operators are then spread network-wide, utilizing resources such as energy efficiency projects, Denali Commission funding, and Rural Alaska Village Grant energy training funds. We are steadily moving toward our goal of common standards to improve reliability and reduce future cost for our customers. These shared successes have been recognized statewide and are now finding their way into many projects in non-ARUC communities.

Looking forward, we are excited to continue this effort. Our operations team is already scheduled for much of 2015. As evidence of our successes, our team sees fewer emergencies and is constructing improvements that provide better reliability, reduce outages, and will reduce cost through better efficiency. I look forward to serving our communities and I'm certain our work will continue to improve the sustainability of our systems as we "grow smarter."

Sincerely,

A handwritten signature in black ink, which appears to read "Chris Mercer". The signature is fluid and cursive.

Chris Mercer

What is the Alaska Rural Utility Collaborative (ARUC)?



Elmer Rookok, a former Savoonga water plant operator, is now employed with ARUC in the Anchorage Office.

ARUC's goals are to protect the public investment by prolonging the life of each water system, providing good drinking water every day, and building local capacities.

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a testament to the effectiveness of the cooperative approach to small communities, over a six-year period ARUC has grown from six communities in the pilot program to 28 communities today.

ARUC is an Alaska Native Tribal Health Consortium (ANTHC) program created to manage, operate and maintain water/sewer systems in rural Alaska. ARUC treats each community's system as a stand-alone non-profit business; money from local customers, generated from user fees and local community and regional support, must be enough to pay the system's direct expenses. ARUC's services include helping set water/sewer rates in each community, billing local water and sewer customers, providing supervision to local water plant operators, and more.

Through active management and operations and maintenance (O&M) support, ARUC has pursued its goals of maximizing the public health benefits of sanitation facilities and building capacity. ARUC focuses on preventive health through reliable sanitation. ARUC's community mission is to protect the public health and the quality of life of Alaska Native community residents by:

- Ensuring that qualified staff operate and maintain facilities to provide high quality drinking water and safely dispose sewage.
- Providing strength in numbers and emergency response.
- Extending the useful life of the system through prevention and maintenance, thereby saving millions of federal and state dollars in replacement costs.
- Hiring and training water plant operators and backup staff in each community with good wages with retirement benefits.
- Setting rates with community council agreements; each community's rates are set to be self-supporting and rates vary per community.
- Providing trained ANTHC engineers, O&M specialists, utility managers and grant specialists to support the utility at no additional cost to customers.

ARUC benefits and types of membership

There are two types of membership within ANTHC's ARUC statewide program: the **Assisted Billing Program** and the **full ARUC membership program**.

Assisted Billing Program

This program provides enrolled communities with water and sewer system billing management and collection from customers. Fees are collected and the payments are used to cover a monthly service fee based on the community's size. Each community will pay only its share of the expenses associated with the billing service. The remainder is sent back to the community to operate its water/sewer system.

Highlights

- Manages the billing and shares customer account information with community partners
- Requires only a 30-day commitment from ANTHC and the community
- Builds partnership for potential full ARUC membership
- Provides electrical billing services

ARUC membership

This program provides management and operations of the water/sewer system, in addition to billing services. The community must be in the Assisted Billing Program for a minimum for one year before becoming a full ARUC member. ARUC sets rates with approval by the local partners. Community rates are set to be self-supporting, so rates vary by location. Community rates include operator costs.

Highlights

- ARUC supports activities of locally-hired water plant operator(s) (and backup) in each community.
- All fuel, parts, electricity, etc. for water/sewer system are purchased through ARUC.
- ARUC enforces shut-off of non-paying customers.
- ARUC manages applications for grant funding to purchase fuel, supplies and needed parts and repairs for ARUC communities during their first year of membership.
- ARUC member communities meet all Rural Utility Business Advisor indicators as long as the community is current with IRS payments.
- ARUC membership is a long-term commitment with contracts automatically renewing in most cases.

Summary of ARUC Community Rates

ARUC Community	Monthly Residential Rates	*Residential Rate Paid Due to Local Subsidy if Applicable
Ambler	\$175.00	N/A
Chevak	\$165.00	\$135.00
Deering	\$85.00	N/A
Chignik Lagoon	\$160.00	N/A
Chignik Lake	\$100.00	\$85.00
Golovin	\$180.00	\$150.00
Goodnews Bay	\$100.00	\$85.00
Holy Cross	\$110.00	N/A
Kiana	\$140.00	N/A
Kobuk	\$200.00	N/A
Kotlik	\$104.50	N/A
Lower Kalskag	\$130.00	N/A
New Stuyahok	\$93.75	N/A
Newhalen	\$175.00	N/A
Noorvik	\$175.00	N/A
Quinhagak	\$250.00	\$120.00
Russian Mission	\$125.00	N/A
Pitka's Point	\$140.00	N/A
Saint Michael	\$212.80	\$180.00
Savoonga	\$105.00	N/A
Scammon Bay	\$100.00	\$85.00
Selawik	\$250.00	\$180.00
Shungnak	\$140.00	N/A
Sleetmute	\$125.00	\$75.00
South Naknek	\$160.00	\$90.00
Toksook Bay	\$65.00	N/A
Tyonek	\$95.00	N/A
Upper Kalskag	\$150.00	N/A

Operator Exchange Program



Operators from Ambler, Chevak, Deering, Goodnews Bay, Kotlik, Noorvik, Pitka's Point and Savoonga, along with the ANTHC construction department, assisted with the Kotlik disaster.



Kotlik Emergency Project

In November 2013, a winter storm caused severe flooding in Kotlik, an ARUC member community. The storm severely crippled the water main system causing water and sewer disruptions in much of the community. ARUC staff restored service to as many residents as quickly as possible. The effort pulled together ANTHC resources and operators from other ARUC communities.

ARUC membership and the operator exchange program were able to quickly restore safe running water to Kotlik residents during the flood relief effort.

