MINUTES
ENVIRONMENTAL POLICY ADVISORY COMMITTEE
FEBRUARY 6, 2020

A meeting of the Environmental Policy Advisory Committee (EPAC) was convened on Thursday, February 6, 2020, at 5:15 p.m., in the Pueblo County Department of Planning and Development Conference Room, 229 West 12th Street. Chair Lopez called the meeting to order at 5:21 p.m.

Ms. Carmen Howard, Director, Department of Planning and Development attended the meeting. Ms. Howard introduced herself to the Environmental Policy Advisory Committee (EPAC) and the members of EPAC introduced themselves to her.

ROLL CALL

Those members present were:

Sherie Caffey
Nancy Keller
Jenna Seddon
Gail Conners (arrived at 5:26 p.m.)
Ted Lopez
Ryan Tessman

Members absent: Becky Cortese* (*excused).

Guest present: Jamie Valdez, Chair, Sierra Club, representing the Bring Power Home 2020 Campaign and Velma Campbell, Secretary, Sierra Club.

Staff present: Carmen Howard, Director, Pueblo County Planning and Development Department and Monica Grosso, EPAC Recording Secretary.

ELECTION OF OFFICERS

Chair Lopez stated that they needed to hold the election of new officers. The two seats that need to be filled are Chair and Vice Chair.

Chair Lopez called for nominations for the Chair position.

Ms. Keller motioned to nominate Ted Lopez for Chair and Becky Cortese for Vice Chair. Ms. Caffey seconded the motion. Chair Lopez questioned if there were any other nominations for Chair. There were no other nominations. Chair Lopez accepted the nomination.

Chair Lopez asked for a motion to fill the position of Chair for the year 2020 by Ted Lopez by acclimation. Ms. Caffey motioned to fill the position of Chair for the year 2020 as stated. Ms. Conners seconded the motion. The motion carried unanimously.

Chair Lopez stated he was not sure if there was a Vice Chair appointed in 2019. Ms. Keller stated upon reviewing the notes from the February 2019 meeting, Ms. Laura Getts had been appointed as Vice Chair so they would need to replace her.

Chair Lopez called for nominations for Vice Chair. Ms. Conners motioned to nominate Ms. Sherie Caffey for the position of Vice Chair. Mr. Tessman seconded the motion. Chair Lopez asked if there were any other nominations for Vice Chair. There were no other nominations. Ms. Caffey accepted the nomination.

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Chair Lopez asked for a motion to fill the position of Vice Chair for the year 2020 by Ms. Sherie Caffey by acclimation. Ms. Keller motioned to fill the position of Vice Chair for the year 2020 as stated. Ms. Conners seconded the motion. The motion carried unanimously.

APPROVAL OF THE FEBRUARY 6, 2020 EPAC AGENDA

Chair Lopez stated there were two amendments that needed to be made to the evening's agenda. The first amendment was the addition of a guest speaker. Mr. Jamie Valdez would be giving a presentation on behalf of the Bring Power Home 2020 Campaign and it would be given after the Solid Water Subcommittee Report (Item 8).

Chair Lopez stated the second amendment was for Ms. Keller to give an update on the Selenium Project under the Water Quality Subcommittee report (Item 7).

APPROVAL OF MINUTES FROM THE DECEMBER 5, 2019 MEETING

Ms. Conners moved to approve the minutes from the December 5, 2019 meeting as mailed. Ms. Keller seconded the motion. The motion carried unanimously.

CHAIR'S REPORT – TED LOPEZ, CHAIR

Introduction of New Member--Jenna Seddon, Health Promotion Specialist, Pueblo Department of Public Health and Environment (PDPHE). Ms. Seddon had introduced herself before the meeting stating she had just started with the PDPHE and had been with the department for four weeks.

HEALTH PROMOTION SPECIALIST REPORT – JENNA SEDDON

Ms. Seddon stated she did not have a lot to report as she was so new with the department. She was not sure if she would use all of her allotted time and would graciously yield the remainder of her time to the night's guest speaker. She stated she would give the Committee the few updates that she did have.

Ms. Seddon stated that in the next six to seven months her priorities would include completion of Supplemental Environmental Project (SEP) requirements for a supplemental environmental project they were tasked with completing. The task will include the already held Household Hazardous Waste Day collection event that took place last fall and completing three additional single-day collection events before the end of June 2020. The focus was going to be tire, mattress, and electronic waste collection. Currently, they have two of those event dates secured. One will be March 28, 2020, the other will be May 2, 2020, and the third date was still pending. The first event will focus on mattress and tire collection as they have found that is a need. They have also collaborated with Mr. Tessman in the Trash Task Force finding that these items are often illegally dumped. Those were the items that would be their primary focus at the March event. The May 2, 2020 event would be for electronic waste. The location for that event was not yet determined. As soon as she received confirmation on the location and the promotional materials, she would distribute the information to the Committee.

Ms. Seddon stated that the second part of her six-month plan with the department will be the promotion of the Recycle Coach app. She believed Mr. Tessman informed the Committee of the app at the December meeting and thought it was also mentioned at the October meeting from her review of the minutes. Recycle Coach was relatively new. She thought the Health Department purchased it last September and launched it in October 2019. It is a web-based application specifically for what goes

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where; recycling that is searchable on the PDPHE website, pueblohealth.org. There was also a cell phone app that was available on the Google Play and app stores that was downloadable so the public can search for information there as well. The information was regularly updated, and she was in the process of reverifying the "what goes where" information with all of the vendors that were listed. She would be submitting that information to the Recycle Coach database for updating as needed.

Ms. Seddon stated she knew that, traditionally, her position had also reported on Discount Day at the Landfill and she had a meeting set the following week to secure the dates for those events. They were historically the first week of May and the first weekend of October, but those dates have not yet been confirmed. As soon as she received confirmation on those dates, she would make sure the Committee got them. She also knew that there was a commitment for her position to attend the Recycle Conference, the Summit on Recycling that was put on by Recycle Colorado. That was in process as well but not yet confirmed. Chair Lopez stated the conference was usually held in the first half of June. Ms. Seddon replied that was correct. This year it will be held June 14th through the 16th in Denver, but the agenda had not yet been released.

Chair Lopez questioned if when she created flyers or other advertisements, she could send them to Ms. Grosso at the Planning Department so that she could distribute them to the Committee members to have them for their own uses. He liked to make copies and hand them to his customers as they came in. Ms. Seddon replied she was happy to do that. Chair Lopez stated they used to get handouts on quarter pages so there were four hand outs on a single page. Ms. Seddon stated she would do that to conserve paper and thanked him for that feedback.

Ms. Conners questioned if she knew where to take old air conditioners to be recycled. Ms. Seddon replied that was a tricky question. If the air conditioner utilized freon, the freon had to be removed prior to scrapping it by a licensed technician. There is an EPA certification process for that removal and there was no one that she was aware of locally that was certified. She was trying to hunt down that information. Ms. Keller stated that anyone that did exchanges should be certified. She thought any of the refrigeration businesses should be certified, noting there was a refrigeration business near the Rawlings Library. Ms. Seddon stated there were some appliance recyclers in Pueblo and suggested Ms. Conners get in touch with Broadway Appliance on Evans Avenue. They performed service, repair and also scrapped appliances that were brought to them. They may have a technician, but she had not yet met with them to verify their certification or get into any details about that.

Ms. Conners questioned if she knew where to dispose of paint thinners and things of that nature in terms of hazardous materials. Ms. Seddon replied for paint, paint thinner, and byproducts she could contact Southern Colorado Services and Recycling. She stated she had all of their contact information and she would be happy to provide it to Ms. Conners after the meeting. Ms. Conners thanked her for the information. Chair Lopez stated they also accepted electronics. Ms. Seddon replied that was correct, but they were limited in what they could receive and suggested calling them ahead of time to confirm what they can accept.

Chair Lopez questioned if the paper copy of the recycling manual was available online. Ms. Seddon replied that was where the new "what goes where" searchable tool was through Recycle Coach. They did still print hard copies to distribute if requested, but to be environmentally friendly, they were encouraging people to access the information online. She also manned the recycling hotline and would field calls for recycling and directed them to where to go to recycle specific items.
Chair Lopez stated that Roots Recycling no longer accepted drop offs at their site. Between Christmas and New Years Eve they had a lot of trash that was dropped off along with recyclables so now they are only doing curbside pick-up. Their answering machine says this is in effect for the rest of 2020. He

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was not sure if there was a chance that they would open back up for drop off in the future but that was how the message was stated. Curbside pick up can be arranged and the payment was due every quarter.

