No. 126, Original

IN THE
SUPREME COURT OF THE UNITED STATES

STATE OF KANSAS,

Plaintiff,
v.

STATE OF NEBRASKA

and

STATE OF COLORADO,

Defendants.

Before The Honorable William J. Kayatta, Jr.
Special Master

Kansas' Expert Witness Disclosure For Aaron M. Thompson Area Manager, Nebraska-Kansas Area Office Bureau of Reclamation, United States Department of Interior

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November 18, 2011

No. 126, Orig. Ex. K97 The State of Kansas hereby provides the subject matter on which Aaron M. Thompson is expected to present evidence and a summary of the facts and opinions to which Mr. Thompson is expected to testify, which are contained in the following documents, all of which are attached hereto.

Attachment A: Statement of the Bureau of Reclamation, Nebraska-Kansas Area Office, Aaron M. Thompson, Area Manager, Regarding Proposed Integrated Management Plan for the Middle Republican Natural Resources District, dated June 8, 2010

Attachment B: Oral Statement of Aaron Thompson, Area Manager, Nebraska-Kansas Area Office, Bureau of Reclamation, Regarding Proposed Integrated Management Plan for the Middle Republican Natural Resources District, dated June 8, 2010

Attachment C: Statement of the Bureau of Reclamation Nebraska-Kansas Area Office, Aaron M. Thompson, Area Manager, Regarding Proposed Integrated Management Plan for the Upper Republican Natural Resources District, dated June 10, 2010

Attachment D: Oral Statement of Aaron Thompson, Area Manager, Nebraska-Kansas Area Office, Bureau of Reclamation, Regarding Proposed Integrated Management Plan for the Upper Republican Natural Resources District, dated June 10, 2010

Attachment E: Statement of the Bureau of Reclamation Nebraska-Kansas Area Office, Aaron M. Thompson, Area Manager, Regarding Proposed Integrated Management Plan for the Lower Republican Natural Resources District, dated January 13, 2011

Attachment F: Oral Statement of Aaron Thompson, Area Manager, Nebraska-Kansas Area Office, Bureau of Reclamation, Regarding Proposed Integrated Management Plan for the Lower Republican Natural Resources District, dated January 13, 2011

Attachment G: Letter from Aaron M. Thompson, Area Manager, Nebraska-Kansas Area Office, Bureau of Reclamation, to Brian Dunnigan, P.E., Director, Nebraska Department of Natural Resources, dated September 30, 2010

Exhibits to which Mr. Thompson may refer in his testimony include the attachments hereto, and Kansas Exhibits 76-80, 82 and 83 from the non-binding arbitration initiated 10/21/08 before Arbitrator Karl J. Dreher.

Respectfully submitted,

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Statement of the Bureau of Reclamation Nebraska-Kansas Area Office Aaron M. Thompson, Area Manager

Regarding Proposed Integrated Management Plan for the Middle Republican Natural Resources District

June 8, 2010

INTRODUCTION

The Bureau of Reclamation (Reclamation) recognizes the appropriate role of the State of Nebraska to establish and enforce water policy. The current State water policy of developing and implementing Integrated Management Plans (IMP) is a step in the right direction. However, Reclamation is concerned that the IMP proposed by the State and the Middle Republican Natural Resource District (MRNRD) is inadequate. It fails to protect Reclamation's senior water rights from direct and substantial groundwater development of the hydrologically connected waters of the Republican River Basin (Basin) that occurred following approval of the Compact and subsequent investment of infrastructure.

Reclamation contends the State water policy that has evolved following approval of the Republican River Compact (Compact) ignores the physical reality of the hydrological connection between surface and groundwater sources. The policy separation between surface and ground water has lead to an overdevelopment of the finite water resource in the Republican River Basin. As a result, the investment of the United States in the development of infrastructure is in jeopardy. The irrigation, recreation, and fish and wildlife benefits are currently below their potential as envisioned and authorized by Congress. The taxpayers of the United States have an expectation that their investment will be protected, which includes water rights held by the United States.

Reclamation offers to assist both the State and NRD in developing a long term solution to the issue of Compact compliance that recognizes the hydrologic connection between surface and groundwater, and protects senior water rights. A potential option is the establishment of a water market as exists in other Reclamation states, such as the system that presently exists in the South Platte River Basin in Colorado.

COMPACT HISTORY

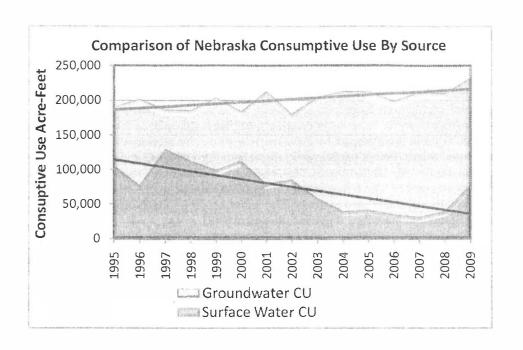
During the late 1930s when Reclamation was initially investigating the water projects in the Basin, we recognized the first step to Federal water development was negotiation of a compact between Nebraska, Kansas, and Colorado allocating water between the states. This was needed to prevent conflict between the states and to insure long term project feasibility to protect the large Federal investment. Reclamation requested that the states enter into negotiations to complete this necessary step. Reclamation stated in a 1940

Reconnaissance Report on the Basin (Project Investigation Report No. 41): "To avoid expensive litigation as a result of possible conflicting uses of water in the various states, further developments for irrigation should be preceded by a three-state compact or similar agreement on use of water." This report was one of many sources of information used by the three states to develop the Compact. Reclamation also assisted the states in the Compact negotiations by preparing hydrology analysis for the Basin and sharing Reclamation's preliminary water development plans with each of the states. The first attempt to adopt the Compact by the states was vetoed by President Roosevelt because the United States did not participate in the negotiations of the Compact. After participation by the United States, the Compact was renegotiated and revised to include Articles 10 and 11. The renegotiated Compact was signed by the states and the representative of the United States on December 31, 1942. Ratification of the Compact by the States and the U.S. Congress followed in 1943.

After the Compact was finalized, this water allocation became the framework for the final planning and design of a system of Federal reservoir and irrigation projects that would assist each of the states in developing their allocated share of the Republican River. Reclamation believed by acquiring necessary state water rights and designing its projects within each state's allocated share of the water, the water supply for these Federal projects would be protected against future water development. Between the late 1940s and 1960s eight Federal dams and reservoirs were constructed in the Basin above the Nebraska-Kansas stateline. Reclamation entered into repayment or water service contracts with each of its irrigation districts in the Basin to provide for repayment of the irrigation portion of construction and their associated operation, maintenance, and replacement (OM&R) costs for these projects. This was done with the expectation that the irrigation districts would be able to repay their share of the project costs, protecting the invested interest of the taxpayers of the United States.

COMPACT ACCOUNTING

From 2003 through 2006, Nebraska's allocation averaged 205,000 acre-feet and Nebraska's use averaged 250,000 acre-feet, each year resulting in computed beneficial consumptive use exceeding Nebraska's allocation. During this period Nebraska ground water pumping caused nearly 80% of the ground water depletions to the streamflows in the basin. The following graph shows Nebraska's ground water and surface water consumptive use since 1995. Statistical trend lines have been added to the graph to show how these consumptive uses have changed over time. Ground water consumptive use has gradually increased over time, while there has been a sharp decline in surface water consumptive use.



Reclamation testified at each of the IMP hearings that surface water supplies in the Basin began to decline significantly in the late 1960s, right at the time ground water development in the Basin was expanding at a rapid rate. The use of surface water is not the reason Nebraska has failed to be in compliance with the Compact. Surface water use has decreased over time. Because of the current level of ground water use in the basin. ground water depletions have resulted in significant Compact compliance deficits for Nebraska. This draft IMP continues to allow for the unreasonable use of surface water supplies to make up for deficits caused by years of ground water overuse. In water-short years, surface water users experience significant water shortages because of imposed reductions in surface water supplies while ground water users have the capability to pump sufficient ground water to meet most of their irrigation demands. As a result, ground water depletions to surface flows have continued to gradually increase while surface water depletions continue to decline.

