Outline for Augmentation Plan to RRCA

I. Background on Augmentation in the FSS

The Final Settlement Stipulation (FSS) expressly recognizes augmentation as a management tool to facilitate Republican River Compact compliance. Augmentation is mentioned in three locations throughout the FSS. The first, Subsection III.B.1.k, states that the moratorium on new wells shall not apply to the following:

> *Wells acquired or constructed by a State for the sole purpose of offsetting stream depletions in order to comply with its Compact Allocations. Provided that, such Wells shall not cause any new net depletion to stream flow either annually or long-term. The determination of net depletions from these Wells will be computed by the RRCA Groundwater Model and included in the State's Computed Beneficial Consumptive Use.* ***Augmentation plans*** *and related accounting procedures submitted under this Subsection III.B.1.k. shall be approved by the RRCA prior to implementation.*

The second and third references to augmentation occur in Section IV. Subsection IV.A. states:

> *The States will determine Virgin Water Supply, Computed Water Supply, Allocations, Imported Water Supply Credit,* ***augmentation credit*** *and Computed Beneficial Consumptive Use based on a methodology set forth in the RRCA Accounting Procedures, attached hereto as Appendix C.*

There presently are no "methodologies" set forth in the RRCA Accounting Procedures to determine the augmentation credit referenced in Subsection IV.A. However, Subsection IV.H. states:

> ***Augmentation credit****, as further described in Subsection III.B.1.k., shall be calculated in accordance with the RRCA Accounting Procedures and by using the RRCA Groundwater Model.*

Taken together, these references suggest the following minimal requirements:

1. If the project involves the acquisition or construction of augmentation wells in the moratorium area, those wells may not cause a "new" net depletion either annually or over the "long-term".

2. The RRCA Groundwater Model will be used to determine the extent of any net depletion and whether such net depletion is "new".

3. The RRCA Accounting Procedures will be revised to reflect the appropriate methodology for calculating the augmentation credit.

4. The RRCA Groundwater Model will be used to calculate the credit, assuming, of course, that the project involves an activity that influences groundwater CBCU or the IWS Credit.

5. The RRCA must approve any augmentation plan and related accounting procedures before a state may receive "augmentation credit" for the project, beyond the effect of simply increasing water supply, which will manifest itself in the current RRCA Accounting Procedures.

The States elaborated on these concepts before Special Master McKusick in 2003. See Transcript at 81-3; id. at 16-17. Using the example there provided, a State would be entitled to claim as an "augmentation credit" all water over and above the historic depletion to streamflow, which must be offset first as part of an augmentation project.

II. Baseline Conditions of the Project Area

This section describes the current conditions of the project area.

A. Current Uses of the Project Area

Current acreage

Current number of wells

Map of the area

B. Groundwater Pumping Under Baseline Operations

Meter data

Consumptive use estimates/Recharge

III. Operational Aspects of the Project

This section describes the expected operations of the project once implemented.

A. Conceptual Description of Project Operations

Period of operation

Augmentation delivery point

B. Groundwater Pumping Under Project Operations

Pumping schedule and volumes under the project

Recharge modifications

IV. Groundwater Modeling Analysis of the Project

This section describes the evaluation of the groundwater CBCU to assess the net impact of the project operations on streamflows of the Republican River Basin.

A. Groundwater Depletions Under Baseline Conditions

Depletions under baseline operations historically and projected into the future

B. Groundwater Depletions Under Project Operations

Depletions under the new project operations

C. Net Groundwater Depletions Under Project Operation

No new net depletions either annually or long-term (FSS III.B.1.k)

V. Accounting Procedures Modifications for Crediting the Project

This section describes the modifications to the RRCA Accounting Procedures needed to determine the augmentation credit to be provided in conjunction with the augmentation project.

A. Modifications to the Accounting and Reporting Procedures

Draft of strike-through edits to accounting procedures

Modifications to reporting requirements to include data related to project operations pumping

Inclusion of Imports of Platte River Basin Water Supplies into the RRCA Accounting