Chair Lopez stated that he was late for the last Materials Management meeting and did not get the handout from Ms. Cortese that he was supposed to get so that he could present it at this EPAC meeting. He stated he would do his best to present without the information on that handout. In June or July of 2019, there was a presentation to EPAC about a change of focus. They were now promoting reduce, reuse and recycle, emphasizing the reduce aspect. He thought recycle had been used first in that slogan but now it is third because reduce was the most important component of this effort. Ms. Seddon stated Ms. Cortese was going to present a request for a new marketing campaign to encourage reduction, reuse and then recycling, noting Ms. Cortese did not provide handouts at the last Materials Management meeting. Chair Lopez stated that Ms. Cortese needed approval from EPAC to make the presentation to the Pueblo Area Council of Governments (PACOG). He stated, with that in mind, if they should go forward with that presentation at the February PACOG meeting or wait until after the next EPAC meeting in April. He questioned what Ms. Seddon thought. Ms. Seddon replied she was open to whatever the Committee decided but believed Ms. Cortese had already secured a spot on the agenda for the February 27th PACOG meeting. Chair Lopez replied his thoughts were with the protocol. In order to present to PACOG, the Committee needed to give their consensus to accept, object or provide comments on it. He thought in this particular regard since it was something that was coming from EPAC that it should be presented to EPAC first. His suggestion was to table the presentation until the April EPAC meeting so that it could be presented at the April PACOG meeting. Ms. Keller replied that made sense. Chair Lopez replied they would do that.

Chair Lopez suggested tabling the presentation from going forward to PACOG until the April meeting. He would convey that information to Ms. Cortese.

Chair Lopez stated he had heard a story on Colorado Public Radio about reducing plastic. He handed out a printout of the story (Exhibit A). He stated the story mentioned House Bill 20-1163, which would put a Statewide ban on single use plastics that came from restaurants and stores such as bags, straws, stir sticks, and styrofoam containers. It also mentioned House Bill 20-1162, which specifically targeted styrofoam takeout containers from restaurants. Senate Bill 20-055 could potentially impact the volume of plastic recycled in the State. He thought Ms. Cortese had mentioned there was a bill that gave municipalities the authority to restrict single-use plastic. He thought this may have been a prohibition through other statutes. He suggested the Committee members go online to the Colorado Public Radio website to this article and follow the links to the house bills for more detailed information on them.

<u>WATER QUALITY SUBCOMMITTEE REPORT - NANCY KELLER</u>

Ms. Keller stated she would provide a little bit of background for her report. Pueblo has Pierre Shale that underlies a fair amount of the City. The area that is west of Interstate 25 and north of the Arkansas River is the side of town that has the most Pierre Shale underlaying it. Pierre Shale is high in selenium and sulfate. When sewer lines are in areas that have high groundwater that is high in those compounds from being in contact with the shales, those compounds can leach into the pipelines. That puts the City up higher in the amount of those compounds it discharges. Stream standard is 4.6 micrograms per liter, for selenium, which is pretty small. They have known that selenium was an issue for 20 plus years and they have done a lot of studies on it. The Pueblo Wastewater Department had Mr. Tim Gates with CSU-Fort Collins do water quality modeling for them showing the loading of selenium, sulfate as well as other contaminants. They have had GEI Consultants, Inc. do aquatic fish studies and have had hydrology studies done as well. They have done a lot of studies and have

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collected a lot of data, river data, and tributary data trying to determine the sources. They had time to study and determine what the right standards were. Once they had all of that data then they determined the site-specific standards for the Lower Arkansas River Segment 1-A, which is from Fountain Creek down to just before Avondale and that standard is 14.1 micrograms per liter. It is a little higher because of the natural background but still a pretty low number. The biggest impact is on fish and their reproductive cycle. Once it is taken up in the fish tissue then the birds eat the fish. The studies showed no evidence of impacts. The biggest reason for that is because of the sulfate that also comes from the Pierre Shale and ameliorates the toxicity of selenium. That was, at one point, recognized by the EPA. They then pulled that draft selenium criteria document. They said they were going to put it in the implementation guidance to address it through that, process, but that guidance has come out and they have not put it there. Because of that the Pueblo Wastewater Department was left with trying to meet the stream standards even though toxicity is questionable because of the sulfate that is in the area as well.

Ms. Keller stated the Pueblo Wastewater Department moved on, got over their disappointment, and started the discharge of a specific variance process. This process was pretty new to Colorado. The State had done a couple of small variances but none of the individual facilities had done one. There were only a few in the U.S., and most of those were in states that have done a statewide variance such as Montana who did a statewide variance for ammonia. There was also a mercury statewide variance done back East. This was a new process and had not yet been widely done. The Pueblo Wastewater Department did a ton of work and the State Health Department met with them once a month as well as the EPA. The State Engineering and Standards group attended all of the meetings and permitting came into some of the later meetings as they walked through the process together. By the end of the process in June of 2018, the variance was approved by the State and the federal EPA also approved it. This was a huge milestone for the Pueblo Wastewater Department. It was basically unheard of in the U.S. for an individual facility to get a variance approved. In the process they looked at affordability, i.e., what could the citizens of Pueblo afford to pay to remediate selenium. The process is very expensive and would cost around $250 million to implement the processes to remediate the full 12 million gallons a day flow. That was obviously beyond what could be afforded. They went through the economics analysis part of the variance. Typically, the EPA affirmed 2% of the median household income is what is affordable. They took in the different conditions in the area such as 25% of the population being below the federal poverty level, the 30% higher residential electricity rates, and 70% higher industry rates. That information contributed to the decision of what the median household income percentage was that the people could afford to pay to treat for selenium. It was set in the variance and also approved by the EPA that 1.5% of the median household income is what was affordable because of the economic status in Pueblo. That limits how much the Pueblo Wastewater Department could pay to put into the selenium remediation.

Ms. Keller stated the ten-year discharge specific variance required the Pueblo Wastewater Department to report annually in August during the first period. They must send a report to the State and tell them what they have done. The variance was approved in 2018 and in 2020, 2023, and 2026 they will be working on the first part of the plan. Each of these years they will have a hearing that will be in front of the Water Quality Control Commission to determine whether the Pueblo Wastewater Department was meeting expectations. If they need to change course, if they need to go to treatment, or if there were any other changes that needed to be made, they would be made at one of those hearings. In 2028, they will be looking at what to do the next ten years. They are required to spend $10 million in the first five years on trying to stop the infiltration of selenium into the system.

Ms. Conners questioned if this was in the pilot area that they had talked about before. Ms. Keller replied the pilot area was a part of it. This area, she explained, was shown on the handout she

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provided (Exhibit B). There were two maps depicted on the handout. Ms. Keller explained they did two mass samplings. One of their first issues was to figure out where in the City and in their 427 miles of sewer lines, the groundwater was getting in that was high in selenium. The tests could only be performed in wet weather. They sat through 2017 and 2018 trying to get wet weather so they could get some results. They set up a protocol and methods and coolers and bottles and chose 250 manholes in the northwest part of town, which was the highest area of recoded selenium. As soon as they got wet weather, which was in March of 2018, they went out in one day with six crews of people and sampled 250 manholes. That was a major feat. To get all those samples analyzed was another major feat. They then repeated that in May 2018, which was the second episode of wet weather. The top map on the handout depicted the March sampling, and it showed an area that had many red dots in sort of an "L" shape, the upper part of that "L" area is what they call the "I-Project". That was a study area they knew had high groundwater. On the back of the handout it depicted one part of the I-Project showing the manholes that were sampled and the two wells that were tested. The wells were named AGM-7 Well and AMW-2 Well. The AGM-7 Well tested at 7,000 to 10,000 micrograms per liter and the standards are 4.6 micrograms per liter and a site specific standard is 14.1 micrograms per liter, so they were slightly above those standards. The AMW-2 Well tested at around 10,000 micrograms per litter in wet weather and between 6,000 to 8,000 micrograms per litter in dry weather. It takes just a little bit of water seeping into the system to go way above the standard. The Pueblo Wastewater Department had tested as high as 250 milligrams per liter during storm events in 1995 and 1997.