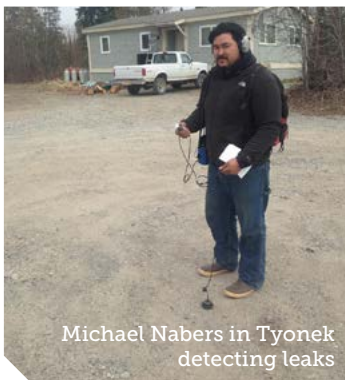
Although the work delayed some of our ongoing projects, ARUC was able to provide temporary service for much of the community due to the dedication of our network.

This response proved the value of our operator exchange program and served as a stepping stone for further exchanges throughout the year. An operator who deserves special recognition is Elmer Rookok from Savoonga. While living in Savoonga, he committed to two rotations in Kotlik. Rookok has since joined our full-time staff in Anchorage. ARUC membership and the operator exchange program were able to quickly restore safe running water to Kotlik residents during the flood relief effort.

Accomplishments



Newhalen project prep work



Michael Nabers in Tyonek detecting leaks



Lift station in Upper Kalskag

Water System Improvements

ARUC has actively pursued opportunities to improve the long-term sustainability of our systems. A variety of projects made strides towards that goal this past year. Our new operations engineer, Mike Nabers, led the ongoing Tyonek leak detection project, working closely with local operators to locate and stop a significant leak. Historically, Tyonek's water system had very high water usage which increased water costs for local residents. Leaks from buried pipes were suspected, yet a number of small-scale efforts to find the leaks had failed.

In July, ANTHC received funding from the Alaska Legislature for sustainability and energy efficiency projects in five ARUC member communities. This included the Tyonek leak detection project. Nabers and the Native Village of Tyonek operators Samuel Bartels and Randy Standifer completed the project with the loan of highly sensitive leak detection equipment from the Alaska Remote Maintenance Worker program. Using historical knowledge from ANTHC's construction branch, they were able to locate and repair a large leak in August. The repair resulted in a 40 percent decrease in water use and is estimated to save 850,000 gallons of treated water per month.

The Tyonek leak detection project will continue into next summer as Tyonek and ARUC crews replace additional aging service lines and valves. ARUC and Tyonek will track energy use, labor and other expenses saved from this project, as well as reduced equipment wear to determine if similar projects could help reduce costs in other communities.

Similar projects were conducted in Newhalen and New Stuyahok in 2014 by installing isolation valves to better locate and isolate leaks. In 2015, ARUC anticipates additional infrastructure projects in Upper Kalskag and Russian Mission.

In 2014, Mike Nabers and Elmer Rookok furthered the stability of our systems by implementing an innovative erosion control strategy in Ambler. ARUC worked with local operators and installed 200 feet of retaining wall that protects a sensitive portion of the water main threatened by erosion. Erosion along the shoreline is primarily from breakup of the Kobuk River in the spring as well as run off following storms. More than 40 feet of riverbank has been lost in the last 30 years due to erosion. ARUC's solution will protect the water main, in addition to preventing further bank loss from erosion.

The Ambler water main erosion control project, Russian Mission lift station and service line valve upgrade project, Newhalen lift station/lagoon upgrade project, and the Upper Kalskag sewer line upgrade projects were funded as a direct result of ARUC membership.

Innovation: ARUC field crews have been busy installing water and sewer service lines using Indian Health Service (IHS) Scattered Sites grant funds. ARUC is at the forefront of implementing many state-of-the-art methods for delivering sanitation services in Alaska. ARUC Engineering Manager Max Goggin-Kehm pioneered a radically new way of connecting services to individual homes.

These innovations, coupled with our ability to react quickly, have made ARUC the go-to source for residential home connections in our member communities.

Using lessons learned from the field, he has improved the connection that is now the ARUC standard for service connections. The design has spread from a few isolated test cases to many of our communities, with more scheduled in the coming year. These innovations, coupled with our ability to react quickly, have made ARUC the go-to source for residential home connections in our member communities. Although this capacity was only recently developed within ARUC, it is proving to be successful at getting services to our customers quickly.



Scammon Bay operators Stanley Charley and ARUC employee Elmer Rookok painting a lift station after major upgrades



Completed lift station in Scammon Bay



Savoonga Water Plant Operators Scott Toolie, Derek Seppilu, Scott Kingeekuk working on new service line connection

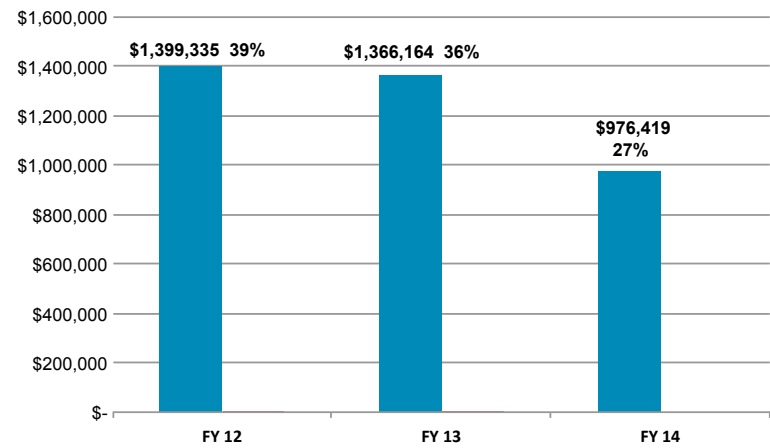
Improved energy and operational efficiency

In FY12, energy made up 39 percent of ARUC village water/ sewer expenses; in FY13, energy comprised 36 percent of expenses; and in FY14, energy expenses dropped to 27 percent because of improvements in energy and operational efficiency. The average ARUC water/sewer system is between 10 and 15 years old. As water/sewer systems get older, the cost of parts and repairs increase.

