



Three States Working Together  
to Achieve Future Benefits

# Newsletter

Volume 1, Issue 1

July 2010

## Letter From the Chairperson

This is our first newsletter to our membership in regard to the status of the Republican River Restoration Partners (RRRP). Each Executive Team member from CO, KS and NE will write a newsletter to cover activities occurring in the state they represent.

**July:** Ted Tietjen, Chairman from NE will bring you to speed on the status of the RRRP.

**Aug:** Bud Mekelburg, Vice Chairman from CO will discuss activities in CO

**Sep:** Bob Martin, Sec/Treasurer from KS will share activities in KS and the minutes from our scheduled organizational meeting on September 9<sup>th</sup> in McCook.

RRRP update from our June 24<sup>th</sup> meeting in Oberlin, KS in addition to the attached minutes.

Our featured speaker Rick Porter, Coordinator from Lake Region Resource, Conservation and Development, Ottawa, KS gave an interesting presentation on what it was like to work across the state line with Missouri on watershed issues. He identified what needed to be done to develop comprehensive plans and then how they should be implemented. He emphasized the point that each state had equal ownership in the plans regardless

where the funding came from. He also believed that hiring an impartial coordinator would be critical to achieving success. We have agreed this is high priority when funds become available.

Since limited water resources are the major concern of the Republican River Basin, strategies and plans must address this issue. An integrated water management plan addressing the needs of the three states is necessary for maintaining the economy and future of the basin.

RRRP has identified the following goals that will go a long way in establishing long term sustainability for both the river basin and the underground aquifer associated with the basin.

Our number one priority is to educate and train the citizens in the Republican River Basin on the merits of "Water Budgets" This training program will lay out a plan on how to reduce consumptive water use from two to seven inches per year in a watershed. We plan on rolling out Our Economy-Our Water-Our Future program at our next meeting on September 9<sup>th</sup> showing the benefits to our economies and our future. It's doable and based on good science where all the citizens are winners. More information will follow in the

near future.

Continue supporting the clean up of the invasive species in the river flood plain and tributaries. A health river is a requirement if we are to satisfy stream flow, wildlife, recreation and aquatics.

Hire a coordinator to oversee the implementation of the plans especially those that cross state lines.

Expand our partnership base to include citizens and organizations that are passionate about the river basin's future. A membership application is enclosed for your consideration as it will help cover the printing and mailing costs of future newsletters.

Included in this newsletter is an article written by Frank Kwapnioski, a civil engineer explaining how lowering consumptive use can improve available water supplies.

On behalf of the Republican River Restoration Partners we thank you for taking the time to read the enclosed information. Feel free to contact any of the Exec Members listed below with thoughts and ideas.

Ted Tietjen, Chairman

### Special points of interest:

NEXT MEETING--  
SEPTEMBER 9, 2010  
IN MCCOOK, NE  
COUNTRY KITCHEN

### Inside this issue:

LETTER FROM THE CHAIR	1
NEW WATER FOR BASINS	2
PAST MINUTES	3
MEMBERSHIP APPLICATION	4

### Executive Committee

Jennifer TenBensel,  
Exec Administrator  
888-585-1085

Ted Tietjen,  
Chairman  
308-352-4336

Bud Mekelburg,  
Vice Chairman  
970-630-6524

Bob Martin,  
Secretary  
785-322-5563

## New Water for the Republican and Platte River Basins

by Frank Kwapnioski

The Republican and Platte river basins face numerous significant challenges in water management. The Republican River compact compliance, the Platte River Recovery Implementation Program (PRRIP) new depletion requirement, and compliance issues such as the NE Integrated Water Management Plan (IMP) process, are just some of the more visible concerns.

Efforts to deal with these issues are focused mainly on reduction of use and/or reallocation of existing limited water supplies. Even the development of Water Action Plan projects under the PRRIP is to some degree a reallocation of existing water supplies from one use or user to another. Additional competition for the same limited water supply can be very expensive and disruptive. To truly solve these conflicts, without totally devastating the Republican and Platte River basin economies, will require the exploration of additional opportunities beyond the approaches current being considered.

Identification and development of new or unused water supplies has the potential to provide relatively economical solution to these existing problems. These are water supply components currently not used or considered available for use by anyone under present water management concepts. Because no one else is currently relying on this water, the cost of these approaches would only be the development cost, with no associated mitigation costs, presumably making these approaches more feasible.

The best and likely most cost effective opportunity for increasing NE's available water supply is

through the managed reduction of direct evaporation and other low or no value consumptions such as invasive species. The following simple example, focused solely on evaporations, gives some understanding of the potential.

About 90% of the available water supply in the basins was consumed by nature before man produced any significant impact and this percentage of total consumption has not changed significantly since then. Of that 90% consumption, approximately 30%, or 27% of the total available water supply, is consumed by direct evaporation. Since the NE water supply in these two basins, on an average annual basis, is about 70 million acre feet plus whatever CO and KS receive, even if only a small percent of direct evaporation can be reduced it could produce a relatively large quantity of new water to help solve the basins water issues. If the water presently being competed for is only about 10% of the total supply and evaporation amounts to over 25% of the total supply it follows that enlightened management could increase the presently identified water supply 250% without even consider the potential for reduction or elimination of low or other no value consumptions. Capturing the potential of and utilizing this vast opportunity for a new water supply will require cooperation, creative thinking, focused research and appropriate legislation.

Another new water opportunity would be the development a basin-wide conjunctive management concept to better utilize the vast

storage and management resource of the groundwater aquifers. Currently the allowable amount of groundwater level drawdown is being limited, even though the basins have areas with hundreds of feet of available saturated aquifer.

