Approved: March 15, 2001
Date

MINUTES OF THE SENATE NATURAL RESOURCES COMMITTEE.

The meeting was called to order by Chairperson Robert Tyson at 8:30 a.m. on March 9, 2001 in Room 423-S of the Capitol.

All members were present except: Senator Dwayne Umbarger - excused

Committee staff present: Raney Gilliland, Legislative Research Department
Jill Wolters, Office of Revisor of Statutes
Judy Krase, Committee Secretary

Conferees appearing before the committee:

David Pope, Program Manager, Division of Water Resources, Department of Agriculture
Don Peterson, Water Protection Association of Central Kansas (Water PACK)

Others attending: See attached list

Senator Tyson opened the meeting with the hearing on **HB 2047**. Staff of Legislative Research explained the bill.

The first conferee and proponent of the bill was David Pope from the Department of Agriculture (Attachment 1). Questions and discussion followed.

The second conferee and proponent was Don Peterson from Water PACK (Attachment 2). Mr. Peterson suggested a conceptual amendment where each water bank shall be responsible for demonstrating that their safe deposit box function will not result in an increase in the amount of net consumptive use in each hydrologic unit on a long term rolling average.

Senator Tyson announced that the hearing on **HB 2047** would continue on Monday, March 12 at 8:30 a.m. in Room 423-S. Also he said that **HB 2134** and **HB 2133** will be heard Thursday, March 15.

The meeting adjourned at 9:30.

The next meeting is scheduled for March 12 at 8:30 a.m. in Room 423-S.

SENATE NATURAL RESOURCES COMMITTEE
GUEST LIST
DATE: 3-9-01

NAME	REPRESENTING
Ron Appletoft	WATER DIST No 1 of JoCo
Kent Weatherby	dRWAD #1
Don Whittemore	Kansas Geological Survey
David Pope	KDA
Terry Duvall	KS Water Office
Cathy Tucker-Vogel	KS Water Office
Joe Lund	KDHE
Bill Bider	KDHE
John C. Bottenberg	Bottenburgh
Shelley King	KSPE/Gaches, Braden, Barbee & Assoc.
Mike Ohrt	Pinegar-Smith
Tracy Streeter	Conservation Commission
Mike Beam	Ks. Lvstk. Assn.
Rebecca Reed	KS Dept of Agriculture
Jamie Clover Adams	KS Dept. of Agriculture
Pat. Lehman	GMD-4
Bonnie Wilson	Kansas Water Office
Kevin Barone	Heritage Trust
Donald K Peters	WaterPACK
Al LeDoux	KWO & Ks. Water Authority
Mark K. Hunt	Kearney Law Office
Darleen Cole	Sen. Pyle's Office Staff

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KANSAS DEPARTMENT OF AGRICULTURE

Senate Committee on Natural Resources

March 9, 2001

Testimony Regarding House Bill No. 2047

David L. Pope, Chief Engineer
Division of Water Resources, Kansas Department of Agriculture

Chairperson Tyson and members of the committee, thank you for the opportunity to present testimony regarding Senate Bill 237. My name is David L. Pope, and I appear on behalf of the Kansas Department of Agriculture.

As most of you recall, last year's Senate Bill 388 proposed a Water Banking Act. House Bill 2047 is very similar to the version of Senate Bill 388 that died last year in conference committee. Generally speaking, KDA supports the water banking concept, but we are concerned about having sufficient resources available to us to make it work as it is envisioned. We also need to ensure that it does not result in more water being used than without banking.

Managing and regulating water use in Kansas currently rests with the chief engineer, but we are amenable to exploring new management practices like those proposed in water banking. Water banking allows a water user who chooses not to use all or part of a water right to deposit it into a water bank so other water users can lease it. One very important provision of the bill requires the bank charter to ensure that operating the bank will result in at least a 10 percent reduction in total groundwater consumption. One of the challenges for the operation and oversight of water banking will be to ensure this actually happens.