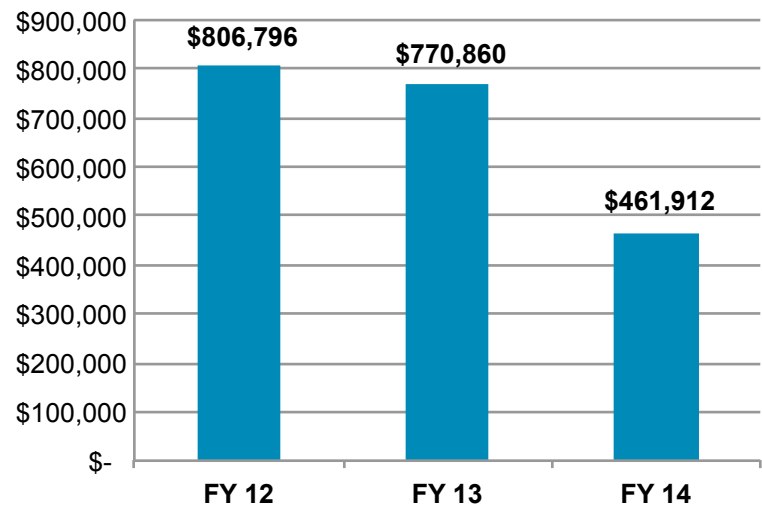
Question: How do we keep costs from rising for village residents who are already struggling with high water/sewer bills?

Answer: By reducing the cost of energy, improving energy and increasing operational efficiency.

ARUC Energy Expenses



Cost of Fuel Purchased by Fiscal Year



2014 Energy Projects

Deering ARUC Startup

State capital investment - \$265,000

Startup funds were used for repairs, an energy audit, and remote monitoring to prevent emergencies and ensure energy efficiency. In addition, the funding provided for local water operators to install new pumps and controls on the recovered heat system; clean and adjust boilers for maximum efficiency; clean and install larger vents for washeteria dryers; install LED lights; and complete other efficiency improvements.

These efforts saved the washeteria and water plant a combined \$16,715 in fuel costs in the first three months of 2013. This energy work will protect the Deering water and sewer service and washeteria rates from experiencing huge increases in the future. In fact, the City of Deering had fuel left over at the end of winter, an uncommon event in rural Alaska.

Annual operational savings for Deering: \$39,000

Chevak Glycol Rehabilitation Project

State capital investment - \$470,000

Funds were used to repair the Chevak vacuum sewer glycol system and make other improvements to decrease water and sewer energy costs. Work was completed with local water operators to replace obsolete or inefficient pumps, controls, boilers, glycol systems and associated plumbing. This work eliminated problems that cost the community more than \$130,000 per year due to sewer system freeze-ups, excess energy costs, thawing costs and lack of sewer service to homes. ARUC used the state funding to attract another \$40,000 in U.S. Environmental Protection Agency (EPA) funds to repair a sewer line to the local health clinic. This sewer line froze daily in the winter, leaving the clinic without sewer service and creating high costs for thawing.

Savings from this project is projected to reduce Chevak residents' water/sewer rates from \$165 per month to \$135 per month in 2015. Further rate decreases are expected in coming years.



ARUC Operations Engineer Michael Nabers
with Chevak children

Selawik Glycol Rehabilitation Project

State capital investment - \$670,000

Funds used to repair the Selawik vacuum sewer glycol system and other improvements to decrease water and sewer energy costs. Work was completed in 2014 in partnership with local water operators to replace obsolete or inefficient pumps, controls, boilers, glycol systems, and associated plumbing.

This work resulted in savings of over \$217,000 per year because of reduced sewer system freeze-ups, lower energy costs, less thawing costs, and more weeks of sewer service to homes, which keeps revenue higher.

ARUC leveraged state funding to attract another \$702,427 in U.S. Department of Energy funding and \$50,000 in EPA funding to complete additional energy efficiency work, including improving the recovered heat system and installing more efficient boilers.

The Selawik project resulted in a 32 percent decrease in local water operating costs. This is essential for the Selawik water system to be sustainable. Rates are \$250 per month, which is not enough to pay all water system expenses. Since completion of the project, the community has begun to pay down operating debts from past years. After this debt is paid off, local residents can begin to see lower water rates.

When Selawik joined ARUC, it owed more than \$250,000 in electric bills and was facing an electricity shutoff by the Alaska Village Electric Cooperative (AVEC). Since joining ARUC, the city was able to pay off the electric bill. ARUC was also heavily involved in thawing and repairing the Selawik water and sewer system in partnership with the community and the Northwest Arctic Borough in 2012.



Other ARUC energy efficiency projects

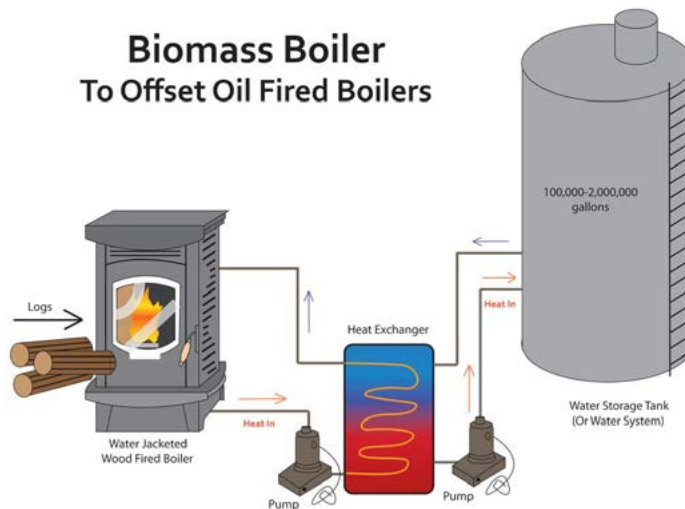


Savoonga Recovered Heat Project

Completed in early 2015 and will save 8,800 gallons of fuel and \$30,000 per year.

