

January 3, 2008

Ann Salomon Bleed
Department of Natural Resources
301 Centennial Mall South, Fourth Floor
PO Box 95676
Lincoln, NE 68509

State of Nebraska
Department of
Natural Resources
Filed in the Department of
Natural Resources at 1:28
O'clock P M. this 3rd
day of JANUARY 20 08
L. Lower

Dear Ms. Bleed:

I am including information on my case which is pending in the Eighth Circuit Court of Appeals. If needed, a Petition for Writ of Certiorari will be filed with the United States Supreme Court. If required, the case will be continued in Lancaster County State Court as per the Federal Judge's direction.

All informational materials referenced in your material will automatically be considered part of the record.

Sincerely,



Michael Jacobson
613 North Ash
Gordon, NE 69343
308-360-0963

MICHAEL JACOBSON)
)
)
V.)
)
)
ANN SOLOMON BLEED,)
Director of Department of Natural)
Resources; In Her Official Capacity)
and)
Her Personal Capacity)

**AFFIDAVIT OF
MICHAEL JACOBSON**

STATE OF NEBRASKA)
) ss.
COUNTY OF Douglas)

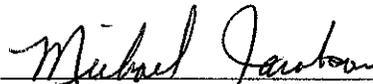
COMES NOW, Michael Jacobson, Affiant in above entitled action, being of lawful age, and first duly sworn on oath, hereby deposes and states as follows:

1. That your Affiant, in 1953, began and has continued to help his father re-leather livestock windmill wells on land owned by the Jacobson family. In this procedure your Affiant has been able to monitor the groundwater depth below the surface of the ground. This re-leathering occurs at least every two years.
2. In 1956, the first of many great irrigation wells in Sheridan County was drilled on land adjacent to, over the hill, from the Jacobson home place.
3. The static underground water level on all the Jacobson land has been at the same level below the surface since at least 1953.
4. When the last well was pulled (in 2006) to re-leather by your Affiant, the groundwater level was still 11 feet below the surface to unknown depths.
5. There are windmills on all parts of the Jacobson land.

6. Affiant's family land is approximately 150 miles north of the land in question in Sporhase, at least ten miles north of the Niobrara River. NO Jacobson underground water is "hydrologically connected" to any surface water, including any river, creek, or stream.

7. Shortly before the board of directors of the Upper Niobrara White Natural Resources voted to "temporarily suspended" drilling of any new irrigation wells, your Affiant's adjacent land owner who is on the board of directors, drilled a new irrigation well that produces 2000 gallons of water per minute and then voted for the "temporary suspension" of all new irrigation wells.

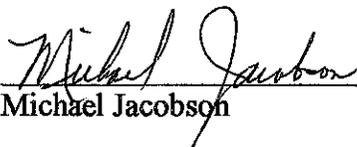
AFFIANT FURTHER SAYETH NAUGHT.


Michael Jacobson

VERIFICATION

STATE OF NEBRASKA)
) ss.
COUNTY OF Douglas)

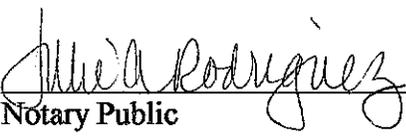
Michael Jacobson, being first duly sworn on oath, states that he is the Affiant in the above Affidavit, that he has read the above and foregoing Affidavit, knows the contents thereof, and the statements herein made are true to the best of his knowledge and belief.



Michael Jacobson

SUBSCRIBED and sworn to before me on this 3rd day of January, 2008.


GENERAL NOTARY - State of Nebraska
JULIE A. RODRIGUEZ
My Comm. Exp. Dec. 11, 2009



Notary Public

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEBRASKA

MICHAEL JACOBSON)
)
 Plaintiff)
)
 vs.)
)
 JON BRUNING, in his official)
 capacity as the Attorney General of)
 Nebraska)
)
 Defendant.)

Case No. 4:06CV3166

**FIRST AMENDED
COMPLAINT FOR
DECLARATORY RELIEF**

Plaintiff states as follows:

NATURE OF ACTION

1. This action challenges the validity, under the United States Constitution and the Civil Rights Act, of part of the Nebraska Constitution, of parts of Neb.Rev.Stat.,

a. Art. III Sec. 1

A. 46-702,

B. 46-703, and

C. LB 1226 as written by the League of Municipalities passed by a lame duck unicameral, 20 members the first of 49 were evicted by court approval last spring as voted out by term limits, April 12, 2006 and summary signed by a govern running for reelection,

D. The authority and conflict of interest of the Board members of the Natural Resources District ("District"),

E. The authority of the state of Nebraska Department of Natural Resources ("Director"),

F. Nebraska Ground Water Management and Protection Act 46- 701 to 46-773 as written by the Water Policy Task Force including LB 962.

PARTIES

2. The plaintiff is a resident of Sheridan County, Nebraska 613 North Ash Street, Gordon Nebraska, 69343, a fourth generation farmer and rancher who has worked his entire life with his family on a traditional Nebraska/South Dakota family farm with livestock identification brands registered in Nebraska and South Dakota, oldest son of Myron and Virginia Jacobson, heir by will, lifetime estate, interest if needed by prescription.

3. Plaintiff was appointed by the Nebraska Federal Bankruptcy Court in 1985 to serve on plaintiff's parents' successful Chapter 11 creditors committee.

4. Plaintiff acquired a stay of Federal Land Bank sheriff's sale from the Honorable Federal District Court Judge Arline Beam. This was received only an hour before the sale of the land on the courthouse steps of four generations of hard work was to take place.

5. Plaintiff, the appointed, qualified, personal representative of the estate of Virginia A. Jacobson who died while a resident of the County of Sheridan, State of Nebraska.

6. The defendant, Mr. Jon Bruning, in his official capacity is the current Attorney General for the State of Nebraska, is charged by statute to defend Nebraska statutes against a claim of being unconstitutional and enforce their sanctions.

SUBPARTIES, ENTITIES OF THE STATE OF NEBRASKA

7. Board members of the Upper Niobrara-White Natural Resources District ("District") are a political subdivision of the State of Nebraska, organized and existing pursuant to Neb.Rev.Stat. § 2-3201 et. seq., have evolved to work in conjunction with the Department to attempt to unlawfully take away vested private property rights in water with an operating budget of \$ 1,799,508.07 for 2005-06.

8. The State of Nebraska Department of Natural Resources ("Department") operates under the Nebraska Ground Water Management and Protection Act, Neb.Rev.Stat. §§ 46-701 to 46-773, has evolved to work in conjunction with the District to attempt to unlawfully take away vested private property rights in water with an operating budget of \$24,997,297.00 for 2005-06.

9. Nebraska Water Task Force, Operating budget of \$6,000,000.00 for 2005-06.

10. League of Municipalities.

11. Entities of the State of Nebraska in using unscientific data, in conjunction with using areas in western Nebraska that historically are deficient or nonexistent in the supply of water, natural recurring droughts, to use in their mission to attempt to unlawfully take vested property rights in underground water under unlawfully claimed state ownership, to stop the development of underground irrigation used in the production of agricultural products in western Nebraska, produced for interstate commerce, for the prohibition of competition to the advantage of municipalities, political subdivisions, members or the Board of Directors of political subdivisions, the states of Kansas, Colorado, and alleged environmentalists. These actions in addition to the counts below violate Neb. Const. Art. III § 18.

JURISDICTION

12. This Court has jurisdiction over this matter pursuant to 28 U.S.C. §§ 1331, 1343(3)(4), 2201 and 2202. This action arises under the Constitution of the United States and the Civil Rights Act.

VENUE

13. Venue is proper in this District pursuant to 28 U.S.C. § 1391(b)(1), as all the parties reside in the State of Nebraska. Venue is also proper in this District under 28 U.S.C. § 1391(b)(2) as the events giving rise to the claims occurred in this district.

BACKGROUND

14. Plaintiff's great-grandfather came west in the 1800's to file on a homestead, claim. His family later came from Wisner, Nebraska, over land with an oxen team, trailing a few cattle and a milk cow. The remains of the dugout dug into the south side of a hill, which was built to survive the first winter are still visible. A large log house was built that still stands today. The sod was broken, crops were planted that used the underground water, and the first water wells were dug by hand. His family proved up on the homestead and received Homestead Certificate No. 688 from application 1131 from President of the United States, Benjamin Harrison. This Homestead Certificate is recorded at the court house in Rushville, Nebraska, county seat for Sheridan County.

15. The certificate says in quoting from the Act of Congress approved on the 20th of May, 1862: "To secure Homesteads to Actual Settlers on the public domain..." The

land was clearly “granted by the United States” to plaintiff’s great-grandfather and “his heirs and assigns forever.” They immediately had to have water in this semi-arid land for personal and livestock survival as well as the survival of the trees and a mandatory garden, thereby beginning to irrigate from *their* water captured and controlled underground.

16. The Louisiana Purchase Treaty (April 30, 1803), treaty between the United States of America and the French Republic, article 1, declared, “The French Republic doth hereby cede to the United States in the name of the French Republic forever and in full sovereignty the said territory with all its rights and appurtenances as fully and in the same manner as they have been acquired by the French Republic in virtue of the above mentioned treaty concluded with his Catholic Majesty.”

17. In an act passed by congress on July 26, 1866, c. 262 § 9, 14 stat. 253 [U.S. Comp. St. 1901, p. 1437], the United States granted to plaintiff or grantor of plaintiff, by priority of possession vested private property rights in the captured underground water, in helping settle the west, for domestic and production of agriculture products for interstate commerce. Neither the legislature nor the courts have the power to abolish these rights which have become vested, if needed, in addition to prescription.

18. From the United States government, plaintiff’s ancestors acquired a vested private property right to water captured under their land, if needed, in addition to by prescription.

19. Plaintiff’s has an uncontroverted, Constitutional private property right in the underground water as a corporeal hereditament, belonging to the soil.

20. The Enabling Act of Congress, an act to enable the people of Nebraska to form a Constitution and state government, and for admission of such state in to the union on an equal footing with the original states, passed April 19, 1864, U.S. Stat. at Large, vol. 13, p. 47, granted (a) the state of Nebraska title of only lands as proscribed by secs. 7,8,9,10.(b) sec.11 made the uncontroverted fact that the state of Nebraska has no ownership in the underground water and the legislature had no authority over Nebraska ground water.

21. Nebraska's first Constitution, adopted by popular vote October 12, 1875, declaring "all laws in force at the time of the adoption of this constitution, ...all rights...claims...of individuals, ...shall continue to be valid as if this constitution had not been adopted....", preserved to plaintiff the total vested private property right to said underground water, in addition, if needed, to taking acquired by prescription. The scope and effect of the provisions referred to, accorded to the United States government, the primary right of disposal of the public lands. Title to the underground water was conveyed by the United States of America through its letter patent to plaintiff or grantor of plaintiff.

22. As an heir, plaintiff and his predecessors in interest as homestead entrymen of vacant public lands of the United States, each continuously enjoyed and exercised ownership over underground water since the 1800's, are entitled to the full, free, and natural state of all waters which are naturally captured and under the control, beneath said ground, for use in domestic, irrigation used in interstate commerce, in the production of all agricultural products produced for interstate commerce and the private vested property rights in the underground water of plaintiff thereto are prior and superior to any alleged

right or claim by the state of Nebraska including any and all entities of the state of Nebraska, the state of Colorado, Wyoming, Kansas, birds, fishes, all species of wildlife and any other adverse interest including all political subdivisions, compacts, settlement agreements, corporations, syndicates, clubs, organizations, lobbyists, environmentalists, socialists and communists.

23. Amendment No. 35 "Defined priority rights in water" was adopted by the Nebraska voters and it became part of the Nebraska Constitution on September 21, 1920; Neb. Const. art. XIV, secs. 4, 5, 6. This Amendment passed because, based on the legislative history; (A) Of the threat to the western Nebraska citizens's water rights from her border states, especially Colorado who has a section in their constitution making all the water in Colorado state property and the future threats from municipalities; (B) Made it clear that the State of Nebraska had no property rights in the water; (C) Made it clear that the word "domestic" does not include municipal. "The needs of the cattle and grass and oats were put ahead of the cities."; (D) Amendment No. 35 was amended into the Constitution for the purpose of preventing future changes by the legislature; (E) Set the Constitutional priority of rights in water 1st - domestic / necessary for survival; 2nd - irrigation; and 3rd - power; (F) The citizens of western Nebraska did not want their water rights subject to the whims of the eastern Nebraska legislators that knew nothing about irrigation in western Nebraska and beyond the whims of the state of Colorado; (G) Vested property rights would not be effected by Amendment 35. Exhibit no. 1 is incorporated herein by this reference, in part because of the frail condition of material.

24. Nebraska Statue Chapter 33, Article 1, 3401, Section 33, (1913), mandated the state in measurement and making of a record of water levels in Nebraska streams.

25. The State of Nebraska is advocating their self-serving new shortage of water in western Nebraska, notwithstanding, there has been no change in the federal government's designations of wetlands, with plaintiff being no stranger to federal wetlands designations.

26. The State of Nebraska is pursuing the largest unlawful taking of private property rights since the Bolshevic Revolution of 1917 in Russia.

27. There have been many legal battles involving creeks, rivers, and streams, involving depletion of water in the creeks, rivers and streams before groundwater irrigation came into being.

28. Indeed there must have been a shortage of underground water under the seat of government in Lincoln, Nebraska, allegedly requiring the municipality to pump water from Ashland, Nebraska, 25 miles away. Notwithstanding the City of Omaha sitting on the mighty Missouri River, in 1966 Omaha Metropolitan Utilities District decided to follow suit, neither tho is in a "fully appropriated" area "temporarily suspending drilling of new irrigation wells" as is the case in western Nebraska.

29. The city of Kansas City, Kansas, gets all of their water from the Missouri River.

30. Twenty-seven municipalities including Sioux Falls, South Dakota, in 2012 will begin receiving water pumped through a pipeline big enough for a man to walk through, from the Missouri River, pumped approximately 100 miles.

31. Petitioner became involved in water legislation in 1977 when he rode the "Save the Groundwater" bus from Chadron State College to oppose a group of out-of-state interests, Energy Transportation Services Industries ("ETSI"). ETSI, in a thinly

veiled attempt to pipe water to Texas, wanted the right of eminent domain to pipe coal slurry down to Texas. They refused to pipe the water back to Nebraska after extracting the coal.

32. In 1953, plaintiff began and has continued to help his father re-leather livestock windmill wells, including the Nebraska County of Sheridan County.

33. In 1956, the first of many great irrigation wells in Sheridan County was drilled on land adjacent to, over the hill, from the Jacobson home place.

34. The static underground water level on all the Jacobson land has been at the same level below the surface since at least 1953.

35. There is no new shortage of water in relation to plaintiff in western Nebraska. Ted Tuner has bought hundreds of thousands of acres of land in Sheridan County, from the South Dakota border, south, in his quest to get his underground water to the Colorado border.

36. On March 20, 2003, the Board of Directors of the Upper Niobrara White Natural Resources District ("District") in conjunction with Nebraska Department of Natural Resources ("Director") under Neb. Rev. Stat. 46-656.28 (Cum. Supp. 2002) "temporarily suspended" drilling of any new irrigation wells under the guise of "fully appropriated" exempting all federal land, based on the underground irrigator's manufactured self serving evidence of the Board of Directors.

37. Shortly before March 20, 2003, one member of the board of directors drilled an irrigation well on land that is adjacent to the Jacobson home place that produces 2000 gallons of water per minute and *then* voted for the "temporary suspension" of all new irrigation wells.

38. Plaintiff timely appealed the Board's decision to the Nebraska District Court where the case was dismissed on the Attorney General and the Board's Motions to Dismiss for Lack of Judicial Jurisdiction. The Court of Appeals and the Supreme Court affirmed the District Court's decision that petitioner could not appeal decision because the board was acting legislatively.

39. On Nov. 3, 2004, the state of Nebraska Department of Natural Resources ("Department") decided there was no new shortage of water in parts of western Nebraska and removed the status of "fully appropriated" to certain parts of western Nebraska.

40. Notwithstanding the Department's new finding, the Board of Directors of Upper Niobrara White Natural Resources District decided to maintain their "temporary suspension" of new irrigation wells, while underground irrigators on the Board keep on irrigating from their underground water on their crops for interstate commerce.

41. Plaintiff testified at the committee hearings in opposition to LB 933, (a farmer/rancher cannot use his water under his ground but everyone else in the world can, now, there really wasn't a shortage of water.) and LB 971 (new tax only on western Nebraska) where Lynn Rex, proponent lobbyist testified for the league of municipalities in defining the intent of their legislation; "...the tremendous leadership that senator Schrock and his committee, sic (chairperson natural resources committee) has given in terms of making sure that there is going to be a guaranteed municipal water supply..."

42. From the floor debate of LB 1226 page 57, senator Schrock, "There's guarantees in here for municipalities, LB 933."

43. LB 933 and LB 971 were amended into LB 1226 that was passed by the unicameral on April 12, 2006 and summarily signed by a governor running for re-election.

44. The State of Nebraska's claim to state ownership of the underground water is barred by the doctrines of laches and estoppel.

45. The State of Nebraska's primary purpose, if, for argument, they have the power to regulate, it is not regulation with a view to conservation of the water, but the prohibition of competition.

Impact of Nebraska's unlawful statutes, unlawful activities of Board of Natural Resources District and the Department of Natural Resources, special interest groups writing laws with a wink and nod from the eastern Nebraska controlled unicameral, on plaintiff.

46. Been denied the constitutional right to produce yearly crops for interstate commerce, thereby restricting access to national grain and livestock markets.

47. Been denied the constitutional right to produce yearly crops to use in the production of beef for interstate commerce thereby restricting access to national livestock markets.

48. Been denied the right to produce yearly crops for the production and finishing of beef from South Dakota.

49. Been denied the Constitutional right to develop the land.

50. Been denied the Constitutional right to use irrigation equipment and production equipment already bought and paid for, for the production of agricultural products in interstate commerce.

51. Been put to a commerce competitive disadvantage by having to buy captive agriculture products, including feed for cattle, there by being forced into involuntary servitude.

52. Been denied the Constitutional right to defend one self against the raves of the unpredictable weather.

53. Dry land is worth much less than irrigated land therefore reducing borrowing power.

54. Diminishes the value of the land.

55. Diminishes the full use of the land.

56. Has stopped Plaintiff from using his own water under threat form the Attorney General's office - if you do he can sell the land. Plaintiff has a Constitutional right to the profession of his choice.

57. Allows irrigators on board of directors, the federal government, municipalities, etc., to use their underground water.

58. Allows an adjacent land irrigator on the Board of Directors that voted for a "temporary suspension" of all new irrigation wells, through foreclosure caused by not being able to compete in interstate commerce by producing irrigated products, to buy the adjacent land and develop the land by pumping his water onto plaintiff's lost land.

COUNT I

Neb. Rev.Stat. § 46-702 provides in part “The legislature finds that ownership of water is held by the state...that groundwater is one of the most valuable natural resources...” with regard to the first part, as put back in the statutes, introduced as LB 619 by the unicameral with an effective date of April 17, 2003, violates plaintiff’s rights under the U.S. Constitution and the Civil Rights Act.

59. Plaintiff re-alleges paragraphs 1-58 of this complaint as if fully set forth herein.

60. The U. S. Supreme Court reversed the Nebraska Supreme Court in finding underground water under a western Nebraska farmer’s land is an article of commerce and therefore subject to congressional regulation.

61. There cannot be commerce without private property ownership.

62. When a state regulates the sending of products across state lines there is commerce among the states as to which state intervention is subordinate to the commerce clause.

63. Violates involuntary servitude, U.S. Constitution (Amend. XIII).

64. Violates the Supremacy Clause of the U.S. Constitution (Art. VI, cl. 2).

65. Violates the Commerce Clause of the U.S. Constitution (Art. 1 § 8, cl. 3)

66. Violates the Equal Protection, Abridged the Privileges, and the Due Process, of the U.S. Constitution (Amend. XIV § 1).

67. Violates the right to be secure in your private property, of the U.S. Constitution (Amend. IV).

68. Violates due process of law and private property taken without just compensation, of the U.S. Constitution (Amend. V).

69. Violates 42 U.S.C. § 1983.

COUNT II

Neb. Rev. Stat. 46-703, provides in part “(2) Hydrologically connected ground water and surface water may need to be managed...” violates plaintiff’s rights under the U.S. Constitution and the Civil Rights Act.

70. Plaintiff re-alleges paragraphs 1-58 of this Complaint as if fully set forth herein.

71. This is Res Ipsa Loquitor.

72. Violates simple laws of physics, including the law of gravity.

73. Is vague by design - there is no statutory definition of “hydrologically connected.”

74. Violates the Supremacy Clause of the U.S. Constitution (Art. VI, cl. 2).

75. Violates the Commerce Clause of the U.S. Constitution (Art. 1 § 8, cl. 3)

76. Violates the Equal Protection, Abridged the Privileges, and the Due Process, of the U.S. Constitution (Amend. XIV § 1).

77. Violates the right to be secure in your private property, of the U.S. Constitution (Amend. IV).

78. Violates due process of law and private property taken without just compensation, of the U.S. Constitution (Amend. V).

79. Violates 42 U.S.C. § 1983 / violates involuntary servitude, U.S. Constitution (Amend. XIII).

COUNT II (a)

Section 25, LB 1226, P. 71, line 22-24, provides “ The applicable Natural Resources District may decide to include all water users within the District boundary in an integrated management plan.” violates plaintiff’s rights under the U.S. Constitution and the Civil Rights Act. Exhibit No. 2 is incorporated herein by this reference.

80. Plaintiff re-alleges paragraphs 1-58 of this Complaint as if fully set forth herein.

81. This section of the statute is designed in conjunction, to further violate plaintiff’s rights contained in Count II.

82. In a case in western Nebraska about to go to trial involving water rights, the sitting judge recused himself because he was an underground water irrigator.

83. Violates the Supremacy Clause of the U.S. Constitution (Art. VI, cl. 2).

84. Violates the Commerce Clause of the U.S. Constitution (Art. 1 § 8, cl. 3)

85. Violates the Equal Protection, Abridged the Privileges, and the Due Process, of the U.S. Constitution (Amend. XIV § 1).

86. Violates the right to be secure in your private property, of the U.S. Constitution (Amend. IV).

87. Violates due process of law and private property taken without just compensation, of the U.S. Constitution (Amend. V).

88. Violates 42 U.S.C. § 1983 / violates involuntary servitude, U.S. Constitution (Amend. XIII).

COUNT III

Section 28 (3) LB 1226, P. 90, line 18-22 provides, "... no integrated management plan, rule or order shall limit the use of ground water by a municipality, within an area determined by the Department of Natural Resources to be fully appropriated pursuant to section 46-714 or designated as over-appropriated pursuant to section 46-713..." violates plaintiff's rights under the U.S. Constitution and the Civil Rights Act.

89. Plaintiff re-alleges paragraphs 1-58 of this Complaint as if fully set forth herein.

90. Violates the Supremacy Clause of the U.S. Constitution (Art. VI, cl. 2).

91. Violates the Commerce Clause of the U.S. Constitution (Art. 1 § 8, cl. 3)

92. Violates the Equal Protection, Abridged the Privileges, and the Due Process, of the U.S. Constitution (Amend. XIV § 1).

93. Violates the right to be secure in your private property, of the U.S. Constitution (Amend. IV).

94. Violates due process of law and private property taken without just compensation, of the U.S. Constitution (Amend. V).

95. Violates 42 U.S.C. § 1983 / violates involuntary servitude, U.S. Constitution (Amend. XIII).

COUNT IV

Section 4(c) LB 1226, P. 5, line 21-24, P. 6, line 1, provides "... each district located in a river basin, subbasin, or reach that has been determined to be fully

appropriated pursuant to section 46-714 or over-appropriated pursuant to section 46-713 by the Department of Natural Resources shall have the power and authority to levy a tax..." violates plaintiff's rights under the U.S. Constitution and the Civil

Rights Act.

96. Plaintiff re-alleges paragraphs 1-58 of this Complaint as if fully set forth herein.

97. Violates the Equal Protection Clause of the U.S. Constitution (Amend. XIV).

98. Violates all the Taxes, Duties, Imports and Excises shall be uniform throughout the United States, of the U.S. Constitution (Art. I § 8).

99. Violates 42 U.S.C. 1983.

COUNT V

LB 1226 as written by the League of Municipalities, Exhibit no. 3 is incorporated herein by this reference, violates plaintiff's rights under the U.S. Constitution and the Civil Rights Act.

100. Plaintiff re-alleges paragraphs 1-58 of this Complaint as if fully set forth herein.

101. Legislature cannot delegate its powers to make a law.

102. Violates Due Process Clause of the U.S. Constitution (Amend. XIV).

103. Violates Freedom of Speech of the U.S. Constitution (Amend. I).

104. Violates the U.S. Declaration of Independence, Unanimously adopted in Congress July, 1776. "...The History of the present King of Great Britain is a history of repeated injuries and usurpations, all having in direct object the establishment of an absolute tyranny over these states. To prove this, let facts be submitted to a candid world.

... For taking away our charters, abolishing our most valuable laws, and altering fundamentally the forms of our government, for suspending our own legislatures and declaring themselves invested with power to legislate for us in all cases whatsoever.”

105. Violates 42 U.S.C. 1983.

COUNT VI

Board members of the Upper Niobrara-White Natural Resource District have evolved to attempt to take away plaintiff's private vested property rights in his underground water, Neb. Rev. Stat. §§ 2-3201 et seq., their lack of Constitutional authority and conflict of interest violates plaintiff's rights under the U.S.

Constitution and Civil Rights Act.

106. Plaintiff re-alleges paragraphs 1-58 of this Complaint as if fully set forth herein.

107. If you control the water you control the land.

108. Violates involuntary servitude of the U.S. Constitution (Art. XIII);

109. Violates the Supremacy Clause of the U.S. Constitution (Art. VI, cl. 2).

110. Violates the Commerce Clause of the U.S. Constitution (Art. 1 § 8, cl. 3)

111. Violates the Equal Protection, Abridged the Privileges, and the Due Process, of the U.S. Constitution (Amend. XIV § 1).

112. Violates the right to be secure in your private property, of the U.S. Constitution (Amend. IV).

113. Violates due process of law and private property taken without just compensation, of the U.S. Constitution (Amend. V).

114. Violates 42 U.S.C. § 1983.

COUNT VII

The State of Nebraska Department of Natural Resources, Neb. Rev. Stat. §§ 46-701 et seq., has evolved to attempt to unlawfully take away plaintiff's private vested property rights in his underground water, does not have the Constitutional authority, violates plaintiff's rights under the U.S. Constitution and The Civil Rights Act.

115. Plaintiff re-alleges paragraphs 1-58 of this complaint as if fully set forth herein.

116. If you control the water you control the land.

117. There are no scenarios in life more of a threat to one's Civil Rights than a governmental agent on a mission claiming to have super human powers enabling them to see underground.

118. Violates involuntary servitude of the U.S. Constitution (Amend. XIII).

119. Violates the Supremacy Clause of the U.S. Constitution (Art. VI, cl. 2).

120. Violates the Commerce Clause of the U.S. Constitution (Art. 1 § 8, cl. 3)

121. Violates the Equal Protection, Abridged the Privileges, and the Due Process, of the U.S. Constitution (Amend. XIV § 1).

122. Violates the right to be secure in your private property, of the U.S. Constitution (Amend. IV).

123. Violates due process of law and private property taken without just compensation, of the U.S. Constitution (Amend. V).

124. Violates 42 U.S.C. § 1983.

COUNT VIII

Nebraska Ground Water Management and Protection Act, Neb. Rev. Stat. §§ 46-701 to 46-773, as written by the Water Policy Task Force including their LB 962, violates plaintiff's rights under the U.S. Constitution and the Civil Rights Act.

125. Plaintiff re-alleges paragraphs 1-58 of this complaint as if fully set forth herein

126. Former Nebraska Governor Johanns appointed the 49 Water Task Force members and the Colorado facilitator. After being appointed to be the federal Secretary of Agriculture, Johanns insisted on opening the flood gates of "mad cows" from Canada, in direct conflict with plaintiff's pecuniary interest.

127. The special interest controlled Water Task Force is run by a special facilitator from Boulder, Colorado. This facilitator holds a Master of Arts in Conflict Transformation from Eastern Mennonite University, where he focused on Islamic, Middle Eastern and Afghan approaches to addressing conflict. He also attended Birzeit University for Arabic and Palestinian studies, and the American university in Cairo for Arabic and Middle Eastern studies.

128. One Water Task Force executive committee member, the Central Nebraska Public Power and Irrigation District, has taken steps to attempt to stop all the underground irrigation west of Lake McConaughy.

129. Legislature cannot delegate its powers to make a law.

130. LB 962 was developed and written by the Water Policy Task Force.

131. Violates Due Process Clause of the U.S. Constitution (Amend. XIV).

132. Violates Freedom of Speech of the U.S. Constitution (Amend. I).

133. Violates the U.S. Declaration of Independence, Unanimously adopted in Congress July, 1776. "...The History of the present King of Great Britain is a history of repeated injuries and usurpations, all having in direct object the establishment of an absolute tyranny over these states. To prove this, let facts be submitted to a candid world. ... For taking away our charters, abolishing our most valuable laws, and altering fundamentally the forms of our government, for suspending our own legislatures and declaring themselves invested with power to legislate for us in all cases whatsoever."

134. Violates 42 U.S.C. 1983.

COUNT IX

Nebraska Constitution, Art. III Sec. 1 provides, "Legislative authority; how vested. Commencing with the regular session of the Legislature to be held in January, nineteen hundred and thirty-seven, the legislative authority of the state shall be vested in a Legislature consisting of one chamber..."

135. Plaintiff re-alleges paragraphs 1-134 of this complaint as if fully set forth herein.

136. Quoting paragraph 20, "The Enabling Act of Congress, an act to enable the people of Nebraska to form a constitution and state government and for admission of such state into the union on an equal footing with the original states, passed April 19, 1864, U.S. Stat. at large, vol. 13, p. 47..." mandated equal representation with the other states.

137. In 1934 Nebraskans voted for Initiative Measure No. 330 that was amended into the Nebraska constitution, because of interest in reining in state spending. Nebraska was caught in the grips of the Great Depression and suffering from a serious drought.

Costs of state government were a burden, especially since the Capitol was being paid for as it was being built over a 10-year period.

138. Nebraska's legislature is unique among all state legislatures in the nation because it has a single house. It wasn't always a unicameral, the state had a senate and a house of representatives for 68 years. Implementation of the unicameral in 1937 cut legislative membership from 133 in the bicameral to 43 (now 49) in the new single house - nearly a 70 percent reduction.

139. In the November election of 2006, Nebraska voted overwhelmingly against a law on the ballot to curb Nebraska governmental spending.

140. Lobbyists and special interest groups more easily control desired legislation where control is needed in only one house.

141. In 1965, the Nebraska Legislature passed LB 302 that required lobbyists to register with the Clerk of the Legislature that was then printed in the Legislative Journal. The first year the list was published was 1967. There were one and one half pages of lobbyists listed, with their principals. For 2005, there are 23 pages of lobbyists and their principals. If you used the website <http://www.unicam.state.ne.us/lobby/index.htm> and brought up Lobbyist/Principal Expenditures Report in 2005, it listed 150 pages of money spent on lobbying in the Nebraska Legislature.

142. Violates the Supremacy Clause of the U.S. Constitution (Art. VI, cl. 2).

143. Violates the Equal Protection, Abridged the Privileges and the Due Process, of the U.S. Constitution (Amend XIV § 1).

144. Violates the U.S. Declaration of Independence unanimously adopted in Congress in July, 1776.

145. Violates 42 U.S.C. § 1983.

WHEREFORE, Plaintiff requests the Court to render judgment on this Complaint in his favor and grant the following relief:

1. Declare the relevant section of Neb. Rev. Stat. § 46-702,

(a) violates the Supremacy Clause of the U.S. Constitution (Art. VI cl. 2);

(b) interferes with interstate commerce in violation of the Commerce Clause of the U.S. Constitution (Art. 1 § 8, cl. 3);

(c) violates the Equal Protection, Abridged the Privileges, and the Due Process, U. S. Constitution (Amend XIV, sec. 1);

(d) violates the Right to be Secure in Your Private Property, U.S. Constitution (Amend. IV);

(e) violates the Due Process of Law and Private Property taken without Just Compensation (Amend. V);

(f) violates 42 U.S.C. § 1983;

(g) violates Involuntary Servitude, U.S. Constitution (Amend. XIII).

2. Declare the relevant section of Neb. Rev. Stat. 46-703,

(a) violates the Supremacy Clause of the U.S. Constitution (Art. VI cl. 2);

(b) interferes with interstate commerce in violation of the Commerce Clause of the U.S. Constitution (Art. 1 § 8, cl. 3);

(c) violates the Equal Protection, Abridged the Privileges, and the Due Process, U. S. Constitution (Amend XIV, sec. 1);

(d) violates the Right to be Secure in Your Private Property, U.S. Constitution (Amend. IV);

(e) violates the Due Process of Law and Private Property taken without Just Compensation (Amend. V);

(f) violates 42 U.S.C. § 1983 / violates involuntary servitude, U.S. Constitution (Amend. XIII);

2a. Declare section 25, LB 1226,

(a) violates the Supremacy Clause of the U.S. Constitution (Art. VI cl. 2);

(b) interferes with interstate commerce in violation of the Commerce Clause of the U.S. Constitution (Art. 1 § 8, cl. 3);

(c) violates the Equal Protection, Abridged the Privileges, and the Due Process, U. S. Constitution (Amend XIV, sec. 1);

(d) violates the Right to be Secure in Your Private Property, U.S. Constitution (Amend. IV);

(e) violates the Due Process of Law and Private Property taken without Just Compensation (Amend. V);

(f) violates 42 U.S.C. § 1983 / violates involuntary servitude, U.S. Constitution (Amend. XIII);

3. Declare section 28 (3) LB 1226,

(a) violates the Supremacy Clause of the U.S. Constitution (Art. VI cl. 2);

(b) interferes with interstate commerce in violation of the Commerce Clause of the U.S. Constitution (Art. 1 § 8, cl. 3);

(c) violates the Equal Protection, Abridged the Privileges, and the Due Process, U. S. Constitution (Amend XIV, sec. 1);

(d) violates the Right to be Secure in Your Private Property, U.S. Constitution (Amend. IV);

(e) violates the Due Process of Law and Private Property taken without Just Compensation (Amend. V);

(f) violates 42 U.S.C. § 1983;

4. Declare section 4 (c) LB 1226,

(a) violates Equal Protection Clause, U.S. Constitution (Amend. XIV);

(b) violates uniform taxes, U.S. Constitution (Art. I § 8);

(c) violates 42 U.S.C. § 1983.

5. Declare LB 1226 as written by the League of Municipalities,

(a) violates Due Process Clause , U.S. Constitution (Amend. XIV);

(b) violates Freedom of Speech, U.S. Constitution (Amend. 1);

(c) violates the Declaration of Independence;

(d) violates 42 U.S.C. § 1983.

6. Declare actions of Board members of the Upper Niobrara-White Natural Resources District acting under Neb. Rev. Stat. §§ 2-3201 et seq.,

(a) violates the Supremacy Clause of the U.S. Constitution (Art. VI cl. 2);

(b) interferes with interstate commerce in violation of the Commerce Clause of the U.S. Constitution (Art. 1 § 8, cl. 3);

(c) violates the Equal Protection, Abridged the Privileges, and the Due Process, U. S. Constitution (Amend XIV, sec. 1);

(d) violates the Right to be Secure in Your Private Property, U.S. Constitution (Amend. IV);

(e) violates the Due Process of Law and Private Property taken without Just Compensation (Amend. V);

(f) violates 42 U.S.C. § 1983;

(g) violates, Involuntary Servitude, U.S. Constitution (Amend. XIII).

7. Declare the actions of the State of Nebraska Department Natural Resources, under Neb. Rev. Stat. §§ 46- 701 et seq.,

(a) violates the Supremacy Clause of the U.S. Constitution (Art. VI cl. 2);

(b) interferes with interstate commerce in violation of the Commerce Clause of the U.S. Constitution (Art. 1 § 8, cl. 3);

(c) violates the Equal Protection, Abridged the Privileges, and the Due Process, U. S. Constitution (Amend XIV, sec. 1);

(d) violates the Right to be Secure in Your Private Property, U.S. Constitution (Amend. IV);

(e) violates the Due Process of Law and Private Property taken without Just Compensation (Amend. V);

(f) violates 42 U.S.C. § 1983;

(g) violates, Involuntary Servitude, U.S. Constitution, (Amend. XIII).

8. Declare that the Water Policy Task Force in developing and writing of LB 962,

(a) violates Due Process Clause of the U.S. Constitution (Amend. XIV);

(b) violates Freedom of Speech of the U.S. Constitution (Amend I);

(c) violates the U.S. Declaration of Independence;

(d) violates 42 U.S.C. § 1983.

9. Declare Section 1, Art. III; the unicameral

(a) violates the Supremacy Clause of the U.S. Constitution (Art. VI, cl. 2);

(b) violates the Equal Protection, Abridged the Privileges and the Due Process, of the U.S. Constitution (Amend XIV § 1);

(c) violates the U.S. Declaration of Independence unanimously adopted in Congress in July, 1776; and

(d) violates 42 U.S.C. § 1983.

10. Declare plaintiff has the right to drill irrigation wells on said land without interference and sanctions from the State of Nebraska, in production of agriculture products for interstate commerce.

11. Award plaintiff his costs incurred in this action, if an attorney can be found, including reasonable attorneys' fees, as permitted by 42 U.S.C. §§ 1983, 1988; and

12. Grant plaintiff such additional and further relief as this Court deems just and proper.

Dated this 8th day of December, 2006.



Michael Jacobson
28 U.S.C. 1654, Pro Se
613 North Ash
Gordon, NE 69343
Phone: 308-360-0963

CERTIFICATE OF SERVICE

The undersigned does hereby certify that on December 8, 2006, he served a copy of the foregoing First Amended Complaint upon the Defendant by U.S. First Class Mail, postage prepaid, or hand delivery to the following address:

Jodi Fenner
Assistant Attorney General
2115 State Capitol Building
Lincoln, NE 68509



Michael Jacobson

constitutionality of the proposed measure, and this decision shall become a record of the court. If the decision is favorable, the measure may be enacted into law. If the decision is not favorable, the measure shall be referred back to the legislature and such proposed legislation cannot be enacted until decided to be constitutional by the Supreme Court of the State."

Referred to Committee on Legislative Department.

PROPOSAL NO. 126. By Mr. Rankin, of Kearney County, relating to the duties of Judges.

PROPOSAL to add a new section to Article VI, as follows:

"Article VI. Section 25. The judge of any court of record shall have the right to examine witnesses direct at any time during the trial of a case before the court, and shall do so whenever in his judgment it will bring out evidence necessary to a just settlement of the case on trial. It shall also be the right of jurors to question the witnesses, provided the question is sanctioned by the judge and asked through him."

Referred to Committee on Judicial Department.

PROPOSAL NO. 127. By Mr. Kunz, of Hall County, relating to Article VIII, Education, Section 12, Reform Schools.

PROPOSAL to strike out Section 12 (Reform Schools) which reads:

The legislature may provide by law for the establishment of a school or schools for the safe keeping, education, employment and reform of all children under age of sixteen years, who for want of proper parental care, or other cause, are growing up in mendicancy or crime.

Referred to Committee on Education.

PROPOSAL NO. 128. By Mr. Lewis, of Wayne County, relating to the Legislature.

PROPOSAL to amend Article III, Section 9 of the Nebraska Constitution by substituting therefor the following:

Section 9. (Bills; origin, amendment.) Any bill may originate in either house of the legislature, or bills may be introduced by any member of the executive department. Any member of the executive department shall be privileged to appear before either house of the Legislature in support of any measure introduced by him and it shall be the duty of any member of the executive department, upon due notice, to present himself before either house for proper interpellation. All bills passed by one house may be amended by the other or the governor may propose amendments to any bill passed by both houses and presented to him for signature, which amended bill if agreed to by a ma-

EX. NO. 1

majority of each house in the order of its former passage, with no other than the governor's amendment or amendments added thereto, shall be signed by the governor and become a law.

Referred to Committee on Legislative Department.

PROPOSAL NO. 129. By Mr. Beeler, of Lincoln County, relating to Irrigation, Drainage, Water Power and Natural Resources.

PROPOSAL to: Place in the Constitution of the State of Nebraska a separate article as follows:

ARTICLE.....

Sec. 1. (Water for irrigation natural want.) Water for the purpose of irrigation in the State of Nebraska is hereby declared to be a natural want.

Sec. 2. (Dedication of water to public use.) The water of every natural stream, not heretofore appropriated, within the State of Nebraska is hereby declared the property of the public, and is dedicated to the use of the people of the state subject to appropriation as herein after provided.

Sec. 3. (Use of water priority.) The right to divert unappropriated waters of every natural stream for beneficial use shall never be denied to the State, to any county and municipality within the state and to any district formed for that purpose by general law, nor to any other sub-division of the State. Priority of appropriation shall give the better right as between those using the water for the same purposes, but when the waters of any natural stream are not sufficient for the use of all those desiring to use the same, those using the water for agricultural purposes shall have the preference over those using the same for manufacturing purposes.

Sec. 4. (Existing rights.) Nothing in this article contained shall be so construed as to affect, interfere with, or impair the rights to water appropriated and acquired prior to the adoption of this article by the people of the state.

Referred to Committee on Irrigation, Drainage, Water Power and Natural Resources.

MR. McLEOD: I move Mr. President, that we adjourn.

At 12:32 P. M., the Convention adjourned.

CLYDE H. BARNARD, Secretary.

MR. TYLER: It will be the duty of this committee to devise ways and means for disseminating information in regard to the changes we propose, and getting this information to the people.

THE PRESIDENT: If there are no further remarks, those in favor of the motion will signify by saying "Aye" and opposed "No".

Motion prevailed.

THE PRESIDENT: There being no further business before the Convention on the regular order, a motion to go into the Committee of the Whole is in order.

Motion.

MR. CORNELL: I move that the Convention do now resolve itself into a Committee of the Whole, for the purpose of considering the proposals on general file.

THE PRESIDENT: All those in favor of the motion signify by saying "aye" and opposed "no."

Motion prevailed.

Committee of the Whole.

At 1:35 P. M. the Convention resolved itself into a Committee of the Whole for the purpose of considering matters on general file.

Mr. McLaughlin in the chair.

After some time spent therein the Committee arose and by its Chairman submitted the following report:
Mr. President:

Your Committee of the Whole has had under consideration Proposal No. 129, and reports the same back to the Convention with recommendation that it be adopted as amended and referred to the Committee on Arrangement and Phraseology.

Also, Proposal No. 330, and reports the same back to the Convention with the recommendation that it be adopted as amended and referred to the Committee on Arrangement and Phraseology.

Also, Proposal No. 333, and reports progress and asks leave to sit again.

CHAS. F. McLAUGHLIN, Chairman.

MR. McLAUGHLIN: Mr. President, I move the adoption of the report of the Committee of the Whole.

THE PRESIDENT: You have heard the motion. All those in favor signify by saying "Aye" and opposed "No".

Motion prevailed.

Proceedings in Committee of the Whole.

THE CHAIRMAN: Gentlemen, the Committee has under consideration Proposal No. 129.

Proposal No. 129.

Section 1. (Water for Irrigation; Natural Want.) Water for the purpose of irrigation in the State of Nebraska is hereby declared to be a natural want.

Proposal No. 129.

Section 2. (Dedication of Water to Public Use.) The use of water of every natural stream within the State of Nebraska is hereby dedicated to the people of the state for beneficial purposes, subject to the provisions of the following section.

Section 3. (Use of Water, Priority.) The right to divert unappropriated waters of every natural stream for beneficial use shall never be denied except when such denial is demanded by the public interest. Priority of appropriation shall give the better right as between those using the water for the same purpose, but when the waters of any natural stream are not sufficient for the use of all those desiring to use the same, those using the water for domestic purposes shall have preference over those claiming it for any other purpose, and those using water for agricultural purposes shall have the preference over those using it for manufacturing purposes.

THE CHAIRMAN: You have heard the report of the Committee.

Are there any amendments?

Motion.

MR. BEELER: I move you that when the committee arise it report Proposal No. 129 as presented by the Committee on Irrigation, Drainage, Water Power and Natural Resources for adoption, and that the same be referred to the Committee on Arrangement and Phraseology.

THE CHAIRMAN: It has been moved that when the committee arise it report Proposal No. 129 for adoption, and that the same be referred to the Committee on Arrangement and Phraseology. Are there any remarks?

MR. TEPOEL: Before we vote I would like to ask the chairman of the committee what significance, in his judgment, this particular clause "priority of appropriation shall give the better right as between those using the water for the same purpose," would have? Is it contemplated by the committee that that shall abrogate the common law rule with reference to flowing streams, or just what is the thought?

MR. BEBLER: I will try and make a brief explanation of the proposal and of its significance. In the first place you will notice that Section 1 declares that water for the purpose of irrigation in the State of Nebraska is hereby declared to be a natural want. That is a provision which you will find in practically every constitution of the states where irrigation is practised. It is a declaration which intends to give to irrigation the standing of being so necessary that it is considered as a natural want. As applied to the State of Nebraska, as a whole, we are aware of the fact that in some portions of the state irrigation is not practicable, whether it is sometimes necessary or not. However, in a large portion of the State it is a matter of absolute necessity, and without it large portions of the state would have been undeveloped today, and even more highly developed than some of the portions of the arid part of the state. Section 2 is simply the use of the water. I desire to call the attention of the convention to the words "the use" rather than "the water." It is the use of the water of every natural stream within the State of Nebraska which is dedicated to the use of the people. The reason why I used, in my original proposal, "use" and why the committee used the words "the use" is for the reason that there is a controversy existing between the State of Colorado, and Wyoming especially, and Nebraska and Kansas as to the ownership of water in the natural streams and especially of the inter-state streams. Colorado has for many years taken the position that by virtue of her statement in the constitution which says that the water of the State that is found in the natural streams is the property of the State, and that as her constitution was approved by the authorities at Washington, she thereby acquired the ownership of the running waters of the various inter-state streams, and that by way of that ownership she was not compelled to recognize any appropriation of water in the State of Nebraska, Kansas or Wyoming. She stated, and has taken that position in the various courts in which litigation has been carried on, and is taking that position today in a case that is pending in the United States Supreme Court, where the State of Wyoming is plaintiff, and the State of Colorado is defendant, to enjoin the State of Colorado from diverting the water of the Laramie River, or rather the head waters of the Laramie River, through a tunnel, diverting it to the Cache La Poudre River, which of course takes the water from one watershed and places it in another watershed, thereby depriving the people of the State of Wyoming of the use of that water, which in the natural course of events would go to Wyoming. That case has not been decided, although it has been pending in the Supreme Court for a long time. The State of Nebraska has a case pending in the District Court of the United States at Denver, wherein the Western Irrigation District is plaintiff, and the officers of the State of Colorado are defendants, in which is involved the same question. Those who are familiar with the South Platte River will notice that from about the first of May until the first of October that river is nothing but a bed of

sand in the State of Nebraska. Every drop of water of that river is taken out by irrigation purposes in the state of Colorado. Many times during the irrigation season they stored the water there in reservoirs and have deprived thereby appropriators in the State of Nebraska of the water for irrigation and domestic purposes, and that litigation is pending in the District Court of the United States in the district of Colorado. The State of Nebraska as well as Wyoming, has taken the position that there is no ownership in the water of a running stream; that the most that any person can claim for it is the right to use it for domestic purposes, irrigation purposes or water power purposes and that the only control that a state has of it is to regulate its use through its police power, and that until an actual appropriation of the water is made to a beneficial use, or rather is placed in a canal by diverting, there is no such thing as ownership in the running water of a stream. Taking that position, the State of Nebraska contends that when an appropriation of water is made out of the stream in this state which is prior to an appropriation made of the same stream in the State of Colorado, that the appropriator in the State of Nebraska has the right by virtue of his prior appropriation to have that water come down to him and that the State of Colorado, nor any other citizen cannot deprive that appropriator of the use of that water by virtue of any ownership either in the state or in its citizens or by virtue of the appropriation which has been made of that water for a beneficial use. Therefore it does not say that the water appropriated, but the use of the water. Section 3 is a limitation upon the right of the Legislature of the state to do such a thing. The first is that the right to divert unappropriated waters of every natural stream for beneficial use shall never be denied. That is, if this becomes a part of the Constitution, the Legislature of the State of Nebraska will have no right to pass any law which will deny to any individual corporation, association or district formed for that purpose, or municipal bodies, the right to appropriate unappropriated waters of the stream except when such denial is demanded by the public interests. Originally I tried to confine it to public corporations. That is municipalities, villages, cities, counties, and sub-divisions of the state, and to districts organized for that purpose. There was however, some objection to that raised by the irrigators of the west who held a little different view than I do on those points by reason of the fact that in many instances we find some small appropriation of some of the smaller streams of the state which an individual himself makes of water, constructs his own irrigation work, and waters his own lands. We have several of those in the western part of the state now. Upon any large scale I believe it is entirely impossible or at least impracticable to develop irrigation works through private capital. It has proved a failure in the past, and about the only thing they have ever succeeded in doing through private enterprise was to partially construct a ditch, and then wait until a district was organized for the purpose of

developing the plan, and then they would ask a large price for the appropriation, and for the partial work which they had done, but in order that the small appropriator might not be cut off, I consented to the insertion of this clause in this proposal, that the legislature may deny the appropriation of unappropriated waters provided the public interests require it. Priority of appropriation shall give the better right as between those using water for the same purpose. That is, if two or three different persons are using the water for the same purpose, then the one who makes the first appropriation of water has the better right. As between irrigators that is the case, it has the same use, and between those using it for water power purposes it has the same use, and he who first appropriates it for water power purposes would have the prior right to the use of it. Those who use it for domestic purposes would have the same right; there would be no priority to it except when it is first applied.

When we come to consider the question of riparian rights, that is the use of the water unimpaired as nature puts it through the stream, by every person who holds land on each side of a non-navigable stream, each owner owing to the middle or to the thread of the stream, is not particularly affected in this state except as custom is fast doing away with that right, and as far as the water is actually being used to irrigate the land, it does diminish the stream. That is, it diminishes the flow of the stream. But except as far as it is done by appropriators in any state, this state has recognized riparian rights, that is the use for domestic purposes. "But the waters of any natural stream are not sufficient," that is based upon the future,—where they are not sufficient for the use of all those desiring to use the same,—now as long as the flow of water in a natural stream is sufficient for all, there is no controversy. The riparian owner or those who use it for domestic purposes will not be deprived of the use of water, but when the flow is not sufficient for all these purposes, then the proposal says that those using the water for domestic purposes, that is including the riparian right owner, shall have the first use, and those claiming it for any other purpose, that is for irrigation or for water power, the irrigator has the second right, and the water power fellow has the third right. The importance of the use determining the first right. Domestic use being above all other uses, first; irrigation being second; and water power being third. It protects the interests of every man according to the importance of the use which he makes of the water of the running stream. It is true that there has, of late years, grown up somewhat of a mixed doctrine which attempts to do away with riparian rights, and attempts to do away with priority rights, and that is based upon the old doctrine of the reasonable use of water and that no matter whether we have a prior appropriation or not, if the use which you make of the water is unreasonable,—that is, supposing there is a real long dry spell and the river begins to go

dry, as it does sometimes, the weather is very hot and dry, hot winds blow from the south and on the upper ridges of the stream a man is using practically the last water in the stream for irrigation purposes. The State Engineer then closes the headgate of the persons who are using the water on the upper ridges of the stream for the purpose of using that water for a prior appropriation, maybe one hundred or a hundred and fifty or two hundred miles further down.

Under the laws of prior appropriation as they exist at the present time that is the duty of the State Engineer and as generally recognized in the states that recognize prior appropriations of water, namely that though that man has a prior appropriation, yet in order that the hundred feet per second of time, for which he has that appropriation may reach his head-gate, there will have to be let loose from the upper reaches of the stream five or six or sometimes a thousand cubic feet of water in order to pull it down to its head-gate 150 or 200 or 300 miles as the case may be, and a tremendous amount of that water is being wasted by sinking into the sand and evaporating, and under those conditions the doctrine strictly of prior appropriation is modified by the old common law idea by the reasonable use of the water. The courts in some instances have held that the man who expects to make use of 100 cubic feet of waterway down there, and in order to get it must have 600 or 1000 cubic feet of water to run down through that bed of sand, is an unreasonable use, and under those circumstances he cannot enforce the law of prior appropriation. But that factor has not been recognized in this state. The Supreme Court of Nebraska had it under consideration to a certain extent in one case but did not apply it in that case.

MR. McDONALD: I would like to ask Mr. Beeler a question.

THE CHAIRMAN: Does the gentleman from Lincoln County, Mr. Beeler, yield to a question?

MR. BEELER: Yes.

