

HOUSE FINANCE COMMITTEE
April 16, 2019
9:00 a.m.

9:00:04 AM

CALL TO ORDER

Co-Chair Wilson called the House Finance Committee meeting to order at 9:00 a.m.

MEMBERS PRESENT

Representative Neal Foster, Co-Chair
Representative Tammie Wilson, Co-Chair
Representative Jennifer Johnston, Vice-Chair
Representative Dan Ortiz, Vice-Chair
Representative Ben Carpenter
Representative Andy Josephson
Representative Gary Knopp
Representative Bart LeBon
Representative Kelly Merrick
Representative Colleen Sullivan-Leonard
Representative Cathy Tilton

MEMBERS ABSENT

None

ALSO PRESENT

Ruth Kostik, Acting Administrative Services Director,
Department of Environmental Conservation, Office of
Management and Budget

PRESENT VIA TELECONFERENCE

Marty Brewer, Director, Village Safe Water Program,
Department of Environmental Conservation

SUMMARY

HB 38 APPROP: CAPITAL BUDGET

HB 38 was HEARD and HELD in committee for further
consideration.

CAPITAL PROJECTS REVIEW PRESENTATION: VILLAGE SAFE WATER

Co-Chair Wilson reviewed the meeting agenda.

#HB38

HOUSE BILL NO. 38

"An Act making appropriations, including capital appropriations, supplemental appropriations, reappropriations, and other appropriations; making appropriations to capitalize funds; and providing for an effective date."

9:00:39 AM

^CAPITAL PROJECTS REVIEW PRESENTATION: VILLAGE SAFE WATER

9:00:41 AM

RUTH KOSTIK, ACTING ADMINISTRATIVE SERVICES DIRECTOR, DEPARTMENT OF ENVIRONMENTAL CONSERVATION, OFFICE OF MANAGEMENT AND BUDGET, provided a PowerPoint presentation titled "Village Safe Water Funding Overview, Department of Environmental Conservation, Presentation to the House Finance Committee," dated April 16, 2019 (copy on file). She began on slide 2 and detailed that the Village Safe Water (VSW) Program under the Department of Environmental Conservation (DEC) funded water and wastewater infrastructure projects in rural Alaska. The program was divided into two allocations: 1) first time service and 2) expansion, upgrade, and replacement of existing service. She communicated that the projects were not allocated by community or project - the multiyear priority list allowed the department to ensure funding was allocated to projects that were ready to go and did not get stuck in projects that may get stalled out along the way.

Ms. Kostik reported that at any given time the multiyear priority list included roughly three years' worth of project funding need. The funding shown on slide 2 reflected 75 percent federal and 25 percent General Fund (GF) and statutory designated program receipts.

Co-Chair Wilson asked where the designated receipts came from. She wondered who paid for the program.

Ms. Kostik answered that often times DEC and the program brought heavy equipment into villages. For example, when DEC brought an excavator into a village, the community may end up buying the machine. She elaborated that the scenario was more cost effective for the community because they did not have to pay to ship the machine. Under the scenario, the money was considered program income and was deposited back into the program for other project costs.

[9:02:39 AM](#)

Ms. Kostik turned to a bar chart on slide 3 and reviewed the funding for rural water and sewer improvements from FY 15 to FY 19. The green portion of the bar reflected the GF match provided by the state, the yellow portion showed funding from the Environmental Protection Agency (EPA) infrastructure grants (IG), and the purple segment reflected the United States Department of Agriculture (USDA) rural development (RD) grants. She noted that the EPA and USDA funds were matched with state funds. The blue portion of the bar showed funding from the Indian Health Service (IHS) and the brown portion was EPA tribal set-aside funds - neither required state matching funds.

Co-Chair Wilson asked if there was a match from communities.

Ms. Kostik answered in the negative. By statute, the program was not allowed to require a community match. She continued to review slide 3. She highlighted that EPA funding had more than doubled from FY 16 to FY 17 due to the hard work of the state's congressional delegation. She reported the expectation for an increase of \$5 million in FY 20.

