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# KAPA

Kansas Aggregate Producers' Association

# **TESTIMONY**

Edward R. Moses Managing Director

Date:

March 6, 2012

Before:

Senate Committee on Agriculture

By:

Woody Moses, Kansas Aggregate Producers Association

Regarding:

SB 412 – Sand & Gravel Extraction/Water Use

Good Morning Chairman Taddiken and Members of the Committee:

My name is Woody Moses, Managing Director of the Kansas Aggregate Producers Association. The Kansas Aggregate Producers Association (KAPA) is an industry wide trade association comprised of over 170 members located or conducting operations in all 165 legislative districts in the state that provides basic building materials to all Kansans. I appreciate the opportunity to appear before you today with our comments on SB 412 a measure dealing with the "use" of water in sand & gravel operations.

Winston Churchill once said Russia "is a riddle, wrapped in a mystery, inside an enigma." Too many of us who deal with water law the same thing may apply for Kansas water law. For the Kansas sand and gravel industry, the Kansas Division of Water Resources (DWR) and this Legislature it is particularly vexing when it comes to water use associated with the development of natural resources such as sand & gravel. In our opinion the adoption of SB 412 will go a long way towards resolving these issues.

## What are these issues?

Sand, in appropriate gradations, is normally found in the alluvial aquifer (near rivers and streams) usually in areas that were closed to appropriation long ago, and unlike a farm or livestock operation cannot be moved to where water is available. Yet, the public demand for sand increases at a rate of 3-4 tons per Kansan per year, or almost 19 million tons per year. Over 70% of sand products are consumed statewide by the public through KDOT, cities and counties. Unfortunately, in order to meet this demand sand operators are forced to expose the alluvial aquifer to evaporation as a consequence of the resulting sand pit. As the sand, which belongs to the operator, is mixed with the water, which is reserved to the public thus create an inner conflict with the Kansas Water Appropriations Act. The easy solution would be for the state to remove its water from the sand, as the sand operator is able to work dry operation more efficiently. So, how does the operator access his private property without unduly affecting the management of the public water resources?

# Resource Management

From 1945 to 1987, it was not considered to be a problem by DWR as the total diversion by evaporation was minimal, even today it is less than 2/10 of 1% of annual industrial use. In 1987 DWR reconsidered its position and sought to regulate evaporation by term permit and eventually by water right in 1993. In 1995, the use was deemed to be not beneficial by the Legislature. However, as it was difficult to obtain the other necessary permits to conduct an operation this was repealed in 2004 and replaced with provisions agreed to by both the sand producers and DWR. This system was the result of a compromise; however the compromise was never fully implemented, so while it has been effective in the short term, long term issues must still be addressed, especially considering the numerous changes that have been made in water policy in this session. SB 412 basically seeks to do this.

### What will the bill do?

Under the provisions of SB 412 the evaporation of groundwater will be regulated by a single permit authorizing the use of water for that purpose. The permit will cover all uses of water associated with a sand & gravel operation including the dredge, wash water wells, and net evaporation. This concept was envisioned in the earlier compromise. Adopting this concept will balance the public interest in both sand & gravel and water by:

- Providing a long term solution for sand & gravel operations, by securing reserves that may not be accessed for another 50-100 years.
- Reduce the work load of the Kansas Division of Water Resources.
- Provide economical access for the development of natural resources.
- Preserve property rights, while protecting the state resources

Protecting property rights, public resource, and developing natural resources are vital issues to all Kansans. In our opinion, SB 412 will advance good policy in this area. We urge this committee to recommend it favorable for passage. Thank for the opportunity to present these comments. I will be pleased to respond to any questions you may have at this time.