Ms. Keller stated the largest problem is in the area where groundwater is very high. The Pueblo Wastewater Department was trying to line the sewer lines in a way that kept that groundwater out. The pilot study went through phases that started three years ago. They started with monitoring then went through and installed lining of all the lines, then they went through and lined all of the manholes and now they are grouting all of the taps. They are grouting where the taps meet the sewer line and fifteen feet up from that point. Because they are doing these improvements residents are getting nearly new service lines. To eliminate the selenium, they were going the extra fifteen feet. All of this work should be completed within the next month. After it is complete, they will do another year of monitoring to determine their work's impact.

Ms. Conners questioned if it was slip lining that was being installed. Ms. Keller replied they were installing slip lining on the lines and then applying grouting or epoxy on the taps. They are eager to know the results of their efforts, but they will have to wait for another wet period to test again. The weather has made it difficult to see if their efforts have worked. They will be working on the areas that have the highest concentrations of red dots on the maps in the handout. These areas are reading selenium at over 100 micrograms per liter, so they are really keeping an eye on that area of town. There were also a few areas near the University Park neighborhood that had issues as it has a lot of shale. That will be their second area to look at. It will take them a long time to get everything lined in the northwest area of town. South of the Arkansas River has very little shale and, therefore, has low concentrations of selenium coming through in those areas. From March to May, there was a clear spike in the amounts of selenium due to the additional moisture. It was starting to get wet in March then they had continuing rains and when they performed the tests in May, a clear impact could be seen between the two months. They will be doing a lot of lining and sealing, the required $10 million worth, over the next five years. They have done some pilots to look at different options and look at the impact of different things such as different ways to handle the taps. One option they looked at were T liners that are similar to the sewer lines and have a cap that seals it to the service line; however, they were expensive. There are 297 taps in the I-Project area, and it would have cost over $2 million for that option. They were able to do it for a few hundred thousand dollars by using the liners and grouting. It was a major cost improvement by using the grouting, and now they will keep monitoring it to see how long it holds up. It looks promising, and the studies for the grouting product that was used says it

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should last 50 years, but that remains to be seen. This area has clay soil and under those conditions sometimes things don't last as long as the studies say they should. The clay soil tends to break things. They have nine monitoring wells that are primarily in this area and there are a few on the northeast side that needs monitoring for groundwater. They have also installed closed circuit TV (CCTV) cameras on every line in that basin. They did everything under 30 inches and hired a contractor to do everything over 30 inches. They are able to look at the CCTV videos and determine if there is infiltration. It is pretty clear where they have infiltration especially after it has been lined because the liners are white and where there is a yellow stake coming down is where the groundwater is penetrating it.

Ms. Keller stated in the next five years, they need to start looking at treatment processes and running pilots at the plant to determine if there are any processes, side streams, or other ways they can eliminate selenium. Trading may also be an option. Wild Horse Creek is loaded with selenium. The ambient background standard is 600 micrograms per liter in Wildhorse because everything coming down off of Pesthouse Gulch is loaded with selenium and the Pueblo West discharge carries that to the Arkansas River. They could potentially do projects there to get a trading credit, which might be more cost effective. They will look at pilots for ways to treat for selenium in that second five-year period.

Ms. Keller stated it was a huge project. It does not require them to get to the standard. It requires them to do the monitoring, lining, and pilots and then to progress towards meeting the standard. If the lining is not progressing them to meet the standard, they would be moved into the treatment sooner. Their hope is to be able to solve the issue with the lining and grouting, but time will tell if they are able to get it sealed up enough, long term, to be able to meet the standards. During drought, like the area is currently experiencing, they are meeting all of the standards. They have been meeting those standards since around the middle of 2019, but as soon as they get a wet weather period the groundwater table will come up and the numbers will come up as well; it is just a question of how much. It is a lot of work and a lot of sampling. They are sampling all the way from Fountain Creek around Pinon down to the confluence of the Arkansas River and from the Pueblo Reservoir to the John Martin Reservoir. There are samples being taken throughout that whole area. There is a huge amount of data being collected not only to look at selenium but to look at nutrients, ammonia, and nutrient models.

Chair Lopez stated those of them that lived in the City of Pueblo should not blame the Board of Water Works for their rates going up. Ms. Keller replied the Board of Water Works, Storm Water, and Streets had rate increases, and the Pueblo Wastewater Department had some pretty major rate increases because they had to pay the $10 million up front with practically no notice. The pilots for the next five years will keep those prices going up, but the increases have slowed down. The first couple of increases were tough but they have put in a lot of effort into cleaning it up. Water should be cheaper than wastewater. customers do not agree with that but it takes a lot more work to clean wastewater because taking not clean water and getting it back to river standards takes a lot more effort than taking clean water, basically out of the river, and cleaning it up. That is why wastewater is always going to cost more.

Ms. Keller stated they are looking at regulating Per- and polyfluoroalkyl substances (PFAS) and requiring permits to be included in the standards for PFAS. It is like selenium and it's another contaminant that is going to cost in the millions of dollars to treat. It is going to be tough on their rates. Ms. Conners questioned if they were looking at the process of treating wastewater back into drinking water. Ms. Keller replied a lot of the processes that treat different compounds have the issue of not being able to treat the volume of gallons a day they would need. They are using a plasma treatment near Peterson Air Force Base to treat PFAS, but they are only treating 300 gallons a day. It is a pilot program but to put that process into treating 12 million gallons of water a day for a city or 150 million gallons of water a day in a more populated area such as Denver isn't feasible. Ms. Conners stated she knew it was

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something the Colorado Springs Utilities was looking into. Ms. Keller replied Colorado Springs had a real issue with PFAS because they were in a targeted area that was identified as having high concentrations of PFAS, and they had additional standards in place already. When a contractor has a project and they dewater the construction site, if they are in an area that has groundwater that's contaminated, they have to clean it up. For those cases, they are trying to look at small systems to clean up that groundwater. That may be what the Colorado Springs Utilities is looking into. Mr. Valdez stated Colorado Springs had two known contamination sites within the Fountain Creek Watershed. Ms. Keller stated he was correct.

Ms. Conners stated she had something to add to Ms. Keller's report from Ms. Allison Schuch, Fountain Creek Watershed (Exhibit C). She explained the handout contained information on Creek Week and the date for it. They were looking for ideas for a potential speaker and topics. They were also looking at working with Fountain Creek Brewshed Alliance. If anybody had a relationship with any of those folks, those members should contact them. They are doing a Kayak Demo day and Fishing Derby in Pueblo this year. The Watershed has a 20-minute presentation if anyone wanted to hear it, noting they were open to collaborations of any kind. It also included Ms. Schuch's phone number. Mr. Valdez stated he was on the Creek Week Planning Committee, and a lot of the information on the handout was not set in stone such as the Fishing Derby. They were still making sure they had the capacity for that, but they were hoping so. Chair Lopez stated they would be bringing more information later in the year closer to Creek Week in September.

<u>SOLID WASTE SUBCOMMITTEE - TED LOPEZ</u>

Chair Lopez stated he had mentioned at the beginning of the meeting that he had invited some guest speakers to make a presentation. There had been a lot of activity in Pueblo over the last several years on making Pueblo 100% renewable by 2035. A lot of this activity was around renewables; the Sierra Club has a lot of members around the country. There is a local group by the name of Climate Action Team that was talking about a second annual summit in April. He knew from going online there were climate action teams with summits throughout the country. There is Pueblo Energy's Future, which he felt was instrumental in getting the resolution by City Council approved to be 100% renewable by 2035.