MR. McDONALD: What is your position with reference to the effect this would have upon vested rights?

MR. BEELER: It would not affect vested rights in any manner, Mr. McDonald. It simply recognizes, as far as this proposal is concerned, the law as it is in existence now, modified by this position that the legislature might deny an appropriation of water provided it is for the public interests.

MR. SELLECK: I would like to ask if the committee considered the term "domestic purposes" sufficiently broad to cover municipal uses? The thought I had in mind was this: many villages and small cities take their supply of water for municipal use from the streams.

MR. BEELER: They would have to make an appropriation of it under these circumstances.

MR. SELLECK: I am wondering if the term "domestic purposes" is broad enough to cover that purpose?

MR. BEELER: No. If a village or city located upon the river desires to make an appropriation of water out of the river for other purposes, within the city, they would have to make an appropriation.

MR. SELLECK: Where, in your classification of rights, would you place municipal uses of water?

MR. BEELER: A municipality can make an appropriation of water just the same as any other body, association or corporation can.

MR. SELLECK: I believe I have not made myself quite clear. You have three different rights, domestic, irrigation and power purposes. Where, in that tabulation, would you include municipal purposes?

MR. BEELER: That would come under the head of domestic purposes, if the appropriation has been made.

MR. SELLECK: I am wondering if there would any controversy arise. For instance, many municipalities use the water for many purposes which would not be strictly covered by the term domestic; as for instance the flushing of streets, the running of elevators by water power, and other machinery that is run by water power furnished by the municipal water plant. I am wondering, if it is the intent of the committee to include municipal purposes along with domestic purposes, if it would not be well to so state?

MR. BEELER: No. If you would do that you would then make a subsequent to a prior one, and it would give greater rights.

MR. SELLECK: The thought I had in mind was this: that the domestic and municipal uses, where that is the case, are so intermingled that you would have difficulty in separating the domestic water from that used by municipalities for other purposes, and if there is a liability of any controversy, why would it not be well, if it is your purpose to place municipal uses in the classification, to make it perfectly clear, so there can be no controversy?

MR. BEELER: It is not my intent, Mr. Selleck, to give a municipality preference over any other use except it be for domestic purposes. If a municipality desires to use it for water power purposes it must take its priority according to the law of priority, the same as any other institution does.

MR. SELLECK: I evidently do not make myself clear to you. Where a municipality draws the supply of water from a spring,—the

domestic purposes and the other purposes of that water used by the municipality are so intermingled that it would be impossible to make the distinction. In other words where you have a municipality drawing its supply of water from a stream, the water goes through common pipes whether it be used for simply domestic purposes, or for other purposes within the municipality. If you are going to prefer domestic uses it would seem to me that it ought to make it so clear that where a municipality is using the water for joint purposes, domestic and other purposes within the municipality, that no controversy could arise over their right for that grade of preference for all water used within the municipality.

MR. BEELER: Of course we have the same difficulty, Mr. Selleck, when an appropriation is made for irrigation purposes or for water power purposes. The water as it runs through the canal is frequently used by land owners for the watering of stock, in fact it is usually used for that. That appropriation of water however running through that canal does not have the status of a domestic use, simply because incidentally it is being used for what may be called domestic purposes. It still retains the status of an appropriation for irrigation purposes. If a municipality gets an appropriation for domestic purposes, it acquires the status of water for domestic purposes. If it makes it for other power purposes it acquires the status of water power. Sprinkling the streets would be to a large extent considered as an incidental use, just as the watering of cattle out of the canal is considered an incidental use.

MR. SELLECK: I understand the chairman of the committee to answer "really that where the city draws its water supply from a stream and files for domestic purposes, that that will cover all purposes for which the municipality may desire the water, if it be incidental to the domestic use as suggested."

MR. BIGELOW: I would like to ask the chairman of the committee this question. Whether this constitutional declaration of the priority of appropriations, would or would not interfere with the modern construction which courts are placing upon the old common law doctrine of unreasonable user? That is, the unreasonable user which you explained a few moments ago. Would not the fact that this is declared in the Constitution prevent a modification of the old riparian rights by the doctrine of reasonable use?

MR. BEELER: It does not seem to have had that effect Mr. Bigelow, in other states where litigation over that question has arisen. As a matter of fact the first litigation, that I know anything about, arose in the Federal Court in Idaho, where irrigation is generally practiced, and where they have had it in the Constitution ever since the state was formed, and where they have a similar provision as this, and yet under

that constitutional provision the courts for the first time begin to apply the doctrine of reasonable use. So that if I am to judge from the decisions of those courts of constitutional provisions similar to this, and in states where irrigation is an absolute necessity all over the state, then I would say that still the courts retain the power to apply the doctrine of reasonable use.

MR. BIGELOW: If you will remember, Mr. Chairman, there was a New Jersey case which applied the doctrine of reasonable user in which this principle was urged as against it, that when a right had been acquired by priority of appropriations, that right included the development of the original use, and if that development of the original use acquired such dimensions as to deny lower riparian owners or deny subsequent appropriators that which was recognized as a higher right as domestic, for instance, that the prior appropriation would be subject to the doctrine of reasonable user. My thought is, might this constitutional declaration of the right of priority of appropriations prevent any such application?

MR. BEELER: I think not. I am expressing my opinion based upon the decisions of the Federal Courts upon questions that arose in purely irrigation states.

MR. McDONALD: Supposing that appropriation of water was obtained for power purposes and a power plant installed in operation, then would a person desiring to use the water for irrigation have the right to divert the water from the user for power purposes?

MR. BEELER: Not if the water power appropriation was prior. It was so decided by the Supreme Court in a case from your city.

MR. SELLECK: Under this provision it says, "Priority of appropriation shall give the better right as between those using the water for the same purpose." Then it goes on and provides that the irrigator has the prior right over those desiring power.

MR. BEELER: But it depends upon the prior appropriation. In the Kearney Case, the question was subsequently raised as to whether or not an appropriation, which was prior to the appropriation of irrigator, could be enforced as against the irrigators, and the Supreme Court held that it could.

MR. SELLECK: Under the present Constitution that would be true, but do you contend that it would be under this provision here?

MR. BEELER: Of course that case construed the law or the statute as it was then in existence, and that was identically the same language.

Motion

MR. SELLECK: I move to amend Section 1 by inserting in line 2 after the word "of" the words "domestic use and of".

THE CHAIRMAN: You have heard the motion of the gentleman from Lancaster County, Mr. Selleck. Are there any remarks?

MR. SELLECK: I propose that amendment for this reason: Section 1, as it now reads, is a constitutional declaration that water is a natural want for one purpose only, namely that of irrigation. No one will dispute but what that is right, but in Sec. 2, domestic purposes is made the first preference. If that is right, then we certainly ought to make a constitutional declaration that water is a natural want for that purpose. If we are going to put in a natural want for irrigation, the purpose of my amendment to Sec. 1 is to declare the right to exist for domestic purposes as well as for irrigation. The section then would read as follows: "Water for the purpose of domestic use and of irrigation in the state of Nebraska is hereby declared to be a natural want." It seems to me we will be inconsistent in making a constitutional declaration that water is a natural want for irrigation, and omit its highest want, that of domestic purposes. In other words if you are going to make a constitutional declaration of the status of water, it ought to include that which is its first use.

MR. OSBORNE: I would like to ask Mr. Selleck if, under his amendment, it would be possible for a man living along a stream and wanting to water his stock from that stream, or even along an irrigation canal, and had been in the habit of watering his stock there and making a domestic use of it, if it would not be possible for him to insist that the irrigation company should keep water in this canal under this constitutional provision, rather than to pump the water, if he chose to do so? As I understand it, the proposition here involved is the declaration that water for the purpose of irrigation is a natural want, whereas, there is no question as to domestic use, and that in a certain sense, a domestic use is for such purpose as watering stock.

MR. BEELER: I can only answer that question by referring to the explanation given by the chairman of the Committee. He replied very clearly as I understood him at least, that these would be referred for the purposes for which it was filed upon. A man would not have the right, if I understand the interpretation of the Chairman of the Committee, to use the water for domestic rights, even if filed for some other purpose.

MR. OSBORNE: The question is, if for a domestic use, would it be necessary for a man to seek an appropriation for a domestic use, such as the watering of his stock? I know the suggestion Mr. Selleck offers was made in one of our irrigation meetings, and that point was raised by a

man who had some difficulty in running water down an irrigation canal where people seemed to think, because they had used the water for the incidental purpose of watering the stock, that they could compel the company to keep water in the canal all the time, so that they could have the domestic use of it.

MR. SELLECK: I have no doubt but what men would claim a right they are not entitled to. But I am basing the answer strictly upon the explanation given by the chairman of the committee, namely, that if a man wants that right he must file for it, and if he has that right established then he would have a preference.

THE CHAIRMAN: Are there any other remarks on the motion of the gentleman from Lancaster County, Mr. Selleck, to amend Proposal No. 129?

MR. BEELER: In regard to the amendment as proposed by Mr. Selleck, that there be inserted "that the use of water for domestic purposes is a natural want," to me seems entirely unnecessary. There are certain things, which by law many times are declared to be natural wants, but are always such uses that there might be a question raised about them as to whether or not they are; and in order that there will be no legal controversy as to whether they shall come under that class, the law or constitution declares them to be natural wants, but I cannot see how a declaration that water for domestic use is a natural want can add anything to it, because there is not a man on earth would dispute but that water for domestic purposes is a natural use, no more than that food is a natural use. A man must have those things naturally, and no controversy could arise over them. This, to my mind, is simply superfluous. It will add nothing to the force of the section, and would not take anything from it.

MR. SELLECK: Do you not think that the enumeration of the term "for irrigation purposes" might raise a question?

MR. BEELER: It could not add anything or change the character of the use of the water for any other purpose.

MR. SELLECK: Putting it in certainly could not raise a doubt about that.

MR. BEELER: I simply say that to my mind it is an absolute unnecessary declaration, because you declare the thing to be a natural use, and there is not a man, woman or child on earth that would dispute the question.

MR. FLANSBURG: Could not this constitution declare that irrigation was the first natural want?

MR. BEELER: Yes, it might do so, but if it did I would be against it.

MR. FLANSBURG: And might not the courts say that having declared alone that irrigation was a natural want that it gave it a first preference?

MR. BEELER: If you suppose that the Supreme Court will do an absolutely foolish thing, yes sir.

MR. FLANSBURG: You are familiar with the case of Meng vs. Coffey, in the 67 Nebraska?

MR. BEELER: Somewhat; yes, sir.

MR. FLANSBURG: And you remember the language do you not?

MR. BEELER: Yes, sir.

MR. FLANSBURG: I am in favor of this amendment. I think it should go in. Here is a constitutional declaration that water for irrigation purposes is a natural want. Nothing is said whatever about water for domestic purposes. I think we should say in that declaration that the water for domestic uses is a natural want; but I think we should further say as proposed by the amendment, that domestic, including municipal purposes, should have preference over irrigation or agricultural purposes. At common law a domestic use was simply the use by a man for his stock; is that all you wish to preserve here as domestic use? In the case of Meng vs. Coffey, the question arose as to the meaning of this identical language; for this entire proposal is but a copy of the Statutes of 1895, and is put in here by the Committee for the purpose of preventing any future change by legislative act. I did not intend to raise this question, but inasmuch as it is raised by this amendment, I think it should be upheld by this Committee. In the case of Meng vs. Coffey, this question was raised; the meaning of that section of the Statute which said that water for irrigation was a natural want. The question there, of whether water for domestic use was superior to irrigation came before the court. Judge Pound, in writing the opinion, used this language: "If that section was meant to enact a new rule, we have here a cause which arose two years prior to its adoption. If it was meant to be declaratory, we must consider it in connection with Section 43, which says that domestic uses must come before agricultural uses, and is inconsistent with any construction that would allow complete diversion of the whole stream for irrigation as against those who desire to use its water for domestic purposes."

In view, then, of the statement of the Supreme Court we now declare water for irrigation in the State of Nebraska to be a natural want, yet say nothing about domestic uses. The court hesitated on that question in the Meng case. Suppose when they construe this, they say: "Well, you said that irrigation was a natural want in the State of Nebraska and said nothing about domestic uses." Now as I said a while

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ago, water for domestic purposes was formerly only for watering stock and for the man himself. Riparian rights in Nebraska are lost, as decided in the case of Crews against the McCook Irrigation Company in the 77th Nebraska in an opinion by Judge Holcomb. In almost all the towns and cities the water is taken from streams for municipal purposes and it seems to me this declaration in the amendment should be made here. Now it is said that everybody knows that water for domestic purposes is a natural want, and so everybody knows that in an arid country water for irrigation purposes is a natural want. It seems to me when the gentleman concedes that the amendment can do no harm we ought to accept it and put it in here in order that we may have the benefit of that declaration, and in the construction that may be put upon this later, let it appear that we had in mind domestic and municipal uses. So I think we ought to support this amendment.

MR. WILSON (Dawes): I hope the amendment offered by the gentleman from Lancaster, Mr. Selleck, will prevail as a number of growing towns and cities in western Nebraska are dependent for their water supply on the running stream and it will not be possible for us to do too much here in order to safeguard the future interests of those communities.

THE CHAIRMAN: Are there any further remarks upon the amendment? If not, all those in favor will signify by saying "Aye" and opposed "No".

Motion prevailed.

Motion.

MR. SELLECK: I move to amend Section 3 by inserting in line 8 after the word "domestic" the words "and municipal".

My only purpose in offering this amendment is to clear up a possibility of there being controversy where some municipality taking its municipal water supply from a stream uses that water for a joint use. Domestic and other municipal purposes, which could not be clearly classified as domestic, as, for instance, flushing streets and sewers, the supplying of water for the running of elevators in business blocks, or other machinery connected up with the city water department, in such a way that it would be almost impossible to find out what part of the water derived from the common source was used distinctly for domestic purposes and what was used for other purposes not strictly domestic, but connected with the municipal water systems, and being purely incidental to their location to the municipality itself.

MR. OSBORNE: This amendment, it seems to me, is liable to cause some difficulty in connection with the development of the larger irrigation propositions. I do not know just exactly what the intention

of the mover is, whether he means to say that the municipal use is just watering the streets or watering the lawns, or whether it would not be interpreted, as well, to be the development of a municipal water power, or a water power plant for use in the municipality. The Government Reclamation Service, in western Nebraska, as many of you know, has been busy the last few years developing the use of the waters of the North Platte and has already spent something like ten or twelve millions of dollars, and will spend considerable more in developing the use of the waters for irrigation purposes. This winter I had a conversation with Mr. Wise, who was the project engineer, and has been for twelve or fifteen years in the North Platte country connected with the Government Reclamation Service, and I talked with him, particularly about the proposition of developing water power. Mr. Wise made the statement, in speaking particularly about western Nebraska, that the time may come when the reclamation service and reclamation officials can give some attention to the development of water power, but he said at the present time we recognize that the direct use that is to be made of water in this somewhat arid region is the development of water for an irrigation purpose, and that of water power as such, as far as we are concerned in western Nebraska, it should wait until the complete development of our irrigation system. I believe that any Nebraskan ought to fully appreciate that statement because we are a great agricultural state, and as to what water power is to mean in the future we are all, more or less, vague in our ideas. But we know, especially those of us who live in the western part of the state, what irrigation will do, and what it has done. There is a large part of this state which lies east of the part of the state which has been largely developed in irrigation. It is a somewhat arid region, but it is upon the line between a rainfall sufficient to produce the crops, and rainfall which makes the development of agriculture almost a question, and the work of the farmer a gamble, and that is why I am assured by Mr. Wise and those who are working with him in the development of the reclamation service that a great deal may be accomplished yet in the western part of the state in the development of irrigation.

What I am afraid of is this, that if this amendment that is offered by the gentleman from Lancaster, Mr. Selleck, as far as municipal use is concerned, will give the right at any time for a city to go into the development of water power, and that bit by bit this water which is stored at great expense during the flood season of the year will be eaten into so that this will not be developed for reclamation purposes as is the intention. I have no objection to such a use if it does not conflict with the development of irrigation, such as we consider to be the first use in the western part of the state.

MR. SELLECK: I think there is no man in this Convention who wants to place himself on record, either in intent, purpose or innuendo.

directly or indirectly, as being anything but in favor of irrigation. It is a very important question in this state, but we should not forget that following the declaration of Section 1, that water is a "natural want". We have now decided to put into it "for domestic purposes," (which the chairman of the committee concedes to be so clear), that that right goes down through the whole matter of the conservation of natural waters of the state. If the time should come, I do not say it will ever come, but if it does, then the use of water for drinking purposes and other sanitary purposes, demanded by the people wherever they live in this state, is superior to the extent of requiring a greater portion of that water, that right should come first. In other words, the lives and the health of the people wherever they may be located is superior to the requirements for water, even to the point of irrigating land that may be used in the growing of crops. It would be of very little use to grow crops unless you conserve the lives of the people themselves, and while I do not think any such controversy as that will ever come, and that the alarm that the gentleman from Morrill County, Mr. Osborne, sounds is wholly theoretical, if it should come, his reasoning, as I see it, does not lead to the correct conclusion, because then the right of the health of the people must be superior to their desire to grow crops.

MR. BEELER: I hope that that amendment of Mr. Selleck's will not prevail, because I do not believe Mr. Selleck has the right idea of the effect of his amendment. I do not think he intends to do anything to injure the irrigation interests of western Nebraska, but yet he will do it if he gets this amendment passed. The largest development in irrigation has been through irrigation districts. There are irrigation districts in this state that are bonded over a million dollars for irrigation work, which they have constructed. Should this amendment prevail the village that might not be composed of more than three hundred men and practically no money invested, could make an appropriation for municipal purposes, as you are calling it, including water power, and then take away from the district that has invested a million or a million and a half of money in an irrigation ditch. Mr. Selleck, you do not intend that that should be the effect of it, and yet it is. You must remember that a municipality should not have before the law any greater standing than an irrigation district. A municipality is nothing more than an organized public corporation,—and so is an irrigation district. Why place a municipal use, provided it includes water power, in a position to condemn and take away the property of the men who live in the irrigation districts which are not municipalities but are public corporations only? The effect would be deadly, Mr. Selleck, to the interests of irrigation, and it would put them at the mercy of every little municipality that might be sent to make an appropriation for water power purposes, or for any other purpose that they could call municipal. The trouble is that the word "municipal" is not a natural definition of the use

of water. This would be a use before a municipality, and not a use for a certain, particular purpose. This definition of domestic use, irrigation use, and water power use are the natural uses of water, but when you add there, "municipal use," you get any kind of use that a municipality has a mind to inject into it, that water can be used for.

MR. SELLECK: I understood you, Mr. Beeler, in answer to my first question to state to the Convention that domestic use was broad enough to cover municipal uses, and hence you thought it was unnecessary to put it in. I now understand you to say that you do not want municipal rights to be observed here. Which position do you take?

MR. BEELER: I said Mr. Selleck, that if a municipality made an appropriation for water for domestic purposes, that that use would be satisfactory to irrigation, and I say so yet, but when you insert, "municipal use" you are taking it out of the column of domestic and you are putting it into all kinds of uses, because it is no longer the kind of use that a municipality may make of it, and that changes the meaning entirely.

MR. SELLECK: I ask the chairman of the committee now to distinguish what his understanding will be where a municipality has filed for domestic purposes and is using a part of that water thus taken for purposes that are proper for a municipality, but are not directly domestic? Are you going to shut that municipality off, or are you going to let them go on?

MR. BEELER: I will state frankly to this convention that I am in favor of shutting it off. Why? Are the people of the municipality not given preference over the people of the irrigation districts who have invested their thousands upon thousands and millions of dollars in a public enterprise, which the laws of the state of Nebraska gave them the right to do? Why should the people of the village be taken care of and enabled to take the property rights of the irrigationists in the irrigation districts away? Why should you put those people who are living in a village upon a pedestal and give them the right over those who have developed this district? But when the municipality wants to use the water for domestic purposes, that being a superior use, they have a right to it, but not when they want to use it for some other municipal use.

MR. SELLECK: I want to call your attention to the fact that the chairman of the committee has frankly stated that he would have people shut off from drinking water.

MR. BEELER: I make that as a special exception.

MR. SELLECK: I asked the chairman this question. The question was fairly put to the chairman of the committee,—

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MR. STOLLEY: I would like to ask Mr. Selleck a question. In your amendment, when you say "municipal," does that include water power for municipal use?

MR. SELLECK: If it were incidental to the domestic use, yes. If it was filing as a power plant, no.

MR. STOLLEY: It seems to me with municipal use of water power there is quite a difference, and if it did include water power I would be against the amendment, because Mr. Beeler has stated his proposition on that very clearly. For drinking purposes it would be alright, but for water power purposes it would be a different proposition.

MR. SELLECK: I have distinctly stated that the purpose of this amendment would be so that where a municipality was taking its supply of water from the stream and incidentally using that water through the common pipes for other purposes which are a part of its municipal life, it could not be cut off because it is using part of the water for municipal purposes, that were not distinctly domestic. The suggestion that Mr. Beeler brings in here is that a municipality might go into a power plant and they would have to file as a power plant and then come under the third division of preference. It would be a power plant run by a municipality, not for municipal purposes, any more than you would if you went into a power program. The municipality that went into a power program would file as a power company. Because it is run by a municipality does not make it a municipal use. I am not speaking of a city making a power plant which would be for a commercial use the same as any other power plant, but unless you put in these words, you are putting into the constitution a possibility at least that community which uses the water for domestic purposes and incidentally as a part of its municipal life is using a part of that water for other purposes than strictly domestic, might be cut off. I asked Mr. Beeler that question and he said "yes, if it was necessary," and gave as his reason that men in the irrigation district had to put their money into that and it was better to cut that off than to cut off the water from those municipalities who have put their money into it. I say if you are going to put the cattle and grass and oats ahead of the rights of the small cities, then vote against this amendment. If you want to protect the lives, even though it be that the men in the irrigated districts might not have water, I do not think it would ever come to that, but it might, if you want to place the lives of the citizens ahead of the cattle and the crops, then you will vote for this amendment.

MR. STOLLEY: To make myself understood, do you mean to say that people that have created a reservoir of water above the stream, that their water can be used for water power purposes, regardless of whether they need that water for irrigation purposes?

MR. SELLECK: I do not quite get your question.

MR. STOLLEY: I mean, can a reservoir of water that has been stored up for irrigation purposes be used for water power purposes if so desired?

MR. SELLECK: This amendment by the committee provides that there shall be three grades of preference. First, for domestic purposes; second for irrigation for agricultural purposes; and third for power purposes. I take it that would apply whether your water was stored or whether it came down the stream in the natural way.

MR. STOLLEY: But the question arises what do you mean by "municipal,"—does that include water power?

MR. SELLECK: I mean just what I have tried to state two or three times and will try it again, that where a municipality is deriving its water power from a natural stream, coming under the terms of this provision, and through the same pipes, water which is used for strictly domestic purposes, and a part of it for the municipal life that is not domestic, that this shall cover that and the city shall not be cut off from its drinking supply because forsooth they use some of that water for incidental purposes.

MR. ALBERT: Would you give a concrete example of what you mean by "incidental use"?

MR. SELLECK: Yes, the illustration that I gave was this, that the city taking its water supply fully or almost wholly for domestic purposes may use a part of that water for running an elevator in a hotel or business block incidental to the municipal life of the city in and incidental to its use of the water for domestic purposes. I do not want to see that city cut off from its domestic supply of water, because forsooth they use a few gallons for some other purpose.

MR. ALBERT: Your proposition leaves it loosely worded. You, of course, show there by your illustration a minimum use of water. You would not want that cut off you say. I think we all agree with you on that. But suppose they are using it to operate an electric light plant or a municipal ice plant, or something of that kind, where do you intend to place the limit?

MR. SELLECK: My answer, that if a municipality went into the business of furnishing power they would have to file as a power company that would not be incidental to domestic purposes, but the only provision I want to guard against is to guard against the possibility of a town being shut off from its domestic uses, because they use some for other purposes.

I think the Chairman has agreed to a wording that will be entirely satisfactory to me, and to the convention. Therefore, if I can meet the approval of my seconds I will withdraw the motion and substitute in

line eight after the word "purposes" the words "whether used by an individual or a municipality". Then it will read that "those using the water for domestic purposes whether by an individual or a municipality."

MR. WILSON (Dawes): I should like to ask the Chairman of the Committee a question.

There are several towns in the northwestern part of Nebraska that are situated similarly to the town in which I live. It is impossible for the town to have a water supply through wells. The towns owe their existence as far as water is concerned to water drawn from running streams. It is necessary in order for the life of the community to be kept up for water to be used for household use, for watering lawns and gardens, an ice plant, and the Northwestern Railroad at Chadron which is a division point. A large amount of water is used for their engines. If this amendment which is now before us will safeguard those uses of water, then I think the amendment would be agreeable to the people of those towns. I would like to have an expression in regard to that.

MR. BEELER: There might be, Mr. Wilson, this proposition, that if the use which you are making of that water is absolutely necessary to the domestic life of an individual, a corporation or an association of individuals, then that use you are making of that water for that ice plant might be condemned for the higher use, though you had a prior appropriation for it. The fact that you are using it as a municipality for power purposes to manufacture ice does not protect you against the natural want of somebody else for domestic purposes, providing they may, and they can do it now and they can do it after this constitutional provision is passed. If the domestic use, which is recognized as being the thing upon which life itself depends, demands that that water be taken from your city where you are using it for the manufacture of ice in order to sustain the life of people living along that river, there is no question but that it can be done now.

MR. WILSON (Dawes): How about the use of the water by the railroad as contrasted with that for irrigation on the streams?

MR. BEELER: That would be the same as your water power. The object of this is, gentlemen of the Constitutional Convention, simply to qualify the various uses of water as to degrees of necessity, and water power purposes are recognized as the lowest use, as the least necessary of the three. Irrigation is recognized as the second use, and domestic as the first. It makes no difference whether that use is made by an individual, by a corporation or an association of individuals, a municipality or an irrigation district or a power district, it is the nature of the use that makes it superior or inferior, and if the superior use is such that it must be exercised in order to preserve the life of people, that they

may get water for domestic purposes, they can take it away from the irrigationists. On the other hand, if for irrigation purposes, it is necessary to use the water, the water that is used for power purposes, the irrigationist can condemn that use which the water power institution makes of that water and use it for irrigation purposes. It is the degree of necessity with reference to the use of the water that determines the preference of the right. Remember there is a difference between preference right and prior right. The preference right has preference to the nature of the use, and the prior right of appropriation to the use of water is based upon time.

MR. MARVIN: If this is merely useless verbiage thrown in as a compliment to someone I am opposed to it, and even if the Chairman of the Committee accepts it, I think that the Convention should reject it.

THE CHAIRMAN: Those in favor of the amendment will signify by saying "aye" and opposed "no."

Amendment lost.

Motion

MR. McDONALD: I move to amend Section 3 of Proposal No. 129 by adding thereto the following: "Provided vested rights shall be preserved."

THE CHAIRMAN: You have heard the motion of the gentleman from Buffalo County. Are there any remarks?

MR. McDONALD: All I care to say is that it is expressly what the Chairman of the Committee says is already the law under it, and he has no objection, as I understand it, to that amendment. I think it is necessary to protect the interest already invested, and for those that may be hereafter.

Motion

MR. FLANSBURG: I move a substitute for that amendment Section 4 in the original Proposal No. 129 which reads as follows:

Section 4 (Existing rights).

"Nothing in this article contained shall be so construed as to affect, interfere with, or impair the rights to water appropriated and acquired prior to the adoption of this article by the people of the state."

THE CHAIRMAN: You have heard the substitute. Are there any remarks? If not, all those in favor of the substitute will signify by saying "aye" and opposed "no."

Substitute motion did not prevail.

THE CHAIRMAN: The question now recurs upon the amendment of the gentleman from Buffalo County, Mr. McDonald. All those in favor signify by saying "Aye" and opposed "No".

Motion prevailed.

THE CHAIRMAN: The question now recurs upon the original motion, that when the committee arise it recommend Proposal No. 129, as amended, for adoption, and that it be referred to the Committee on Arrangement and Phraseology. All those in favor of the motion will signify by saying "aye" and opposed "no."

Motion prevailed.

THE CHAIRMAN: The next proposal is Proposal No. 330.

Proposal No. 330.

Section 17. (Salt springs and other natural resources). The legislature shall never alienate the salt springs, coal, oil, minerals, or other natural resources appurtenant to the land, belonging to the State, but may provide by law for the leasing of any lands belonging to the State upon which the same may be located, and provide for the leasing and development of all mineral deposits on state lands, and the collection of rents and royalties therefor. In case of the sale of any of the educational or other lands belonging to the state, the deed or deeds of conveyance therefor shall contain an expressed reservation of property rights in all salt, coal, oil or other mineral deposits thereon and thereunder, together with the right to prospect for, mine and remove the same, and the right of ingress and egress to such mines and prospect places, by the state, its agents, servants or lessee, or lessees.

THE CHAIRMAN: You have heard the reading of the Proposal. Are there any amendments?

MR. SCOTT: I was asked to make a short statement as to the purpose of this bill. The original section was contained in two lines and relating only to the salt springs. In the last few years the potash industry has developed, and is situated in a good many places on state land and on school lands. There are all over the state indications of oil, and prospects are being made and oil leases are being made and the purpose of this bill was to preserve for the state all mineral deposits of every kind and nature that might be situated on state lands and not to hold them idle, but to permit the leasing of the lands, and the collection of royalties and rents for that purpose. Then the second proposition was that if the state lands, whether educational or otherwise, are offered for sale that the mineral will be reserved, whatever minerals there might be, as they say in a mining country when the top is sold, and for that reason it was proposed that the deeds of conveyance will reserve whatever minerals there may be with the right of ingress and egress, and with the right to remove it and to prospect for it.

MR. STOLLEY: This is one of the most vital and far-reaching proposals that has come before this Convention. It involves untold wealth

yet undeveloped, and this proposal not only preserves this to the people of Nebraska, but also opens the way for future development along conservative lines beneficial to the people of Nebraska as a whole, and the proposal I feel should prevail.

MR. OLESON: The first part of this proposal I have no objection to, but the last one which provides that in the case of the sale of any of the educational lands and so forth, a reservation shall be made thereon for, the right of not only all the mineral deposits in that land, but a right to go upon and prospect, which means the right to go there under leasing from the State and dig holes over that land, and if the State intends to sell these educational lands especially where they are in an agricultural or grazing district you could not expect to obtain the real value of that land because of that reservation. That reservation is an unlimited one to go upon that land and dig under the name of prospecting, and do all those things which injure it for an agricultural use or for grazing purposes. If any such reservations were contained in the deed, the reservation of the minerals should be sufficient, but the reservation to go upon there at all times and under all circumstances to prospect for this mineral is a right I do not think should be retained by this state in case it sells the land, it is something I do not think should be adopted because it will reduce the price of that land way below its worth. If there was just the reservation, as the Government has in some of its patents in the western country on the reservation of all minerals, that is another subject and there possibly could not be such an objection to it, but it is an additional reservation of the rights to go upon there at all times, under all conditions for the purpose of prospecting, I think this would tend to destroy the value of the land in case the State was going to sell the land, and they would not get any where near its real worth.

MR. SCOTT: The reservation of the mineral deposit itself would amount to nothing without the reservation of the right to prospect and to go upon the land for that purpose. So far as conforming to the Government's patents in cases of this kind I wish to say to the gentleman from Cuming County, Mr. Oleson, that this was copied out of the Government patent, containing the exact words that the Government Reservations are made in.

MR. OLESON: The right to prospect?

MR. SCOTT: Yes, and every word of it was copied from a patent. I had it here just a few days ago and copied it from that; and without the right to go upon the land and prospect, your reservation would be nothing.

MR. BEELER: The Committee in working out this Proposal No. 330 as it stands took its suggestions from the proposal introduced by Mr. Stolley, and the one introduced by Mr. Ross. It tried to place itself in line with the general policy of the United States Government in regard

erty in Nebraska and a million dollars in Iowa, but they are domesticated.

THE CHAIRMAN: All in favor of the motion to indefinitely postpone Proposal No. 230 will signify by saying "aye" and contrary "no."

Motion prevailed.

THE CHAIRMAN: The Secretary will read the next proposal contained in the report of the Arrangement and Phraseology Committee.

(Secretary reads proposal from the Committee to change the title as follows:)

We further recommend that the title to said Article XI on the final arrangement be amended by striking out the word "railroad" and inserting in lieu thereof the words "public service" thereby making the same sufficiently comprehensive to include not only railroad corporations, but all public service corporations and matters pertaining thereto.

THE CHAIRMAN: Gentlemen of the Committee, what will you do with this part of the report of the Committee on Arrangement and Phraseology?

MR. ALBERT: Our committee, upon considering this, felt that perhaps such action would not be absolutely necessary on the part of the Constitutional Convention. We thought perhaps the Secretary of State, in compiling and publishing a Constitution, might change the title of an article, but we thought further that if this body adopted a motion recommending that the title be changed, that that would carry sufficient weight and change it. This Article XI in the old Constitution, headed "Railroad Corporations" by the proposals which we have adopted today we have placed into it a number of additional propositions affecting other public service institutions. Therefore, our committee merely made a recommendation to this Convention with a view that this Convention adopt it, and as a recommendation to the Secretary of State, advised the changing of the title of this article, to Public Service Corporations, in place of Railroad Corporations, because it now covers many subjects other than railroads. At the time of the adoption of the Constitution of 1875, about the only Public Service Corporations in the state were railroad companies. There are now many others.

MR. PETERSON: Is it your understanding that this is a part of the Constitution adopted as such or is that an editor's insertion?

MR. TE POEL: We took it for granted that it was an editor's insertion, but all the editors for many years past have inserted it.

MR. PETERSON: Then what we are doing is amending an editor's insertion.

MR. TE POEL: We are advising the Secretary of State to change the title.

THE CHAIRMAN: I am informed by the Secretary that there was no motion made to adopt this recommendation of the committee, and we had better back up and start over again.

Motion

MR. TE POEL: I move that the report of the committee be adopted.

THE CHAIRMAN: You have heard the motion, that the report of the committee be adopted: All those in favor of the motion signify by saying "aye" and opposed "no."

Motion prevailed.

THE CHAIRMAN: The next proposal regarding Article XIV, as contained in the report of the Committee on Arrangement and Phraseology is Proposal No. 129.

Proposal No. 129.

Your Committee on Arrangement and Phraseology to which was referred Proposals Nos. 129, 111, 282 and 333 begs to recommend that the same be adopted as amendments to the present Constitution to be incorporated into Article XIV thereof, Section 1, 2 and 3 to be and constitute Sections 4, 5 and 6 respectively of said article.

Section 4. The necessity of water for domestic use and for irrigation purposes in the State of Nebraska is hereby declared to be a natural want.

Section 5. The use of water of every natural stream, within the state of Nebraska is hereby dictated to the people of the state for beneficial purposes, subject to the provisions of the following section.

Section 6. The right to divert unappropriated waters of every natural stream for beneficial use shall never be denied except when such denial is demanded by the public interest. Priority of appropriation shall give the better right as between those using the water for the same purpose, but when the waters of any natural stream are not sufficient for the use of all those desiring to use the same, those using the water for domestic purposes shall have preference over those claiming it for any other purpose, and those using the water for agricultural purposes shall have the preference over those using the same for manufacturing purposes. Provided, vested rights shall be preserved.

THE CHAIRMAN: You have heard the reading of Proposal No. 129 as contained in the report of the Arrangement and Phraseology Committee. Are there any remarks?

MR. OLESON: In connection with this proposal I desire to call the attention of the committee to Chapter 3369 of the Revised Statutes of Nebraska for 1911, and if they will take Proposal No. 129 I will read the sections from the statutes and they can compare them.

3369 Section 1. Water for irrigation a natural want.—Water for the purposes of irrigation in the state of Nebraska, is hereby declared to be a natural want. (1895, p. 269; Ann. 6844; Comp. 6473.)

3370 Sec. 2. Dedication of water to public use.—The water of every natural stream not heretofore appropriated within the state of Nebraska, is hereby declared to be the property of the public, and is dedicated to the use of the people of the state, subject to appropriation as hereinbefore provided. (1895, p. 260; Ann. 6821; Comp. 6450.)

3372 Sec. 4. Use of waters—priority.—The right to divert unappropriated waters of every natural stream for beneficial use shall never be denied. Priority of appropriation shall give the better right as between those using the water for the same purposes but when the waters of any natural stream are not sufficient for the use of all those desiring the use of the same, those using the water for domestic purposes shall have the preference over those claiming it for any other purpose, and those using the water for agricultural purposes shall have the preference over those using the same for manufacturing purposes. (1895, p. 260; Ann. 6822; Comp. 6451.)

This has been upon our statute book for twenty-five years, and has been held constitutional by our Supreme Court in a number of cases which are cited under these sections.

MR. NORVAL: Do you not think we ought to legislate again on it?

MR. OLESON: Well, the only trouble will be we should give some ear marks so that the annotators of the statutes will know that it was legislated upon again by the Convention of 1919 and 1920.

Motion.

MR. TE POEL: I move you that when the committee arise it recommend Proposal No. 129 for indefinite postponement.

THE CHAIRMAN: You have heard the motion of the gentleman from Douglas County, Mr. TePoel, that when this committee arise it recommend Proposal No. 129 for indefinite postponement. Are there any remarks?

MR. SCOTT: The constitutional provision that is offered here in this proposal is not the statute in any particular. There is this ear mark, if the gentleman wants an ear mark. The one is recognizing

water as the property of the state, and the other is recognizing the use of the water, which is another proposition entirely.

MR. OSBORNE: There is another difference between the statutes as read by Judge Oleson, and this provision offered here for the constitutional adoption. Take it in Section 3 for example, "No public utility corporation shall consolidate its stock, property, franchise, or earnings in whole or in part with any other public utility corporation owning a parallel or competing property without permission of the Railway Commission; and in no case shall any consolidation take place except upon public notice of at least sixty days to all stock holders, in such manner as may be provided by law. The legislature may by law require all public utilities to exchange, through physical connection, joint use, connected service or otherwise." That is another difference. Gentlemen, I think that it is a mistake to treat this matter so lightly, that is to say as though we were seeking to copy into the Constitution simply a legislative provision which is now covered. There are indeed some provisions here covered by legislation, but that legislation is subject at any time to change. We have in the western part of this state developed a condition which is dependent upon organization, and we do not wish to have that condition depend upon the whim of a legislature which is elected from districts of the state where men know absolutely nothing about the matter of irrigation. We believe we are entitled to the same consideration as the men of other states where irrigation is practiced now enjoy in having a constitutional foundation for the conditions which they have developed, and that is what this proposal asks for.

Motion.

MR. BEELER: I hope the motion to indefinitely postpone this proposal will not prevail. I recognize the fact that some of the provisions that are copied in this proposal are in the statutes but the statute is liable to repeal at any time, and there is another fundamental difference in this proposal and the statutory provision, and that is that it is the use of the water that is dedicated to the people of the state, and this proposal does not recognize any property right in the state in the water, and if you indefinitely postpone this proposal, you are jeopardizing the water which the people of the western part of the state have appropriated to irrigation purposes, to the whims of the state of Colorado. Colorado takes the position that the waters that fall upon her mountains, the snows that fall there and melt there and run down into the streams are all the property of the state of Colorado, and that she can do what she pleases. She has in her constitution the provision that it is the property of the state—the water, itself. This recognizes a property right only in the use of the water after it has been appropriated and placed in the canal, but the use is dedicated to the people of the state. That is a fundamental principle. It is a principle which today is pending

before the Supreme Court of the United States, and that court has been hung up on it for over two years, and yet, gentlemen, are you, those of you from the eastern part of the state, and I want to address myself particularly to Judge Oleson, are you ready to throw this overboard when the United States Supreme Court itself has not yet rendered a decision on the very point involved in the suit between Wyoming and Colorado? Why should you treat it so lightly? If you were from the western part of the state and had gone through all the hardships which those people have gone through in order to establish before the legislature their rights, and are now trying to get in the fundamental law a recognition of those rights, you would not treat it so lightly, and simply because you find it in the statute. There are many things that the legislature can do in the absence of constitutional provisions and yet you have placed many of those things in the Constitution, but at least when you get them in the Constitution then they are not subject to any changes by the legislature. Suppose the same spirit that actuates Mr. Oleson just now should invade a legislature of the state of Nebraska, and they should repeal those laws which protect those vast interests in the western part of the state, what would become of our work, and of our efforts for all these privations we have gone through with in order to establish these things? I think I have said enough. I hope that you will not, in the spirit of a light vein, discard the things which the people in the western part of the state ask for and which do no harm to anybody, which will protect our rights in the fundamental law of the state of Nebraska.

I move as a substitute that Proposal No. 129 be recommended by this committee, when it arise, for passage and that it be placed on third reading.

THE CHAIRMAN: You have heard the substitute motion. Are there any remarks?

MR. PETERSON: I would like to inquire where the proper stage of these proceedings is for proposed amendments? I understand that the Secretary has an amendment on his desk.

MR. BEELER: Then I will withdraw the motion for a moment.

MR. SEARS: I would like to ask Mr. Beeler, if the words "use of the water" is not tantamount to saying "ownership?"

MR. BEELER: The courts have held that the use of water of running streams is subject to the police power of the state and it is not the expression that I use in this Constitutional Convention, and not the expression of the statute. It is not a property right but the police power of the state distributing the water to those entitled to it, and regulating it through that power.

THE CHAIRMAN: The question now recurs upon the motion to indefinitely postpone Proposal No. 129 and all amendments. Are you ready for the question?

MR. WEAVER: We are voting now on the indefinite postponement of Proposal No. 129?

THE CHAIRMAN: Yes.

MR. BEELER: I would like a roll call.

THE CHAIRMAN: There being more than ten seconds to the request for a roll call, the Secretary will call the roll.

The Secretary called the roll and those voting in the affirmative were: Albert, Corothers, Hastings, Oleson, TePoel, Wall.—6.

Those voting in the negative were: Abbott, Alder, Anderson, Austin, Beeler, Bigelow, Bratton, Bryant, Byrum, Cleve, Cornell, Coufal, Cowan, Davies, Donohoe (Holt), Elwood, Epperson, Evans, Fauquet, Ferneau, Flansburg, Greuber, Halderman, Hare, Haskell, Heasty, Hewett, Higgins, Holbrook, Howard, Jackson, Johnson, Junkin, Keefe, Keeney, Kieck, Kunz, Lahners, Landgren, Lehman, Lewis, Lute, Malicky, Marvin, Matteson, Meserve, McDonald, McLaughlin, McLeod, Norman, Norton, Norval, Nye, Osborne, Peterson, Pitzer, Pollard, Price, Pugsley, Radke, Ream, Rhoades, Rodman, Ross, Saunders, Scott, Sears, Sidner, Spillman, Spirk, Stebbins, Stewart, Stolley, Strong, Sughroue, Sullivan, Taylor, Thielen, Tyler, Varner, Votava, Widle, Wilson (Dawes), Wilson (Douglas), Wiltse, Mr. President.—86.

THE CHAIRMAN: The majority having voted in the negative the motion does not prevail, and the question now recurs on the report of the committee. Are there any amendments?

Motion.

MR. FLANSBURG: When we were considering this before, in the Committee of the Whole, just before adjournment, there were added these words "provided vested rights shall be preserved." The effect of that might be to continue the vested rights of appropriation indefinitely. Under the statute and under the rule, the termination of use ends the right of the appropriator. In other words, when the use ceases the right ceases. Under this constitutional proposal rights will be preserved. I wish the rights to be preserved, unless they are forfeited in the manner provided by law.

I move to amend the committee report of Proposal No. 129 by striking out all of line 11 and inserting in lieu thereof the words "No in-

rior right to the use of the waters of the state shall be acquired by a superior right without just compensation therefor, to the inferior user."

Having declared by the Constitution that the power right must yield to the agricultural use, just as the agricultural use must yield to the domestic use, I have offered this amendment to safeguard the rights of those who might use the water for all purposes, so that in case the superior user, agriculture, desired to appropriate power water, it would be compelled to make just compensation to the inferior user, or the power user. That would be compelled without this provision, but to satisfy the gentlemen who are interested, I have offered this amendment.

THE CHAIRMAN: All those in favor of this amendment offered by the gentleman from Lancaster County, Mr. Flansburg, will signify by saying "Aye" and opposed "No."

Motion prevailed.

Motion.

MR. OSBORNE: I move that the word "except" be restored after the word "denied" in line 2 of Section 6 of Proposal No. 129.

THE CHAIRMAN: You have heard the motion. Are there any remarks?

MR. OSBORNE: That word was in there but it is not in the report as recommended by the Committee, and my motion is just to get this straightened out.

MR. FLANSBURG: When we read this in the Committee of the Whole the second time, Mr. Beeler offered a motion to insert that and that motion was carried, it being held that it was merely a clerical error, and so could be inserted.

THE CHAIRMAN: You have heard the motion to insert the word that has been left out, all those in favor of this motion will signify by saying "Aye" and opposed "No."

Motion prevailed.

Motion.

MR. BEELER: I move that Proposal No. 129 as amended, when this Committee arise, be recommended for passage and referred to the Committee on Arrangement and Phraseology and placed on third reading.

THE CHAIRMAN: It has been moved and seconded that Proposal No. 129 as amended be recommended for passage and sent to the Committee on Arrangement and Phraseology, and placed on file for third reading. All those in favor signify by saying "Aye" and opposed "No."

Motion prevailed.

THE CHAIRMAN: The next section of the report of the Committee on Arrangement and Phraseology is Proposal No. 282.

Proposal No. 282.

"And said Proposals 282, 211 and 333 to be and constitute Sections 7, 8 and 9 thereof and the whole to be arranged and worded as follows:

Section 7. The use of the waters of the state for power purposes shall be deemed a public use and shall never be alienated but may be developed as by law prescribed."

Motion.

MR. NYE: I move to amend Proposal No. 282 by striking out the following words in line 3: "but may be developed as by law provided," and insert in lieu thereof the following, "but the legislature may provide for leasing the same for development" so that the proposal will read as follows:

"The use of the water of the state for power purposes shall be deemed a public use, and shall never be alienated but the legislature may provide for leasing the same for development."

THE CHAIRMAN: You have heard the amendment of the gentleman from Buffalo County, Mr. Nye. Are there any remarks?

MR. NYE: My object in making this change, after conferring with the gentleman from Douglas County, Mr. Abbott, was for the purpose of getting into the proposal the exact meaning which was intended. We find that Section 9 of Article XV of the Kansas Constitution provides that a homestead occupied as a residence shall not be alienated without the joint consent of the husband and wife. In construing that section of the Constitution, the Supreme Court of Kansas has held in the 26th Kansas, page 116, that said section prohibits the husband from making a lease for five years or giving possession to a tenant without consent of the wife, and that the execution of a lease upon real estate and the transfer of possession thereunder is a species of conveyance. You will notice that the section in the Kansas Constitution is practically the identical words used in this proposal, and it is in order to give the state the power to lease and not alienate that I have proposed this amendment. In support of that further is the Constitution of the State of Michigan, and the Supreme Court of Michigan in the 157th Michigan, page 167, held that a lease of a homestead is an alienation thereof within the provision of the Constitution, and is void unless signed by the lessor's wife. So that if we do not have the word "alienated" with a

Ex. No. 2

LB 1226

LB 1226

LEGISLATURE OF NEBRASKA

NINETY-NINTH LEGISLATURE

SECOND SESSION

LEGISLATIVE BILL 1226

FINAL READING

Introduced by Langemeier, 23

Read first time January 18, 2006

Committee: Natural Resources

A BILL

1 FOR AN ACT relating to the environment; to amend sections
2 46-229.02, 46-229.03, 46-229.04, 46-290, 46-291,
3 46-294.01, 46-2,112, 46-2,136, 46-655.01, 46-683,
4 46-691.03, 46-701, 46-706, 46-712, 46-713, 46-714,
5 46-715, 46-719, 46-739, 46-740, and 61-205, Reissued
6 Revised Statutes of Nebraska, sections 2-945.01,
7 2-1588, 2-3225, and 2-3240, Revised Statutes Cumulative
8 Supplement, 2004, section 77-3442, Revised Statutes
9 Supplement, 2005, and section 46-602, Reissue Revised
10 Statutes of Nebraska, as amended by section 2,
11 Legislative Bill 508, Ninety-ninth Legislature, Second
12 Session, 2006; to change notice requirements for projects
13 under the Noxious Weed Control Act; to change provisions

6.04.23

LB 1226

LB 1226

1 relating to the Natural Resources Development Fund;
2 to provide and change tax levy authority for natural
3 resources districts; to create the Storm Water Management
4 Plan Program and the Interrelated Water Management
5 Plan Program; to change provisions relating to water
6 appropriations, the Water Policy Task Force, water wells,
7 and the Nebraska Ground Water Management and Protection
8 Act; to provide powers for the Department of Natural
9 Resources; to harmonize provisions; to provide operative
10 dates; to repeal the original sections; and to declare
11 an emergency.

12 Be it enacted by the people of the State of Nebraska,

1 Section 1. A control authority may direct and carry out
2 projects of control for one or more specific noxious weeds without
3 individual notice as prescribed in section 2-955 if the control
4 authority has caused publication of notices of such project as
5 provided in this section. The notice shall be published in one
6 or more newspapers of general circulation throughout the area
7 over which such control authority has jurisdiction and shall be
8 published weekly for four successive weeks prior to the project
9 commencement date specified in the notice for the control project.
10 Such notice shall state the noxious weed or weeds to be controlled
11 by the project, the date the project will commence, and the
12 approximate period of time when the project will be carried out. In
13 no event shall a fine or lien be assessed against a landowner as
14 prescribed in section 2-955 for a project under this section unless
15 the control authority has caused individual notice to be served
16 upon the landowner as specified in section 2-955.

17 Sec. 2. Section 2-945.01, Revised Statutes Cumulative
18 Supplement, 2004, is amended to read:

19 2-945.01 Sections 2-945.01 to 2-966 and section 1 of this
20 act shall be known and may be cited as the Noxious Weed Control
21 Act.

22 Sec. 3. Section 2-1588, Revised Statutes Cumulative
23 Supplement, 2004, is amended to read:

24 2-1588 (1) Any money in the Nebraska Resources
25 Development Fund may be allocated by the commission in accordance

1 with sections 2-1586 to 2-1595 for utilization by the department,
2 by any state office, agency, board, or commission, or by any
3 political subdivision of the state which has the authority to
4 develop the state's water and related land resources. Such money
5 may be allocated in the form of grants or loans or for acquiring
6 state interests in water and related land resources programs and
7 projects undertaken within the state. The allocation of funds to
8 a program or project in one form shall not of itself preclude
9 additional allocations in the same or any other form to the same
10 program or project. Funds may also be allocated to assist natural
11 resources districts in the preparation of management plans as
12 provided in section 46-709. Funds so allocated shall not be subject
13 to sections 2-1589 to 2-1595.

14 (2) No project, including all related phases, segments,
15 parts, or divisions, shall receive more than ten million dollars
16 from the fund. On July 1, 1994, and each year thereafter of
17 each year, the director shall adjust the project cost and payment
18 limitation of this subsection by an amount equal to the average
19 percentage change in the federal Department of Commerce, Bureau of
20 the Census, Composite Construction Cost Index a readily available
21 construction cost index for the prior three years.

22 (3) Prior to September 1 of each even-numbered year, a
23 biennial report shall be made to the Governor and the Clerk of
24 the Legislature describing the work accomplished by the use of
25 such development fund during the immediately preceding two-year

1 period. The report shall include a complete financial statement.
2 Each member of the Legislature shall receive a copy of such report
3 upon making a request to the director.

4 Sec. 4. Section 2-3225, Revised Statutes Cumulative
5 Supplement, 2004, is amended to read:

6 2-3225 (1)(a) Each district shall have the power and
7 authority to levy a tax of not to exceed four and one-half cents
8 on each one hundred dollars of taxable valuation annually on all of
9 the taxable property within such district unless a higher levy is
10 authorized pursuant to section 77-3444.

11 (b) Each district shall also have the power and authority
12 to levy a tax equal to the dollar amount by which its restricted
13 funds budgeted to administer and implement ground water management
14 activities and integrated management activities under the Nebraska
15 Ground Water Management and Protection Act exceed its restricted
16 funds budgeted to administer and implement ground water management
17 activities and integrated management activities for FY2003-04, not
18 to exceed one cent on each one hundred dollars of taxable valuation
19 annually on all of the taxable property within the district.

20 (c) In addition to the power and authority granted in
21 subdivisions (1)(a) and (b) of this section, each district located
22 in a river basin, subbasin, or reach that has been determined
23 to be fully appropriated pursuant to section 46-714 or designated
24 overappropriated pursuant to section 46-713 by the Department of
25 Natural Resources shall also have the power and authority to

1 levy a tax equal to the dollar amount by which its restricted
2 funds budgeted to administer and implement ground water management
3 activities and integrated management activities under the Nebraska
4 Ground Water Management and Protection Act exceed its restricted
5 funds budgeted to administer and implement ground water management
6 activities and integrated management activities for FY2005-06, not
7 to exceed three cents on each one hundred dollars of taxable
8 valuation on all of the taxable property within the district for
9 fiscal year 2006-07 and not to exceed two cents on each one
10 hundred dollars of taxable valuation annually on all of the taxable
11 property within the district for fiscal years 2007-08 and 2008-09.