Kobuk Biomass Project

Currently under construction and projected to save 4,200 gallons of fuel annually and financial savings of about \$10,000. Kobuk, NWAB, NANA Regional Corporation, Inc., and ANTHC have collaborated to develop a timber harvesting plan for this project. The borough has completed installation of solar panels for the water plant to reduce the cost of water/sewer in Kobuk.





Savoonga Vacuum Sewer Pumps

Data shows oil-less pumps can generate a savings of over \$20,000 annually versus the rotary-vane pumps that are the vacuum sewer standard in Alaska.



Ambler Solar Panels

8.2 kW polar panels were installed for the water plant. Annual local electricity savings are approximately \$1,500 with estimated Alaska's Power Cost Equalization (PCE) program savings of \$5,000. The solar panels produce about \$6,500 of electricity per year for the water plant to reduce the cost of water and sewer in Ambler.

Vacuum sewer systems – Lessons learned

Beyond providing water and sewer services to our 28 communities, ARUC members benefit from shared experiences and lessons learned from multiple operations. One of the areas that ARUC gained some insight is with vacuum sewer systems.

ARUC members benefit from shared experiences and lessons learned from multiple operations.

Vacuum sewer systems are usually used in tundra communities that have permafrost and shifting soils that do not allow gravity sewer systems to be effective. The vacuum sewer system acts like a giant wet/dry vacuum that sucks sewage to a central tank, even in shifting ground. Communities with vacuum sewer systems have the highest energy usage of any type of water/sewer system, as seen from ANTHC energy audits.

The high electrical costs of the vacuum sewer systems (which are paid nearly evenly by the Alaska PCE program and the community) prompted ARUC to make electrical efficiency a high priority.

ARUC communities with vacuum sewer systems include Chevak, Deering, Kotlik, Noorvik, Savoonga, Selawik and Saint Michael.

Vacuum sewer pumps: Most communities have two to four 12 horsepower (hp) vacuum pumps, Emmonak has two 25 hp pumps. These pumps use enormous amounts of electricity. Until recently, all of these pumps were rotary vane pumps. Rotary vane pumps are expensive, with installed prices of about \$20,000 and \$40,000 each for the 12 hp and 25 hp pumps, respectively. They are fairly energy efficient in new condition but have a few vulnerabilities.

The solution: A new style of vacuum sewer pump known as an ‘oil-less’ pump became available in 2012. This pump uses two heavy-duty rotating steel claws to generate vacuum. This eliminates the need for eight exhaust oil filters and five gallons of oil, and is not harmed by sewage getting sucked into the pump. Oil changes have been simplified to changing an automobile style oil filter and one quart of oil every 20,000 hours, at a cost of only \$20.

Contrast that to five gallons of oil, nine filters and \$1,000 every 500 hours with the rotary vane pump. This is a savings of approximately \$4,000 annually, per pump in oil change costs alone.

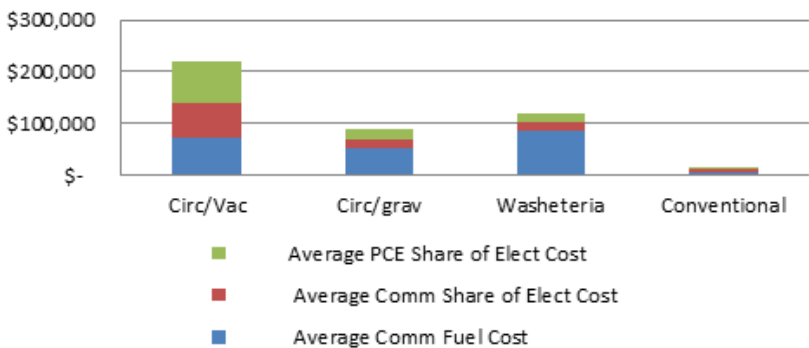
ARUC began installing oil-less pumps in Saint Michael in 2013. After seeing

positive results, they were installed in Chevak after a fire burned one of the rotary vane pumps. Electrical data was tracked and showed the Chevak vacuum pump reduced local electrical costs by \$6,711 in 2014. This saved the Alaska PCE program \$11,064 over the same year.

The total annual savings in Chevak by replacing a rotary vane pump with an oil-less vacuum sewer pump:

Oil change costs:	\$4,000
Local electricity savings:	\$6,711
State PCE program savings:	\$11,064
Total savings annually	\$21,775

Reported Average Annual Cost of Water System Operation and PCE Share of Cost



Remote monitoring in rural Alaska water systems

Remote monitoring of water/sewer systems are being installed in some rural Alaska systems to increase energy efficiency and reduce costly emergencies. These monitoring systems are able to pass along water system data to water managers, Remote Maintenance Workers (RMW) and utility engineers. Potential problems can be identified, corrected and emergencies can be prevented before they become larger and more costly to repair.

Successful use of remote monitoring:

Chevak Remote monitoring installed in 2013 quickly identified a non-functioning pressure transducer that led to a well pump turning off and on every few minutes. This was energy inefficient and could dramatically shorten the life of pumps and lead to higher repair bills. ANTHC was able to repair the problem economically reducing the cost of electricity and future pump repairs after receiving the monitoring data.



Transducer in Chevak, AK

Kiana One week after installation of remote monitoring, the system identified an issue with lift station pumps. These lift stations have contributed to the sewer force main freeze-up in the past. The monitoring system will allow ARUC to track pump cycle times and downtime to minimize the chance of future freeze-ups.

Selawik In 2012, Selawik experienced a water pump freeze-up that interrupted water service to each residence in the community. During the incident, the raw water pump stopped working and the problem was not recognized until the water storage tank was nearly empty. Eventually, the system ran out of water and froze before the water pump could be repaired. Restoring service to all homes cost \$300,000.



