

**EQUUS BEDS GROUNDWATER MANAGEMENT DISTRICT NO. 2**  
**OCTOBER 11, 2016**

The Board of Directors for the Equus Beds Groundwater Management District No. 2 held a monthly meeting October 11, 2016, in the conference room of the Equus Beds Groundwater Management District No. 2 in Halstead, Kansas. President Fred Seiler called the meeting to order at 10:00 a.m.

Directors and staff present during all or portions of the meeting:

Fred Seiler, President	Bob Seiler, Member
Vin Kissick, Vice-President	Joe Pajor, Member
Jeff Winter, Secretary	Tom Adrian, Attorney
Mike McGinn, Treasurer	Tim Boese, Manager
David Bogner, Member	Steve Flaherty, Hydrogeologist
Alan Burghart, Member	Rebecca Wilson, Admin. Assistant

*Directors absent: David Stroberg, Member*

Others attending the meeting or portions thereof were:

David Barfield, KDA - DWR Manhattan  
Jeff Lanterman, KDA - DWR Stafford  
Brian Meier, Burns & McDonnell  
Daniel Clement, Burns & McDonnell  
Luca DeAngelis, Burns & McDonnell  
Tim Maier, BPU McPherson  
Susan Metzger, KDA  
Tucker Stewart - Kansas Livestock Association

**ITEM 1 -- APPROVAL OF AUGUST 23RD MEETING MINUTES**

Moved by Bob Seiler and seconded by Jeff Winter to approve the Minutes as amended. Motion carried with 5 Directors for, 0 Directors against, 0 Directors abstained, and 4 Directors absent.

**ITEM 2 -- APPROVAL OF AGENDA**

Moved by Vin Kissick and seconded by Jeff Winter to approve the Agenda with two additions: 1) New Business Item 8(e) for a presentation by Susan Metzger regarding possible water-related legislative and regulatory changes and to seek input from Groundwater Management Districts; 2) Item 13 for Executive Session. Motion carried with 5 Directors for, 0 Directors against, 0 Directors abstained, and 4 Directors absent.

**ITEM 3 -- FINANCIAL REPORT**

**August and September Financial Reports**

Moved by Bob Seiler and seconded by Vin Kissick to approve the August and September Financial Reports. Motion carried with 7 Directors for, 0 Directors against, 0 Directors abstained, and 2 Directors absent.

**ITEM 4 -- APPROVAL OF EXPENDITURES**

Board members discussed the high cost of printing and mailing newsletters versus emailing newsletters. A reduction in expenses may allow the newsletter to be published more frequently. Moved by Vin Kissick and seconded by Jeff Winter to approve the October expenditures. Motion carried with 7 Directors for, 0 Directors against, 0 Directors abstained, and 2 Directors absent.

**ITEM 5 -- PUBLIC FORUM – NONE**

**ITEM 6 -- APPEAL REVIEW – NONE**

**ITEM 7 -- OLD BUSINESS – NONE**

**ITEM 8 -- NEW BUSINESS**

**a) Review of McPherson BPU Application Nos. 47955, 47956, and 47957**

Tim Boese, Manager, presented information regarding Application Nos. 47955, 47956, and 47957. The applicant and the applicant's consultant were present and provided information regarding the applications.