12 (2) The proceeds of such tax shall be used, together with
13 any other funds which the district may receive from any source, for
14 the operation of the district. When adopted by the board, the levy
15 shall be certified by the secretary to the county clerk of each
16 county which in whole or in part is included within the district.
17 Such levy shall be handled by the counties in the same manner
18 as other levies, and proceeds shall be remitted to the district
19 treasurer. Such levy shall not be considered a part of the general
20 county levy and shall not be considered in connection with any
21 limitation on levies of such counties.

22 Sec. 5. Section 2-3240, Revised Statutes Cumulative
23 Supplement, 2004, is amended to read:

24 2-3240 In matters pertaining to applications for
25 appropriation and use of surface water, construction of dams,

1 drainage and channel rectification projects, and installation
2 of ground water wells, districts shall comply with Chapter 46,
3 articles 2, and 6, and 7, and the applicable rules and regulations
4 of the department.

5 Sec. 6. The Storm Water Management Plan Program is
6 created. The purpose of the program is to facilitate and fund
7 the duties of cities and counties under the federal Clean
8 Water Act, 33 U.S.C. 1251 et seq., as such act existed on
9 January 1, 2006, regarding storm water runoff under the National
10 Pollutant Discharge Elimination System requirements. The Storm
11 Water Management Plan Program shall function as a grant program
12 administered by the Department of Environmental Quality, using
13 funds appropriated for the program. The department shall deduct
14 from funds appropriated amounts sufficient to reimburse itself for
15 its costs of administration of the grant program. Any city or
16 county when applying for a grant under the program shall have a
17 storm water management plan approved by the department which meets
18 the requirements of the National Pollutant Discharge Elimination
19 System. Grant applications shall be made to the department on forms
20 prescribed by the department. Grant funds shall be distributed by
21 the department as follows:

22 (1) Not less than eighty percent of the funds available
23 for grants under this section shall be provided to cities and
24 counties in urbanized areas, as identified in 64 Federal Register
25 68822, that apply for grants and meet the requirements of this

1 section. Grants made pursuant to this subdivision shall be
2 distributed proportionately based on the population of applicants
3 within such category, as determined by the most recent federal
4 census update or recount certified by the United States Department
5 of Commerce, Bureau of the Census. Any funds available for grants
6 under this subdivision and not awarded by the end of a calendar
7 year shall be available for grants in the following year; and

8 (2) Not more than twenty percent of the funds available
9 for grants under this section shall be provided to cities
10 and counties outside of urbanized areas, as identified in 64
11 Federal Register 68822, with populations greater than ten thousand
12 inhabitants as determined by the most recent federal census
13 update or recount certified by the United States Department of
14 Commerce, Bureau of the Census, that apply for grants and meet
15 the requirements of this section. Grants under this subdivision
16 shall be distributed proportionately based on the population of
17 applicants within this category as determined by the most recent
18 federal census update or recount certified by the United States
19 Department of Commerce, Bureau of the Census. Any funds available
20 for grants pursuant to this subdivision which have not been awarded
21 at the end of each calendar year shall be available for awarding
22 grants pursuant to subdivision (1) of this section.

23 Any city or county receiving a grant under subdivision
24 (1) or (2) of this section shall contribute matching funds equal to
25 twenty percent of the grant amount.

1 Sec. 7. Section 46-229.02, Reissue Revised Statutes of
2 Nebraska, is amended to read:

3 46-229.02 (1) If, based upon the results of a field
4 investigation or upon information, however obtained, the department
5 makes preliminary determinations (a) that an appropriation has not
6 been used, in whole or in part, for a beneficial or useful purpose
7 or having been so used at one time has ceased to be used, in whole
8 or in part, for such purpose for more than five consecutive years
9 and (b) that the department knows of no reason that constitutes
10 sufficient cause, as provided in section 46-229.04, for such nonuse
11 or that such nonuse has continued beyond the additional time
12 permitted because of the existence of any applicable sufficient
13 cause, the department shall serve notice of such preliminary
14 determinations upon the owner or owners of such appropriation and
15 upon any other person who is an owner of the land under such
16 appropriation. Such notice shall contain the information required
17 by section 46-229.03, shall be provided in the manner required by
18 such section, and shall be posted on the department's web site.
19 Each owner of the appropriation and any owner of the land under
20 such appropriation shall have thirty days after the mailing or
21 last publication, as applicable, of such notice to notify the
22 department, on a form provided by the department, that he or
23 she contests the department's preliminary determination of nonuse
24 or the department's preliminary determination of the absence of
25 sufficient cause for such nonuse. Such notification shall indicate

1 the reason or reasons the owner is contesting the department's
2 preliminary determination and include any information the owner
3 believes is relevant to the issues of nonuse or sufficient cause
4 for such nonuse.

5 (2) If no owner of the appropriation or of the land
6 under the appropriation provides notification to the department
7 in accordance with subsection (1) of this section, the director
8 may issue an order canceling the appropriation in whole or in
9 part. The extent of such cancellation shall not exceed the extent
10 described in the department's notice to the owner or owners in
11 accordance with subsection (1) of this section. A copy of the order
12 canceling the appropriation, or part thereof, shall be posted on
13 the department's web site and shall be provided to the owner or
14 owners of the appropriation and to any other owner of the land
15 under the appropriation in the same manner that notices are to be
16 given in accordance with subsection (2), (3), or (4) of section
17 46-229.03, as applicable. No cancellation under this subsection
18 shall prohibit an irrigation district, a reclamation district,
19 a public power and irrigation district, or a mutual irrigation
20 company or canal company from asserting the rights provided by
21 subsections (5) and (6) of section 46-229.04.

22 (3) If an owner of the appropriation provides
23 notification to the department in accordance with subsection (1)
24 of this section, the department shall review the owner's stated
25 reasons for contesting the department's preliminary determination

1 and any other information provided with the owner's notice. If
2 the department determines that the owner has provided sufficient
3 information for the department to conclude that the appropriation
4 should not be canceled, in whole or in part, it shall inform the
5 owners of the appropriation, and any other owners of the land under
6 the appropriation, of such determination.

7 (4) If the department determines that an owner has
8 provided sufficient information to support the conclusion that the
9 appropriation should be canceled only in part and if (a) the
10 owner or owners filing the notice of contest agree in writing
11 to such cancellation in part and (b) such owner or owners are
12 the only known owners of the appropriation and of the land under
13 the appropriation, the director may issue an order canceling the
14 appropriation to the extent agreed to by the owner or owners and
15 shall provide a copy of such order to such owner or owners.

16 (5) If the department determines that subsections (2),
17 (3), and (4) of this section do not apply, it shall schedule and
18 conduct a hearing on the cancellation of the appropriation in whole
19 or in part. Notice of the hearing shall be provided to the owner or
20 owners who filed notices with the department pursuant to subsection
21 (1) of this section, to any other owner of the appropriation known
22 to the department, and to any other owner of the land under the
23 appropriation. The notice shall be posted on the department's web
24 site and shall be served or published, as applicable, in the manner
25 provided in subsection (2), (3), or (4) of section 46-229.03, as

1 applicable.

2 (6) Following a hearing conducted in accordance with
3 subsection (5) of this section and subsection (1) of section
4 46-229.04, the director shall render a decision by order. A copy
5 of the order shall be provided to the owner or owners of the
6 appropriation and to any other person who is an owner of the land
7 under the appropriation. The copy of the order shall be posted
8 on the department's web site and shall be served or published, as
9 applicable, in the same manner that notices are to be given in
10 accordance with subsection (2), (3), or (4) of section 46-229.03,
11 as applicable, except that if publication is required, it shall be
12 sufficient for the department to publish notice that an order has
13 been issued. Any such published notice shall identify the land or
14 lands involved and shall provide the address and telephone number
15 that may be used to obtain a copy of the order.

16 (7) A water appropriation that has not been perfected
17 pursuant to the terms of the permit may be canceled by the
18 department without complying with sections 46-229.01 to 46-229.04
19 if the owner of such appropriation fails to comply with any of the
20 conditions of approval in the permit, except that this subsection
21 does not apply to appropriations to which subsection (2) of section
22 46-237 applies.

23 Sec. 8. Section 46-229.03, Reissue Revised Statutes of
24 Nebraska, is amended to read:

25 46-229.03 (1) The notice provided by the department

1 in accordance with subsection (1) or (5) of section 46-229.02
2 shall contain: (a) A description of the appropriation; (b) the
3 number assigned to the appropriation by the department; (c) the
4 date of priority; (d) the point of diversion; (e) if the notice
5 is published, the section or sections of land which contain
6 the lands located under such appropriation; (f) if the notice
7 is served by personal service or by registered or certified
8 mail, a description of the lands which are located under such
9 appropriation, a description of the information used by the
10 department to reach the preliminary determinations of nonuse,
11 and a copy of section 46-229.04; (g) a description of the owner's
12 options in response to the notice; (h) a department telephone
13 number which any person may call during normal business hours
14 for more information regarding the owner's rights and options,
15 including what constitutes sufficient cause for nonuse; (i) if the
16 notice is provided in accordance with subsection (1) of section
17 46-229.02 and is mailed, a copy of the form that such owner may
18 file to request a departmental hearing; ~~(j) if the notice is~~
19 ~~provided in accordance with subsection (1) of section 46-229.02~~
20 ~~and is published, contest such determination, if notice is provided~~
21 ~~in accordance with subsection (1) of section 46-229.02 and is~~
22 ~~mailed; (j) the location where the owner may obtain a form to file~~
23 ~~to request a departmental hearing contest such determination, if~~
24 ~~notice is provided in accordance with subsection (1) of section~~
25 ~~46-229.02 and is published;~~ and (k) if the notice is provided

1 in accordance with subsection (5) of section 46-229.02, the date,
2 time, and location of the hearing.

3 (2) For any owner whose name and address are known to
4 the department or can be reasonably obtained by the department, the
5 notice shall be served by personal service or by registered mail or
6 certified mail. Any landowner's name or address shall be considered
7 reasonably obtainable if that person is listed as an owner of the
8 land involved, on the records of the county clerk or register of
9 deeds for the county in which the land is located.

10 (3) For any owner whose name and address are not known to
11 the department and cannot reasonably be obtained by the department,
12 such notice shall be served by publication in a legal newspaper
13 published or of general circulation in any county in which the
14 place of diversion is located and in a legal newspaper published
15 or of general circulation in each county containing land for which
16 the right to use water under the appropriation is subject to
17 cancellation. Each such publication shall be once each week for
18 three consecutive weeks.

19 (4) Landowners whose property under such appropriation is
20 located within the corporate limits of a city or village shall
21 be served by the publication of such notice in a legal newspaper
22 published or of general circulation in the county in which the city
23 or village is located. The notice shall be published once each week
24 for three consecutive weeks.

25 Sec. 9. Section 46-229.04, Reissue Revised Statutes of

1 Nebraska, is amended to read:

2 46-229.04 (1) At such hearing the verified field
3 investigation report of an employee of the department, or such
4 other report or information that is relied upon by the department
5 to reach the preliminary determination of nonuse, shall be prima
6 facie evidence for the forfeiture and annulment of such water
7 appropriation. If no person appears at the hearing, such water
8 appropriation or unused part thereof shall be declared forfeited
9 and annulled. If an interested person appears and contests the
10 same, the department shall hear evidence, and if it appears that
11 such water has not been put to a beneficial use or has ceased to
12 be used for such purpose for more than five consecutive years, the
13 same shall be declared canceled and annulled unless the department
14 finds that (a) there has been sufficient cause for such nonuse as
15 provided for in subsection (2), (3), or (4) of this section or (b)
16 subsection (5) or (6) of this section applies.

17 (2) Sufficient cause for nonuse shall be deemed to exist
18 for up to thirty consecutive years if such nonuse was caused by the
19 unavailability of water for that use. For a river basin, subbasin,
20 or reach that has been designated as overappropriated pursuant
21 to section 46-713 or determined by the department to be fully
22 appropriated pursuant to section 46-714, the period of time within
23 which sufficient cause for nonuse because of the unavailability
24 of water may be deemed to exist may be extended beyond thirty
25 years by the department upon petition therefor by the owner of

1 the appropriation if the department determines that an integrated
2 management plan being implemented in the river basin, subbasin, or
3 reach involved is likely to result in restoration of a usable water
4 supply for the appropriation.

5 (3) Sufficient cause for nonuse shall be deemed to exist
6 indefinitely if such nonuse was the result of one or more of the
7 following:

8 (a) For any tract of land under separate ownership, the
9 available supply was used but on only part of the land under the
10 appropriation because of an inadequate water supply;

11 (b) The appropriation is a storage appropriation and
12 there was an inadequate water supply to provide the water for the
13 storage appropriation or less than the full amount of the storage
14 appropriation was needed to keep the reservoir full; or

15 (c) The appropriation is a storage-use appropriation and
16 there was an inadequate water supply to provide the water for the
17 appropriation or use of the storage water was unnecessary because
18 of climatic conditions.

19 (4) Sufficient cause for nonuse shall be deemed to exist
20 for up to fifteen consecutive years if such nonuse was a result of
21 one or more of the following:

22 (a) Federal, state, or local laws, rules, or regulations
23 temporarily prevented or restricted such use;

24 (b) Use of the water was unnecessary because of climatic
25 conditions;

1 (c) Circumstances were such that a prudent person,
2 following the principles of good husbandry, would not have been
3 expected to use the water;

4 (d) The works, diversions, or other facilities essential
5 to use the water were destroyed by a cause not within the control
6 of the owner of the appropriation and good faith efforts to repair
7 or replace the works, diversions, or facilities have been and are
8 being made;

9 (e) The owner of the appropriation was in active
10 involuntary service in the armed forces of the United States
11 or was in active voluntary service during a time of crisis;

12 (f) Legal proceedings prevented or restricted use of the
13 water; or

14 (g) The land subject to the appropriation is under
15 an acreage reserve program or production quota or is otherwise
16 withdrawn from use as required for participation in any federal or
17 state program or such land previously was under such a program but
18 currently is not under such a program and there have been not more
19 than five consecutive years of nonuse on that land since that land
20 was last under that program.

21 The department may specify by rule and regulation other
22 circumstances that shall be deemed to constitute sufficient cause
23 for nonuse for up to fifteen years.

24 (5) When an appropriation is held in the name of
25 an irrigation district, reclamation district, public power and

1 irrigation district, or mutual irrigation company or canal company
2 and the director determines that water under that appropriation
3 has not been used on a specific parcel of land for more than
4 five years and that no sufficient cause for such nonuse exists,
5 the right to use water under that appropriation on that parcel
6 shall be terminated and notice of the termination shall be posted
7 on the department's web site and shall be given in the manner
8 provided in subsection (2), (3), or (4) of section 46-229.03. The
9 district or company holding such right shall have five years after
10 the determination, or five years after an order of cancellation
11 issued by the department following the filing of a voluntary
12 relinquishment of the water appropriation that has been signed by
13 the landowner and the appropriator of record, to assign the right
14 to use that portion of the appropriation to other land within
15 and the district or the area served by the district or company
16 or company, to file an application for a transfer in accordance
17 with section 46-290, or to transfer the right in accordance with
18 sections 46-2,127 to 46-2,129. The department shall issue its order
19 of cancellation within sixty days after receipt of the voluntary
20 relinquishment. The department shall be notified of any such
21 assignment within thirty days thereafter after such assignment. If
22 the district or company does not assign the right to use that
23 portion of the appropriation to other land, does not file an
24 application for a transfer within the five-year period, or does not
25 notify the department within thirty days after any such assignment,

1 that portion of the appropriation shall be canceled without further
2 proceedings by the department and the district or company involved
3 shall be so notified by the department. During the time within
4 which assignment of a portion of an appropriation is pending, the
5 allowable diversion rate for the appropriation involved shall be
6 reduced, as necessary, to avoid inconsistency with the rate allowed
7 by section 46-231 or with any greater rate previously approved
8 for such appropriation by the director in accordance with section
9 46-229.06.

10 (6) When it is determined by the director that an
11 appropriation, for which the location of use has been temporarily
12 transferred in accordance with sections 46-290 to 46-294, has not
13 been used at the new location for more than five years and that
14 no sufficient cause for such nonuse exists, the right to use that
15 appropriation at the temporary location of use shall be terminated.
16 Notice of that termination shall be posted on the department's
17 web site and shall be given in the manner provided in subsection
18 (2), (3), or (4) of section 46-229.03. The right to reinitiate
19 use of that appropriation at the location of use prior to the
20 temporary transfer shall continue to exist for five years after the
21 director's determination, but if such use is not reinitiated at
22 that location within such five-year period, the appropriation shall
23 be subject to cancellation in accordance with sections 46-229 to
24 46-229.04.

25 (7) If at the time of a hearing conducted in accordance

1 with subsection (1) of this section there is an application for
2 incidental or intentional underground water storage pending before
3 the department and filed by the owner of the appropriation, the
4 proceedings shall be consolidated.

5 Sec. 10. Section 46-290, Reissue Revised Statutes of
6 Nebraska, is amended to read:

7 46-290 (1)(a) Except as provided in this section and
8 sections 46-2,120 to 46-2,130, any person having a permit to
9 appropriate water for beneficial purposes issued pursuant to
10 sections 46-233 to 46-235, 46-240.01, 46-241, ~~or~~ 46-242, or 46-637
11 and who desires (i) to transfer the use of such appropriation to
12 a location other than the location specified in the permit, (ii)
13 to change that appropriation to a different type of appropriation
14 as provided in subsection (3) of this section, or (iii) to change
15 the purpose for which the water is to be used under a natural-flow,
16 storage, or storage-use appropriation to a purpose not at that time
17 permitted under the appropriation shall apply for approval of such
18 transfer or change to the Department of Natural Resources.

19 (b) The application for such approval shall contain (i)
20 the number assigned to such appropriation by the department, (ii)
21 the name and address of the present holder of the appropriation,
22 (iii) if applicable, the name and address of the person or entity
23 to whom the appropriation would be transferred or who will be
24 the user of record after a change in the location of use, type
25 of appropriation, or purpose of use under the appropriation, (iv)

1 the legal description of the land to which the appropriation is
2 now appurtenant, (v) the name and address of each holder of a
3 mortgage or deed of trust for the land to which the appropriation
4 is now appurtenant, (vi) if applicable, the legal description of
5 the land to which the appropriation is proposed to be transferred,
6 (vii) if a transfer is proposed, whether other sources of water
7 are available at the original location of use and whether any
8 provisions have been made to prevent either use of a new source
9 of water at the original location or increased use of water from
10 any existing source at that location, (viii) if applicable, the
11 legal descriptions of the beginning and end of the stream reach
12 to which the appropriation is proposed to be transferred for the
13 purpose of augmenting the flows in that stream reach, (ix) if a
14 proposed transfer is for the purpose of increasing the quantity
15 of water available for use pursuant to another appropriation, the
16 number assigned to such other appropriation by the department, (x)
17 the purpose of the current use, (xi) if a change in purpose of
18 use is proposed, the proposed purpose of use, (xii) if a change in
19 the type of appropriation is proposed, the type of appropriation to
20 which a change is desired, (xiii) if a proposed transfer or change
21 is to be temporary in nature, the duration of the proposed transfer
22 or change, and (xiv) such other information as the department by
23 rule and regulation requires.

24 (2) If a proposed transfer or change is to be temporary
25 in nature, a copy of the proposed agreement between the current

1 appropriator and the person who is to be responsible for use of
2 water under the appropriation while the transfer or change is in
3 effect shall be submitted at the same time as the application.

4 (3) Regardless of whether a transfer or a change in
5 the purpose of use is involved, the following changes in type of
6 appropriation, if found by the Director of Natural Resources to
7 be consistent with section 46-294, may be approved subject to the
8 following:

9 (a) A natural-flow appropriation for direct out-of-stream
10 use may be changed to a natural-flow appropriation for aboveground
11 reservoir storage or for intentional underground water storage;

12 (b) A natural-flow appropriation for intentional
13 underground water storage may be changed to a natural-flow
14 appropriation for direct out-of-stream use or for aboveground
15 reservoir storage;

16 (c) A natural-flow appropriation for direct out-of-stream
17 use, for aboveground reservoir storage, or for intentional
18 underground water storage may be changed to an instream
19 appropriation subject to sections 46-2,107 to 46-2,119 if the
20 director determines that the resulting instream appropriation would
21 be consistent with subdivisions (2), (3), and (4) of section
22 46-2,115;

23 (d) A natural-flow appropriation for direct out-of-stream
24 use, for aboveground reservoir storage, or for intentional
25 underground water storage may be changed to an appropriation for

1 induced ground water recharge if the director determines that the
2 resulting appropriation for induced ground water recharge would be
3 consistent with subdivisions (2)(a)(i) and (ii) of section 46-235;
4 and

5 (e) The incidental underground water storage portion,
6 whether or not previously quantified, of a natural-flow or
7 storage-use appropriation may be separated from the direct-use
8 portion of the appropriation and may be changed to a natural-flow
9 or storage-use appropriation for intentional underground water
10 storage at the same location if the historic consumptive use
11 of the direct-use portion of the appropriation is transferred
12 to another location or is terminated, but such a separation and
13 change may be approved only if, after the separation and change,
14 (i) the total permissible diversion under the appropriation will
15 not increase, (ii) the projected consequences of the separation
16 and change are consistent with the provisions of any integrated
17 management plan adopted in accordance with section 46-718 or 46-719
18 for the geographic area involved, and (iii) if the location of the
19 proposed intentional underground water storage is in a river basin,
20 subbasin, or reach designated as overappropriated in accordance
21 with section 46-713, the integrated management plan for that river
22 basin, subbasin, or reach has gone into effect, and that plan
23 requires that the amount of the intentionally stored water that is
24 consumed after the change will be no greater than the amount of the
25 incidentally stored water that was consumed prior to the change.

1 Approval of a separation and change pursuant to this subdivision
2 (e) shall not exempt any consumptive use associated with the
3 incidental recharge right from any reduction in water use required
4 by an integrated management plan for a river basin, subbasin, or
5 reach designated as overappropriated in accordance with section
6 46-713.

7 Whenever any change in type of appropriation is approved
8 pursuant to this subsection and as long as that change remains in
9 effect, the appropriation shall be subject to the statutes, rules,
10 and regulations that apply to the type of appropriation to which
11 the change has been made.

12 (4) The Legislature finds that induced ground water
13 recharge appropriations issued pursuant to sections 46-233 and
14 46-235 and instream appropriations issued pursuant to section
15 46-2,115 are specific to the location identified in the
16 appropriation. Neither type of appropriation shall be transferred
17 to a different location, changed to a different type of
18 appropriation, or changed to permit a different purpose of use.

19 (5) In addition to any other purposes for which transfers
20 and changes may be approved, such transfers and changes may
21 be approved if the purpose is (a) to augment the flow in a
22 specific stream reach for any instream use that the department has
23 determined, through rules and regulations, to be a beneficial use
24 or (b) to increase the frequency that a diversion rate or rate of
25 flow specified in another valid appropriation is achieved.

1 For any transfer or change approved pursuant to
2 subdivision (a) of this subsection, the department shall be
3 provided with a report at least every five years while such
4 transfer or change is in effect. The purpose of such report shall
5 be to indicate whether the beneficial instream use for which the
6 flow is augmented continues to exist. If the report indicates that
7 it does not or if no report is filed within sixty days after
8 the department's notice to the appropriator that the deadline
9 for filing the report has passed, the department may cancel its
10 approval of the transfer or change and such appropriation shall
11 revert to the same location of use, type of appropriation, and
12 purpose of use as prior to such approval.

13 (6) A quantified or unquantified appropriation for
14 incidental underground water storage may be transferred to a new
15 location along with the direct-use appropriation with which it is
16 recognized if the director finds such transfer to be consistent
17 with section 46-294 and determines that the geologic and other
18 relevant conditions at the new location are such that incidental
19 underground water storage will occur at the new location. The
20 director may request such information from the applicant as
21 is needed to make such determination and may modify any such
22 quantified appropriation for incidental underground water storage,
23 if necessary, to reflect the geologic and other conditions at the
24 new location.

25 (7) Unless an incidental underground water storage

1 appropriation is changed as authorized by subdivision (3)(e)
2 of this section or is transferred as authorized by subsection
3 (6) of this section or subsection (1) of section 46-291, such
4 appropriation shall be canceled or modified, as appropriate, by
5 the director to reflect any reduction in water that will be stored
6 underground as the result of a transfer or change of the direct-use
7 appropriation with which the incidental underground water storage
8 was recognized prior to the transfer or change.

9 Sec. 11. Section 46-291, Reissue Revised Statutes of
10 Nebraska, is amended to read:

11 46-291 (1) Upon receipt of an application filed under
12 section 46-290 for a transfer in the location of use of an
13 appropriation, the Department of Natural Resources shall review
14 it for compliance with this subsection. The Director of Natural
15 Resources may approve the application without notice or hearing
16 if he or she determines that: (a) The appropriation is used and
17 will continue to be used exclusively for irrigation purposes; (b)
18 the only lands involved in the proposed transfer are (i) lands
19 within the quarter section of land to which the appropriation is
20 appurtenant, (ii) lands within such quarter section of land and
21 one or more quarter sections of land each of which is contiguous
22 to the quarter section of land to which the appropriation is
23 appurtenant, or (iii) lands within the boundaries or service
24 area of and capable of service by the same irrigation district,
25 reclamation district, public power and irrigation district, or

1 mutual irrigation or canal company; (c) after the transfer, the
2 total number of acres irrigated under the appropriation will
3 be no greater than the number of acres that could legally be
4 irrigated under the appropriation prior to the transfer; (d) all
5 the land involved in the transfer is under the same ownership
6 or is within the same irrigation district, reclamation district,
7 public power and irrigation district, or mutual irrigation or canal
8 company; (e) the transfer will not result in a change in the
9 point of diversion; and (f) the transfer will not diminish the
10 water supply available for or otherwise adversely affect any other
11 water appropriator. If transfer of an appropriation with associated
12 incidental underground water storage is approved in accordance
13 with this subsection, the associated incidental underground water
14 storage also may be transferred pursuant to this subsection as
15 long as such transfer would continue to be consistent with the
16 requirements of this subsection. If necessary, the boundaries of
17 the incidental underground water storage area may be modified to
18 reflect any change in the location of that storage consistent with
19 such a transfer. Transfers shall not be approved pursuant to this
20 subsection until the department has adopted and promulgated rules
21 and regulations establishing the criteria it will use to determine
22 whether proposed transfers are consistent with subdivision (1)(f)
23 of this section.

24 (2) If after reviewing an application filed under section
25 46-290 the director determines that it cannot be approved pursuant

1 to subsection (1) of this section, he or she shall cause a notice
2 of such application to be posted on the department's web site,
3 to be sent by certified mail to each holder of a mortgage or
4 deed of trust that is identified by the applicant pursuant to
5 subdivision (1)(b)(v) of section 46-290 and to any entity owning
6 facilities currently used or proposed to be used for purposes
7 of diversion or delivery of water under the appropriation, and
8 to be published at the applicant's expense at least once each
9 week for three consecutive weeks in at least one newspaper of
10 general circulation in each county containing lands to which the
11 appropriation is appurtenant and, if applicable, in at least one
12 newspaper of general circulation in each county containing lands to
13 which the appropriation is proposed to be transferred.

14 (3) The notice shall contain: (a) A description of the
15 appropriation; (b) the number assigned to such appropriation in
16 the records of the department; (c) the date of priority; (d) if
17 applicable, a description of the land or stream reach to which
18 such water appropriation is proposed to be transferred; (e) if
19 applicable, the type of appropriation to which the appropriation
20 is proposed to be changed; (f) if applicable, the proposed change
21 in the purpose of use; (g) whether the proposed transfer or change
22 is to be permanent or temporary and, if temporary, the duration
23 of the proposed transfer or change; and (h) any other information
24 the director deems relevant and essential to provide the interested
25 public with adequate notice of the proposed transfer or change.

1 (4) The notice shall state (a) that any interested person
2 may object to and request a hearing on the application by filing
3 such objections in writing specifically stating the grounds for
4 each objection and (b) that any such objection and request shall be
5 filed in the office of the department within two weeks after the
6 date of final publication of the notice.

7 (5) Within the time period allowed by this section for
8 the filing of objections and requests for hearings, the county
9 board of any county containing land to which the appropriation
10 is appurtenant and, if applicable, the county board of any county
11 containing land to which the appropriation is proposed to be
12 transferred may provide the department with comments about the
13 potential economic impacts of the proposed transfer or change in
14 such county. The filing of any such comments by a county board
15 shall not make the county a party in the application process, but
16 such comments shall be considered by the director in determining
17 pursuant to section 46-294 whether the proposed transfer or change
18 is in the public interest.

19 Sec. 12. Section 46-294.01, Reissue Revised Statutes of
20 Nebraska, is amended to read:

21 46-294.01 Whenever a temporary transfer is approved in
22 accordance with sections 46-290 to 46-294, the Department of
23 Natural Resources shall applicant shall, within sixty days after
24 the order of approval of the Department of Natural Resources, cause
25 copies of the following to be filed with the county clerk or

1 register of deeds of the county in which the land subject to the
2 appropriation prior to the transfer is located: (1) The permit by
3 which the appropriation was established; (2) the agreement by which
4 the temporary transfer is to be effected; and (3) the order of
5 the Director of Natural Resources approving the temporary transfer.
6 Whenever renewal of a temporary transfer is approved pursuant to
7 section 46-294.02, ~~the department shall~~ applicant shall, within
8 sixty days after such approval, cause a copy of the order of
9 the director approving such renewal to be filed with the county
10 clerk or register of deeds of such county. Such documents shall
11 be indexed to the land subject to the appropriation prior to the
12 transfer. The costs of the filing and indexing shall be charged to
13 the applicant for the transfer or renewal, and failure to pay such
14 costs applicant shall file with the department, within ninety days
15 after the department's order of approval, proof of filing with the
16 county clerk or register of deeds. Failure to file such proof of
17 filing within such ninety-day time period shall be grounds for the
18 director to negate any prior approval of the transfer or renewal.

19 Sec. 13. Section 46-2,112, Reissue Revised Statutes of
20 Nebraska, is amended to read:

21 46-2,112 A permit to appropriate water for instream flows
22 shall be subject to review every fifteen years after it is granted.
23 Notice of a pending review shall be published in a newspaper
24 published or of general circulation in the area involved at least
25 once each week for three consecutive weeks, the last publication

1 to be not later than fourteen years and ten months after the
2 permit was granted or after the date of the director's action
3 following the last such review, whichever is later, and such notice
4 shall be mailed to the appropriator of record and posted on the
5 department's web site. The notice shall state that any interested
6 person may file comments relating to the review of the instream
7 appropriation or may request a hearing to present evidence relevant
8 to such review. Any such comments or request for hearing shall
9 be filed in the headquarters office of the department within six
10 weeks after the date of final publication of the notice. The
11 appropriator of record shall, within the six-week period, file
12 written documentation of the continued use of the appropriation.
13 If no requests for hearing are received and if the director is
14 satisfied with the information provided by the appropriator of
15 record that the appropriation continues to be beneficially used
16 and is in the public interest, the director shall issue an order
17 stating such findings. If requested by any interested person, or on
18 his or her own motion based on the comments and information filed,
19 the director shall schedule a hearing. The If a hearing is held,
20 the purpose of the hearing shall be to receive evidence regarding
21 whether the water appropriated under the permit still provides the
22 beneficial uses for which the permit was granted and whether the
23 permit is still in the public interest. The hearing shall proceed
24 under the rebuttable presumption that the appropriation continues
25 to provide the beneficial uses for which the permit was granted

1 and that the appropriation is in the public interest. After the
2 hearing, the director may by order modify or cancel, in whole or in
3 part, the instream appropriation.

4 Sec. 14. Section 46-2,136, Reissue Revised Statutes of
5 Nebraska, is amended to read:

6 46-2,136 The Water Policy Task Force shall discuss the
7 issues described in section 46-2,131 and such related issues as
8 it deems appropriate, shall identify options for resolution of
9 such issues, and shall make recommendations to the Legislature and
10 the Governor relating to any water policy changes the task force
11 deems desirable so long as the task force is authorized by the
12 Legislature.

13 The task force shall complete its work within eighteen
14 months after the Governor notifies the Legislature that all members
15 of the task force have been appointed and a meeting facilitator has
16 been selected.

17 Sec. 15. Section 46-602, Reissue Revised Statutes
18 of Nebraska, as amended by section 2, Legislative Bill 508,
19 Ninety-ninth Legislature, Second Session, 2006, is amended to read:

20 46-602 (1) Each water well completed in this state on
21 or after July 1, 2001, excluding test holes and dewatering wells
22 to be used for less than ninety days, shall be registered with
23 the Department of Natural Resources as provided in this section
24 within sixty days after completion of construction of the water
25 well. The water well contractor as defined in section 46-1213

1 constructing the water well, or the owner of the water well if
2 the owner constructed the water well, shall file the registration
3 on a form made available by the department and shall also file
4 with the department the information from the well log required
5 pursuant to section 46-1241. The department shall, by January 1,
6 2002, provide water well contractors with the option of filing such
7 registration forms electronically. No signature shall be required
8 on forms filed electronically. The fee required by subsection (3)
9 of section 46-1224 shall be the source of funds for any required
10 fee to a contractor which provides the on-line services for such
11 registration. Any discount in the amount paid the state by a credit
12 card, charge card, or debit card company or a third-party merchant
13 bank for such registration fees shall be deducted from the portion
14 of the registration fee collected pursuant to section 46-1224.

15 (2) (a) If the newly constructed water well is a
16 replacement water well, the registration form shall include
17 (i) the registration number of the water well being replaced,
18 if applicable, and (ii) the date the original water well was
19 decommissioned or a certification that the water well will be
20 decommissioned within one hundred eighty days or a certification
21 that the original water well will be modified and equipped to
22 pump fifty gallons per minute or less and will be used only for
23 livestock, monitoring, observation, or any other nonconsumptive use
24 or de minimus use approved by the applicable natural resources
25 district.

1 (b) For purposes of this section, replacement water well
2 means a water well which is constructed to provide water for
3 the same purpose as the original water well and is operating in
4 accordance with any applicable permit from the department and any
5 applicable rules and regulations of the natural resources district
6 and, if the purpose is for irrigation, the replacement water well
7 delivers water to the same tract of land served by the original
8 water well and (i) replaces an abandoned water well within three
9 years after the last operation of the abandoned water well and
10 the original water well is decommissioned either before or within
11 one hundred eighty days after such construction, (ii) replaces a
12 water well that has not been abandoned but will not be used after
13 construction of the new water well and the original water well
14 will be decommissioned within one hundred eighty days after such
15 construction, except that in the case of a municipal water well,
16 the original municipal water well may be used after construction
17 of the new water well but shall be decommissioned within one year
18 after completion of the replacement water well, or (iii) will
19 continue to be used but will be modified and equipped within one
20 hundred eighty days after such construction of the replacement
21 water well to pump fifty gallons per minute or less and will
22 be used only for livestock, monitoring, observation, or any other
23 nonconsumptive or de minimus use and approved by the applicable
24 natural resources district.

25 (c) No water well shall be registered as a replacement

1 water well until the Department of Natural Resources has received
2 a properly completed notice of decommissioning for the water well
3 being replaced on a form made available by the department, or
4 properly completed notice, prepared in accordance with subsection
5 (7) of this section, of the modification and equipping of the
6 original water well to pump fifty gallons per minute or less
7 for use only for livestock, monitoring, observation, or any other
8 nonconsumptive or de minimus use approved by the applicable natural
9 resources district. Such notices, as required, shall be completed
10 by (i) the water well contractor as defined in section 46-1213
11 who decommissions the water well or modifies and equips the water
12 well, (ii) the pump installation contractor as defined in section
13 46-1209 who decommissions the water well or modifies and equips the
14 water well, or (iii) the owner if the owner decommissions a driven
15 sandpoint well which is on land owned by him or her for farming,
16 ranching, or agricultural purposes or as his or her place of
17 abode. The Department of Health and Human Services Regulation and
18 Licensure shall, by rule and regulation, determine which contractor
19 or owner shall be responsible for such notice in situations in
20 which more than one contractor or owner may be required to provide
21 notice under this subsection.

22 (3) For a series of two or more water wells completed and
23 pumped into a common carrier as part of a single site plan for
24 irrigation purposes, a registration form and a detailed site plan
25 shall be filed for each water well. The registration form shall

1 include the registration numbers of other water wells included in
2 the series if such water wells are already registered.

3 (4) A series of water wells completed for purposes
4 of installation of a ground heat exchanger for a structure
5 for utilizing the geothermal properties of the ground shall be
6 considered as one water well. One registration form and a detailed
7 site plan shall be filed for each such series.

8 (5) One registration form shall be required along with
9 a detailed site plan which shows the location of each such water
10 well in the site and a log from each such water well for water
11 wells constructed as part of a single site plan for (a) monitoring
12 ground water, obtaining hydrogeologic information, or extracting
13 contaminants from the ground, (b) water wells constructed as part
14 of remedial action approved by the Department of Environmental
15 Quality pursuant to section 66-1525, 66-1529.02, or 81-15,124, and
16 (c) water well owners who have a permit issued pursuant to the
17 Industrial Ground Water Regulatory Act and also have an underground
18 injection control permit issued by the Department of Environmental
19 Quality.

20 (6) The Department of Natural Resources shall be notified
21 by the owner of any change in the ownership of a water well
22 required to be registered under this section. Notification shall be
23 in such form and include such evidence of ownership as the Director
24 of Natural Resources by rule and regulation directs. The department
25 shall use such notice to update the registration on file. The

1 department shall not collect a fee for the filing of the notice.

2 (7) The water well contractor or pump installation
3 contractor responsible therefor shall notify the department within
4 sixty days on a form provided by the department of any pump
5 installation or any modifications to the construction of the water
6 well or pump, after the initial registration of the well. For
7 a change of use resulting in modification and equipping of an
8 original water well which is being replaced in accordance with
9 subsection (2) of this section, the water well contractor or pump
10 installation contractor shall notify the department within sixty
11 days on a form provided by the department of the water well and
12 pump modifications and equipping of the original water well. A
13 water well owner shall notify the department within sixty days on
14 a form provided by the department of any other changes or any
15 inaccuracies in recorded water well information, including, but not
16 limited to, changes in use. The department shall not collect a fee
17 for the filing of the notice.

18 (8) Whenever a water well becomes an illegal water well
19 as defined in section 46-706, the owner of the water well shall
20 either correct the deficiency that causes the well to be an illegal
21 water well or shall cause the proper decommissioning of the water
22 well in accordance with rules and regulations adopted pursuant
23 to the Water Well Standards and Contractors' Licensing Act. The
24 water well contractor who decommissions the water well, the pump
25 installation contractor who decommissions the water well, or the

1 owner if the owner decommissions a driven sandpoint well which is
2 on land owned by him or her for farming, ranching, or agricultural
3 purposes or as his or her place of abode, shall provide a properly
4 completed notice of abandonment to the Department of Natural
5 Resources within sixty days. The Department of Health and Human
6 Services Regulation and Licensure shall, by rule and regulation,
7 determine which contractor or owner shall be responsible for such
8 notice in situations in which more than one contractor or owner may
9 be required to provide notice under this subsection. The Department
10 of Natural Resources shall not collect a fee for the filing of the
11 notice.

12 (9) Except for water wells which are used solely for
13 domestic purposes and were constructed before September 9, 1993,
14 and for test holes and dewatering wells used for less than ninety
15 days, each water well which was completed in this state before
16 July 1, 2001, and which is not registered on that date shall be an
17 illegal water well until it is registered with the Department of
18 Natural Resources. Such registration shall be completed by a water
19 well contractor or by the current owner of the water well, shall
20 be on forms provided by the department, and shall provide as much
21 of the information required by subsections (1) through (5) of this
22 section for registration of a new water well as is possible at the
23 time of registration.

24 (10) Water wells which are or were used solely for
25 injecting any fluid other than water into the underground water

1 reservoir, which were constructed before July 16, 2004, and which
2 have not been properly decommissioned on or before July 16, 2004,
3 shall be registered on or before July 1, 2005.

4 Sec. 16. Section 46-655.01, Reissue Revised Statutes of
5 Nebraska, is amended to read:

6 46-655.01 (1) A public water supplier as defined in
7 section 46-638 may obtain protection for a public water supply
8 wellfield from encroachment from other water wells by filing with
9 the Department of Natural Resources a notice of intent to consider
10 a wellfield. The notice of intent shall include:

11 (a) The legal description of the land being considered as
12 a public water supply wellfield; and

13 (b) Written consent of the owner of the land considered
14 for a public water supply wellfield, allowing the public water
15 supplier to conduct an evaluation as to whether such land is
16 suitable for a public water supply wellfield.

17 (2) A notice of intent filed under this section shall be
18 limited to a contiguous tract of land. No public water supplier
19 shall have more than three notices of intent under this section on
20 file with the department at any one time.

21 (3) A notice of intent filed under this section shall
22 expire one year after the date of filing and may be renewed for one
23 additional year by filing with the department a notice of renewal
24 of the original notice of intent filed under this section before
25 expiration of the original notice of intent.

1 (4) At the time a notice of intent or a notice of renewal
2 is filed with the department, the public water supplier shall:

3 (a) Provide a copy of the notice of intent or notice of
4 renewal to the owners of land adjoining the land being considered
5 for a wellfield falling within the spacing protection provided by
6 subdivision (5)(a) of this section pursuant to the notice;

7 (b) Provide a copy of the notice to the natural resources
8 district or districts within which the land being considered for a
9 wellfield is located; and

10 (c) Publish a copy of the notice in a newspaper of
11 general circulation in the area in which the wellfield is being
12 considered.

13 (5) (a) Except as provided in subdivisions (b) and (c) of
14 this subsection, during the time that a notice of intent under this
15 section is in effect, no person may drill or construct a water
16 well, as defined in section 46-601.01, within the following number
17 of feet of the boundaries of the land described in the notice of
18 intent, whichever is greater:

19 (i) One thousand feet; or

20 (ii) The maximum number of feet specified in any
21 applicable regulations of a natural resources district that a
22 well of a public water supplier must be spaced from another well.

23 (b) Any person who, at least one hundred eighty days
24 prior to filing a notice of intent, obtained a valid permit from
25 a natural resources district to drill or construct a water well

1 within the area subject to the protection provided by this section
2 is not prohibited from drilling or constructing a water well.

3 (c) The public water supplier may waive the protection
4 provided by this section and allow a person to drill or construct
5 a new or replacement water well within the area subject to the
6 protection provided by this section.

7 (6) Within thirty days after the public water supplier
8 reaches a determination that the land described in a particular
9 notice of intent is not suitable for a public water supply
10 wellfield, the public water supplier shall notify the Department
11 of Natural Resources, all affected natural resources districts,
12 the owner of the land described in the notice of intent, and the
13 owners of the contiguous tracts of land all land falling within
14 the spacing protection provided by subdivision (5)(a) of this
15 section pursuant to the notice of intent of such determination.
16 Upon receipt by the department of the notice of such determination,
17 the notice of intent that contains the description of such tract
18 of land shall terminate immediately, notwithstanding any other
19 provision of this section.

20 Sec. 17. Section 46-683, Reissue Revised Statutes of
21 Nebraska, is amended to read:

22 46-683 (1) The director shall issue a written order
23 containing specific findings of fact either granting or denying a
24 permit. The director shall grant a permit only if he or she finds
25 that the applicant's withdrawal and any transfer of ground water

1 are in the public interest. In determining whether the withdrawal
2 and transfer, if any, are in the public interest, the director's
3 considerations shall include, but not be limited to:

4 (a) Possible adverse effects on existing surface or
5 ground water users;

6 (b) The effect of the withdrawal and any transfer of
7 ground water on surface or ground water supplies needed to meet
8 reasonably anticipated domestic and agricultural demands in the
9 area of the proposed ground water withdrawal;

10 (c) The availability of alternative sources of surface or
11 ground water reasonably accessible to the applicant in or near the
12 region of the proposed withdrawal or use;

13 (d) The economic benefit of the applicant's proposed use;

14 (e) The social and economic benefits of existing uses of
15 surface or ground water in the area of the applicant's proposed use
16 and any transfer;

17 (f) Any waivers of liability from existing users filed
18 with the director;

19 (g) The effects on interstate compacts or decrees and
20 the fulfillment of the provisions of any other state contract or
21 agreement; and

22 (h) Other factors reasonably affecting the equity of
23 granting the permit.

24 (2) The director may grant a permit for less water than
25 requested by the applicant. The director may also impose reasonable

1 conditions on the manner and timing of the ground water withdrawals
2 and on the manner of any transfer of ground water which the
3 director deems necessary to protect existing users of water. The
4 If a hearing is held, the director shall issue such written order
5 within ninety days of the hearing.

6 Sec. 18. Section 46-691.03, Reissue Revised Statutes of
7 Nebraska, is amended to read:

8 46-691.03 (1) Any person intending to withdraw ground
9 water from any water well located in the State of Nebraska,
10 transport that water off the overlying land, and use it to augment
11 water supplies in any Nebraska wetland or natural stream for
12 the purpose of benefiting fish or wildlife or producing other
13 environmental or recreational benefits may do so only if the
14 natural resources district in which the water well is or would
15 be located allows withdrawals and transport for such purposes and
16 only after applying for and obtaining a permit from such natural
17 resources district. An application for any such permit shall be
18 accompanied by a nonrefundable fee of fifty dollars payable to such
19 district. Such permit shall be in addition to any permit required
20 pursuant to section 46-252 or 46-735 or subdivision (1)(k) of
21 section 46-739.

22 (2) Prior to taking action on an application pursuant to
23 this section, the district shall provide an opportunity for public
24 comment on such application at a regular or special board meeting
25 for which advance published notice of the meeting and the agenda

1 therefor have been given consistent with the Open Meetings Act.

2 (3) In determining whether to grant a permit under this
3 section, the board of directors for the natural resources district
4 shall consider:

5 (a) Whether the proposed use is a beneficial use of
6 ground water;

7 (b) The availability to the applicant of alternative
8 sources of surface water or ground water for the proposed
9 withdrawal, transport, and use;

10 (c) Any negative effect of the proposed withdrawal,
11 transport, and use on ground water supplies needed to meet present
12 or reasonable future demands for water in the area of the proposed
13 withdrawal, transport, and use, to comply with any interstate
14 compact or decree, or to fulfill the provisions of any other formal
15 state contract or agreement;

16 (d) Any negative effect of the proposed withdrawal,
17 transport, and use on surface water supplies needed to meet present
18 or reasonable future demands for water within the state, to comply
19 with any interstate compact or decree, or to fulfill the provisions
20 of any other formal state contract or agreement;

21 (e) Any adverse environmental effect of the proposed
22 withdrawal, transport, and use of the ground water;

23 (f) The cumulative effects of the proposed withdrawal,
24 transport, and use relative to the matters listed in subdivisions
25 (3) (c) through (e) of this section when considered in conjunction

1 with all other withdrawals, transports, and uses subject to this
2 section;

3 (g) Whether the proposed withdrawal, transport, and use
4 is consistent with the district's ground water quantity and
5 quality management plan and with any integrated management plan
6 previously adopted or being considered for adoption in accordance
7 with sections 46-713 to 46-719; and

8 (h) Any other factors consistent with the purposes of
9 this section which the board of directors deems relevant to protect
10 the interests of the state and its citizens.

11 (4) Issuance of a permit shall be conditioned on the
12 applicant's compliance with the rules and regulations of the
13 natural resources district from which the water is to be withdrawn
14 and, if the location where the water is to be used to produce
15 the intended benefits is in a different natural resources district,
16 with the rules and regulations of that natural resources district.
17 The board of directors may include such reasonable conditions on
18 the proposed withdrawal, transport, and use as it deems necessary
19 to carry out the purposes of this section.

20 (5) The applicant shall be required to provide access to
21 his or her property at reasonable times for purposes of inspection
22 by officials of any district where the water is to be withdrawn or
23 to be used.

24 Sec. 19. Section 46-701, Reissue Revised Statutes of
25 Nebraska, is amended to read:

1 46-701 Sections 46-701 to 46-753 and section 20 of this
2 act shall be known and may be cited as the Nebraska Ground Water
3 Management and Protection Act.

4 Sec. 20. The Interrelated Water Management Plan Program
5 is created for the purpose of facilitating and funding the duties
6 of districts arising under the Nebraska Ground Water Management
7 and Protection Act. The program shall function as a grant program
8 administered by the Nebraska Natural Resources Commission and
9 the Department of Natural Resources upon recommendations of the
10 commission using funds appropriated for the program. The commission
11 shall develop guidelines and limitations for grant requests for
12 funding such district's duties, including studies required to carry
13 out those duties. Grant requests shall be made to the commission
14 for review in a manner and form prescribed by the commission. The
15 amounts requested and approved shall be supported by a minimum
16 local revenue match comprising twenty percent of the total project
17 cost. The Director of Natural Resources shall expend funds to
18 implement the commission's recommendations for fiscal support under
19 the program only upon the commission's approval.

20 Sec. 21. Section 46-706, Reissue Revised Statutes of
21 Nebraska, is amended to read:

22 46-706 For purposes of the Municipal and Rural Domestic
23 Ground Water Transfers Permit Act, the Nebraska Ground Water
24 Management and Protection Act, and sections 46-601 to 46-613.02,
25 46-636, 46-637, and 46-651 to 46-655, unless the context otherwise

1 requires:

2 (1) Person means a natural person, a partnership,
3 a limited liability company, an association, a corporation, a
4 municipality, an irrigation district, an agency or a political
5 subdivision of the state, or a department, an agency, or a bureau
6 of the United States;

7 (2) Ground water means that water which occurs in or
8 moves, seeps, filters, or percolates through ground under the
9 surface of the land;

10 (3) Contamination or contamination of ground water means
11 nitrate nitrogen or other material which enters the ground water
12 due to action of any person and causes degradation of the quality
13 of ground water sufficient to make such ground water unsuitable for
14 present or reasonably foreseeable beneficial uses;

15 (4) District means a natural resources district operating
16 pursuant to Chapter 2, article 32;

17 (5) Illegal water well means (a) any water well operated
18 or constructed without or in violation of a permit required by
19 the Nebraska Ground Water Management and Protection Act, (b) any
20 water well not in compliance with rules and regulations adopted and
21 promulgated pursuant to the act, (c) any water well not properly
22 registered in accordance with sections 46-602 to 46-604, or (d)
23 any water well not in compliance with any other applicable laws of
24 the State of Nebraska or with rules and regulations adopted and
25 promulgated pursuant to such laws;

1 (6) To commence construction of a water well means the
2 beginning of the boring, drilling, jetting, digging, or excavating
3 of the actual water well from which ground water is to be
4 withdrawn;

5 (7) Management area means any area so designated by a
6 district pursuant to section 46-712 or 46-718, by the Director
7 of Environmental Quality pursuant to section 46-725, or by
8 the Interrelated Water Review Board pursuant to section 46-719.
9 Management area includes a control area or a special ground water
10 quality protection area designated prior to July 19, 1996;

11 (8) Management plan means a ground water management plan
12 developed by a district and submitted to the Director of Natural
13 Resources for review pursuant to section 46-711;

14 (9) Ground water reservoir life goal means the finite or
15 infinite period of time which a district establishes as its goal
16 for maintenance of the supply and quality of water in a ground
17 water reservoir at the time a ground water management plan is
18 adopted;

19 (10) Board means the board of directors of a district;

20 (11) Acre-inch means the amount of water necessary to
21 cover an acre of land one inch deep;

22 (12) Subirrigation or subirrigated land means the natural
23 occurrence of a ground water table within the root zone of
24 agricultural vegetation, not exceeding ten feet below the surface
25 of the ground;

1 (13) Best management practices means schedules of
2 activities, maintenance procedures, and other management practices
3 utilized for purposes of irrigation efficiency, to conserve or
4 effect a savings of ground water, or to prevent or reduce present
5 and future contamination of ground water. Best management practices
6 relating to contamination of ground water which may include, but
7 not be limited to, irrigation scheduling, proper rate and timing
8 of fertilizer application, and other fertilizer and pesticide
9 management programs. In determining the rate of fertilizer
10 application, the district shall consult with the University of
11 Nebraska or a certified crop advisor certified by the American
12 Society of Agronomy;

13 (14) Point source means any discernible, confined, and
14 discrete conveyance, including, but not limited to, any pipe,
15 channel, tunnel, conduit, well, discrete fissure, container,
16 rolling stock, vessel, other floating craft, or other conveyance,
17 over which the Department of Environmental Quality has regulatory
18 authority and from which a substance which can cause or contribute
19 to contamination of ground water is or may be discharged;

20 (15) Allocation, as it relates to water use for
21 irrigation purposes, means the allotment of a specified total
22 number of acre-inches of irrigation water per irrigated acre per
23 year or an average number of acre-inches of irrigation water per
24 irrigated acre over any reasonable period of time;

25 (16) Rotation means a recurring series of use and nonuse

1 of irrigation wells on an hourly, daily, weekly, monthly, or yearly
2 basis;

3 (17) Water well has the same meaning as in section
4 46-601.01;

5 (18) Surface water project sponsor means an irrigation
6 district created pursuant to Chapter 46, article 1, a reclamation
7 district created pursuant to Chapter 46, article 5, or a public
8 power and irrigation district created pursuant to Chapter 70,
9 article 6;

10 (19) Beneficial use means that use by which water may be
11 put to use to the benefit of humans or other species;

12 (20) Consumptive use means the amount of water that is
13 consumed under appropriate and reasonably efficient practices to
14 accomplish without waste the purposes for which the appropriation
15 or other legally permitted use is lawfully made;

16 (21) Dewatering well means a well constructed and used
17 solely for the purpose of lowering the ground water table
18 elevation;

19 (22) Emergency situation means any set of circumstances
20 that requires the use of water from any source that might
21 otherwise be regulated or prohibited and the agency, district,
22 or organization responsible for regulating water use from such
23 source reasonably and in good faith believes that such use is
24 necessary to protect the public health, safety, and welfare,
25 including, if applicable, compliance with federal or state water

1 quality standards;

2 (23) Good cause shown means a reasonable justification
3 for granting a variance for a consumptive use of water that
4 would otherwise be prohibited by rule or regulation and which the
5 granting agency, district, or organization reasonably and in good
6 faith believes will provide an economic, environmental, social, or
7 public health and safety benefit that is equal to or greater than
8 the benefit resulting from the rule or regulation from which a
9 variance is sought;

10 (24) Historic consumptive use means the amount of water
11 that has previously been consumed under appropriate and reasonably
12 efficient practices to accomplish without waste the purposes for
13 which the appropriation or other legally permitted use was lawfully
14 made;

15 (25) Monitoring well means a water well that is designed
16 and constructed to provide ongoing hydrologic or water quality
17 information and is not intended for consumptive use;

18 (26) Order, except as otherwise specifically provided,
19 includes any order required by the Nebraska Ground Water Management
20 and Protection Act, by rule or regulation, or by a decision adopted
21 by a district by vote of the board of directors of the district
22 taken at any regularly scheduled or specially scheduled meeting of
23 the board;

24 (27) Overall difference between the current and fully
25 appropriated levels of development means the extent to which

1 existing uses of hydrologically connected surface water and ground
2 water and conservation activities result in the water supply
3 available for purposes identified in subsection (3) of section
4 46-713 to be less than the water supply available if the
5 river basin, subbasin, or reach had been determined to be fully
6 appropriated in accordance with section 46-714;

7 (28) Test hole means a hole designed solely for the
8 purposes of obtaining information on hydrologic or geologic
9 conditions; and

10 (29) Variance means (a) an approval to deviate from a
11 restriction imposed under subsection (1), (2), (9), or (10) of
12 section 46-714 or (b) the approval to act in a manner contrary to
13 existing rules or regulations from a governing body whose rule or
14 regulation is otherwise applicable.