<u>BRING POWER HOME 2020 CAMPAIGN PRESENTATION – JAMIE VALDEZ (GUEST)</u>

Mr. Valdez thanked Chair Lopez for the introduction and provided some of the background information for his presentation. Pueblo's Energy Future kind of started the ball rolling. They came together with the Sierra Club at the time and some of the members were also a part of the local Sierra Club group. They came together and decided to seek a grant from the Sierra Club's National Ready for 100 Campaign, which was granted, and they moved forward with that local campaign to encourage the local elected leaders to resolve for 100% renewable energy by the year 2035. It was in February of 2017 when the City Council made the resolution. Later that year, the Pueblo County Commissioners made a similar resolution for the County. Pueblo is committed as both a City and a County to 100% renewable energy by the year 2035. Once those resolutions were approved, they were not quite sure where to go. The implementation phase had not been fully planned, and they had to go back to the drawing board. At the time, they felt one of the major obstacles to achieving that goal was the investor owned utility, Black Hills Energy. Black Hills Energy is currently striving to reach 30% renewable energy by the end of 2020, which in their outlook was not going to be good enough to stay on track with their overall goal or time frame, especially at the rate they had seen Black Hills Energy move in the past. Black Hills Energy had been very reluctant to increase their renewable energy portfolio and that is seen as a problem. The Bring Power Home 2020 Campaign was created by the Sierra Club's Ready for 100 Campaign, Pueblo's Energy Future, and Renewable Energy's Coalition of America. It's mission is to

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educate the Pueblo electorate on the benefits of a public or municipally owned power system and to encourage both the Pueblo electorate and the elected leaders to make the move away from the exclusive franchise agreement with the current investor owned utility. They feel this would bring several benefits. One of the most important to EPAC would clear the path to reaching the 100% renewable energy goal. The City Council commissioned a feasibility study to look at the feasibility of this plan and whether it would be beneficial for the City. By the best estimates, the Evaluation Entry System (EES) study showed they would be able to go, almost immediately, to 70% renewable energy if they switched to a public powered system. Black Hills Energy is still trying to get to 30% renewable this year. As soon as they were able to make the switch and were able to get a public power utility up and running, they would instantly go to 70% renewable power.

Ms. Conners questioned if the report said what the resource or resources would be for the renewable power. Mr. Valdez replied that right now they were at the mercy of the investor owned utility and that utility decided where to get the power from and what kind of sources it came from. If Pueblo was able to make the move away from Black Hills Energy, they would be able to make those decisions on their own. One of the things they were pushing for in their campaign was a locally owned power generation. They would be able to apply on the open market, which would be great as it would give them the freedom of competition that they do not have currently in their legislative monopoly with Black Hills Energy. It would not only give Pueblo the freedom of competition for price, it would also give them the power and seat at the table to make the decisions on what kind of energy they would like to use and where they wanted it sourced from. Hopefully, they would be able to build local power generation sources and that way the revenues could benefit their own communities where it would do the most good. Another major benefit they were looking at was a regenerative business model of a utility versus an extractive business model. Currently, there was an investor owned utility, which had the extractive business model, and they were taking an estimated $20 million in profits out of the Pueblo community. Those profits were being taken to Rapid City, South Dakota, where Black Hills Energy is headquartered. Many of those profits were used to pay their employees, CEOs and shareholders who then spend that money and recirculate it in the Rapid City economy. With public power, Pueblo would be able to keep those revenues local and recirculate them into the local economy where they could do the local economy the most good. They would also look at keeping all the jobs that are currently available with Black Hills Energy in the community and give the current employees the opportunity to keep their jobs with the public utility. In addition to saving those jobs, they would be looking at bringing more jobs to Pueblo, which currently existed in the form of administrative and customer service jobs in Rapid City, South Dakota. Those jobs would be added to the community. Public power would give Pueblo the opportunity to have a regenerative business model where they would keep the revenues and add more jobs to the community. That was a big point they were trying to make that Pueblo could have the opportunity to do that. Pueblo had already put themselves on the map as a leader in the move towards 100% clean energy. They were one of the first ten cities in the country to make a resolution for 100% renewable energy and they were one of the top five county and city combinations to make those resolutions.

Chair Lopez stated they should talk about changing habits when it came to plastics and recyclables and using items that required a lot of packaging. Instead of plastic, use glass. Buy in bulk instead of single use portions. Packaging seemed to be the largest component of waste. In terms of climate and electricity, it also required a change in thinking and culture to move toward their goals. One thing he learned when he installed solar panels in 2008 was in order for him to get the biggest rebate, he had to turn lights off when he left the room. He thought they should keep in mind that the increase in the electrical rates should be an incentive to cut back on electricity. He questioned if Mr. Valdez could focus on the culture change for what the Climate Action Team was looking at in terms of providing alternatives such as electric vehicles, solar panels, wind generation, and other things of that nature.

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Mr. Valdez replied that was a great point. They want to be as sustainable as possible and that included all sectors of the economy and industry. Public power gives Pueblo the opportunity to make those decisions for itself as a community where as currently, those decisions were made for them in a boardroom in Rapid City, South Dakota. A lot of people were trying to cut their energy use to try to be more sustainable and to cut their own bills. Many other citizens, and likely everyone in EPAC, had a larger idea in mind of the environment and the next seven generations. Black Hills Energy, unfortunately, did not incentivize efficient use of electricity. There was not a big difference in customers' bills who were trying to cut back on their power usage because of all the added fees Black Hills Energy charged. Under one line item there were fifteen fees added to their customers' bills. That is one of the reasons the current local electricity bills were so high. In a lot of cases, it did not matter how efficient customers were being because they would still be charged those fees and additional franchise fees. With public power, they would be able to cut those fees out and that would help to incentivize more efficient use of power and more sustainable activities and behaviors. Ms. Conners stated that what was being proposed was similar to how Colorado Springs Utilities is set up. Mr. Valdez referred to handout (Exhibit E) he had passed around titled, "The Mayors Plan". The Mayor introduced the campaign on the Monday the week prior to the EPAC meeting. The Mayor's Plan included San Isabel Electric running the transmission side of their proposed utility. Some residents were concerned about starting up a municipalized utility and them not knowing how to run that utility. If they had San Isabel Electric who had been doing just that for a number of years as their transmission provider that would give them a big help. Ms. Keller stated that the Board of Water Works would run the public utility and they would subcontract the transmission distribution lines out to San Isabel Electric. Chair Lopez stated the Board of Water Works would be the administrative manager and San Isabel Electric would be the distribution site. Mr. Valdez stated that one of the great things about the offer from San Isabel Electric was that they were willing to stay out of the decision-making process. The Board of Water Works would be the enterprise that would be running that utility and there would be accountability to the citizens of Pueblo. Mr. Valdez referred to another handout he provided (Exhibit D), which was a survey from the Colorado Association of Municipal Utilities (CAMU). He explained the lines to the far right represented investor owned utilities, Black Hills Energy and Xcel Energy. The lines in the middle were rural electric co-ops, and the lines on the left were municipally owned utilities. He said to keep in mind that co-ops were municipally owned utilities as well. The main point he wanted the Committee to take away from the graph was the line that went along the top of the graph represented Pueblo's utility rates, and it was clear that there were only a handful of Colorado cities that were paying more than Pueblo for their electricity. Most of the cities that were paying more were in the rural co-op sites. The reason for their higher rates was they were in less densely populated areas and it costs more money to send electricity to each customer. When there is a higher density of meters it should logically cut down on the cost. The graph showed that Pueblo is paying more than most of the rural utilities that spend more to distribute their power. The graph speaks to the local economy, the environment, and most strongly to environmental justice, specifically energy justice. As Ms. Keller pointed out in her report, the median household income in Pueblo is $17,000 below the national median household income and around $26,000 below the Colorado median household income, yet its citizens are paying about 30%+ more for their electric rates. Ms. Conners questioned if they were looking at buying generation or adding assets. Mr. Valdez replied they would be looking at condemnation of assets as laid out with the Mayor's Plan (Exhibit E). They do not know exactly what assets they are looking at yet. That would all be up to the Board of Water Works and the courts. Chair Lopez stated that type of decision would be somewhere down the road and may be a three-step process and likely will be one of the last of those steps.