The bank charter is one of the most critical aspects of water banking. It sets forth the conditions and limitations under which the bank must function to balance conservation goals with flexibility to market water use. Among other things, Section 5(b) of the bill states the chief engineer must ensure the charter is consistent with the provisions of the Water Appropriation Act and its associated regulations. Those using the bank should expect that the conditions, limitations and regulatory restrictions on the use of leased water will be similar, at least in some ways, to those currently applied through the Water Appropriation Act that prevent impairment of existing water rights.

If water banking is to work, current laws and regulations will need to be strictly enforced so a water user does not pump more than authorized and eliminate the need to lease water from the bank. We are implementing an enhanced program to deal with blatant, recurring overpumping, but our staff resources and legal authority are limited. Currently, if a water user does not comply with the conditions of a water right, we must rely on the courts for enforcement, which is a slow and expensive process. While Section 10 of the bill does provide for suspension of use for violations of the Water Banking Act, it does not address the enforcement needs for other water users who are not participating but are within the bank boundary. Therefore, a more comprehensive enforcement mechanism, such as provided by House Bill 2316, should be considered.

The bill calls for the division of water resources to help a bank determine whether a water right is bankable based on the status of the water right and its past use. It will require careful, individual evaluation so deposits of previously unused water are not accepted or that less water is leased. Otherwise, water consumption is likely to increase and the water conservation goal will not be met. We also anticipate being expected to provide quick turnaround on term permit applications so the leasing concept works efficiently for water users. Administering this act will be difficult in that it will require extreme care if we are to achieve flexibility, decrease groundwater consumption by at least 10 percent and ensure that other water rights are not impaired.

Most water rights were granted so users would be able to meet their maximum need during periods of heavy demand, such as during dry weather, with the caveat that use does not impair more senior rights. For a variety of reasons, most water users do not use all of the water authorized every year. Weather variability influences use, as does the limited availability of water from the water source, physical limits of the diversion works, economic decisions, and improved conservation and water use efficiency. In fact, actual water use in any given area in an average year may be only one-half to three-fourths of the authorized amount. This is good from a conservation standpoint, and operating a water bank should not interfere with, or discourage, existing practical conservation methods.

As set forth in Section 5(b)(9), the bankable portion of a water right is based on a representative average water consumption for a group of users within a hydrologic unit, not on an individual user. This method of determining a bankable quantity is intended to prevent penalizing those who conserve water. However, it also has the inherent potential to increase consumption since it is likely that water rights most likely to be deposited will be those that have been underused. There are many water rights that have not been used for extended periods, yet they have not been abandoned.

The water conservation and impairment protection aspects of the bill are strengthened by the language in Section 5, number10. However, this language has been restricted to groundwater. A bank could be a surface water/groundwater combination bank, or surface water only. While many of the bills provisions apply only to groundwater banks, this provision should apply to all banks. We suggest that this section, lines 22-23 read as follows: *The charter ensures that the total amount of <u>water</u> leased each year from each hydrologic unit does not exceed 90 percent ...*

The bill's provisions for safe deposit accounts, found primarily in Section 3(c), provide a beneficial mechanism for multiyear water management. However, this flexibility may encourage increased consumption during abnormally dry years when higher use and the probability of impairment is greater. If not properly structured, the use of safe deposit accounts may conflict with the fundamental requirement of decreased consumption and protection from impairment. We concur with the House Committee amendment to allow them to be optional.

We also anticipate water right holders will want to deposit water in a bank from water rights in poor portions of aquifer systems where water availability is low. In contrast, water users in areas where additional water could be pumped will tend to increase use in that area with leased water, which could compound additional use or impairment in those areas. This issue will need to be addressed in the bank charters, or in the rules and regulations of the chief engineer.