[9:04:02 AM](#)

Ms. Kostik turned to slide 4 and reviewed the primary sources of Alaska sanitation rural facility improvement funding. The slide showed a three-year annual average of federal fiscal years 2016 to 2018. She shared that DEC partnered with the Alaska Native Tribal Health Consortium (ANTHC) on the projects. She detailed that VSW and ANTHC staff managed the construction projects for communities. She noted that the communities tended to not have the capacity to manage large scale projects. The slide included the various pots of money flowing into the program through

VSW and ANTHC. The funding on the left in yellow represented state match, USDA-RD, and EPA-IG funds. The blue and purple shown in the middle reflected IHS and EPA tribal set-aside funding - the state did not provide match funding for these categories; the funding was eligible for Native villages only. Funding on the right of the slide included additional funding ANTHC pursued including Department of Energy and other funds for Native villages.

Representative Josephson asked for clarification on what constituted a non-Native village. He asked if the community of Pelican was an example.

Ms. Kostik deferred the question to a colleague.

Representative Josephson highlighted the IHS fund source shown in purple (on slide 4) that went to Native villages only. He asked for the distinction between a non-Native and Native village.

MARTY BREWER, DIRECTOR, VILLAGE SAFE WATER PROGRAM, DEPARTMENT OF ENVIRONMENTAL CONSERVATION (via teleconference), replied that ANTHC defined Native communities as those with a Native population over 55 percent.

Co-Chair Wilson asked whether there were administrative costs (e.g. 10 to 20 percent) associated with the VSW program.

Ms. Kostik responded that administrative costs for the program were referred to as EMT (engineering, management, and travel costs); a certain percentage of every grant was allocated for EMT costs to allow VSW or ANTHC staff to manage the projects.

Co-Chair Wilson asked if there was a range in the cost.

[9:07:16 AM](#)

Ms. Brewer replied there was an 8 percent [EMT] cap for RD-funded projects.

Co-Chair Wilson asked if the cap applied to all grants.

Ms. Brewer answered that the cap only applied to RD grants.

Co-Chair Wilson asked if there was an EMT cost range for the other grants.

Ms. Brewer replied that the EMT cost was typically between 8 and 15 percent.

Representative Josephson noted that the administration had taken the position that it should not necessarily fully invest state funds to achieve the largest match available under federal law. However, he did not believe that was the case with the state GF shown in green on slide 3. He observed there was \$1.5 million less and asked if it reflected some diminishment of state contribution.

Ms. Kostik answered that the department took advantage of every federal dollar appropriated for the VSW program. The amounts appropriated by the federal government annually could fluctuate. She noted that the federal government was currently deciding the budget that would fund VSW projects in the coming fiscal year. She elaborated that the program often ended up with "old" money. She explained that other states were not as good as Alaska at spending all of their federal money. She furthered that if the VSW program did not have enough federal rewards in one year to fully utilize its match, it sometimes received prior-year money left over from other states.

[9:09:38 AM](#)

Representative Josephson where the state was in providing water and wastewater for all of the states 230 villages.

Ms. Kostik replied that she would address the question later in the presentation.

Co-Chair Wilson asked if all of the GF money had to be a match to federal dollars.

Ms. Kostik answered that the previous year the legislature had appropriated match funding above and beyond the required amount - the program was doing some work that was funded by GF match only.

Co-Chair Wilson surmised it was not all GF match.

Ms. Kostik agreed. She turned to slide 5 and reported that it cost approximately \$250,000 to \$500,000 per home to

provide first time service via traditional pipe centralized service in villages. She explained that communities remaining unserved were the most challenging. She detailed that houses may be spread farther apart, they did not have a great identified source of water to begin with, and the cost of getting supplies to remote areas was very expensive. She elaborated that most people's homes had buried pipes, whereas, some of the more challenging locations had permafrost and it was not as easy to bury pipes and run them to houses. She furthered that there were other logistical challenges including freezing conditions. She would discuss what DEC was doing to bring the cost down later in her presentation.

[9:11:46 AM](#)

Representative LeBon would not characterize the systems as self-contained, but as community systems.

Ms. Kostik answered in the affirmative. She detailed that the systems were traditional structure with a centralized water point or wastewater collection point with pipes running to individual houses as opposed to a self-contained system that served only one home or small group of homes.

Representative LeBon asked if the program looked at self-contained systems.

Ms. Kostik answered in the affirmative and would further address the question later in the presentation.

Co-Chair Wilson asked how the state justified the idea to communities that had their own individual home systems. She pointed out that there was only a small group of homes in the Fairbanks North Star Borough that had water and sewer - most of the homes had wells and individual septic systems. She asked why it was acceptable to use federal and state money to pay for water in sewer in areas when there was a bulk of residents who were required to put in and maintain systems themselves.