2009 ARBITRATION

Reclamation testified at the Republican River Compact Arbitration hearings in April 2009 and stated our concern that without additional limits and controls on ground water use the surface water supplies in the Basin will continue to decline making it more difficult for Nebraska to meet Compact compliance in the long term. Reclamation concurs with Arbitrator Dreher's decision that "...Nebraska's current IMPs are inadequate to ensure compliance with the Compact during prolonged dry years" and "Nebraska and the NRDs should make further reductions in consumptive ground water withdrawals beyond what's required in the current IMPs." It is our position that ground water consumptive use must be reduced to a level that will allow base flows to recover to

an extent that will allow Nebraska to consistently comply with the Compact in both the near term and long term. This is the only way Nebraska can meet the IMP goal of "sustaining a balance between water uses and water supplies . . ." Likewise, Arbitrator Dreher concluded in his Final Decision that "Nebraska's problem in complying with the Compact is groundwater CBCU, not surface water CBCU." As long as ground water depletions continue to increase, there will be less and less surface water supplies available to offset the deficits caused from ground water pumping.

CONCERNS AND EXPECTATIONS

Reclamation is very concerned about Nebraska's failure to meet Compact compliance since compliance accounting was reinitiated in 2003. Reclamation is even more concerned about the continuing depletion of inflows to Federal reservoirs. Federal projects were constructed based on the concept that project surface water rights would be protected. The trend of declining ground water levels will result in continuing stream flow depletions. This draft IMP fails to address impacts from past ground water use and future ground water declines that will cause direct and substantial depletions in stream flows.

Reduced surface water supplies have caused Federal project water deliveries, throughout the Basin, to decline during the last 40 years. Ground water pumping in the MRNRD directly affects the water supply for several canals associated with the Federal projects in the Basin. A decline of return flows from these canals has reduced supplies to downstream Federal projects as well. According to NE Stat. 46-715, the IMP should include clear goals and objectives with the purpose of sustaining the balance between water uses and water supplies for both the near term and the long term. Reclamation is very concerned with this balance in the Basin as it relates to surface water supplies for existing surface water uses.

Reclamation expects the water rights associated with the authorized Federal multipurpose projects in the Basin be protected by the State of Nebraska and the NRDs. Reclamation expects to continue to operate the Federal projects for their authorized purposes. Reducing ground water depletions is the only way to gradually allow the streamflows to recover, provide equity among water users, and assist Nebraska in achieving long term Compact compliance.

SPECIFIC COMMENTS

1. Goal 4 – "reserve any streamflow available from regulation, incentive programs, and purchased or leased surface water required to maintain compact compliance from any use that would negate the benefit of such regulations or programs." Since any water that appears as streamflow is subject to storage and surface water use in accordance with Nebraska state statues, how does the state intend to meet this goal?

- 2. Goal 5 "protect ground water and surface water users...from stream flow depletions caused by ground water or surface water uses began after the date the river basin was designated as fully appropriated." This goal is not being met and will not be met by the proposed IMP. Records indicate depletions from ground water have increased since 2004 and ground water levels are continuing to decline.
- 3. The IMP requires a 20% reduction in pumping to average a level no greater than 247,580 acre-feet but then allows higher pumping in any single year. Allowing higher pumping levels in "water short" years works against compliance and equity between surface water users and ground water users.
- 4. The MRNRD's current pumping volumes are near a 20% reduction from the '98-'02 baseline volumes discussed in the IMP. The '98-'02 baseline is not representative of average pumping as this was a dry period when pumping rates were high. Reductions need to be higher to improve surface water supplies and achieve long-term compliance. Reducing allocations by more than 20% will provide a cushion to offset deficits in dry or water short years. This would reduce the need for other users to unfairly make up the deficit.
- The proposed IMP does not address improving long-term surface water flows nor make up existing deficits. Improved surface water flows will be needed to achieve long-term compliance.
- 6. The Surface Water Controls as described in section VIII.F are vague and do not describe the intent of "Compact Call."
- 7. The "Compact Call Year" is not defined in the draft IMP. Also a number of the terms under the Compact Call Year evaluation are not clear.
- 8. The IMP indicates that a "Compact Call" will be placed on the river at Guide Rock or Hardy on all natural flow and storage permits. This call would appear to prevent storing water in Harlan County Lake decreasing the water supply for the Bostwick Division. This call would also appear to prevent the diversion of natural flow into the Courtland Canal. Is this the intent of the Compact Call? This could also increase the number of years that are designated as "water-short years" under the terms of the Final Settlement Stipulation.
- Closing all natural flow rights and storage rights while not curtailing all ground water wells hydrologically connected to the streams (as defined by the FSS) is discriminatory and does not provide equity between water users (a primary goal of the IMP).
- 10. The IMP states that a "Compact Call" is on until such time that administration is no longer needed. The IMP is unclear whether any ground water use in the Rapid Response Area will occur during a "Compact Call Year". Will ground water use remain off during the entire year when a "Compact Call" has been placed?
- 11. The IMP does not define "allowable surface flow depletions." A better understanding of the surface water user's share of allowable depletions is needed. Surface water supplies are already reduced during "water short" years. Ground water consumptive use has remained the same or increased and under the IMP a higher volume of ground water pumping is allowed in years with below average

precipitation. This is completely contrary to providing equity between surface water uses and ground water users.

CONCLUSION

Reclamation is supportive with Nebraska's effort to comply with the Compact. However, a plan that essentially curtails all surface water use and continues to allow ground water use and ground water mining to occur in the Basin is unreasonable and not acceptable. This is not consistent with Nebraska Statute 46-715 as surface water users are not being provided equal protection among all water users. Reclamation views our Federal water rights as property rights that must be provided equal protection. The fiscal investment of the taxpayers of the United States must also be protected. In doing so, the IMPs should not ignore the physical reality that ground water and surface water are hydrologically connected and the administration of the water supply in the basin should be consistent and equitable for all water users.

Additionally, the proposed revisions to the IMP do not allow Reclamation to operate as authorized by the U.S Congress. If adopted, this IMP would prevent Reclamation from performing its contractual obligations of delivering water to irrigation districts in "Compact Call" years. Federal projects were specifically designed to be in compliance with the Compact and our use has not increased over time but decreased as a result of uncontrolled depletions upstream of our reservoirs. Inadequate water supplies, because of depleted stream flows in the MRNRD, adversely affect surface irrigators who were planning on supplies expected after the signing of the Compact. Depleted surface water deliveries directly and substantially reduce the economic benefits provided by the Federal projects.

Reclamation needs a better understanding on how the surface water controls of this proposed IMP will work. If the state recognizes the administration of water in the basin for Compact compliance as a "beneficial use" then the senior water right holders in the basin should be compensated. Bypassing inflows from upstream reservoirs to store water in Harlan County Lake is, in our view, a "selective call". Two of Reclamation's reservoirs upstream are senior to Harlan County Lake and the other reservoirs have an equal water right priority to that of Harlan County Lake. Additionally, if all natural flow permits are closed, as indicated in the proposed IMP, what authority will be used to supply water to the Courtland Canal and Lovewell Reservoir during "Compact Call" years? If the water cannot be stored or diverted as indicated in this IMP, then the water flowing through our reservoirs is no longer project water. Reclamation does not currently have authority to transfer non-project water through Courtland Canal for a non-project use. Finally, Reclamation is concerned that "Compact Call" years could result in surface water users losing irrigation supplies for multiple years as the reservoirs ability to store water is reduced. The financial viability of our irrigation districts, which supplies water to approximately 700 users in Nebraska, would be in jeopardy if this would occur. This is unreasonable. Other impacts coupled with reduced reservoir levels will occur to recreational and fish and wildlife benefits associated with these projects. It is our understanding that DNR predicts surface water users will be curtailed 2 out of 10 years.

Please provide us with the modeling and supporting data showing the frequency that surface water curtailments will occur.

As an alternative, Reclamation believes the water supplies of the basin should be managed fairly across the basin for all water users. A long term conjunctive management approach should be developed that allocates consumptive use in an equitable manner across the basin. This approach would allow water to be marketed between all users based on consumptive use. Surface water should be provided with an equitable share of Nebraska's consumptive use during "water short" years. We again want to stress that the earliest water rights in the basin are the surface water rights that are currently not being provided "equity among water users" and if this IMP is adopted, will not be in the future. Sustained surface water supplies are critical for project viability and Nebraska's ability to be in compliance in the long term.

