



Kerry Howe, *Chair*
Russell Pederson, *Vice-Chair*
Suzanne Busch
Steve Glass

Julia Maccini
Roland Penttila
Caroline Scruggs
Jennifer Thacher

Water Protection Advisory Board
c/o ABCWUA
P.O. Box 568
Albuquerque, NM 87103

Minutes: March 9, 2018
Location: Bernalillo County Public Works Division, 2400 Broadway Blvd. SE
Time: 8:30 to 10:30 a.m.

Board Members Present: Chair Kerry Howe, Vice-Chair Russell Pederson, Suzanne Busch, Julia Maccini, Roland Penttila, Caroline Scruggs, and Jennifer Thacher

Board Members Absent (excused): Steve Glass

PIC Members Present: Bart Faris, Kathleen Verhage, Kali Bronson, Kate Mendoza, and Diane Agnew

Guests: Mike Neas, and Glenn DeGuzman (Bernalillo County)

I. Call to Order

Chair Dr. Kerry Howe called the meeting to order at 8:31 a.m.

II. Approval of Agenda

Chair Howe requested a motion to approve the agenda. Ms. Julia Maccini motioned to approve the agenda and Vice Chair Mr. Russell Pederson seconded the motion. Motion to approve the agenda carried unanimously.

III. Approval of Minutes

Chair Howe asked board members for comments on the February meeting minutes. Ms. Maccini requested that Mr. Don Phillips' affiliation be added to page 6. Chair Howe asked for a motion to approve the minutes with Ms. Maccini's request incorporated. Mr. Roland Penttila motioned to approve the minutes and Dr. Jennifer Thacher seconded the motion. Motion to approve the February meeting minutes carried unanimously.

IV. Board Business

a. AWWA Exemplary Source Water Protection Award

Ms. Diane Agnew, PIC member, announced to the board that the Water Authority will be receiving the 2018 Exemplary Source Water Protection Plan Award from the American Water Works Association (AWWA) at the annual conference in Las Vegas, Nevada in June 2018. Dr. Thacher asked how the Water Authority will be sharing the news and Ms. Kate Mendoza, PIC member, replied that the Water Authority will be presenting the award to the Water Authority Governing Board at their June meeting.

b. PIC Agency Updates

Mr. Bart Faris, PIC member, announced that the Air Force and New Mexico Environment Department (NMED) will be hosting a joint public meeting on Mar. 22nd at the African American Performing Arts Center from 5:30 to 8:00 p.m. to present the 2018 Strategic Plan for cleaning-up the Kirtland Air Force Base (Kirtland AFB) Bulk Fuels Facility (BFF) jet fuel leak. The meeting will include a poster session from 5:30 to 6:00 p.m. and be followed with presentations from the Air Force and NMED. Mr. Faris added that the Air Force will be hosting an open house on Mar. 24th from 10:00 a.m. to 2:00 p.m. to provide a public opportunity to tour the treatment facilities at Kirtland AFB. Ms. Agnew told the board she would forward more information to members later today, March 9th. Ms. Mendoza told the board that the NMED has posted the draft 2018 Strategic Plan for the Kirtland AFB BFF jet fuel leak and strongly encouraged board member to review the plan and attend the upcoming public meeting.

Ms. Kali Bronson, PIC member, announced that EPA Region 6 is holding its annual stormwater conference in Albuquerque at the Hotel Albuquerque on Aug. 20 through Aug. 23, 2018. Ms. Bronson stated that she is looking for someone with experience in sediment loading and contaminant transport to speak at the conference and if board members had someone in mind that they please forward her the speaker's information.

c. Legislative Update

Ms. Agnew told the board that at the 2018 legislative session, legislators passed House Memorial 102 (HM 102) regarding the effectiveness of the Albuquerque Bernalillo County Water Utility Authority and its governing board. HM 102 will task an interim committee to receive testimony by Oct. 1, 2018 and resolves that the committee consider alternatives to the composition of the governing board. Ms. Agnew added that there was a similar memorial in the Senate (SM 100), but the memorial was not passed.

d. Approval of WQPPAP Policies

Board members reviewed the Water Quality Protection Policy and Action Plan (WQPPAP) policies which were revised to combine the groundwater and surface water policies, which were previously separate, into one document. Dr. Caroline Scruggs motioned to approve the WQPPAP policies and Dr. Thacher seconded the motion. Motion to approve the WQPPAP policies carried unanimously.