[9:13:06 AM](#)

Ms. Kostik replied that it was more of a policy call. Per statute, VSW-eligible projects went to communities with populations of 1,000 or less. The federal funding was available specifically for those types of communities. She

stated that part of it was it was where the money was. There had been a big push to eliminate honey buckets from villages and the program was the outgrowth of that push.

Co-Chair Wilson agreed with the effort to eliminate honey buckets; however, she believed there were other systems people could put in and may be able to better afford the maintenance compared to what VSW was installing for free. She did not know whether communities were able to maintain the systems.

Ms. Kostik answered that DEC currently had an initiative pertaining to the issue.

Representative Carpenter asked if Ms. Kostik would provide a cost comparison between city-wide or village-wide systems with individual site systems.

Ms. Kostik answered that one of the goals of the Alaska Water Sewer Challenge Project was to design a system that would cost no more than \$125,000 per home. The cost was still expensive but represented a fraction of the cost of a centralized system.

Representative Tilton asked how DEC addressed the maintenance and operations of systems after installation.

Ms. Kostik responded that when VSW funded a project, part of the criteria was ensuring the community could demonstrate it had the capacity to operate and manage the project, which included looking at potential utility rates. The department worked on the frontend to ensure communities had the capacity prior to installing a system that the community would not be able to use.

Ms. Kostik turned to slide 6 and reviewed grant projects that had been funded in FY 18 in addition to projects that had been identified and added to the list. There were currently 173 active VSW projects throughout rural Alaska with the oldest dating back to 2014. The active projects included 117 construction projects, 43 planning projects, and 13 design projects.

[9:16:25 AM](#)

Ms. Kostik moved to slide 7 and addressed the eligibility criteria. She shared that projects were added to the

multiyear priority list and identified for funding through an application process. Applications were submitted annually - the application period was currently underway and ended on May 10. Once the application period closed, a committee made up of individuals from DEC, ANTHC, IHS, EPA, and USDA met and scored applications based on criteria shown on slide 7. She elaborated that a scoring matrix assigned points to the different criteria. She highlighted that the ability for a community to operate and maintain a project was weighted heavily (the component reflected the second largest points available).

Representative Carpenter asked about current construction projects listed on slide 6. He asked if the projects fell under the \$500,000 per home solution or the \$125,000 standalone solution.

Ms. Kostik answered that it was a mix. There were two allocations including first-time service and expansion/upgrade/replacement of existing systems. She explained that many of the listed projects were for critical upgrades to existing systems. The department was not currently adding new first-time service projects to the multiyear priority list due to the high cost.

Representative Carpenter understood from Ms. Kostik's earlier testimony that the program's focus in the past had been on a centralized system and it was currently looking at an alternative with individual systems. He asked if the current project planning was focused on individual systems or centralized systems.

Ms. Kostik answered that DEC was not ready to fund individual decentralized systems for new construction. They were currently in the pilot testing phase. The program was not currently adding any new first-time service projects to the multiyear priority list.

Co-Chair Wilson asked why the state was doing upgrades and replacements if communities were vetted for their ability to maintain the systems after installation. She thought it should have been part of the initial plan.

Ms. Kostik answered that many of the systems were aging and had been built when the state had substantial funds. She explained that perhaps they had not been as careful at the time compared to current day. She relayed that there had

been some critical failures, things that had not been built as well, and some projects may not have met the need of a community or were oversized. She elaborated that the program was had to go back to fix those issues.

Co-Chair Wilson asked if the department was requiring communities to provide a plan showing they would put money into future upgrades.

[9:20:35 AM](#)

Ms. Brewer answered that the program required an assessment of a community's financial and managerial capacity to operate and maintain a system - even if the VSW program was just making improvements. She reported that some of the systems were aging out and were decades old and communities did not have the money to make the major upgrades required.

Co-Chair Wilson stated it was her point. She found it disturbing that in the past the state had installed systems any way it wanted because it had a lot of money. She spoke about the current methods dealing with best practices. She provided a scenario where upgrades were needed but a community could not show its ability to make additional upgrades in 10 to 15 years. She wondered if VSW would do the upgrade and hope for the best 15 years down the road.

Ms. Brewer responded that a business plan was required for each project to assess a community's capacity to operate and maintain the system. Part of the plan required the community to set funding aside for future repairs and updates.

Co-Chair Wilson asked for verification that a community would have to prove it could fund the future work. She wondered if a community did not have the funding, the state would not do the upgrades.