In conclusion, Reclamation is willing to continue working with all the NRDs and the State as they seek compliance with the Compact. The IMP should recognize and protect the investment of the United States' taxpayers made decades ago. To ensure compliance in the long term, Reclamation believes there must be a healthy surface water component in the Basin. To accomplish this we believe reduction in ground water pumping must be significantly more than currently provided in the IMP to allow stream flows to begin to recover. Ground water pumping and other upstream uses are progressively depleting reservoir inflow.

Reclamation is hopeful as you finalize the IMP that you will study the presented testimony and respond to our specific questions and concerns we have presented in this statement.

Agron M. Thompson Area Manager

Oral Statement

Aaron Thompson, Area Manager Nebraska-Kansas Area Office

Regarding Regarding Proposed Integrated Management Plan for the Middle Republican Natural Resources District

June 8, 2010

My name is Aaron Thompson. I am the Area Manager of the Bureau of Reclamation's Nebraska-Kansas Area Office located in Grand Island, Nebraska.

Good evening and thank you for the opportunity to present a statement before you this evening. For the record, I am presenting written and oral statements here tonight.

The Bureau of Reclamation recognizes the appropriate role of the State of Nebraska to establish and enforce water policy. While the current State water policy of developing and implementing Integrated Management Plans is a step in the right direction, Reclamation is concerned that the Integrated Management Plan proposed by the State and the Middle Republican Natural Resources District is inadequate in that it fails to protect Reclamation's senior water rights from significant groundwater development of the

hydrologically connected waters of the Republican River Basin that occurred following approval of the Compact and significant investment in the existing infrastructure. As a result, the investment of the citizens of the United States in the development of infrastructure is in jeopardy.

Reclamation testified at the Republican River Compact Arbitration hearings in April 2009 outlining our concerns that without additional limits and controls on ground water use, the surface water supplies in the Basin will continue to decline making it more difficult for Nebraska to meet Compact compliance in the long term. Reclamation concurs with Arbitrator Dreher's decision that "...Nebraska's current IMPs are inadequate to ensure compliance with the Compact during prolonged dry years" and "Nebraska and the NRDs should make further reductions in consumptive ground water withdrawals beyond what's required in the current IMPs." It is our position that ground water consumptive use must be reduced to a level that will allow base flows to recover to an extent that will allow Nebraska to consistently comply with the Compact in both the near term and long term. This is the only way Nebraska can meet the Integrated Management Plan goal of "sustaining a balance between water uses and water supplies . . ." Likewise, Arbitrator Dreher concluded in his Final Decision that "Nebraska's problem

in complying with the Compact is... groundwater consumptive use, not surface water consumptive use."

This proposed Integrated Management Plan continues to allow for the unfair use of surface water supplies to make up for deficits caused by years of ground water overuse and fails to address past ground water use and future ground water declines that will continue to deplete the streamflows. In water-short years, surface water users experience significant water shortages due to the reduced surface water supplies while ground water users have the capability to pump sufficient ground water to meet most of their irrigation demands. As a result, ground water depletions to surface flows have continued to gradually increase while surface water diversions and depletions continue to decline.

Again, Reclamation is supportive with Nebraska's effort to comply with the Compact and expects to continue to operate the Federal projects for their authorized purposes. However, a plan that essentially curtails all surface water use and continues to allow ground water use and ground water mining to occur in the Basin is unreasonable and not acceptable to Reclamation.

This is not consistent with Nebraska Statute 46-715 as surface water users are not being provided equal protection among all water users. Reclamation

views our Federal water rights as property rights that must be provided equal protection. The Integrated Management Plan cannot ignore the physical and legal reality that ground water and surface water are hydrologically connected and the administration of the water supply in the basin must be consistent and equitable for all water users.

With regards to the proposed Integrated Management Plan, Reclamation needs a better understanding on how the surface water controls of the Integrated Management Plan will work. Please refer to our specific comments related to the proposed Integrated Management Plan in our written testimony. If the state recognizes the administration of water in the basin for Compact compliance as a "beneficial use" then the senior water right holders in the basin should be compensated. If the intent of by-passing inflows from upstream reservoirs is to store water in Harlan County Lake then, in our view, this is a "selective call" which denies equal protection to property right holders. Two of Reclamation's upstream reservoirs are senior in priority to Harlan County Lake. Additionally, if the State closes <u>all</u> natural flow permits, as indicated in the proposed Integrated Management Plan, what State authority will be used to supply water to Lovewell Reservoir during "Compact Call" years? If the water cannot be stored or diverted, as indicated in this Integrated Management Plan, then the water flowing through our

reservoirs is no longer project water and Federal law limits the use of Project facilities for non-project water.

As an alternative, Reclamation believes the State should manage the water supplies of the basin consistently for all water users. A long term conjunctive management approach should be developed that allocates consumptive use in an equitable manner across the basin. This approach would allow water to be marketed between all users based on consumptive use. We again want to stress that the earliest water rights in the basin are the surface water rights that are currently not be provided "equity among water users" and will not be in the future if this Integrated Management Plan is adopted.

In conclusion, Reclamation is willing to continue working with all the NRDs and the State as they seek compliance with the Compact. The Integrated Management Plan should recognize and protect the investment of the United States taxpayers made decades ago. To ensure compliance in the long term, Reclamation believes there must be a healthy surface water component in the Basin. To accomplish this, we believe reductions in ground water pumping must be significantly more than currently provided in the Integrated Management Plan to allow stream flows to begin to recover. Ground water

pumping and other upstream uses are progressively depleting reservoir inflow.

Reclamation is hopeful as you finalize the IMP that you will study the presented testimony and respond to our specific questions and concerns we have presented in our written statement.

Again, I thank you for the opportunity to present this testimony here tonight.

Statement of the Bureau of Reclamation Nebraska-Kansas Area Office Aaron M. Thompson, Area Manager

Regarding Proposed Integrated Management Plan for the Upper Republican Natural Resources District

June 10, 2010

INTRODUCTION

The Bureau of Reclamation (Reclamation) recognizes the appropriate role of the State of Nebraska to establish and enforce water policy. The current State water policy of developing and implementing Integrated Management Plans (IMP) is a step in the right direction. However, Reclamation is concerned that the IMP proposed by the State and the Upper Republican Natural Resource District (URNRD) is inadequate. It fails to protect Reclamation's senior water rights from direct and substantial groundwater development of the hydrologically connected waters of the Republican River Basin (Basin) that occurred following approval of the Compact and subsequent investment of infrastructure.

Reclamation contends the State water policy that has evolved following approval of the Republican River Compact (Compact) ignores the physical reality of the hydrological connection between surface and groundwater sources. The policy separation between surface and ground water has lead to an overdevelopment of the finite water resource in the Republican River Basin. As a result, the investment of the United States in the development of infrastructure is in jeopardy. The irrigation, recreation, and fish and wildlife benefits are currently below their potential as envisioned and authorized by Congress. The taxpayers of the United States have an expectation that their investment will be protected, which includes water rights held by the United States.

Reclamation offers to assist both the State and URNRD in developing a long term solution to the issue of Compact compliance that recognizes the hydrologic connection between surface and groundwater, and protects senior water rights. A potential option is the establishment of a water market as exists in other Reclamation states, such as the system that presently exists in the South Platte River Basin in Colorado.