**FINDINGS:**

1. The municipal well locations proposed by Application #47955, #956, and #47957 are located in the southern edge of the Hollow-Nikkel SWQUA.
2. Application #47955, #47956, and #47957 propose a total quality of 2909 acre-feet per year.
3. The applications comply with the District's Safe Yield Regulation, K.A.R. 5-22-7 (a);
4. The applications comply with the District's Well Spacing Regulation K.A.R. 5-22-2a.
5. The boundaries of the chloride plume in the Hollow-Nikkel SWQUA are well defined by the Kansas Geological Survey (KGS).
6. An aquifer test was conducted by Ground Water Associates.
7. Burns and McDonnell (BmcD) conducted a study to estimate the effects of pumping from the three proposed wells. Model simulation results indicated that pumping would not affect the plume migration and that the rate and quantity of requested water is achievable at the proposed locations.
8. Chloride concentrations have not exceeded 11.7 ppm at well EB33C or 5.3 ppm at BPU 6;
9. The chloride concentrations at EB33C has remained between 11.7 ppm and 3 ppm since 1986;
10. Groundwater modeling and hydrogeologic tests indicate that the zone of capture from the applications' proposed rates and quantities does not reach the plume.
11. The McPherson Board of Public Utilities has installed and maintains 7 observation wells located between the proposed municipal well locations and the chloride plume.
12. According to the KGS, the southern edge of the Hollow-Nikkel chloride contaminant plume is located approximately 1.75 – 2 miles north-northwest of the proposed wells.
13. The plume is not significantly moving in any lateral directions according to the KGS.
14. Groundwater levels in the vicinity of the applications have remained stable since 1986 as measured at monitoring well EB 23C.
15. The exact impacts of the proposed pumping are unknown without a full scale pumping test.
16. The applications do not comply with the District's Maximum Reasonable Quantity for Beneficial Use Rule and Regulation 5-22-14(f), as the applicant is requesting that a longer period than 20 years be used for projecting water use demand and justifying the quantity of water requested.
17. Due to the unique nature of the applications, including the significant investment in infrastructure required including well construction, pipeline installation, etc., a longer than 20 year water demand projection is reasonable.
18. The current McPherson BPU municipal wells are located in the McPherson IGUCA and are experiencing long-term groundwater declines.
19. If the proposed applications are approved, the 2909 acre-feet per year authorized by the applications could be used to reduce the amount of water pumped by the McPherson BPU's existing wells located in the McPherson IGUCA, thus assisting in stabilizing the groundwater levels in that portion of the McPherson IGUCA.

Moved by Joe Pajor and seconded by Alan Burghart to recommend to the Chief Engineer that the applications be granted an exception to the Maximum Reasonable

Quantity for Beneficial Use Rule and Regulation 5-22-14(f) and the applications be recommended for approval, subject to the following conditions:

1. The implementation of a District developed groundwater monitoring plan, including water-level and water quality monitoring, at the applicant's expense.
2. The existing monitoring well network of the seven existing monitoring previously installed by McPherson BPU be maintained and incorporated in to the groundwater monitoring plan.
3. The constructed wells be equipped with a sample port or ports for water sample collection.
4. Water samples be collected from the points of diversion prior to initial operation, and analyzed by a State accredited water quality laboratory to include inorganic analysis comprised of metals and minerals and including chloride, sodium, and specific conductance and drinking water suitability interpretation.
5. The results of a rigorous 72 hour pumping test simulating maximum authorized pumping rates indicating that drawdown will not exceed 1 foot of drawdown at EB33A, B, or C. Details of the pumping test to be determined between District staff, McPherson BPU, and the applicant's consultant.
6. The permits shall be subject to Board review if the groundwater monitoring plan indicates, as determined by the District staff, that the operation of the proposed wells are impacting the chloride plume.
7. Application #47955 is authorized for 2574 acre-feet per year at 1750 GPM.
8. Application #47956 is authorized for 2674 acre-feet per year at 1750 GPM, and further limited to 2674 acre-feet per year when combined with #47955.
9. Application #47957 is authorized for 2909 acre-feet year at 2000 GPM, and further limited to 2909 acre-feet per year when combined with #47955 #47956.
10. The approved applications are further limited to 4995 acre-feet per year when combined with the McPherson BPU's existing water rights through the year 2035. After the year 2035, and upon demonstration by the applicant satisfactory to the District and Chief Engineer that additional water is needed due to the population projections and industry water use projections being consistent with the information provided with the original applications, the Chief Engineer will modify the initial aggregate quantity limitation to meet the projected water use for another 20 years or longer, not to exceed the total time allowed to perfect #47955, #47956, and #47957. Additionally, upon demonstration by the applicant satisfactory to the District and Chief Engineer that additional water is needed due to required water treatment or actual water demand exceeding the original projections, the Chief Engineer will modify the aggregate quantity limitation to meet the increased projected water use.

