High Plains Aquifer Coalition

## CHARTER FOR THE HIGH PLAINS AQUIFER COALITION

#### Comprising the

Kansas Geological Survey A Division of the University of Kansas

and

New Mexico Bureau of Mines and Mineral Resources A Division of New Mexico Tech

and

Nebraska Conservation and Survey Division A Division of the University of Nebraska

and

Texas Bureau of Economic Geology A Division of the University of Texas

and

Colorado Geological Survey A Division of the Department of Natural Resources

and

Oklahoma Geological Survey A Division of the University of Oklahoma

and

South Dakota Geological Survey A Division of the Department of Environment and Natural Resources

and

Wyoming State Geological Survey An Agency of the State of Wyoming

and

U.S. Geological Survey Department of the Interior

This Charter (hereinafter referred to as Agreement) between the Kansas Geological Survey, the New Mexico Bureau of Mines and Mineral Resources, the Colorado Geological Survey, the Oklahoma Geological Survey, the Texas Bureau of Economic Geology, the Nebraska Conservation and Survey Division, the South Dakota Geological Survey, the Wyoming State Geological Survey, and the U.S. Geological Survey (hereinafter referred to as the Parties) records the Parties' desire to cooperate in joint investigations and scientific exchanges concerning the earth sciences (including hydrology, geology, geochemistry, geochronology, geophysics, geotechnical and geological engineering and related investigations) on topics of mutual interest. This agreement is specifically undertaken to advance the understanding of the three-dimensional distribution, character, and nature of the sedimentary deposits that comprise the High Plains Aquifer in the eight-state Mid-continent region. It recognizes that the distribution, withdrawal, and recharge of groundwater, and the interaction with surface waters is profoundly affected by the geology and the natural environment of the High Plains Aquifer in all eight States - New Mexico, Texas, Oklahoma, Colorado, Kansas, Nebraska, South Dakota, and Wyoming – thereby establishing a commonality of interests among the Parties and citizens of these states. The Parties have agreed that reaching a fuller understanding of the threedimensional framework and hydrogeology of the High Plains Aquifer is needed to provide regional and national policymakers with the earth-science information required to make wise decisions regarding urban and agricultural land use, the protection of aquifers and surface waters, and the environmental well being of the citizens of this geologically unique region.

## ARTICLE 1

The Parties agree to conduct exchanges and cooperate on the basis of equality, reciprocity, and mutual benefit.

### ARTICLE 2

Subject areas of cooperation are those of regional interest and may include:

- 1. Research on the regional geologic framework, particularly the completion of detailed, quadrangle-size (1:24,000 scale), surface and subsurface geologic maps and models in digital format, and the public dissemination of these maps and models, as well as interpretive information derived from them.
- 2. Research on geologic processes relating to deposition of sedimentary sequences their definition, nature, extent, origin, and bounding surfaces forming the High Plains Aquifer and adjacent aquifers.
- 3. Other areas of earth-science research and development as may be mutually agreed upon.
- 4. Research on the region's hydrogeology and its fluid systems.
- 5. Research on processes controlling the quantity and quality of water recharging the High Plains aquifer, including the effect of past and future changes in climate and land-use activities on recharge.

- 6. Research on enhancing the recharge of the High Plains aquifer.
- 7. Research on the porosity, permeability, storativity, and specific yield of the aquifer.
- 8. Research on the geological and hydrological processes controlling regional differences and temporal changes in water quality.
- 9. Research on the vertical and lateral exchange of groundwater between different formations that make up the High Plains and adjacent aquifers and the effect of such exchange on water quality in the High Plains aquifer.
- 10. Research on the age of groundwater recharging and moving through the aquifer.
- 11. Research on improved techniques for modeling the occurrence, movement, and quality of water in the High Plains aquifer.
- 12. Research on using geophysical techniques, procedures, and models for regional application in mapping subsurface deposits in the Mid-continent region.
- 13. Transfer of technology and information among the Parties and to both the private and public sectors.

# ARTICLE 3

The cooperation may be conducted in the following forms:

- 1. Joint research and development projects, which may include joint planning and/or joint project execution and/or a cost-sharing arrangement, which will be specified in future Annexes to this Agreement.
- 2. Exchange of scientific, engineering, and technical information including publications, reports, technical data, samples, specimens, and other materials, including numerical models, data bases, computer codes, results, and methods of research and development as needed for the cooperative projects. These exchanges will be specified in future Annexes to this Agreement.
- 3. Exchange and/or sharing of instruments and components to help characterize, model, predict, test or verify earth materials, surface waters, and groundwaters, and their occurrences, as specified in future Annexes to this Agreement.
- 4. Collaborative exchange visits of individual scientists.
- 5. Joint organization of symposia, conferences, and workshops and joint publications that will be specified in future Annexes to this Agreement.

6. Such other scientific and technically-related cooperative activities as may be mutually agreed upon among the Parties that will further the objectives of this Agreement and which will be specified in future Annexes to this Agreement.