Chair Lopez distributed a map of the utilities in the State (Exhibit F). He explained it went along with the handouts provided by Mr. Valdez. In the State of Colorado, in terms of geographical areas, most of the electrical power is provided by co-ops or publicly owned utilities. In the middle of the map, in

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orange, depicted Colorado Springs Utilities, and the grey area below that depicted the Black Hills Energy distribution area. Mr. Valdez stated one of the important points to take away from the map was the Black Hills Energy distribution area and the darker blue area, which represented the Xcel distribution area, were the only two investor owned utilities in Colorado. The rest of the utilities depicted were all public power providers, either in the form of a municipal electric utility or a rural electric co-op. In terms of reliability, all the rural areas had reliable service. Reliability was one of the top priorities for customers no matter where they were. That was one of the big issues they were getting approached about. Residents were concerned with the reliability of public power. The Bring Power Home 2020 Campaign sees reliability as very good. Nationwide data shows that public power systems have a higher reliability than investor owned utility systems. Pueblo's local investor owned utility, Black Hills Energy, can point to their reliability as a bonus, but by switching to public power, Pueblo has a greater chance of increasing that reliability. Ms. Conners stated there were a lot of benefits to public power. She works for public power and has seen the benefits firsthand especially in the cost of service that gets passed on to the customer. With public power, the customers are the shareholders. Mr. Valdez stated he felt like they had a lot of public support, but their challenge will be turning out the vote. Chair Lopez stated that as Mr. Valdez stated, it was about education. Without education or alternatives, the ratepayers just continue to pay. Once they are presented with an alternative and a path to go towards that alternative, that education is very important. Ms. Keller stated that scare tactic ads had already started. Mr. Valdez stated Black Hills Energy had been reluctant to release their renewable portfolio and the Bring Power Home 2020 Campaign felt like the move toward public power would be removing one of the main barriers towards their renewable energy goals for the City and the County. With the Ready for 100 Campaign, one of their slogans was, "with renewable energy there's no limit to Pueblo's power". They really felt that was a key point with the Bring Power Home 2020 Campaign as well. There would be no limit to where Pueblo could go. Pueblo would get to decide at that point and that would include renewable energy, concerns for the environment and energy justice.

Chair Lopez stated in terms of the environment, the Comanche Power Plant had three power generating stations, and he thought they were set to retire one in around 2025. That would reduce one of the older coal generated power stations. There was a solar power generating facility that will serve EVRAZ Steel to help them in their upgrades for efficiency improvements. It is all an advantage and a benefit to the climate and to the contribution that our area provided in carbon dioxide gas (CO2) emissions. Mr. Valdez stated the solar array at Xcel is one of the largest in the country and although it doesn't service the Pueblo territory, it gives them hope for what is possible. The Big Horn Project that is going to be powering EVRAZ is also going to be one of the largest solar arrays in the country. Pueblo was getting looked at by cities across the country as a leader in renewable energy and as a region that sees the path forward. Pueblo was showing the rest of the country that path forward. Chair Lopez stated there was also talk in the community about solar farms out at the Chemical Depot and possibly other locations in Pueblo. Mr. Valdez stated one of the great ideas that had been kicked around was the Colorado State Fair being a microgrid in and of itself. It would be able to power itself during the Colorado State Fair and the rest of the year it could power the surrounding neighborhood as a microgrid. Ms. Conners stated they are interesting concepts. Mr. Valdez replied another great concept was solar gardens. There was one in the works for the East Side community. It had hit a couple of snags but it was moving forward. It was set up to service low income citizens on that side of town and he saw that as a great way to ensure they were including all residents so that not only those who could afford it have access to renewable energy but all did. When it comes down to it, we were all the same. Many of the pollutants that go into the air become water contaminants as well. Power generation effects people in a lot of ways that many may not consider.

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Ms. Keller stated they should also think about the chemicals it took to build the solar panels. There was a phenomenal amount of minerals and chemicals that go into the process to build solar panels. It was not a clean energy; it was a different energy. There was also a lot of recycling that needed to be done with them. The lifespan was 20-30 years then the panels would need to be recycled. All of the selenium, zinc, cadmium and other things that were in them would need to be processed. Down the road, it would take major efforts to recycle those panels. Mr. Valdez replied that was absolutely correct, but the technology was improving at a very fast rate. He agreed with her, noting the mining process for some of the battery storage materials that were needed was very problematic not only from an environmental standpoint but from a human right standpoint. They would like to see that improve. He stated the terminology "Clean Energy" referred to their generation not creating more pollution. They had extracted some pollution that already existed and created a technology to generate that energy but the generation itself was not creating pollution. Ms. Keller stated that creating the solar panels did create pollution. The Pueblo Wastewater Department had a solar company provide an estimate and what they wanted to discharge to them was phenomenal. The company would have made them put in their own facility in to treat the water because it was so high. Chair Lopez stated that there are a few individuals looking into the process of recycling the cadmium in the batteries. Ms. Keller replied it was not only the batteries that were the issue; it was also the panels that have a huge amount of chemicals in them. Chair Lopez stated that whatever the issue happened to be it had to do with the circumstances. Currently, the U.S. was not able to ship their plastics to China so that gave them the opportunity to look at what could be done to encourage some type of technology to solve our own problem. He had six solar panels replaced on his roof with four more efficient ones. He had two that were damaged and four that could probably be installed on his shed. They would be faced with challenges no matter which direction they went.

Ms. Conners stated that if anyone on the Committee wanted to see one of the Colorado Springs Utility solar farms, she could arrange that, noting they just built two huge farms.

AGENDA FOR APRIL 2, 2020 MEETING

The next regularly scheduled EPAC meeting is Thursday, April 2, 2020, at 229 West 12th Street, from 5:15 p.m. to 6:30 p.m.

ADJOURNMENT

There being no further business before EPAC, the meeting was adjourned at 6:38 p.m.

Monica M. Grosso
EPAC Recording Secretary

MMG

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Exhibit A

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# 4 Ways Colorado Lawmakers Want To Reduce The Plastic In Your Life

By Xandra McMahon | February 1, 2020

LISTEN NOW

*9min 34sec*

SHARE:

David Zalubowski/AP

*A display of plastic shopping sacks stands in the exhibit for reusable bags made by ChicoBag at the Outdoor Retailer Summer Market in the Colorado Convention Center Wednesday, June 19, 2019, in Denver.*

A little less than a month into the session and multiple bills are already on the table to either reduce or all-out ban types of plastic — a material that's increasingly under attack with environmentalism at the forefront of many consumers' minds.

Supporters feel the 1989 law now stands in the way of reducing plastic pollution and the Colorado Municipal League would like to see some local control restored.

"We have a proud, long tradition and respect for both local control and home rule authority here in Colorado," CML's Morgan Cullen said. "Yet we're just one of 15 other [states] across the country that actually has one of these plastic preemptions."

On the flip side, different rules in each city might create headaches for business owners. That potential legal patchwork has the Colorado Restaurant Association concerned.

"Even if you're a small restaurant group with just two locations that happen to be in separate jurisdictions, you could have significantly different regulations on what types of plastics can be used in your business," the CRA's Nick Hoover said.

Hoover added that the association would prefer for a plastic ban to come from the state level instead.

## Sorry Single-Use Plastics, You Gotta Go

This bill, HB20-1163, would put a statewide ban on single-use plastic that comes from restaurants and stores. Think bags, straws, plastic stir sticks and Styrofoam containers. The sponsor, Democratic Rep. Alex Valdez, said not only is the climate changing for a bill like this but now is the time as his party has a majority in both chambers and the governor's office.

"The big difference this time is that consumer sentiment is changing, people all over the state are having a desire to do things differently and the environment is at the forefront of people's thoughts," he said. "I think this is one of those rare issues that really bridges both sides of the aisle in the sense that whether you're an outdoorsman or a fisherman or a city dweller, pollution affects us all."

## Say Goodbye To Polystyrene

In a similar vein to the other bans on this list, HB20-1162 specifically targets styrofoam takeout containers at restaurants. It was introduced in the 2019

legislative but failed. It's now back for another go. The language in the bill is exactly the same as the last time.

## How 'Bout We Turn Recyclable Materials Into Useful Things?

This bill, SB20-055, isn't so much about plastic, but let's include it anyway because it could potentially impact the volume of plastic recycled in the state.

Republican Sen. Kevin Priola wants to see more recycling end markets in Colorado. What's an end market, you ask? End markets are the places that turn your trash into new things, e.g. a plastic water bottle into a T-shirt, a glass jar into another glass jar. The process usually happens overseas; up until a few years ago, China was the largest accepter of U.S. recyclable materials.