COMPACT HISTORY

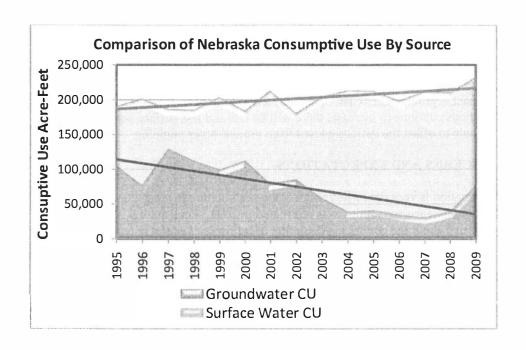
During the late 1930s when Reclamation was initially investigating the water projects in the Basin, we recognized the first step to Federal water development was negotiation of a compact between Nebraska, Kansas, and Colorado allocating water between the states. This was needed to prevent conflict between the states and to insure long term project feasibility to protect the large Federal investment. Reclamation requested the states enter into negotiations to complete this necessary step. Reclamation stated in a 1940

Reconnaissance Report on the Basin (Project Investigation Report No. 41): "To avoid expensive litigation as a result of possible conflicting uses of water in the various states, further developments for irrigation should be preceded by a three-state compact or similar agreement on use of water." This report was one of many sources of information used by the three states to develop the Compact. Reclamation also assisted the states in the Compact negotiations by preparing hydrology analysis for the Basin and sharing Reclamation's preliminary water development plans with each of the states. The first attempt to adopt the Compact by the states was vetoed by President Roosevelt because the United States did not participate in the negotiations of the Compact. After participation by the United States, the Compact was renegotiated and revised to include Articles 10 and 11. The renegotiated Compact was signed by the states and the representative of the United States on December 31, 1942. Ratification of the Compact by the States and the U.S. Congress followed in 1943.

After the Compact was finalized, this water allocation became the framework for the final planning and design of a system of Federal reservoir and irrigation projects that would assist each of the states in developing their allocated share of the Republican River. Reclamation believed by acquiring necessary state water rights and designing its projects within each state's allocated share of the water, the water supply for these Federal projects would be protected against future water development. Between the late 1940s and 1960s eight Federal dams and reservoirs were constructed in the Basin. Reclamation entered into repayment or water service contracts with each of its irrigation districts in the Basin to provide for repayment of the irrigation portion of construction and their associated operation, maintenance, and replacement (OM&R) costs for these projects. This was done with the expectation that the irrigation districts would be able to repay their share of the project costs, protecting the invested interest of the taxpayers of the United States.

COMPACT ACCOUNTING

From 2003 through 2006, Nebraska's allocation averaged 205,000 acre-feet and Nebraska's use averaged 250,000 acre-feet, each year resulting in computed beneficial consumptive use exceeding Nebraska's allocation. During this period Nebraska ground water pumping caused nearly 80% of the ground water depletions to the streamflows in the basin. The following graph shows Nebraska's ground water and surface water consumptive use since 1995. Statistical trend lines have been added to the graph to show how these consumptive uses have changed over time. Ground water consumptive use has gradually increased over time, while there has been a sharp decline in surface water consumptive use.



Reclamation testified at each of the IMP hearings that surface water supplies in the Basin began to decline significantly in the late 1960s, right at the time ground water development in the Basin was expanding at a rapid rate. The use of surface water is not the reason Nebraska has failed to be in compliance with the Compact. Surface water use has decreased over time. Because of the current level of ground water use in the basin, ground water depletions have resulted in significant Compact compliance deficits for Nebraska. This draft IMP continues to allow for the unreasonable use of surface water supplies to make up for deficits caused by years of ground water overuse. In water-short years, surface water users experience significant water shortages because of imposed reductions in surface water supplies while ground water users have the capability to pump sufficient ground water to meet most of their irrigation demands. As a result, ground water depletions to surface flows have continued to gradually increase while surface water depletions continue to decline.

2009 ARBITRATION

Reclamation testified at the Republican River Compact Arbitration hearings in April 2009 and stated our concern that without additional limits and controls on ground water use, the surface water supplies in the Basin will continue to decline making it more difficult for Nebraska to meet Compact compliance in the long term. Reclamation concurs with Arbitrator Dreher's decision that "...Nebraska's current IMPs are inadequate to ensure compliance with the Compact during prolonged dry years" and "Nebraska and the NRDs should make further reductions in consumptive ground water withdrawals beyond what's required in the current IMPs." It is our position that ground water consumptive use must be reduced to a level that will allow base flows to recover to

an extent that will allow Nebraska to consistently comply with the Compact in both the near term and long term. This is the only way Nebraska can meet the IMP goal of "sustaining a balance between water uses and water supplies . . ." Likewise, Arbitrator Dreher noted in his Final Decision that "Nebraska's problem in complying with the Compact is groundwater CBCU, not surface water CBCU." As long as ground water depletions continue to increase, there will be less and less surface water supplies available to offset the deficits caused from ground water pumping.

CONCERNS AND EXPECTATIONS

Reclamation is very concerned about Nebraska's failure to meet Compact compliance since compliance accounting was reinitiated in 2003. Reclamation is even more concerned about the continuing depletion of inflows to Federal reservoirs. Federal projects were constructed based on the concept that project surface water rights would be protected. The trend of declining ground water levels will result in continuing stream flow depletions. This draft IMP fails to address impacts from past ground water use and future ground water declines that will cause direct and substantial depletions in stream flows.

Reduced surface water supplies have caused Federal project water deliveries, throughout the Basin, to decline during the last 40 years. Ground water pumping in the URNRD directly affects the water supply for several canals associated with the Federal projects in the Basin. A decline of return flows from these canals has reduced supplies to downstream Federal projects as well. According to NE Stat. 46-715, the IMP should include clear goals and objectives with the purpose of sustaining the balance between water uses and water supplies for both the near term and the long term. Reclamation is very concerned with this balance in the Basin as it relates to surface water supplies for existing surface water uses.

Reclamation expects the water rights associated with the authorized Federal multipurpose projects in the Basin be protected by the State of Nebraska and the NRDs. Reclamation expects to continue to operate the Federal projects for their authorized purposes. Reducing ground water depletions is the only way to gradually allow the streamflows to recover, provide equity among water users, and assist Nebraska in achieving long term Compact compliance.

SPECIFIC COMMENTS

 Goal 4 – "protect ground water and surface water users... from stream flow depletions caused by surface water or ground water uses begun after the date the river basin was designated as fully appropriated". This goal is not being met and will not be met by the proposed IMP. Records indicate depletions from ground water have increased since 2004 and ground water levels are continuing to decline.

- 2. Goal 5 "reserve any streamflow available from regulation, incentive programs, and purchased or leased surface water required to maintain compact compliance from any use that would negate the benefit of such regulations or programs..." Since any water that appears as streamflow is subject to storage and surface water use in accordance with Nebraska state statues, how does the state intend to meet this goal?
- 3. The IMP requires a 20% reduction in pumping to a level no greater than 425,000 acre-feet but then allows higher pumping above 425,000 acre-feet in years with lower than average precipitation. Years with below average precipitation are also "water short" years. Allowing higher pumping levels in these years works against compliance and equity between surface water users and ground water users.
- 4. The URNRD's current pumping volumes are near a 20% reduction from the '98-'02 baseline volumes discussed in the IMP. The '98-'02 baseline is not representative of average pumping as this was a dry period when pumping rates were high. Reductions need to be higher to improve surface water supplies and achieve long-term compliance. Reducing allocations by more than 20% will provide a cushion to offset deficits in dry or water short years. This would reduce the need for other users to unfairly make up the deficit.
- 5. The proposed IMP does not address improving long-term surface water flows nor make up existing deficits. Improved surface water flows will be needed to achieve long-term compliance.
- 6. The Surface Water Controls as described in section VII.F are vague and do not describe the intent of "Compact Call."
- 7. The "Compact Call Year" is not defined in the draft IMP. Also a number of the terms under the Compact Call Year evaluation are not clear.
- 8. The IMP indicates that a "Compact Call" will be placed on the river at Guide Rock or Hardy on all natural flow and storage permits. This call would appear to prevent storing water in Harlan County Lake decreasing the water supply for the Bostwick Division. This call would also appear to prevent the diversion of natural flow into the Courtland Canal. Is this the intent of the Compact Call? This could also increase the number of years that are designated as "water-short years" under the terms of the Final Settlement Stipulation (FSS).
- 9. Closing all natural flow rights and storage rights while not curtailing all ground water wells hydrologically connected to the streams (as defined by the FSS) is discriminatory and does not provide equity between water users (a primary goal of the IMP).
- 10. The IMP states that a "Compact Call" is on until such time that administration is no longer needed. The IMP is unclear whether any ground water use will occur in the Rapid Response Area during a "Compact Call Year". Will ground water use remain off during the entire year when a "Compact Call" has been placed?
- 11. The IMP does not define "allowable surface water depletions." A better understanding of the surface water user's share of allowable depletions is needed. Surface water supplies are already reduced during "water short" years. Ground water consumptive use has remained the same or increased and, under the IMP a higher volume of ground water pumping is allowed in years with below average

precipitation. This is completely contrary to providing equity between surface water uses and ground water users.