# ARTICLE 4

The need for interface of the Parties with many scientific disciplines and public policy entities demands interdisciplinary collaborative research and cooperation including:

- 1. Areas of technical expertise including climatology, agronomy, and soil science, surfacewater engineering and water-resource management.
- 2. Areas of public policy including groundwater conservation or management districts, public utilities, water-user groups, environmental advocacy groups.
- 3. Governmental bodies including regulatory agencies and county and state government.

# ARTICLE 5

No financial commitments are established by the Agreement, and it is understood that participation by any of the Parties in future activities shall be subject to the availability of funds. In accordance with the principles of equality, reciprocity, and mutual benefit, each Party to this agreement will endeavor to share material and financial resources to the extent possible and permissible by law, in effect "pooling" resources to accomplish research objectives that would require resources beyond those available to the individual Parties. Cooperative activities under this Agreement will be subject to, and dependent upon, the human and financial resources available to the Parties. The terms and conditions of financing shall be established by the Parties before the commencement of each activity and shall be set forth in each Annex to this Agreement. Any costs incurred by a Party that were not previously agreed upon in each Annex shall be borne by the Party that incurs them.

### ARTICLE 6

Activities under this Agreement shall be in accordance with applicable State and Federal laws. The provisions of this Agreement shall not affect the rights or obligations of any of the Parties under other agreements or arrangements with other agencies, contractors or individuals within or without the Parties' respective State boundaries.

### ARTICLE 7

The Parties will be individually responsible for publishing or publicly releasing the results of research not covered by an Annex to this Agreement and not involving cooperative activities with other Parities to the Agreement. The scientific, engineering, and technical results of cooperative projects conducted under this Agreement will be shared and published, or held confidential, in accordance with any specific terms agreed upon by the Parties for an individual project; such terms will include the provision that any joint publications of the results of studies resulting under this Agreement shall carry the Coalition logo (yet to be designed) and a statement acknowledging that the work was done in cooperation with the other Parties involved. A cooperative publication series will be developed as the natural outlet for jointly supported cooperative projects conducted under this Agreement. Details of the series will be established in an Annex to his Agreement. Each Party will have the privilege of open-filing or publishing nonconfidential, non-proprietary data from a cooperative project in a timely manner following review and opportunity for comment by each of the other Parties. Responsibilities for costs of publication will be specified in each Annex to this Agreement. When necessary, an Annex shall include appropriate intellectual property provisions that recognize the rights and equities of each Party consistent with the applicable laws, regulations, and policies affecting the respective Parties.

#### ARTICLE 8

Under each Annex to this Agreement, the Parties will appoint a coordinator who will facilitate communication and coordinate the joint activities specified in each Annex.

#### ARTICLE 9

This Charter shall enter into force upon the signature of each of the Parties and shall remain in force for five (5) years, unless extended by mutual written agreement of the Parties. Any Party may withdraw from the Agreement by providing the other Parties with ninety (90) days advance notice. Any such withdrawal or termination shall be without prejudice to the rights that have accrued under this Agreement to any of the Parties up to the date of such withdrawal or termination. The terms of this Charter may be modified at any time upon mutual agreement of all parties.

Agreed at Socorro, New Mexico; Austin, Texas, Norman, Oklahoma, Lawrence, Kansas; Denver, Colorado; Lincoln, Nebraska; Vermillion, South Dakota; Laramie, Wyoming; and

Reston, Virginia and to remain in force for 5 years from the latest date shown below, or until extended by mutual agreement of the Parties.

Signatures

For the New Mexico Bureau of Mines and Mineral Resources New Mexico Tech For the Kansas Geological Survey University of Kansas

By\_\_\_\_\_ Name: Peter Scholle Title: State Geologist

Date

For the Bureau of Economic Geology University of Texas

By \_\_\_\_\_ Name: Scott Tinker Title: State Geologist

Date

For the Colorado Geological Survey Department of Natural Resources

By \_\_\_\_\_ Name: Vicki Cowart Title: State Geologist

Date: \_\_\_\_\_

For the South Dakota Geological Survey Department of Environmental and Natural Resources

By \_\_\_\_\_\_ Name: Derric Iles Title: State Geologist By\_\_\_\_\_ Name: M. Lee Allison Title: State Geologist

Date

For the Nebraska Conservation and Survey University of Nebraska

Ву \_\_\_\_\_

Name: Mark Kuzila Title: State Geologist

Date \_\_\_\_\_

For the Oklahoma Geological Survey University of Oklahoma

By \_\_\_\_\_\_ Name: Charles Mankin Title: State Geologist

Date \_\_\_\_\_

For the Wyoming State Geological Survey State of Wyoming

By \_\_\_\_\_

Name: Lance Cook Title: State Geologist Date: \_\_\_\_\_

Date: \_\_\_\_\_

For the U.S. Geological Survey Department of the Interior

By \_\_\_\_\_\_ Name: William Carswell Title: Regional Hydrologist

Date: \_\_\_\_\_

Policy Statement

In recognition of the key role played by the state water resource agencies, it is the responsibility of each state geological survey to consult with the appropriate water management or water regulatory agencies regarding any major technical initiatives undertaken under this charter.

Adopted August 31, 2001