After additional discussion, a motion was made by Bob Seiler and seconded by Jeff Winter to amend the original motion of approval to modify Condition No. 10 to the following:

The approved applications are further limited to 4995 acre-feet per year when combined with the McPherson BPU's existing water rights through the year 2035. That 10 years after the diversion works are completed, and every 10 years following until the perfection period expires, the applicant submit to the District and Chief engineer water use data, including population/per capita data and industrial use data. Following submitting each 10 year report and upon demonstration by the applicant satisfactory to the District and Chief Engineer that additional water is needed due to the population and industry water use being consistent with the information provided with the original applications, the Chief Engineer will modify the initial aggregate quantity limitation to meet the projected water use for another 10 years, not to exceed the total time allowed to perfect Nos. 47955, 47956, and 47957. Additionally, upon demonstration by the applicant satisfactory to the District and

Chief Engineer that additional water is needed due to required water treatment or actual water demand exceeding the original projections, the Chief Engineer will modify the aggregate quantity limitation to meet the increased projected water use.

The motion amendment made by Bob Seiler carried with 8 Directors for, 0 Directors against, 0 Directors abstained, and 1 Director absent.

After further discussion, a motion was made by David Bogner and seconded by Bob Seiler to amend the original motion of approval to include the following condition:

11. Any change in place of use application filed on Nos. 47955, 47956, and/or 47957 shall be subject to District Board review.

The motion amendment carried with 8 Directors for, 0 Directors against, 0 Directors abstained, and 1 Director absent.

The original motion made by Joe Pajor and seconded by Alan Burghart to recommend to the Chief Engineer that the applications be granted an exception to the Maximum Reasonable Quantity for Beneficial Use Rule and Regulation 5-22-14(f) and the applications be recommended for approval, subject to the conditions as amended by the Board, carried with 8 Directors for, 0 Directors against, 0 Directors abstained, and 1 Director absent.

**b) Proposed Change to Water Conservation Areas – K.S.A. 82A-745**

Tim Boese, Manager, presented information regarding the current Water Conservation Areas (WCA) statute and staff concerns regarding water use flexibilities allowed by WCAs and discussed the need for the Chief Engineer to develop WCA regulations. Susan Metzger, KDA, provided a handout and additional information regarding the current WCAs. Susan also discussed possible WCA statute changes to provide for the use of a management plan instead of a term permit, which would last as long as the WCA. Tucker Stewart, KLA, provided information regarding the livestock industry driven aspect of the WCA, which has historically been to provide flexibility in water usage. Tucker also discussed a few key components of legislation such as suspension or modification of a WCA so that impairment does not affect other water rights, as well as the inclusion of Multi Year Flex Accounts in a WCA. Susan stated that she would appreciate hearing feedback from the Board before the proposed legislation is introduced during the 2017 legislative session.

**c) Proposed Changes to Consumptive Use Calculation Regulation**

Tim Boese, Manager, provided information regarding the background, findings, and staff recommendations regarding proposed changes to the Consumptive Use Calculation Regulation for irrigation water rights being converted to other types of uses.

Susan Metzger, KDA, reported that these changes have been proposed because livestock and dairy farmers looking at Kansas to grow their animal agriculture continue to report that they find the current calculation confusing. Susan explained the proposed consumptive use calculation was based on the Area-Weighted Average Irrigation Return Flow method, rather than individual water rights perfection acres and the net irrigation requirement.

Tucker Stewart, KLA, provided additional information regarding the reasoning behind the proposed changes.

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Tucker Stewart, KLA, provided additional information regarding the reasoning behind the proposed changes.

It was the consensus of the Board for District staff to provided additional information and recommendation to the Board at the November 8, 2016, meeting.