CONCLUSION

Reclamation is supportive with Nebraska's effort to comply with the Compact. However, a plan that essentially curtails all surface water use and continues to allow ground water use and ground water mining to occur in the Basin is unreasonable and not acceptable. This is not consistent with Nebraska Statute 46-715 as surface water users are not being provided equal protection among all water users. Reclamation views our Federal water rights as property rights that must be provided equal protection. The fiscal investment of the taxpayers of the United States must also be protected. In doing so, the IMPs should not ignore the physical reality that ground water and surface water are hydrologically connected and the administration of the water supply in the basin should be consistent and equitable for all water users.

Additionally, the proposed revisions to the IMP do not allow Reclamation to operate as authorized by the U.S Congress. If adopted, this IMP would prevent Reclamation from performing its contractual obligations of delivering water to irrigation districts in "Compact Call" years. Federal projects were specifically designed to be in compliance with the Compact and our use has not increased over time but decreased as a result of uncontrolled depletions upstream of our reservoirs. Inadequate water supplies, because of depleted stream flows in the URNRD, adversely affect surface irrigators who were planning on supplies expected after the signing of the Compact. Depleted surface water deliveries directly and substantially reduce the economic benefits provided by the Federal projects.

Reclamation needs a better understanding on how the surface water controls of this proposed IMP will work. If the state recognizes the administration of water in the basin for Compact compliance as a "beneficial use" then the senior water right holders in the basin should be compensated. Bypassing inflows from upstream reservoirs to store water in Harlan County Lake is, in our view, a "selective call." Two of Reclamation's reservoirs upstream are senior to Harlan County Lake and the other reservoirs have an equal water right priority to that of Harlan County Lake. Additionally, if all natural flow permits are closed, as indicated in the proposed IMP, what authority will be used to supply water to the Courtland Canal and Lovewell Reservoir during "Compact Call" years? If the water cannot be stored or diverted as indicated in this IMP, then the water flowing through our reservoirs is no longer project water. Reclamation does not currently have authority to transfer non-project water through Courtland Canal for a non-project use. Finally, Reclamation is concerned that "Compact Call" years could result in surface water users losing irrigation supplies for multiple years as the reservoirs ability to store water is reduced. The financial viability of our irrigation districts, which supplies water to approximately 700 users in Nebraska, would be in jeopardy if this would occur. This is unreasonable. Other impacts coupled with reduced reservoir levels will occur to recreational and fish and wildlife benefits associated with these projects. It is our understanding that DNR predicts surface water users will be curtailed 2 out of 10 years.

Please provide us with the modeling and supporting data showing the frequency that surface water curtailments will occur.

As an alternative, Reelamation believes the water supplies of the basin should be managed fairly across the basin for all water users. A long term conjunctive management approach should be developed that allocates consumptive use in an equitable manner across the basin. This approach would allow water to be marketed between all users based on consumptive use. Surface water should be provided with an equitable share of Nebraska's consumptive use during "water short" years. We again want to stress that the earliest water rights in the basin are the surface water rights that are currently not being provided "equity among water users" and if this IMP is adopted, will not be in the future. Sustained surface water supplies are critical for project viability and Nebraska's ability to be in compliance in the long term.

In conclusion, Reclamation is willing to continue working with all the NRDs, Irrigation Districts, and State as they seek compliance with the Compact. The IMP should recognize and protect the investment of the United States' taxpayers made decades ago. To ensure compliance in the long term. Reclamation believes there must be a healthy surface water component in the Basin. To accomplish this, we believe reduction in ground water pumping must be significantly more than currently provided in the IMP to allow base flows to begin to recover. Ground water pumping and other upstream uses are progressively depleting reservoir inflow.

Reclamation is hopeful as you finalize the IMP that you will study the presented testimony and respond to our specific questions and concerns we have presented in this statement.

Agran M Thompson Area Manager

Oral Statement

Aaron Thompson, Area Manager Nebraska-Kansas Area Office

Regarding Proposed Integrated Management Plan for the Upper Republican Natural Resources District

June 10, 2010

My name is Aaron Thompson. I am the Area Manager of the Bureau of Reclamation's Nebraska-Kansas Area Office located in Grand Island, Nebraska.

Good evening and thank you for the opportunity to present a statement before you this evening. For the record, I am presenting written and oral statements here tonight. I have given a copy of the written statement to the hearing recorder.

The Bureau of Reclamation recognizes the appropriate role of the State of Nebraska to establish and enforce water policy. While the current State water policy of developing and implementing Integrated Management Plans (IMP) is a step in the right direction, Reclamation is concerned the IMP proposed by the State and the Upper Republican NRD is inadequate in that it fails to protect Reclamation's senior water rights from significant ground

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water development of the hydrologically connected waters of the Republican River Basin that occurred following approval of the Compact and significant investment in the existing infrastructure. As a result, the investment of the citizens of the United States in the development of infrastructure is in jeopardy.

Federal projects were constructed based on the concept that project surface water rights would be protected. The trend of declining ground water levels in the Upper Republican NRD ensures continuing stream flow depletions. According to NE Stat. 46-715, the IMP should include clear goals and objectives with the purpose of sustaining the balance between water uses and water supplies for both the near term and the long term. Reclamation is very concerned with this balance in the Basin as it relates to surface water supplies.

Reclamation testified at the Republican River Compact Arbitration hearings in April 2009 outlining our concerns that without additional limits and controls on ground water use, the surface water supplies in the Basin will continue to decline making it more difficult for Nebraska to meet Compact compliance in the long term. Reclamation concurs with Arbitrator Dreher's decision that "...Nebraska's current IMPs are inadequate to ensure

compliance with the Compact during prolonged dry years" and "Nebraska and the NRDs should make further reductions in consumptive ground water withdrawals beyond what's required in the current IMPs." It is our position that ground water consumptive use must be reduced to a level that will allow base flows to recover to an extent that will allow Nebraska to consistently comply with the Compact in both the near term and long term. This is the only way Nebraska can meet the IMP goal of "sustaining a balance between water uses and water supplies . . ." Likewise, Arbitrator Dreher concluded in his Final Decision that "Nebraska's problem in complying with the Compact is... groundwater consumptive use, not surface water consumptive use."

This proposed IMP continues to allow for the unfair use of surface water supplies to make up for deficits caused by years of ground water overuse and fails to address past ground water use and future ground water declines that will continue to deplete the streamflows. In water-short years, surface water users experience significant water shortages due to the reduced surface water supplies while ground water users have the capability to pump sufficient ground water to meet most of their irrigation demands. As a result, ground water depletions to surface flows have continued to gradually increase while surface water diversions and depletions continue to decline.

Again, Reclamation is supportive with Nebraska's effort to comply with the Compact and expects to continue to operate the Federal projects for their authorized purposes. However, a plan that essentially curtails all surface water use and continues to allow ground water use and ground water mining to occur in the Basin is unreasonable and not acceptable to Reclamation.

This is not consistent with Nebraska Statute 46-715 as surface water users are not being provided equal protection among all water users. Reclamation views our Federal water rights as property rights that must be provided equal protection. The IMP cannot ignore the physical and legal reality that ground water and surface water are hydrologically connected and the administration of the water supply in the basin must be consistent and equitable for all water users.

In light of the URNRD's special board meeting on June 3, 2010 regarding possible inaccurate well meter readings and violations to the District's rules and regulations, Reclamation is concerned the pumping data used in the ground water modeling in preparation of this IMP may be compromised. If the URNRD investigation determines the actual pumping volumes in the district are inaccurate, it would seem appropriate the URNRD and DNR

review what affect this may have on the modeling results used in the development of this IMP and RRCA accounting.