Flow rate meter computer in Selawik, AK



CloudGate router and Ethernet Gateway which act as the hub for the monitoring equipment in Selawik, AK

This year, a similar situation occurred again, but an ANTHC-installed remote monitoring system helped the community divert a disaster. During the incident, ARUC program management staff in Kotzebue used remote monitoring to see the flow rate and water tank levels in Selawik. They then obtained help from a nearby community before the system failed.

“Being able to track water flow and tank levels let us know the severity of the situation,” said John Nichols, ANTHC Utility Operations Manager. “Remote monitoring was the difference between the \$300,000 freeze-up two years ago and a few thousand dollars in labor and repairs this year.”

ANTHC is scheduled to receive an additional \$145,000 in funding from the EPA to install remote monitoring systems in additional communities in Alaska. ARUC is working with communities to begin the planning phase of each system.

ARUC training and technical assistance

Historically, the lack of training and technical assistance was the main factor in keeping water and sewer systems from achieving higher levels of sustainability and dependability. Training and technical assistance are key components of the ARUC program.

Training and technical assistance help achieve higher levels of system sustainability and dependability.

To combat this, ARUC Utility Operations Specialists and Management Specialists provide day-to-day training and technical assistance for water plant operators. In FY14, 47 operators were trained on water treatment plant, vacuum sewer, sewer grinder pump and lift station operation. The team took 15 trips during to communities across Alaska to build operator skills and maintain necessary certification levels.

FY14 trainings included:

Anchorage

- Basics of Electricity (April)
- Electrical Controls (May)

Bethel

- Airvac Vacuum Sewer training (December)
- Intro to Small Water Systems, Level 1 (April and November)
- Water Treatment, Level 2 (April)

Fairbanks

- Intro to Small Water Systems, Level 1 (November)

Kotzebue

- Airvac Vacuum Sewer training (February and July)

Seward

- Water Treatment and Distribution, and Energy and Heating Systems (May)



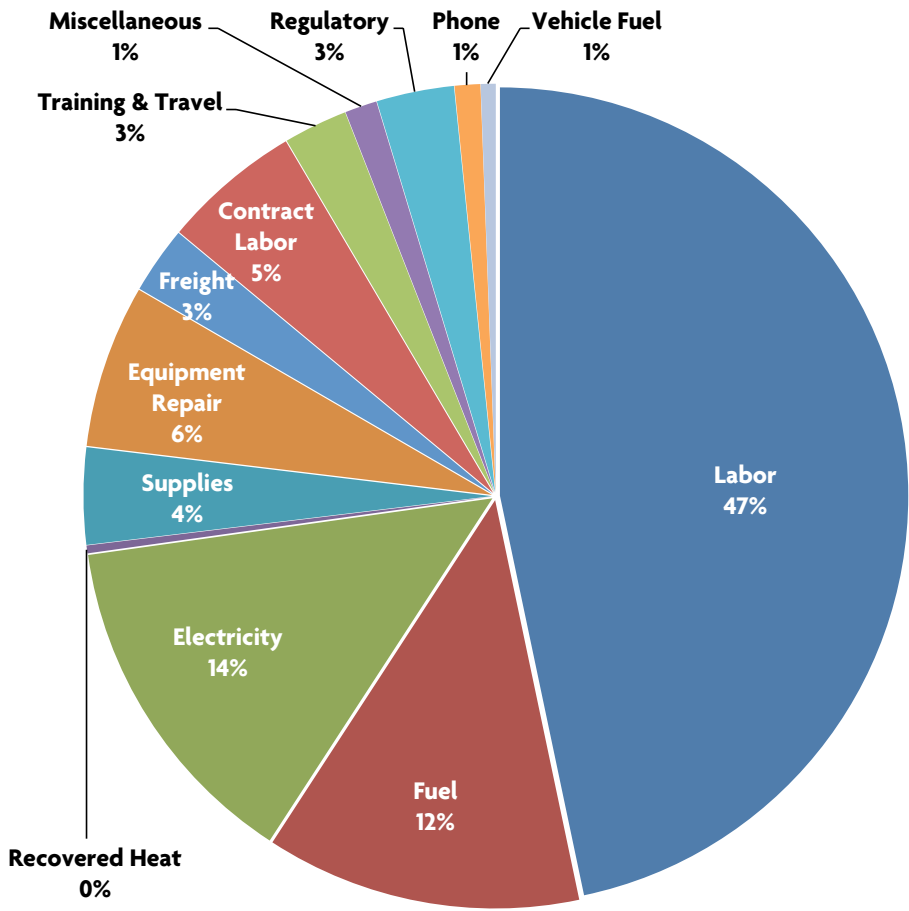
ARUC and community operators receive AIRVAC training in Kotzebue in 2014.