15 Sec. 22. Section 46-712, Reissue Revised Statutes of
16 Nebraska, is amended to read:

17 46-712 (1) A natural resources district may establish
18 a ground water management area in accordance with this section
19 to accomplish any one or more of the following objectives: (a)
20 Protection of ground water quantity; (b) protection of ground water
21 quality; or (c) prevention or resolution of conflicts between users
22 of ground water and appropriators of surface water, which ground
23 water and surface water are hydrologically connected.

24 (2) Prior to establishment by a district of a management
25 area other than a management area being established in accordance

1 with section 46-718, the district's management plan shall have been
2 approved by the Director of Natural Resources or the district
3 shall have completed the requirements of subsection (2) of
4 section 46-711. If necessary to determine whether a management
5 area should be designated, the district may initiate new studies
6 and data-collection efforts and develop computer models. In order
7 to establish a management area, the district shall fix a time
8 and place for a public hearing to consider the management plan
9 information supplied by the director and to hear any other
10 evidence. The hearing shall be located within or in reasonable
11 proximity to the area proposed for designation as a management
12 area. Notice of the hearing shall be published as provided in
13 section 46-743, and the hearing shall be conducted in accordance
14 with such section.

15 (3) (a) Within ninety days after the hearing, the district
16 shall determine whether a management area shall be designated.
17 If the district determines that no management area shall be
18 established, the district shall issue an order to that effect.

19 (b) If the district determines that a management area
20 shall be established, the district shall by order designate
21 the area as a management area and shall adopt one or more
22 controls authorized by section 46-739 to be utilized within the
23 area in order to achieve the ground water management objectives
24 specified in the plan. Such an order shall include a geographic and
25 stratigraphic definition of the area. The boundaries and controls

1 shall take into account any considerations brought forth at the
2 hearing and administrative factors directly affecting the ability
3 of the district to implement and carry out local ground water
4 management.

5 (c) The controls adopted shall not include controls
6 substantially different from those set forth in the notice of the
7 hearing. The area designated by the order shall not include any
8 area not included in the notice of the hearing.

9 (4) Modification of the boundaries of a
10 district-designated management area or dissolution of such an area
11 shall be in accordance with the procedures established in this
12 section. Hearings for such modifications or for dissolution may not
13 be initiated more often than once a year. Hearings for modification
14 of controls may be initiated as often as deemed necessary by the
15 district, and such modifications may be accomplished using the
16 procedure in this section.

17 (5) A district shall, prior to adopting or amending
18 any rules or regulations for a management area, consult with any
19 holders of permits for intentional or incidental underground water
20 storage and recovery issued pursuant to section 46-226.02, 46-233,
21 46-240, 46-241, 46-242, or 46-297.

22 (6) If a ground water management area has been adopted by
23 a district under this section that includes one or more controls
24 authorized by subdivision (1)(f) or (1)(m) of section 46-739, the
25 district may request the Department of Natural Resources to conduct

1 an evaluation to determine if an immediate stay should be placed
2 on the issuance of new surface water natural-flow appropriations
3 in the area, river basin, subbasin, or reach of the management
4 area, and the department may determine that the stay is in the
5 public interest. The stay may include provisions for exceptions to
6 be granted for beneficial uses as described in subsection (3) of
7 section 46-714 or for a project that provides hydrological benefit
8 to the area of the stay and may include provisions that the stay
9 may be rescinded based on new or additional information that may
10 become available.

11 Sec. 23. Section 46-713, Reissue Revised Statutes of
12 Nebraska, is amended to read:

13 46-713 (1) (a) By January 1 of each year beginning in
14 2006 and except as otherwise provided in this section and section
15 46-720, the Department of Natural Resources shall complete an
16 evaluation of the expected long-term availability of hydrologically
17 connected water supplies for both existing and new surface water
18 uses and existing and new ground water uses in each of the
19 state's river basins and shall issue a report that describes the
20 results of the evaluation. For purposes of the evaluation and the
21 report, a river basin may be divided into two or more subbasins or
22 reaches. A river basin, subbasin, or reach for which an integrated
23 management plan has been or is being developed pursuant to sections
24 46-715 to 46-717 or pursuant to section 46-719 shall not be
25 evaluated unless it is being reevaluated as provided in subsection

1 (2) of this section. For each river basin, subbasin, or reach
2 evaluated, the report shall describe (i) the nature and extent
3 of use of both surface water and ground water in each river
4 basin, subbasin, or reach, (ii) the geographic area within which
5 the department preliminarily considers surface water and ground
6 water to be hydrologically connected and the criteria used for
7 that determination, and (iii) the extent to which the then-current
8 uses affect available near-term and long-term water supplies.
9 River basins, subbasins, and reaches designated as overappropriated
10 in accordance with subsection (4) of this section shall not be
11 evaluated by the department.

12 (b) Based on the information reviewed in the evaluation
13 process, the department shall arrive at a preliminary conclusion
14 for each river basin, subbasin, and reach evaluated as to
15 whether such river basin, subbasin, or reach presently is fully
16 appropriated without the initiation of additional uses. The
17 department shall also determine if and how such preliminary
18 conclusion would change if no additional legal constraints were
19 imposed on future development of hydrologically connected surface
20 water and ground water and reasonable projections are made about
21 the extent and location of future development in such river basin,
22 subbasin, or reach.

23 (c) In addition to the conclusion about whether a river
24 basin, subbasin, or reach is fully appropriated, the department
25 shall include in the report, for informational purposes only,

1 a summary of relevant data provided by any interested party
2 concerning the social, economic, and environmental impacts of
3 additional hydrologically connected surface water and ground water
4 uses on resources that are dependent on streamflow or ground water
5 levels but are not protected by appropriations or regulations.

6 (d) In preparing the report, the department shall rely
7 on the best scientific data, and information, and methodologies
8 readily available to ensure that the conclusions and results
9 contained in the report are reliable. In its report, the department
10 shall provide sufficient documentation to allow these data,
11 information, methodologies, and conclusions to be independently
12 replicated and assessed. Upon request by the department, state
13 agencies, natural resources districts, irrigation districts,
14 reclamation districts, public power and irrigation districts,
15 mutual irrigation companies, canal companies, municipalities, and
16 other water users and stakeholders shall provide relevant data
17 and information in their possession. The Department of Natural
18 Resources shall specify by rule and regulation the types of
19 scientific data and other information that will be considered for
20 making the preliminary determinations required by this section.

21 (2) The department shall complete a reevaluation of
22 a river basin, subbasin, or reach for which an integrated
23 management plan has been or is being prepared if the department has
24 reason to believe that a reevaluation might lead to a different
25 determination about whether such river basin, subbasin, or reach

1 is fully appropriated or overappropriated. A decision to reevaluate
2 may be reached by the department on its own or in response
3 to a petition filed with the department by any interested
4 person. To be considered sufficient to justify a reevaluation,
5 a petition shall be accompanied by supporting information showing
6 that (a) new scientific data or other information relevant to the
7 determination of whether the river basin, subbasin, or reach is
8 fully appropriated or overappropriated has become available since
9 the last evaluation of such river basin, subbasin, or reach, (b)
10 the department relied on incorrect or incomplete information when
11 the river basin, subbasin, or reach was last evaluated, or (c)
12 the department erred in its interpretation or application of the
13 information available when the river basin, subbasin, or reach was
14 last evaluated. If a petition determined by the department to be
15 sufficient is filed before March 1 of any year, the reevaluation of
16 the river basin, subbasin, or reach involved shall be included in
17 the next annual report prepared in accordance with subsection (1)
18 of this section. If any such petition is filed on or after March 1
19 of any year, the department may defer the reevaluation of the river
20 basin, subbasin, or reach involved until the second annual report
21 after such filing.

22 (3) A river basin, subbasin, or reach shall be deemed
23 fully appropriated if the department determines based upon its
24 evaluation conducted pursuant to subsection (1) of this section and
25 information presented at the hearing pursuant to subsection (4) of

1 section 46-714 that then-current uses of hydrologically connected
2 surface water and ground water in the river basin, subbasin, or
3 reach cause or will in the reasonably foreseeable future cause
4 (a) the surface water supply to be insufficient to sustain over
5 the long term the beneficial or useful purposes for which existing
6 ~~natural flow~~ natural-flow or storage appropriations were granted
7 and the beneficial or useful purposes for which, at the time of
8 approval, any existing instream appropriation was granted, (b) the
9 streamflow to be insufficient to sustain over the long term the
10 beneficial uses from wells constructed in aquifers dependent on
11 recharge from the river or stream involved, or (c) reduction in
12 the flow of a river or stream sufficient to cause noncompliance by
13 Nebraska with an interstate compact or decree, other formal state
14 contract or agreement, or applicable state or federal laws.

15 (4) (a) A river basin, subbasin, or reach shall be deemed
16 overappropriated if, on July 16, 2004, the river basin, subbasin,
17 or reach is subject to an interstate cooperative agreement among
18 three or more states and if, prior to such date, the department
19 has declared a moratorium on the issuance of new surface water
20 appropriations in such river basin, subbasin, or reach and has
21 requested each natural resources district with jurisdiction in the
22 affected area in such river basin, subbasin, or reach either (i)
23 to close or to continue in effect a previously adopted closure of
24 all or part of such river basin, subbasin, or reach to the issuance
25 of additional water well permits in accordance with subdivision

1 (1) (k) of section 46-656.25 as such section existed prior to July
2 16, 2004, or (ii) to temporarily suspend or to continue in effect
3 a temporary suspension, previously adopted pursuant to section
4 46-656.28 as such section existed prior to July 16, 2004, on the
5 drilling of new water wells in all or part of such river basin,
6 subbasin, or reach.

7 (b) Within sixty days after July 16, 2004, the department
8 shall designate which river basins, subbasins, or reaches are
9 overappropriated. The designation shall include a description of
10 the geographic area within which the department has determined that
11 surface water and ground water are hydrologically connected and the
12 criteria used to make such determination.

13 Sec. 24. Section 46-714, Reissue Revised Statutes of
14 Nebraska, is amended to read:

15 46-714 (1) Whenever the Department of Natural Resources
16 makes a preliminary determination that a river basin, subbasin,
17 or reach not previously designated as overappropriated and not
18 previously determined to be fully appropriated has become fully
19 appropriated, the department shall place an immediate stay on
20 the issuance of any new natural-flow, storage, or storage-use
21 appropriations in such river basin, subbasin, or reach. The
22 department shall also provide prompt notice of such preliminary
23 determination to all licensed water well contractors in the state
24 and to each natural resources district that encompasses any of
25 the geographic area involved. Such notice to natural resources

1 districts shall be by certified mail. The notice shall be addressed
2 to the manager of the natural resources district or his or her
3 designee and shall include the signature of the Director of Natural
4 Resources. Immediately upon receipt of such notice by the natural
5 resources district, there shall be a stay on issuance of water
6 well construction permits in the geographic area preliminarily
7 determined by the department to include hydrologically connected
8 surface water and ground water in such river basin, subbasin,
9 or reach. The department shall also notify the public of the
10 preliminary determination that the river basin, subbasin, or reach
11 is fully appropriated and of the affected geographic area. Such
12 notice shall be provided by publication once each week for
13 three consecutive weeks in at least one newspaper of statewide
14 circulation and in such other newspaper or newspapers as are deemed
15 appropriate by the department to provide general circulation in the
16 river basin, subbasin, or reach.

17 (2) If the department preliminarily determines a river
18 basin, subbasin, or reach to be fully appropriated and has
19 identified the existence of hydrologically connected surface water
20 and ground water in such river basin, subbasin, or reach, stays
21 shall also be imposed:

22 (a) ~~on~~ On the construction of any new water well in the
23 area covered by the determination if such construction has not
24 commenced unless a permit with conditions imposed by the natural
25 resources district has been issued prior to the determination.

1 Such conditions shall meet the objectives of subsection (3)
2 of section 46-715 and may include, but are not limited to,
3 conditions in accordance with subsection (6) of section 46-739.
4 Any well constructed pursuant to such permit shall be completed in
5 accordance with section 46-738; ~~whether or not a construction~~
6 permit for such water well was previously obtained from the
7 department or a natural resources district, and

8 (b) ~~on~~ On the use of an existing water well or an
9 existing surface water appropriation in the affected area to
10 increase the number of acres historically irrigated.

11 Such additional stays shall begin ten days after the
12 first publication, in a newspaper of statewide circulation, of
13 the notice of the preliminary determination that the river basin,
14 subbasin, or reach is fully appropriated.

15 (3) Exceptions to the stays imposed pursuant to
16 subsection (1), (2), (9), or (10) of this section shall exist
17 for (a) test holes, (b) dewatering wells with an intended use
18 of one year or less, (c) monitoring wells, (d) wells constructed
19 pursuant to a ground water remediation plan under the Environmental
20 Protection Act, (e) water wells designed and constructed to pump
21 fifty gallons per minute or less, except that no two or more
22 water wells that each pump fifty gallons per minute or less may
23 be connected or otherwise combined to serve a single project such
24 that the collective pumping would exceed fifty gallons per minute,
25 (f) water wells for range livestock, (g) new surface water uses or

1 water wells that are necessary to alleviate an emergency situation
2 involving the provision of water for human consumption or public
3 health and safety, (h) water wells defined by the applicable
4 natural resources district as replacement water wells, but the
5 consumptive use of any such replacement water well can be no
6 greater than the historic consumptive use of the water well it
7 is to replace or, if applicable, the historic consumptive use of
8 the surface water use it is to replace, (i) new surface water
9 uses and water wells to which a right or permit is transferred
10 in accordance with state law, but the consumptive use of any
11 such new use can be no greater than the historic consumptive use
12 of the surface water use or water well from which the right or
13 permit is being transferred, (j) water wells and increases in
14 ground water irrigated acres for which a variance is granted by
15 the applicable natural resources district for good cause shown,
16 (k) ~~to the extent permitted~~ subject to any conditions imposed by
17 the applicable natural resources district, to the extent permitted
18 by the applicable natural resources district, increases in ground
19 water irrigated acres that result from the use of water wells that
20 were constructed within the nine months prior to the effective
21 date of the stay permitted prior to the effective date of the
22 determination made in subsection (1) of this section and completed
23 in accordance with section 46-738 but were not used for irrigation
24 prior to that effective date, (l) to the extent permitted by the
25 applicable natural resources district, increases in ground water

1 irrigated acres that result from the use of water wells that are
2 constructed after the effective date of the stay in accordance
3 with a permit granted by that natural resources district prior
4 to the effective date of the stay, (m) surface water uses for
5 which temporary public-use construction permits are issued pursuant
6 to subsection (8) of section 46-233, (n) surface water uses and
7 increases in surface water irrigated acres for which a variance is
8 granted by the department for good cause shown, and (o) water wells
9 for which permits have been approved by the Department of Natural
10 Resources pursuant to the Municipal and Rural Domestic Ground Water
11 Transfers Permit Act prior to the effective date of the stay.

12 (4) Except as otherwise provided in this section, any
13 stay imposed pursuant to subsections (1) and (2) of this section
14 shall remain in effect for the affected river basin, subbasin, or
15 reach until the department has made a final determination regarding
16 whether the river basin, subbasin, or reach is fully appropriated
17 and, if the department's final determination is that the river
18 basin, subbasin, or reach is fully appropriated, shall remain in
19 effect as provided in subsection (12) of this section. Within
20 the time period between the dates of the preliminary and final
21 determinations, the department and the affected natural resources
22 districts shall consult with any irrigation district, reclamation
23 district, public power and irrigation district, mutual irrigation
24 company, canal company, or municipality that relies on water from
25 the affected river basin, subbasin, or reach and with other water

1 users and stakeholders as deemed appropriate by the department
2 or the natural resources districts. The department shall also
3 hold one or more public hearings not more than ninety days after
4 the first publication of the notice required by subsection (1)
5 of this section. Notice of the hearings shall be provided in
6 the same manner as the notice required by such subsection. Any
7 interested person may appear at such hearing and present written or
8 oral testimony and evidence concerning the appropriation status of
9 the river basin, subbasin, or reach, the department's preliminary
10 conclusions about the extent of the area within which the surface
11 water and ground water supplies for the river basin, subbasin, or
12 reach are determined to be hydrologically connected, and whether
13 the stays on new uses should be terminated.

14 (5) Within thirty days after the final hearing under
15 subsection (4) of this section, the department shall notify the
16 appropriate natural resources districts of the department's final
17 determination with respect to the appropriation status of the
18 river basin, subbasin, or reach. If the final determination is
19 that the river basin, subbasin, or reach is fully appropriated,
20 the department, at the same time, shall (a) decide whether to
21 continue or to terminate the stays on new surface water uses and
22 on increases in the number of surface water irrigated acres and (b)
23 designate the geographic area within which the department considers
24 surface water and ground water to be hydrologically connected in
25 the river basin, subbasin, or reach and describe the methods and

1 criteria used in making that determination. The department shall
2 provide notice of its decision to continue or terminate the stays
3 in the same manner as the notice required by subsection (1) of this
4 section.

5 (6) If the department's final determination is that
6 the river basin, subbasin, or reach is not fully appropriated,
7 the department shall provide notice of such determination as
8 provided in subsection (1) of this section, the stays imposed
9 pursuant to subsections (1) and (2) of this section shall terminate
10 immediately, and no further action pursuant to subsections (7)
11 through (12) of this section and sections 46-715 to 46-719 shall be
12 required.

13 (7) Within ninety days after a final determination by
14 the department that a river basin, subbasin, or reach is fully
15 appropriated, an affected natural resources district may hold one
16 or more public hearings on the question of whether the stays on
17 the issuance of new water well permits, on the construction of
18 new water wells, or on increases in ground water irrigated acres
19 should be terminated. Notice of the hearings shall be published as
20 provided in section 46-743.

21 (8) Within forty-five days after a natural resources
22 district's final hearing pursuant to subsection (7) of this
23 section, the natural resources district shall decide (a) whether
24 to terminate the stay on new water wells in all or part of the
25 natural resources district subject to the stay and (b) whether to

1 terminate the stay on increases in ground water irrigated acres. If
2 the natural resources district decides not to terminate the stay
3 on new water wells in any geographic area, it shall also decide
4 whether to exempt from such stay the construction of water wells
5 for which permits were issued prior to the issuance of the stay but
6 for which construction had not begun prior to issuance of the stay.
7 If construction of water wells for which permits were issued prior
8 to the stay is allowed, all permits that were valid when the stay
9 went into effect shall be extended by a time period equal to the
10 length of the stay.

11 (9) Whenever the department designates a river basin,
12 subbasin, or reach as overappropriated, each previously declared
13 moratorium on the issuance of new surface water appropriations in
14 the river basin, subbasin, or reach shall continue in effect. The
15 department shall also provide prompt notice of such designation
16 to all licensed water well contractors in the state and to each
17 natural resources district that encompasses any of the geographic
18 area involved. Immediately upon receipt of such notice by a natural
19 resources district, there shall be a stay on the issuance of new
20 water well construction permits in any portion of such natural
21 resources district that is within the hydrologically connected area
22 designated by the department. The department shall also notify the
23 public of its designation of such river basin, subbasin, or reach
24 as overappropriated and of the geographic area involved in such
25 designation. Such notice shall be published once each week for

1 three consecutive weeks in at least one newspaper of statewide
2 circulation and in such other newspapers as are deemed appropriate
3 by the department to provide general notice in the river basin,
4 subbasin, or reach.

5 (10) Beginning ten days after the first publication
6 of notice under subsection (9) of this section in a newspaper
7 of statewide circulation, there shall also be stays (a) on the
8 construction of any new water well in the hydrologically connected
9 area if such construction has not commenced prior to such date
10 and if no permit for construction of the water well has been
11 issued previously by either the department or the natural resources
12 district, (b) on the use of an existing water well in the
13 hydrologically connected area to increase the number of acres
14 historically irrigated, and (c) on the use of an existing surface
15 water appropriation to increase the number of acres historically
16 irrigated in the affected area.

17 (11) Within ninety days after a designation by
18 the department of a river basin, subbasin, or reach as
19 overappropriated, a natural resources district that encompasses any
20 of the hydrologically connected area designated by the department
21 may hold one or more public hearings on the question of whether
22 to terminate the stays on (a) the construction of new water wells
23 within all or part of its portion of the hydrologically connected
24 area, (b) the issuance of new water well construction permits in
25 such area, or (c) the increase in ground water irrigated acres in

1 such area. Notice of any hearing for such purpose shall be provided
2 pursuant to section 46-743. Prior to the scheduling of a natural
3 resources district hearing on the question of whether to terminate
4 any such stay, the department and the affected natural resources
5 district shall consult with any irrigation district, reclamation
6 district, public power and irrigation district, mutual irrigation
7 company, canal company, or municipality that relies on water from
8 the affected river basin, subbasin, or reach and with other water
9 users and stakeholders as deemed appropriate by the department or
10 the natural resources district.

11 (12) Any stay issued pursuant to this section shall
12 remain in effect until (a) the stay has been terminated pursuant
13 to subsection (5), (6), (8), or (11) of this section, (b) an
14 integrated management plan for the affected river basin, subbasin,
15 or reach has been adopted by the department and the affected
16 natural resources districts and has taken effect, (c) an integrated
17 management plan for the affected river basin, subbasin, or reach
18 has been adopted by the Interrelated Water Review Board and has
19 taken effect, (d) the department has completed a reevaluation
20 pursuant to subsection (2) of section 46-713 and has determined
21 that the affected river basin, subbasin, or reach is not fully
22 appropriated or overappropriated, or (e) the stay expires pursuant
23 to this subsection. Such stay may be imposed initially for not
24 more than three years following the department's designation of
25 the river basin, subbasin, or reach as overappropriated or the

1 department's final determination that a river basin, subbasin, or
2 reach is fully appropriated and may be extended thereafter on
3 an annual basis by agreement of the department and the affected
4 natural resources district for not more than two additional years
5 if necessary to allow the development, adoption, and implementation
6 of an integrated management plan pursuant to sections 46-715 to
7 46-719.

8 Sec. 25. Section 46-715, Reissue Revised Statutes of
9 Nebraska, is amended to read:

10 46-715 (1) Whenever the Department of Natural
11 Resources has designated a river basin, subbasin, or reach as
12 overappropriated or has made a final determination that a river
13 basin, subbasin, or reach is fully appropriated, the natural
14 resources districts encompassing such river basin, subbasin, or
15 reach and the department shall jointly develop an integrated
16 management plan for such river basin, subbasin, or reach. The plan
17 shall be completed, adopted, and take effect within three years
18 after such designation or final determination unless the department
19 and the natural resources districts jointly agree to an extension
20 of not more than two additional years.

21 (2) In developing an integrated management plan, the
22 effects of existing and potential new water uses on existing
23 surface water appropriators and ground water users shall be
24 considered. An integrated management plan shall include the
25 following: (a) Clear goals and objectives with a purpose of

1 sustaining a balance between water uses and water supplies so that
2 the economic viability, social and environmental health, safety,
3 and welfare of the river basin, subbasin, or reach can be achieved
4 and maintained for both the near term and the long term; (b)
5 a map clearly delineating the geographic area subject to the
6 integrated management plan; (c) one or more of the ground water
7 controls authorized for adoption by natural resources districts
8 pursuant to section 46-739; and (d) one or more of the surface
9 water controls authorized for adoption by the department pursuant
10 to section 46-716; and (e) a plan to gather and evaluate data,
11 information, and methodologies that could be used to implement
12 sections 46-715 to 46-717, increase understanding of the surface
13 water and hydrologically connected ground water system, and test
14 the validity of the conclusions and information upon which the
15 integrated management plan is based. The plan may also provide for
16 utilization of any applicable incentive programs authorized by law.
17 Nothing in the integrated management plan for a fully appropriated
18 river basin, subbasin, or reach shall require a natural resources
19 district to regulate ground water uses in place at the time of
20 the department's preliminary determination that the river basin,
21 subbasin, or reach is fully appropriated, but a natural resources
22 district may voluntarily adopt such regulations. The applicable
23 natural resources district may decide to include all water users
24 within the district boundary in an integrated management plan.

25 (3) The ground water and surface water controls proposed

1 for adoption in the integrated management plan pursuant to
2 subsection (1) of this section shall, when considered together
3 and with any applicable incentive programs, (a) be consistent with
4 the goals and objectives of the plan, (b) be sufficient to ensure
5 that the state will remain in compliance with applicable state and
6 federal laws and with any applicable interstate water compact or
7 decree or other formal state contract or agreement pertaining to
8 surface water or ground water use or supplies, and (c) protect the
9 ground water users whose water wells are dependent on recharge from
10 the river or stream involved and the surface water appropriators on
11 such river or stream from streamflow depletion caused by surface
12 water uses and ground water uses begun after the date the river
13 basin, subbasin, or reach was designated as overappropriated or
14 was preliminarily determined to be fully appropriated in accordance
15 with section 46-713.

16 (4) (a) In any river basin, subbasin, or reach that is
17 designated as overappropriated, when the designated area lies
18 within two or more natural resources districts, the department and
19 the affected natural resources districts shall jointly develop a
20 basin-wide plan for the area designated as overappropriated. Such
21 plan shall be developed using the consultation and collaboration
22 process described in subdivision (b) of this subsection, shall
23 be developed concurrently with the development of the integrated
24 management plan required pursuant to subsections (1) through (3) of
25 this section, and shall be designed to achieve, in the incremental

1 manner described in subdivision (d) of this subsection, the goals
2 and objectives described in subsection (2) of this section. The
3 basin-wide plan shall be adopted after hearings by the department
4 and the affected natural resources districts.

5 (b) In any river basin, subbasin, or reach designated
6 as overappropriated and subject to this subsection, the department
7 and each natural resources district encompassing such river basin,
8 subbasin, or reach shall jointly develop an integrated management
9 plan for such river basin, subbasin, or reach pursuant to
10 subsections (1) through (3) of this section. Each integrated
11 management plan for a river basin, subbasin, or reach subject
12 to this subsection shall be consistent with any basin-wide plan
13 developed pursuant to subdivision (a) of this subsection. Such
14 integrated management plan shall be developed after consultation
15 and collaboration with irrigation districts, reclamation districts,
16 public power and irrigation districts, mutual irrigation companies,
17 canal companies, and municipalities that rely on water from
18 within the affected area and that, after being notified of the
19 commencement of the plan development process, indicate in writing
20 their desire to participate in such process. In addition, the
21 department or the affected natural resources districts may include
22 designated representatives of other stakeholders. If agreement
23 is reached by all parties involved in such consultation and
24 collaboration process, the department and each natural resources
25 district shall adopt the agreed-upon integrated management plan. If

1 agreement cannot be reached by all parties involved, the integrated
2 management plan shall be developed and adopted by the department
3 and the affected natural resources district pursuant to sections
4 46-715 to 46-718 or by the Interrelated Water Review Board pursuant
5 to section 46-719.

6 (c) Any integrated management plan developed under
7 this subsection shall identify the overall difference between
8 the current and fully appropriated levels of development. Such
9 determination shall take into account cyclical supply, including
10 drought, identify the portion of the overall difference between the
11 current and fully appropriated levels of development that is due
12 to conservation measures, and identify the portions of the overall
13 difference between the current and fully appropriated levels of
14 development that are due to water use initiated prior to July 1,
15 1997, and to water use initiated on or after such date.

16 (d) Any integrated management plan developed under this
17 subsection shall adopt an incremental approach to achieve the goals
18 and objectives identified under subdivision (2)(a) of this section
19 using the following steps:

20 (i) The first incremental goals shall be to address the
21 impact of streamflow depletions to (A) surface water appropriations
22 and (B) water wells constructed in aquifers dependent upon recharge
23 from streamflow, to the extent those depletions are due to water
24 use initiated after July 1, 1997, and, unless an interstate
25 cooperative agreement for such river basin, subbasin, or reach is

1 no longer in effect, to prevent streamflow depletions that would
2 cause noncompliance by Nebraska with such interstate cooperative
3 agreement. During the first increment, the department and the
4 affected natural resources districts shall also pursue voluntary
5 efforts, subject to the availability of funds, to offset any
6 increase in streamflow depletive effects that occur after July 1,
7 1997, but are caused by ground water uses initiated prior to such
8 date. The department and the affected natural resources districts
9 may also use other appropriate and authorized measures for such
10 purpose;

11 (ii) The department and the affected natural resources
12 districts may amend an integrated management plan subject to this
13 subsection (4) as necessary based on an annual review of the
14 progress being made toward achieving the goals for that increment;

15 (iii) During the ten years following adoption of an
16 integrated management plan developed under this subsection (4)
17 or during the ten years after the adoption of any subsequent
18 increment of the integrated management plan pursuant to subdivision
19 (d)(iv) of this subsection, the department and the affected natural
20 resources district shall conduct a technical analysis of the
21 actions taken in such increment to determine the progress towards
22 meeting the goals and objectives adopted pursuant to subsection (2)
23 of this section. The analysis shall include an examination of (A)
24 available supplies and changes in long-term availability, (B) the
25 effects of conservation practices and natural causes, including,

1 but not limited to, drought, and (C) the effects of the plan
2 on reducing the overall difference between the current and fully
3 appropriated levels of development identified in subdivision (4)(c)
4 of this section. The analysis shall determine whether a subsequent
5 increment is necessary in the integrated management plan to meet
6 the goals and objectives adopted pursuant to subsection (2) of this
7 section and reduce the overall difference between the current and
8 fully appropriated levels of development identified in subdivision
9 (4)(c) of this section;

10 (iv) Based on the determination made in subdivision
11 (d)(iii) of this subsection, the department and the affected
12 natural resources districts, utilizing the consultative and
13 collaborative process described in subdivision (b) of this
14 subsection, shall if necessary identify goals for a subsequent
15 increment of the integrated management plan. Subsequent increments
16 shall be completed, adopted, and take effect not more than ten
17 years after adoption of the previous increment; and

18 (v) If necessary, the steps described in subdivisions
19 (d)(ii) through (iv) of this subsection shall be repeated until
20 the department and the affected natural resources districts agree
21 that the goals and objectives identified pursuant to subsection
22 (2) of this section have been met and the overall difference
23 between the current and fully appropriated levels of development
24 identified in subdivision (4)(c) of this section has been addressed
25 so that the river basin, subbasin, or reach has returned to a fully

1 appropriated condition.

2 Sec. 26. Section 46-719, Reissue Revised Statutes of
3 Nebraska, is amended to read:

4 46-719 (1)(a) The Interrelated Water Review Board is
5 created for the purposes stated in subsections (2) through (5)
6 of this section. The board shall consist of five members. The
7 board, when appointed and convened, shall continue in existence
8 only until it has resolved a dispute referred to it pursuant to
9 such subsections. The Governor shall appoint and convene the board
10 within forty-five days of being notified of the need to resolve
11 a dispute. The board shall be chaired by the Governor or his
12 or her designee, which designee shall be knowledgeable concerning
13 surface water and ground water issues. The Governor shall appoint
14 one additional member of his or her choosing and shall appoint
15 the other three members of the board from a list of no fewer than
16 six nominees provided by the Nebraska Natural Resources Commission
17 within twenty days after request by the Governor for a list of
18 nominees.

19 (b) Not more than two members of the board shall reside
20 in the geographic area involved in the dispute. A person is not
21 eligible for membership on the board if the decisions to be made
22 by the board would or could cause financial benefit or detriment
23 to the person, a member of his or her immediate family, or a
24 business with which the person is associated, unless such benefit
25 or detriment is indistinguishable from the effects of such action

1 on the public generally or a broad segment of the public. The board
2 shall be subject to the Open Meetings Act.

3 (c) For purposes of subsections (2) and (3) of this
4 section, action may be taken by a vote of three of the board's five
5 members. For purposes of subsections (4) and (5) of this section,
6 action may be taken only by a vote of at least four of the board's
7 five members.

8 (2)(a) If the Department of Natural Resources and the
9 affected natural resources districts cannot resolve disputes over
10 the content of a basin-wide plan or an integrated management plan
11 by utilizing the process described in sections 46-715 to 46-718,
12 the Governor shall be notified and the dispute submitted to the
13 Interrelated Water Review Board. When the board has been appointed
14 and convened to resolve disputes over a basin-wide plan, the
15 department and each affected district shall present their proposed
16 basin-wide plans to the board. When the board has been convened to
17 resolve disputes over an integrated management plan, the department
18 and each affected natural resources district shall present their
19 (i) proposed goals and objectives for the integrated management
20 plan, (ii) proposed geographic area to be subject to controls,
21 and (iii) proposed surface water and ground water controls and any
22 proposed incentive program for adoption and implementation in the
23 river basin, subbasin, or reach involved. The department and each
24 affected natural resources district shall also be given adequate
25 opportunity to comment on the proposals made by the other parties

1 to the dispute.

2 (b) When the Interrelated Water Review Board concludes
3 that the issues in dispute have been fully presented and commented
4 upon by the parties to the dispute, which conclusion shall be made
5 not more than forty-five days after the board is convened, the
6 board shall select the proposals or portions of proposals that the
7 board will consider for adoption and shall schedule one or more
8 public hearings to take testimony on the selected proposals. The
9 hearings shall be held within forty-five days after the board's
10 selection of proposals to consider for adoption and shall be within
11 or in reasonable proximity to the area that would be affected by
12 implementation of any of the proposals to be considered at the
13 hearings. Notice of the hearings shall be published as provided in
14 section 46-743. The cost of publishing the notice shall be shared
15 by the department and the affected natural resources districts. All
16 interested persons may appear at the hearings and present testimony
17 or provide other evidence relevant to the issues being considered.

18 (c) Within forty-five days after the final hearing
19 pursuant to subdivision (b) of this subsection, the Interrelated
20 Water Review Board shall by order, as applicable, adopt a
21 basin-wide plan or an integrated management plan for the affected
22 river basin, subbasin, or reach and, in the case of an integrated
23 management plan, shall designate a ground water management plan
24 area for integrated management or an integrated management subarea
25 for such river basin, subbasin, or reach. An integrated management

1 plan shall be consistent with subsection (2) of section 46-715,
2 and the surface water and ground water controls and any applicable
3 incentive programs adopted as part of that plan shall be consistent
4 with subsection (3) of section 46-715. The controls adopted by the
5 board shall not be substantially different from those described
6 in the notice of hearing. The area designated as a ground water
7 management area or an integrated management subarea shall not
8 include any area that was not identified in the notice of the
9 hearing as within the area proposed to be subject to the controls
10 in the plan.

11 (d) The order adopted under this subsection shall be
12 published in the manner prescribed in section 46-744.

13 (e) Surface water controls adopted by the Interrelated
14 Water Review Board shall be implemented and enforced by the
15 department. Ground water controls adopted by the Interrelated Water
16 Review Board shall be implemented and enforced by the affected
17 natural resources districts.

18 (3) Whether an integrated management plan is adopted
19 pursuant to section 46-718 or by the Interrelated Water Review
20 Board pursuant to subsection (2) of this section, the department or
21 a natural resources district responsible in part for implementation
22 and enforcement of an integrated management plan may propose
23 modification of the goals or objectives of that plan, of the area
24 subject to the plan, or of the surface water controls, ground
25 water controls, or incentive programs adopted to implement the

1 plan. The department and the affected natural resources districts
2 shall utilize the procedures in sections 46-715 to 46-718 in
3 an attempt to reach agreement on and to adopt and implement
4 proposed modifications. If agreement on such modifications cannot
5 be achieved utilizing those procedures, either the department or
6 an affected natural resources district may notify the Governor of
7 the dispute. The Interrelated Water Review Board shall be appointed
8 and convened in accordance with subsection (1) of this section to
9 resolve the dispute and, if applicable, to adopt any modifications
10 utilizing the procedures in subsection (2) of this section.

11 (4) The department and the affected natural resources
12 districts may also raise objections concerning the implementation
13 or enforcement of previously adopted surface water or ground
14 water controls. The department and the affected natural resources
15 districts shall utilize the procedures in sections 46-715 to
16 46-718 in an attempt to reach agreement on such implementation or
17 enforcement issues. If agreement on such issues cannot be achieved
18 utilizing such procedures, either the department or an affected
19 natural resources district may notify the Governor of the dispute.
20 The Interrelated Water Review Board shall be appointed and convened
21 in accordance with subsection (1) of this section. After permitting
22 each party to fully express its reasons for its position on the
23 disputed issues, the board may either take no action or conclude
24 (a) that one or more parties needs to modify its approach to
25 implementation or enforcement and direct that such modifications

1 take place or (b) that one or more parties either has not made
2 a good faith effort to implement or enforce the portion of the
3 plan or controls for which it is responsible or is unable to
4 fully implement and enforce such portion and that such party's
5 jurisdiction with respect to implementation and enforcement of
6 the plan and controls shall be terminated and reassigned to one
7 or more of the other parties responsible for implementation and
8 enforcement. A decision by the Interrelated Water Review Board to
9 terminate and reassign jurisdiction of any portion of the plan or
10 controls shall take effect immediately upon that decision. Notice
11 of such reassignment shall be published at least once in one or
12 more newspapers as necessary to provide general circulation in the
13 area affected by such reassignment.

14 (5) The board may be reconvened in accordance with
15 subsection (1) of this section at a later date upon request to
16 the Governor by the party for which jurisdiction for implementation
17 and enforcement was terminated if such party desires to have its
18 jurisdiction reinstated, but no such request shall be honored until
19 at least one year after the termination and not more than once
20 per year thereafter. The board may reinstate jurisdiction to that
21 party only upon a clear showing by such party that it is willing
22 and able to fully implement and enforce the plan and any applicable
23 controls. Notice that a party's jurisdiction has been reinstated
24 shall be provided in the same manner that notice of the earlier
25 termination was given.

1 Sec. 27. Section 46-739, Reissue Revised Statutes of
2 Nebraska, is amended to read:

3 46-739 (1) A district in which a management area has
4 been designated shall by order adopt one or more of the following
5 controls for the management area:

6 (a) It may allocate the amount of ground water that may
7 be withdrawn by ground water users;

8 (b) It may adopt a system of rotation for use of ground
9 water;

10 (c) It may adopt well-spacing requirements more
11 restrictive than those found in sections 46-609 and 46-651;

12 (d) It may require the installation of devices for
13 measuring ground water withdrawals from water wells;

14 (e) It may adopt a system which requires reduction of
15 irrigated acres pursuant to subsection (2) of section 46-740;

16 (f) It may limit or prevent the expansion of irrigated
17 acres or otherwise limit or prevent increases in the consumptive
18 use of ground water withdrawals from water wells used for
19 irrigation or other beneficial purposes;

20 (g) It may require the use of best management practices;

21 (h) It may require the analysis of water or deep soils
22 for fertilizer and chemical content;

23 (i) It may impose mandatory educational requirements
24 designed to protect water quality or to stabilize or reduce the
25 incidence of ground water depletion, conflicts between ground water

1 users and surface water appropriators, disputes over interstate
2 compacts or decrees, or difficulties fulfilling the provisions of
3 other formal state contracts or agreements;

4 (j) It may require water quality monitoring and reporting
5 of results to the district for all water wells within all or part
6 of the management area;

7 (k) It may require district approval of (i) transfers of
8 ground water off the land where the water is withdrawn or (ii)
9 transfers of rights to use ground water that result from district
10 allocations imposed pursuant to subdivision (1)(a) of this section
11 or from other restrictions on use that are imposed by the district
12 in accordance with this section. Such approval may be required
13 whether the transfer is within the management area, from inside
14 to outside the management area, or from outside to inside the
15 management area, except that transfers for which permits have been
16 obtained from the Department of Natural Resources prior to July 16,
17 2004, or pursuant to the Municipal and Rural Domestic Ground Water
18 Transfers Permit Act shall not be subject to district approval
19 pursuant to this subdivision. If the district adopts rules and
20 regulations pursuant to this subdivision, such regulations shall
21 require that the district deny or condition the approval of any
22 such transfer when and to the extent such action is necessary to
23 (A) ensure the consistency of the transfer with the purpose or
24 purposes for which the management area was designated, (B) prevent
25 adverse effects on other ground water users or on surface water

1 appropriators, (C) prevent adverse effects on the state's ability
2 to comply with an interstate compact or decree or to fulfill the
3 provisions of any other formal state contract or agreement, and (D)
4 otherwise protect the public interest and prevent detriment to the
5 public welfare;

6 (l) It may require, when conditions so permit, that
7 new or replacement water wells to be used for domestic or other
8 purposes shall be constructed to such a depth that they are less
9 likely to be affected by seasonal water level declines caused by
10 other water wells in the same area;

11 (m) It may close all or a portion of the management
12 area to the issuance of additional permits or may condition the
13 issuance of additional permits on compliance with other rules and
14 regulations adopted and promulgated by the district to achieve the
15 purpose or purposes for which the management area was designated;
16 and

17 (n) It may adopt and promulgate such other reasonable
18 rules and regulations as are necessary to carry out the purpose for
19 which a management area was designated.

20 (2) In adopting, amending, or repealing any control
21 authorized by subsection (1) of this section or sections 46-740
22 and 46-741, the district's considerations shall include, but not
23 be limited to, whether it reasonably appears that such action will
24 mitigate or eliminate the condition which led to designation of the
25 management area or will improve the administration of the area.

1 (3) Upon request by the district or when any of
2 the controls being proposed are for the purpose of integrated
3 management of hydrologically connected ground water and surface
4 water, the Director of Natural Resources shall review and comment
5 on the adoption, amendment, or repeal of any authorized control
6 in a management area. The director may hold a public hearing to
7 consider testimony regarding the control prior to commenting on the
8 adoption, amendment, or repeal of the control. The director shall
9 consult with the district and fix a time, place, and date for
10 such hearing. In reviewing and commenting on an authorized control
11 in a management area, the director's considerations shall include,
12 but not be limited to, those enumerated in subsection (2) of this
13 section.

14 (4) If because of varying ground water uses, varying
15 surface water uses, different irrigation distribution systems, or
16 varying climatic, hydrologic, geologic, or soil conditions existing
17 within a management area the uniform application throughout such
18 area of one or more controls would fail to carry out the intent
19 of the Nebraska Ground Water Management and Protection Act in a
20 reasonably effective and equitable manner, the controls adopted
21 by the district pursuant to this section may contain different
22 provisions for different categories of ground water use or portions
23 of the management area which differ from each other because of
24 varying climatic, hydrologic, geologic, or soil conditions. Any
25 differences in such provisions shall recognize and be directed

1 toward such varying ground water uses or varying conditions. Except
2 as otherwise provided in this section, if the district adopts
3 different controls for different categories of ground water use,
4 those controls shall be consistent with section 46-613 and shall,
5 for each such category, be uniform for all portions of the area
6 which have substantially similar climatic, hydrologic, geologic,
7 and soil conditions.

8 (5) The district may establish different water
9 allocations for different irrigation distribution systems.

10 (6) (a) The district may establish different provisions
11 for different hydrologic relationships between ground water and
12 surface water.

13 (b) For management areas a purpose of which is the
14 integrated management of hydrologically connected ground water and
15 surface water, the district may establish different provisions for
16 water wells either permitted or constructed before the designation
17 of a management area for integrated management of hydrologically
18 connected ground water and surface water and for water wells
19 either permitted or constructed on or after the designation date
20 or any other later date or dates established by the district.
21 Permits for construction of new wells not completed by the date
22 of the determination of fully appropriated shall be subject to any
23 conditions imposed by the applicable natural resources district.

24 (c) For a management area in a river basin or part
25 of a river basin that is or was the subject of litigation over

1 an interstate water compact or decree in which the State of
2 Nebraska is a named defendant, the district may establish different
3 provisions for restriction of water wells constructed after January
4 1, 2001, if such litigation was commenced before or on May 22,
5 2001. If such litigation is commenced after May 22, 2001, the
6 district may establish different provisions for restriction of
7 water wells constructed after the date on which such litigation
8 is commenced in federal court. An appeal from a decision of
9 the district under this subdivision shall be in accordance with
10 the hearing procedures established in the Nebraska Ground Water
11 Management and Protection Act.

12 (d) Except as otherwise authorized by law, the district
13 shall make a replacement water well as defined in section 46-602,
14 or as further defined in district rules and regulations, subject to
15 the same provisions as the water well it replaces.

16 (7) If the district has included controls delineated in
17 subdivision (1)(m) of this section in its management plan, but has
18 not implemented such controls within two years after the initial
19 public hearing on the controls, the district shall hold a public
20 hearing, as provided in section 46-712, regarding the controls
21 before implementing them.

22 ~~(8) Whenever a management area designated under section~~
23 ~~46-712 or 46-725 or sections 46-713 to 46-719 encompasses portions~~
24 ~~of two or more districts, the responsibilities and authorities~~
25 ~~delegated in this section and sections 46-740 and 46-741 shall~~

1 be exercised jointly and uniformly by agreement of the respective
2 boards of all districts so affected. Whenever management areas
3 designated by two or more districts adjoin each other, the
4 districts are encouraged to exercise the responsibilities and
5 authorities jointly and uniformly by agreement of the respective
6 boards.

7 ~~(9)~~ (8) In addition to the controls listed in subsection
8 (1) of this section, a district in which a management area has
9 been designated may also adopt and implement one or more of the
10 following measures if it determines that any such measures would
11 help the district and water users achieve the goals and objectives
12 of the management area: (a) It may sponsor nonmandatory educational
13 programs; and (b) it may establish and implement financial or
14 other incentive programs. As a condition for participation in
15 an incentive program, the district may require water users or
16 landowners to enter into and perform such agreements or covenants
17 concerning the use of land or water as are necessary to produce the
18 benefits for which the incentive program is established.

19 Sec. 28. Section 46-740, Reissue Revised Statutes of
20 Nebraska, is amended to read:

21 46-740 (1) If allocation is adopted for use of ground
22 water for irrigation purposes in a management area, the permissible
23 withdrawal of ground water shall be allocated equally per irrigated
24 acre except as permitted by subsections (4) through (6) of
25 section 46-739. Such allocation shall specify the total number

1 of acre-inches that are allocated per irrigated acre per year,
2 except that the district may allow a ground water user to average
3 his or her allocation over any reasonable period of time. A ground
4 water user may use his or her allocation on all or any part of
5 the irrigated acres to which the allocation applies or in any other
6 manner approved by the district.

7 (2) Except as permitted pursuant to subsections (4)
8 through (6) of section 46-739, if annual rotation or reduction of
9 irrigated acres is adopted for use of ground water for irrigation
10 purposes in a management area, the nonuse of irrigated acres shall
11 be a uniform percentage reduction of each landowner's irrigated
12 acres within the management area or a subarea of the management
13 area. Such uniform reduction may be adjusted for each landowner
14 based upon crops grown on his or her land to reflect the varying
15 consumptive requirements between crops.

16 (3) Unless an integrated management plan, a rule, or an
17 order is established, adopted, or issued prior to November 1, 2005,
18 no integrated management plan, rule, or order shall limit the use
19 of ground water by a municipality, within an area determined by the
20 Department of Natural Resources to be fully appropriated pursuant
21 to section 46-714 or designated as overappropriated pursuant to
22 section 46-713, until January 1, 2026, except that:

23 (a) Any allocations to a municipality that have been made
24 as of November 1, 2005, shall remain in full force and effect
25 unless changed by the appropriate natural resources district;

1 (b) (i) For any municipality that has not received an
2 allocation as of November 1, 2005, the minimum annual allocation
3 may be the greater of either the amount of ground water authorized
4 by a permit issued pursuant to the Municipal and Rural Domestic
5 Ground Water Transfers Permit Act or the governmental, commercial,
6 and industrial uses of the municipality plus a per capita
7 allowance. Water for commercial and industrial uses may be limited
8 as specified in subdivision (b) (iii) of this subsection.

9 (ii) The per capita allowance shall be based on the
10 location of the municipality, increasing in equal increments from
11 east to west, and shall not be less than two hundred gallons per
12 person per day at 95 degrees, 19 minutes, 00 seconds longitude
13 and not less than two hundred fifty gallons per person per day at
14 104 degrees, 04 minutes, 00 seconds longitude. Persons served by
15 a municipality outside of its corporate limits shall be considered
16 part of the municipality's population if such service begins prior
17 to January 1, 2026.

18 (iii) Prior to January 1, 2026, any new or expanded
19 single commercial or single industrial development served by any
20 municipality within the fully appropriated or overappropriated
21 area which, after the operative date of this section, commences
22 water use resulting in the consumptive use of water in amounts
23 greater than twenty-five million gallons annually may be subject to
24 controls adopted pursuant to section 46-715;

25 (c) Prior to January 1, 2026, increases in the

1 consumptive use of water by a municipality that result in a
2 decrease in streamflow shall be addressed by the integrated
3 management plan pursuant to controls or incentive programs
4 adopted pursuant to section 46-715 and shall not affect the
5 municipal allocations outlined in subdivisions (3) (a) and (b)
6 of this section. Any permanent reduction in consumptive use of
7 water associated with municipal growth, including governmental,
8 industrial, and commercial growth, during the period between the
9 operative date of this section and January 1, 2026, shall accrue
10 to the benefit of the natural resources district within which such
11 municipality is located; and

12 (d) To qualify for the exemption specified in subsection
13 (3) of this section, any city of the metropolitan class, city of
14 the primary class, city of the first class, or city of the second
15 class shall file a conservation plan with the natural resources
16 district, if required by the integrated management plan. Villages
17 and other municipalities smaller than a city of the second class
18 shall not be required to submit a conservation plan to qualify for
19 such exemption.