Water banking is one concept that could provide more options for water users. However, it must be administered with great care if we are to achieve the 10 percent reduction in groundwater consumption, provide water users with as much flexibility as possible and ensure that existing rights are not impaired. The division of water resources will need to increase its workforce substantially to provide the careful administration this concept requires, as we will be adding the following responsibilities to our existing duties:

- establish water banking rules and regulations (section 9)
- evaluate and approve each proposed bank charter (section 5)
- review the charter's proposals to ensure the bank will actually reduce groundwater consumption by 10 percent or more (Section 5)
- assess whether it meets all other criteria set forth in the bill
- assist the bank with determinations as to the bankable portion of a water right proposed for deposit (section 4)
- review and issue term permits for leases, including terms and conditions of the agreements (section 3)
- carry out enforcement activities (section 10)
- annually review an accounting report of a water bank's transactions (section 6)
- based on the review team's recommendations, decide whether the charter should be extended (section 7)

Section 11 of the bill provides for funding by the banks for the cost of help and services provided by the division of water resources. Some administrative tasks associated with establishing banks will be hard to identify as services provided to a particular bank, and those services may even be provided before the banks are organized and able to generate income. These tasks may include developing rules and regulations, enforcing pumping restrictions, or other matters precipitated by bank operations that are not specifically identified as reimbursable services. Therefore, it is essential that some general funds, or another source of revenue, be provided to KDA if we are to administer the Water Banking Act independent of reimbursement from the banks.

The bill will also require enforcement at levels not previously achieved by the division of water resources. Enforcement efforts must not focus only on banking participants, but on all appropriators in the bank area.

Thank you for the opportunity to provide testimony on this very complex issue. I will be glad to answer any questions you may have.

Testimony Before the Senate Natural Resources Committee – House Bill 2047
Friday, March 9, 2001

My name is Don Peterson and I am here today as a community banker, farmer-irrigator member of the Water Protection Association of Central Kansas (Water PACK). Water PACK was one of four organizations (Division of Water Resources, US Fish & Wildlife Service, Groundwater Management District # 5) who have worked together for the last seven years to develop and implement a management plan for the area along the Rattlesnake Creek in central Kansas. That plan has been finalized and approved by the Chief Engineer in January 2000. Implementation of the plan, which is intended to address the long term sustainability of the water resources, both surface and groundwater, has begun in August of 2000.

In order to reduce water use in the subbasin, and obtain this sustainability, seven management strategies have been adopted in this management plan, as follows:

1. Water Rights Purchase Program
2. **Water Banking**
3. Five Year Water Right Program
4. Conservation Practices & Irrigation Management
5. Voluntary Removal of End Guns on Center Pivot Irrigation Machines
6. Enhanced Compliance & Enforcement Activities
7. Water Appropriation Transfers

We have done extensive study of this subbasin area and are ready to finalize and present a water bank charter to the Chief Engineer at the earliest possible date, pending the outcome of this legislation. We seek to use the water banking concept to:

- Conserve water through the incentives contained in the safe-deposit box feature coupled with the conservation element in the bill. We have developed specific targets and mechanisms for this that would apply to our subbasin.
- Attract participants to voluntarily become active in water banking through incentives
- Target conservation in sensitive and/or high decline areas through pricing mechanisms and incentives
- Achieve conservation in a manner that is self funding through a margin on all transactions. However, start up funding would be needed until such time as these margins can accumulate sufficiently.

This bill must allow pricing mechanisms to be developed in the bank charter to enable the bank to look at the amount of water use in the water rights deposited and react accordingly, and to reward those in sensitive or high decline areas to deposit their rights for use in less sensitive/high decline areas.

Senate Natural Resources Committee
Date 3-9-01
Attachment # 2

I have included two other pieces to my testimony today: one example of how we would envision water rights to be used, and one example of how we would accept deposits and lease water out from the bank.

The safety deposit box section HB 2047 presently does not have a limit as to the quantity of water that can be deposited. This is a concern to the Kansas Water Office and the chief engineer of Division of Water Resources. Water PACK acknowledges this as a concern , and puts forth the following proposition to alleviate their concern.

1. The water in a safety deposit box is tied to a specific water right and is not transferable .

2. Limit the yearly withdrawal to 3-6 inches per year.
   The attached safety deposit formula used in the Rattlesnake Management Plan indicates it will take 10 years to put 6.97 acre-inches in a safety deposit box.

3. To be eligible to open a safety deposit box it will be necessary to have a Management Plan for the water right file number. Water management plans are approved by the Division of Water Resources.

The safety deposit box is the carrot to promote a conservation package. The carrot being irrigation worry about that dry year that they will need an extra 2-4 inches of water.