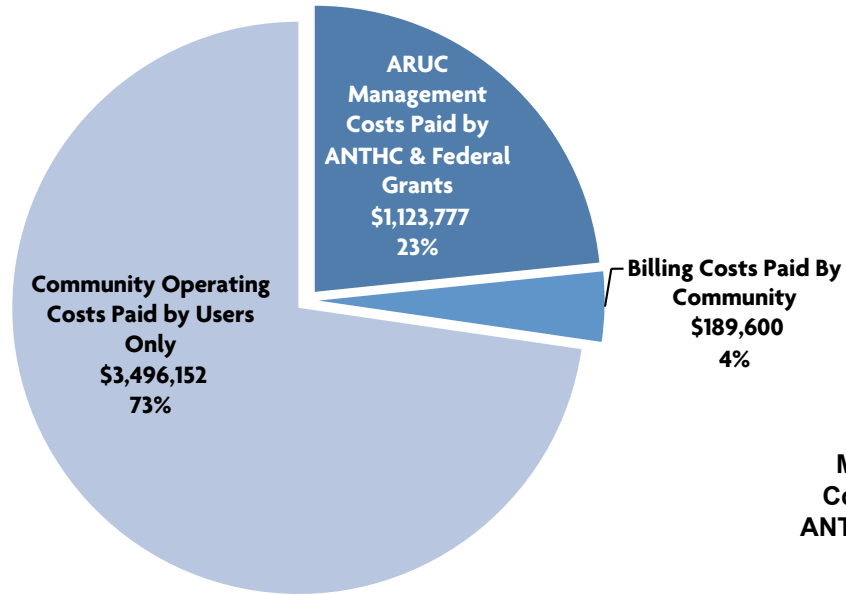
ARUC Financial Information

FY14 was a steady financial year for ARUC. Community revenue was about \$637,000 higher than expenses, meaning ARUC communities have more money in reserves for emergencies and bulk fuel purchases. Compared to FY13, community revenue was about \$395,000 more than expenses. The previous two years were a change from FY10 and FY12 when ARUC experienced larger losses due to rapid expansion of membership and emergency freeze-ups requiring additional resources. However, some ARUC communities do not have enough money in reserves for emergencies and bulk fuel purchases. ARUC will continue to improve financial management so all ARUC communities have money in reserves for replacement parts and repairs.

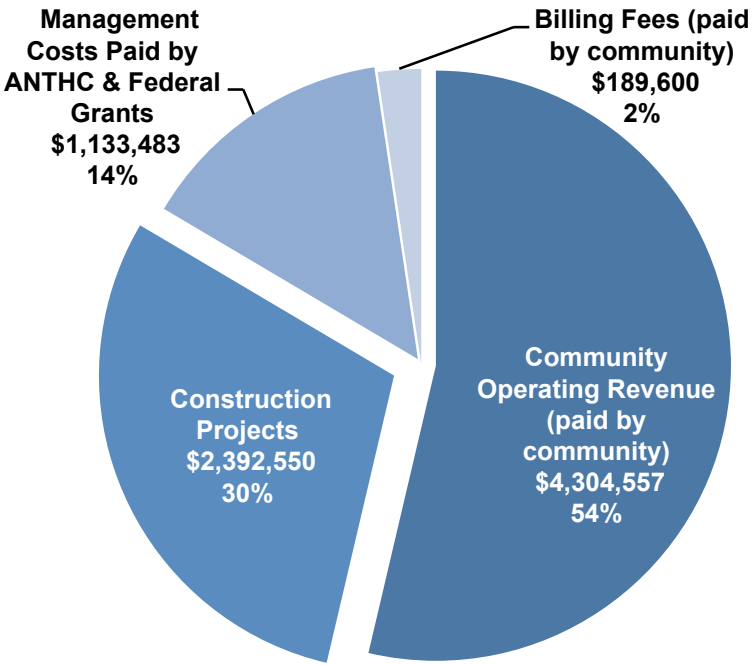
Fiscal Year 2014 Revenue	
User Fees	\$4,094,313
Community Subsidies	\$210,244
Subtotal Revenue	\$4,304,557

Fiscal Year 2014 Expenditures	
Labor	\$1,727,366
Fuel	\$461,912
Electricity	\$503,028
Recovered Heat	\$11,479
Supplies	\$141,416
Equipment Repair	\$238,919
Freight	\$98,385
Contract Labor	\$203,001
Training & Travel	\$93,711
Miscellaneous	\$46,978
Regulatory	\$113,461
Phone	\$37,581
Vehicle Fuel	\$21,917
Subtotal Expenses	\$3,699,154