Ms. Brewer answered that a community had to demonstrate it had the capacity to operate and maintain the systems.

Co-Chair Wilson asked if a community had to demonstrate its capacity to make updates in the future.

Ms. Kostik affirmed.

Co-Chair Wilson shared that North Pole had 2,000 residents, but only 500 residents were on the septic water system (those individuals did not qualify). She explained the individuals had to bond for over \$2 million because of DEC rules about where they were releasing sewage. She stressed that the individuals did not qualify for the VSW program, but they had a very small tax base of 500 people who had to maintain the system (it was not possible to charge all residents because they were not all receiving the services). She did not know how the statute originated. She reported that the 500 individuals also had to demonstrate their capacity to make upgrades on their own; they had also received some federal funding.

[9:23:19 AM](#)

Ms. Kostik moved to slide 8 and reported that the past year the legislature funded \$4 million in additional GF above the required federal match. The funds were used for "band aid" projects to address minor health threats through the repair and replacement of existing systems that were not otherwise eligible for federal rewards. The department reviewed the grants quarterly and would make approximately \$1.5 million in FY 19 to fund 20 new projects. She highlighted that the state operated the Alaska Clean Water and Drinking Water State Revolving Loan Funds. Traditionally, the loans had been used to make large loans to municipalities and other qualified organizations for infrastructure work. The funds were funded annually by capitalization grants from the EPA. She detailed that DEC was required to issue a certain amount of subsidy in the term of loan forgiveness annually. The department would begin issuing microloans to VSW-eligible communities up to \$50,000 for system upgrades that were not otherwise eligible. She noted the loans would be highly subsidized. She relayed that communities could take out a loan for larger upgrades that arose.

Co-Chair Wilson asked for an example of what would not qualify.

Ms. Kostik asked if Co-Chair Wilson was referring to federal funding.

Co-Chair Wilson affirmed.

Ms. Kostik provided a scenario where the roof over a water tank was leaking and it would eventually deteriorate the building. She explained that the situation was not at a critical point, but perhaps in five or ten years it would fail if the problem was not addressed at present. Federal funding was not available under the scenario, but a community could use the infrastructure grants or microloan program to replace the roof.

[9:26:02 AM](#)

Representative Carpenter asked if the microloan program came out of the state revolving loan fund.

Ms. Kostik agreed.

Representative Carpenter asked if the subsidy came from general funds.

Ms. Kostik answered in the negative. She explained that it was loan forgiveness - a requirement by EPA for the capitalization funds received annually. There was a certain portion of loans issued by the program annually that VSW was required to subsidize (or basically not write off).

Representative Carpenter asked if the revolving loan fund received an annual appropriation. His understanding of a revolving loan fund with forgiveness was that money would go out and at some point, it would not come back in. He imagined the fund depleted eventually. He asked for the funding source.

Ms. Kostik answered that there were several appropriations related to the revolving loan funds. She detailed there were language appropriations in the capital budget that allowed the program to accept the federal capitalization. The state was required to match the capitalization, which the EPA allowed DEC to do by issuing one-day bonds from the interest earnings on the loan fund. The program also had two capital projects for the subsidies. She explained there was a clean water and drinking water subsidy capital appropriation in the budget, which was from the loan fund. For accounting purposes, the subsidy was like a grant - the program recorded the expenditure of the subsidy in the capital appropriations.

[9:28:30 AM](#)

Representative Carpenter found it hard to call a fund that was not being repaid, a revolving loan fund. He thought it sounded like a grant.

Ms. Kostik answered that the loans were repaid for the most part. There was a percentage of loans that got subsidized. The program's largest customer from the loan fund was the Municipality of Anchorage, which was large enough that it did not receive any subsidy and fully paid back its loans. Most communities received small subsidies. She detailed that the subsidy amount for normal loans was approximately 10 to 20 percent of the loan amount. Most of the loans were repaid and second-cycle money in the loan fund - the money was replenishing itself and received new capitalization funds annually.

Representative Carpenter asked for a list of the outstanding loans to see what was repaid and what was subsidized.

Co-Chair Wilson requested the current balance of the loan fund as well.

Ms. Kostik replied that she would follow up with the information.

Vice-Chair Johnston shared that she was familiar with the revolving loan funds because of her experience with the Municipality of Anchorage. She explained that for years Anchorage was the only place using the funds because most other projects were grants. She detailed that the loans were low interest and the Municipality of Anchorage had a large number of them. She stated that the rate of return was likely sufficient to cover any subsidy.