**d) Proposed Changes to Disposal of Dike and Pit Contents Regulation – K.A.R. 82-3-607**

Tim Boese, Manager, provided information regarding the Proposed Changes to Disposal of Dike and Pit Contents Regulation. The changes are proposed to the Kansas Corporation Commission (KCC) by the Kansas oil and gas industry and would allow stormwater accumulations in any diked area built for containment of spills from oil and gas activities to be discharged without a permit or notification to KCC, provided the chloride content of the fluid does not show any visible indication of hydrocarbons and the chloride content of the fluid does not exceed 1000 mg/L, both as determined by the oil/gas operator. The current regulation requires the fluid to be properly disposed, which is usually done by disposing the fluid into a deep injection well. The District is concerned about the potential contamination for the Equus Beds Aquifer that could be caused by the discharge of fluids with chloride levels up to 1000 mg/L, especially in locations with sandy soils and shallow depth to groundwater. The District is also concerned about any other contaminants, such as hydrocarbons, that may be present in the discharged fluid. Additionally, it is likely that fluids would be discharged in the same location (just outside the diked areas) time after time, resulting in a chloride concentration in the soil and aquifer near the diked areas. This could also potentially damage the soil and crops near the diked areas. Finally, the District is concerned about the accuracy of the chloride content in the fluids since the oil/gas operator making the determination may not be properly trained and may not use proper techniques and equipment to accurately determine the chloride content of the fluid prior to discharging it to the land surface.

Moved by Alan Burghart and seconded by Jeff Winter directing Tim Boese, Manager, to oppose the regulation change and write a letter to the KCC and also request to testify in any hearing concerning the regulation change. Motion carried with 6 Directors for, 0 Directors against, 0 Directors abstained, and 3 Director absent.

Moved by Joe Pajor and seconded by David Bogner to amend the motion to instruct Tim Boese, Manager, to identify other agencies and organizations that might also be concerned about the regulation and copy such agencies and organizations on his correspondence. Motion carried with 6 Directors for, 0 Directors against, 0 Directors abstained, and 3 Director absent.

**e) Susan Metzger, KDA – Proposed Water-Related Legislative and Regulatory Changes**

Susan Metzger, KDA, and Tucker Stewart, KLA, provided a handout and information regarding draft proposed changes to the Water Conservation Areas (WCA) statute, consumptive use calculation regulation, and water right impairment claims. The proposed changes to the WCA statute and consumptive use calculation regulation were discussed early in the meeting. The proposed changes to the water rights impairment statute 82a-717a would require all impairment complaints to initially be handled administratively by the Chief Engineer prior to any judicial review and action. The Chief Engineer could issue a temporary order to curtail pumping under certain criteria and the decision of the Chief Engineer would be reviewable under the Kansas Judicial Review Act. Susan advised that the proposed legislation is planned to be introduced during the 2017 legislative session.

## **ITEM 9 -- AGENCY & COMMITTEE REPORTS**

### **a) DIVISION OF WATER RESOURCES**

Jeff Lanterman, DWR – Stafford, advised that DWR has been working on Compliance Investigations, and they completed around 90 investigations in regards to the City of Wichita water permits. DWR has also been working diligently on the Quivira Impairment issue and the City of Hays Change Applications.

### **b) KANSAS WATER AUTHORITY**

Vin Kissick reported that the KWA meeting held in Emporia on August 31 and September 1, 2016 included tours of Wolf Creek nuclear power plant and John Redmond reservoir dredging operations. Vin also advised that Orrin Feril of GMD5 was appointed to the RAC committee, which may improve communication between the two agencies. KWA continues to work with RACs and the Blue Ribbon Task Force regarding funding options and answering questions concerning how locally generated funding can be used locally, as well as the benefits from such funding. Joe Pajor discussed a proposal by Alan King regarding the City of Wichita meeting with appropriate parties to discuss the salt contamination in GMD2. The potential outcome would be to formulate a remediation system pilot project in the Burrton IGUCA. The next KWA meeting is scheduled for October 19, 2016, in Milford.

### **c) EQUUS – WALNUT REGIONAL ADVISORY COMMITTEE**

Joe Pajor reported that at the meeting on September 20, 2016, the committee worked on finalizing actions items, and they received a report on the draft statewide educational effort.