ARUC FY14 Operating Costs



ARUC FY14 Operating Revenue

Assisted Billing Program Financial Data - FY14

Fiscal Year 2014 Revenue - Assisted Billing

User Fees \$1,281,134

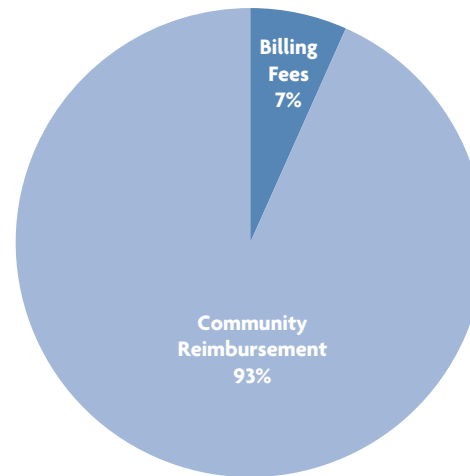
Subtotal Revenue \$1,281,134

Fiscal Year 2014 Expenditures

Billing Fees \$86,524

Community Reimbursement \$1,207,758

Subtotal Expenses \$1,294,282



FY14 Assisted Billing Program Expenses

Combined ARUC and Assisted Billing Program Financial Data - FY14

Fiscal Year 2014 ARUC and Assisted Billing Financial Data

ARUC \$4,304,557

Assisted Billing \$1,281,134

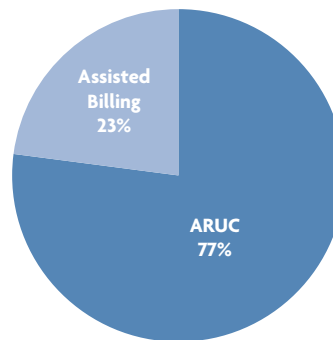
Total Revenue \$5,585,691

Fiscal Year 2014 Expenditures

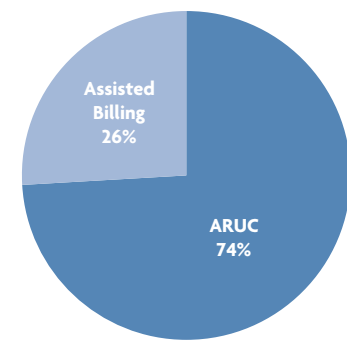
ARUC \$3,699,154

Assisted Billing \$1,294,282

Total Revenue \$4,993,436

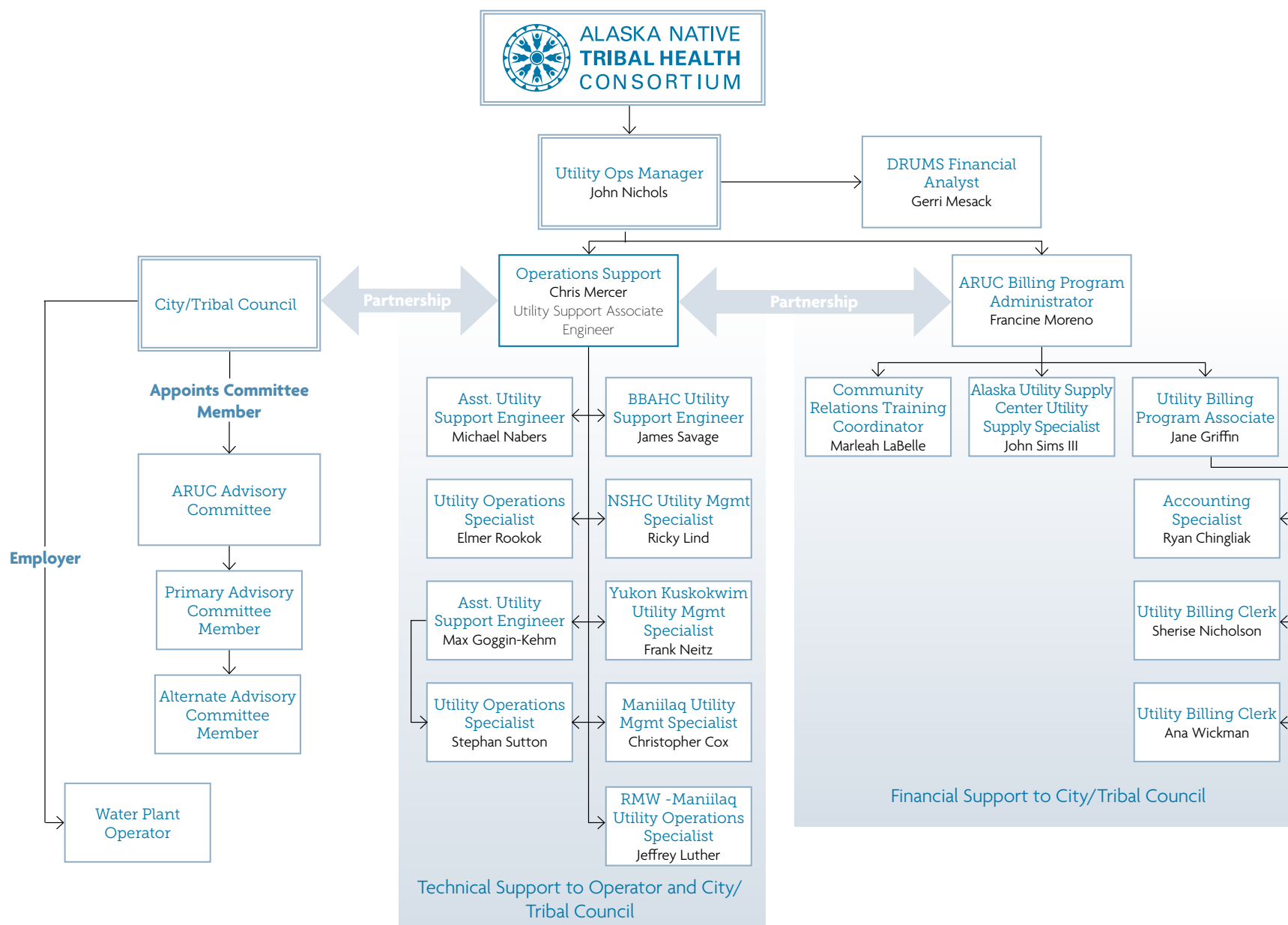


FY14 ARUC and Assisted Billing Program Revenue



FY14 ARUC and Assisted Billing Program Expenses

ARUC FY14 Organization Chart



ARUC Staff



Ryan Chingliak

Ryan is the Accounting Specialist for ARUC. He assists with billing, reporting and financial aspects of the program. Originally from Akiachak, Ryan is currently working towards a degree in Accounting at the University of Alaska Anchorage.



Chris Cox

Chris is the northwest Alaska ARUC Manager. He is based in Kotzebue with five years of management experience. Chris also oversees the RMW program based out of the Maniilaq region.



Max Goggin-Kehm

Max is a Utility Support Engineer for ARUC. Max developed an affinity for rural water and sanitation work while volunteering in Honduras for the U.S. Peace Corps. He brings the same energy to advancing sanitation in rural Alaska.



Jane Griffin

Jane is a Program Associate for ARUC. She recently joined ARUC to manage billing staff and holds a BS degree in Human Services and Management with over 27 years of experience in business administration. Jane's family is from Goodnews Bay.



Marleah LaBelle

Marleah is the Community Relations Manager for ARUC and brings nearly 10 years of public relations and communications experience. She is a tribal member of the Native Village of Port Graham and holds a in business administration from Alaska Pacific University.



Rick Lind

Rick is a Utilities Management Specialist for ARUC. Originally from Chignik Lake, he has 17 years' experience in utility mechanics and 12 years' of experience in facilities management including working with Bristol Bay Area Health Corporation.



Jeff Luther

Jeff is the Utility Ops Specialist working as an RMW in the Maniilaq area since Aug. 2013. Jeff served as the Noatak WPO for seven years earning six W/S certificates and also attended AVTEC and AIRVAC certifications.



Chris Mercer

Chris is an Operations Manager for ARUC. He is a licensed engineer who has worked throughout Alaska's remote water systems for the past six years. He is based in Anchorage and is dedicated to providing sustainable solutions to operate and maintain systems in rural Alaska.



