



February 10, 2012

Honorable Members of the Oklahoma Water Resources Board
Mr. J.D. Strong, Executive Director
3800 N. Classen Blvd.
Oklahoma City, OK 73118

Re: Proposed Maximum Annual Yield for the Arbuckle-Simpson Groundwater Basin

Dear Members of the Board and Mr. Strong,

On Monday, you will be considering an agenda item regarding the proposed Maximum Annual Yield (MAY) and Equal Proportionate Share (EPS) for the Arbuckle-Simpson groundwater basin. The proposed order was available the afternoon of Tuesday, February 7, so by Monday, we will have had less than a week to review it.

The proposed MAY is based upon how stream and spring flows affect certain fish species. Upon examining the document, we are concerned about the methodology and criteria used by the Technical Advisory Group to recommend the MAY. Further, we are concerned that the MAY will unnecessarily deprive landowners of their groundwater and private property, thereby inhibiting agricultural production and economic growth for both urban and rural citizens.

At this time, we are not questioning the validity of the multi-year \$6 million scientific studies on the basin or the credentials of those who performed the studies. However, with regard to the recommendation prepared by the Technical Advisory Group for Arbuckle-Simpson MAY, we question why a biological indicator – how groundwater withdrawals affect certain spring-dependent fish species – was the method chosen to determine a MAY for the basin.¹

Arbuckle-Simpson's Abundant Water Supply

The Arbuckle-Simpson underlies 612.5 square miles² or 392,019 acres³ contained in Murray, Pontotoc, Johnston, Garvin, Coal and Carter Counties in south central Oklahoma⁴. By

¹ Proposed Tentative Determination of the Maximum Annual Yield for the Arbuckle-Simpson Groundwater Basin, OWRB. Feb. 13, 2012. p. 5.

² Proposed Tentative Determination. p. 2.

comparison, the largest lake by surface area in Oklahoma is Eufaula with 105,000 acres.⁵ The second largest lake by surface area is Texoma with 88,000 acres⁶. By area, the Arbuckle-Simpson is almost four times the size of Lake Eufaula.

The OWRB calculated the Arbuckle-Simpson basin holds over 9.4 million acre/feet⁷ of water. The state's largest lake in conservation storage⁸ is Texoma at 2.6 million acre/feet⁹, and the second largest lake in conservation storage is Eufaula at 2.3 million acre/feet¹⁰. By volume, the Arbuckle-Simpson is more than three times the size of Lake Texoma.

According to the Scientific Investigations Report 2011-5029, most groundwater withdrawals in the Arbuckle-Simpson are in the eastern part of the aquifer, where the average annual reported groundwater use from 1964 through 2008 was 4,299 acre-feet. Sixty-three percent of the groundwater withdrawal was for public water supply systems.¹¹

How the Proposed MAY Will Be Incorporated into the OCWP

It is unclear how the proposed MAY will be incorporated into the statewide water plan. If adopted, this MAY could create "hot spots", areas with the most significant potential for permit related limitations for water supply, in this water rich area. In other words, an unrealistically low MAY could create a paper shortage of water, not an actual shortage.

³ Proposed Tentative Determination, p. 2.

⁴ Proposed Tentative Determination, p. 1.

⁵ Oklahoma Water Facts, OWRB website, February 9, 2012, p. 1.

⁶ Oklahoma Water Facts, OWRB website, February 9, 2012, p. 1.

⁷ Proposed Tentative Determination, p. 3.

⁸ Conservation pool is the reservoir storage of water for the project's authorized purpose other than flood control. The flood control pool is reservoir storage of excess runoff above the conservation pool storage capacity that is discharged at a regulated rate to reduce potential downstream flood damage.

⁹ Oklahoma Water Facts, OWRB website, February 9, 2012, p. 1.

¹⁰ Oklahoma Water Facts, OWRB website, February 9, 2012, p. 1.

¹¹ Scientific Investigations 2011-5029, Hydrology and Simulation of Groundwater Flow in the Arbuckle-Simpson Aquifer, South-Central Oklahoma. U.S. Department of the Interior, U.S. Geological Survey, Oklahoma Water Resources Board. p. 2.

