

**Barton Springs/Edwards Aquifer Conservation District  
Board of Directors Meeting Minutes  
Regular Meeting  
May 27, 2010**

Board members present at commencement: Mary Stone, Gary Franklin, and Jack Goodman. Craig Smith arrived at 6:24 p.m. Bob Larsen was out of town. Staff present: Kirk Holland, John Dupnik, Brian Smith, Dana Wilson, and Tammy Raymond. Mr. Bill Dugat of Bickerstaff, Heath also participated. Also present were those on the attached sign-in sheet. These minutes represent a summarized version of the meeting; the complete discussion of the following items is recorded digitally.

**1. Call to Order.**

Vice President Stone, presiding in Dr. Larsen's absence, called the meeting to order at 6:10 p.m., noting that a quorum of the Board was present.

**2. Citizen Communications (Public Comments).**

There were no public comments of a general nature.

**5. Regular Meeting: New Business.**

**5a. Swearing-in of and administering the Oath of Office to Craig Smith, Precinct 5 Director, and to Gary Franklin, Precinct 2 Director, and authorizing the purchase of director bonds for the term of each.**

Mr. Franklin was sworn in by Ms. Stone, and took the Oath of Office for Director of Precinct 2. The agenda item was kept open so that Mr. Smith could be sworn in upon his arrival.

**4. Public Hearing: 6:15 p.m.**

**The Board will hold a Public Hearing concerning recommendations of Desired Future Conditions for the Freshwater Edwards, Upper Trinity, Middle Trinity, Lower Trinity, and Saline Edwards Aquifers in Groundwater Management Area 10.**

Ms. Stone opened the Public Hearing at 6:16 p.m.

After Mr. Holland provided some introductory comments concerning the process of establishing DFCs and the District's progress, Mr. Dupnik gave a power point presentation on the staff's assessment of the regulatory implications of Desired Future Conditions and their likely Managed Available Groundwater amounts, focusing primarily on the Freshwater Edwards Aquifer. Staff members answered a number of questions from the directors concerning the presented information

Mr. Bill Bunch commented on the recommended Desired Future Conditions.

Mr. Holland read a comment letter submitted by Jennifer Walker of the Lone Star Chapter of the Sierra Club.

Ms. Stone closed the Public Hearing at 7:49 p.m.

**5a. Swearing-in of and administering the Oath of Office to Craig Smith, Precinct 5 Director, and to Gary Franklin, Precinct 2 Director, and authorizing the purchase of director bonds for the term of each.**

Mr. Smith was sworn in by Ms. Stone, and took the Oath of Office for Director of Precinct 5.

Mr. Goodman moved approval of the purchase of director bonds for Mr. Franklin and Mr. Smith for their new four-year terms.

Mr. Franklin seconded the motion and it passed unanimously with a vote of 4 to 0.

**6b. Discussion and possible action on recommendations for Desired Future Conditions of the Freshwater Edwards Aquifer in the Northern Subdivision of Groundwater Management Area 10.**

After discussion, Mr. Smith made the following motion:

The Board of Directors of the Barton Springs/Edwards Aquifer Conservation District (BSEACD) adopts the following resolution as its recommendation to all of the groundwater conservation districts within Groundwater Management Area 10 (GMA-10) of the expression of the “desired future condition” (DFC) for the Northern Subdivision of the freshwater Edwards Aquifer, as required by Texas Water Code Sec. 36.108(d) and Texas Water Development Board (TWDB) regulations.

**WHEREAS,**

- A. The DFC is intended to be the realistic goal or target set by the districts within the GMA for groundwater conditions 50 years from now. But the “managed available groundwater” (MAG) amount that will be calculated in accordance with the DFC will be issued to each district by the TWDB within one year after the submission of the DFC, and the districts will be obligated to issue permits totaling up to that amount, provided they satisfy other district requirements. So the DFC must be calibrated with an eye on both near-term outcomes and long-term goals. That is, the desired condition must be achievable relatively soon after the MAG is issued and also achievable and still desirable in 50 years.
- B. The freshwater Edwards Aquifer is a karst aquifer that experiences rapid recharge during periods of high rainfall and rapid depletion during drought. The Barton Springs segment that comprises the Northern Subdivision of the aquifer is also a relatively small reservoir

that mainly serves as a public water supply source for more than 50,000 people but also serves significant industrial, commercial, recreational, and other uses, including providing the habitat for endangered species. These facts, combined with the availability of alternative water sources to some users, suggest that two types or levels of DFC are needed: an upper or “all conditions” DFC that will set a limit on the amount by which the aquifer water level may be drawn down under even transient high-flow conditions, and a lower or “extreme drought” DFC that will define the aquifer water level to be maintained in a return of a great drought like that of the 1950’s. Permits for the amount of groundwater between those two levels should be available only on a conditional basis, subject to reduction and total curtailment when drought returns. The regulatory and drought management programs of the district must provide for pumpage reductions and curtailments that achieve those outcomes.