20 (4) On and after January 1, 2026, the base amount for
21 an annual allocation to a municipality shall be determined as
22 the greater of either (a) the amount of water authorized by a
23 permit issued pursuant to the Municipal and Rural Domestic Ground
24 Water Transfers Permit Act or (b) the greatest annual use prior
25 to January 1, 2026, for uses specified in subdivision (3) (b) of

1 this section plus the per capita allowance described in subdivision
2 (3) (b) (ii) of this section. On and after January 1, 2026, increases
3 in the consumptive use of water by a municipality that result
4 in a decrease in streamflow shall be addressed by the integrated
5 management plan pursuant to controls or incentive programs adopted
6 pursuant to section 46-715. Each municipality may be subject to
7 controls adopted pursuant to such section for amounts in excess of
8 the allocations.

9 (5) Unless an integrated management plan, rule, or order
10 is established, adopted, or issued prior to November 1, 2005,
11 no integrated management plan, rule, or order shall limit the
12 use of ground water by a nonmunicipal commercial or industrial
13 water user within an area determined by the department to be
14 fully appropriated pursuant to section 46-714 or designated as
15 overappropriated pursuant to section 46-713, until January 1, 2026,
16 except that:

17 (a) Prior to January 1, 2026, the minimum annual
18 allocation for a nonmunicipal commercial or industrial user shall
19 be the greater of either (i) the amount specified in a permit
20 issued pursuant to the Industrial Ground Water Regulatory Act or
21 (ii) the amount necessary to achieve the commercial or industrial
22 use, including all new or expanded uses that consume less
23 than twenty-five million gallons annually. Any increases in the
24 consumptive use of water by a nonmunicipal commercial or industrial
25 water user that result in a decrease in streamflow shall be

1 addressed by the integrated management plan pursuant to controls or
2 incentive programs adopted pursuant to section 46-715;

3 (b) Prior to January 1, 2026, any new or expanded single
4 commercial or industrial development served by a nonmunicipal
5 well within an area determined by the department to be fully
6 appropriated pursuant to section 46-714 or designated as
7 overappropriated pursuant to section 46-713 which, after the
8 operative date of this section, commences water use resulting in
9 the consumptive use of water in amounts greater than twenty-five
10 million gallons annually may be subject to controls adopted
11 pursuant to section 46-715. This subdivision does not apply to
12 a water user described in this subdivision that is regulated by
13 the Industrial Ground Water Regulatory Act and the United States
14 Nuclear Regulatory Commission;

15 (c) On and after January 1, 2026, the base amount
16 for an annual allocation to a nonmunicipal commercial or
17 industrial user within an area determined by the department to
18 be fully appropriated pursuant to section 46-714 or designated as
19 overappropriated pursuant to section 46-713 shall be the amount
20 specified in subdivision (5)(a) or (b) of this section;

21 (d) On and after January 1, 2026, increases in the
22 consumptive use of water by a nonmunicipal commercial or industrial
23 water user that result in a decrease in streamflow shall be
24 addressed by the integrated management plan pursuant to controls or
25 incentive programs adopted pursuant to section 46-715; and

1 (e) Any reduction in consumptive use associated with new
2 nonmunicipal industrial or commercial uses of less than twenty-five
3 million gallons, during the period between the operative date of
4 this section and January 1, 2026, shall accrue to the benefit
5 of the natural resources district within which such nonmunicipal
6 industrial or commercial user is located.

7 Sec. 29. Section 61-205, Reissue Revised Statutes of
8 Nebraska, is amended to read:

9 61-205 The Department of Natural Resources shall exercise
10 the powers and perform the duties assigned to the Department of
11 Water Resources prior to July 1, 2000. The Department of Natural
12 Resources shall exercise the powers and perform the duties assigned
13 to the Nebraska Natural Resources Commission prior to July 1, 2000,
14 except as otherwise specifically provided.

15 The Director of Natural Resources and his or her duly
16 authorized assistants shall have access at all reasonable times
17 to all dams, reservoirs, hydroelectric plants, water measuring
18 devices, and headgates, and other devices for diverting water, for
19 the purpose of performing the duties assigned to the department.

20 Sec. 30. Section 77-3442, Revised Statutes Supplement,
21 2005, is amended to read:

22 77-3442 (1) Property tax levies for the support of local
23 governments for fiscal years beginning on or after July 1, 1998,
24 shall be limited to the amounts set forth in this section except as
25 provided in section 77-3444.

1 (2)(a) Except as provided in subdivision (2)(b) of this
2 section, school districts and multiple-district school systems may
3 levy a maximum levy of (i) one dollar and five cents per one
4 hundred dollars of taxable valuation of property subject to the
5 levy for fiscal years 2003-04 through 2007-08 and (ii) one dollar
6 per one hundred dollars of taxable valuation of property subject to
7 the levy for all fiscal years except fiscal years 2003-04 through
8 2007-08. Excluded from this limitation are amounts levied to pay
9 for sums agreed to be paid by a school district to certificated
10 employees in exchange for a voluntary termination of employment
11 and amounts levied to pay for special building funds and sinking
12 funds established for projects commenced prior to April 1, 1996,
13 for construction, expansion, or alteration of school district
14 buildings. For purposes of this subsection, commenced means any
15 action taken by the school board on the record which commits
16 the board to expend district funds in planning, constructing, or
17 carrying out the project.

18 (b) Federal aid school districts may exceed the maximum
19 levy prescribed by subdivision (2)(a) of this section only to
20 the extent necessary to qualify to receive federal aid pursuant
21 to Title VIII of Public Law 103-382, as such title existed on
22 September 1, 2001. For purposes of this subdivision, federal
23 aid school district means any school district which receives ten
24 percent or more of the revenue for its general fund budget from
25 federal government sources pursuant to Title VIII of Public Law

1 103-382, as such title existed on September 1, 2001.

2 (c) For school fiscal year 2002-03 through school fiscal
3 year 2007-08, school districts and multiple-district school systems
4 may, upon a three-fourths majority vote of the school board of
5 the school district, the board of the unified system, or the
6 school board of the high school district of the multiple-district
7 school system that is not a unified system, exceed the maximum
8 levy prescribed by subdivision (2)(a) of this section in an amount
9 equal to the net difference between the amount of state aid that
10 would have been provided under the Tax Equity and Educational
11 Opportunities Support Act without the temporary aid adjustment
12 factor and if subdivision (3) of section 79-1007.02 and subsections
13 (2) and (5) of section 79-1008.01 had applied for the ensuing
14 school fiscal year for the school district or multiple-district
15 school system and the amount provided with the temporary aid
16 adjustment factor and if subdivision (4) of section 79-1007.02
17 and subsections (3) and (6) of section 79-1008.01 had applied.
18 The State Department of Education shall certify to the school
19 districts and multiple-district school systems the amount by which
20 the maximum levy may be exceeded for the next school fiscal
21 year pursuant to subdivision (2)(c) of this section on or before
22 February 15 for school fiscal years 2004-05 through 2007-08.

23 (3) Community colleges may levy a maximum levy on each
24 one hundred dollars of taxable property subject to the levy of
25 seven cents, plus amounts allowed under subsection (7) of section

1 85-1536.01, except that any community college whose valuation per
2 reported aid equivalent student as defined in section 85-1503 was
3 less than eighty-two percent of the average valuation per statewide
4 reimbursable reported aid equivalent total as defined in section
5 85-1503 for all community colleges for fiscal year 1997-98 may levy
6 up to an additional one-half cent for each of fiscal years 2005-06
7 and 2006-07 upon a three-fourths majority vote of the board.

8 (4) Natural resources districts may levy a maximum levy
9 of four and one-half cents per one hundred dollars of taxable
10 valuation of property subject to the levy. Natural resources
11 districts shall also have the power and authority to levy a
12 tax equal to the dollar amount by which their restricted funds
13 budgeted to administer and implement ground water management
14 activities and integrated management activities under the Nebraska
15 Ground Water Management and Protection Act exceed their restricted
16 funds budgeted to administer and implement ground water management
17 activities and integrated management activities for FY2003-04,
18 not to exceed one cent on each one hundred dollars of taxable
19 valuation annually on all of the taxable property within the
20 district. In addition, natural resources districts located in a
21 river basin, subbasin, or reach that has been determined to be
22 fully appropriated pursuant to section 46-714 or designated as
23 overappropriated pursuant to section 46-713 by the Department of
24 Natural Resources shall also have the power and authority to
25 levy a tax equal to the dollar amount by which their restricted

1 funds budgeted to administer and implement ground water management
2 activities and integrated management activities under the Nebraska
3 Ground Water Management and Protection Act exceed their restricted
4 funds budgeted to administer and implement ground water management
5 activities and integrated management activities for FY2005-06, not
6 to exceed three cents on each one hundred dollars of taxable
7 valuation on all of the taxable property within the district for
8 fiscal year 2006-07 and not to exceed two cents on each one
9 hundred dollars of taxable valuation annually on all of the taxable
10 property within the district for fiscal years 2007-08 and 2008-09.

11 (5) Educational service units may levy a maximum levy of
12 one and one-half cents per one hundred dollars of taxable valuation
13 of property subject to the levy.

14 (6) (a) Incorporated cities and villages which are not
15 within the boundaries of a municipal county may levy a maximum levy
16 of forty-five cents per one hundred dollars of taxable valuation
17 of property subject to the levy plus an additional five cents per
18 one hundred dollars of taxable valuation to provide financing for
19 the municipality's share of revenue required under an agreement
20 or agreements executed pursuant to the Interlocal Cooperation Act
21 or the Joint Public Agency Act. The maximum levy shall include
22 amounts levied to pay for sums to support a library pursuant
23 to section 51-201, museum pursuant to section 51-501, visiting
24 community nurse, home health nurse, or home health agency pursuant
25 to section 71-1637, or statue, memorial, or monument pursuant to

1 section 80-202.

2 (b) Incorporated cities and villages which are within the
3 boundaries of a municipal county may levy a maximum levy of ninety
4 cents per one hundred dollars of taxable valuation of property
5 subject to the levy. The maximum levy shall include amounts paid
6 to a municipal county for county services, amounts levied to pay
7 for sums to support a library pursuant to section 51-201, a museum
8 pursuant to section 51-501, a visiting community nurse, home health
9 nurse, or home health agency pursuant to section 71-1637, or a
10 statue, memorial, or monument pursuant to section 80-202.

11 (7) Sanitary and improvement districts which have been in
12 existence for more than five years may levy a maximum levy of forty
13 cents per one hundred dollars of taxable valuation of property
14 subject to the levy, and sanitary and improvement districts which
15 have been in existence for five years or less shall not have
16 a maximum levy. Unconsolidated sanitary and improvement districts
17 which have been in existence for more than five years and are
18 located in a municipal county may levy a maximum of eighty-five
19 cents per hundred dollars of taxable valuation of property subject
20 to the levy.

21 (8) Counties may levy or authorize a maximum levy of
22 fifty cents per one hundred dollars of taxable valuation of
23 property subject to the levy, except that five cents per one
24 hundred dollars of taxable valuation of property subject to the
25 levy may only be levied to provide financing for the county's

1 share of revenue required under an agreement or agreements executed
2 pursuant to the Interlocal Cooperation Act or the Joint Public
3 Agency Act. The maximum levy shall include amounts levied to pay
4 for sums to support a library pursuant to section 51-201 or museum
5 pursuant to section 51-501. The county may allocate up to fifteen
6 cents of its authority to other political subdivisions subject
7 to allocation of property tax authority under subsection (1) of
8 section 77-3443 and not specifically covered in this section to
9 levy taxes as authorized by law which do not collectively exceed
10 fifteen cents per one hundred dollars of taxable valuation on any
11 parcel or item of taxable property. The county may allocate to
12 one or more other political subdivisions subject to allocation
13 of property tax authority by the county under subsection (1) of
14 section 77-3443 some or all of the county's five cents per one
15 hundred dollars of valuation authorized for support of an agreement
16 or agreements to be levied by the political subdivision for the
17 purpose of supporting that political subdivision's share of revenue
18 required under an agreement or agreements executed pursuant to the
19 Interlocal Cooperation Act or the Joint Public Agency Act. If an
20 allocation by a county would cause another county to exceed its
21 levy authority under this section, the second county may exceed the
22 levy authority in order to levy the amount allocated.

23 (9) Municipal counties may levy or authorize a maximum
24 levy of one dollar per one hundred dollars of taxable valuation
25 of property subject to the levy. The municipal county may allocate

1 levy authority to any political subdivision or entity subject to
2 allocation under section 77-3443.

3 (10) Property tax levies for judgments, except judgments
4 or orders from the Commission of Industrial Relations, obtained
5 against a political subdivision which require or obligate a
6 political subdivision to pay such judgment, to the extent such
7 judgment is not paid by liability insurance coverage of a
8 political subdivision, for preexisting lease-purchase contracts
9 approved prior to July 1, 1998, for bonded indebtedness approved
10 according to law and secured by a levy on property, and for
11 payments by a public airport to retire interest-free loans from the
12 Department of Aeronautics in lieu of bonded indebtedness at a lower
13 cost to the public airport are not included in the levy limits
14 established by this section.

15 (11) The limitations on tax levies provided in this
16 section are to include all other general or special levies
17 provided by law. Notwithstanding other provisions of law, the
18 only exceptions to the limits in this section are those provided by
19 or authorized by sections 77-3442 to 77-3444.

20 (12) Tax levies in excess of the limitations in this
21 section shall be considered unauthorized levies under section
22 77-1606 unless approved under section 77-3444.

23 (13) For purposes of sections 77-3442 to 77-3444,
24 political subdivision means a political subdivision of this state
25 and a county agricultural society.

1 Sec. 31. Sections 4, 30, 31, 32, and 34 of this act
2 become operative on their effective date. The other sections of
3 this act become operative three calendar months after adjournment
4 of this legislative session.

5 Sec. 32. Original section 2-3225, Revised Statutes
6 Cumulative Supplement, 2004, and section 77-3442, Revised Statutes
7 Supplement, 2005, are repealed.

8 Sec. 33. Original sections 46-229.02, 46-229.03,
9 46-229.04, 46-290, 46-291, 46-294.01, 46-2,112, 46-2,136,
10 46-655.01, 46-683, 46-691.03, 46-701, 46-706, 46-712, 46-713,
11 46-714, 46-715, 46-719, 46-739, 46-740, and 61-205, Reissue Revised
12 Statutes of Nebraska, sections 2-945.01, 2-1588, and 2-3240,
13 Revised Statutes Cumulative Supplement, 2004, and section 46-602,
14 Reissue Revised Statutes of Nebraska, as amended by section 2,
15 Legislative Bill 508, Ninety-ninth Legislature, Second Session,
16 2006, are repealed.

17 Sec. 34. Since an emergency exists, this act takes effect
18 when passed and approved according to law.

Ex. No. 2

NEBRASKA MUNICIPAL REVIEW

■ 2006 legislation of interest
to municipalities

■ City of Lincoln wins right
to implement impact fees

■ Central City receives \$1 million
donation from Platte Valley Fuel Ethanol

Official Publication of the League of Nebraska Municipalities

MAY 2006

American Society for Public Administration – Nebraska Chapter award winners



ASPA Outstanding Public Administrator

Michael Nolan, City Administrator,
Norfolk. Award presented by
Dr. Gordon Adams, Mayor of Norfolk.



ASPA Outstanding Elected Official
Kate Witek, State Auditor of Public
Accounts



ASPA Lifetime Achievement
The late Randy Reyzlik, City Administrator,
Fremont



**City of Laurel receives 2006 Governor's
Showcase Community Award**



Sen. Ed Schrock

LB 1226: Thanks to Sen. Schrock, the League's critically important water provisions to protect and assure an adequate water supply will become law; Storm water funding provisions were also included in LB 1226

On April 12, the Legislature passed LB 1226 regarding natural resources on a 45-2 vote. Gov. Dave Heineman signed the bill into law on April 13. The effective date is July 14, 2006.

Included in LB 1226 are the provisions of the League's water bill, LB 933, and LB 1097, to create a storm water management plan program.

LB 1226 was introduced by Sen. Chris Langemeier of Schuyler. The intent of the bill is to clarify provisions of the law that give the Department of Natural Resources and the Natural Resources Districts authority to regulate water. LB 1226 would provide some standards for the Department of Natural Resources to use when they declare a basin fully or over appropriated.

The League water provisions (originally in LB 933) were introduced by Elm Creek Sen. Ed Schrock and the Legislature's Natural Resources Committee and adopted as the committee amendment to LB 1226. They are designed to assure that municipal water systems will be able to serve their customers, and have a secure water supply to provide for eco-

nomical growth under Nebraska's new and rapidly evolving state and Natural Resources Districts regulatory system for water use.

The municipal provisions were drafted by Don Blankenau of Fennemore Craig Law Firm on behalf of the League. These provisions represent the work of the League Legislative Committees, the League Water Legislative Subcommittee, and a negotiating committee formed by the League Subcommittee.

The municipal water changes were endorsed by the 49-member Governor's Water Policy Task Force, which includes representation from surface water irrigation interests, groundwater irrigation interests, municipal interests, environmental interests, as well as many others. Thanks to Steve Huggenberger, Lincoln Assistant City Attorney; Gary Mader, Grand Island Utilities Superintendent; Ted Cook, Lexington Mayor; Pat Heath, Gering Utilities Superintendent; Dan Crouchley, Metropolitan Utilities District Attorney; and Curt Friesen, former Henderson Mayor, who provided excellent municipal representation on this committee over the last several years.

Thanks to the many municipal officials and others who worked many

hours over the last year with League staff to negotiate with representatives from the State of Nebraska, Natural Resources Districts, and agricultural groups to draft legislation to meet the interests of municipal water systems: Don Blankenau of Fennemore Craig Law Firm on behalf of the League; Bob Rager, Holdrege City Administrator; Chris Anderson, Central City City Administrator; Dean Skokan, Fremont City Attorney; Dennis Smith, Norfolk Public Works Superintendent; Jack Vavra, York City Administrator; Steve Krajewski, Ogallala City Manager; Mike Lucas, Broken Bow Utilities Superintendent; Steve Kelley, Beatrice Water Superintendent; Jordan Ball, Sidney City Attorney; and John Heil of Baird Holm Law Firm also representing Sidney.

The basic premise of the municipal water sections is that municipal water growth will be largely exempt from most NRD water regulation for 20 years. After 20 years, municipalities will be exempt from most NRD regulation up to the highest use in that 20-year period, and additionally exempt for a municipal per capita growth allotment.

Specifically, this concept would apply in areas designated fully or over

Continued on page 5

Continued on page 4

appropriated by the Department of Natural Resources. For any municipality that has not received an allocation as of Nov. 1, 2005, the minimum annual allocation would be the greater of either: (1) the amount of a ground water transfer permit, or (2) the governmental, commercial and industrial uses of the municipality *plus* a per capita allowance representing customers served.

The per capita allowance would be based on the location of the municipality, increasing in equal increments from east to west and would not be less than 200 gallons per person per day at the eastern edge of the state and not less than 250 gallons per person per day at the western edge of the state.

The only exception would be that any new or expanded single commercial or single industrial development that has water use resulting in the **consumptive** use of water in amounts greater than 25,000,000 gallons annually, may be subject to controls adopted by the Natural Resources District. It is important to note that this applies to consumptive use, so water going back to the watershed through wastewater, stormwater, or other drainage runoff would not be included in the 25,000,000-gallon threshold.

Allocations to a municipality that have been made as of Nov. 1, 2005, would remain in effect.

To qualify for the exemption, all municipalities of the second class and larger will need to file a conservation plan if called for in the Integrated Management Plan with the Natural Resources Districts.

After Jan. 1, 2026, municipalities might be subject to an annual allocation for water use above the greater of either (1) the amount of water authorized by a groundwater

transfer permit, or (2) the greatest annual use prior to Jan. 1, 2026 for uses outlined above *plus* an ongoing per capita allowance.

Several amendments had been filed to the municipal water provisions that were of concern. These amendments were withdrawn.

Also included in LB 1226 are the provisions of LB 1097. LB 1097 was introduced by Sen. Schrock to create the **Storm Water Management Plan Program** within the Department of Environmental Quality.

This program will be used to fund grant requests from cities that are required to develop storm water management programs under the National Pollutant Discharge Elimination System. The grants, in part, will be based on population. This fund will assist cities in meeting the

unfunded federal mandates under the Clean Water Act. The amount of appropriation in LB 1226A is \$2.5 million.

The cities that are required to meet this federal mandate are those in Dakota, Douglas, Lancaster, and Sarpy Counties plus Fremont, Columbus, Norfolk, Grand Island, Hastings, Kearney, Lexington, North Platte, Gering, and Scottsbluff.

Thanks to Sen. Schrock for his work on LB 1226, LB 933, and LB 1097 on behalf of municipalities.

Thanks to Sen. Langemeier for allowing his bill to be used as a vehicle for both bills. Thanks to the many municipal officials who contacted your Senators throughout the session to express how important this water legislation is to municipalities. ■

**UNITED STATES COURT OF APPEALS
FOR THE EIGHTH CIRCUIT**

NO. 07-2248

MICHAEL JACOBSON,

Appellant

v.

**JON BRUNING, IN HIS OFFICIAL CAPACITY AS THE ATTORNEY
GENERAL OF NEBRASKA,**

Appellee.

**APPEAL FROM THE UNITED STATES DISTRICT COURT FOR THE
DISTRICT OF NEBRASKA
HONORABLE RICHARD G. KOPF**

**BRIEF OF APPELLANT,
MICHAEL JACOBSON**

SUBMITTED BY:
Michael Jacobson
Pro Se
613 North Ash
Gordon, NE 69343
308-360-0963

SUMMARY OF THE CASE

Appellant filed an action for declaratory relief, challenging parts of Neb.Rev.Stat. under the United States Constitution and the Civil Rights Act.

The Nebraska Attorney General filed a motion to dismiss invoking the 11th Amendment to the U.S. Constitution which was granted by the court. Appellant filed a motion for new trial that was denied. Appellant filed a timely notice of appeal to this court.

Plaintiff/Appellant requests twenty (20) minutes for oral argument for the reason that the issues presented are complex.

CORPORATE DISCLOSURE STATEMENT

There is no formal corporation just a family farm.

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JURISDICTIONAL STATEMENT

BASIS FOR DISTRICT COURT SUBJECT-MATTER JURISDICTION:

The Federal District Court jurisdiction is by virtue of 28 U.S.C. §§ 1331, 1343(3)(4), 2201 and 2202. This action arises under the Constitution of the United States and the Civil Rights.

BASIS OF COURT OF APPEALS JURISDICTION:

This Court has appellate jurisdiction pursuant to 28 U.S.C. § 1291, from the judgment of the District Court, dated April 24, 2007.

FILING DATES ESTABLISHING TIMELINESS OF APPEAL:

The judgment was entered by the District Court on the 24th day of April, 2007. Notice of Appeal was filed by Appellant within 30 days of the judgment.

ASSERTION THAT THE APPEAL IS FROM A FINAL ORDER OR JUDGEMENT:

This appeal is from a final decision pursuant to 28 U.S.C. § 1291.

STATEMENT OF THE ISSUES
PRESENTED FOR REVIEW

1. The court made an error adjudicating that the 11th amendment to the U.S. Constitution, precludes the appellant from bringing this action in federal court.

Apposite Cases: Hans v. Louisiana, 134 U.S. 1 (1890)

Edelman v. Jordon, 415 U.S. at 687.

2. The court made as error when it cited Idaho v. Coeur d'Alene Tribe of Idaho, 521 U.S. 261, without following up on the end result of the litigation.

Apposite Cases: Idaho v. Coeur d'Alene Tribe of Idaho, 521 U. S. 261.

U.S. v. Idaho, 95 F.Supp. 2d 1094 (D. Idaho 1998)

3. The court erred when it adjudicated that federal law did not confer appellant rights in vested private property rights in underground water.

Apposite Cases: Sorenson v. Lower Niobrara Natural Resources District, 376 N.W. 2nd 539,(1985)

Tulare Lake Basin Water Storage Dist. V. United States, 59 Fed Cl. 246 (2003)

Sporhase v. Nebraska ex Rel. Douglas, 102 S.Ct. 3456 (1982).

4. The court made an error when it decided that plaintiff's cause did not qualify for the Young exception.

Apposite Cases: Ex parte Young, 209 U.S. 123 (1908)

Fond du Lac Band of Chippewa Indians v. Carlson, 68 F.3d 253 (8th Cir. 1995)

Florida Dept. of State v. Treasure Salvors Inc., et al, 458 U.S. at 658-690.

Tindal, 167 U.S. at 221-223.

5. The court erred in ruling that appellant's case did not trigger the Federal Commerce Clause.

Apposite Cases: Sporhase v. Nebraska Ex Rel. Douglas, 102 S.Ct. at page 3462

Jones v. Gale, 405 F. Supp 2nd 1066

Wickard v. Filburn, 317 U.S. 111, 118-119 (1942)

6. It was error for the court to adjudicate that under Will v. Michigan Dept. of State Police, the state of Nebraska is not a person under 42 U.S.C. § 1983.

Apposite Cases: Jones v. Gale, 405 F. Supp 2nd 1066

Gray v. University of Kansas Medical Center, 715 F. Supp. (D. Kan. 1989)

7. The state of Nebraska waived their alleged immunity under the Compact Clause of the United States Constitution.

Apposite Cases: Parden v. Terminal R. Co., 377 U.S. 184 (1964)

STATEMENT OF THE CASE

Plaintiff's great-grandfather came west in the 1800's to file on a homestead, claim. His family later came from Wisner, Nebraska, over land with an oxen team, trailing a few cattle and a milk cow. The remains of the dugout dug into the south side of a hill, which was built to survive the first winter are still visible. A large log house was built that still stands today. The sod was broken, crops were planted that used the underground water, and the first water wells were dug by hand. His family proved up on the homestead and received Homestead Certificate No. 688 from application 1131 from President of the United States, Benjamin Harrison. This Homestead Certificate is recorded at the court house in Rushville, Nebraska, county seat for Sheridan County.

The certificate says in quoting from the Act of Congress approved on the 20th of May, 1862: "To secure Homesteads to Actual Settlers on the public domain..." The land was clearly "granted by the United States" to plaintiff's great-grandfather and "his heirs and assigns forever." They immediately had to have water in this semi-arid land for personal and livestock survival as well as the survival of the trees and a mandatory garden, thereby beginning to irrigate from *their* water captured and controlled underground.

In an act passed by congress on July 26, 1866, c. 262 § 9, 14 stat. 253 [U.S. Comp. St. 1901, p. 1437], the United States granted to plaintiff or grantor of plaintiff, by priority of possession vested private property rights in the captured underground water, in helping settle the west, for domestic and production of agriculture products for interstate commerce. Neither the legislature nor the courts have the power to abolish these rights which have become vested, if needed, in addition to prescription.

In 1953, plaintiff began and has continued to help his father re-leather livestock windmill wells, including the Nebraska County of Sheridan County.

In 1956, the first of many great irrigation wells in Sheridan County was drilled on land adjacent to, over the hill, from the Jacobson home place.

The static underground water level on all the Jacobson land has been at the same level below the surface since at least 1953.

There is no new shortage of water in relation to plaintiff in western Nebraska. Ted Tuner has bought hundreds of thousands of acres of land in Sheridan County, from the South Dakota border, south, in his quest to get his underground water to the Colorado border.

The Board of Directors of the Upper Niobrara White Natural Resources District ("District") in conjunction with Nebraska Department of Natural Resources ("Director") under Neb. Rev. Stat. 46-656.28 (Cum. Supp. 2002) "temporarily suspended" drilling of any new irrigation wells under the guise of "fully appropriated" exempting all federal land, based on the underground irrigator's manufactured self serving evidence of the Board of Directors.

Shortly before March 20, 2003, one member of the board of directors drilled an irrigation well on land that is adjacent to the Jacobson home place that produces 2000 gallons of water per minute and *then* voted for the "temporary suspension" of all irrigation wells.

Plaintiff timely appealed the Board's decision to the Nebraska District Court where the case was dismissed on the Attorney General and the Board's Motions to Dismiss for Lack of Judicial Jurisdiction. The Court of Appeals and the Supreme Court affirmed the District Court's decision that petitioner could not appeal decision because the board was acting legislatively.

STATEMENT OF THE FACTS

Please refer to Appellant's Complaint as included in the transcript previously transmitted to the Court.

SUMMARY OF THE ARGUMENT

From the United States government, plaintiff's ancestors acquired a vested private property right to water captured under their land, if needed, in addition to by prescription.

Plaintiff's has an uncontroverted, Constitutional private property right in the underground water as a corporeal hereditament, belonging to the soil.

As an heir, plaintiff and his predecessors in interest as homestead entrymen of vacant public lands of the United States, each continuously enjoyed and exercised ownership over underground water since the 1800's, are entitled to the full, free, and natural state of all waters which are naturally captured and under the control, beneath said ground, for use in domestic, irrigation used in interstate commerce, in the production of all agricultural products produced for interstate commerce and the private vested property rights in the underground water of plaintiff thereto are prior and superior to any alleged right or claim by the state of Nebraska including any and all entities of the state of Nebraska, the state of Colorado, Wyoming, Kansas, birds, fishes, all species of wildlife and any other adverse interest including all political subdivisions, compacts, settlement agreements, corporations, syndicates, clubs, organizations, lobbyists, environmentalists, socialists and communists.

Standard of Review. This court recently explained that “Ex parte Young recognized that suits may be brought in federal court against state officials in their official capacities for prospective injunctive relief to prevent future violations of federal law.” See Fond du Lac Band of Chippewa Indians v. Carlson, 68 F.3rd 253,255 (8th Cir. 1995) “Indian band sought to enjoin governor and other state officials from enforcing state fish and game laws against its members in alleged violation of treaty rights to hunt and fish in ceded territories. The United States District Court for the District Court for the District of Minnesota, Richard H. Kyle, J., denied state officials’ motion for summary judgment on defense of sovereign immunity. Officials appealed. The Court of Appeals, Lay Circuit Judge, held that lawsuit sought to vindicate important federal rights and therefore fell squarely within Ex parte Young exception to Eleventh Amendment immunity doctrine.”

ARGUMENT

THE COURT MADE AN ERROR ADJUDICATING THAT THE 11TH AMENDMENT TO THE U.S. CONSTITUTION, PRECLUDES THE APPELLANT FROM BRINGING THIS ACTION IN FEDERAL COURT.

Appellant is the fourth generation that has continuously lived and made their living on land that was homesteaded as a farmer and rancher in western Nebraska, 400 hundred miles form the state capitol, since the 1800s. It is absurd that the court is classifying appellant as a "foreigner" to Nebraska for purposes of this case.

From Hans v. Louisiana, supra, "The sovereignty of the States is limited by the Constitution. No state can enter into any treaty, alliance or confederation; grant letters of marque, pass any bill of attainder, or grant any title of nobility. These and many other rights and powers inherent in sovereign States were surrendered to the federal government by the adoption of the Constitution." The state of Nebraska, Colorado, and Kansas attorney generals has formed an alliance or compact in regard to water, with Nebraska's parade of attorney generals, in this alliance of generals, has not

defended appellant's interstate commerce rights and vested property water rights granted by the federal government in underground water captured and continuously used, under his farm and ranch ground, they have continued to defy and continued to violate federal law.

ATTORNEY GENERAL AS A LOBBYIST

The attorney general knew there could be a constitutional challenge to Nebraska water law, but there was not a claim of sovereign immunity. From page 42, committee hearing for LB 619 February 6, 2003: DAVID COOKSON, assistant attorney general:

“And by the same token, while I didn't consult with Senator Jones sic (plaintiff in suit to get Initiative 300 declared unconstitutional) ... if anyone asks me a question about how this language ties in with the Sporhase decision, the Supreme Court decision that said ground water is an article of commerce ... you would look to make sure that this language is consistent with that.”

The attorney general knew full well that the Sporhase decision by the U.S. Supreme Court adjudicated that the State of Nebraska does not own the underground water under Nebraska. But never the less Mr. Cookson testified on page 43:

“The state does in fact, own the water...”

Again from Hans, “In Chisholm v. Georgia, 2 Dall. 419, a citizen of South Carolina sued the State of Georgia, invoking jurisdiction under that

clause of the Constitution extending the judicial power to controversies between States and citizens of other States. It was contended on behalf of the State of Georgia that while a State might sue a citizen of another State in the federal courts, the State could not there be sued; but this court held that it could be.”

This decision was followed by the adoption of the Eleventh Amendment to the Constitution, declaring that “The judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States by citizens of ANOTHER state, or by citizens or subjects of any FOREIGN state.”

(Emphasis added)

From Petty v. Tennessee- Missouri Bridge Commission, 79 S. Ct. 785, at n.1 “When Chisholm dared to sue the ‘sovereign state’ of Georgia, all the states were so indignant that Congress moved with vehement speed to prevent subsequent affronts to the dignity of the states. More than the dignity of a sovereign state was probably at issue, however. When the Eleventh Amendment was proposed many states were in financial difficulties and had defaulted on their debts. The states could therefore use the new amendment not only in defense of theoretical sovereignty but also in a more practical

way to forestall suits by individual creditors!" Irish and Prothro, *The Politics of American Democracy* (1959), p. 123.

The Hans decision clearly states, "... any attempt on its part (a state) to violate property ... may be judicially resisted;"

From Edelman v. Jordon, 415 U.S. at 687, Mr. Justice Brennan, dissenting. "This suit is brought by Illinois citizens against Illinois officials. In that circumstance, Illinois may not invoke the Eleventh Amendment, since that Amendment bars only federal court suits against States by citizens of other States. Rather, the question is whether Illinois may avail itself of the non-constitutional but ancient doctrine of sovereign immunity ... In my view Illinois may not assert sovereign immunity; ... the states surrendered that immunity in Hamilton's words, "'in the plan of the Convention,'" that formed the Union, at least insofar as the States granted Congress specifically enumerated powers..."

THE COURT MADE AN ERROR WHEN IT CITED IDAHO V. COEUR D'ALENE TRIBE OF IDAHO, 521 U.S. 261, WITHOUT FOLLOWING UP ON THE END RESULT OF THE LITIGATION.

The court in Idaho v. Coeur d' Alene Tribe of Idaho, declared the state of Idaho could steal the tribes land and water and hide behind the 11th Amendment to the U.S. Constitution, and claiming because there was not a federal interest or ongoing violation of federal law; and the state could not function without the absconded land and water, the tribe could not qualify for the Younger exception. The court further declared that the case would have to be tried in the "hometown" state court where there is only a discretionary right to appeal of the state supreme courts decision to the U.S. Supreme Court, therefore the issue would be decided by a state court if the Supreme Court refused to hear the case which is a given.

Normally this would have been the end of the state's successful thief of a vested property right, except in this case the United States in U.S. v. Idaho, 95 F. Supp. 2nd 109 (D. Idaho 1998), in its own capacity and as trustee for Coeur d'Alene Indian Tribe, brought action against State of Idaho seeking to quiet title to lands submerged by Coeur d'Alene Lake and St. Joe River within exterior boundaries of Coeur d'Alene Indian Reservation. Tribe

intervened as plaintiff. The District Court held that the tribe owned the land and water in question and the water was essential to their survival.

It was shown that the federal government granted vested property rights in the land and water at the time of the president's order declaring the boundaries of the reservation. This is analogous to appellants claim that the government granted appellant's ancestors vested property rights in the land and water through the Homestead Act. There is no evidence that the Homestead Act or any of the acts of this time frame did not convey the land and water to the homesteader. The intent of the government was to settle the west and to do this water was essential. For the attorney general of the state of Nebraska and his minions to now come in after over 100 years and try to stop irrigation for the benefit of cities including the city of Denver, Colorado who is quickly running out of water, the bird lovers and board members that are irrigators on the board of the Natural Resources Districts, is unconstitutional. It must be remembered that the attorney general office is only shutting down irrigation in western Nebraska where we are sitting on an underground ocean. One only has to look at all the lake, windmills and sub-irrigated alfalfa to make this simple deduction.

Like the tribe, appellant's ancestors depended on the underground for survival, for the horses to work the fields, for livestock and irrigate a

mandatory garden plot. This captured underground water was and is essential for survival.

At the time of the Homestead Act the federal government was plainly aware of the vital importance of the underground water, as an example when they enacted the tree claim.

**THE COURT ERRED WHEN IT ADJUDICATED THAT FEDERAL
LAW DID NOT CONFER APPELLANTS RIGHTS IN VESTED
PRIVATE PROPERTY RIGHTS IN UNDERGROUND WATER.**

Appellant has not asked for any compensation to try to not run afoul of the 11th Amendment, but must cite cases that involve compensation to make his point of vested property rights in underground water.

**THE APPELLANT'S RIGHT TO USE THE GROUND WATER
UNDERLYING HIS ANCESTOR'S LAND CANNOT BE TAKEN
WITHOUT THE PAYMENT OF JUST COMPENSATION.**

Appellant holds vested federal property rights. Specifically, appellant has a vested federal property right in the use of ground water at issue. The Nebraska Supreme Court has expressly held that the right to use ground water is a property right that cannot be taken without just compensation. In

Sorenson v. Lower Niobrara Natural Resources District, 221 Neb. 1809, 191-192, 376 N.W. 2nd 539, 548 (1985), the Nebraska Supreme Court held as follows:

“... it is clear that the right to use ground water is an attribute of owning fee simple title to land overlying a source of ground water and is inseparable from the land to which it applies. *We conclude that the right of an owner of overlying land to use ground water is an appurtenance constituting property protected by Neb. Const. Art. 1 § 21*” (5th and 14th Amendments U.S. Constitution). “The property of no person shall be taken or damaged for public use without compensation therefore.” (Emphasis added)

Appellant also calls the Court’s attention to Tulare Lake Basin Water Storage District v. United States, 59 Fed. Cl. 246 (2003), in which a Biological Opinion issued by the National Marine Fisheries Service pursuant to the Endangered Species Act was held to have effectuated a taking of water rights requiring just compensation.

In Sporhase v. Nebraska Ex Rel. Douglas, 102 S. Ct. 3456 (1982), the attorney general brought suit to enjoin defendant, a farmer, from transporting his groundwater under the state of Nebraska onto adjoining farm ground in the state of Colorado for agricultural irrigation located on the Colorado border without a permit. The District Court, Chase County, Jack H. Hendrix, issued injunction and defendants appealed. The Nebraska Supreme Court, 305 N.W. 2nd 614, affirmed. Appeal was taken. The Supreme Court, Justice Stevens, held that: (1) groundwater is an article of

commerce, and (2) reciprocity requirement of Nebraska statutory restriction on withdrawal of groundwater from any well within Nebraska intended for use in adjoining state violated commerce clause by imposing impermissible burden on interstate commerce.

The Supreme Court in Sporhase was correct when it ruled that Nebraska's claim of public ownership of water under the farmers' land in western Nebraska was based on legal fiction. The state of Nebraska does not own the water under plaintiff's land. This fact is proven by tracing title to the water that is an appurtenance to the soil as defined by the Louisiana Purchase Treaty from the time that the geographical area that is now Nebraska came under the jurisdiction of the United States.

The land that became Nebraska was part of the Louisiana Purchase. When the treaty with France was signed in 1803 (The United States Constitution does not authorize the acquisition of land, but it does authorize the making of treaties. U.S. CONST. art. II, section 2 cl . 2. Consequently, in an attempt to avoid questions of constitutional authority to purchase land, President Jefferson entered into a treaty with France on April 30, 1803. The treaty was approved by the Senate on Oct. 17, 1803, and the United States took possession of the vast Louisiana territory on December 20 of the same year). The federal government acquired title to all of the Louisiana territory.

When Nebraska was admitted to the Union in 1867, most land and water found within the state remained part of the public domain and subject to the land disposition laws of the United States. The state of Nebraska received only certain enumerated sections of land described in the Nebraska Enabling Act (Enabling Act of Congress, 13 Stat, 47 [1864]. Sections 16 and 36 in every Nebraska township were granted to the state for support of the common schools. The Act also granted Nebraska 20 sections of land for the purpose of erecting public buildings in the state capitol, 50 sections to support a penitentiary, and 80 sections to support a state university). Under the equal footing doctrine (Article IV, section 3, clause 1 of the Constitution gives Congress power to admit new states into the union. Most acts of admission declare that new states are admitted on equal footing with the original states), the state also received title to the bed and banks of rivers that were navigable in fact in 1867.

The vast bulk of land and water found within the borders of Nebraska remained property of the United States to be disposed of under a variety of federal disposition laws, most notably the Homestead Act of 1862. Quite clearly, the source of Nebraska's power to just "take" plaintiff's vested property water rights cannot be derived from its title to water because Nebraska never received title to water from the federal government in land

except to land that was granted to it by the United States under the Enabling Act.

Sporhase put to rest the notion that the state of Nebraska's claims of public ownership of water could defeat Commerce Clause scrutiny.

**THE COURT MADE AN ERROR WHEN IT DECIDED THAT
PLAINTIFF'S CAUSE DID NOT QUALIFY FOR THE YOUNG
EXCEPTION.**

This court recently explained that "Ex parte Young recognized that suits may be brought in federal court against state officials in their official capacities for prospective injunctive relief to prevent future violations of federal law." See Fond du Lac Band of Chippewa Indians v. Carlson, 68 F.3rd 253,255 (8th Cir. 1995) "Indian band sought to enjoin governor and other state officials from enforcing state fish and game laws against its members in alleged violation of treaty rights to hunt and fish in ceded territories. The United States District Court for the District Court for the District of Minnesota, Richard H. Kyle, J., denied state officials' motion for summary judgment on defense of sovereign immunity. Officials appealed. The Court of Appeals, Lay Circuit Judge, held that lawsuit sought to

vindicate important federal rights and therefore fell squarely within Ex parte Young exception to Eleventh Amendment immunity doctrine.”

Plaintiff's cause has its genesis from the federal government in his claims under the United States Homestead Act, analogous to the treaty of the Chippewa Indians, in addition to the dormant commerce clause.

Additionally, state officials are “persons” under § 1983 when sued for injunctive relief because such actions “are not treated as actions against the State.” Will, 491 U.S. at 71 n. 10, 109 S. Ct. at 2312 n. 10 (quoting Kentucky v. Graham, 473 U.S. 159, 167 n. 14, 105 S. Ct. 3099, 3106 n. 14, (1985)).

The District Court claims that the Court lacks jurisdiction to hear plaintiff's claims due to the State's alleged sovereign immunity. The District Court, in Jones v. Gale, 405 F Supp 2d 1066, decided December 15, 2005, and upheld by the Eighth Circuit Court of Appeals, 470 F.3d 1261, held that prospective relief against state officials is proper. “V. 42 U.S.C. § 1983. Because I have found that the Defendants, acting under color of state law, have denied the Plaintiffs rights secured to them under the Commerce Clause of the United States Constitution, the Plaintiffs are entitled to judgment against the Defendants in their official capacities under 42 U.S.C. 1983, including prospective injunctive relief, ...” It would be an absurd

result to give a Colorado resident and an ex-Nebraska state senator a federal forum challenging the validity of Nebraska law while denying a fourth generation farmer resident of Nebraska the same right.

Where prospective relief is sought against an individual state officer in a federal forum based on a federal right, the Eleventh Amendment is not a bar.

As this action concerns the federal constitutionality of state law, the Nebraska state official authorized with enforcing its provisions and with defending state laws, Attorney General Jon Bruning was named as Defendant.

The landmark case of Ex parte Young, 209 U.S. 123 (1908), asserted that a suit challenging the constitutionality of a state official's action in enforcing state law is not one against the State. *Id.*, at 159-160. The theory of Young is that an unconstitutional statute is void, *id.*, at 159, and therefore does not "impart to [the official] any immunity from responsibility to the supreme authority of the United States." *Id.*, at 160. Young also held that the Eleventh Amendment does not prevent federal courts from granting prospective injunctive relief to prevent a continuing violation of federal law. *Id.*, at 155-156, 159. See Seminole Tribe of Fla. V. Florida, 517 U.S. at n. 14, page 71, (1996).

“...an individual can bring suit against state officer in order to ensure that the officer’s conduct is in compliance with federal law ...”

Ex parte Young was a watershed case in which the U.S. Supreme Court held that the Eleventh Amendment did not bar an action in the federal courts seeking to enjoin the Attorney General of Minnesota from enforcing a statute claimed to violate the Fourteenth Amendment of the United States Constitution. This holding has permitted the Civil War Amendments to the Constitution to serve as a sword, rather than merely as a shield, for those whom they were designed to protect. See Edelman v. Jordan, 415 U.S. at 664.

From Idaho v. Coeur d’Alene Tribe of Idaho, 521 U.S. 261, 302 (1997):

“Indeed, the decisions of this Court have so held or assumed as far back as the time of Chief Justice Marshall’s statement in United States v. Peters, 5 Cranch 115, 139-140 (1809), that ‘it certainly can never be alleged that a mere suggestion of title in a state to property, in possession of an individual, must arrest the proceedings of the court, and prevent their looking into the suggestion, and examining the validity of the title.’ The contrary rule, Lee later explained, would ‘sanctio[n] a tyranny which has no existence in the monarchies of Europe, nor in any other government which has a just claim to well-regulated liberty and the protection of personal rights.’ U.S. v. Lee, 106 U.S. 196 (1882). Thus did the Chief Justice foresee that governmental officials are not any the less amenable to suit for relying on their government’s claim to property title, and no decision before today’s would have turned the envious eyes of the old monarchs toward Idaho....We have already seen that

since the time of Young, as well as long before it, this Court has consistently held that a public officer's assertion of property title in the name of a government immune to suit cannot defeat federal jurisdiction over an individual's suit to be rid of interference with the property rights he claims."

From Florida Dept. of State v. Treasure Salvors Inc., et al, 458 U.S. at 685-690:

"We have already seen that since the time of Young, as well as long before it, this Court has consistently held that a public officer's assertion of property title in the name of a government immune to suit cannot defeat federal jurisdiction over an individual's suit to be rid of interference with the property rights he claims. (opinion of STEVENS, J.); Tindal, 167 U.S., at 221-223; Stanley v. Schwalby, 162 U.S. 255, 270-271 (1896); Lee, 106 U.S., at 210.

Relying extensively on the earlier decision in United States v. Lee, 106 U.S. 196, the Court in Tindal held that the "settled doctrine of this court wholly precludes the idea that a suit against individuals to recover possession of real property as a suit against the State simply because the defendant holding possession happens to be an officer of the State and asserts that he is lawfully in possession on its behalf." 167 U.S., at 221. The Court refused to accept the proposition that the "doors of the courts of justice are...closed against one legally entitled to possession, by the mere assertion of the defendants that they are entitled to possession for the State." Id., at 222. In explaining the extent of its decision, the Court stated:

"[T]he Eleventh Amendment gives no immunity to officers or agent of a State in withholding the property of a

citizen without the authority of law. And when such officers or agents assert that they are in rightful possession, they must make good that assertion when it is made to appear in a suit against them as individuals that the legal title and right of possession is in the plaintiff. If a suit against officers of a State to enjoin them from enforcing an unconstitutional statute, whereby the plaintiff's property will be injured...be not one against the State, it is impossible to see how a suit against the same individuals to recover the possession of property belonging to the plaintiff and illegally withheld by the defendants can be deemed a suit against the State."

The Court continued:

"Any other view leads to this result: That if a State, by its officers, acting under a void statute, should seize for public use the property of a citizen, without making or securing just compensation for him, and thus violate the constitutional provision declaring that no State shall deprive any person of property without due process of law, Chicago, Burlington & c. Railroad v. Chicago, 166 U.S. 226, 236, 241, the citizen is remediless so long as the State, by its agents, chooses to hold his property; for, according to the contention of the defendants, if such agents are sued as individuals, wrongfully in possession, they can bring about the dismissal of the suit by simply informing the court of the official character in which they hold the property thus illegally appropriated." *Id.*, at 222.

If plaintiff attempts to use his underground water that has been used continuously by him and his family since the 1800's from a well that is equipped to pump 50,000 gallons per minute for irrigation on agricultural crops on his land, used in interstate commerce, the attorney general can bankrupt plaintiff at \$5,000.00 per day for each day of use by plaintiff of his water and that is just for starters. Neb. Rev. Stat. 46-745; (1) Any person

who violates a cease and desist order ... shall be subject to a civil penalty of not less than one thousand dollars and not more than 5000.00 for each day an intentional violation occurs. ... Any civil penalty assessed and unpaid shall constitute a debt to the state which may be collected in the manner of a lien foreclosure ... (2)(a)...The attorney general shall have exclusive authority to enforce actions...(3)When the attorney general...brings an action...to recover a civil penalty under this section, the district shall recover the costs of the action ... (a)Remitted to the state treasure for credit to the Department of Justice Natural Resources Enforcement Fund.

THE COURT ERRED IN RULING THAT APPELLANT'S CASE DID NOT TRIGGER THE FEDERAL COMMERCE CLAUSE.

From Sporhase v. Nebraska Ex Rel. Douglas, 102 S. Ct. 3456, page 3462 , "The agricultural markets supplied by irrigated farms are world wide. They provide the archtypical example of commerce among the several states for which the Framers of our Constitution intended to authorize federal regulation."

From Sporhase v. Nebraska Ex Rel. Douglas, 102 S. Ct. 3456 (1982) page 3460 n.10. The District Court opinion 255 F.Supp., at 839, included these quotations from the two cases:

"The statute of Oklahoma recognizes [natural gas] to be a subject of intrastate commerce, but seeks to prohibit it from being the subject of interstate commerce, and this is the purpose of its conservation. In other words, the purpose of its conservation is in a sense commercial - the business welfare of the State, as coal might be, or timber. Both of these products might be limited in amount, and the same consideration of the public welfare which would confine gas to the use of the inhabitants of a State would confine them to the inhabitants of the State. If the States have such power a singular situation might result. Pennsylvania might keep its coal, the Northwest its timber, the mining States their minerals. And why may not the products of the field be brought within the principle?" West v. Kansas Natural Gas Co., 221 U.S., at 255, 31 S.Ct., at 571.

From Jones v. Gale, 405 F. Supp 2nd 1066, in regards to initiative 300, "Under the Commerce Clause, Congress may regulate (1) the channels of interstate commerce, (2) the instrumentalities of interstate commerce, or persons or things in interstate commerce, and (3) activities that substantially affect interstate commerce. United States v. Lopez, 514 U. S. 549, 558-59 (1995). Farming or ranching is defined in Initiative 300 as (i) the cultivation of land for the production of agricultural crops, fruit, or other horticultural products, or (ii) the ownership, keeping or feeding of animals for the production of livestock products. Producing, maintaining, and adding value to such commodities are activities that substantially affect interstate commerce. Wickard v. Filburn, 317 U.S. 111, 118-19 (1942) (Commerce Clause applied to production of wheat, even though production was only intended for consumption on the farm).

Initiative 300 also affects other activities related to interstate commerce by placing restrictions on the rental and sale of agricultural real estate. The rental of real estate is "unquestionably" an activity affecting interstate commerce. Russell v. United States, 471 U.S. 858, 862(1985). A number of courts have also recognized that the sale of real estate is an activity affecting interstate commerce, and that state laws or regulations governing the sale of real estate are subject to dormant Commerce Clause analysis, even though real estate itself is incapable of physical movement in commerce. See, e.g., Old Coach Development Corp. Inc. v. Tanzman, 881 F.2d 1227, 1232 (3rd Cir. 1989); Cranberry Hill Corp. v. Shaffer, 629 F.Supp.628, 630-36 (E.D.N.Y. 1986)("An item of commerce need not cross state lines to fall within the Commerce Clause's protection if its sale...will have an economic impact out-of-state." Id., at 631, citing Wickard, supra.)"

A succession of Supreme Court cases has upheld Congressional power to regulate where the regulated activity merely affects or depends on interstate commerce. Heart of Atlanta Motel, Ind. v. United States, 379 U. S. 241 (1964) (refusal of a local motel to rent rooms to African Americans affects interstate commerce because the action potentially limits the interstate travel opportunities of African Americans); Katzenbach v. McClung, 379 U.S. 294 (1964) (a restaurant that refuses to seat African

Americans operates in interstate commerce even if none of its customers are interstate travelers because it depends upon food supplies that travel in interstate commerce).

**IT WAS ERROR FOR THE COURT TO ADJUDICATE THAT
UNDER WILL V. MICHIGAN DEPT. OF STATE POLICE, THE
STATE OF NEBRASKA IS NOT A PERSON UNDER 42 U.S.C. §**

1983.

It was certainly not a problem for the ex-senator and Colorado attorney defendant in Jones v. Gale just recently decided by this very same court in regards to a Nebraska constitutional amendment that over 280,000 Nebraska residents including this plaintiff voted for.

The Will court 109 S.Ct. 2304 (1989), was a split court and it is an issue that needs to be revisited by the United States Supreme Court. From page 2315, "... In my view, a careful and detailed analysis of section 1983 leads to the conclusion that States are persons within the meaning of that statute."

From Gray v. University Of Kansas Medical Center, 715 F.Supp. (D. Kan. 1989) page 1043, "A few days ago, the United States Supreme Court, in what we believe to be an ill-founded and sophistic opinion, ruled that state

officials sued in their official capacities an not "persons" under 42 U.S.C. § 1983 ..."

