

An Evaluation of Long-Term Availability of Hydrologically Connected Water in Specified Nebraska River Basins

I. Introduction

- A. Purpose/Statutory Charge**
- B. Definitions – Hydrologically Connected and Fully Appropriated**
- C. River Basins Examined/Not Examined**

II. Nature and Extent of Use of Ground Water and Surface Water in the Nemaha River Basin

A. Surface Water

- 1) Basin Overview (include Degradation)
- 2) Precipitation Trends
- 3) Streamflow Trends
- 4) Surface Water Development
- 5) Surface Water Administration

B. Ground Water

- 1) Basin Overview
 - Bedrock geology, other geology, groundwater in storage, saturated thickness, water table direction of flow and depth to water
- 2) Ground water Development
 - Irrigation well, high capacity well and depletive well trends, groundwater irrigated and/or overall irrigated acreage trends, harvested acres trends, groundwater level changes, change in depth to water

C. Hydrologic Connection Between Ground Water & Surface Water

- 1) Nature and Extent of Connection
- 2) Lag Effect/Stream Depletion Lines/Stream Depletion Graphs

D. Sustainability of Uses Under Current Development

E. Potential Sustainability of Uses Under Alternate Development Projections

III through X. Nature and Extent of Use of Ground Water and Surface Water in ...
Big Blue Basin, Little Blue Basin, Middle and Lower Niobrara Basin, Missouri
Tributaries Basin, Mainstem Missouri, Loup Basin, Elkhorn Basin, Lower Platte Basin,
Platte River Basin Portion of Tri-Basin NRD

XI. Director's Preliminary Determination of Whether Basins are Fully Appropriated

A. Nemaha Basin

- 1) Preliminary Fully Appropriated Determination under current uses
- 2) Findings on How Determination Might Change if no Legal Constraints are Imposed on Future Development

B through I. Same material for: Big Blue Basin, Little Blue Basin, Middle and Lower Niobrara Basin, Missouri Tributaries Basin, Mainstem Missouri, Loup Basin, Elkhorn Basin, Lower Platte Basin, Platte River Basin portion of Tri-Basin NRD