e. Discussion and Approval of Revised Oil and Gas Letter

Ms. Agnew presented board members with two letters, one addressed to the Mid-Region Council of Governments and one to Bernalillo County Commissioners and City of Albuquerque Councilors, requesting an ordinance for oil and gas industries to protect water quality in the Middle Rio Grande. Dr. Thacher requested that the letters state that WPAB wants to reiterate the request to establish a dedicated, multi-disciplinary advisory board of experts to craft the ordinance and other board members supported that request. Dr. Thacher also suggested language be added to indicate that prices of oil and gas change rapidly based on international market prices and can influence costs of extraction, both of which sway industry activity and can encourage extraction in previously vacant areas when prices are favorable. Board members also made suggestions for wording and consistency within the letters. Chair Howe suggested that Ms. Agnew revise the letters to incorporate the board members' suggestions and stated that the board would vote on the letters at the next meeting in April.

V. Presentation: Bernalillo County Septic Systems Status Update

Mr. Glenn DeGuzman from Bernalillo County (County) presented board members with information on liquid waste disposal (septic) system permits in Bernalillo County. Mr. DeGuzman informed the board that the County is in the process of sending out notification letters to homeowners with non-compliant septic systems. Notification letters are sent out in two phases notifying homeowners that their septic system must be evaluated for compliance. Mr. DeGuzman told the board that the two common problems he has with this effort to bring septic systems into compliance in the County is that it is challenging to get homeowner response and there are database issues in clarifying data for accuracy. Dr. Thacher asked about the evaluation and inspection process for septic systems and Mr. DeGuzman replied that the process is challenging for many residents because they live on fixed incomes. Mr. DeGuzman added that roughly 60% of septic systems fail the inspections, which can pose a financial challenge for residents because they must repair or replace the septic system to come into compliance. Dr. Thacher asked if there was financial assistance available for low-income residents and Mr. DeGuzman replied that the Partners in Improving and Protecting the Environment (PIPE) program can provide assistance but that there are specific, income-driven limits for applying to the program.

Mr. DeGuzman told board members that any homes applying for building permits or well inspections in the County have their septic systems inspected if there is not already information in the County database. Ms. Bronson asked what the County does about notification letters that are returned to the County unsigned and Mr. DeGuzman responded that those residences have their septic system inspected randomly and data is verified on-site. Ms. Bronson asked about septic system evaluations for the Chilili Land Grant and Mr. DeGuzman responded that the County still needs to get an agreement in place with the mayor of Chilili to evaluate those systems. Mr. Penttila asked if there is ongoing outreach to real estate agents in the East Mountains and Mr. DeGuzman responded that there have been presentations to real estate agents and neighborhood associations about septic systems.

Dr. Thacher asked about prioritizing areas where septic systems pose the most risk and Mr. DeGuzman replied that the County prioritized the East Mountain area because most residents have private wells and do not have the option to use municipal water and

wastewater services. Mr. DeGuzman added that risks are similar between the South Valley of Albuquerque and the East Mountains because of the potential for contamination of domestic wells. Ms. Bronson added that it is important to prioritize the East Mountain area because septic systems in the area may be contributing to the nutrient loading in Tijeras Arroyo, which now has a total maximum daily load defined for nitrate. Dr. Thacher asked if homeowners were generally aware of the dangers of a non-functioning septic system and Mr. DeGuzman replied that he did believe that homeowners were aware of the risks. Mr. DeGuzman added that many residents who do contact the County want to bring their system into compliance to do the right thing for the environment. Mr. DeGuzman also said that many residents who do not call the County may not be aware that they have a septic system or simply do not want to address the issues they may have with their septic system because of the potential costs.

VI. Presentation: Groundwater Contamination in the Southwest – A Comparison of Five Major Cities

Ms. Agnew presented to the board about groundwater contamination in other southwest region cities and how other cities compare to Albuquerque. Ms. Agnew started off by talking about general definitions of contaminants and stated that for the purpose of the presentation, contaminants are defined as any physical, chemical, biological, or radiological substance or matter in water. The language used to define a contaminant is consistent with the Environmental Protection Agency's Safe Drinking Water Act. Ms. Agnew showed a table of different contaminants found in drinking water and discussed the sources of the various types of contaminants. Ms. Agnew offered the board an example of a whey processing plant in eastern New Mexico where the plant claimed to have natural Arsenic at concentrations greater than and the New Mexico Environment Department pointed out that although Arsenic is naturally occurring, it does not naturally occur at that concentration. For this presentation, Ms. Agnew told the board that she focused on leaking underground storage tanks, Superfund and abatement sites, and other remediation sites for each of the five cities, which included Phoenix, Las Vegas, Denver, El Paso, and Albuquerque.