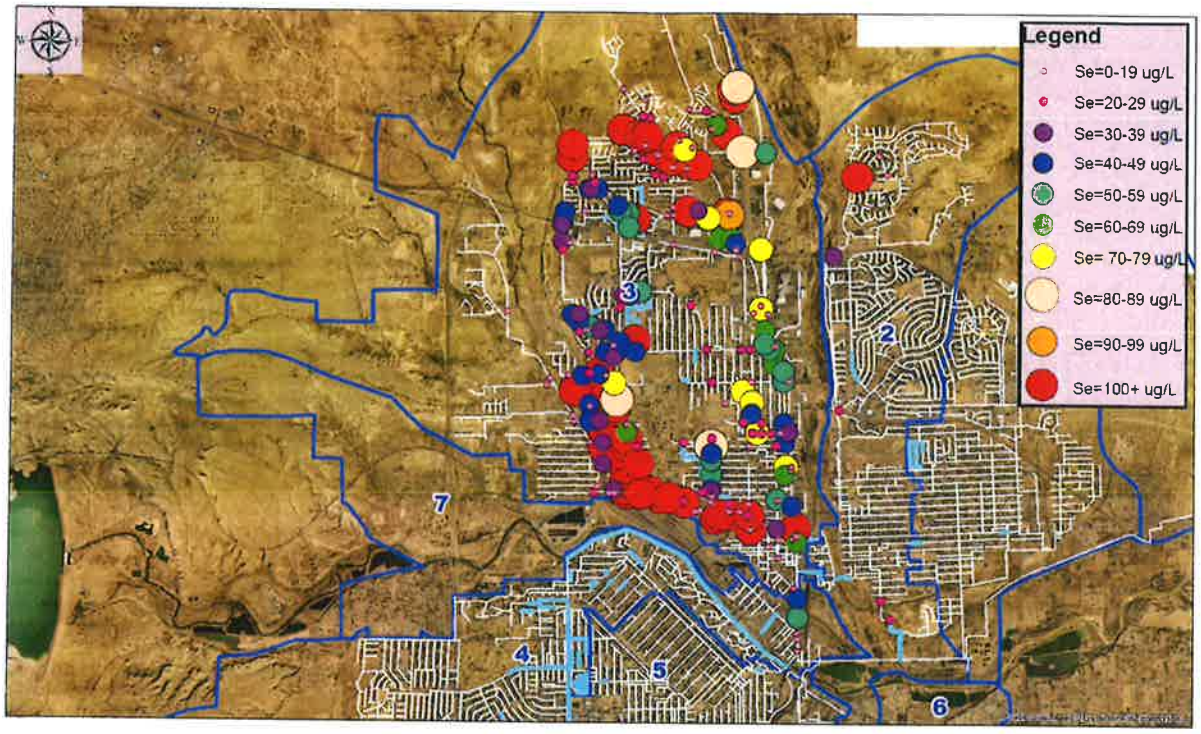
A little bit of this is already happening in the state, like in Broomfield with Momentum Recycling but that company only deals with glass. Priola wants to create a tax credit program with this bill to encourage more recycling companies to focus on end-market production.

"Colorado has one of the lowest recycling rates in the nation and there's a number of reasons for that," he said. "We're trying to have some homegrown manufacturing as well as remanufacturing of items that we currently just bury out on the Eastern Plains, a lot of which is in my district."