Water PACK is concerned with the costs associated with the over view committee. We have great respect for the Kansas Geological Survey, but they are contract providers. In the interest of efficiency using financial resources it would be logical for the Kansas Water Office to do the evaluation of the banks, and for the Division of Water Resources to over see the term permits for the pilot bank.

In conjunction with this recommendation Section 7A of HB 2047 has a rather lengthy statement of a 5-year evaluation of each bank. Water PACK would like you to consider an annual review of the pilot bank by the Kansas Water Office and report the review to the Legislature. HB 2047 is breaking new ground and it is in all stock holders best interest to do the best job possible getting water banking to do the best job possible assisting in the management of the water resources with the bank.

Water PACK has obligations to two separate groups to promote a management plan that will provide sustainable yield to the Rattlesnake Basin. One is to the people in the basin, both the irrigators and the many businesses that are in existence because of the irrigated agriculture, and secondly to the environmental community. Water PACK has a signed partnership contract with U S Fish & Wildlife Services, that their engineer and attorneys have agreed to. The Division of Water Resources and the Big Bend Ground

Water management district have also signed and share some liability with Water PACK to the U S Fish and Wildlife Service as members of the partnership.

We would have no objection to a surface water bank being chartered in eastern Kansas along with one groundwater bank for the Rattlesnake Creek Subbasin. We very much want to use the water banking concept as one of our elements of water reduction. To that end, Water PACK will be available to this committee on an as-needed basis as a resource.

Respectfully submitted,

Donald K. Peterson

Testimony Before the Senate Natural Resources Committee – House Bill 2047
Friday, March 9, 2001

Example of How a Rattlesnake Creek Water Bank would Buy Water Right Deposits & Lease these Deposits Out to other Water Users

Assume that a water user comes to the bank with a 200 AF water right to deposit, and the water right is in good standing. The bank offers $ 25/AF for a one year lease and the right holder accepts. A contract to that effect is drawn and the bank pays the right holder $ 5,000. Right holder may not pump from this well for one year.

Now the bank must account for the conservation element as per the charter for this particular bank. For the Rattlesnake Creek bank, the elements would be as follows:

Ave. water use factor of 72 % would be applied (200 AF x .72 = 144 AF)

10 % conservation element applied (200 AF x 10 % = 20 AF)

Balance of water that could be leased out is therefore:

144 AF less the conservation component of 20 AF = 124 AF

Now the bank has paid out $ 5,000 and can only lease out 124 AF.

$ 5,000 / 124 AF = $ 40.32 /AF

The bank must have some margin to be self-sufficient. Let's assume this would be $10/AF for the bank. Therefore, total cost of this water to be leased out would be:

124 AF @ $ 50.32/AF

This water would be available to any water user within the Rattlesnake Creek subbasin, for any type of use, for $ 50.32/AF. Any user or users would have to file for a term permit to obtain all or a part of this water from the bank.

This is an example based on just one water right being deposited. We feel that quite often the bank will have demand for water at a certain price, and would then work this example backwards to see what could be offered for deposits. If the price is not acceptable to water right holders, the bank would have to renegotiate.

Suppose an irrigator comes in and needs just one more inch on his 128 acre center pivot field. This would be 128 Acre-inches, or 10.67 Acre-Feet. At $ 50.32/Acre-foot, the irrigator could obtain this water from the bank for $ 536.91.

Testimony Before the Senate Natural Resources Committee – HB 2047
Friday, March 9, 2001

Safe Deposit Box Feature - (As would be used by Rattlesnake Creek Subbasin)

Assume a water right in good standing that has 195 Acre-Feet, or 18 inches applied on a 130 acre field

Assume that in a dry year the entire 18 inches is utilized

Upper limit for Safe Deposit Box = 18 x .85 = 15.3 inches

Suppose the water user, in a particular year, uses only 10 inches

The amount of water that could be put into the Safe Deposit Box is:

> **15.3 inches less 10.0 inches = 5.3 inches x factor of .25**
>
> **1.32 inches of water could be placed into the Safe Deposit Box**
>
> **Each year, 10 % (0.13 inches the first year) would be taken out of the Safe Deposit Box.**

At the end of the first year, if no water was utilized from the Safe Deposit Box, 1.19 inches of water would remain (1.32 less 0.13)

User would have to go through the Rattlesnake Creek Water Bank to utilize his Safe Deposit Box Water, and apply for the appropriate term permits with the Division of Water Resources.