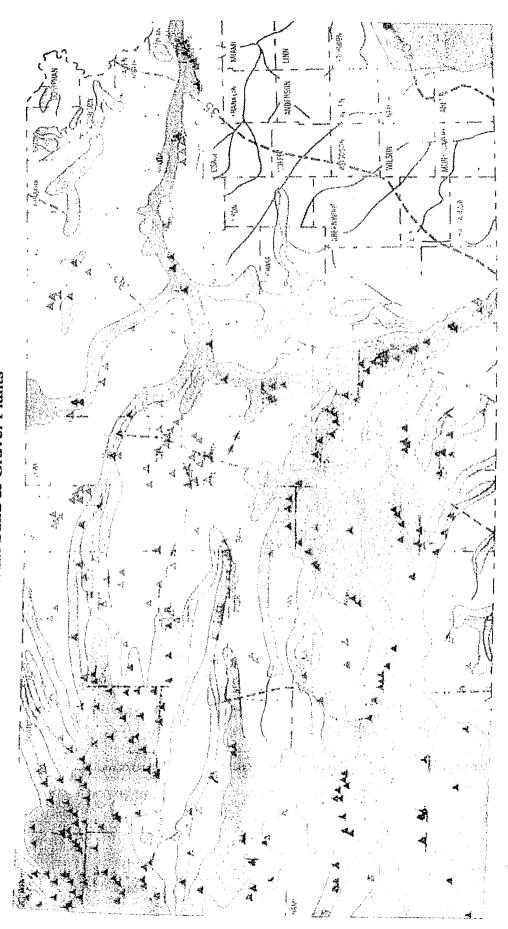
# WHAT IS A BENEFICIAL USE OF WATER?

It would appear from 1976 interim committee notes and sections of 82a-701 et. seq. the following questions should be asked in the determination of a beneficial use.

		Types of Diversions	SI	
	Irrigation	Reservoir	Canals	Sand & Gravel Pit
ls water brought under control?	By well	By Floodgate	By Headgates	None
Are diversions works constructed?	Pump	Dam	Headgates, Ditches & Valves	None
Can the Chief Engineer order the				
diversion stopped?	Yes	Yes	Yes	S
s the diversion specific?	Yes	Yes	Yes	2 Z
s the diversion measurable?	Yes	Yes	Yes	2 Z

Is water brought under control?	ш
Are diversions works constructed?	
Can the Chief Engineer order the	
diversion stopped?	
Is the diversion specific?	
Is the diversion measurable?	

General Availabilty of Ground Water & Normal Annual Percipitation in Kansas With Sand & Gravel Plants



Yield of greater than 500 gallons per minute

Yield of 100-500 gallons of water per minute

Yield of less than I(gallons of water per minute

0

100

- Precipitation contours in inches per year

= Sand & Gravel Operation

### **GLOSSARY**

**Acre-foot** - the quantity of water required to cover one acre to a depth of one foot; equal to 43,560 cubic feet or 325,851 gallons.

Administration of water rights - the distribution of water according to priority of right.

Appropriation - the act or acts involved in the taking and reducing to personal possession of water occurring in a stream or other body of water, and of applying such water to beneficial uses or purposes.

Aquifer - a saturated underground body of rock or similar material capable of storing water and transmitting it to wells or springs.

CFS (cubic feet per second) - the volume of water which flows in one second; one cubic foot = approximately 7.48 gallons.

Consumptive use - water withdrawn from a supply which, because of absorption, transpiration, evaporation, or incorporation in a manufactured product, is not returned directly to a surface or ground water supply; hence, water which is lost for immediate further use. For example, irrigation is a consumptive use.

**Depletion** - the withdrawal of water from surface or ground water reservoirs at a rate greater than the rate of replenishment.

Diversion works - pump, motor and other devices used to withdraw water.

Groundwater - water that occurs beneath the land surface and completely fills all pore spaces of the rock material in which it occurs.

**Perfection of Water Right** - Completion of a diversion works and the full application of water for a beneficial use according to the provisions of the appropriation permit.

**Mined water** - withdrawal in excess of recharge of a water supply causing an increasing depletion of that supply.

**Recharge** - addition of water to an aquifer. Occurs naturally from rainfall. Artificial recharge through injection wells, or by spreading surface water where it will infiltrate.

Safe yield - the maximum dependable draft which can be made continuously upon a source of water supply during a period of years during which the probable driest period or period of greatest deficiency in water supply is likely to occur. Dependability is relative and is a function of storage provided and drought probability.

Saturated thickness - that part of an aquifer actually filled with water.

Water quality - chemical, physical and biological characteristics of water in respect to its suitability for a particular purpose.

Well log - a chronological record of the soil and rock formations which were encountered in the operation of sinking a well including the water-bearing characteristics of each formation.

Yield - the rate at which water may be drawn from a formation through a well to cause a drawdown of a stipulated depth. The usual units of measurement are gallons per minute per foot.