- C. Springflow at the natural outlet of Barton Springs is the best overall indicator of conditions in the Northern Subdivision of the freshwater Edwards Aquifer, especially during the critical low-flow conditions. So the “extreme drought” DFC for the aquifer is best expressed in terms of the amount of springflow that is to be maintained. Under low-flow conditions, there is an approximate one-to-one relationship between the amount of water withdrawn from the aquifer by wells and the amount of springflow. That is, each measure of water that is withdrawn results in an equal measure of reduction in springflow. The “all conditions” DFC relates to the amount of water in storage in the aquifer above the level of Barton Springs and is best expressed as the maintenance of an all-time average springflow over a suitably long time period...
- D. The factors to be considered in setting an upper or “all conditions” DFC for the aquifer include the following:
  - 1. The ability of the aquifer to supply regional water needs in times of abundance;
  - 2. The ability of groundwater conservation districts and others to implement aquifer storage and retrieval (ASR) projects during high-flow conditions to increase the amount of water held in storage for use during drought;
  - 3. The ability of conditional permittees to reduce and curtail their usage of aquifer water through conservation and the substitution of other water supplies upon the return of drought conditions; and
  - 4. The avoidance of unreasonable acceleration of mandatory water conservation requirements for other permittees.
- E. After considering these factors, the Board concludes that an initial upper or “all conditions” DFC that is defined as maintaining a minimum average springflow of 49.7 cfs over a running seven-year period, which corresponds to 16 cfs of total pumped withdrawals from the Edwards from all users, including exempt users, under any and all aquifer conditions will enable the aquifer to continue to play an important role in supplying regional water needs, will allow the districts and others in GMA 10 to conduct pilots and implement ASR projects if deemed feasible, will provide reasonable assurance that conditional permittees will be able to reduce and curtail their usage upon the return

of drought, and will not unreasonably accelerate mandatory water conservation requirements for other permittees.

- F. The factors to be considered in setting a lower or “extreme drought” DFC include the following:
1. The vulnerability of some existing public water supply, domestic, livestock, and other wells to depletion of available groundwater at low aquifer water levels;
  2. The potential for prolonged harm or even risk of extinction to the endangered Barton Springs salamanders and other wildlife species of concern in Barton Springs due to low springflow and the associated lower dissolved oxygen concentrations, although that risk might be mitigated by other means;
  3. The recreational needs of the more than 500,000 annual visitors to Barton Springs Pool;
  4. The ability and costs of existing public water supply and other aquifer permittees to reduce their water usage and secure alternative water supplies in time of drought in order to meet mandatory reduction requirements; and
  5. The economic impact of mandatory water use reduction or curtailment on aquifer users, communities, and individual property rights.
- G. After considering these factors, the Board concludes that an initial lower or “extreme drought” DFC that is defined as Barton Springs flow averaging no less than 6 cubic feet per second (cfs) on a monthly basis during a recurrence of drought-of-record conditions will not unduly endanger vulnerable wells, will not likely create jeopardy for survival and recovery of the endangered species that the district has a duty to protect under the federal Endangered Species Act and BSEACD’s approved Management Plan; will not prevent the recreational use of Barton Springs Pool; will be achievable through aggressive conservation, substitution of alternative water supplies, and retirement or reservation of existing permitted uses; and will not cause intolerable economic impacts due to mandatory water use reduction or curtailment.
- H. The board recognizes that the limitations on water withdrawals implied by the recommended DFCs, especially the limitations during extreme drought conditions, will cause considerable inconvenience and some economic losses to the human users of the aquifer and does not eliminate risk to the survival of the endangered wildlife that depends on the flow of Barton Springs. The board believes that the proposed DFCs fairly balance the inconvenience, losses, and risks and fulfill the obligation of the district to protect and conserve the aquifer so that it can be passed undiminished to succeeding generations. As more effective water conservation methods and increased alternative water supplies, such as reclaimed water, desalinated brackish groundwater, surface water through extended distribution networks, and harvested rainwater become more available, it may be possible in the future to modify the DFCs or how they are achieved in order to reduce the inconvenience, losses, and risk. The risk to the survival of the endangered salamanders during low-flow episodes may also be mitigated by technical means, such as subsurface

aeration or water recirculation, which may provide additional opportunities to modify the “extreme drought” DFC.