With regards to the proposed IMP, Reclamation needs a better understanding on how the surface water controls of the IMP will work. Please refer to our specific comments related to the proposed IMP in our written statement. If the state recognizes the administration of water in the basin for Compact compliance as a "beneficial use" then the senior water right holders in the basin should be compensated. If the intent of by-passing inflows from upstream reservoirs is to store water in Harlan County Lake then, in our view, this is a "selective call" which denies equal protection to property right holders. Two of Reclamation's upstream reservoirs are senior in priority to Harlan County Lake. Additionally, if the State closes all natural flow permits, as indicated in the proposed IMP, what State authority will be used to supply water to Lovewell Reservoir during "Compact Call" years? If the water cannot be stored or diverted, as indicated in this IMP, then the water flowing through our reservoirs is no longer project water and Federal law limits the use of Project facilities for non-project water.

As an alternative, Reclamation believes the State should manage the water supplies of the basin consistently for all water users. A long term

conjunctive management approach should be developed that allocates consumptive use in an equitable manner across the basin. This approach would allow water to be marketed between all users based on consumptive use. We again want to stress that the earliest water rights in the basin are the surface water rights that are currently not be provided "equity among water users" and will not be in the future if this IMP is adopted.

In conclusion, Reclamation is willing to continue working with all the NRDs, Irrigation Districts, and the State as they seek compliance with the Compact. The IMP should recognize and protect the investment of the United States taxpayers made decades ago. To ensure compliance in the long term, Reclamation believes there must be a healthy surface water component in the Basin. To accomplish this, we believe reductions in ground water pumping must be significantly more than currently provided in the IMP to allow stream flows to begin to recover. Ground water pumping and other upstream uses are progressively depleting reservoir inflow.

Reclamation is hopeful as you finalize the IMP that you will study the presented testimony and respond to our specific questions and concerns we have presented in our written statement.

Again, I thank you for the opportunity to present this testimony here tonight.

Statement of the Bureau of Reclamation Nebraska-Kansas Area Office Aaron M. Thompson, Area Manager

Regarding Proposed Integrated Management Plan for the Lower Republican Natural Resources District

January 13, 2011

INTRODUCTION

The U. S. Bureau of Reclamation (Reclamation) recognizes the appropriate role of the State of Nebraska to establish and enforce water policy. While the current State water policy of developing and implementing Integrated Management Plans (IMPs) are a step in the right direction, Reclamation contends that State water law that has evolved following approval of the Compact does not adequately address the physical reality of the hydrological connection between surface and groundwater sources. The legal separation between surface and ground water has lead to overdevelopment of the finite water resource in the Republican River Basin. As a result, the investment of the citizens of the United States in the development of water resource infrastructure is in jeopardy. The irrigation water supplies, recreation, and fish and wildlife benefits are also currently not fulfilling their potential as envisioned and authorized by Congress. The taxpayers of the United States have an expectation that their investment will be protected, which includes water rights held by the Department of the Interior on behalf of the United States.

Reclamation appreciates Lower Republican Natural Resources District's (LRNRD) acknowledgment that the rights and interest of the United States and specifically Reclamation waters within the LRNRD are recognized and respected by this IMP. Reclamation is encouraged by the LRNRD efforts to reduce ground water pumping within their district beyond what was required in the LRNRD's 2008 IMP. Reclamation is also encouraged by LRNRD's efforts to eliminate the practice of carrying forward unused allocations and developing an IMP based on concepts and goals of maintaining a long-term sustainable river basin to achieve compliance with the Compact. Adequately reducing ground water depletions will gradually allow the stream flows to recover, provide equity among water users, and assist Nebraska in achieving long term Compact compliance.

COMPACT HISTORY

During the late 1930s when Reclamation was initially investigating the water projects in the Basin, we believed the first step to effective Federal water development was negotiation of a compact among Nebraska, Kansas and Colorado allocating water between the states. This was needed to prevent conflict between the states and to insure long term project feasibility, protecting the large Federal investment. Reclamation

Attachment E

requested that the states enter into negotiations to complete this necessary step.

Reclamation stated in a 1940 Reconnaissance Report on the Basin (Project Investigation Report No. 41): "To avoid expensive litigation as a result of possible conflicting uses of water in the various states, further developments for irrigation should be preceded by a three-state compact or similar agreement on use of water." This report was one of a many sources of information used by the three states to develop the Compact.

Reclamation also assisted the states in the Compact negotiations by preparing hydrology analysis for the Basin and sharing Reclamation's preliminary water development plans with each of the states. The first attempt of the Compact adopted by the states was vetoed by President Roosevelt because the United States did not participate in the negotiations of the Compact. After participation by the United States, the Compact was renegotiated and revised to include Articles 10 and 11. The renegotiated Compact was signed by the states and the representative of the United States on December 31, 1942.

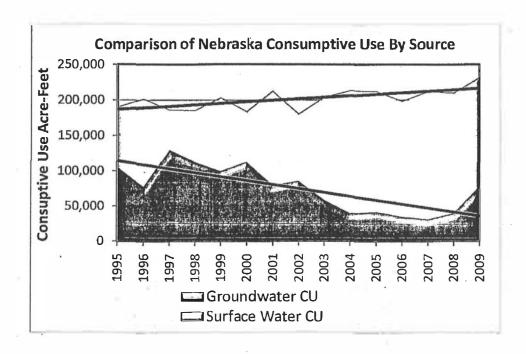
Ratification of the Republican River Compact (Compact) by the States and the U.S.

Congress followed in 1943.

Once the Compact was finalized, this water allocation laid the framework for the final planning and design of a system of Federal reservoir and irrigation projects that would assist each of the states in developing their allocated share of the Republican River. Reclamation believed that by acquiring necessary state water rights and designing its projects within each state's allocated share of the water, the water supply for these Federal projects would be protected against future water development. Between the late 1940s and 1960s seven Federal dams and reservoirs were constructed in the Basin upstream from the Nebraska-Kansas state line. Reclamation entered into repayment or water service contracts with each of the irrigation districts in the Basin to provide for repayment of the irrigation portion of construction and their associated operation, maintenance, and replacement (OM&R) costs for these projects. This was done with the expectation that the irrigation districts would be able to repay their share of the project costs, protecting the invested interest of the taxpayers of the United States.

COMPACT ACCOUNTING

From 2003 through 2006, Nebraska's allocation averaged 205,000 acre-feet and Nebraska's use averaged 250,000 acre-feet, each year resulting in computed beneficial consumptive use exceeding Nebraska's allocation. During this period Nebraska ground water pumping caused nearly 80% of the ground water depletions to the streamflows in the basin. The following graph shows Nebraska's ground water and surface water consumptive use since 1995. Statistical trend lines have been added to the graph to show how these consumptive uses have changed over time. Ground water consumptive use has gradually increased over time while there has been a sharp decline in surface water consumptive use.



Reclamation testified at each of the past IMP hearings that surface water supplies in the Basin began to decline significantly in the late 1960s when ground water development in the Basin was expanding at a rapid rate. The use of surface water is not the reason Nebraska has failed to be in compliance with the Compact. Surface water use has significantly decreased over time. Because of the current level of ground water use in the basin, ground water depletions have resulted in significant Compact compliance deficits for Nebraska. In water-short years surface water users experience significant water shortages due to the reduced surface water supplies while ground water users have the capability to pump sufficient ground water to meet most of their irrigation demands. As a result, ground water depletions to surface flows have continued to gradually increase reducing the available water for use by our surface water users.

2009 ARBITRATION

Reclamation testified at the Republican River Compact Arbitration hearings in April 2009 outlining our concerns that without additional limits and controls on ground water use, then surface water supplies in the Basin will continue to decline making it more difficult for Nebraska to meet Compact compliance in the long term. Reclamation concurs with Arbitrator Dreher's decision that Nebraska's 2008 IMPs are inadequate to ensure compliance with the Compact in dry years and that additional reductions in ground water consumptive use should be made. It is our position that ground water consumptive use must be reduced to a level that will allow base flows to recover to an extent sufficient to provide sustainable surface and ground water supplies and allow Nebraska to consistently achieve both short-term and long-term. Compact compliance. This is the only way Nebraska can meet the purpose of this IMP of "susta ning a balance

between water uses and water supplies . . ." Unless ground water depletions are sufficiently reduced to allow surface water supplies to recover, Nebraska will not meet its Compact compliance obligations on a long-term basis.