## **ITEM 10 -- MANAGER'S REPORT**

### **a) ASR Project Report**

Tim Boese, Manager, advised the Recharge for August was: Phase I – 101.43 acre-feet (all in recharge basin) and Phase II – 436.78 acre-feet (70% in recharge basin). The Recharge for September was: Phase I – 112.06 acre-feet (all in recharge basin) and Phase II – 546.59 acre-feet (63% in recharge basin). Cheney Reservoir: Conservation pool is full and flood pool is 4.7% full. Cheney release is 0 CFS. Flow today: Little Ark - Highway 50 is 35 CFS; Valley Center is at 144 CFS. District staff met with City of Wichita staff to review model inputs. Final model inputs to be determined soon and model run under three drought pumping scenarios. District staff will provide hydrographs with October water levels for the November Board meeting. Joe Pajor also requested a detailed ASR status report for the November meeting to show a “path forward” for the project.

### **b) Administrative Field Tasks**

Tim Boese, Manager, reported for the month of August that staff worked on 9 new/change applications and processed a total of 89 files including new and change applications, dismissals, VI cards, etc. Staff also completed 19 assessment issues, collected 194 Water Quality samples, and conducted 27 Water Meter Inspections. For the month of September, staff worked on 25 new/change applications and processed a total of 158 files including new and change applications, dismissals, VI cards, etc. Staff also completed 31 assessment issues and conducted 35 Water Meter Inspections.

### **c) Monthly Information & Service Report**

Tim Boese, Manager presented customer service requests for the months of August and September.

## **ITEM 12 -- BOARD ROUND TABLE DISCUSSION – VIN KISSICK, VICE PRESIDENT**

Tim Boese, Manager, reported that the public hearings for the Burrton and McPherson IGUCA reviews were held on October 4<sup>th</sup> in Hutchinson. Tim advised that he provided testimony for both reviews. There was one comment from the City of Wichita on the Burrton IGUCA review regarding boundaries expansion, and there was one public comment from the McPherson BPU on the McPherson IGUCA review. Tim advised that if the Board wished to provide comments/recommendations regarding the possible expansions of both the Burrton IGUCA and McPherson IGUCA boundaries it needs to be made within the 30 day comment period. Tim recommended requesting a 30 day extension to allow the Board time to review the information at the November Board meeting.

Moved by Jeff Winter and seconded by Alan Burghart to request a 30 day extension from the Chief Engineer for Board input on the possible expansions of both the Burrton and McPherson IGUCA boundaries. Motion carried with 6 Directors for, 0 Directors against, 0 Directors abstained, and 3 Director absent.

Tim also reported that the public hearing for the District Boundaries Expansion was also held on October 4<sup>th</sup> in Hutchinson, with Tim providing testimony and only one question from the public. District staff will provide the Chief Engineer additional information regarding the aquifer in the proposed expansion areas within the next 60 days.

Tim advised District staff continues to work with GIS Workshop in regards to the new mobile GIS application.

Vin Kissick mentioned that he has been involved in preliminary discussions with other GMDs regarding raising the GMD Assessment Cap. The Board will continue to discuss this at a later date.

### ITEM 13 – EXECUTIVE SESSION

Moved by Jeff Winter and seconded by David Bogner to recess into Executive Session for fifteen minutes to discuss District matters with the District's attorney for the purpose of protecting the privacy of that information. Motion carried with 6 Directors for, 0 Directors against, 0 Directors abstained, and 4 Directors absent. Those present during this Executive Session were the members of the Board; Tim Boese, Manager; and Tom Adrian, Legal Counsel.

Time in Executive Session: 2:10 p.m.

Time out of Executive Session: 2:25 p.m.

There was no Board action as a result of the Executive Session.

Moved by Jeff Winter and seconded by Alan Burghart to adjourn the meeting. Motion carried with 6 Directors for, 0 Directors against, 0 Directors abstained, and 3 Director absent.

Vin Kissick, Vice President, adjourned the Board meeting at 2:34 p.m.

Jeff Winter  
Secretary  
JW/TDB/rsw





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