**THEREFORE,**

The Board of Directors of the BSEACD recommends that GMA 10 submit to the TWDB the following expressions of the DFC for the freshwater Edwards Aquifer in the Northern Subdivision of GMA 10:

1. Under all aquifer conditions, the DFC is the maintenance of a minimum average springflow of 49.7 cfs over a seven-year period, which is intended to correspond to an aggregate maximum of 16 cfs of total annual withdrawals from the Edwards by all users, including exempt users; and
2. During extreme drought conditions, the DFC is springflow of Barton Springs averaging no less than 6 cubic feet per second (cfs) on a monthly basis.

Mr. Goodman seconded the motion.

Ms. Stone stated that she would like to see 7 cfs and would like to know the implications to Groundwater Districts.

After further discussion, Mr. Goodman moved to table the motion to the next meeting when a full Board would be present.

Mr. Smith seconded the motion and it passed with a vote of 4 to 0.

**6c. Discussion and possible action on recommendations for Desired Future Conditions of the Upper Trinity, Middle Trinity, Lower Trinity, and Saline Edwards Aquifers in Groundwater Management Area 10.**

After discussion, the Board elected to return the item to the agenda of the next meeting.

**5b. Discussion and possible action related to setting a work session of the Board to discuss the District’s legislative agenda in the upcoming legislative session.**

The Board set a work session to discuss a legislative agenda for the upcoming session on Thursday, June 17<sup>th</sup> at 6:00 p.m.

**6a. Discussion and possible action concerning the change requested by Hays Co. WCID No. 1 to its settlement agreement with the District.**

Mr. Holland and Mr. Dugat gave an update on recent activities to assess the implications of the requested changes to the settlement agreement with the District.

### **3. Routine Business.**

- a. **Consent Agenda** Note: These items may be considered and approved as one motion. Directors or citizens may request any consent item be removed from the consent agenda, for consideration and possible approval as an item of Regular Business.
  1. **Approval of Financial Reports under the Public Funds Investment Act, Directors' Compensation Claims, and Specified Expenditures greater than \$5,000.**
  2. **Approval of minutes from the May 13, 2010, Regular Board Meeting, and May 18, 2010 Special Board Meeting.**

Mr. Goodman moved approval of the consent agenda as stated above, noting an invoice for \$10,000 from Figer and Company.

Mr. Franklin seconded the motion.

Mr. Holland stated that the invoice amount has been budgeted for the annual audit.

The motion passed unanimously with a vote of 4 to 0.

- b. **General Manager's Report.** Note: Topics discussed in the General Manager's Report are intended for general administrative and operational information-transfer purposes.  
The Directors will not take any action on them in this meeting, unless the topic is specifically listed elsewhere in this as-posted agenda.
  1. **Personnel matters and utilization;**
  2. **Upcoming public events of possible interest;**
  3. **Aquifer conditions and status of drought indicators.**
  4. **Discussion related to current staff work areas and specific activities of staff teams and directors.** Note: Individual topics listed below may be discussed by the Board in this meeting, but no action will be taken unless a topic is specifically posted elsewhere in this agenda as an item for possible action. A Director may request an individual topic that is presented only under this agenda item be placed on the posted agenda of some future meeting for Board discussion and possible action.
    - i. **Review of Status Report Update – at Board's discretion.**
    - ii. **Update on status and activities of GMA 9 and GMA 10.**
    - iii. **Update on discussions with Hays County concerning a possible Interlocal Agreement with District.**
    - iv. **Update on the relationship of Lovelady water levels and Barton Springs discharge during extreme drought.**

**v. Update on status of desalination feasibility study grant proposal to TWDB and other grant opportunities.**

Mr. Holland and staff updated the Board and answered directors' questions on the teams' activities concerning the items listed above.

**7. Adjournment.**

Ms. Stone adjourned the meeting at 9:14 p.m.

Approved by the Board:

By: Mary Stone  
Mary Stone, Vice President

Attest: Gary Franklin  
Gary Franklin, Secretary