CONCERNS AND EXPECTATIONS

Reclamation is very concerned with Nebraska's failure to meet Compact compliance requirements since Compact compliance accounting was reinitiated in 2003. Reclamation is even more concerned about the continuing depletion of inflows to the Federal reservoirs. Federal projects were constructed based on the concept that project surface water rights would be protected. The trend of increasing ground water depletions and declining ground water levels in the basin ensures continuing stream flow depletions. While reducing ground water allocations beyond the requirements of the LRNRD's 2008 IMP is an important first step in controlling groundwater depletions, it is still unclear that these further reductions will be sufficient to ensure Compact compliance during all years. Our experience leads us to believe that groundwater depletions will have to be continually evaluated in order to have sustained and long-term Compact compliance.

Reclamation is also concerned with how the best management practices (BMPs) criteria, as indentified in this IMP, will be applied to surface water users without interfering with their water rights. Reclamation agrees that conservation tools and goals are valuable for water resource planning, but concerned with how these BMPs rules might be implemented in relation to our surface water users. Reclamation plans to continue to operate the Federal projects for their authorized purposes and expects the water rights associated with the authorized Federal multipurpose projects, located within the Basin, be recognized and protected by the State of Nebraska and the NRDs.

SPECIFIC COMMENTS

Goals provided under I. on page 3:

- Sustainability Reclamation strongly supports this goal as we believe
 sustainability is critical for Nebraska consistently complying with the Compact on
 both a short-term and long-term basis. This goal is currently not being met and
 will not be met until ground water depletions are reduced to a level that allows
 stream flows to begin to recover. Records (DNR data) indicate depletions from
 ground water have increased since 2004 and ground water levels (USGS data) are
 continuing to decline. This trend must be reversed.
- 2. Best Use; Best Practices "require the most beneficial impact on the human population, sustainable water management and incentives for voluntary actions in accord with the best management practices criteria of the LRNRD as set forth in its Rules." Is it the intent of LRNRD to impose their Best Use; Best Practices on surface water uses? If so, the LRNRD needs to clearly cite its authority, if any, to

impose these best management practices on surface water users. These rules should be clear and not restrict or interfere with surface water rights.

<u>Definitions provided on page 5-6</u>

"allowable groundwater depletions". This definition needs to be clarified to be consistent with section 4.2 Forecast Procedures. This definition is also not consistent with DNR's definition and section 4.3 Determination of Available Stream Flow.

III. Reservations. Page 7 – LRNRD contends in the IMP that the State of Nebraska must compensate the LRNRD for groundwater taken for RRC compliance obligations and that the State of Nebraska must compensate groundwater users whose use of their land, wells, or use of groundwater are curtailed or taken to allow the State to achieve compliance with the RRC. To ensure equity, surface water users should be fairly compensated as well for any surface water taken for RRC compliance.

<u>IV. 4.3, page 10</u> - The maximum allowable consumption is provided in a table for the base year and the next 5 years. Based on the values listed it appears that this should be "maximum allowable application" rather than "maximum allowable consumption."

IV. 9, page 11 – The word "ground" should be inserted in front of "water" on the first line as this depletion is in reference to the allowable ground water depletions. This also applies to the end of line six where the word "water" appears.

Under this same paragraph the IMP states that the URNRD and MRNRD should reduce water consumption to levels that supplement historic crops exclusive of corn, alfalfa, soybean, and other high-water crops. We do not see the need for this requirement. We support each of the NRDs in reducing ground water consumption to levels that allow for sustainable surface and ground water supplies and meeting RRC compliance but we do not believe that individual users should be restricted to specific crops. Surface water users associated with Reclamation projects have some of the most senior water rights and a long established history of water use. Many of our water users rely on long established farm economies dependant on some of these higher water use crops.

CONCLUSION

Reduced surface water supplies have caused the Federal project water deliveries, throughout the Basin, to decline during the past 40 years. Activities in the LRNRD directly impact the water supply for several canals associated with the Federal projects in the Basin. A decline of return flows from these canals has reduced supplies to downstream Federal projects as well. According to NE Stat. 46-715, the Integrated Management Plan (IMP) should include clear goals and objectives with the purpose of sustaining the balance between water uses and water supplies for both the short term and the long term. Reclamation is very concerned with this balance in the Basin as it relates

to surface water supplies for existing surface water uses. The water supply in the basin should be consistent and equitable for all water users.

Reclamation expects to continue to operate the Federal projects for their authorized purposes and expects the water rights associated with the authorized Federal multipurpose projects that were in the Basin be protected by State of Nebraska and the NRDs. Reclamation views our Federal water rights as property rights that must be provided equal protection. Sustained surface water supplies are critical for our future project viability and allowing Reclamation to perform its contractual obligations of delivering water to irrigation districts in "all" years.

Reclamation supports LRNRD's efforts in developing an IMP based on concepts and goals of providing sustainable surface and ground water supplies and maintaining long term compliance with the Compact. Reclamation is further encouraged by the LRNRD's willingness to significantly reduce ground water pumping which will ultimately lower the ground water depletions within the LRNRD and allow for the recovery of stream flows for the long term. While Reclamation is still unclear that the proposed reductions will be sufficient to ensure Nebraska will be able to comply with the Compact during dry or water-short years they are a positive step in developing a long-term approach.

In conclusion, Reclamation is encouraged by the effort of the LRNRD to consult with us in the development of the proposed IMP and is willing to continue to work collaboratively with all the NRDs, Irrigation Districts, and State as they seek compliance with the Compact. To ensure compliance in the long term, Reclamation believes there must be a healthy surface water component in the Basin. Adequately reducing ground water depletions will allow stream flows to recover, provide equity among water users, and assist Nebraska in achieving long term Compact compliance.

RAUNT Agron M. Thompson, Area Manager

Oral Statement

Aaron Thompson, Area Manager Nebraska-Kansas Area Office

Regarding Proposed Integrated Management Plan for the Lower Republican Natural Resources District

January 13, 2011

Good afternoon, my name is Robert Schieffer. I am the acting manager of the Bureau of Reclamation's McCook Field Office. I am here on behalf of Mr. Aaron Thompson, Area Manager of the Bureau of Reclamation's Nebraska-Kansas Area Office located in Grand Island, Nebraska.

For the record, I am presenting written and oral statements here today. I have given a copy of the written statement to the hearing recorder.

The U. S. Bureau of Reclamation (Reclamation) recognizes the appropriate role of the State of Nebraska to establish and enforce water policy. While the current State water policy of developing and implementing Integrated Management Plans (IMPs) are a step in the right direction, Reclamation contends that the evolution of State water law that has evolved following approval of the Compact does not adequately address the physical reality of the hydrological connection between surface and groundwater sources. The

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legal separation between surface and ground water has lead to an overdevelopment of the finite water resource in the Republican River Basin. As a result, the investment of the citizens of the United States in the development of infrastructure is in jeopardy.

Reclamation appreciates the Lower Republican Natural Resources District's (LRNRD) acknowledgment that the rights and interest of the United States and specifically Reclamation waters within the Lower Republican Natural Resource District are recognized and respected by your IMP. Reclamation is encouraged by, and supports your efforts to reduce ground water pumping within your district beyond what was required in your 2008 IMP.

Reclamation is also encouraged by your efforts to eliminate the practice of carrying forward unused allocations and developing an IMP based on concepts and goals of maintaining a long-term sustainable river basin to achieve compliance with the Compact. Adequately reducing ground water depletions will gradually allow the stream flows to recover, provide equity among water users, and assist Nebraska in achieving long term Compact compliance.

Reclamation testified at the Republican River Compact Arbitration hearings in April 2009 outlining our concerns that without additional limits and

controls on ground water use, the surface water supplies in the Basin will continue to decline making it more difficult for Nebraska to meet Compact compliance in the long term. Reclamation concurs with Arbitrator Dreher's decision that "...Nebraska's current IMPs are inadequate to ensure compliance with the Compact during prolonged dry years" and "Nebraska and the NRDs should make further reductions in consumptive ground water withdrawals beyond what's required in the current IMPs." It is our position that ground water consumptive use must be reduced to a level that will allow base flows to recover to an extent that will allow Nebraska to consistently comply with the Compact in both the near term and long term. This is the only way Nebraska can meet the purpose of this IMP of "sustaining a balance between water uses and water supplies . . ."