Gerri Mesack

Gerri is the Financial Analyst for the ARUC program with over 20 years of experience in program and financial management. She has a BA from the University of Oregon, an MA in rural development from University of Alaska Fairbanks and is a member of the Tlingit and Indian Tribes of Alaska.



Francine Moreno

Francine is the Program Administrator for ARUC. Formerly responsible for managing the billing staff, she now manages the business end of the ARUC program and attends the University of Alaska Anchorage seeking a Business degree. Francine's family is from Alakanuk, Alaska, and San Antonio, Texas.



Michael Nabers

Michael is the Operations Engineer for ARUC providing support for community operators, assisting with technical expertise and training. With over 12 years of experience and construction and project, he holds a BS degree in Civil Engineering and is a shareholder of ASRC and Olgoonik Village Corporation.



Frank Neitz

Frank is the Utilities Management Specialist for ARUC. He manages communities out of Bethel. Frank has worked for ANTHC since 2009. In addition to his duties with ARUC, Frank has been an airline pilot for the past 20 years.



Sherise Nicholson

Sherise is a Utility Billing Clerk for ARUC. Sherise assists customers in rural Alaska with payments, reconciliations, refunds and other billing inquiries. Sherise's family is from the Dillingham area.



Elmer Rookok

Elmer is a Utility Ops Specialist for ARUC. He assists water plant operators in maintaining, upgrading and operating water treatment facilities and services. He has over four years' experience in a water treatment plant. Elmer is from Savoonga and he was previously the water plant operator.



James Savage

James is a Utility Support Associate Engineer for ARUC. Based in Dillingham, James manages the water and wastewater utilities for the Bristol Bay Area communities. He has over 20 years of experience in construction, management and utilities in rural Alaska.



Stephen Sutton

Stephen is a Utility Ops Specialist for ARUC providing technical assistance and support services. He responds to facility emergencies and requests for assistance. Stephen has a BS in Construction Management in addition to working towards a BS in Mechanical Engineering.



Ana Wickman

Ana is a Utility Billing Clerk for ARUC. She assists customers in rural Alaska with billing inquiries. Her family is originally from Montana, and she is a Blackfoot Indian. Ana is a graduate of South Anchorage High School.

Profiles of ARUC Communities

ARUC Community	Population	Median Household Income	# of Service Connections	Water Service Type	Sewer Service Type
Ambler	258	\$43,333.00	52	Piped, circulating water, buried PE arctic	Piped, gravity, buried PE arctic
Chevak	938	\$37,500.00	164	Piped, circulating water, surface PE arctic	Piped, vacuum, surface PE arctic
Deering	78	\$138,542.00	30	Haul system	Piped, vacuum, buried PE arctic
Chignik Lagoon	73	\$66,667.00	16	Piped, circulating water, buried	Piped, gravity, some septic, buried
Chignik Lake	122	\$37,250.00	43	Piped, circulating water, buried PE arctic	Piped, gravity, buried DIP
Golovin	156	\$32,188.00	60	Piped, circulating water + flush & haul	Piped, gravity
Goodnews Bay	243	\$22,917.00	64	Piped water, buried PE arctic	Piped, gravity, buried PE arctic
Holy Cross	178	\$35,833.00	54	Piped, circulating water, buried PE arctic	Piped, gravity, buried PE arctic
Kiana	361	\$43,750.00	80	Piped, circulating water, buried PE arctic	Piped, gravity, buried PE arctic
Kobuk	151	\$30,313.00	35	Piped, circulating water, buried PE arctic	Piped, gravity, buried PE arctic
Kotlik	577	\$35,417.00	121	Piped, circulating water, surface PE arctic	Piped, vacuum, surface PE arctic
Lower Kalskag	282	\$45,179.00	53	Piped, circulating water, buried PVC arctic	Piped, gravity, buried PVC arctic
New Stuyahok	510	\$38,750.00	88	Piped, circulating water, buried PVC arctic	Piped, gravity, buried PVC arctic
Newhalen	190	\$58,125.00	36	Piped, circulating water, buried PVC arctic	Piped, gravity, buried
Noorvik	668	\$52,250.00	118	Piped, circulating water, surface PE arctic	Piped, vacuum, surface PE arctic (some gravity)
Quinhagak	109	\$50,000.00	29	Piped, circulating water, surface PE arctic	Piped, low pressure sewer surface PE arctic
Russian Mission	669	\$35,208.00	103	Piped, circulating water, buried PE & PVC arctic	Piped, gravity, buried PE & PVC arctic
Pitka's Point	312	\$43,125.00	71	Piped, circulating water, buried PE arctic	Piped, gravity, buried PE arctic
Saint Michael	401	\$32,188.00	80	Piped, circulating water, surface PE arctic	Piped, vacuum, surface PE arctic
Savoonga	474	\$36,000.00	70	Piped, circulating water, surface PE arctic	Piped, vacuum, surface PE arctic
Scammon Bay	671	\$30,313.00	136	Piped circulating water, buried PVC arctic	Piped gravity & L.S Low Pressure buried
Selawik	829	\$38,672.00	133	Piped, circulating water, surface PE arctic	Piped, vacuum, surface PE arctic
Shungnak	262	\$50,000.00	73	Piped, circulating water	Piped, gravity
Sleetmute	86	\$28,438.00	17	Piped, circulating water, buried PE arctic	Private septic
South Naknek	79	\$65,250.00	34	Piped water, buried PE arctic	Piped, gravity, buried PE arctic
Toksook Bay	590	\$54,464.00	91	Piped, circulating water, buried PE arctic	Piped, gravity, buried PE arctic
Tyonek	171	\$38,125.00	65	Piped water, buried PE & cast iron	Piped, gravity, buried PE & cast iron
Upper Kalskag	210	\$41,563.00	30	Private wells	Piped, gravity, buried PE arctic
ARUC Averages	345	\$45,048.57			

Contact ARUC:

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www.anthc.org/aruc

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