[9:30:37 AM](#)

Vice-Chair Ortiz asked if there was an annual recapitalization of the revolving loan fund. He asked if there was a regular funding source.

Ms. Kostik answered in the affirmative. She explained there was a federal EPA grant that came in through a language appropriation in the budget to capitalize the fund. She detailed that it was not a regular capital appropriation;

it was an annual language appropriation under fund capitalization.

Co-Chair Wilson clarified that the legislature gave DEC the authority in the capital budget to accept the federal funds.

Vice-Chair Ortiz asked for verification that the recapitalization fund source was federal, not state.

Ms. Kostik agreed.

Co-Chair Wilson remarked it was still the state's money because it paid taxes.

Representative Josephson asked if the Municipality of Anchorage borrowed \$50,000 or less through the microloan program.

Ms. Kostik answered in the negative. She clarified that the microloan program specifically targeted VSW-eligible communities. The Municipality of Anchorage took out loans of \$3 million or more at one time.

Representative Josephson asked for verification the subject was beyond the information on slide 8 of the PowerPoint.

Ms. Kostik agreed.

Co-Chair Wilson asked if any subsidies were done on the loans mentioned by Representative Josephson.

Ms. Kostik answered in the affirmative. She elaborated that there were numerous eligibility requirements for the subsidies related to a community's poverty level, population, and other.

Co-Chair Wilson surmised that although the Municipality of Anchorage may be a low income area within a community, it was not considered because eligibility was based on the entire population and not on an individual's ability to repay the loan.

Ms. Kostik replied it was her understanding that eligibility was based on a municipality as a whole and not on a specific area. She would have to confirm with program staff and follow up.

Vice-Chair Johnston explained that the areas were service areas. She explained that even if an area within a service area had high needs and low income, the general service area paid. For example, Girdwood had a small population and had to completely redo its system. She relayed that the whole Municipality of Anchorage was paying for the project because it was one large service area.

Co-Chair Wilson pointed out the inequality. She remarked that people outside of villages also struggled to pay their bills. She thought it may be necessary to look at existing statute and consider that other areas struggled and may need the grants as well.

[9:34:27 AM](#)

Ms. Kostik moved to slide 9 and relayed that the VSW program did not provide ongoing funding for maintenance and operations of programs. She shared that DEC's operating budget included an operator, training, and certification program that trained water and wastewater system operators who took a test and received certification to run the systems. The program also partnered with regional health corporations to provide remote maintenance workers (15 to 16 throughout the state serving different regions) for technical assistance or in the case of emergency (e.g. when pipes froze in the winter). The program worked closely with partners (regional health corporations, RUBA, and community leaders) to ensure the state was providing assistance to communities to help build their financial and managerial capacity.

Co-Chair Foster looked at the RUBA acronym on slide 9. He wondered if there were efforts to address communities that did not have the capacity to pay for system operations. He realized there were various systems, with pipe being the most expensive. He asked what efforts were made to look at a situation where a community had a low capacity to pay, yet under the RUBA scoring system it received more points for having more capacity to pay for the system. He noted it was a difficult situation where communities had no service or needed an upgrade but were the least likely to get the service.

Ms. Kostik replied that it was her understanding in terms of scoring for the systems, the VSW program did not use

RUBA scoring. The program had been reevaluating its scoring.

[9:37:33 AM](#)

Ms. Brewer augmented that RUBA's primary function was not scoring, but capital improvement. She explained that DEC used RUBA scoring as one component of its overall best practice scoring to evaluate a community's financial and managerial capacity to take on new projects. The RUBA score was only one component in the overall scoring matrix. The scoring matrix also included whether a community had an operator certified at the appropriate level to manage the system in addition to a community's financial capacity.

Co-Chair Foster asked how much weight was put towards the financial capacity of a community to maintain a system.

Ms. Kostik answered that a community's financial capacity was heavily weighted. She noted that it was not only the RUBA scoring component and included all of the various pieces of the managerial and operating capacity.

Co-Chair Foster would continue to work with the program on the issue.

[9:39:46 AM](#)

Vice-Chair Johnston asked what RUBA stood for.

Ms. Kostik replied that RUBA stood for Rural Utility Business Advisor.

Co-Chair Wilson asked who paid for operator training and certification.

Ms. Kostik answered that the operators taking the training paid fees to take certification classes and tests.