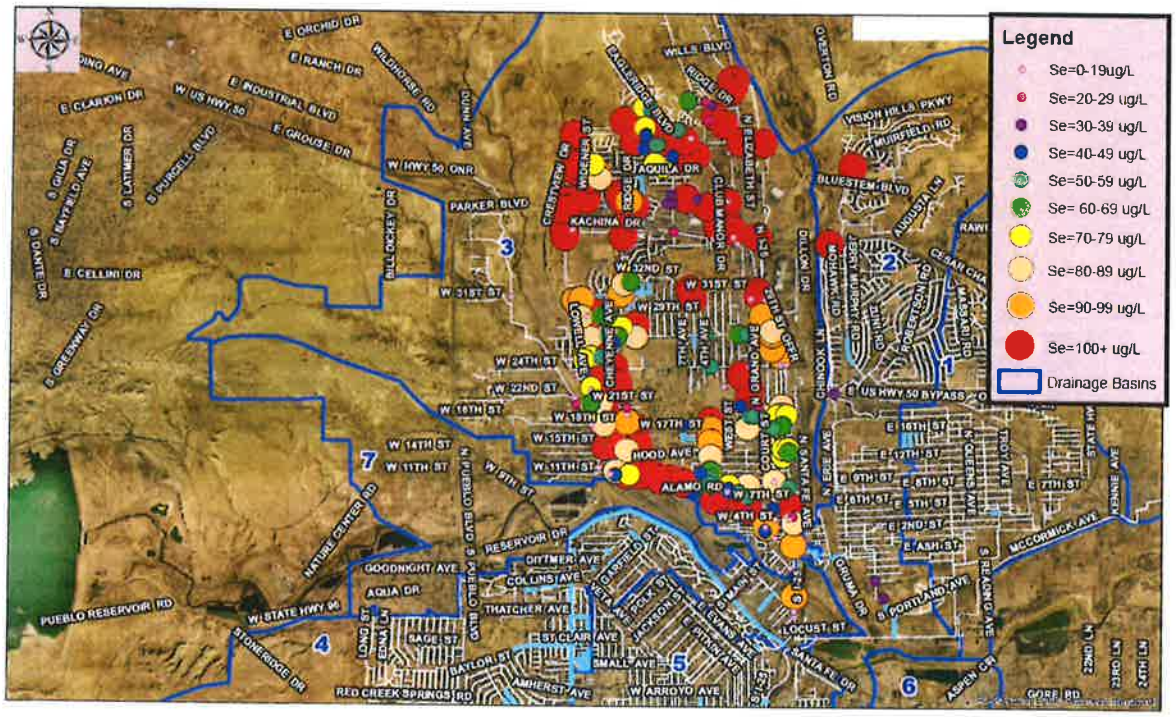
Exhibit B

nk

March 2019 Mass Sample Results




May 2019 Mass Sample Results



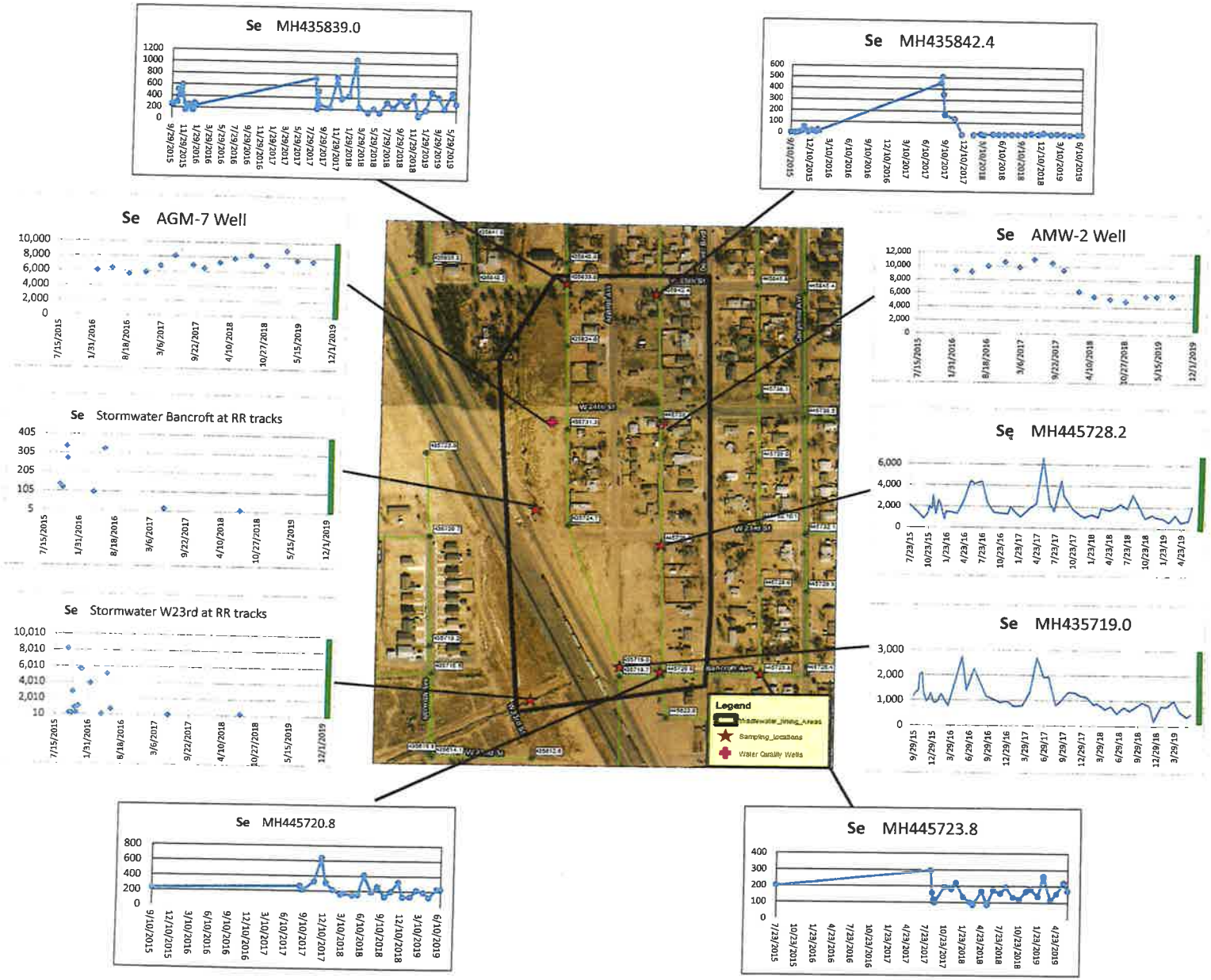

Se MH435839.0
Se MH435842.4
Se AGM-7 Well
Se AMW-2 Well
Se Stormwater Bancroft at RR tracks
Se MH445728.2
Se Stormwater W23rd at RR tracks
Se MH435719.0
Se MH445720.8
Se MH445723.8
Legend
Sampling_locations
Water Quality Wells

Exhibit C

GC

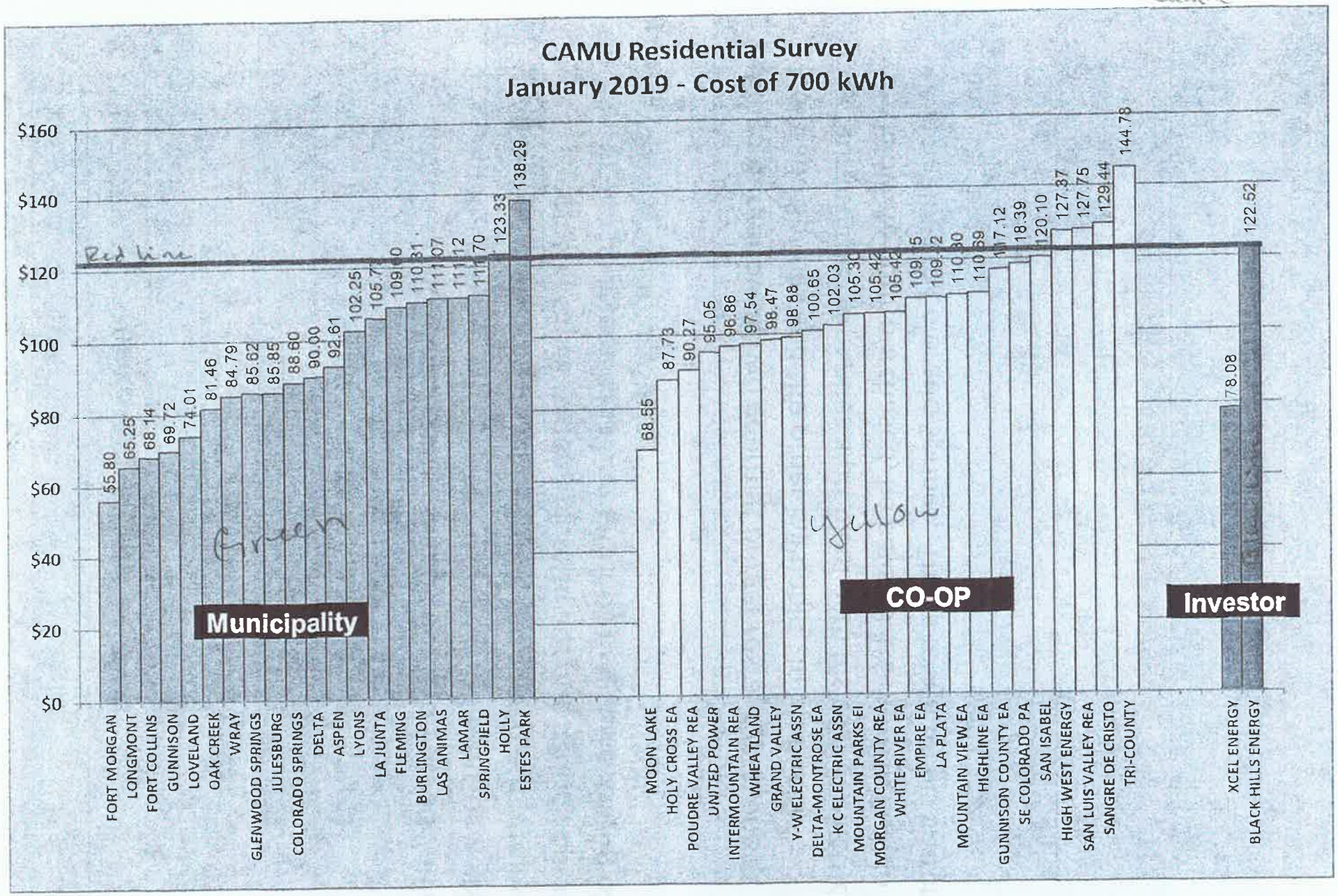
Here are some notes if you can pass them along to your Pueblo folks next week:

- Creek Week is set for Sept 26-Oct 4th this year. We will be having a planning meeting in Pueblo probably in March for any that are interested in getting involved -
- We are also working on a Liquid Lecture speaker/panel at Brues Alehouse sometime this year. We have some ideas for potential speakers/topics, just need to work out a date and other logistics. Please let me know if you are interested in helping with this or have speaker ideas. We could do more than one if there is enough interest/bandwith to organize
- We would like to add Walters and Shamrock to the Fountain Creek Brewshed Alliance membership. Does anyone have a relationship there, or would be willing to stop in and inquire about their interest? Its free to participate - more info here: http://www.fountain-crk.org/about/brewshed-alliance/ So far Brues is the only one in Pueblo thats participating.
- There is interest in a kayak demo day and a fishing derby in Pueblo this year. These are larger-scale events and I'm looking for folks/organizations to get involved and make them happen.
- The Watershed District has a 20 minute presentation and would like to present to any group that is interested in learning more about what the District does
- We are open to collaborations of all kinds - let's support each other for a clean and healthy watershed :)