Safety Deposit Box
for the
Rattlesnake Creek Basin
Management Plan

The following example assumes a 72% water use

18" Annual Allocation
0.85 Net irrigation requirement
25% Of net savings to be placed in the deposit box
10% Negative interest to be applied at the end of the year to all water in the deposit box

These are conditions set forth in the RSC Basin Management Plan

18 X 72% =12.95

18"	Annual Allocation
12.95"	72% average use
5.05"	Net use for the year
x .85	Net irrigation requirement
4.29	
x 25%	Allowance to be deposited
1.07	Total amount to be deposited

Year	Beginning of the year	End of the year			Available for next year
1		1.07		-10%	0.96
2	0.96	1.07	2.03	-10%	1.83
3	1.83	1.07	2.90	-10%	2.61
4	2.61	1.07	3.68	-10%	3.31
5	3.31	1.07	4.38	-10%	3.94
6	3.94	1.07	5.01	-10%	4.51
7	4.51	1.07	5.58	-10%	5.02
8	5.02	1.07	6.09	-10%	5.48
9	5.48	1.07	6.55	-10%	5.90
10	5.90	1.07	6.97	-10%	6.27
11	6.27	1.07	7.34	-10%	6.61
12	6.61	1.07	7.68	-10%	6.91
13	6.91	1.07	7.98	-10%	7.18
14	7.18	1.07	8.25	-10%	7.43
15	7.43	1.07	8.50	-10%	7.65
16	7.65	1.07	8.72	-10%	7.85
17	7.85	1.07	8.92	-10%	8.02
18	8.02	1.07	9.09	-10%	8.18
19	8.18	1.07	9.25	-10%	8.33
20	8.33	1.07	9.40	-10%	8.46
21	8.46	1.07	9.53	-10%	8.58
22	8.58	1.07	9.65	-10%	8.68
23	8.68	1.07	9.75	-10%	8.78
24	8.78	1.07	9.85	-10%	8.86
25	8.86	1.07	9.93	-10%	8.94
26	8.94	1.07	10.01	-10%	9.01

27	9.01	1.07	10.08	-10%	9.07
28	9.07	1.07	10.14	-10%	9.13
29	9.13	1.07	10.20	-10%	9.18
30	9.18	1.07	10.25	-10%	9.22
31	9.22	1.07	10.29	-10%	9.26
32	9.26	1.07	10.33	-10%	9.30
33	9.30	1.07	10.37	-10%	9.33
34	9.33	1.07	10.40	-10%	9.36
35	9.36	1.07	10.43	-10%	9.39
36	9.39	1.07	10.46	-10%	9.41
37	9.41	1.07	10.48	-10%	9.43
38	9.43	1.07	10.50	-10%	9.45
39	9.45	1.07	10.52	-10%	9.47
40	9.47	1.07	10.54	-10%	9.49
41	9.49	1.07	10.56	-10%	9.50
42	9.50	1.07	10.57	-10%	9.51
43	9.51	1.07	10.58	-10%	9.53
44	9.53	1.07	10.60	-10%	9.54
45	9.54	1.07	10.61	-10%	9.55
46	9.55	1.07	10.62	-10%	9.55
47	9.55	1.07	10.62	-10%	9.56
48	9.56	1.07	10.63	-10%	9.57
49	9.57	1.07	10.64	-10%	9.57
50	9.57	1.07	10.64	-10%	9.58
51	9.58	1.07	10.65	-10%	9.59
52	9.59	1.07	10.66	-10%	9.59
53	9.59	1.07	10.66	-10%	9.59
54	9.59	1.07	10.66	-10%	9.60
55	9.60	1.07	10.67	-10%	9.60
56	9.60	1.07	10.67	-10%	9.60
57	9.60	1.07	10.67	-10%	9.61
58	9.61	1.07	10.68	-10%	9.61
59	9.61	1.07	10.68	-10%	9.61