The United States of America Congress had the foresight to give plaintiffs a federal forum through their legislation of 1871 creating the Civil Rights Act when a state like Nebraska (unicameral) has evolved to legislate through special interest group's lobbyists, not unlike the effects of the KKK, post civil war, with the purpose of widespread deprivations of civil rights.

THE STATE OF NEBRASKA WAIVED THEIR ALLEGED
IMMUNITY UNDER THE COMPACT CLAUSE OF THE UNITED
STATES CONSTITUTION

In 1943, a Compact was entered into by Nebraska, Kansas and Colorado which divided Republican River surface water among the three states.

In July, 1997, the states of Nebraska, Wyoming and Colorado and the Department of the Interior entered into a "Cooperative Agreement." Parden v. Terminal R. Co., 377 U.S. 184 (1964). (when involved in interstate commerce with another state the states waive their alleged immunity). The Nebraska attorney generals have done a great job of representing the interest of Kansans verses Appellants rights.

In 1938, Nebraska became the only state in the union that governed by a unicameral, therefore, Plaintiff has not been on equal footing with the other states.

Nebraska's legislature is unique among all state legislatures in the nation because it has a single house. It wasn't always a unicameral, the state had a senate and a house of representatives for 68 years. Implementation of the unicameral in 1937 cut legislative membership from 133 in the bicameral to 43 (now 49) in the new single house - nearly a 70 percent reduction.

Lobbyists and special interest groups more easily control desired legislation where control is needed in only one house.

In 1965, the Nebraska Legislature passed LB 302 that required lobbyists to register with the Clerk of the Legislature that was then printed in the Legislative Journal. The first year the list was published was 1967. There were one and one half pages of lobbyists listed, with their principals. For 2005, there are 23 pages of lobbyists and their principals. If you used the website <http://www.unicam.state.ne.us/lobby/index.htm> and brought up Lobbyist/Principal Expenditures Report in 2005, it listed 150 pages of money spent on lobbying in the Nebraska Legislature.

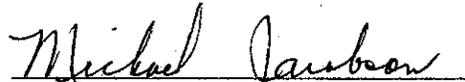
CONCLUSION

The Attorney General's "Temporary moratorium on drilling of new irrigation wells" on Appellant's ancestor's land, on its face, discloses an impermissible, discriminatory purpose.

This case must be returned for trial on its merits.

Respectfully submitted.

Dated this 20 day of August, 2007.


Michael Jacobson
Pro Se
613 North Ash
Gordon, NE 69343
308-360-0963

CERTIFICATE OF COMPLIANCE

Michael Jacobson, pro se, hereby certifies that:

1. Appellant's Brief herein complies with the type-volume limitations of Fed.R.App.P. 32(1)(5);
2. The number of words in this brief is 6,421 and the number of lines in this brief is 668;
3. Five (5) copies of this brief have been filed with the court;
4. Two (2) copies of this brief have been served upon counsel for

Appellee, Jon Bruning, as follows:

Jodi Fenner
Assistant Attorney General
2115 State Capitol Building
Lincoln, NE 68509

5. This Brief was prepared by using Microsoft Word. The 3.5" diskette accompanying the filing of the Appellant Michael Jacobson contains the full text of the Jacobson Brief and has been scanned and is virus-free.

Dated this 22nd day of August, 2007.

Michael Jacobson
Pro Se
613 North Ash
Gordon, NE 69343
308-360-0963

CERTIFICATE OF SERVICE

The undersigned hereby certifies that true and correct copies of the above and foregoing document was served by United States mail, first class postage prepaid on the 20 day of August, 2007, upon the following:

Jodi Fenner
Assistant Attorney General
2115 State Capitol Building
Lincoln, NE 68509



Michael Jacobson

ADDENDUM

unpredictable weather" (*id.* at ¶ 52). The value of his land has diminished (*id.* at ¶¶ 53-55).

The plaintiff asserts that he has a private property right in under ground water (filing no. 8 at ¶ 19) which is superior to the interest or claim of anyone else (*id.* at ¶¶ 20 *et seq.*) including the State of Nebraska. Around March of 2003, the plaintiff filed suit in a state district court in response to directives by the Board of Directors of the Upper Niobrara-White Natural Resources District and the Nebraska Department of Natural Resources that landowners must suspend the drilling of new irrigation wells. On motion by the Nebraska Attorney General and the Board of the District, the court dismissed the plaintiff's action (*id.* at ¶ 38).

Sovereign Immunity

The defendant does not address the merits of the plaintiff's claims but asserts that the plaintiff may not bring this action in federal court. I agree with the defendant that the sovereign immunity of the State of Nebraska, recognized and preserved by the Eleventh Amendment to the U.S. Constitution, precludes the plaintiff from bringing this action in federal district court.

A lawsuit against a government employee in his or her official capacity is actually a suit against the public employer. Kentucky v. Graham, 473 U.S. 159, 165 (1985). Therefore, although the plaintiff has sued the Nebraska Attorney General, the defendant in his official capacity is considered the State itself for purposes of this litigation. The plaintiff also seeks relief directly against the State, in this case a declaratory judgment that the "plaintiff has the right to drill irrigation wells on [his] land without interference and sanctions from the State of Nebraska, in production of agriculture products for interstate commerce." (Filing no. 8 at ¶ 10.)

Insofar as this is an action under 42 U.S.C. § 1983 against the State of Nebraska or an agency or instrumentality of the State, "a State is not a 'person' as that term is used in [42 U.S.C.] § 1983, and is not suable under the statute, regardless of the forum where the suit is maintained." Hilton v. South Carolina Public Railways Com'n, 502 U.S. 197, 199-201 (1991), *citing Will v. Michigan Dept. of State Police*, 491 U.S. 58 (1989). Thus, 42 U.S.C. § 1983 does not create a cause of action against the State of Nebraska or its agencies and instrumentalities.

Ex parte Young

The plaintiff acknowledges that sovereign immunity shields the State of Nebraska, its agencies and instrumentalities and employees in their official capacity in many circumstances. However, the plaintiff relies on the doctrine of Ex Parte Young, 209 U.S. 123, 155-56 (1908), by which a private party may seek prospective injunctive relief in federal court against state officials in their official capacity, even if the state is otherwise protected by the Eleventh Amendment. See, e.g., Klingler v. Director, Dept. of Revenue, 281 F.3d 776, 777 (8th Cir. 2002).

The doctrine of Ex parte Young, which ensures that state officials do not use the Eleventh Amendment to avoid compliance with federal law, carves out an exception to Eleventh Amendment immunity. However, the exception is narrow and applies in circumstances involving both prospective relief and a federal interest.

The exception does not permit a judgment against a state officer in his or her official capacity declaring that the officer violated federal law in the past. See, e.g., Green v. Mansour, 474 U.S. 64, 68, 73 (1985).¹ Similarly, while a suit to enjoin state officials in their official capacity may proceed if the complaint alleges an ongoing violation of federal law and seeks relief properly characterized as prospective, a declaratory judgment establishing *past* liability of the State is nevertheless forbidden by the Eleventh Amendment. Verizon Maryland, Inc. v. Public Service Com'n of Maryland, 535 U.S. 635, 646 (2002).

In this case, the rights advanced by the plaintiff arise under Nebraska law, and his claims derive from, and turn on, interpretation of state law. Federal law did not confer plaintiff's rights. The "vested private property rights in water" referenced in the Amended Complaint, which are alleged to be imperiled by the legislation challenged by the plaintiff, are property rights conferred solely by state law. Similarly, the legislation which purportedly infringes the plaintiff's property rights in under ground water is a matter of state law.

¹A declaratory judgment by a federal court that state officers in their official capacity violated federal law in the past "would have much the same effect as a full-fledged award of damages or restitution by the federal court, the latter kinds of relief being of course prohibited by the Eleventh Amendment." Green v. Mansour, 474 U.S. 64, 72-73, (1985).

The plaintiff traces his property rights to inheritance of the surface land from his parents. Of course, the plaintiff's rights derived from inheritance under state law cannot exceed the rights held by his parents. In Sporhase v. Nebraska, ex rel. Douglas, 458 U.S. 941 (1982), the U.S. Supreme Court described a Nebraska landowner's rights to under ground water as quite limited.

In Nebraska the surface owner has no comparable interest in ground water. As explained by the Nebraska Supreme Court, "the owner of land is entitled to appropriate subterranean waters found under his land, but he cannot extract and appropriate them in excess of a reasonable and beneficial use upon the land which he owns, especially if such use is injurious to others who have substantial rights to the waters, and if the natural underground supply is insufficient for all owners, each is entitled to a reasonable proportion of the whole." ... 305 N.W.2d, at 617 (quoting Olson v. City of Wahoo, ... 248 N.W. 304, 308 (1933)).

Id. at 950. The dissent, differing only as to whether the Commerce Clause was implicated in Sporhase, agreed with the majority that Nebraska landowners enjoy minimal ownership rights to ground water, elaborating that:

As with almost all of the Western States, Nebraska does not recognize an absolute ownership interest in ground water, but grants landowners only a right to use ground water on the land from which it has been extracted. Moreover, the landowner's right to use ground water is limited. Nebraska landowners may not extract ground water "in excess of a reasonable and beneficial use upon the land in which he owns, especially if such use is injurious to others who have substantial rights to the waters, and if the natural underground supply is insufficient for all owners, each is entitled to a reasonable proportion of the whole." Olson v. City of Wahoo, ... 248 N.W. 304, 308 (1933). With the exception of municipal water systems, Nebraska forbids any transportation of ground water off the land owned or controlled by the person who has appropriated the water from its subterranean source. ... 305 N.W.2d 614, 619 (1981).

Nebraska places additional restrictions on ground water users within certain areas, such as the portion of appellant's land situated in Nebraska, where the shortage of ground water is determined to be critical. Water users in appellants' district are permitted only to irrigate the acreage irrigated in 1977, or the average number of acres irrigated between 1972 and 1976, whichever is greater, and must obtain permission from the water district's board before any additional acreage may be placed under irrigation. The amount of ground water that may be extracted is strictly limited on an acre-inch-per-

irrigated-acre basis. There are also detailed regulations as to the spacing of wells and the use and operation of flow meters.

Id. at 964-65 (Rehnquist, J, dissenting, with whom Justice O'Connor joined).

There is no federal interest inherent in an alleged violation of state law by the state. "[A] violation of state law, without more, does not create a claim under the federal Constitution or 42 U.S.C. § 1983." Bagley v. Rogerson, 5 F.3d 325, 328 (8th Cir. 1993). Accord Collins v. Bellinghausen, 153 F.3d 591, 596 (8th Cir. 1996); Marler v. Missouri State Bd. of Optometry, 102 F.3d 1453, 1457 (8th Cir. 1996).

More important, the Eleventh Amendment deprives federal courts of jurisdiction over claims to enjoin a state official from prospective violation of state law or to require a state official to conform to state law. Pennhurst State School & Hosp. v. Halderman, 465 U.S. 89, 104-06 (1984). In such a case, the "need to promote the supremacy of federal law" underlying the Ex Parte Young exception is absent. Id. at 106.

A federal court's grant of relief against state officials on the basis of state law, whether prospective or retroactive, does not vindicate the supreme authority of federal law. On the contrary, it is difficult to think of a greater intrusion on state sovereignty than when a federal court instructs state officials on how to conform their conduct to state law. Such a result conflicts directly with the principles of federalism that underlie the Eleventh Amendment.

Id.

The plaintiff contends that more than just local property interests are at stake here, and he invokes the federal Commerce Clause in his facial challenge to the State's legislative restrictions on his use of ground water. It is true that the Commerce Clause precludes a state from discriminating in favor of its own inhabitants against nonresidents, even as to natural resources within the state's borders. Thus, in Sporhase v. Nebraska ex rel. Douglas, 458 U.S. 941 (1982), Nebraska created an impermissible barrier to interstate commerce by preventing the export of ground water to states which did not allow reciprocal export rights. Id. at 958.

However, the legislation which the plaintiff seeks to enjoin does not discriminate in favor of Nebraska residents against inhabitants of other states. On the contrary, the plaintiff objects to the restriction of his own local property rights by the State of Nebraska,

a purely intrastate concern, and a matter of competing property rights within the state's borders – pitting interests arising under state common law, estate law, statutory and regulatory law against each other, for a court to sort out wherever the State of Nebraska has consented to be sued for that purpose.

This case is reminiscent of Idaho v. Coeur d'Alene Tribe of Idaho, 521 U.S. 261 (1997), in which the Coeur d'Alene tribe and its members filed a declaratory judgment action in federal court against the State of Idaho and its officials to establish the tribe's entitlement to certain submerged lands under Lake Coeur d'Alene in Idaho. The defendants asserted the state's right under the Eleventh Amendment to have the dispute resolved in its own courts. The tribe alleged a continuing violation of its property rights in contravention of federal law, sought prospective injunctive relief, and invoked the Ex parte Young exception to the state's sovereign immunity.

The Court concluded that when a suit and the remedy it seeks "implicate[] special sovereignty interests" (in that case in the state's subterranean lands and waters), risk an outcome equivalent to an invasion of the state treasury, and may be pursued in a state forum, the state's sovereign immunity should not be ignored in favor of applying the Ex Parte Young fiction in a federal court. Idaho v. Coeur d'Alene Tribe of Idaho, 521 U.S. at 281, 287-88: "[I]f the Tribe were to prevail, Idaho's sovereign interest in its lands and waters would be affected in a degree fully as intrusive as almost any conceivable retroactive levy upon funds in its Treasury. Under these particular and special circumstances, we find the Young exception inapplicable. The dignity and status of its statehood allow Idaho to rely on its Eleventh Amendment immunity and to insist upon responding to these claims in its own courts, which are open to hear and determine the case." Id. at 287-88.

The plaintiff seeks in the present case to divest the State of Nebraska of some or all of the State's regulatory authority with respect to ground water within the State's boundaries. The case implicates significant sovereignty interests and risks fiscal consequences for the State. Also, as earlier discussed, this is not a case in which it is necessary for the federal courts to vindicate federal rights.

A state-court forum exists for suit against the State of Nebraska or its officers in an

action in state court like the one the plaintiff has instituted in this court. See the Nebraska Uniform Declaratory Judgments Act, Neb. Rev. Stat. §§ 25-21,149 to 25-21,164. Neb. Rev. Stat. § 25-21,150 of the Act states:

Any person ... whose rights, status or other legal relations are affected by a statute, municipal ordinance, contract or franchise, may have determined any question of construction or validity arising under the ... statute, ordinance, contract, or franchise and obtain a declaration of rights, status or other legal relations thereunder.

(Emphasis added.) "The Legislature has specifically decreed that the 'state may be sued in the district court of the county wherein the capital is situated in any matter founded upon or growing out of a contract, express or implied, originally authorized or subsequently ratified by the Legislature, or founded upon any law of the state.' Neb. Rev. Stat. § 25-21,206 Accordingly, the system has waived its sovereign immunity under the provisions of § 25-21,206." Hoiengs v. County of Adams, 516 N.W.2d 223, 235 (Neb., 1994).² (Emphasis added.)

A state declaratory judgment action attacking the constitutionality of a state statute or seeking relief from an invalid act or an abuse of authority by an officer or agent of the state does not violate the state's sovereign immunity if certain rules are observed. First, an action for declaratory judgment does not lie where another equally serviceable remedy is available. Northwall v. State, Dept. of Revenue, 637 N.W.2d 890, 896 (Neb. 2002). Therefore, if another state statutory scheme provides a more specific remedy, that remedial source may not be ignored in favor of the more general remedy of a declaratory judgment. Id.

Just as the Declaratory Judgments Act permits an action to challenge the constitutionality of a statute, Neb. Rev. Stat. § 84-911 provides a cause of action for a declaratory judgment concerning the constitutionality of administrative rules and regulations. See Logan v. Department of Corr. Servs., 578 N.W.2d 44, 51 (Neb. 1998).

²The current version of Neb. Rev. Stat. § 25-21,206 states in pertinent part: "The state may be sued in the district court of Lancaster County in any matter founded upon or growing out of a contract, express or implied, originally authorized or subsequently ratified by the Legislature, or founded upon any law of the state." (Emphasis added.)

In both instances, however, the state's waiver of sovereign immunity is restricted to restraining a state official from performing an invalid act (as opposed to compelling a state official to perform an affirmative act). Johnson v. Clarke, 603 N.W.2d 373, 376-77 (Neb. 1999).³ Accordingly, it appears that the plaintiff has an available forum in the state courts, either because a remedy exists under the statutory scheme which he challenges, or, if not, then under the state Declaratory Judgments Act to enjoin appropriate public officials from enforcing the state legislation which he contends violates his property rights in ground water.

For the foregoing reasons, the defendant's Motion to Dismiss will be granted. In addition, the plaintiff's Motion for Default Judgment is denied. The defendant received an extension of time to respond to the initial complaint. Before the defendant's deadline expired, the plaintiff filed his Amended Complaint. The plaintiff responded on a timely basis to the Amended Complaint. See filing no. 9 and Fed. R. Civ. P. 12(b).

³A declaratory judgment action which seeks a "statement of rights" but does not request state officials "to *do anything*" does not infringe on the state's immunity. Jacob v. Hill, 2003 WL 21316229 at *6 (Neb. App. 2003) (emphasis in original). Similarly, a plaintiff may sue a state official and seek to restrain that defendant from enforcing allegedly illegal laws or performing "invalid" acts, as long as the plaintiff does not seek to compel affirmative injunctive relief from the state official. If a declaratory judgment would compel an affirmative act by a state official, the state's sovereign immunity bars the action. See, e.g., Logan v. Department of Corr. Servs., 578 N.W.2d 44, 51 (Neb. 1998):

In determining whether the defendants' demurer should have been sustained, we look at whether [the plaintiff] seeks to compel affirmative action on the part of state officials which is within the rule of immunity or, **instead, seeks to restrain state officials from performing affirmative acts which are not within the rule of immunity**

The petition ultimately requests that the officers of the Department be prevented from requiring that the sentences from Knox County and Madison County be served consecutively to each other. Thus, [the plaintiff's] action **seeks to restrain state officials from performing affirmative acts which he alleges would be invalid and an abuse of authority. Therefore, the action as against [the state officials] Clarke and Hopkins is not barred by sovereign immunity.**

(Emphasis added.)

THEREFORE, IT IS ORDERED:

1. That filing no. 9, the Motion to Dismiss filed by the defendant Jon Bruning, is granted;
2. That filing no. 11, the plaintiff's Motion for Default Judgment, is denied;
3. That filing no 14, the plaintiff's Motion for Extension of Time to File Brief in Support of Resistance and Objection to Defendant's Motion to Dismiss, is granted; and
4. That judgment will be entered dismissing the plaintiff's complaint and this action without prejudice.

April 24, 2007.

BY THE COURT:

s/ Richard G. Kopf
United States District Judge

**UNITED STATES COURT OF APPEALS
FOR THE EIGHTH CIRCUIT**

NO. 07-2248

MICHAEL JACOBSON,

Appellant

v.

**JON BRUNING, IN HIS OFFICIAL CAPACITY AS THE ATTORNEY
GENERAL OF NEBRASKA,**

Appellee.

**APPEAL FROM THE UNITED STATES DISTRICT COURT FOR THE
DISTRICT OF NEBRASKA
HONORABLE RICHARD G. KOPF**

**REPLY BRIEF OF APPELLANT,
MICHAEL JACOBSON**

**SUBMITTED BY:
Michael Jacobson
Pro Se
613 North Ash
Gordon, NE 69343
308-360-0963**

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ARGUMENT

Plaintiff brought suit in the United States District Court, District of Nebraska challenging the validity, under the United States Constitution and Civil Rights Act, of Nebraska's three year moratorium on the drilling of new irrigation wells in western Nebraska in violation of the Commerce Clause, and parts of Nebraska Revised Statutes.

Appellant farms and ranches on ground homesteaded by appellant's ancestors in the 1800's in western Nebraska that has endured a prolonged drought and once again was declared a disaster area because of no rain. It is very hard to watch crops die a slow death and look at the land adjacent to your land being irrigated and producing great yielding crops because the owner of that adjacent land is an arm of the state government. He is a director of the local Natural Resources District that voted for the three year moratorium on drilling of new irrigation wells right after drilling a new irrigation well that produces 2,000 gallons per minute. Appellant's ancestor's land sits on an ocean of underground water that is eleven feet below the surface of the ground. Ted Turner knows about this underground water and is buying hundreds of thousands of acres from the South Dakota border to the Kansas border. Turner allegedly has paid for a feasibility study on pumping water from western Nebraska to Los Angeles, California. For

the Nebraska Attorney General to claim there is a shortage of underground water in Appellant's area is absurd to justify using police powers. An attempt by the State to acquire ownership of substantially all of the underground water in the state would be subject to attack as an illegal attempt to monopolize. There is no known bottom to this water captured underground. Appellant began helping his father re-leather stock wells in 1953, before underground irrigation got started. In the re-leathering process you become fully aware of the underground water level of a well. The static underground water level is at the same level as it was in 1953.

The court dismissed appellant's case on Eleventh Amendment grounds.

I. NEBRASKA'S MORATORIUM ON THE DRILLING OF NEW UNDERGROND IRRIGATION WELLS IN WESTERN NEBRASKA, WHERE PLAINTIFF'S LAND LIES, VIOLATES THE COMMERCE CLAUSE OF THE CONSTITUTION OF THE UNITED STATES.

The Dormant Commerce Clause Prohibits States from Enacting Laws that
Discriminate Against Interstate Commerce.

Like New Mexico's statute imposing a two year moratorium on the drilling of new underground water wells, invalidated by the Federal District Court in City of El Paso v. Reynolds, 597 F. Supp. 694 (1984),(El Paso 2)

because the moratorium violated the commerce clause. Nebraska's three year moratorium, unlawfully and unconstitutionally extended by arms of the state, on the drilling of new irrigation wells in western Nebraska excluding eastern Nebraska, on its face discloses an impermissible, discriminatory purpose to prevent plaintiff from obtaining any water under his land for irrigation in the production of farm products for interstate commerce.

Nebraska's moratorium violates the dormant Commerce Clause of the United States Constitution, U.S. Const. Art. I, § 8, Cl. 3, as it unconstitutionally restricts the free flow of commerce both into and out of the State of Nebraska. The dormant Commerce Clause "prohibits States from enacting laws that discriminate against or unduly burden interstate commerce." Smithfield Foods, Ind. v. Miller, 367 F.3d 1061, (8th Cir. 2004), IESI AR Corporation v. Northwest Arkansas Regional Solid Waste Mgmt. Dist., 433 F. 3d 600 (8th Cir. 2006). According to the United States Supreme Court, the vision of the Framers of the Commerce Clause was that "every farmer shall be encouraged to produce by the certainty that he will have free access to every market in the Nation." South Dakota Farm Bureau v. Hazeltine, 340 F.3rd 593 (quoting H.P. Hood and Sons, Inc. v. DuMond, 336 U.S. 525, 69 S. Ct. 657 (1949).

IT IS IMPOSSIBLE TO PRODUCE ANY CROP WITHOUT WATER.

In City Of El Paso v. Reynolds, supra (El Paso 2), was an action brought challenging constitutionality of New Mexico statute which expressly prohibited transport of ground water from New Mexico for use in another state. From No 14. Commerce: Waters and Water Courses. Statute imposing a two-year moratorium on new appropriations of ground water hydrologically connected to the Rio Grande below Elephant Butte on its face disclosed an impermissible, discriminatory purpose, namely, to prevent plaintiff city from obtaining any ground water from New Mexico, and thus it violated the commerce clause.

From No. 15 Commerce. A state statute may be invalid because of its protectionist purpose as well as its discriminatory effect. U.S.C.A. Const. Art. 1, § 8 cl.3.

**II. THE COURT AND THE ATTORNEY GENERAL ARE IN ERROR
IN DECIDING THAT THE ATTORNEY GENERAL AND ITS
ARMS OF STATE GOVERNMENT CAN HIDE BEHIND THE
11TH AMENDMENT ON UNDERGROUND WATER.**

From City of El Paso v. Reynolds, 563 F. Supp. 379 (1983) (El Paso 1), page 382 and 383, "Intervenors make two additional jurisdictional arguments. They first assert that El Paso's attempt to appropriate the public

waters of New Mexico is an action against the state itself which is barred by the Eleventh Amendment. The Supreme Court, in Sporhase v. Nebraska, expressly held that a state's espoused ownership of water is a legal fiction. 102 S.Ct. at 3462. Furthermore, plaintiffs seek only prospective relief as permitted under Ex Parte Young, 28 S.Ct. 441,(1908) and Quern v. Jordan, 99 S. Ct. 1139 (1979).”

The U.S. Supreme Court left no doubt that Nebraska underground water was a federal right. From Sporhase v. Nebraska, 102 S.Ct. at page 3463, “But appellee’s claim that Nebraska ground water is not an article of commerce goes too far: it would not only exempt Nebraska ground water regulation from burden-on-commerce analysis...”

CONCLUSION

Appellant respectfully requests this Court to reverse the District Court and remand for trial.

Dated this 9th day of October, 2007.

Respectfully submitted,

Michael Jacobson
Pro Se
613 North Ash
Gordon, NE 69343
308-360-0963

CERTIFICATE OF COMPLIANCE

Michael Jacobson, pro se, hereby certifies that:

1. Appellant's Reply Brief herein complies with the type-volume limitations of Fed.R.App.P. 32(1)(5);
2. The number of words in this reply brief is 963 and the number of lines in this reply brief is 97;
3. Five (5) copies of this reply brief have been filed with the court;
4. Two (2) copies of this reply brief have been served upon counsel for Appellee, Jon Bruning, as follows:

Jodi Fenner
Assistant Attorney General
2115 State Capitol Building
Lincoln, NE 68509

5. This Reply Brief was prepared by using Microsoft Word. The 3.5" diskette accompanying the filing of the Appellant Michael Jacobson contains the full text of the Jacobson Reply Brief and has been scanned and is virus-free.

Dated this 9th day of October, 2007.

Michael Jacobson
Pro Se
613 North Ash
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308-360-0963

CERTIFICATE OF SERVICE

The undersigned hereby certifies that true and correct copies of the above and foregoing document was served by United States mail, first class postage prepaid on the 9th day of October, 2007, upon the following:

Jodi Fenner
Assistant Attorney General
2115 State Capitol Building
Lincoln, NE 68509

Michael Jacobson

387
605

Case No. S-05-000759

IN THE NEBRASKA SUPREME COURT

SPEAR T RANCH, INC., a Nebraska Corporation,

Plaintiff,

vs.

MELVIN G. KNAUB, et al.,

Defendants.

APPEAL FROM THE MORRILL COUNTY DISTRICT COURT

Judge Paul D. Empson

REPLY BRIEF OF APPELLANT,
THE CENTRAL NEBRASKA PUBLIC POWER AND IRRIGATION DISTRICT
(CENTRAL)

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FILED

OCT 28 2005

CLERK
NEBRASKA SUPREME COURT
COURT OF APPEALS

enhancement, protection of threatened and endangered species, power plant cooling, and incidental underground water storage and recovery.

This Court had the foresight to caution against the use of injunction, except in that unusual case in which the weighing of factors called for in the Restatement augured extraordinarily to the side of one party. This is such a case. The consideration of specific evidentiary information is not appropriate at this point. However, the parties have stipulated to the Court's judicial notice of the records in the related cases, and the information in Central's briefs, filed in those cases, illustrates the magnitude of the harm caused by continuing to permit individual use of water for irrigation, when that same water could be used for multiple purposes:

Lake McConaughy is in dire condition.

When the original Complaint in this case was filed with the DNR, on June 9, 2003, Lake McConaughy held 807,000 acre feet, about 46% of its capacity. When the DNR's order summarily dismissing the Amended Complaint was entered on July 1, 2004, Lake McConaughy held 552,000 acre feet, 32% of capacity.

The reservoir, at this writing [October 1, 2004], holds 354,000 acre feet, about 20% of its capacity. Unpermitted diversions continue to withdraw perhaps as

much as 100,000 acre feet, on an average annual basis, from the reservoir. The lowest level ever, prior to 2004, was on October 17 through 19, 1956, at 383,600 acre feet. The new record low is now 341,400, set on September 13 and 14, 2004.

Until the current drought, the calendar year 1956 was the worst year for water supply for Lake McConaughy. As measured at the Lewellen gauge, the lake received 576,000 acre feet of inflow in that year. A new record low was recorded in 2002, 450,700 acre feet. The record was again broken in 2003, with a total of 437,300 acre feet of inflow for that year. Through July, 2004, 218,600 acre feet of inflow was recorded. Projected for the calendar year, this will again be a new record low, a total of about 375,000 acre feet of inflow.

Certainly, drought is the major cause of the precipitous decline in storage water in Lake McConaughy. However, the loss of 100,000 acre feet per year from the supply, and perhaps more, is of great significance.

Brief of Appellant, *In re Complaint of Central Neb. Pub. Power*, 270 Neb. 108, 699 N.W.2d 372 (2005).

CONCLUSION

For the foregoing reasons, the trial court's decision should be reversed and the case remanded for further proceedings.

DATED this 27 day of October, 2005.

Respectfully submitted,

THE CENTRAL NEBRASKA PUBLIC POWER
AND IRRIGATION DISTRICT, Appellant

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4.0 METHODOLOGIES

Overview

This section provides an overview of the methodologies used in the Department's basin evaluations and is separated into seven subsections. The first subsection will outline the legal requirements established in section 46-713 of the Ground Water Management and Protection Act and regulation 457 N.A.C. 24.001 (Appendix B) as they relate to the analysis. Subsection two will discuss the various methods available to assess stream depletions in hydrologically connected regimes and explain when specific methods were implemented by the Department. Subsection three will discuss the specific methods implemented by the Department to calculate the extent of the 10/50 area. The fourth subsection will proceed through the steps to calculate lag impacts from current wells and estimate long-term sustainability of water supplies. Subsection five will discuss implementation of the "erosion rule" (i.e., regulation 457 N.A.C. 24.001.01C) to evaluate impacts to surface water appropriations. Subsection six discusses how each basin, subbasin, or reach is evaluated to ensure compliance with state and federal laws. Subsection seven provides the details of the methods used to predict depletions from potential future development.

4.1 Legal Obligation of the Department

4.1.1 The Legal Requirements of Section 46-713

The methodologies used for evaluation within this report were developed to meet the requirements of section 46-713 of the Act. The criteria set forth in section 46-713 require the Department to 1) describe the nature and extent of surface and ground water uses in each river basin, subbasin, or reach; 2) define the geographic area within which surface water and ground water are hydrologically connected; 3) define the extent to which current uses will affect available near-term and long-term water supplies; and 4)

determine how preliminary conclusions, based on current development, would change if no additional legal constraints were imposed on reasonable projections of future development.

The description of the nature and extent of surface and ground water uses is developed based on information obtained through published reports from the University of Nebraska-Conservation and Survey Division (CSD), the U.S. Geological Survey, natural resources districts, Department databases, and other sources as noted in the text. The information represents the most current publications available. These data include information on transmissivity, specific yield, saturated thickness, depth to water, surficial geology, bedrock geology, water table elevation change, and test-hole information. These data are available on the UNL-Conservation and Survey Division and U.S. Geological Survey websites, <http://csd.unl.edu/> and <http://waterdata.usgs.gov/ne/nwis/gw>, respectively. All data utilized in this report are available from the Department upon request.

The Department is tasked with assessing the geographic area within which surface water and ground water are hydrologically connected. Regulation 457 N.A.C. 24.001.02 states that the geographic area within which the ground and surface water are hydrologically connected is determined by calculating where, in each river basin, a well would deplete a river's flow by 10% of the amount of water the well could pump over a fifty-year period (i.e., "the 10/50 area").

The Department's evaluation of the extent to which current uses will affect available near-term and long-term water supplies considers current well development and the twenty-five year lag impacts from that current development on surface water flows. For purposes of this report, lag impacts are defined as the delayed effect that the consumptive use of water associated with well pumping will have on hydrologically connected streamflow and the associated impact on surface water appropriations.

The Department is also required to assess how its preliminary conclusions, based on current development, might change by predicting future development. The predictions of future development account for existing wells and wells that may be added in the next twenty-five years. In projecting the quantity of wells that may be added to the number of currently developed wells, the Department considers the following: 1) availability of lands suitable for irrigation; 2) well-construction moratoriums established by natural resources districts; and 3) trends in well development over the previous ten-year period.

4.1.2 Regulation 457 N.A.C. 24.001

Regulation 457 N.A.C. 24.001 generally states that a basin is fully appropriated if current uses of hydrologically connected surface water and ground water in a basin cause, or will cause in the reasonably foreseeable future, (a) the surface water to be insufficient to sustain over the long term the beneficial purposes for which the existing surface water appropriations were granted, (b) the streamflow to be insufficient to sustain over the long term the beneficial uses from wells constructed in aquifers dependent on recharge from the basin's river or stream, or (c) reduction in streamflow sufficient to cause Nebraska to be in noncompliance with an interstate compact or decree, formal state contract, or state or federal laws.

In short, regulation 457 N.A.C. 24 states that the surface water supply is deemed to be insufficient if, at current levels of development, the most junior irrigation right in a basin, subbasin, or reach has been unable to divert sufficient surface water over the last twenty years to provide 85% of the amount of water a corn crop needs (the net corn crop irrigation requirement, or NCCIR) during the irrigation season (May 1 through September 30), or if the most junior irrigation right in a basin, subbasin, or reach is unable to divert 65% of the amount of water a corn crop needs during the key growing period of July 1 through August 31. For the purposes of this report, this is deemed the "65/85 rule".

If the requirements of the 65/85 rule are not satisfied, then the final step in a preliminary conclusion of whether a basin is fully appropriated is to apply what has been termed the "erosion rule" (457 N.A.C. 24.001.01C). This rule takes into account the fact that appropriations may be granted even though sufficient water is not available at the time they are granted to provide enough water for diversion to satisfy the requirements of the 65/85 rule. If an appropriation is unable to divert enough water to satisfy the requirements of the 65/85 rule, a second evaluation is completed to determine if the right has been "eroded". According to regulation 457 N.A.C. 24.001.01B, in the event that the junior water right is not an irrigation right, the Department will utilize a standard of interference appropriate for the type of water use to determine whether flows are sufficient for that use, taking into account the purpose for which the appropriation was granted.

4.2 Methods Available for Assessing Stream Depletions

There are several methods for estimating the extent and magnitude of stream depletions. Historically, three broad categories have been used to study ground water flow systems, i.e. sand tank models, analog models, and mathematical models, which include analytical models and numerical models. The first two methods were primarily used prior to the advent of modern, high-speed, digital computers. Since the advent of computers, analytical and numerical models have become the preferred methods for evaluating ground water flow. Limitations of each method must be considered by the user when considering the results of analyses and the appropriateness of each method for a given task.

4.2.1 Numerical Modeling Methods

With user-friendly interfaces and high-speed computers, numerical models have fast become the preferred method of evaluating regional ground water flow. One widely used numerical model developed by the U.S. Geological Survey is MODFLOW (McDonald and Harbaugh, 1988). For the purposes of this report, if an acceptable MODFLOW model suitable for regional analysis is available, then it will be utilized to assist in analysis. The only area for which an existing model was utilized in this year's evaluation was the Upper Big Blue Basin. The model was used to evaluate areas of hydrologic connection between surface water and ground water within the basin.

The remaining basins discussed in this report are not currently represented in a suitable numerical model. Development of a numerical model requires a substantial amount of quality-assured data. Current data collection efforts may allow for suitable model development for these basins in the future. However, at present, analytical methods are the best available tool for the analysis of stream depletions within these basins.

4.2.2 Analytical Methods

Analytical methods for the analysis of streamflow depletions have been developed by Glover and Balmer (1954), Maasland and Bittinger (1963), Gautuschi (1964), and others to evaluate the impacts of wells on streams. The Jenkins (1968) method for calculation of stream depletion factors (SDF) (Appendix C) lends itself best to the basin-wide aspect of the task described by this report. This method is based on simplifying assumptions and was built upon previously published equations. The Jenkins method has been utilized by other states, including Colorado and Wyoming, for water administration purposes. For this report, the Jenkins method was used in the evaluation of the Lower Niobrara River Basin, the Lower Platte River Basin, and Missouri Tributary basins.

Modified versions of the Jenkins method have been developed to address more complex situations, such as the presence of boundary conditions (Miller and Durnford, 2005) and a streambed (Zlotnik, 2004).

The modifications require additional data that are often not available for the basins in this evaluation.

However, the dominant factors in determining the impact of a pumping well on a stream are the distance of the well from the stream and the length of time that the well is pumped. Thus, the impact of any other differences between actual hydrologic and geologic conditions and the idealized assumptions used in the Jenkins method decreases as the distance from the stream and any relevant boundary conditions and duration of pumping increase. Therefore, when looking at regional impacts, the simplifying assumptions of the Jenkins method are much less significant. This concept is supported by comments from Dick Luckey (USGS, 2006). For this reason, and because of a lack of published data necessary for the calculations, no modifications were made to the Jenkins method for the Department's analysis.

In some areas of the state, particularly in the glaciated eastern sections, information regarding hydrologic conditions is inadequate, and no method currently available can be used to determine the 10/50 area or the lag impact of ground water pumping from wells. These areas were not evaluated in the current report.

4.2.3 Peer Review of the Methodology

The methodology developed by the Department and described in Sections 4.3 and 4.4 was independently peer reviewed by the Nebraska Water Science Center of the U.S. Geological Survey in October 2005.

The Center concluded, "The NWSC reviewers found the document technically sound." A copy of the peer review transmittal letter is in Appendix D.

4.3 Development of the 10/50 Areas

The 10/50 area is defined as the geographic area within which ground water is hydrologically connected to surface water. A well constructed in the 10/50 area would deplete a river's flow by at least 10% of the water pumped over a fifty-year period. The 10/50 areas are not dependent on the quantity of water pumped, but rather on each basin's geologic characteristics and the distance between each well and the stream.

4.3.1 Use of Numerical Models

The Department reviewed available numerical models to assess their validity in defining the 10/50 areas. The Upper Big Blue Natural Resources District developed a numerical MODFLOW ground water model using Cooperative Hydrology Study (COHYST) data to delineate the extent of the 10/50 area hydrologically connected to the Little Blue River. The Department reviewed the ground water model and deemed it suitable for use in this report. Documentation of this ground water model is available in Appendix E.

4.3.2 Use of Analytical Methods

In areas where an acceptable numerical model has not been developed but where sufficient geologic data exist, the Jenkins SDF methodology was used to define the 10/50 area. The following steps were taken to calculate the extent of the 10/50 area:

1. Collect and prepare data (data will be provided by the Department upon request).

2. Evaluate available data to determine if the principal aquifer is present and if sufficient data exist to determine that a given stream reach is in hydrologic connection with the principal aquifer.
3. Complete Jenkins SDF calculations to delineate the 10/50 boundary for these basins.
4. Develop the 10/50 area.

In all other areas, where sufficient data do not exist or the principal aquifer is not present, the 10/50 area could not be determined.

Step 1: Data Preparation

The following data are necessary for determining the extent of the 10/50 area:

- Aquifer transmissivity
- Aquifer specific yield
- Locations of perennial streams
- Point grid of distances to streams

The aquifer properties used in the study were found in the report "Mapping of Aquifer Properties – Transmissivity and Specific Yield – for Selected River Basins in Central and Eastern Nebraska", published by the Conservation and Survey Division (CSD, 2005).

The location and extent of perennial streams were found in the permanent streams GIS coverage available from the U.S. Geological Survey National Hydrography Dataset. The main stems of each river and of its tributaries were included in the calculations for individual basins.

A point grid with a spacing of one mile was developed to identify specific distances from the stream and to store those locations which were within the 10/50 area.



Step 2: Identify Principal Aquifers and Hydrologic Connection to Perennial Streams

The extent of hydrologic connection between aquifers and streams was primarily determined from maps generated by the Conservation and Survey Division (CSD, 2005). Other supporting evidence from published reports was also used in some cases to delineate the extent of hydrologic connection between aquifers and streams, and this information is referenced where used. Areas that lie outside of the hydrologically connected areas were not incorporated into the analysis.

Step 3: Perform Jenkins SDF Calculations

The Jenkins SDF method utilizes the following two terms, for which solutions are derived graphically using the curve shown in Figure 4-1.

Depletion percentage term: v/Q_t

Dimensionless term: $\frac{t}{SDF}$

Where

v = volume of stream depletion during time t

Q_t = net volume pumped during time t

t = time during the pumping period since pumping began

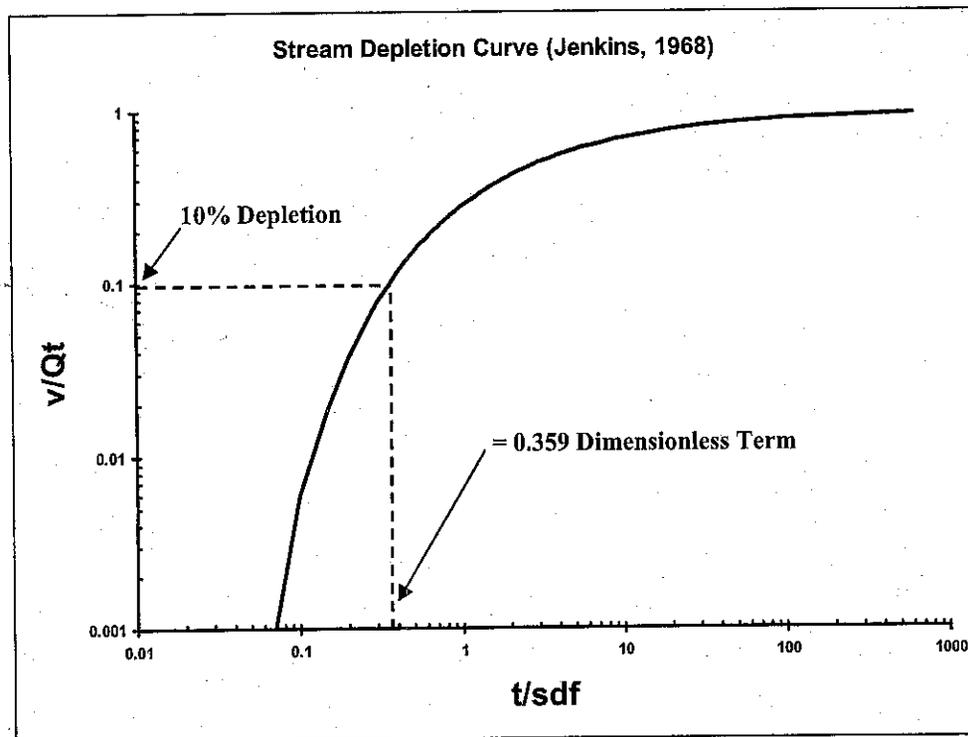
$$SDF = \frac{a^2 * S}{T}$$

where a = perpendicular distance between the well and stream

S = average specific yield of the aquifer between the well and the stream

T = average transmissivity of the aquifer between the well and the stream

Figure 4-1 Stream depletion curve from Jenkins (1968)

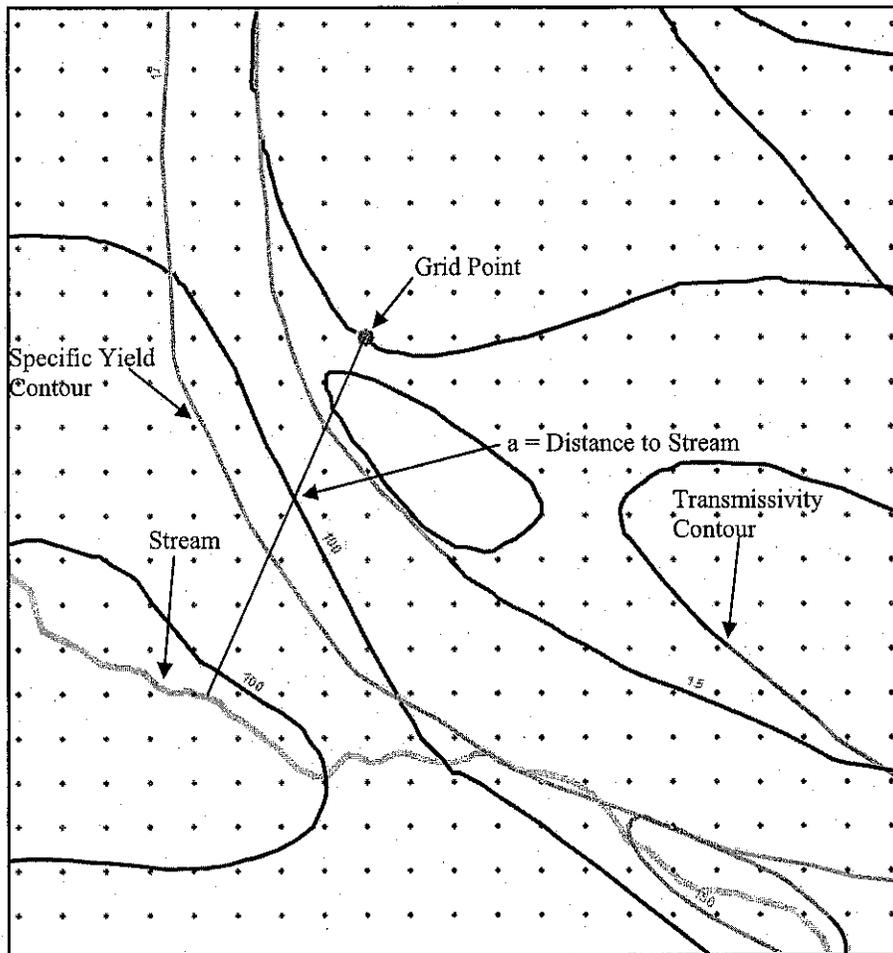


As illustrated in Figure 4-1, the dimensionless term will equal 0.359 when the depletion percentage is equal to 10%. The aquifer properties at each grid point and the distance of each grid point from the nearest perennial stream will be utilized to calculate the dimensionless term (Figure 4-2).

The known values for the 10/50 calculation are as follows:

- t is 50 years or 18,262 days.
- T is the aquifer transmissivity.
- S is the aquifer specific yield.
- a is the perpendicular distance from the grid point to the nearest perennial stream.

Figure 4-2 An example of the data and method used in determination of the 10/50 area



Step 4: Developing the 10/50 Area

Once the value for the dimensionless term is derived, those grid points with a dimensionless term value greater than 0.359 are included as part of the 10/50 area. All points that meet this requirement are merged to develop the complete 10/50 area for the basin.

4.4 Evaluating Current Development within a Basin

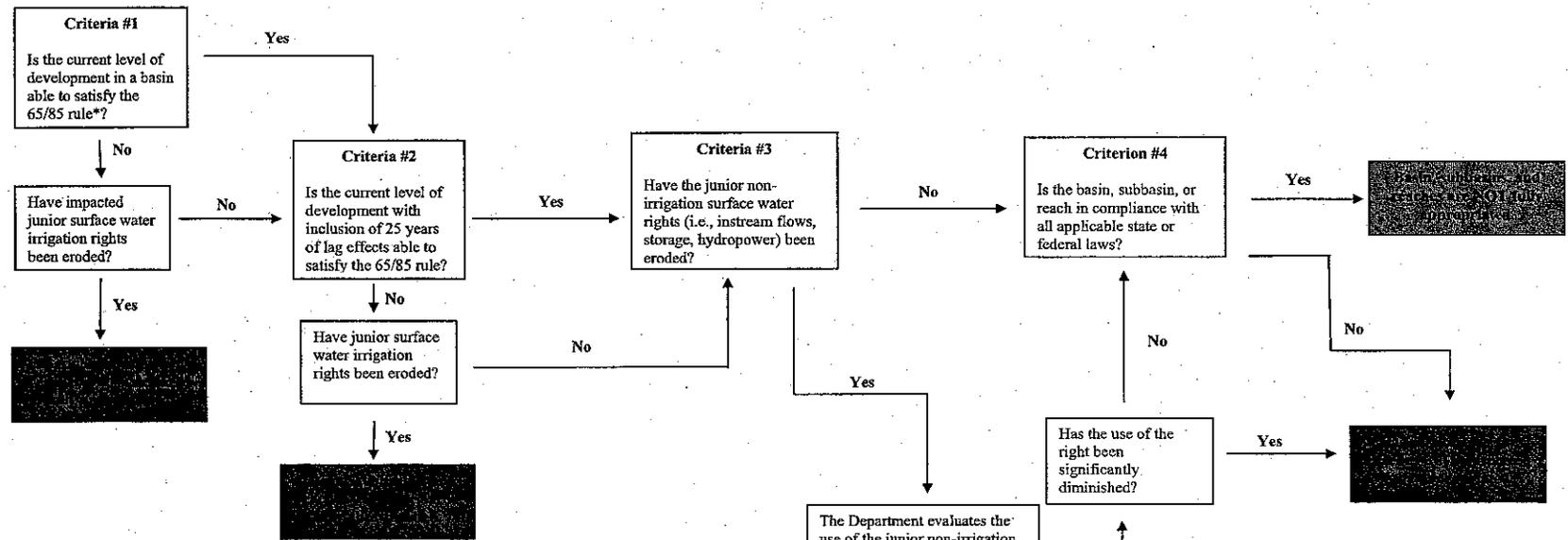
When determining the status of a basin, the Department evaluates five criteria. The five criteria are 1) that current levels of surface water and ground water development, without consideration of lag impacts

from wells, are able to satisfy the 65/85 rule; 2) that current levels of surface water and ground water development, with consideration of twenty-five year lag impacts, are able to satisfy the 65/85 rule; 3) that erosion of non-irrigation surface water rights based on the standard of interference established by the Department has not occurred; 4) that the basin, subbasin, or reach is in compliance with all applicable state and federal laws; and 5) that future development (including lag impacts) of ground water in the basin will not cause the basin to be unable to satisfy the 65/85 rule.

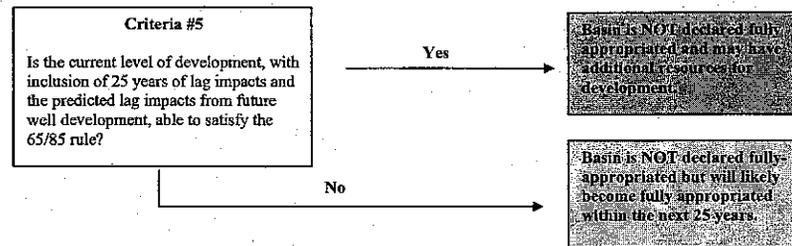
If criteria one and/or two are unable to be satisfied, then an additional test, the "erosion rule", is applied to junior irrigation rights. This is used to evaluate whether the ability to divert water by the most junior surface water appropriation has been eroded. Methods for implementation of the erosion rule are discussed in detail in Section 4.5. Figure 4-3 illustrates the evaluation process for determining whether a basin is fully appropriated.

Evaluation of Current Development

Figure 4-3 Basin evaluation flow chart



Evaluation of Future Development



*In general terms, the 65/85 rule states that the surface water supply is deemed to be insufficient if, at current levels of development, the most junior irrigation right in a basin, subbasin, or reach has been unable to divert sufficient surface water over the last twenty years to provide 85% of the amount of water a corn crop needs (the net corn crop irrigation requirement) during the irrigation season (May 1 through September 30) or if the most junior irrigation right in a basin, subbasin, or reach is unable to divert 65% of the amount of water a corn crop needs during the key growing period of July 1 through August 31.

Failure to satisfy criteria one, two, three, or four will cause a basin to be declared fully appropriated.

Failure to satisfy criterion five alone will not cause a basin to be declared fully appropriated, however, but such failure would indicate that future development may cause the basin to become fully appropriated if current development trends continue.

4.4.1 The Role of Surface Water Administration Doctrine

The administration of surface water plays a key role in evaluating the sustainability of development within a basin, subbasin, or reach. Surface water appropriations in Nebraska are administered under the doctrine of prior appropriation. The basis for the doctrine is "first in time, first in right." When there is a surface water shortage in a basin, subbasin, or reach, the surface water appropriation with a senior priority date has the right to use any available water for beneficial use, up to its permitted limit, before any upstream junior surface water appropriation can use water. To exercise a senior right, the senior water appropriation will put a call on the stream, and the Department will investigate the streamflows and, if necessary, issue closing orders to the upstream junior water appropriations, starting with the most junior right.