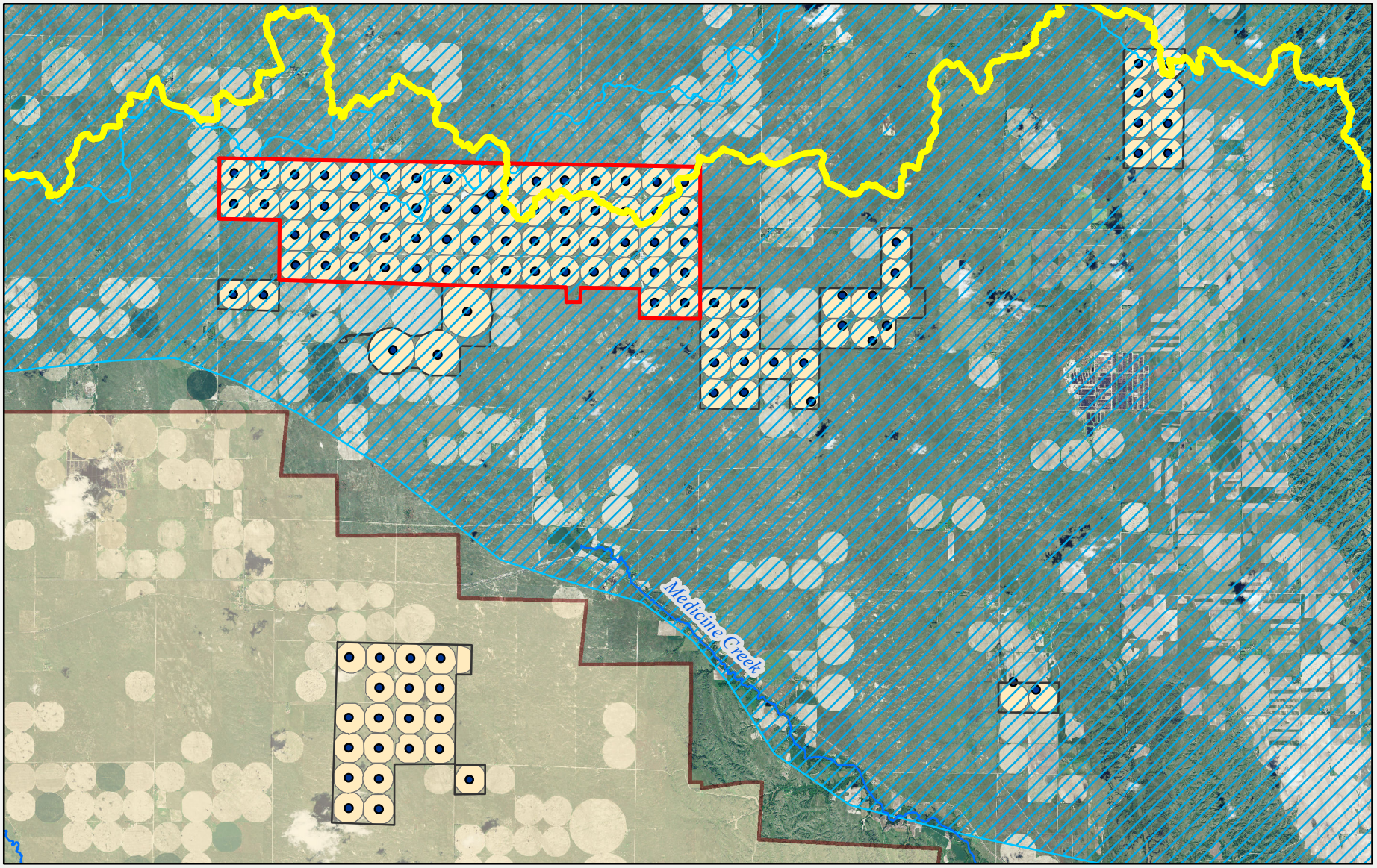
The importation of water from the Platte River Basin is an established element of the Final Settlement Stipulation (FSS). The Imported Water Supply Credit was established to recognize that waters from the Platte River Basin should not be included in the Virgin Water Supply, but rather credit for these imports should be given exclusively to Nebraska.

Nebraska is proposing to enhance these imports through directly pumping this water supply into the Republican River Basin from areas within the Platte River Basin and mound areas near the drainage divide (see figure 1. Project Area Map). These direct imports can easily be accommodated into the Republican River Compact Administration (RRCA) Accounting Procedures and Reporting Requirements (Appendix C of the FSS). Nebraska is proposing to include these imports through modifications to the accounting procedures that will reflect that portion of Platte Basin water recharge that is introduced into the Republican River Basin via pipeline, canal, stream course or combination thereof.

The general nature of the project will be to pump mound recharge from an area in northern Frontier and southern Lincoln counties via a pipeline to the headwaters of Medicine Creek. The well field area from which the pumping will occur is located in the mound area near the drainage divide of the Platte River and Republican River basins and is within the area excluded from the moratorium that was established in the FSS. The lands in the project area were formally cropland with approximately 15,800 acres of irrigated lands that will be permanently retired.

The water pumped from the project will be transported through a pipeline and measured at the point where it is delivered to Medicine Creek. From this delivery point these waters will flow through the stream course into the Main Stem and into or through Harlan County Reservoir.

Figure 1. Project Area Map



Nebraska
Department of Natural Resources

Mound Area
Project Area
Drainage Divide
Area Included in the Moratorium
Previously Irrigated Acres

0 1.25 2.5 5 Miles

N

Updated on December 11th, 2012