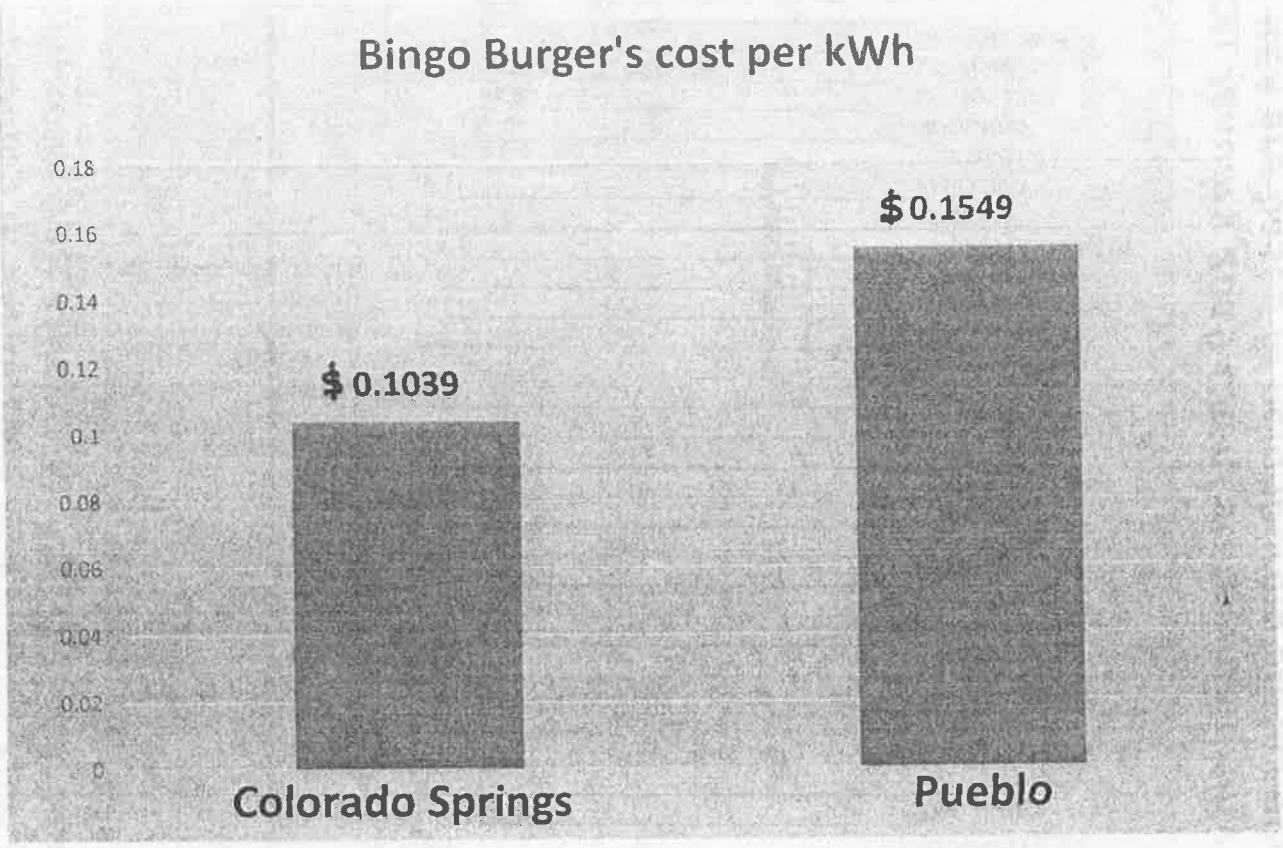
you can give out my phone/email
Allison Schuch
719-650-7474
allischuch@gmail.com

Exhibit D

Jamie




***Source:*** ***January 2019 CAMU statewide utility survey.*** ***NOTE:*** ***Tri-County REA and High West REA are based in neighboring states and only have a few customers in Colorado.***




**Bingo Burger** owns two gourmet burger restaurants: one in Colorado Springs and the other in Pueblo. In his Pueblo restaurant, the owner has a problem with his cost of electricity: per kilowatt-hour purchased, he pays 49.1% more in Pueblo than he does in Colorado Springs. That's tough on his bottom line.

Exhibit E
Janine

# The Mayor's Plan for a Pueblo Water and Power Authority
## Summary January 28, 2020

1. **The utility would be a combined Water and Electric Board.**
    a. The Board would be elected, not appointed by the mayor. Terms of office will be 6 years.

2. **A regional power supply authority is under contemplation**
    a. Pueblo Water would join with other regional partners, who would own an equitable portion of the power authority and have representation on the Power Authority's board.
    b. There would also be a regional distribution authority, also with shared ownership and board representation.
    c. The Board would have the authority to condemn generation and transmission as well as the electric distribution system.
    d. Pueblo Water already has the power of condemnation

3. **The utility is expressly granted rights to contract with another entity for the operation and maintenance of the electric system.**
    a. Reg Rudolph, San Isabel CEO, is part of the planning team.
    b. Pueblo Water would be responsible for oversight of the SIEA contract, long-term planning and rate-setting

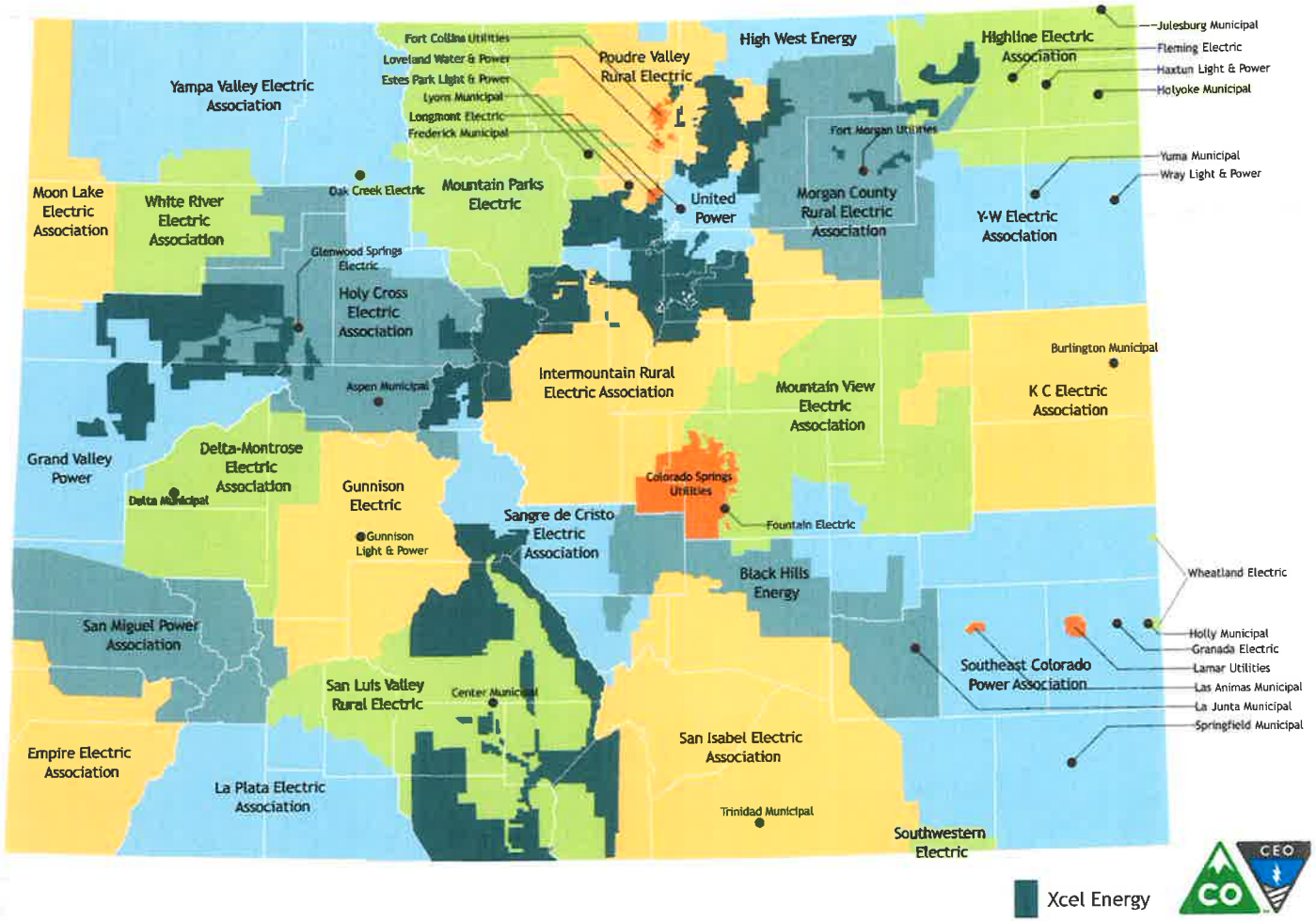
4. **The utility has the authority to condemn infrastructure outside the city limits (e.g. Pueblo county-wide).**
    a. The utility would also be authorized to sell power outside the boundaries of its ownership and jurisdiction (e.g. surrounding counties).

5. **The utility would be authorized as an Enterprise and would not be subject to TABOR restrictions.**

6. **The utility is authorized to issue revenue bonds for capital investments like purchasing the Black Hills poles and lines, to be repaid through utility bill revenues.**
    a. Taxes may not be used to repay the bonds, and voters do not have to approve the issuance of the bonds.

Exhibit F

TC

# PUBLIC POWER MODEL

Most of the Colorado footprint is served by the public power model.