Ms. Agnew started her comparison with Phoenix, Arizona and presented information about Phoenix's sources of water, population, and water use. Ms. Agnew showed the board maps of abatement sites, Superfund sites, and leaking underground storage tank locations in the Phoenix area. Ms. Agnew highlighted the West Van Buren groundwater plume, which is contaminated with chlorinated solvents, poses a vapor intrusion threat to buildings in the vicinity, and is the largest plume in the country with a footprint of about 12 square miles. Ms. Agnew mentioned that the contamination is in the shallow aquifer and poses a serious human health concern. She also added that the site has multiple responsible parties, which makes the remediation effort challenging. Chair Howe asked if there were any municipal wells located near the plume and Ms. Agnew replied that she wasn't sure. Dr. Scruggs asked if the site had any groundwater treatment systems in place and Ms. Agnew responded that there are currently three or four operation treatment systems for the West Van Buren plume. Chair Howe asked if the site was designated as a Superfund site and Ms. Agnew clarified that the site is not currently under Superfund and that there are multiple responsible parties.

Ms. Agnew then talked about Denver, Colorado where an asymmetric bowl geology results in four distinct groundwater basins in the Denver area, with the Dawson aquifer being the most important for drinking water. Ms. Agnew told the board that Denver appears to regulate all groundwater remediation sites under the voluntary cleanup program. Ms. Agnew added that the Colorado Department of Public Health regulates the remediation sites, but the Colorado Department of Labor and Employment regulates the aboveground and underground storage tanks in the state. Ms. Agnew showed the board maps of abatement sites, brownfields, Superfund sites, and underground storage tanks in the Denver area. Ms. Agnew highlighted the Lowry Air Force Base groundwater plumes which are a series of plumes contaminated with trichloroethylene (TCE) and carbon tetrachloride. Chair Howe mentioned the Rocky Mountain Arsenal site and said that cleanup had been completed, but asked if the site was being monitored and Ms. Agnew replied that monitoring will continue to occur at the Rocky Mountain Arsenal site and a portion of the site was deemed ready for redevelopment. Ms. Suzanne Busch, board member, and Dr. Scruggs both asked about the Rocky Flats groundwater contamination site and Mr. Penttila said the site is north of the Denver area, site cleanup was completed, and the Rocky Flats site reached regulatory closure in 2006. Ms. Agnew added that the database for environmental data in Colorado was somewhat difficult to work with.

Ms. Agnew presented the board with information about El Paso, Texas where the community uses both surface and groundwater for drinking water supplies. She told the board about the Hueco and Mesilla Bolsons, which provide groundwater supply and are international aquifers. Ms. Agnew showed the board maps of abatement sites and underground storage tank locations in the El Paso area. Ms. Agnew highlighted the ASARCO groundwater contamination site where a former smelting company contaminated groundwater with organic chemicals and metals. Ms. Agnew told the board the ASARCO site is being regulated by an environmental trust that works with the permittee and the state to ensure cleanup. Dr. Scruggs asked if regulation by an environmental trust was a regular thing in Texas and Ms. Agnew replied that it was unique for remediation regulation. Ms. Bronson asked about the site's proximity to Mexico and Ms. Agnew replied that the ASARCO site is on the border with Mexico. Ms. Agnew added that she was not aware of a process to notify residents in Mexico about the nearby groundwater contamination, but there was a large discussion about international affairs related to groundwater issues at the National Groundwater Association meeting in Albuquerque in February.

Ms. Agnew talked about groundwater contamination in Albuquerque and showed the board maps of abatement sites, Superfund sites, voluntary remediation sites, and locations of leaking underground storage tanks in the Water Authority service area. Chair Howe asked if the map included closed sites with leaking underground storage tanks and Ms. Agnew clarified that only sites that were currently open were included on the map of the leaking underground storage tanks. Ms. Agnew highlighted the Laun-Dry Supply Co. groundwater plume that has TCE and tetrachloroethylene (PCE) contamination. Ms. Agnew told the board the site does not impact any water supply wells, but it is directly upgradient of a few irrigation wells at the Sunset and Mountain Calvary cemeteries. Ms. Agnew added that the site has evaluated vapor intrusion issues with nearby businesses.