Concerns about Methodology, Use of All Available Data for MAY Proposal

Senate Bill 288 passed by the Legislature in 2003, directed the OWRB to conduct and complete a hydrological study and approve a MAY that would ensure any permit for the removal of water not reduce the natural flow of water from springs or streams emanating from said basin or subbasin.¹² The OWRB staff arbitrarily decided the way to protect the “natural flow” in springs and streams was to use a biological indicator as a proxy to develop a MAY recommendation. That biological indicator was the effect of spring and stream flow on certain fish species.

There are ways to determine a MAY other than using a biological indicator surrogate. When “natural flow” is considered in the context of the entire period of record for flow conditions, natural flow sometimes means “no flow” as evidenced by zero flow measurements taken at multiple locations along the Blue River since 1937. Springs and streams emanating from the Arbuckle-Simpson naturally go dry on occasion due to drought. Therefore, we believe OWRB should have calculated a MAY based on the entire period of flow record to determine the highest MAY that could be implemented without substantially increasing the number of zero flow measurements.

Furthermore, a proposed MAY, derived from data based upon the study of primarily one single lobe of sub-basin cannot be scientifically demonstrated to apply to the other sub-basins of differing geological and hydrological characteristics.

Emphasis Should be on People and Drinking Water, not Fish

We believe it is inappropriate to use a biological indicator (fishes) as the basis to develop a MAY for the basin, rather than a method based upon the existing permitted uses, including public water supply, irrigation, industrial, recreation, mining and agriculture.

Nothing in Senate Bill 288 stated a MAY for the basin should be based upon fish species. We believe the MAY was intended to be based upon the uses that are currently permitted in the basin, focusing on people, not fish. The purpose of a MAY is to allow landowners to put their water to beneficial use in an orderly manner. A MAY based upon a different standard (fish as a proxy) is contrary to statute.

A lawsuit that challenged SB 288 as a special law and contrary to the Oklahoma Constitution was decided by the Oklahoma Supreme Court in 2006. In their analysis of the case the Court recognized the importance of water to the people in the basin. The Court wrote:

¹² 82 O.S. § 1020.9A(B)(2)

As to its nature, the sensitive sole source groundwater basin legislation relates to the state's water resources that supply safe drinking water to the basin area and to all the people who live, work or visit there. Unquestionably, safe drinking water is a subject of common interest throughout the state and a rightful subject for legislative regulation.¹³

and

...we conclude that the purpose of the challenged legislation is to conserve the sole source of safe drinking water for use in the area overlying the sensitive sole source groundwater until a hydrological study is completed and a maximum annual yield is determined that *ensures the withdrawal of water will not interfere with the in-basin drinking water supply*.¹⁴ [Emphasis added]

Notably, there is no mention of fish in the opinion.

In 2009, the Arbuckle Simpson Surface Water Technical Advisory Group determined a maximum of 25 percent reduction in baseflow should result in limited impact to spring and stream habitat,¹⁵ and would therefore be an acceptable basis for a MAY.

The proposed order has recommended .2 acre/feet for an EPS. In 1972, the Legislature passed a law which allowed the issuance of temporary permits until a MAY is determined for a groundwater basin. The temporary permits were for 2 acre/feet of water for each acre of land. The 2 acre/feet number was chosen because it was presumed to be the maximum amount of water needed by Oklahoma irrigators.¹⁶

There is obviously a huge difference between 2 acre/feet and .2 acre/feet. Another contrast is the Antler's groundwater basin, which adjoins the Arbuckle-Simpson on the south. It has an EPS of 2.1 acre feet. Some landowners in the Arbuckle-Simpson basin contend they should at least receive the recharge rate (5.58 inches) as their EPS, as it is their land which is recharging the aquifer.

¹³ Jacobs Ranch, L.L.C. v. Smith, 2006 OK 34.

¹⁴ Jacobs Ranch, L.L.C. v. Smith, 2006 OK 34.

¹⁵ Arbuckle Simpson Surface Water Technical Advisory Group Recommendations. PowerPoint. OWRB. Aug. 19, 2009. p. 22.

¹⁶ Update of the Oklahoma Comprehensive Water Plan 1995. OWRB, Feb. 1997. p. 12.

