### STATE OF NEBRASKA

#### DEPARTMENT OF NATURAL RESOURCES

In the Matter of the ) ORDER DESIGNATING
Platte River Basin upstream of ) OVERAPPROPRIATED RIVER BASINS,
the Kearney Canal Diversion, the ) SUBBASINS, OR REACHES, AND
North Platte River Basin, and ) DESCRIBING HYDROLOGICALLY
the South Platte River Basin ) CONNECTED GEOGRAPHIC AREA

This matter came on for consideration before the Director of the Department of Natural Resources (the "Department") pursuant to Section 53, subsection (4) of LB 962 (2004 Nebraska Legislature), codified at Neb. Rev. Stat. Section 46-713(4), which requires the Department to designate which river basins, subbasins, or reaches are overapproriated within sixty days after the operative date of that section. Furthermore, the designation shall include a description of the geographic area within which the Department has determined that surface water and ground water are hydrologically connected and the criteria used to make such determination.

#### Section 46-713(4)(a) provides as follows:

A river basin, subbasin, or reach shall be deemed overappropriated if, on July 16, 2004, the river basin, subbasin, or reach is subject to an interstate cooperative agreement among three or more states and if, prior to such date, the department has declared a moratorium on the issuance of new surface water appropriations in such river basin, subbasin, or reach and has requested each natural resources district with jurisdiction in the affected area in such river basin, subbasin, or reach either (i) to close or to continue in effect a previously adopted closure of all or part of such river basin, subbasin, or reach to the issuance of additional water well permits in accordance with subdivision (1)(k) of section 46-656.25 as such section existed prior to July 16, 2004, or (ii) to temporarily suspend or to continue in effect a temporary suspension, previously adopted pursuant to section 46-656.28 as such section existed prior to July 16, 2004, on the drilling of new water wells in all or part of such river basin, subbasin, or reach.

# The Director FINDS:

- 1. In 1997, the States of Nebraska, Wyoming, and Colorado and the U.S. Department of the Interior signed the Cooperative Agreement for Platte River Research and Other Efforts Relating to Endangered Species Habitats Along the Central Platte River, Nebraska (the "Cooperative Agreement").
  - a. Pursuant to the Cooperative Agreement, Nebraska has prepared the Nebraska New Depletion Plan (the "New Depletion Plan"), a purpose of which is to describe the actions Nebraska proposes to take to prevent or mitigate for new depletions to the extent those new depletions are caused by new and expanded uses of water since the target date of July 1, 1997.

- 2. a. On February 27, 1979, by a memorandum to staff, the Director of the Department of Water Resources (now the Department of Natural Resources) ordered staff to deny all applications for natural flow for consumptive purposes in the Lodgepole Creek basin.
  - b. On December 13, 1979, the same Director of the Department of Water Resources issued another memorandum to staff directing them to deny all applications for the direct use of natural flow from Pumpkinseed Creek and tributaries for irrigation purposes.
  - c. Through actions taken since approximately 1993, the Department of Natural Resources has effectively maintained other informal moratoriums through its discussions with possible applicants and through its orders regarding applications filed in the North Platte River and its tributaries, the South Platte River and its tributaries, and the Platte River and its tributaries above the mouth of the Loup River.
  - d. On July 14, 2004, the Department issued an Order Declaring Formal Moratorium on the issuance of new surface water appropriations in the Platte River Basin above the mouth of the Loup River, the North Platte River Basin, and the South Platte River Basin.
  - e. Numerous new wells have been registered with the Department since the Department stopped issuing surface water rights as described in this Section.
- 3. The Department has made written requests to each Natural Resources District ("NRD") with jurisdiction in the affected area, as follows:
  - a. By letter dated July 13, 2004, to Jim Olson, Chair of the North Platte NRD, the Department requested the North Platte NRD to continue in effect a previously adopted closure of the Pumpkin Creek integrated ground water management subarea to the issuance of additional water well permits and to continue in effect a previously adopted temporary suspension on the drilling of new water wells in the remainder of the Natural Resources District.
  - b. By letter dated July 13, 2004, to Alicia Haussler, Chair of the Central Platte NRD, the Department requested the Central Platte NRD to continue in effect a temporary suspension of well construction that took effect November 20, 2003 in a portion of the Natural Resources District, and to extend the temporary suspension to include all of the area the Department had preliminarily determined to be hydrologically connected to the overappropriated basin.