Although additional surface water development in a basin will deplete the overall surface water supplies during times when there is excess surface water, under the priority system a junior right cannot cause a senior surface water appropriation's supply to be reduced. When the Department administers for a calling senior surface water appropriation, all upstream junior surface water appropriations, starting with the most junior appropriator, are shut off in order of priority, no matter how far upstream, until the calling senior surface water appropriation is satisfied. Therefore, in areas where surface water administration is already occurring, additional surface water development will not reduce the number of days surface water is available for diversion by a senior surface water appropriation. In areas that have

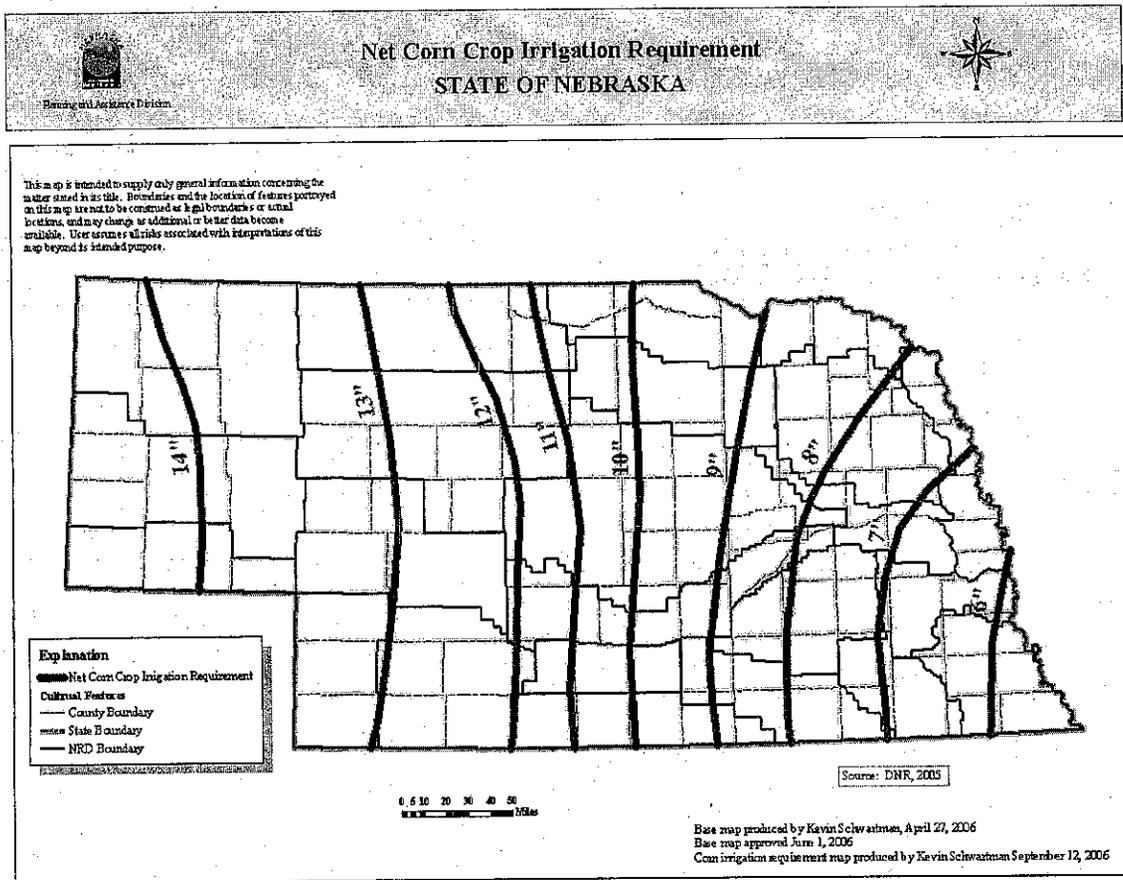
not experienced surface water administration, it is not feasible to predict the point at which additional surface water development may cause surface water administration to occur.

The priority doctrine of first in time, first in right which governs surface water administration ensures that, if there is sufficient water for the most junior irrigation appropriation, then all irrigation appropriations will be satisfied. Therefore, the Department analyzed the water available to the most junior appropriator in each basin evaluation. When making the calculation of the number of days that surface water was available to the most junior irrigation surface water appropriator, the Department assumed that, if the junior appropriator was not closed, then he or she could have diverted at the full permitted diversion rate.

4.4.2 The Net Corn Crop Irrigation Requirement

The net corn crop irrigation requirement (NCCIR) was developed to estimate the average minimum consumptive allocation of water necessary to yield a profitable corn crop to an individual operator. The NCCIR is used to determine the number of diversion days required for the most junior surface water appropriation to satisfy irrigation needs under the 65/85 rule (see Section 4.1.2). In developing the NCCIR, corn is used as the baseline crop because the most frequent beneficial use of water in all of the basins evaluated is for the irrigation of corn. The NCCIR accounts for the average evapotranspiration and average precipitation in an area and generally decreases from northwest to southeast across the state (Figure 4-4). The NCCIR distribution for each basin is set out in individual basin subsections. The method of developing the NCCIR is described in Appendix F.

Figure 4-4 Net corn crop irrigation requirement



4.4.3 Determination of Diversion Requirements

To determine a junior irrigator's diversion requirements, the NCCIR is converted to the number of days necessary for an operator to divert water to yield a profitable corn crop using these assumptions: 1) a downtime of 10%, due to mechanical failures and other causes; 2) a diversion rate of 1 cubic foot per second (cfs) per 70 acres (or 0.34 inches/day), as this is the most common rate approved by the Department for surface water appropriations; and 3) an irrigation efficiency of 80%. The steps to determine the number of days necessary for a specific operator to divert include the following:

- 1) Determine the geographic location of the operator.
- 2) Interpolate between the NCCIR contours to determine the specific need of the operator.
- 3) Multiply the NCCIR by 0.65 and 0.85 to find the 65% and 85% requirements.
- 4) Calculate the gross irrigation requirement by dividing the values from step 3 by 0.8 (the irrigation efficiency).
- 5) Divide the gross irrigation requirement by 0.34 inches per day (rate of diversion) and by 0.9 (to account for downtime) to determine the number of days of diversion necessary for an operator.

$$\text{Number of days necessary} = \frac{\text{gross requirement}}{(0.34)(0.9)}$$

The results of this calculation for the most junior surface water appropriator in a basin are used to evaluate whether a basin is fully appropriated by comparing these results to the average number of days over the previous twenty-year period (1987-2006) that surface water was available for diversion. If the number of days necessary to meet either the 65% or 85% criteria is less than the average number of days available for diversion, then the basin, subbasin, or reach may be declared fully appropriated.

This test is the first criterion in the five-tiered test described at the beginning of Section 4.4. If the basin satisfies this test, then the second criterion is evaluated: the addition of lag impacts from current development.

4.4.4 Calculating Lag Impacts from Current Well Development

The second criterion assessed to determine whether a basin is fully appropriated is to estimate the lag impacts from current well development. In those basins for which the appropriate geologic and

hydrologic data were available, the following steps were taken to compute the lag impact from current development:

1. Define the ground water boundary for the study area.
2. Extract all high capacity wells from the Department's database with a completion date prior to December 31, 2006.
3. Account for current year's development.
4. Estimate the volume of water pumped from each well.
5. Calculate the twenty-five year lag impacts.
6. Create lag-adjusted flow record.
7. Determine number of diversion days available.

In those basins for which the appropriate geologic and hydrologic data were not available, the lag impacts were not calculated, due to uncertainty of the degree of hydrologic connection. In many of those cases, the number of days in which surface water is available for diversion far exceeds the number of days necessary to meet the net corn crop irrigation requirement, and the final conclusion would likely not change even with the addition of lag impacts.

Step 1: Define the Study Area Boundaries

The study area surface water boundary for each river basin is defined by the watershed boundary. The study area ground water boundary is defined by certain features that include the location of perennial baseflow streams, location of non-hydrologically connected areas, and ground water table highs that prevent flow to the stream of interest.

An individual well may fall into multiple basin study areas. If a well falls within multiple basin study areas, its total stream depletion is divided by the number of basin study areas that it intersects. For

example, if a well falls into two basin study areas, the depletion is divided by 2. This prevents overestimation of depletions in overlapping areas. A sufficient number of wells in an overlapping area will likely, on average, be halfway between the two basins. Because SDF methodology is distance-based, splitting the depletion in half and assigning half of the total depletion to each basin is justified.

Step 2: Identify High Capacity Wells within the Study Area

In calculating lag impacts, the Department evaluates only high capacity wells, considered to be those wells with a pumping rate of greater than 50 gallons per minute (gpm). High capacity wells include active irrigation, industrial, public water supply, and unprotected public water supply wells (public water supply wells without statutory spacing protection). Other wells, such as decommissioned or inactive high capacity wells, livestock watering wells, and domestic wells were not included, because the database is not complete for those well types. This omission is not considered significant, because these wells use relatively small amounts of water. All active high capacity wells with a completion date prior to December 31, 2006, were used in the analysis.

Step 3: Account for Current Year (2007) Development

Wells are not registered simultaneously with their completion date, so it was necessary to estimate the number of high capacity wells that will be registered as constructed between January 1, 2007, and December 31, 2007. The first step in estimating the number of high capacity wells for 2007 is to average the well development rates within a basin over the previous three-year period (2004-2006), taking into account known limitations, such as moratoriums, on well development. Based on the rates, additional wells are randomly located geographically within the study area on soils that have been defined by the U.S. Department of Agriculture as irrigable. To ensure that land was available for development, a 1,400-foot-radius circle (slightly larger than the radius of an average center pivot) was drawn around each active high capacity well existing in the Department's water well registration database. All lands within the circles were removed from the inventory of irrigable land available for development. In addition, all

irrigable land areas of less than 40 acres in size that were available for new development were excluded. The wells extracted from the Department's water well registration database with a completion date prior to December 31, 2006, and those estimated to be developed in each basin for 2007 were then combined to serve as the basis for current well development.

Step 4: Estimate the Volume Pumped by Each Well

The volume pumped from a well for consumptive use (Q_t) is determined by multiplying the NCCIR (see Section 4.4.2) by the number of acres irrigated by the well. The number of acres irrigated by each well was estimated to be 90 acres, for reasons documented in Appendix G (DNR, 2005). Industrial and public water supply wells are treated the same as irrigation wells for this analysis.

Example:

If Location of well: Custer County, Nebraska

NCCIR requirement (from Figure 4-4): 11 inches/year

Number of acres served: 90 acres

Then Q_t : 11 inches/year * 90 acres = 990 acre-inches/year or 82.5 acre-feet/year

Step 5: Calculate Twenty-Five Year Lag Impacts

The Jenkins SDF methodology is utilized to estimate the twenty-five year lag impacts to streamflows due to current well development. The Jenkins SDF methodology allows for calculation of the streamflow depletion percentage of each well in the basin. The terms used in this methodology include the depletion percentage term and the dimensionless term, both defined below:

Depletion percentage term: v/Q_t

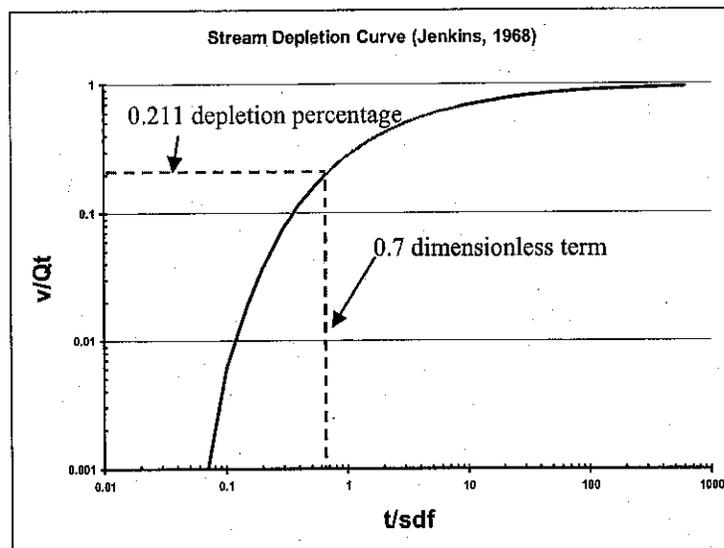
Dimensionless term: $\frac{tT}{a^2S}$ or $\frac{t}{SDF}$

The goal of this analysis is to solve for the 'v' term, or the volume of stream depletion (in acre-feet/year) over the twenty-five year period. First, the dimensionless term is calculated using the following known variables:

- t is the time since the well was completed (2007-well completion year).
- T is the aquifer transmissivity.
- S is the aquifer specific yield.
- a is the perpendicular distance from the well to the nearest perennial stream.

Next, the dimensionless term is used to determine the percentage of depletion (v/Qt). For example, if the dimensionless term is equal to 0.7, then the depletion percentage is equal to 0.211, or 21.1% (see Figure 4-5).

Figure 4-5 Determining depletion percentage from the dimensionless term



Finally, the stream depletion is calculated as follows:

$$v = Q_t * \text{percentage depletion}$$

Where v = stream depletion in acre-feet/year

Q_t = volume pumped in acre-feet/year

percentage depletion = value corresponding to the dimensionless term, from the graph in

Figure 4-5

The depletion percentage is multiplied by the volume pumped, as calculated in Step Four, to determine total stream depletion. These results can be converted from annual acre-feet of depletion to cubic feet per second (cfs) by dividing by 724.46 (the conversion factor for acre-feet/year to cfs).

The next step is to calculate the twenty-five year lag impacts. The twenty-five year lag impacts for all current wells are calculated in a similar way, except that the time period for each well (t) is increased by twenty-five years (9,125 days). The total depletions calculated in 2007 are subtracted from the total depletions calculated in 2032 (twenty-five years into the future) to determine the lag impacts. An example of this process is illustrated below (Table 4-1).

Table 4-1 Example calculation of twenty-five year lag impacts

| Year | Cumulative Depletion (cfs) | Additional Annual Depletion (cfs) | Lag (cfs) |
|------|----------------------------|-----------------------------------|-----------|
| 2006 | 100 | 10 | 20 |
| 2007 | 110 | | |
| 2031 | 300 | 30 | |
| 2032 | 330 | | |

Step 6: Create Lag-Adjusted Flow Record

The twenty-five year lag impacts from all current wells within a basin are summed to generate a total stream depletion figure for the basin. A daily historic flow record is developed from stream gage data for the previous twenty-year period to represent variations in climate and precipitation in the basin. The sum of the lag impacts is subtracted from the daily historic record to develop a new flow record, here termed the "lag-adjusted flow record".

Step 7: Determine the Number of Days Available for Diversion

The lag-adjusted flow record is used to calculate the average number of days available to the most junior appropriator within the basin for diversion. The new average number of days available for diversion is compared to the number of days necessary for the most junior surface water appropriator to divert in the basin. If the number of days necessary to meet either the 65% or 85% criterion is less than the average number of days available for diversion, then the basin, subbasin, or reach may be declared fully appropriated.

4.5 Determine Erosion of Rights

If a basin has failed either the first or second criterion (described in Sections 4.4.3 and 4.4.4), then the next step in the Department's analysis is to apply what has been termed "the erosion rule" (457 N.A.C. 24.001.01C). This rule takes into account the fact that appropriations may be granted even though there is insufficient water at the time the appropriation is granted to satisfy the requirements of 65/85 rule. If an appropriation is unable to divert enough water to satisfy the requirements of the 65/85 rule, then the second evaluation is completed to determine if the right has been "eroded", i.e., if enough water was not available to satisfy the rule at the time the appropriation was granted. As set forth in regulation 457 N.A.C. 24.001.01B, in the event that the junior water right is not an irrigation right, the Department will

utilize a standard of interference appropriate for the type of use to determine whether flows are sufficient for the use, taking into account the purpose for which the appropriation was granted.

4.5.1 Potential Erosion of Irrigation Rights

The erosion rule is applied through the use of historic streamflow data in a two-step process. The first step is to calculate the average number of days the most junior surface water appropriator would have been able to divert during the twenty-year period before the priority date of the appropriation. The second step is to calculate the average number of days the same junior surface water appropriator has been able to divert during the previous twenty years (i.e., 1987-2006). If the number of days available for diversion has decreased, then the right has been eroded. When making these calculations, the Department takes into account the lag effect of wells existing at the time of the priority date, as well as lag impacts from current well development.

The steps for determining whether a right has been eroded are as follows:

1. Gather the daily streamflow records from the twenty-year period prior to the appropriation being granted.
2. Gather the daily streamflow records for 1987-2006 to serve as the current twenty-year period.
3. Determine the twenty-five-year lagged ground water depletions from wells existing on the date the junior surface water appropriation was granted, and subtract them from the daily streamflow record for the twenty-year period prior to the granting of the appropriation.
4. Determine the twenty-five-year lagged ground water depletions from wells existing at the end of the current twenty-year period (using methodologies described in Section 4.4.4), and subtract them from the daily streamflow record for the current twenty-year period (1987-2006).

5. Assume that surface water administration would occur if the flow requirement of a senior surface water appropriation was greater than the depleted historical daily flow.
6. Conduct a month-by-month comparison of the average number of days available for the junior surface water appropriation to divert during the twenty-year period prior to the appropriation and the average number of days available to divert during the current twenty-year period.

If the average number of days available to the junior surface water appropriation for diversion during the current period (1987-2006) is less than the number of days available to the junior surface water appropriation for the twenty-year period prior to the appropriation, then the appropriation is deemed to be eroded.

4.5.2 Potential Erosion of Instream Flow Rights

In the Lower Platte Basin, the junior water rights that require water administration are instream flow permits. Since the purpose of the instream flow permits is not for irrigation, but rather to maintain—but not enhance—habitat for the fish community existing at the time of the priority date on the permit, the Department determined that an appropriate standard of interference would be to determine whether the instream flow requirements that could be met at the time the water rights were granted can still be met today.

To determine if water use development has interfered with the ability of these water rights to obtain water for instream flow purposes, the Department applied the erosion rule in the same manner as described above. One important difference in evaluating the erosion of an instream flow permit, however, is that the number of days available to the appropriation is evaluated throughout the entire year, rather than only during the irrigation season. Results from the average number of days available for the twenty-year

period prior to the appropriation are compared on a month-by-month basis with the average number of days during the current twenty-year period (1987-2006).

4.6 Evaluation of Compliance with State and Federal Laws

To evaluate compliance with state and federal law, it was determined that, currently, only the state and federal laws prohibiting the taking of threatened and endangered species could raise compliance issues under section 46-713(3)(c). The federal Endangered Species Act, 16 U.S.C. §§ 1530 *et seq.*, prohibits the taking of any federally listed threatened or endangered species of animal by the actual killing or harming of an individual member of the species (16 U.S.C. § 1532) and by degrading or destroying a species' habitat so much that the species cannot survive (50 CFR § 17.3). The state Nongame and Endangered Species Conservation Act, Neb. Rev. Stat. §§ 37-801 *et seq.*, also prohibits the actual killing or harming of an individual member of a listed species, but it is not clear whether the degradation of a species' habitat is considered a taking under state law. The Department reviewed information from the Nebraska Game and Parks Commission about the possible existence of species listed as threatened and endangered in the river basins, subbasins, or reaches that the Department evaluated. The Department then determined whether a reduction in streamflow will cause noncompliance with either the federal or state law endangered species.

4.7 Evaluating Predicted Future Development in a Basin

The Department is required by section 46-713 to project the impact of reasonable future development within a basin on the potential for fully appropriated status. The results of this analysis alone cannot cause a basin to be declared fully appropriated. However, the analysis does provide an estimate of the effects of current well development trends on the basin's future status.

The steps necessary to calculate the impacts of future development on streamflows parallel those steps outlined in Section 4.4.4. The specific steps necessary to conduct an analysis of the impacts of future well development on the status of a basin are as follows:

- Gather information on lag impacts of current wells (from calculations performed in Section 4.4.4).
- Project the rate of future well development.
- Incorporate projected future well development into the study area.
- Calculate the depletions of projected future well development.
- Subtract the depletions from projected future well development from the previous twenty-year lag-adjusted flow record (1987-2006), and recalculate the number of days available for diversion for the most junior surface water appropriation.

Step 1: Gather Information on Lag Impacts of Current Wells

The lag impacts from current well development will be determined through completion of the steps outlined in Section 4.4.4 above, and the lag-adjusted flow record developed in Step 7 of Section 4.4.4 will be used in this section. In using the lag-adjusted flow record, the twenty-five year lag impacts of current well development will be accounted for, and the impacts from future wells can be removed directly from this new flow record.

Step 2: Project Future Well Development

When calculating impacts from future wells, it is necessary to estimate the rate of future well development. This estimation is completed by projecting the linear trend of current high capacity well development within a study area over the previous ten years (1997-2006). The yearly estimated well

development for the study area is equivalent to the slope of the trend line and takes into account known limitations, such as moratoriums, on well development.

Step 3: Incorporate Future Wells into the Study Area

The number of future wells estimated in Step 2 above must be incorporated into the study area. The future wells are located geographically within the study area by randomly placing each future well on a site where the soils have been defined by the U.S. Department of Agriculture as irrigable. To ensure that land was available for development, a 1,400-foot-radius circle (slightly larger than the radius of an average center pivot) was drawn around every existing well, and all lands already irrigated within the circles were removed from the inventory of irrigable lands that are available for development. In addition, all irrigable land areas of less than 40 acres in size that are available for new development were excluded.

Step 4: Calculate the Lag Impacts of Future Wells

Depletions from future wells are calculated following the same methodology outlined in Section 4.4.4. The depletions of future wells are calculated independently of current well development. The twenty-five year depletions from future well development are removed from the lag-adjusted flow record created in Step 7 of Section 4.4.4 to develop the future lag-adjusted flow record.

Step 5: Create a Historic Flow Record with Lag Impacts from Current and Future Well

Development

The historic record, with the twenty-five year lag impacts from all current wells (created at the end of Step 5 in Section 4.4.4) subtracted (i.e., the lag adjusted flow record), is used as the starting point in developing the future lag-adjusted flow record. The depletions from future wells incorporated into the study area are calculated for each year through the twenty-five year period and subtracted from the lag-adjusted flow record.

The sum of the future depletions is subtracted from the lag-adjusted daily flow record for the period 1987-2006 to create a future adjusted flow record to account for all current well lag impacts and potential future well depletions. The future lag-adjusted flow record is then used to calculate the average number of days available for diversion to the most junior appropriator within the basin. This new future lag-adjusted flow record is compared to the number of days necessary for the most junior surface water appropriator to divert in the basin.

In those basins for which the appropriate geologic and hydrologic data were not available, the impacts of future well development were not calculated due to uncertainty of the degree of hydrologic connection. In many of those cases, the number of days in which surface water is available for diversion far exceeds the number of days necessary to meet the NCCIR, and the final conclusion would likely not change even with the addition of lag impacts.

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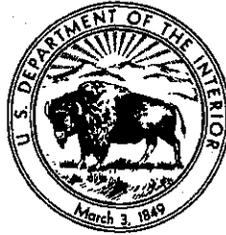
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Techniques of Water-Resources Investigations
of the United States Geological Survey

Chapter D1

COMPUTATION OF
RATE AND VOLUME OF
STREAM DEPLETION
BY WELLS

By C. T. Jenkins

Book 4

HYDROLOGIC ANALYSIS AND INTERPRETATION

UNITED STATES DEPARTMENT OF THE INTERIOR

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PREFACE

The series of manuals on techniques describes procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and further subdivided into sections and chapters; Section D of Book 4 is on inter-related phases of the hydrologic cycle.

The unit of publication, the chapter, is limited to a narrow-field of subject matter. This format permits flexibility in revision and publication as the need arises.

Provisional drafts of chapters are distributed to field offices of the U.S. Geological Survey for their use. These drafts are subject to revision because of experience in use or because of advancement in knowledge, techniques, or equipment. After the technique described in a chapter is sufficiently developed, the chapter is published and is sold by the U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of Superintendent of Documents, Government Printing Office).

This manual is an expanded version of a paper, "Techniques for computing rate and volume of stream depletion of wells" (Jenkins, 1968a), that was prepared in the Colorado District, Water Resources Division, in cooperation with the Colorado Water Conservation Board and the South-eastern Colorado Water Conservancy District and published in *Ground Water*, the journal of the Technical Division, National Water Well Association.

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COMPUTATION OF RATE AND VOLUME OF STREAM DEPLETION BY WELLS

By C. T. Jenkins

Abstract

When field conditions approach certain assumed conditions, the depletion in flow of a nearby stream caused by pumping a well can be calculated readily by using dimensionless curves and tables. Computations can be made of (1) the rate of stream depletion at any time during the pumping period or the following nonpumping period, (2) the volume of water induced from the stream during any period, pumping or non-pumping, and (3) the effects, both in rate and volume of stream depletion, of any selected pattern of intermittent pumping. Sample computations illustrate the use of the curves and tables. An example shows that intermittent pumping may have a pattern of stream depletion not greatly different from a pattern for steady pumping of an equal volume.

The residual effects of pumping, that is, effects after pumping stops, on streamflow may often be greater than the effects during the pumping period. Adequate advance planning that includes consideration of residual effects thus is essential to effective management of a stream-aquifer system.

Introduction

With increasing frequency, problems of water management require evaluation of effects of ground-water withdrawal on surface supplies. Both rate and volume effects have significance. Effects after the pumping stops (called residual effects in this paper) are important also but have not previously been examined in detail. In fact, residual effects can be much greater than those during pumping. Curves and tables shown in this paper, although applicable to a large range of interactions, are especially oriented to the solution of problems involving very small interactions and to the evaluation of residual effects. Where many wells are concentrated near a stream, the combined withdrawals can have a significant effect on the availability of water in the stream.

In some instances, especially in the evaluation of residual effects, the grid spacing on the

charts shown may prove to be too coarse to provide the desired precision. However, this precision can be attained either by interpolating between the tabular values supplied or by using curves prepared by plotting the tabular values on commercially available chart paper that is more finely divided.

The relations between the pumping of a well and the resulting depletion of a nearby stream have been derived by several investigators (Theis, 1941; Conover, 1954; Glover and Balmer, 1954; Glover, 1960; Theis and Conover, 1963; Hantush, 1964, 1965). The relations generally are shown in the form of equations and charts; however, except for the charts shown by Glover (1960), which were in a publication that had limited distribution, the charts are useful as computational tools only in the range of comparatively large effects, and rather formidable equations must be solved to evaluate small effects. The average user retreats in dismay when faced by the mysticism of "fine source integral," "complementary error function," or "the second repeated integral of the error function." The primary purpose of this report is to provide tools that will simplify the seemingly intricate computations and to give examples of their use.

Because this writer definitely is a member of the community of "average users," he has exercised what he believes to be his prerogative of reversing the usual order of presentation. In this paper, the working tools—curves, tables, and sample computations—are shown first, and the discussion of their mathematical bases is relegated to the end of the report. The usefulness of the tools will not be greatly enhanced by an understanding of the material at the end of the report; it is shown for the benefit of those who desire to examine the mathematical bases of the tools.

The techniques demonstrated in this paper are not new, but they seem to have been rather well concealed from most users in the past. Their value to water managers is apparent, especially in the estimation of total volume of depletion and of residual effects.

Virtually all the literature that discusses the effects of pumping on streamflow fails to mention that the effects of recharge are identical, except for direction of flow. (See Glover, 1964, p. 48.) Only pumping will be considered in this paper, but the reader should be aware that the terms "recharging" and "accretion" can be substituted for "pumping" and "depletion," respectively.

Definitions and Assumptions

To avoid confusion owing to the use of the same symbol for the dimension time as for transmissivity, symbols for the dimensions time and length are set in Roman type, are capitalized, and are enclosed in brackets. All other symbols, except that designating the mathematical term "second repeated integral," are set in italics.

Stream depletion means either direct depletion of the stream or reduction of ground-water flow to the stream.

The symbols used in the main body of the report are defined below (those that have to do only with the mathematical bases are defined at the end of the report in the section on this subject):

- T = transmissivity, $[L^2/T]$;
- S = the specific yield of the aquifer, dimensionless;
- t = time, during the pumping period, since pumping began, $[T]$;
- t_p = total time of pumping, $[T]$;
- t_i = time after pumping stops, $[T]$;
- Q = the net steady pumping rate, $[L^3/T]$; the steady pumping rate less the rate at which pumped water returns to the aquifer;
- q = the rate of depletion of the stream, $[L^3/T]$;
- Qt = the net volume pumped during time t , $[L^3]$;
- Qt_p = the net volume pumped, $[L^3]$;
- v = the volume of stream depletion during time t , t_p , or $t_p + t_i$, $[L^3]$;

a = the perpendicular distance from the pumped well to the stream, $[L]$;

sdf = the stream depletion factor, $[T]$.

The term "stream depletion factor" was introduced by Jenkins (1968a). It is arbitrarily defined as the time coordinate of the point where $v=28$ percent of Qt on a curve relating v and t . If the system meets the assumptions listed in this section, $sdf=a^2S/T$; in a complex system it can be considered to be an effective value of a^2S/T . The value of the sdf at any location in the system depends upon the integrated effects of the following: Irregular impermeable boundaries, stream meanders, aquifer properties and their areal variation, distance from the stream, and imperfect hydraulic connection between the stream and the aquifer.

The curves and tables in this report are dimensionless and can be used with any units. The units in the system must be consistent, however. For example, if Q and q are in acre-feet per day (acre-ft/day), v must be in acre-feet (acre-ft). If a is in feet (ft) and T/S is in gallons per day per foot (gal/day-ft), the value of T/S must be converted to square feet per day (ft²/day). A T/S value of 10⁶gal/day-ft equals (10⁶gal/day-ft) × (1ft²/7.48 gal) equals 134,000 ft²/day.

The assumptions made for this analysis are the same as other investigators have made and are as follows:

1. T does not change with time. Thus for a water-table aquifer, drawdown is considered to be negligible when compared to the saturated thickness.
2. The temperature of the stream is assumed to be constant and to be the same as the temperature of the water in the aquifer.
3. The aquifer is isotropic, homogeneous, and semi-infinite in areal extent.
4. The stream that forms a boundary is straight and fully penetrates the aquifer.
5. Water is released instantaneously from storage.
6. The well is open to the full saturated thickness of the aquifer.
7. The pumping rate is steady during any period of pumping.

Field conditions never meet fully the idealized conditions described by the above assumptions.

The usefulness of the tools presented in this report will depend to a large extent on the degree to which the user recognizes departures from ideal conditions, and on how well he understands the effects of these departures on stream depletion.

Departure from idealized conditions may cause actual stream depletions to be either greater or less than the values determined by methods presented in this report. Although the user usually cannot determine the magnitude of these discrepancies, he should, where possible, be aware of the direction the discrepancies take.

Jenkins (1968b) has described the use of a model to evaluate the effects on stream depletion of certain departures from the ideal. If a model is not available, the user of this report can be guided in estimating the sdf by the effects calculated in that report for selected departures from the idealized system. Intuitive reasoning will be useful in estimating the effects of departures from the ideal that are difficult to incorporate in a model. For example, where drawdowns at the well site are a substantial proportion of the aquifer thickness, T will decrease significantly. A decrease in T results in a decrease in the amount of stream depletion relative to the amount of water pumped.

Variations in water temperatures will cause variations in stream depletion, especially by large-capacity wells near the stream. Warm water is less viscous than cold water; hence stream depletion will be somewhat greater in the summer than in the winter, given the same pattern of pumping. Stream stages affect water-table gradients, and hence stream depletion.

Lowering of the water table on a flood plain may result in the capture of substantial amounts of water that would otherwise be transpired. The effect is similar to intercepting another recharge boundary, and the proportion of stream depletion to pumpage is decreased. Interception of a valley wall or other negative boundary will have the opposite effect.

If large-capacity wells are placed close to a stream, and streambed permeability is low compared to aquifer permeability, the water table may be drawn down below the bottom of the streambed. (See Moore and Jenkins, 1966.) Under these conditions, stream depletion de-

pends upon streambed permeability, area of the streambed, temperature of the water, and stage of the stream, and the methods presented in this report are not applicable.

Both during and after pumping, some part and at times all of stream depletion can consist of ground water intercepted before reaching the stream. Thus a stream can be depleted over a certain reach, yet still be a gaining stream over that reach. The flow at the lower end of the reach is less than it would have been had depletion not occurred, and less by the amount of depletion. In order to predict the amount of streamflow at the lower end of the reach, residual effects of previous pumping or recharge must be considered. They can be approximately accounted for by using past records of pumping and recharge to "prestress" the calculations. The depletion due to the pumping under consideration will then be superimposed on the residual depletion, and the resultant value will be the net direct depletion from the stream.

Description of Curves and Tables

Effects during pumping

Curves *A* and *B* in figure 1 apply during the period of steady pumping. Curve *A* shows the relation between the dimensionless term t/sdf and the rate of stream depletion, q , at time t , expressed as a ratio to the pumping rate Q . Curve *B* shows the relation between t/sdf and the volume of stream depletion, v , during time t , expressed as a ratio to the volume pumped, Qt . The two curves labeled $1 - q/Q$ and $1 - \frac{v}{Qt}$ are shown to facilitate determination of values of q/Q and $\frac{v}{Qt}$ when the ratios exceed 0.5. The coordinates of curves *A* and *B* are tabulated in table 1. The number of significant figures shown for the values in table 1 was determined by needs for some of the computations described in the next section. Precision to more than two significant figures in reporting results probably will never be warranted.

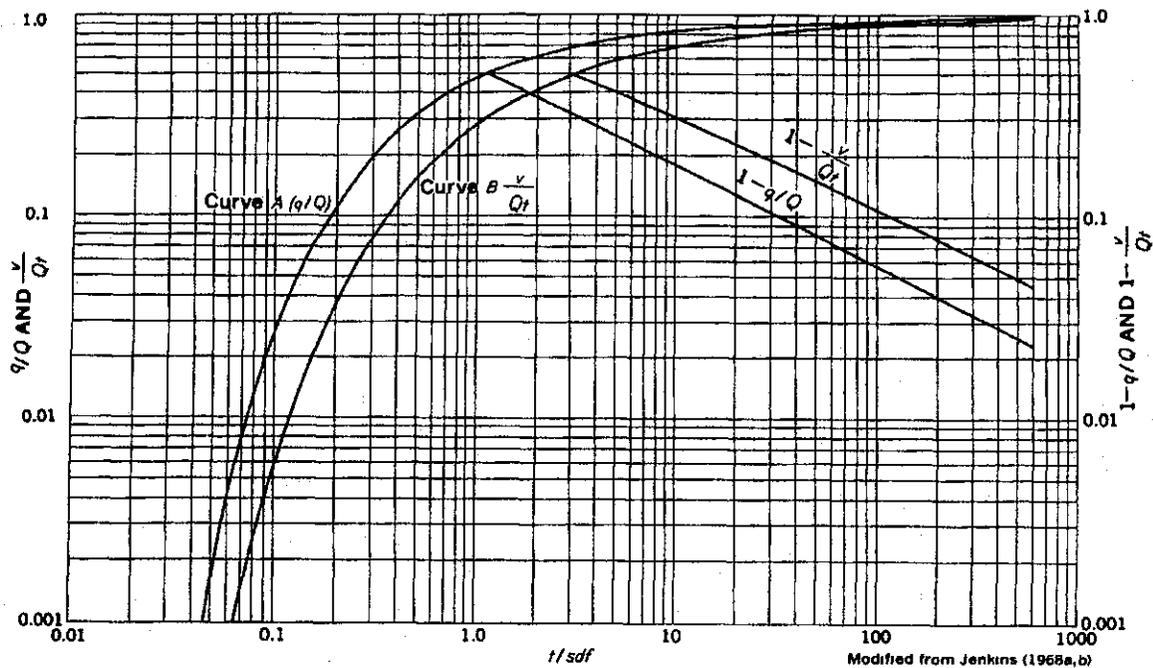


Figure 1.—Curves to determine rate and volume of stream depletion.

Residual effects

Stream depletion continues after pumping stops. As time approaches infinity, the volume of stream depletion approaches the volume pumped, if the assumption is made that the stream is the sole source of recharge. In any real case this is not true in the long term because precipitation and return flow from irrigation may represent the major portion of the recharge. To simplify the relation between well pumpage and stream depletion all other sources of water input are ignored in the following discussions. The rate and volume of depletion at any time after pumping ends can be computed by using the method of superposition, that is, by assuming that the pumping well continues to pump, and that an imaginary well at the same location is recharged continuously at the same rate the pumping well is discharging. The rate and volume of stream depletion at any time after pumping ends is equal to the differences between the rate and volume of depletion that would have occurred if pumping had continued, and the rate and volume of accretion resulting from recharge by the imagi-

nary recharge well, starting from the time pumping ends.

Residual effects are shown in figures 2 and 3 for eight values of t_p/sdf . Problems concerned with values of t_p/sdf other than those for which curves are shown in figures 2 and 3 can be solved with an acceptable degree of accuracy by interpolation, but if the user desires a more accurate appraisal, separate computations can be made.

The computations shown in table 2, which are the basis for the curves labeled $t_p/sdf=0.35$ in figures 2 and 3 and for the curve in figure 4, will serve as an illustration of how additional curves can be constructed. As an aid to construction of curves such as those in figure 3, note that the curves are asymptotic to the ordinate $\frac{v}{Qsdf}$ ($=t_p/sdf$).

Because Q is the same for both the pumping and recharging wells, residual q/Q can be computed directly from q/Q values in table 1. However, Qt is different for the two wells; so the ratios $\frac{v}{Qt}$ must be given a common denominator by multiplying by their respective values

Table 1.—Values of q/Q , $\frac{v}{Q_1}$, and $\frac{v}{Q_{sdf}}$ corresponding to selected values of t/sdf

| $\frac{t}{sdf}$ | q/Q | $\frac{v}{Q_1}$ | $\frac{v}{Q_{sdf}}$ |
|-----------------|-------|-----------------|---------------------|
| 0 | 0 | 0 | 0 |
| .07 | .008 | .001 | .0001 |
| .10 | .025 | .006 | .0006 |
| .15 | .068 | .019 | .003 |
| .20 | .114 | .037 | .007 |
| .25 | .157 | .057 | .014 |
| .30 | .197 | .077 | .023 |
| .35 | .232 | .097 | .034 |
| .40 | .264 | .115 | .046 |
| .45 | .292 | .134 | .060 |
| .50 | .317 | .151 | .076 |
| .55 | .340 | .167 | .092 |
| .60 | .361 | .182 | .109 |
| .65 | .380 | .197 | .128 |
| .70 | .398 | .211 | .148 |
| .75 | .414 | .224 | .168 |
| .80 | .429 | .236 | .189 |
| .85 | .443 | .248 | .211 |
| .90 | .456 | .259 | .233 |
| .95 | .468 | .270 | .256 |
| 1.0 | .480 | .280 | .280 |
| 1.1 | .500 | .299 | .329 |
| 1.2 | .519 | .316 | .379 |
| 1.3 | .535 | .333 | .433 |
| 1.4 | .550 | .348 | .487 |
| 1.5 | .564 | .362 | .543 |
| 1.6 | .576 | .375 | .600 |
| 1.7 | .588 | .387 | .658 |
| 1.8 | .598 | .398 | .716 |
| 1.9 | .608 | .409 | .777 |
| 2.0 | .617 | .419 | .838 |
| 2.2 | .634 | .438 | .964 |
| 2.4 | .648 | .455 | 1.09 |
| 2.6 | .661 | .470 | 1.22 |
| 2.8 | .673 | .484 | 1.36 |
| 3.0 | .683 | .497 | 1.49 |
| 3.5 | .705 | .525 | 1.84 |
| 4.0 | .724 | .549 | 2.20 |
| 4.5 | .739 | .569 | 2.56 |
| 5.0 | .752 | .587 | 2.94 |
| 5.5 | .763 | .603 | 3.32 |
| 6.0 | .773 | .616 | 3.70 |
| 7 | .789 | .640 | 4.48 |
| 8 | .803 | .659 | 5.27 |
| 9 | .814 | .676 | 6.08 |
| 10 | .823 | .690 | 6.90 |
| 15 | .855 | .740 | 11.1 |
| 20 | .874 | .772 | 15.4 |
| 30 | .897 | .810 | 24.3 |
| 50 | .920 | .850 | 42.5 |
| 100 | .944 | .892 | 89.2 |
| 600 | .977 | .955 | 573 |

of t/sdf , to obtain the values given in table 1 for $\frac{v}{Q_{sdf}}$. The "stepping" of the last six items in column 8, table 2, is the result of using linear interpolation in table 1. The errors are small and can be practically eliminated by drawing mean curves.

The magnitude, distribution, and extent of residual effects in a hypothetical field situation

are shown in figure 4. The curve labeled q shows the relation between the rate of stream depletion, q , and time, t , resulting from pumping a well 3,660 feet from a stream at a rate of 10 acre-ft/day for 35 days. The ratio T/S is 134,000 ft²/day, which is not an unusual value for an alluvial aquifer. The sdf is 100 days. The pumping rate is 10 acre-ft/day; the maximum rate of stream depletion is 2.7 acre-ft/day. Pumping stops at the end of 35 days; the maximum rate of stream depletion occurs about 10 days later, and q still is about half the maximum rate 45 days after pumping stops.

The area in the rectangle under the line labeled Q represents total volume pumped; the area under the curve labeled q represents the volume of stream depletion. In terms of volume removed from the stream during the pumping period, the effect is small, only about 10 percent of the volume pumped. However, the effect continues, and as time approaches infinity, the volume of stream depletion approaches the volume pumped.

Consideration of such residual effects as are illustrated in figure 4 leads to the conclusion that the management of a system that uses both surface water and a connected ground-water reservoir requires a great deal of foresight. The immediate effects on streamflow of a change in pumping pattern may be very small; plans adequate for effective management of the resource generally require consideration of needs in the future—sometimes the distant future. The sample problems solved later in this report illustrate the value of long-range plans in water management.

Intermittent pumping

The curves in figure 5 illustrate the effect of one pattern of intermittent pumping. The computations are shown in table 3. Effects on the stream, both in volume removed and rate of removal are compared for two patterns of pumping of 63 acre-ft during a 42-day period. In both cases the aquifer has a ratio T/S of 134,000 ft²/day, and the well is 1,890 feet from the stream; thus the value for the $sdf=26.7$ days. During steady pumping, the well is pumped at a rate of 1.5 acre-ft/day for 42 days. In the intermittent pattern, the well is pumped at a rate of 5.25 acre-ft/day for

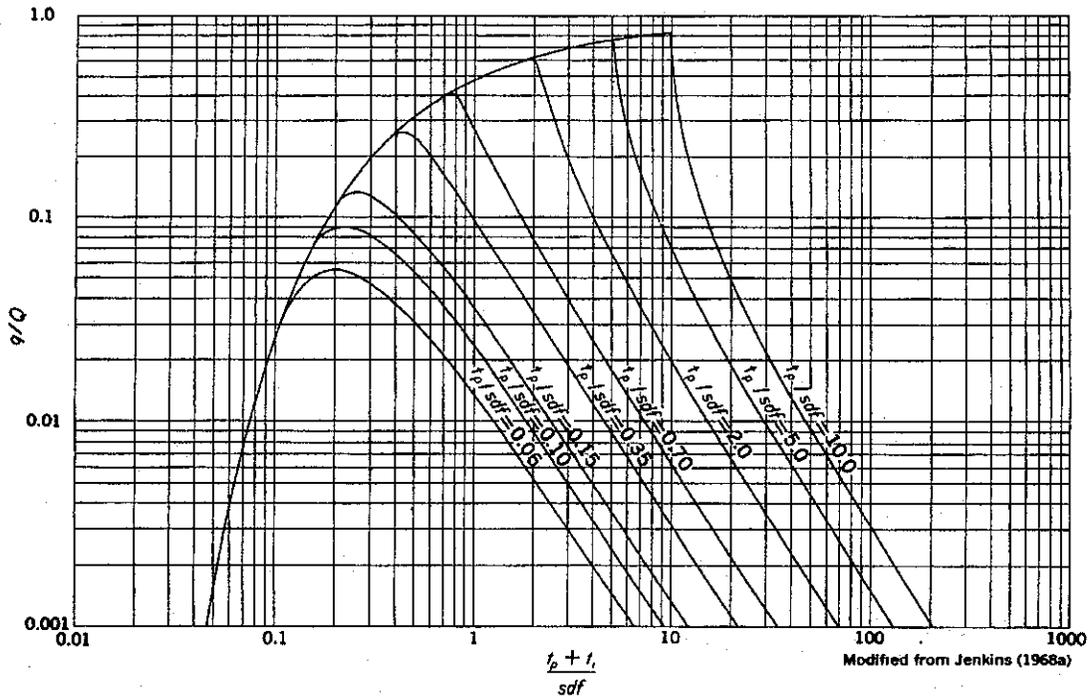


Figure 2.—Curves to determine rate of stream depletion during and after pumping.

Table 2.—Computation of residual effects of pumping

[Pumping stopped when $t/sdf=0.35$]

| Pumped well | | | Recharged well | | | Residual q/Q | Residual $\frac{v}{Qsdf}$ |
|-------------|-------|------------------|----------------|-------|------------------|-------------------|------------------------------|
| t/sdf | q/Q | $\frac{v}{Qsdf}$ | t/sdf | q/Q | $\frac{v}{Qsdf}$ | | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 0.35 | 0.232 | 0.034 | 0 | 0 | 0 | 0.232 | 0.034 |
| .42 | .275 | .052 | .07 | .008 | .0001 | .267 | .052 |
| .45 | .292 | .060 | .10 | .025 | .0006 | .267 | .059 |
| .50 | .317 | .076 | .15 | .068 | .003 | .249 | .073 |
| .60 | .361 | .109 | .25 | .157 | .014 | .205 | .095 |
| .70 | .398 | .148 | .35 | .232 | .034 | .166 | .114 |
| 1.00 | .480 | .280 | .65 | .380 | .128 | .099 | .152 |
| 1.50 | .564 | .543 | 1.15 | .510 | .354 | .053 | .189 |
| 2.00 | .617 | .838 | 1.65 | .581 | .629 | .035 | .209 |
| 3.00 | .683 | 1.49 | 2.65 | .664 | 1.255 | .019 | .235 |
| 5.00 | .752 | 2.94 | 4.65 | .743 | 2.67 | .009 | .27 |
| 7.00 | .789 | 4.48 | 6.65 | .783 | 4.21 | .006 | .27 |
| 10.00 | .823 | 6.90 | 9.65 | .8198 | 6.61 | .0032 | .29 |
| 15.00 | .855 | 11.1 | 14.65 | .8528 | 10.81 | .0022 | .29 |
| 20.00 | .872 | 15.3 | 19.65 | .8718 | 15.00 | .0012 | .30 |
| 30.00 | .897 | 24.3 | 29.65 | .8961 | 23.99 | .0009 | .31 |

- $\frac{t_p + t_r}{sdf} = t/sdf$ for pumped well if pumping had continued.
- q/Q for pumped well if pumping had continued. Values from table 1 for value of t/sdf indicated in column 1.
- $\frac{v}{Qsdf}$ for pumped well if pumping had continued. Values from table 1 for value of t/sdf indicated in column 1.
- t/sdf for recharged well, beginning at end of pumping.

- q/Q for recharged well, beginning at end of pumping. Values from table 1 for value of t/sdf indicated in column 4.
- $\frac{v}{Qsdf}$ for recharged well, beginning at end of pumping. Values from table 1 for value of t/sdf indicated in column 4.
- Column 2 minus column 5; residual q/Q .
- Column 3 minus column 6; residual $\frac{v}{Qsdf}$.

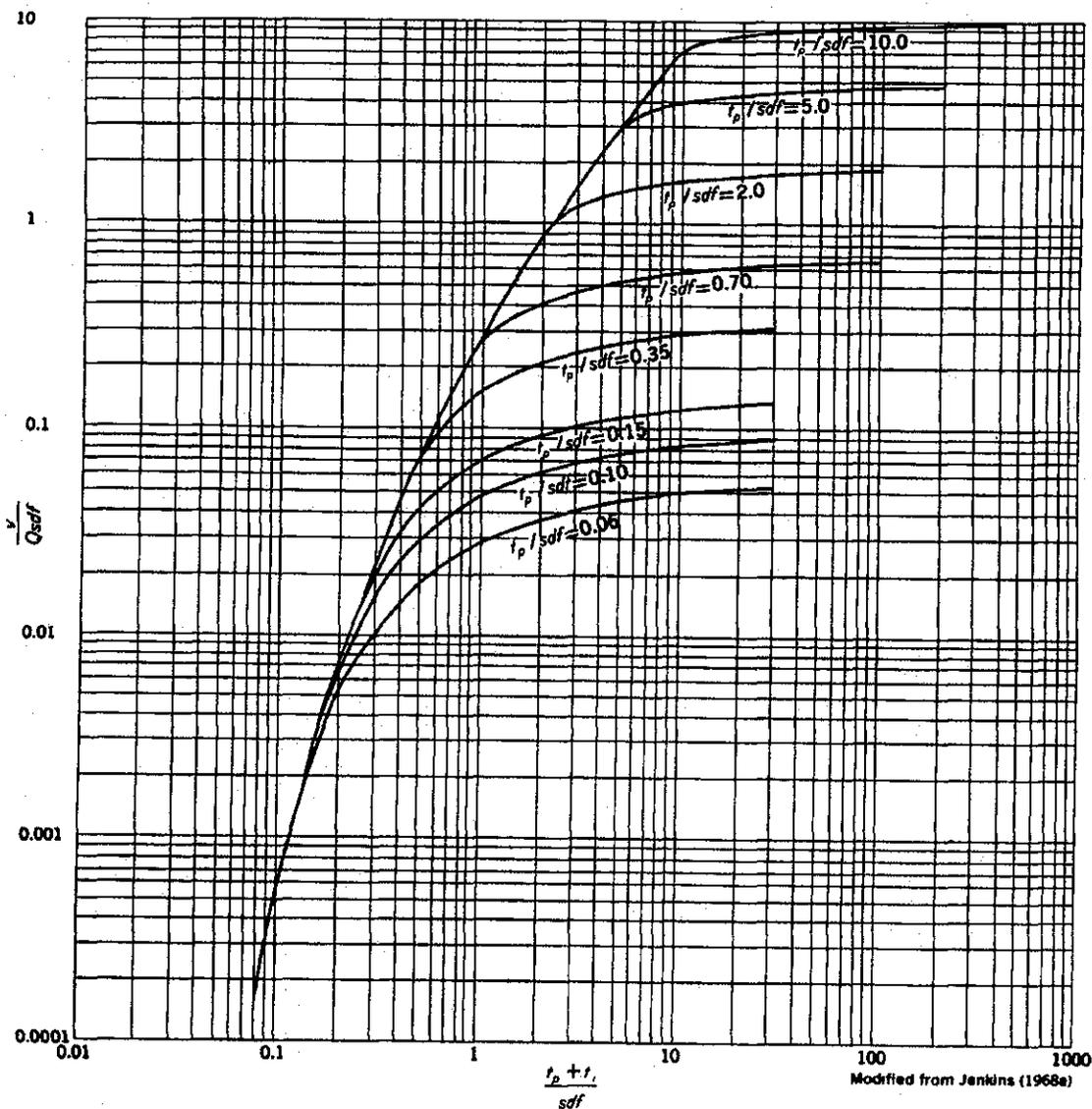


Figure 3.—Curves to determine volume of stream depletion during and after pumping.

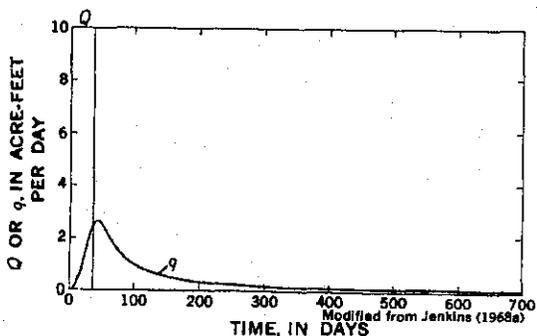


Figure 4.—Example of residual effects of well pumping 35 days.

4 days beginning 5 days after the beginning of the period, shut down 10 days, pumped 4 days, shut down 10 days, pumped 4 days, and shut down 5 days. The computed effects of the pattern of intermittent pumping are compared in figure 5 with those of the steady rate. The comparisons indicate that, within quite large ranges of intermittency, the effects of intermittent pumping are approximately the same as those of steady, continuous pumping of the same volume.

Table 3.—Computation of the effects of two selected

[$a=1,800$ ft, $T/S=134,000$ ft²/day, $sdf=28.7$ days. Intermittent pumping rate=5.25 acre-ft/day,

| Time from beginning of period (days) | Steady pumping | | | | | Intermittent pumping | | | |
|--------------------------------------|--|-------|------------------|------------------------------------|----------------------------|--|---------|-------|------------------|
| | Pumping period (1st-42d day inclusive) | | | | | Pumping period (8th-9th day inclusive) | | | |
| | t/sdf | q/Q | $\frac{v}{Qsdf}$ | $\frac{q}{\text{acre-ft per day}}$ | $\frac{v}{\text{acre-ft}}$ | Time (days) | t/sdf | q/Q | $\frac{v}{Qsdf}$ |
| 0..... | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5..... | .187 | .102 | .006 | .15 | .2 | 0 | 0 | 0 | 0 |
| 9..... | .337 | .223 | .031 | .33 | 1.2 | 4 | .150 | .068 | .003 |
| 12..... | .449 | .291 | .060 | .44 | 2.4 | 7 | .262 | .127 | .015 |
| 19..... | .712 | .402 | .153 | .60 | 6.1 | 14 | .524 | .080 | .044 |
| 23..... | .861 | .446 | .216 | .67 | 8.7 | 18 | .674 | .061 | .054 |
| 26..... | .974 | .471 | .262 | .71 | 10.5 | 21 | .787 | .050 | .061 |
| 33..... | 1.236 | .525 | .398 | .79 | 15.9 | 28 | 1.049 | .034 | .071 |
| 37..... | 1.386 | .548 | .479 | .82 | 19.2 | 32 | 1.199 | .029 | .074 |
| 42..... | 1.573 | .573 | .585 | .86 | 23.4 | 37 | 1.386 | .023 | .081 |

Sample Computations

To illustrate the use of the curves and tables, solutions are shown of problems that might arise in the conjunctive management of ground water and surface water.