Implementation Process

In an article first printed in the Ada Evening News, an Ada official considering how the City might adapt to the proposed MAY estimated the City would need an additional 40,000 acres of ground water rights to fulfill its needs at an estimated cost of \$8 to \$12 million.¹⁷ It has been mentioned that Ada is ready to take water rights by eminent domain if necessary. In fact, the City of Ada is already actively pursuing additional water rights.

We submit that a MAY based on the historical period of flow record would greatly mitigate the drastic change in taxpayer resources and local land use required by the currently proposed MAY.

While we disagree with a MAY based upon fish species, if the Board decides to move forward with the MAY, whether it is based upon fish species or otherwise, it should be implemented as swiftly as possible. OWRB has admitted it lacks legal authority to allow for a phase-in period and there is no precedent for a phase-in. Landowners are the losers in a long implementation period because it unnecessarily delays the development of local water markets and deprives them of immediate opportunities to sell their water rights to municipalities and rural water districts, if they wish to do so.

Well Set Back Distances from Springs and Streams

The proposed order says:

...the Board tentatively determines that a rule should be promulgated to set out an established distance that new wells in the Arbuckle-Simpson Groundwater Basin must be from the location of springs and streams, with companion rules to adopt a methodology for estimating effects of pumping from the specific location of a proposed new well to analyze whether such pumping is likely to degrade or interfere with specific springs or streams.¹⁸

We question why the MAY is not sufficient to address this issue. The Proposed Tentative Determination claims a rulemaking will be required to implement set back distances. This proposal sounds like more regulations and bigger government for the landowner to navigate in order to get a permit.

¹⁷ Scalf, Dick. "A reliable, affordable water supply for Ada", Ada Evening News. Reprinted on the Citizens for the Protection of the Arbuckle Simpson Aquifer Website. January 24, 2011.

¹⁸ Proposed Tentative Determination. p. 14.

Conflicts with Current Law

This MAY proposal is built upon an unsteady legal foundation. There is a conflict between competing laws with SB 288 calling for a MAY with no impact on springs and streams and the State's overall policy of utilization at 82 O.S. § 1020.2(A):

It is hereby declared to be the public policy of this state, in the interest of the agricultural stability, domestic, municipal, industrial and other beneficial uses, general economy, health and welfare of the state and its citizens, to utilize the ground water resources of the state, and for that purpose to provide reasonable regulations for the allocation for reasonable use based on hydrologic surveys of fresh ground water basins or subbasins to determine a restriction on the production, based upon the acres overlying the ground water basin or subbasin.

Setting aside millions of acre/feet of water for nonuse is inconsistent with the State's policy of utilization.

Further, current law requires that MAY be based on a hydrological study of individual aquifers. This proposed order is based on a study of the Eastern Lobe of the Arbuckle Simpson, which is both geologically and hydrologically different from the Central and Western lobes of the Arbuckle Simpson. There is no basis in current law to apply the study of the Eastern Lobe to a MAY for the Central and Western.

Plea for Consideration and Action

The current OWRB proposal would take more than 9 million acre/feet of water off the table for any use. Existing permits total 127,700 acre/feet/year¹⁹. The current proposal will change landowners' water in the basin from a valuable resource into something that has no value. More to the point, using an approach that requires landowners to surrender their groundwater rights to maintain flow in springs and streams effectively takes private property and converts it to the State, something that isn't provided for in statute.

We urge you to postpone a vote on the proposed MAY on Monday. We urge you to slow down the process in order to allow time for consideration of a different method to determine a MAY. We urge you to refer the matter back to OWRB staff for examination of our concerns. We urge the OWRB to use the existing studies and data to develop a MAY that more closely adheres to the direction given by SB 288. We are prepared and eager to enter into those discussions with an open mind and spirit of cooperation.

¹⁹ Scientific Investigations 2011-5029, p. 9.

Please let us know how we can assist you in this process. Thank you for your consideration in this matter.

Sincerely,

Oklahoma Farm Bureau

Oklahoma Cattlemen's Association

The State Chamber

Environmental Federation of Oklahoma

Oklahoma Aggregates Association

Oklahoma Independent Petroleum Association

Mid-Continent Oil & Gas Association of Oklahoma