To ensure compliance in the long term, Reclamation believes there must be a healthy surface water component in the Basin. Reclamation is concerned about the continuing depletion of inflows to the Federal reservoirs. Federal projects were constructed based on the concept that project surface water rights would be protected. The trend of increasing ground water depletions and declining ground water levels in the basin ensures continuing stream flow depletions. Reducing ground water allocations beyond the requirements

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of your 2008 IMP is an important first step in controlling groundwater

depletions. It is still unclear that these further reductions will be sufficient to ensure Compact compliance during all years. Our experience leads us to believe that groundwater depletions will have to be continually evaluated in order to have sustained and long-term Compact compliance.

In conclusion, Reclamation is encouraged by the effort of the Lower Republican Natural Resource District to consult with us in the development of the proposed IMP and we are willing to continue to work collaboratively with all the NRDs, Irrigation Districts, and State as they seek compliance with the Compact.

Thank you for the opportunity to present this testimony.

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BUREAU OF RECLAMATION Great Plains Region Nebraska-Kansas Area Office P.O. Box 1607 Grand Island, Nebraska 68802-1607

SEP 3 0 2010

Mr. Brian Dunnigan, P.E. Director, Nebraska Department of Natural Resources P.O. Box 94676 Lincoln, NE 68509-4676

Subject: Questions and Concerns Related to the Proposed Republican River Basin 1105020

Integrated Management Plans (IMPs)

Dear Mr. Dunnigan:

Thank you for your August 23, 2010 response which makes progress towards addressing Reclamation's questions and concerns related to the recently revised IMPs which were outlined in our July 27, 2010 correspondence to you, Mr. Dan Smith, and Mr. Jasper Fanning. Reclamation wants to completely understand the proposed IMPs and appreciates your patience as we request clarification in the areas that are not completely clear to us.

Our meeting in Grand Island on July 30, 2010 was helpful in better understanding the IMPs, but after reading your response to our questions and further reviewing the IMPs we continue to have a number of questions and significant concerns. To help clarify our understanding of how the IMPs limit ground water use, we prepared the following statement summarizing what we heard in the July 30 meeting.

We understand that the IMPs require a minimum 20 percent reduction in ground water pumping, along with an additional five percent reduction by 2015, from the 1998-2002 baseline pumping levels. In addition, ground water use will be limited to an amount that will not exceed Nebraska's Allowable Ground Water Depletion. Nebraska's Allowable Ground Water Depletion is defined as the maximum level of depletions to stream flow from ground water pumping within Nebraska's portion of the Republican River Compact area that can occur in a given year without exceeding Nebraska's Compact allocation. The Allowable Ground Water limit is calculated as shown below:

Allowable Ground Water Depletion = Nebraska's Compact Allocation + Imported Water Supply -Nebraska's Surface Water Computed Beneficial Consumptive Use (CBCU) – Other Natural Resource District (NRD) CBCU

We understand this to mean that the limit on ground water use will vary from year to year as necessary to stay within the Allowable Ground Water Depletion amount for each

Attachment G

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Classification: WTR 4.00 RR

Control No: 10073102

Project: TRR 501

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Remarks

year. The IMPs require the NRDs to adjust their ground water pumping allocations or take other appropriate actions to ensure they stay within their share of the Allowable Ground Water Depletion amount. Surface water use is not limited by the IMPs except in Compact Call years when it may be necessary for the Nebraska Department of Natural Resources (DNR) to place a call and curtail some or all surface water use as required in that year to meet Compact compliance. Surface water use is limited, as in the past, by the available surface water under each user's water right and their contractual right to available stored water.

We also understood from the July 30 meeting that you believe the limit placed on the NRDs to stay within their proportional share of the Allowable Ground Water Depletion will make it highly improbable that Compact Calls will be necessary once the IMPs are implemented. We further understood that in Compact Call years, NRD management actions and controls will be implemented to make up for any expected shortfall in the Compact balance prior to curtailing surface water use. This will include completely curtailing ground water use in the Rapid Response Area. We understood surface water will only be administered in the Compact Call years when all available NRD management actions and controls would not be sufficient to supply the expected shortfall.

We would appreciate your careful review of the above statement along with your concurrence or, if needed, any additional clarification to our understanding of the IMPs.

In addition, after reviewing your August 23, 2010 response along with the adopted IMPs, we still have a number of questions and concerns that we request you address in further detail. A few specific ones are listed below:

• It was our understanding from reading the IMPs that during "Compact Call" years, a Compact Call will be made that essentially curtails all surface water use. You replied that the IMPs do not "essentially curtail all surface water use" during a Compact Call. This appears to contradict the IMPs. On page 11 of the MRNRD IMP it states:

"A 'Compact Call' will result in DNR issuing closing notices on <u>all</u> natural flow and storage permits in the basin until such time as DNR in consultation with the MRNRD and other basin NRDs, determines that yearly administration is no longer needed to ensure Compact compliance, pursuant to Section X."

While we understand the Compact Call may not be on for the entire irrigation season and it would not affect the use of water stored prior to the call, it does appear that for at least a portion of the season all surface water use of natural flow (including the storage of natural flow) will be curtailed. Can you help clarify what you meant by the IMPs do not essentially curtail all surface water use during a Compact Call?

It would be helpful if you could provide us with some examples of situations where a call on the river curtailing surface water use would be necessary even after exhausting all NRD management actions including the complete shutoff of wells in the Rapid Response Area. Also, if Nebraska is not in compliance with the Compact, can there be any situations when the NRDs are allowed to exceed their share of allowable ground water depletions?

- In your response to our August 23, 2010 letter, you stated that Nebraska will not compensate any water users that may be forced to curtail or limit their use of water to meet Nebraska's Compact allocation. It was our understanding that it is the intent of the NRDs to provide compensation to water users that are required to forgo water use to allow the State to comply with the Compact. We strongly believe that any surface water users, who are shut off by a Compact Call while hydrologicially-connected ground water wells are allowed to pump, should be fairly compensated for their loss. If a funding method and source for such compensation is found, then will DNR and the NRD's commit to compensate all surface water users that are shutoff during a Compact Call?
- In our view, if the IMPs require a bypass of inflow through Harlan County Lake (HCL), then the intent and purpose of the Consensus Plan (agreement between Reclamation and the Corps of Engineers) is affected. This bypass would alter the intent and procedures as indentified in the Final Settlement Stipulation, which would require approval by the Republican River Compact Administration. Please explain in detail why you believe that the Consensus Plan would not be altered.

In addition to the above questions, we continue to be concerned that the IMPs do not adequately address the need for long-term sustainability of both the surface water and ground water supply and the need for equity. To meet Compact compliance on a long-term basis, it is essential that the IMPs be designed to provide sustainability. The need for equity between users is also a critical element. Allowing ground water users, who developed their use subsequent to the investment and construction of the Federal projects to continue to use water during a Compact Call while the senior surface water users are shut off, without just compensation, does not result in equity.

Finally, please provide us with the spreadsheets and supporting data used to produce the PowerPoint charts and slides presented at the Forecast Meeting in November 2009 and during our discussions at our July 30 meeting. Specifically, we would like to review the spreadsheets that produced the IMP evaluation of the 1999-2008 historic data. In addition, please provide any model runs, model run summaries, or data that show the expected trend for base stream flow levels as declining, stabilizing, or increasing based on the recent IMP controls that were put in place.

We appreciate your consideration and response to our questions. It is our hope that your response will serve to clarify our understanding of the IMPs and address any other

IMP specifics or assumptions for which we need additional explanation. We look forward to further discussions and working with you and your staff on these matters as we continue to review the IMPs and other related materials. We may have additional questions in the future. If you have any questions, please contact me at 308-389-5300.

Sincerely,

AARON M. THOMPSON

Aaron M. Thompson Area Manager

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