There are two primary concerns limiting the utilization of groundwater. The first is a limited understanding of the amount of available water and a concern that the resource may be depleted to economic extinction if any level of drawdown is permitted to continue. This concern could be addressed, in large part, by educating ourselves about the total available water supply and an acceptable level of consumption to allow for long-term/permanent sustainability.

The other primary concern lies with the fact that most surface water features are directly connected to and dependent on the top part of the aquifers. Because of this, whenever relatively small declines occur in the aquifer, these can produce relatively large impacts to these surface features, including stream flows. This physical fact has, to this point, severely limited the utilization of the vast conjunctive management potential of these groundwater reservoirs. To tap this large undeveloped opportunity, each basin could expand conjunctive management planning to incorporate more extensive but controlled use of the existing groundwater well infrastructure. The envisioned concept could use existing wells to make up for surface feature water shortages during droughts and additional groundwater recharge during wet periods. (Continued on Page 3)

## June 24, 2010 Minutes

The Republican River Restoration Partners met at 10 am on June 24, 2010 at the Gateway, Oberlin, KS. Bob Martin gave opening remarks. Each participant introduced themselves and the organization they represented.

Bud Mekelburg updated the group on Colorado activities, Bonny Dam and working downriver.

Steve Hirsch, Oberlin attorney, informed the group on the status of the 501C5 filing of the organization.

Roger Lawson, MRNRD representative, gave more information about the drought mitigation program and the work being done by Dr. Cody Knutson of UNL.

Rick Porter, RC&D coordinator of the Lakes Region RC&D, Ottawa, KS, presented his program "Strengths of Partnerships" and told about his experiences working across state lines with Missouri. This program led to discussion in dealing with the differences in state laws and trying to fit projects to standards of the federal programs. The work in Eastern Kansas and Missouri is being done with a grant from EPA with Sec-

tion 319 funds and local matching money.

Pam Potthoff, Save our Swanson representative, from Trenton, NE told the group about progress made cleaning up beaches, boat docks and picnic areas around Swanson Lake. She reported that a group with AmeriCorps was presently working on the North Shore area and was being sponsored by the Upper Republican NRD.

After lunch the business meeting was called to order by Ted Tietjen, President.

Bob Martin reviewed the teleconference meeting minutes and read the January 14<sup>th</sup> meeting minutes. They were approved.

The treasurer's report was given. The two-year budget which was developed to accompany the 501C5 paperwork was reviewed and approved.

Ted reported on meetings he has been attending with power companies in Nebraska and Colorado. They are concerned with the potential shutdown of irrigation wells and therefore the effects it can have on the demand for power and the return on their investment in

recent years when pumping power was converted to electricity. About 70% of the wells are powered by electricity.

The Republican River Basin Water and Drought Portal, which was presented by Roger Lawson during the morning meeting, was brought up for discussion. This program was developed for Nebraska. Ted moved to get information on this program to Kansas and Colorado so they can develop ownership. Jen TenBensel seconded the motion and it passed. Information is available at [www.rbdp.org](http://www.rbdp.org). Click on Republican River Basin Water and Drought Portal.

The goals and objectives as well as the long-range plan of RRRP were discussed. It was agreed that Ted would appoint a committee from the three states to review them and make recommendations. Those appointed are: Roger Lawson (NE), Greg Sundstrom (CO) and Jim Strine (KS). Duane Cheney is to be contacted to see if he would be interested in serving on the committee.

The next meeting date

was tentatively set for September 9 at McCook, NE.

A tour of a surface water irrigation area southwest of McCook was taken by part of the group. They could see the development and the changes from flood to center pivot systems in the area. A stop at

The Richard and Karen Dack farm was enjoyed as the Dacks told of the experiences they had developing their farm so it could be flood irrigated with siphon tubes when the canal came through their property and their later adaptation to center pivot systems. The canal was put in service in 1958, but it took a few years before landowners could get their land prepared for flood irrigation. There were some water short seasons in past years, but the drought shut down operations in 2002. Limited water was available last year. The higher level of taxes on irrigated land as well as ditch assessment fees continued even though no water was available.

Respectfully submitted,  
Robert Martin,  
RRRP Secretary

## New Water for the Republican and Platte River Basins (Con't)

This approach could be used in conjunction with the evaporation reduction process above to make better use of the extra water made available by direct evaporation reduction efforts. I firmly believe that when assessed these concepts easily have the poten-

tial, either in conjunction with or in place of currently identified management process to make current or even greater levels of water development sustainable for the long term.

Frank Kwapnioski  
H<sub>2</sub>Option Engineering  
L.L.C.  
1120 Miles Ct.  
North Platte, NE 69101-6434  
[frank@h2optionsllc.com](mailto:frank@h2optionsllc.com)



PO Box 86  
Cambridge, NE 69022

## Membership Application

Name \_\_\_\_\_ Business \_\_\_\_\_  
Address \_\_\_\_\_ Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

Business Tel \_\_\_\_\_ Home Tel \_\_\_\_\_  
Cell Tel \_\_\_\_\_ Fax Tel \_\_\_\_\_  
e-mail \_\_\_\_\_

Occupation \_\_\_\_\_

Individual Membership \_\_\_\_\_ \$25.00 per year \_\_\_\_\_

Organization Membership \_\_\_\_\_ \$100.00 per year \_\_\_\_\_

Make checks payable to:  
**RRRP**

Send to:  
**Bob Martin, Treasurer** 785-322-5563  
**RT 2 Box 104** 785-322-7004 cell  
**Herndon, KS 67739** Liane.martin@hotmail.com

Place  
Postage  
Here