Co-Chair Wilson asked if remote maintenance workers were state employees or individuals hired by the communities.

Ms. Kostik replied that it was a mix. Three to four of the remote maintenance workers were state employees and the other 11 were employees of regional health corporations. The department passed through funding for the non-state employees.

9:40:53 AM

Ms. Kostik moved to slide 10 and reported that 86 percent of rural homes had indoor plumbing and sewer. She reported that the figure had grown by 30 percent in the past decade. She highlighted a bar chart showing there were approximately 2,600 unserved homes in rural Alaska, most of which were located in communities targeted for future service.

Representative Josephson commended the department for its progress. He noted that Ms. Kostik had testified there was currently a hiatus on moving into communities that had no service at all. He asked why and assumed it was to cover and complete projects in the gray area status.

Ms. Kostik responded that the hiatus was primarily related to the \$500,000 cost per home. The next slide would show that the overall cost to provide the centralized piped service to the homes was high. The department wanted to get farther down the path of the Water Sewer Challenge Project to look at the decentralized options in a less expensive way rather than continuing to build large, expensive systems.

Representative Josephson could imagine what it looked like for other communities [without service]. He stated that essentially, the unserved communities drew water from some location that was tested from time to time. He believed it was the case for a location without a water system. He asked if his statements were accurate.

Ms. Kostik answered that she would have to check with drinking water program staff. She stated that many communities without in-home service had a washeteria or central watering point, which would be tested and regulated as a public drinking water system.

Representative Josephson addressed wastewater and noted there was typically a dumping site separate from a garbage site. He remarked on concern with bath tissue, fecal coliform and other related issues. He asked if he was accurate.

Ms. Kostik answered there would be a sewage lagoon or other similar dumping point where communities dumped their honey buckets.

[9:44:27 AM](#)

Vice-Chair Ortiz understood that the \$500,000 per household price tag was important to consider. He wondered if holding off and reassessing or working on a superior alternative had ongoing opportunity costs in terms of public health (i.e. higher rates of illness) that should be considered.

Ms. Kostik responded in the affirmative. She detailed that running water in a home promoted better hygiene and cleanliness. She elaborated that running water meant a person was more likely to wash their hands and do laundry and dishes more frequently. The issue was about managing the cost of the system over the health needs.

Co-Chair Wilson commended DEC for working to determine a more affordable option for communities. She reasoned that although it may delay installation for some communities, in the long run, something more cost-effective with easier maintenance was preferable.

Ms. Kostik moved to slide 11 showing a pie chart of rural Alaska sanitation funding need of \$1,420,503,024. The blue portion of the chart reflected communities with a first-time service need based on the cost of a centralized pipe system to unserved homes. The yellow portion reflected areas needing minor updates that were not eligible for federal funding under the current model. The orange portion represented upgrades to address substantial health threats funded by upgrades/replacements funding included in DEC's appropriations.

[9:46:35 AM](#)

Co-Chair Foster looked at slide 10 showing a total of 2,600 unserved homes. He noted that there were 650 homes not targeted for future service. He asked if the \$850 million shown in blue on slide 11 was based on the 2,000 homes getting pipe service.

Ms. Kostik answered in the affirmative; the amount was based on the number of unserved homes.

Co-Chair Foster asked if it was likely all of the [2,000] homes would get pipe service.

Ms. Kostik replied that the plan was for the homes to be served by some form of running water, but it may not be piped service. She detailed that there may be a centralized system that included a water recycling system in homes. The goal going forward was to avoid building new pipe systems for the remainder of the 2,000 unserved homes.

Co-Chair Foster looked at the \$1.4 billion total on slide 11 and asked if it had been held fairly constant or was increasing substantially in the past 5 to 10 years.

Ms. Kostik answered that the number had decreased over the past five years since she had been with the department. She explained that much of the decrease was related to finishing some of the projects that were currently underway - as those came online the number decreased.

Representative Carpenter looked at the \$1.4 billion need on slide 11. He reasoned that the figure could be interpreted as a \$325,000 need if the cost per home decreased. He reasoned that the \$1.4 billion would look like less than \$500,000.

Ms. Kostik answered that if the VSW program moved to a less expensive system, the number would decrease, but not to \$500,000. She relayed that the cost would be closer to \$125,000 per home for first-time service.

Representative Carpenter corrected that he had meant \$500 million.

Ms. Kostik agreed.