- c. By letter dated July 13, 2004, to Bradley Lundeen, Chair of the Tri-Basin NRD, the Department requested the Tri-Basin NRD to either close the geographic area the Department preliminarily determined to be hydrologically connected to the overappropriated basin, as identified on a map enclosed with the Department's letter, to the issuance of additional water well permits, or temporarily suspend the drilling of new water wells within that identified area.
- d. By letter dated July 13, 2004, to Keith Rexroth, Chair of the South Platte NRD, the Department requested the South Platte NRD to continue in effect a previously adopted closure of the Lodgepole Creek integrated ground water management subarea to the issuance of additional water well permits and to continue in effect a previously adopted temporary suspension on the drilling of new water wells in the remainder of the Natural Resources District.
- e. By letter dated July 13, 2004, to Jim Rubenthaler, Chair of the Twin Platte NRD, the Department requested the Twin Platte NRD to continue in effect a previously adopted temporary suspension of well construction in a portion of the Natural Resources District, and to extend the temporary suspension to include all of the area the Department had preliminarily determined to be hydrologically connected to the overappropriated basin, as identified on a map enclosed with the Department's letter.
- 4. Included with the Department's July 13, 2004 correspondence listed in Section 3 of this Order were maps identifying the portions of each of the Natural Resources Districts within which the Department was preliminarily considering the surface water and ground water to be hydrologically connected to the overappropriated basin.
- 5. The criteria used to make the determination of hydrologically connected surface water and ground water for purposes of the overappropriated designation is as follows:
  - a. The area within which pumping of a well for 40 years will deplete the North Platte River, South Platte River, Platte River or a base flow tributary thereof by at least 28% of the amount pumped in that time (referred to as the "28/40 line"). The 28/40 line is also relevant for management purposes in terms of the Cooperative Agreement, which is one of the criteria on which the overappropriated designation rests. The New Depletion Plan prepared as a result of the Cooperative Agreement requires that the NRDs responsible for its implementation have groundwater management areas that cover all land area within the Platte River Basin and also the area within the 28/40 line.
  - b. To the extent not included as a result of the 28/40 line, any other land area that is within the North Platte NRD's current integrated ground water management subarea of the Pumpkin

Creek subbasin, or the South Platte NRD's current integrated ground water management subarea of the Lodgepole Creek subbasin. This criteria is relevant because the Cooperative Hydrology Study ("COHYST") Model, discussed below, does not have modeling for all parts of Nebraska. In areas not covered by COHYST, NRD information analysis relating to integrated management areas was relied upon in order to determine the areas to be considered hydrologically connected for the relevant management purposes.

- 6. The preliminary map sent on July 13<sup>th</sup> to each NRD was based on data from the United States Geological Survey's Regional Aquifer Study Assessment. In the July 13, 2004 letters to the NRDs, the Department reserved the ability to utilize data from the COHYST Model, when available, in making the final designation, as such data was anticipated to be the best data available.
- 7. The COHYST Model is now available. The Department has examined the results of the current COHYST Model's 28/40 line. The Department determines that the current COHYST Model is the best data available for purposes of obtaining the 28/40 line.
- 8. The Department held public information meetings and public hearings for the purpose of collecting evidence and testimony concerning the final determination of certain NRDs as "fully appropriated" in their entirety. The public hearings were held in North Platte on August 31, 2004, in Sidney on September 1, 2004, and in Kearney on September 9, 2004. Prior to each hearing, Department personnel indicated that testimony could be given during the hearing on the extent of the area within which the surface water and groundwater supplies for the river basin, subbasin or reach are determined to be hydrologically connected for purposes of the overappropriated designation. The Department duly considered such testimony and evidence produced at the hearings.

It is therefore CONCLUDED that it is in the public interest to designate the Platte River Basin above the Kearney Canal Diversion, the North Platte River Basin, and the South Platte River Basin as overappropriated, and to designate the area within which surface water and ground water are hydrologically connected for purposes of the overappropriated designations.

## It is therefore ORDERED that:

- 1. The Platte River Basin above the Kearney Canal Diversion, the North Platte River Basin including Pumpkinseed Creek, and the South Platte River Basin including Lodgepole Creek are hereby designated as overappropriated.
- 2. Surface water and ground water are determined to be hydrologically connected for purposes of the overappropriated designations in the area within the 28/40 line, based on data from the COHYST Model. It is further ordered that each full Public Land Survey System section, fifty percent or more of which is within the area having as its outer boundary the 28/40 line, shall be designated as hydrologically connected for purposes of the overappropriated designations. The legal description of the geographic area within

which the Department has determined that the surface water and ground water are hydrologically connected for purposes of the overappropriated designations is attached hereto as Appendix I. Appendix II attached hereto is a map showing the designated overappropriated basins and the geographic area within which the Department has determined that surface water and groundwater are hydrologically connected for purposes of the overappropriated designations.

3. Interested persons may petition the Department to reconsider the designation of the overappropriated basins, the determination of the geographic area within which the Department has determined that surface water and groundwater are hydrologically connected for purposes of the overappropriated designations, or the criteria used to make the determination of hydrologic connectivity for purposes of the overappropriated designations. The petition for reconsideration must clearly state the basis for such request. For sufficient cause shown, the Director may re-examine the action imposed by this Order at any time.

DEPARTMENT OF NATURAL RESOURCES

September 15, 2004

Roger K. Patterson, Director