Ms. Agnew presented information on per capita contamination for the five cities showing that Phoenix had the fewest number of sites per capita. Ms. Bronson asked about the

Phoenix numbers and pointed out that the city likely does not know of all the contamination in the aquifer. Ms. Agnew replied that Arizona has recently established a voluntary remediation program within the last 10 years and is likely still discovering groundwater contamination. Ms. Agnew reminded the board that numbers presented per capita may not be accurate because of regulatory differences among states. Ms. Agnew discussed the nuances of state resources and state funding for remediation in different states. She also added that each city has a different industrial development history that may also contribute to the number of groundwater contamination sites per city.

Ms. Agnew concluded her presentation by discussing some key take-away points that highlighted the importance of characterization to inform remediation of contamination as a key for resource management. She also added that as more information on emerging contaminants develops, contamination sites that were previously closed or new sites may emerge. Chair Howe asked why Albuquerque had the lowest density of leaking underground storage tanks and Ms. Agnew responded that it may be because the closed sites are not included in the figure or that because New Mexico has a rigorous inspection process for underground storage tanks. Dr. Scruggs asked about emerging contaminants found in groundwater supplies in the nation and Ms. Agnew said that Albuquerque is keeping track of emerging contaminants, including personal care products. Dr. Scruggs asked if Ms. Agnew could provide the detection limits the Water Authority uses for monitoring for emerging contaminants and Ms. Agnew said she could search for the information to forward to Dr. Scruggs. Dr. Thatcher thanked Ms. Agnew and Ms. Mendoza for putting together the presentation and asked about how New Mexico compares to other states for receiving and updating groundwater contamination data. Ms. Mendoza replied that Nevada had the best database and suggested the New Mexico Environment Department should use Nevada's database as a model. Ms. Agnew added that the New Mexico Environment Department recently established an effort to address data and mapping to address data management issues. Chair Howe mentioned that the presentation was a great comparison for perspective on how each community deals with contamination and remediation, especially for comparing how New Mexico identifies and remediates groundwater contamination sites. Ms. Agnew mentioned that Albuquerque looks to be comparable to Denver for identifying contamination sites, but Denver has more sites with completion of cleanup than Albuquerque. Chair Howe asked about future board recommendations from this research and Ms. Agnew suggested that New Mexico consider establishing a dry-cleaning fund to help clean up dry-cleaning plumes, similar to what has been established in Texas.

VII. Other Board Business

None.

VIII. Public Comment

Mike Neas, member of the public and general contractor from Placitas, NM, told board members that he liked the letters addressing the need for an oil and gas ordinance in the region and encouraged further communication with decision-makers to keep the development of an ordinance at the forefront. Regarding the language in the letters, Mr. Neas added that the horizontal fracking poses a major threat to groundwater in the

Albuquerque area and language stating that should be stronger. Mr. Neas further emphasized the need to be proactive to develop an ordinance in the region. Mr. Neas asked that the letters include references that they will be sent across county lines to highlight the regional effort. Mr. Neas pointed out that it is part of the Water Quality Protection Policy and Action Plan policies to encourage collaboration and asked that the letter also be sent to the Mayor of Albuquerque.

Mr. Neas talked about the source water assessments the Water Authority is working on and voiced concern that the 0.5-mile radius around each well was not enough to address the potential for oil and gas contamination in the wells because mineral rights owners and permits do not occur within that radius. Mr. Neas asked that all mineral rights owners and permits be included in the source water assessments.

Mr. Neas requested that professors from the University of New Mexico be part of the advisory committee for developing the oil and gas ordinance. He specifically asked that staff from the Utton Center, Planning Department, and Water Resources departments be a part of the committee. Mr. Neas voiced his concern about who would participate in drafting the ordinance and warned the board to be careful about which people represent the oil and gas industry on the advisory board to prevent an industry-written and driven ordinance. Mr. Neas concluded by informing the board that Don Phillips will be presenting at the Vincent E. Griego Council Chambers at City Hall on April 3rd at 6:00 p.m. and encouraged board members to attend and share with others who may be interested. The presentation is not for council members or commissioners, but is an open presentation for the public.

IX. Adjourn

Chair Howe asked for a motion to adjourn. Dr. Scruggs motioned to adjourn the meeting and Mr. Penttila seconded the motion. Motion to adjourn the meeting passes unanimously. The meeting was adjourned at 10:22 a.m.