Co-Chair Wilson asked if the \$1.4 billion figure on slide 11 was based off of \$500,000 [per home]. She reasoned that if the cost per home decreased to \$125,000 it would substantially lower the \$1.4 billion figure.

Ms. Kostik agreed. The current math was based on a traditional centralized pipe system and not a new approach. The math had not yet been done, but the reduction per home would dramatically decrease the \$1.4 billion.

[9:50:21 AM](#)

Ms. Kostik moved to slide 12 related to the Alaska Water and Sewer Challenge Project. She detailed that the project had started five or six years earlier as a research and development project. She reported that there had been a capital appropriation by the legislature about six years back that kicked the project off. The project had started off with six teams that were given criteria for what the system needed to do, and they had all worked up designs. The department had selected two or three teams that had developed prototypes. One successful system had been selected pertaining to water recycling - it was currently under a testing phase. The hope was to test the system in villages in the coming year. In addition to having a system that met the needs and recycled a certain amount of water every day, it was important to ensure the community had buy-in and would use the system. She explained the system would be installed in some homes to determine how people liked it and if it worked.

Ms. Kostik explained that the system required a minimal amount of water each day and recycled gray water from laundry, dishes, showering, and washing hands. The water would be recycled for use on those types of services. She clarified that the system was not currently meant to recycle the water into drinking water, but perhaps they would reach that point in the future.

Co-Chair Wilson asked why a community would not use a system.

Ms. Kostik answered that the system had not been shown to a community or installed in a home. She explained that a person may be unsure about using recycled water that may look different than drinking water.

Co-Chair Wilson asked what the other option would be for a community. She wondered if the department would still look at another more expensive pipe water option if enough individuals were opposed to a recycled water system.

Ms. Kostik did not believe they had gotten that far as of yet; the system had not yet been tested in homes.

Vice-Chair Johnston asked if DEC would test available space and maintenance in homes and whether a system could modernize a washeteria for a group of homes. She explained

that perhaps the system may not be in individual homes, but it would be less expensive than the cost of piping.

[9:53:47 AM](#)

Ms. Kostik replied in the affirmative. She detailed that a system may not be in a single home but may go to a group of four homes that share one system. She highlighted that DEC wanted to ensure a system could be easily maintained and repaired by homeowners, which was included in the challenge criteria.

Co-Chair Foster referenced Ms. Kostik's statement that the water and sewer challenge project had started six years earlier. He asked how the challenge was funded. He recalled being told several years earlier that the system was in the testing phase. He realized it may take years to obtain all of the data. He wanted to ensure that DEC had the resources to make sure the project was actively pursued. He observed that \$1.4 billion was substantial. He thought it would be better if the number could be decreased. He wanted to ensure the challenge resulted in service to individuals who currently had no service to partial service. He believed improving the health in communities should be done sooner rather than later. He asked if there was a separate funding line item.

Ms. Kostik replied that six years earlier, the VSW program had received a capital appropriation of about \$3 million GF. The program had finished off the funds about one to two years back. In the meantime, the department had worked with federal funding partners to receive additional funds for the project. The department currently had fund sources to continue its work.

Co-Chair Wilson asked if the work would qualify for the same funding that was going to pipe water system. She wondered if the program had to be proven prior to receiving federal funds.

Ms. Kostik deferred the question to her colleague.

Ms. Brewer answered that DEC had to demonstrate the efficacy and safety of a system before federal funding was received. The department was currently entering stage four of the gray water recycling project. The next step was to install the system into a home-based system and use real

gray water with no human exposure. The department would treat and test the gray water to ensure it met treatment standards. The next phase would include human exposure (skin contact for washing hands and other, but no drinking water). The department was getting through the challenges of the liability of exposing human subjects to treated water.

[9:57:43 AM](#)

Co-Chair Wilson asked how long they anticipated the current phase lasting.

Ms. Brewer answered that the initial phase was anticipated to last through FY 20. Based on the success of the initial phase with no human exposure, the department would move to the second phase including human exposure in FY 21.

Co-Chair Wilson asked if some of the communities may be on hold for the next two to three years.

Ms. Brewer answered in the affirmative.

HB 38 was HEARD and HELD in committee for further consideration.

Co-Chair Wilson recessed the meeting until the following morning.

#

[9:58:59 AM](#)

RECESSED UNTIL 9:00 a.m. April 17, 2019

[Note: See separate minutes dated April 17, 2019, 9:00 a.m.]