Problem I

Management criteria require that pumping cease when the rate of stream depletion by pumping reaches 0.14 acre-ft/day:

- Under this restriction how long can a well 1.58 miles from the stream be pumped at the rate of 2 acre-ft/day if T/S is 10^6 gal/day-ft, and what is the volume of stream depletion during this time?
- If pumping this well is stopped when $q=0.14$ acre-ft/day, what will the rate of stream depletion be 30 days later? What will be the volume of stream depletion at that time?
- What will be the largest rate of stream depletion and when will it occur?

Given:

$$\begin{aligned} q &= 0.14 \text{ acre-ft/day} \\ Q &= 2 \text{ acre-ft/day} \\ a &= 1.58 \text{ miles} \\ T/S &= 10^6 \text{ gal/day-ft} \\ t_i &= 30 \text{ days} \end{aligned}$$

$$\begin{aligned} sdf &= a^2 S/T = \frac{a^2}{T/S} = \frac{(1.58 \text{ mi})^2 (5,280 \text{ ft/mi})^2}{(10^6 \text{ gal/day-ft}) (1 \text{ ft}^3/7.48 \text{ gal})} \\ &= 520 \text{ days.} \end{aligned}$$

Find:

$$\begin{aligned} &t_p \\ &v \text{ at } t_p \\ &q \text{ at } t_p + t_i \\ &v \text{ at } t_p + t_i \\ &q \text{ max} \\ &t \text{ of } q \text{ max.} \end{aligned}$$

Part 1

From information given, the ratio of the rate of stream depletion to the rate of pumping is

$$q/Q = \frac{(0.14 \text{ acre-ft/day})}{(2 \text{ acre-ft/day})} = 0.07.$$

From curve A (fig. 1)

$$t/sdf = 0.15.$$

Substitute the value under "Given" for sdf , and

$$t = (0.15)(520 \text{ days}) = 78 \text{ days.}$$

The total time the well can be pumped is 78 days.

When

$$t/sdf = 0.15.$$

then from curve B (fig. 1),

$$\frac{v}{Qt} = 0.02.$$

Substitute the values for Q and t , and the volume of stream depletion during this time is

$$\begin{aligned} v &= (0.02)(2 \text{ acre-ft/day})(78 \text{ days}) \\ &= 3.1 \text{ acre-ft.} \end{aligned}$$

patterns of pumping on a nearby stream

$t_p/sdf=0.15$ (see curves in figures 2 and 3). Steady pumping rate=1.5 acre-ft/day]

| Intermittent pumping—Continued | | | | | | | | | | | |
|---|---------|-------|------------------|---|---------|-------|------------------|--------|------------------|-----------------------|---------------|
| Pumping period (20th–23d day inclusive) | | | | Pumping period (32d–35th day inclusive) | | | | Totals | | | |
| Time (days) | t/sdf | q/Q | $\frac{v}{Qsdf}$ | Time (days) | t/sdf | q/Q | $\frac{v}{Qsdf}$ | q/Q | $\frac{v}{Qsdf}$ | q (acre-ft per day) | v (acre-ft) |
| | | | | | | | | 0 | 0 | 0 | 0 |
| | | | | | | | | .068 | .003 | .36 | .4 |
| | | | | | | | | .127 | .015 | .67 | 2.1 |
| 0 | 0 | 0 | 0 | | | | | .080 | .044 | .42 | 6.2 |
| 4 | .150 | .068 | .003 | | | | | .129 | .057 | .68 | 8.0 |
| 7 | .262 | .127 | .015 | | | | | .177 | .076 | .93 | 10.7 |
| 14 | .524 | .080 | .044 | 0 | 0 | 0 | 0 | .114 | .115 | .60 | 16.1 |
| 18 | .674 | .061 | .054 | 4 | .150 | .068 | .003 | .158 | .131 | .83 | 18.4 |
| 23 | .861 | .044 | .063 | 9 | .337 | .223 | .031 | .188 | .169 | .99 | 23.7 |

During the 78-day pumping period, 3.1 acre-ft, out of a total of 156 acre-ft pumped, is stream depletion.

Part 2

If pumping is stopped at the end of 78 days, then $t_p/sdf=0.15$, and 30 days later,

$$\frac{t_p + t_i}{sdf} = \frac{108 \text{ days}}{520 \text{ days}} = 0.21.$$

From figure 2: if

$$t_p/sdf = 0.15$$

and

$$\frac{t_p + t_i}{sdf} = 0.21,$$

$$q/Q = 0.12.$$

Thus the rate of stream depletion is

$$q = (0.12)(2 \text{ acre-ft/day}) = 0.24 \text{ acre-ft/day, 30 days after pumping stops.}$$

From figure 3

$$\frac{v}{Qsdf} = 0.008.$$

Substitute the values for Q and sdf , and the total volume of the stream depletion at the end of 30 days is

$$v = (0.008)(2 \text{ acre-ft/day})(520 \text{ days}) = 8.3 \text{ acre-ft of stream depletion during 108 days}$$

as a result of pumping 2 acre-ft/day during the first 78 days.

Part 3

If

$$t_p/sdf = 0.15,$$

then from figure 2

$$\text{maximum } q/Q = 0.13,$$

when

$$\frac{t_p + t_i}{sdf} = 0.25.$$

Therefore

$$\text{maximum } q = (0.13)(2 \text{ acre-ft/day}) = 0.26 \text{ acre-ft/day}$$

when

$$t_p + t_i = (0.25)(520 \text{ days}) = 130 \text{ days, or 52 days after pumping stops.}$$

Problem II

An irrigator is restricted to a maximum withdrawal of 150 acre-ft during the 150-day growing season, provided his pumping depletes the stream less than 25 acre-ft during the season. His well is 1 mile from the stream, and $T/S=134,000 \text{ ft}^2/\text{day}$. He will pump at the rate of 2.00 acre-ft/day, regulating his average pumping rate by shutting his pump off for the appropriate number of hours per day. Examine the effects of several possible pumping patterns: Given:

$$\text{max} = Qt \text{ 150 acre-ft}$$

$$v \text{ max} = 25 \text{ acre-ft}$$

$$t \text{ max} = 150 \text{ days}$$

$$a = 1 \text{ mile}$$

$$T/S = 134,000 \text{ ft}^2/\text{day}$$

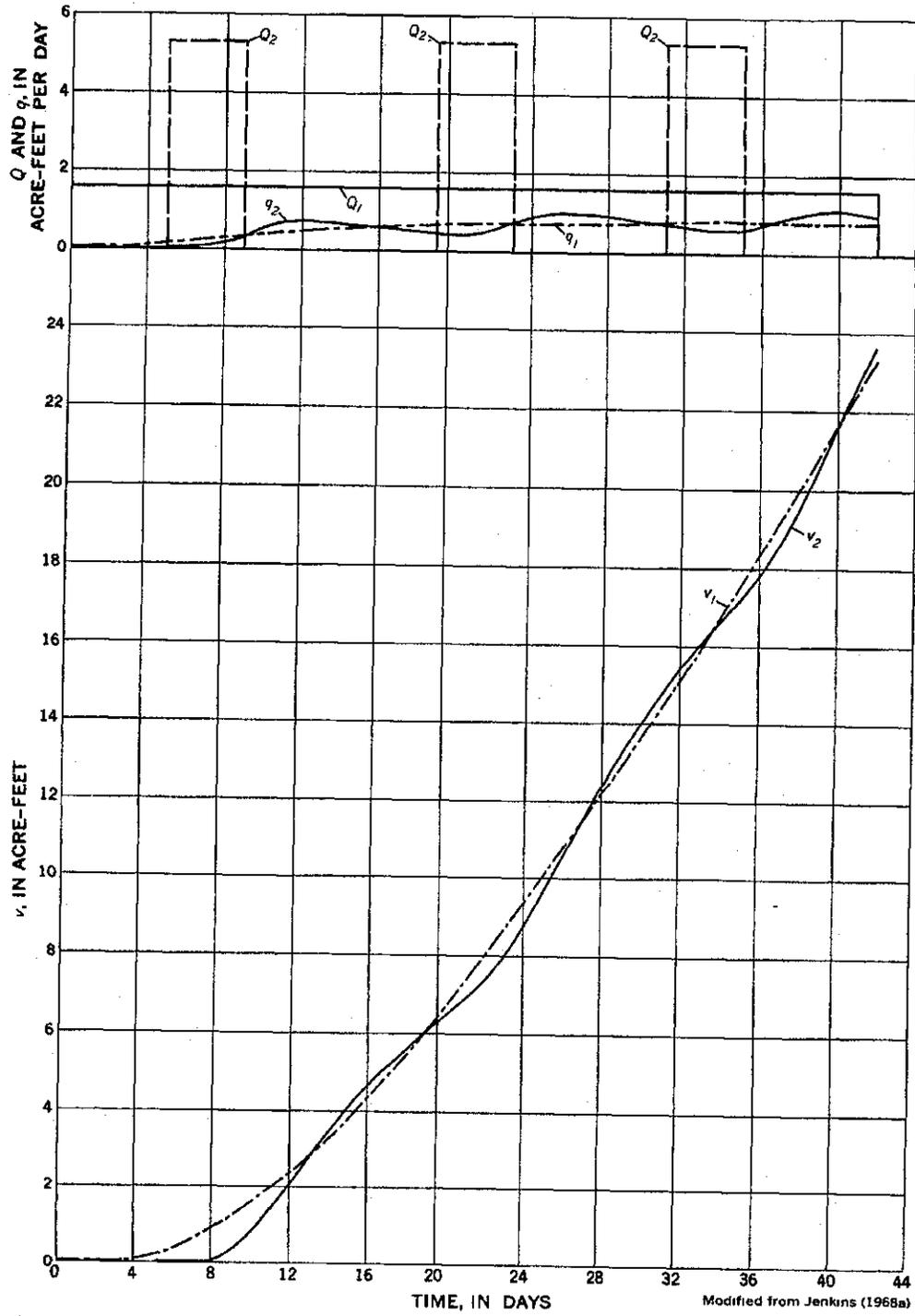


Figure 5.—Curves showing the effects of intermittent and steady pumping on a stream

$$sdf = a^2 S/T = \frac{a^2}{T/S} = \frac{(5,280 \text{ ft})^2}{134,000 \text{ ft}^2/\text{day}} = 209 \text{ days.}$$

Find:

Various pumping patterns possible within the restrictions given.

Part 1

First, test to see if both restrictions apply to any combination of pumping time and rate within the 150-day period. Try ending pumping the last day of the season, beginning pumping at a time and rate such that pumping 150 acre-ft will result in a depletion of the stream of 25 acre-ft at the end of pumping.

$$Qt = 150 \text{ acre-ft, } v = 25 \text{ acre-ft; } \frac{v}{Qt} = 0.167.$$

From curve *B* (fig. 1)

$$t/sdf = 0.54.$$

Time will be

$$\begin{aligned} t &= (0.54) (209 \text{ days}) \\ &= 113 \text{ days, or 37 days after beginning} \\ &\quad \text{of season.} \end{aligned}$$

Pumping rate will be

$$Q = \frac{150 \text{ acre-ft}}{113 \text{ days}} = 1.33 \text{ acre-ft/day.}$$

He can pump 16 hours per day, beginning 113 days before the end of the season.

If pumping 150 acre-ft during the 113-day period at the end of the season results in 25 acre-ft of stream depletion, it follows that pumping 150 acre-ft—regardless of rate—in a shorter period at the end of the season will result in less than 25 acre-ft depletion, and the 150 acre-ft limit will apply. It also follows that pumping 150 acre-ft in the earlier periods will result in more than 25 acre-ft of stream depletion, hence the restriction on stream depletion will apply during the first part of the season.

Part 2

Begin pumping 60 days after the beginning of the season. Test reasoning that the restriction on volume pumped applies.

$$\begin{aligned} Qt &= 150 \text{ acre-ft,} \\ t &= 90 \text{ days,} \end{aligned}$$

$$t/sdf = \frac{90 \text{ days}}{209 \text{ days}} = 0.43.$$

From curve *B*

$$\frac{v}{Qt} = 0.13.$$

The volume of stream depletion is

$$v = (0.13) (150 \text{ acre-ft}) = 19.5 \text{ acre-ft.}$$

The restriction on the volume of stream depletion has not been exceeded; therefore, the restriction on volume pumped does apply, and the allowable pumping rate would be

$$Q = \frac{150 \text{ acre-ft}}{90 \text{ days}} = 1.67 \text{ acre-ft/day}$$

which is the equivalent of pumping at the rate of 2.00 acre-ft/day for 20 hours per day.

Part 3

Begin pumping at the beginning of the season, pump for 73 days. Test reasoning that the restriction on stream depletion applies.

$$t_p/sdf = 73 \text{ days}/209 \text{ days} = 0.35.$$

From figure 3, for

$$t/sdf = 0.35$$

and

$$\frac{t_p + t_i}{sdf} = \frac{150 \text{ days}}{209 \text{ days}} = 0.72,$$

$$\frac{v}{Qsdf} = 0.12.$$

The steady pumping rate is

$$Q = \frac{25 \text{ acre-ft}}{(0.12)(209 \text{ days})} = 1.00 \text{ acre-ft/day,}$$

and the net volume pumped is

$$Qt = (1.00 \text{ acre-ft/day}) (73 \text{ days}) = 73 \text{ acre-ft.}$$

Therefore, the restriction on volume of stream depletion does apply. He can pump 12 hours per day at a rate of 2.00 acre-ft/day during a 73-day pumping period at the beginning of the season.

Part 4

The irrigator elects to pump 6 hours per day for the first 32 days of the season. What is the highest rate he can pump during the remaining 118 days?

Try assumption that restriction on volume of stream depletion will apply.

$$t_p/sdf = \frac{32 \text{ days}}{209 \text{ days}} = 0.15$$

and

$$\frac{t_p + t_i}{sdf} = \frac{150 \text{ days}}{209 \text{ days}} = 0.72.$$

From figure 3

$$\frac{v_1}{Qsdf} = 0.057.$$

The volume of stream depletion during the 32 days is

$$v_1 = (0.057) (0.5 \text{ acre-ft/day}) (209 \text{ days}) = 6.0 \text{ acre-ft.}$$

The net volume pumped during this time is

$$Q_1 t_1 = (0.5 \text{ acre-ft/day}) (32 \text{ days}) = 16 \text{ acre-ft.}$$

Subtract v_1 from the allowable volume of stream depletion

$$25 \text{ acre-ft} - 6 \text{ acre-ft} = 19 \text{ acre-ft} = v_2.$$

If

$$t_2/sdf = \frac{118 \text{ days}}{209 \text{ days}} = 0.56,$$

then from figure 1

$$\frac{v_2}{Q_2 t_2} = 0.17.$$

The volume pumped during the 118 days is

$$Q_2 t_2 = (19 \text{ acre-ft}) / 0.17 = 112 \text{ acre-ft.}$$

The values for the two periods total

$$(112 + 16) \text{ acre-ft} = 128 \text{ acre-ft,}$$

which is less than 150 acre-ft. Therefore the assumption that restriction on volume of stream depletion applies is correct.

$$Q_2 = \frac{112 \text{ acre-ft}}{118 \text{ days}} = 0.95 \text{ acre-ft/day.}$$

He can pump at the steady rate of 2.00 acre-ft/day for 11.4 hours per day during the last 118 days of the season.

The irrigator elects to pump continuously at the rate of 2.00 acre-ft/day. If he plans to pump until the end of the season, how soon can he start pumping? (See Part 5.) If he plans to start pumping at the beginning of the season, how long can he pump? (See Part 6.) If he plans to start pumping 50 days after the beginning of the season, how long can he pump? (See Part 7.)

Part 5

$$Qt = 150 \text{ acre-ft,}$$

$$t = \frac{150 \text{ acre-ft}}{2 \text{ acre-ft/day}} = 75 \text{ days}$$

$$t/sdf = \frac{75 \text{ days}}{209 \text{ days}} = 0.36.$$

From curve *B* (fig. 1)

$$\frac{v}{Qt} = 0.10.$$

The volume of stream depletion is

$$v = 15.0 \text{ acre-ft.}$$

Therefore the restriction on volume pumped applies, and he can pump continuously at the rate of 2 acre-ft/day, beginning 75 days before the end of the season.

Part 6

Assume that the restriction on stream depletion applies,

$$\frac{v}{Qsdf} = \frac{25 \text{ acre-ft}}{(2 \text{ acre-ft/day}) (209 \text{ days})} = 0.060$$

and

$$\frac{t_p + t_i}{sdf} = \frac{150 \text{ days}}{209 \text{ days}} = 0.72.$$

From figure 3

$$t_p/sdf = 0.17$$

$$t_p = (0.17) (209 \text{ days}) = 35 \text{ days.}$$

Therefore the irrigator can begin pumping at the beginning of the season and pump continuously at a rate of 2.00 acre-ft/day for about 35 days.

Part 7

Restriction on volume pumped limits pumping time to

$$\frac{150 \text{ acre-ft}}{2 \text{ acre-ft/day}} = 75 \text{ days.}$$

Test to see if depletion restriction would be exceeded by 75 days of pumping beginning 50 days after the beginning of the season.

$$t_p + t_i = (150 - 50) \text{ days} = 100 \text{ days.}$$

If

$$\frac{t_p + t_i}{sdf} = \frac{100 \text{ days}}{209 \text{ days}} = 0.48$$

and

$$t_p/sdf = 75 \text{ days}/209 \text{ days} = 0.36,$$

then from figure 3

$$\frac{v}{Qsdf} = 0.72.$$

The volume of stream depletion is

$$v = (0.72)(2 \text{ acre-ft/day})(209 \text{ days}) \\ = 30 \text{ acre-ft,}$$

which exceeds the 25 acre-ft restriction.

Try stopping pumping after 69 days. Use values from table 1 instead of interpolation between curves in figure 3.

$$t_i = (100 - 69) \text{ days} = 31 \text{ days.}$$

If

$$\frac{t_p + t_i}{sdf} = 0.48, \text{ then } \frac{v_1}{Qsdf} = 0.070,$$

and if

$$\frac{t_i}{sdf} = 0.15, \text{ then } \frac{v_2}{Qsdf} = 0.003.$$

The net is

$$\frac{v}{Qsdf} = 0.067.$$

The volume of steam depletion is

$$v = 28 \text{ acre-ft.}$$

Try $t_p = 54$ days, $t_i = 46$ days.

$$\frac{t_p + t_i}{sdf} = 0.48, \quad \frac{v_1}{Qsdf} = 0.070,$$

and

$$\frac{t_i}{sdf} = 0.22, \quad \frac{v_2}{Qsdf} = 0.010.$$

The net is

$$\frac{v}{Qsdf} = 0.060.$$

The volume of stream depletion is

$$v = 25 \text{ acre-ft.}$$

Therefore, the irrigator can pump continuously at a rate of 2 acre-ft/day during the 54-day period beginning 50 days after the season begins.

Problem III

A well 4,000 feet from the stream is shut down after pumping at a rate of 250 gal/min for 150 days; $T/S = 67,000 \text{ ft}^2/\text{day}$.

1. What effect did pumping the well have on the stream during the pumping period?
2. What will be the effect during the next 216 days after pumping was stopped?
3. What would the effect have been if pumping had continued during the entire 366 days?

Given:

$$Q = 250 \text{ gal/min}$$

$$t_p = 150 \text{ days, } 366 \text{ days}$$

$$t_i = 216 \text{ days}$$

$$a = 4,000 \text{ feet}$$

$$T/S = 67,000 \text{ ft}^2/\text{day}$$

$$sdf = \frac{(4000 \text{ ft})^2}{67,000 \text{ ft}^2/\text{day}} = 239 \text{ days.}$$

Find:

$$q \text{ and } v \text{ for } t_p = 150 \text{ days}$$

$$q \text{ and } v \text{ for } t_p + t_i = 366 \text{ days}$$

$$q \text{ and } v \text{ for } t_p = 366 \text{ days}$$

Part 1

$$t_p/sdf = 150 \text{ days}/239 \text{ days} = 0.63.$$

The rate of pumping in consistent units is

$$Q = \left(\frac{250 \text{ gal}}{\text{min}} \right) \left(1,440 \frac{\text{min}}{\text{day}} \right) \left(\frac{1 \text{ ft}^3}{7.48 \text{ gal}} \right) \left(\frac{1 \text{ acre-ft}}{43,560 \text{ ft}^3} \right) \\ = 1.1 \text{ acre-ft/day.}$$

When

$$t = t_p,$$

$$t/sdf = 0.63.$$

From curve A

$$q/Q = 0.37.$$

From curve B

$$\frac{v}{Qt} = 0.19.$$

At the end of 150 days,

$$\begin{aligned} q &= (1.1 \text{ acre-ft/day}) (0.37) \\ &= 0.41 \text{ acre-ft/day,} \\ v &= (1.1 \text{ acre-ft/day}) (150 \text{ days}) (0.19) \\ &= 31 \text{ acre-ft.} \end{aligned}$$

Part 2

When $t_p + t_i = (150 + 216) \text{ days} = 366 \text{ days}$,

$$\frac{t_p + t_i}{sdf} = 1.53.$$

From figure 2 by interpolation,

$$q/Q = 0.11.$$

From figure 3 by interpolation,

$$\frac{v}{Qsdf} = 0.33.$$

Thus, 216 days after pumping ceased,

$$\begin{aligned} q &= (0.11) (1.1 \text{ acre-ft/day}) \\ &= 0.12 \text{ acre-ft/day,} \\ v &= (0.33) (1.1 \text{ acre-ft/day}) (239 \text{ days}) \\ &= 87 \text{ acre-ft.} \end{aligned}$$

The additional volume of stream depletion during the 216-day period would be

$$(87 - 31) \text{ acre-ft} = 56 \text{ acre-ft.}$$

Part 3

If pumping had continued for the entire 366-day period,

$$\frac{t}{sdf} = 1.53,$$

and from table 1, $q/Q = 0.568$ and

$$\frac{v}{Qt} = 0.366.$$

$$\begin{aligned} q &= (0.568) (1.1 \text{ acre-ft/day}) \\ &= 0.62 \text{ acre-ft/day,} \\ v &= (0.366) (1.1 \text{ acre-ft/day}) (366 \text{ days}) \\ &= 147 \text{ acre-ft.} \end{aligned}$$

During the last 216 days the stream depletion would have been

$$v = (147 - 31) \text{ acre-ft} = 116 \text{ acre-ft.}$$

Problem IV

A municipal well is to be drilled in an alluvial aquifer near a stream. Downstream water uses require that depletion of the stream be limited to no more than 5,000 cubic meters during the dry season, which commonly is about 200 days long. The well will be pumped continuously at the rate of 0.03 m³/sec (cubic meters per second) during the dry season only. Wet season recharge is ample to replenish storage depleted by the pumping in the previous dry season, thus residual effects can be disregarded. $T = 30$ cm²/sec (square centimeters per second), $S = 0.20$.

What is the minimum allowable distance between the well and the stream?

Given:

$$\begin{aligned} v &= 5,000 \text{ m}^3 \\ Q &= 0.03 \text{ m}^3/\text{sec} \\ t_p &= 200 \text{ days} \\ T &= 30 \text{ cm}^2/\text{sec} \\ S &= 0.20 \\ Qt &= (0.03 \text{ m}^3/\text{sec}) (200 \text{ days}) \\ &= (86,400 \text{ sec/day}) = 5.184 \times 10^5 \text{ m}^3 \end{aligned}$$

$$\frac{v}{Qt} = 5,000 \text{ m}^3 / 5.184 \times 10^5 \text{ m}^3 = 0.01.$$

Find: a

From curve B

$$t/sdf = 0.12 = \frac{tT}{a^2S}$$

$$0.12 = \frac{(200 \text{ days}) (86,400 \text{ sec/day}) (30 \text{ cm}^2/\text{sec})}{a^2(0.20)},$$

$$a^2 = \frac{(200) (86,400) (30) \text{ cm}^2}{(0.12) (0.20)} = 2.16 \times 10^{10} \text{ cm}^2,$$

$$a = 1.47 \times 10^5 \text{ cm} = 1,470 \text{ meters.}$$

Problem V

A water company wants to install a well near a stream and pump it 90 days during the sum-

mer to supplement reservoir supplies. Downstream residents have protested that the well might dry up the stream. Natural streamflow at the lower end of the reach that would be affected by pumping is not expected to go below 2.0 ft³/sec in most years, and the downstream users have agreed that the well can be installed if depletion of the stream is limited to a maximum of 1.5 ft³/sec. The well would be 500 feet from the the stream and would pump 1,000 gpm. $T=50,000$ gal/day-ft, and $S=0.20$.

1. Will the rate of stream depletion exceed 1.5 ft³/sec during the first season or any following season?
2. If so, when will the rate of stream depletion exceed 1.5 ft³/sec?
3. At what rate could the well be pumped in order not to exceed 1.5 ft³/sec of stream depletion?

Given:

$$q \text{ max allowable} = 1.5 \text{ ft}^3/\text{sec}$$

$$a = 500 \text{ feet}$$

$$T = 50,000 \text{ gal/day-ft}$$

$$S = 0.20$$

$$Q = 1,000 \text{ gal/min}$$

$$sdf = \frac{(500 \text{ ft})^2(0.20)(7.48 \text{ gal/ft}^3)}{50,000 \text{ gal/day-ft}} = 7.5 \text{ days}$$

Find:

$$q \text{ max}$$

$$t \text{ for } q = 1.5 \text{ ft}^3/\text{sec}$$

$$Q \text{ for } q = 1.5 \text{ ft}^3/\text{sec}$$

Part 1

$$t_p = 90 \text{ days.}$$

$$t_p/sdf = 12.$$

From figure 1,

$$1 - q/Q = 0.155.$$

Therefore

$$q/Q = 0.845,$$

$$q = \frac{(0.845)(1,000 \text{ gal/min})(1,440 \text{ min/day})}{7.48 \text{ gal/ft}^3}$$

$$= 1.63 \times 10^5 \text{ ft}^3/\text{day}$$

$$= 1.88 \text{ ft}^3/\text{sec.}$$

Therefore by the end of the first pumping period, the rate of stream depletion would have exceeded the allowable depletion of 1.5 ft³/sec.

Part 2

$$q = 1.5 \text{ ft}^3/\text{sec} = (1.5 \text{ ft}^3/\text{sec})(86,400 \text{ sec/day})$$

$$= 1.30 \times 10^5 \text{ ft}^3/\text{day}$$

$$Q = 1,000 \text{ gal/min}$$

$$= \frac{(1,000 \text{ gal/min})(1,440 \text{ min/day})}{7.48 \text{ gal/ft}^3}$$

$$= 1.93 \times 10^5 \text{ ft}^3/\text{day}$$

$$q/Q = 1.30 \times 10^5 / 1.93 \times 10^5 = 0.67$$

$$1 - q/Q = 1.00 - 0.67 = 0.33.$$

From figure 1, curve $1 - q/Q$

$$t/sdf = 2.7,$$

$$t = (2.7)(7.5) = 20 \text{ days.}$$

Therefore, the rate of stream depletion will exceed 1.5 ft³/sec after 20 days pumping at 1,000 gal/min.

Part 3

From "Part 1," $q/Q = 0.845.$

$$Q = q/0.845$$

$$= (1.30 \times 10^5 \text{ ft}^3/\text{day})/0.845$$

$$= 1.54 \times 10^5 \text{ ft}^3/\text{day}$$

$$= 800 \text{ gal/min.}$$

Therefore, if pumping were reduced to 800 gal/min, the rate of stream depletion would not exceed 1.5 ft³/sec during the first 90-day period of pumping.

However, the residual effects of this pumping would carry over through the next pumping period.

The residual effect of the first pumping period on rate of stream depletion at the end of the second period, assuming no pumping during the second period, is as follows:

$$t_p + t_i = 90 \text{ days} + 365 \text{ days} = 455 \text{ days.}$$

$$\frac{t_p + t_i}{sdf} = 61, t_i/sdf = 49.$$

From figure 1,

$$(1 - q/Q)_{p+i} = 0.073,$$

$$(1 - q/Q)_i = 0.081,$$

and

$$q/Q = 0.008.$$

Thus the rate of depletion is

$$\begin{aligned} q &= (0.008) (1.54 \times 10^8 \text{ ft}^3/\text{day}) \\ &= 1,230 \text{ ft}^3/\text{day} \\ &= 0.014 \text{ ft}^3/\text{sec}. \end{aligned}$$

The effects are very slight. Pumping 800 gal/min during the second pumping period would exceed the allowable stream depletion rate by only 0.014 ft³/sec. Reduction of the pumping rate to about 750 gal/min would keep rate of stream depletion below 1.5 ft³/sec during several successive pumping seasons.

Mathematical Bases for Curves and Tables

The literature concerning the effect of a pumping well on a nearby stream contains several equations and charts that, although superficially greatly different, yield identical results. The basic curves and table (Curves A and B, and table 1) of this report can be derived from any of the published expressions. A cursory review of some of the pertinent equations may be useful to those interested in the mathematics.

Definitions

The notation that has been used in the literature is even more diverse than the published equations; consequently, definitions of only selected terms are given below. Complete definitions of all terms used are in the indicated references.

erf x = the error function of x

$$= \frac{2}{\sqrt{\pi}} \int_0^x e^{-t^2} dt = 1 - \text{erfc } x$$

erfc x = the complementary error function of x

$$= \frac{2}{\sqrt{\pi}} \int_x^\infty e^{-t^2} dt$$

$\text{i}^2 \text{erfc } x$ = the second repeated integral of the error function.

The line source integral (Maasland and Bittinger, 1963, p. 84)

$$= \sqrt{\pi} \int_{x/\sqrt{4ht}}^\infty \frac{e^{-u^2} du}{u^2}$$

In the notation used in the main body of this report,

$$x/\sqrt{4ht} = \sqrt{\frac{sdj}{4t}}$$

Definitions and tabular values of erf x , erfc x , and $\text{i}^2 \text{erfc } x$ are shown by Gautschi (1964, p. 297, 310-311, 316-317). Tabular values of the line source integral are shown by Maasland and Bittinger (1963, p. 84) and by Glover (1964, p. 45-53).

Mathematical base for curve A

Curve A and its coordinates in table 1 can be computed from Theis (1941), Conover (1954), and Theis and Conover (1963)

$$P = \frac{2}{\pi} \int_0^{\pi/2} e^{-k \sec^2 u} du \quad (1)$$

from Glover and Balmer (1954)

$$q/Q = 1 - P(x_1/\sqrt{4at}) \quad (2)$$

from Glover (1960)

$$q_1/Q = 1 - \frac{2}{\sqrt{\pi}} \int_0^{x_1/\sqrt{4at}} e^{-u^2} du \quad (3)$$

and from Hantush (1964, 1965)

$$Q_r = Q \text{erfc } (U) \quad (4)$$

This transformed his basic integral into equation 1 because the basic integral is laborious to evaluate, but in the form of equation 1, is amenable to either numerical or graphical solution. Equations 2, 3, and 4 are identical, and in the notation used in this paper are

$$q/Q = \text{erfc} \left(\sqrt{\frac{sdj}{4t}} \right) = 1 - \text{erf} \left(\sqrt{\frac{sdj}{4t}} \right) \quad (5)$$

Mathematical base for curve B

Curve B and its coordinates in table 1 can be computed either by integration of curve A or of the equations that are the base of curve A. Analytical integration of equations 2 and 3 is shown by Glover (1960) as

$$\int_0^t \frac{q_r}{Q} dt = 1 - \frac{2}{\sqrt{\pi}} \int_0^{x_1/\sqrt{4at}} e^{-u^2} du$$

$$- \frac{2}{\pi} \left(\frac{x_1^2}{4at} \right) \sqrt{\pi} \int_{x_1/\sqrt{4at}}^{\infty} \frac{e^{-u^2}}{u^2} du \quad (6)$$

and equation 4 is integrated by Hantush (1964, 1965)

$$v_r = \int_0^{t_0} Q_r dt = 4Qt_0 i^2 \operatorname{erfc}(U_0) \quad (7)$$

In the notation used in this paper, equation 6 is

$$\frac{v}{Qt} = 1 - \operatorname{erf} \left(\sqrt{\frac{sdf}{4t}} \right) - \frac{2}{\pi} \left(\frac{sdf}{4t} \right) \sqrt{\pi} \int_{\sqrt{\frac{sdf}{4t}}}^{\infty} \frac{e^{-u^2}}{u^2} du \quad (8)$$

and equation 7 is

$$\frac{v}{Qt} = 4i^2 \operatorname{erfc} \left(\sqrt{\frac{sdf}{4t}} \right) \quad (9)$$

Equations 8 and 9 both can be expressed in terms extensively tabulated in Gautschi (1964, p. 310-311) as

$$\frac{v}{Qt} = \left(\frac{sdf}{2t} + 1 \right) \operatorname{erfc} \left(\sqrt{\frac{sdf}{4t}} \right)$$

$$- \left(\sqrt{\frac{sdf}{4t}} \right) \frac{2}{\sqrt{\pi}} \exp \left(-\frac{sdf}{4t} \right) \quad (10)$$

Before discovering equations 6 and 7, the writer integrated curve A both numerically and graphically. The results were identical, within the limitations of the methods, to those obtained from equation 10.

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6.0 LOWER NIOBRARA RIVER BASIN

6.1 Summary

Based on the analysis of the sufficiency of the long-term surface water supply in the Lower Niobrara River Basin, the Department has reached a preliminary conclusion that the basin is fully appropriated upstream of the Spencer Hydropower facility. The designation as fully appropriated is the result of two factors. The first factor is that the current number of days available for diversion is less than the necessary crop irrigation requirements for junior irrigators within the basin. The second factor is that those irrigation rights which are junior to the calling senior right are currently receiving less water than was available for the twenty-year period prior to the granting of the appropriations. This preliminary conclusion differs from the preliminary conclusion found in last year's report in part because, prior to 2007, no call had been made to administer for the rights of the Spencer Hydropower facility. On March 5, 2007, the Department received a written request from Nebraska Public Power District (NPPD) to administer the water rights on the Niobrara River when flows fall below those to which NPPD's permits are entitled in order to generate electricity. Therefore, irrigators junior to the Spencer Hydropower rights were closed while administration was occurring on the river upstream of Spencer Hydropower. Some irrigators chose to pay NPPD to subordinate its water rights, in accordance with Nebraska law. Those irrigators were not closed, and the amount of water for which NPPD could call was lowered accordingly.

The basin downstream of the Spencer Hydropower facility is not currently included in the fully appropriated designation for the Lower Niobrara River Basin. The effects of future ground water depletions on future water supplies were estimated for the basin downstream of the Spencer Hydropower facility, but, due to a lack of administration, the number of days available for diversion in the future was could not be estimated.

6.2 Basin Description

The Lower Niobrara River Basin in Nebraska is defined in this report as the surface areas in Nebraska that drain into the Niobrara River Basin and have not previously been determined to be fully appropriated. This general basin area extends from the Mirage Flats diversion dam in the west downstream to the confluence of the Niobrara River and the Missouri River and includes all aquifers that impact surface water flows in the basin (Figure 6-1). The total area of the Niobrara River surface water basin is approximately 8,900 square miles. Natural resources districts with significant area in the basin are the Upper Niobrara White Natural Resources District, the Middle Niobrara Natural Resources District, and the Lower Niobrara Natural Resources District.

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 Director
 DEPARTMENT OF NATURAL RESOURCES

Dave Heineman
 Governor



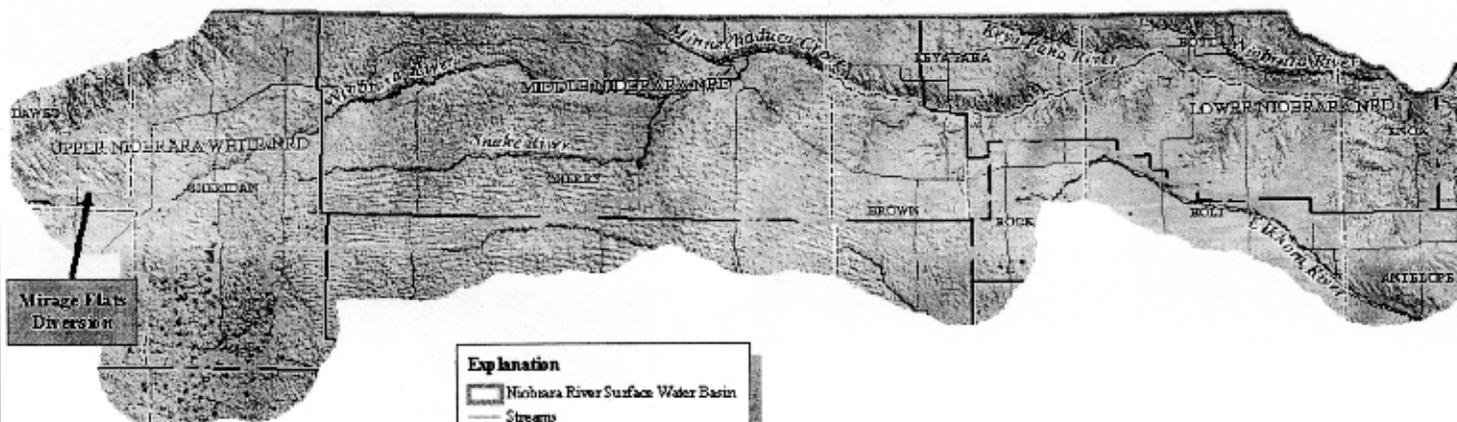
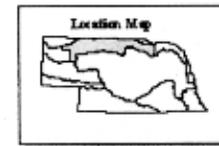


Planning and Assistance Division

General Basin Map NIOBRARA RIVER SURFACE WATER BASIN BELOW MIRAGE FLATS DIVERSION



This map is intended to supply only general information concerning the matter stated in its title. Boundaries and the location of features portrayed on this map are not to be construed as legal boundaries or actual locations, and may change as additional or better data become available. Use assumes all risks associated with interpretations of this map beyond its intended purpose.



| Explanation | |
|-------------------|------------------------------------|
| | Niobrara River Surface Water Basin |
| | Streams |
| | Lakes |
| Cultural Features | |
| | County Boundary |
| | State Boundary |
| | Highways |
| | NRD Boundary |



Base map produced by Kevin Schwartzman, April 27, 2006
Base map approved June 1, 2006
General basin map produced by Kevin Schwartzman, June 1, 2006

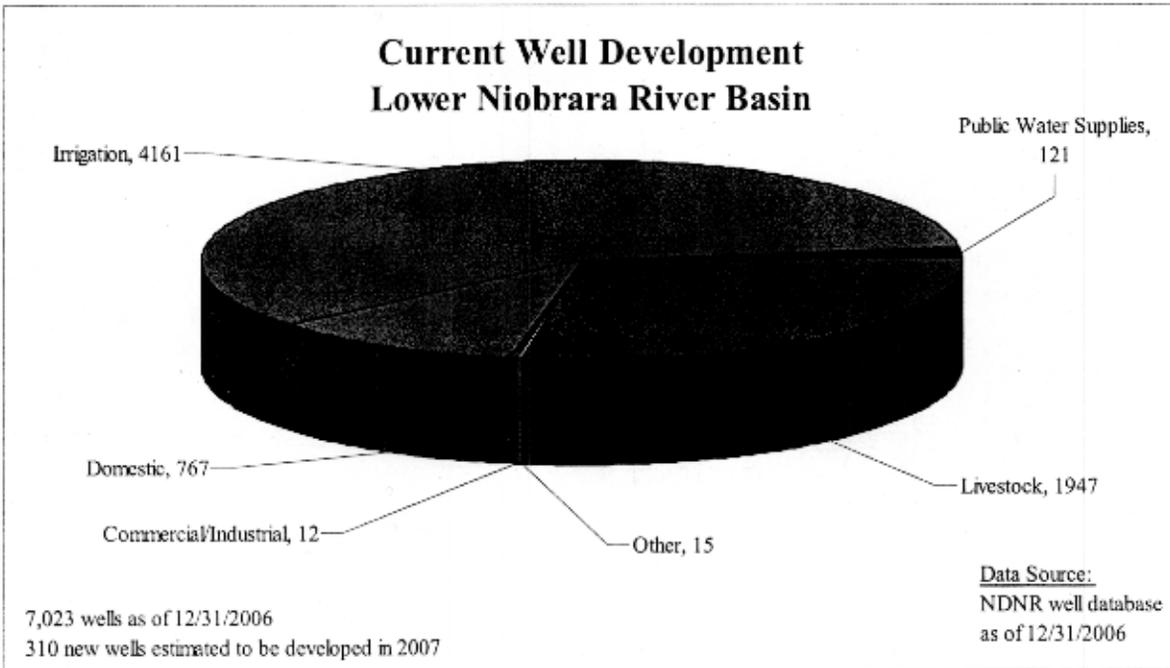
Figure 6-1 General basin map, Lower Niobrara River Basin

6.3 Nature and Extent of Water Use

6.3.1 Ground Water

Ground water in the basin is used for a variety of purposes: domestic, industrial, livestock, irrigation, and other uses. A total of 7,023 ground water wells had been registered within the basin as of December 31, 2006 (Department registered ground water wells database), with an estimated 310 ground water wells to be developed during 2007 (Figure 6-2). The locations of all active ground water wells can be seen in Figure 6-3.

Figure 6-2 Current well development by number of registered wells, Lower Niobrara River Basin



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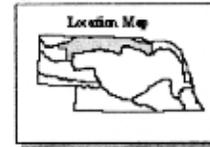


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Current Well Development NIOBRARA RIVER SURFACE WATER BASIN BELOW MIRAGE FLATS DIVERSION



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| Explanation | |
|-------------|------------------------------------|
| | Niobrara River Surface Water Basin |
| | Wells |
| | County Boundary |
| | State Boundary |
| | NRD Boundary |
| | Public Water Supplies |
| | Commercial/Industrial |
| | Domestic |
| | Livestock |
| | Irrigation |
| | Other |

Well information is from the DNR Registered Ground Water Well Database, as of December 31, 2006.



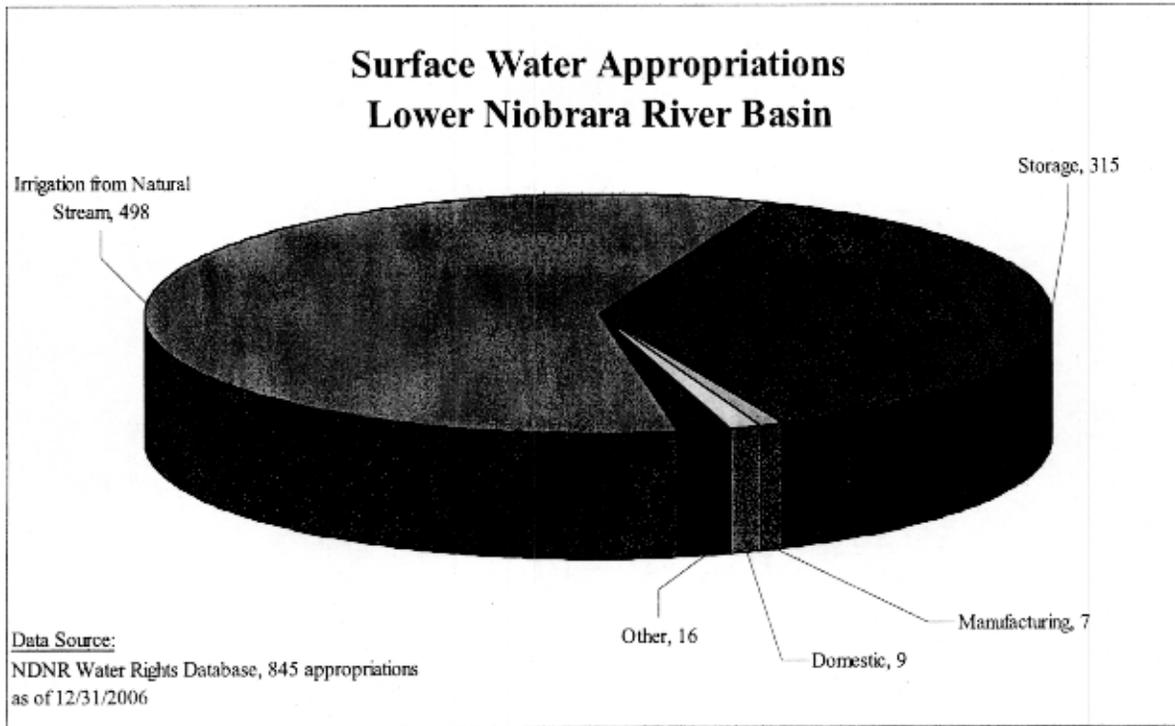
Base map produced by Kevin Schwartzman, April 27, 2006
Base map approved June 1, 2006
Wells map produced by Kevin Schwartzman, January 12, 2007

Figure 6-3 Current well locations, Lower Niobrara River Basin

6.3.2 Surface Water

As of December 31, 2006, there were 845 surface water appropriations in the basin issued for a variety of uses (Figure 6-4). Most of the surface water appropriations are for irrigation use and storage and tend to be located on the major streams. There is an instream flow appropriation in the basin located on Long Pine Creek and a hydropower appropriation on the Niobrara River near Spencer. The first surface water appropriations in the basin were permitted in 1894, and development has continued through the present day. The approximate locations of the surface water diversion points are shown in Figure 6-5.

Figure 6-4 Surface water appropriations by number of diversion points, Lower Niobrara River Basin



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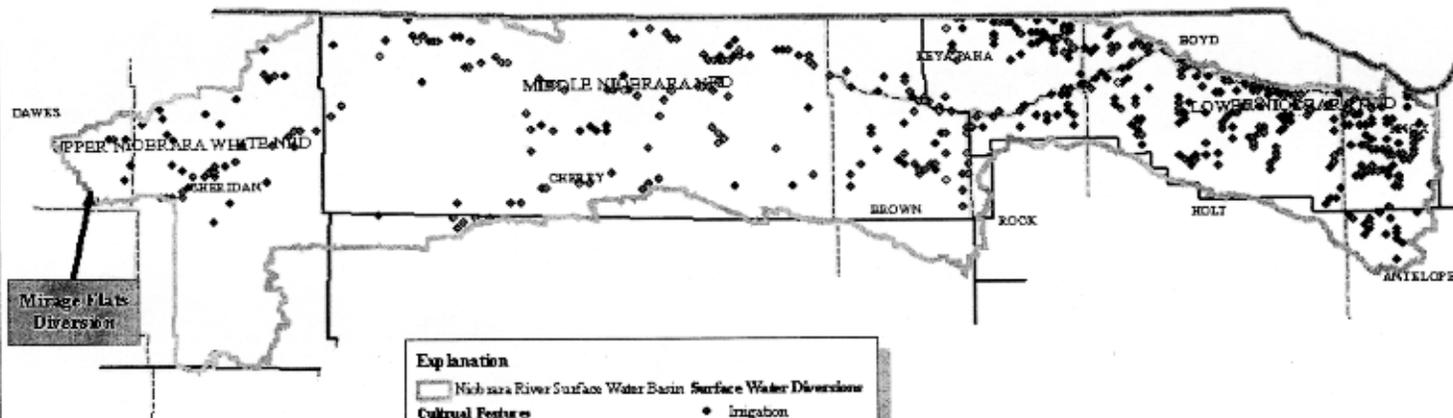
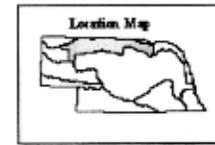


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Surface Water Diversions NIOBRARA RIVER SURFACE WATER BASIN BELOW MIRAGE FLATS DIVERSION



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| Explanation | |
|-------------|------------------------------------|
| | Niobrara River Surface Water Basin |
| | Cultural Features |
| | County Boundary |
| | State Boundary |
| | NRD Boundary |
| | Surface Water Diversions |
| | Irrigation |
| | Storage |
| | Manufacturing |
| | Power |
| | Domestic |
| | Instream Flow |
| | Other |

Points of diversions were derived from legal descriptions in the DNR Water Rights Database, as of December 31, 2006, and was plotted to the nearest one-mile section center on this map.



Base map produced by Kevin Schwartzman, April 27, 2006
Base map approved June 1, 2006
Surface water diversion map produced by Kevin Schwartzman, February 16, 2007

Figure 6-5 Surface water appropriation diversion locations, Lower Niobrara River Basin

6.4 Hydrologically Connected Area

No sufficient numeric ground water model is available in the Lower Niobrara River Basin to determine the 10/50 area. Therefore, the 10/50 area was determined using stream depletion factor (SDF) methodology. Figure 6-6 specifies the extent of the 10/50 area. A description of the SDF methodology used appears in the "Methodology" section of this report.

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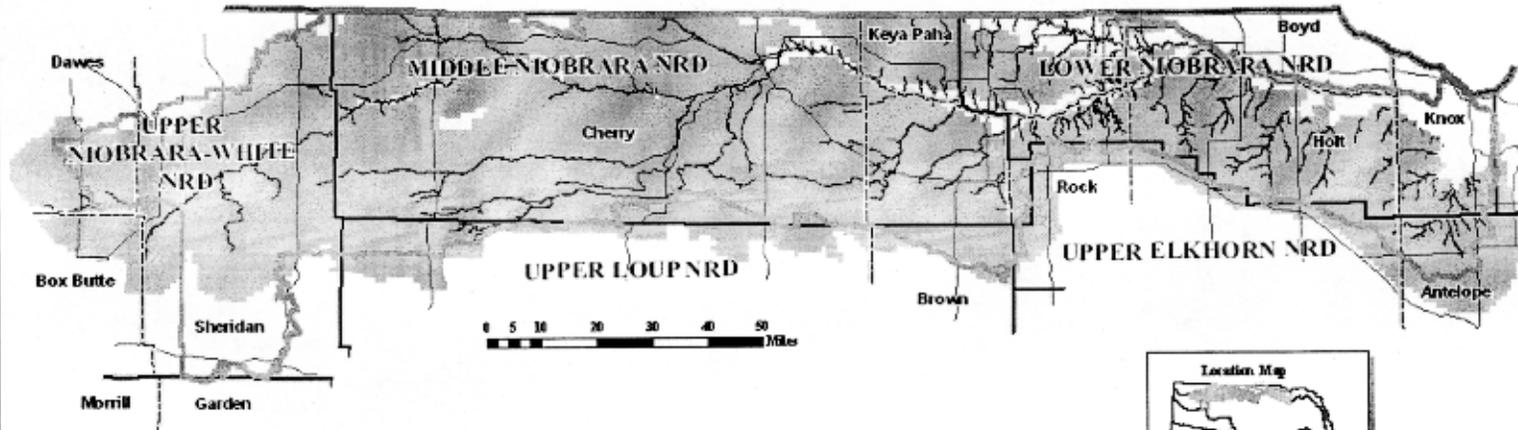


Planning and Assistance Division

Map of Geographic Area within which Surface Water and Ground Water Are Hydrologically Connected For Purposes of the Determination of Fully Appropriated NIOBRARA RIVER SURFACE WATER BASIN BELOW MIRAGE FLATS DIVERSION



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| Explanation | |
|-------------|------------------------------------|
| | Niobrara River Basin 10/50 Area |
| | Niobrara River Surface Water Basin |
| | NRD Boundary |
| | County Boundaries |
| | Major Roads |
| | Rivers |

Base map produced by Kevin Schwartzman, April 27, 2006
Base map approved June 1, 2006
10/50 map produced by Kevin Schwartzman October 11, 2007

Figure 6-6 10/50 area, Lower Niobrara River Basin

6.5 Net Corn Crop Irrigation Requirement

Figure 6-7 is a map of the net corn crop irrigation requirement for the basin (DNR, 2005). The NCCIR in the basin ranges from 8.9 to 13.9 inches. To assess the number of days required to be available for diversion, a surface water diversion rate equal to 1 cfs per 70 acres, a downtime of 10%, and an irrigation efficiency of 80% were assumed. Based on these assumptions, it will take the junior surface water appropriation in the Niobrara River Basin upstream of Spencer Hydropower 36.9 days annually to divert 65% of the NCCIR and 68.1 days to divert 85% of the NCCIR. Junior surface water appropriations in the Niobrara River Basin downstream of Spencer Hydropower will require between 23.6 and 25.6 days annually to divert 65% of the NCCIR and between 30.9 and 33.4 days to divert 85% of the NCCIR.

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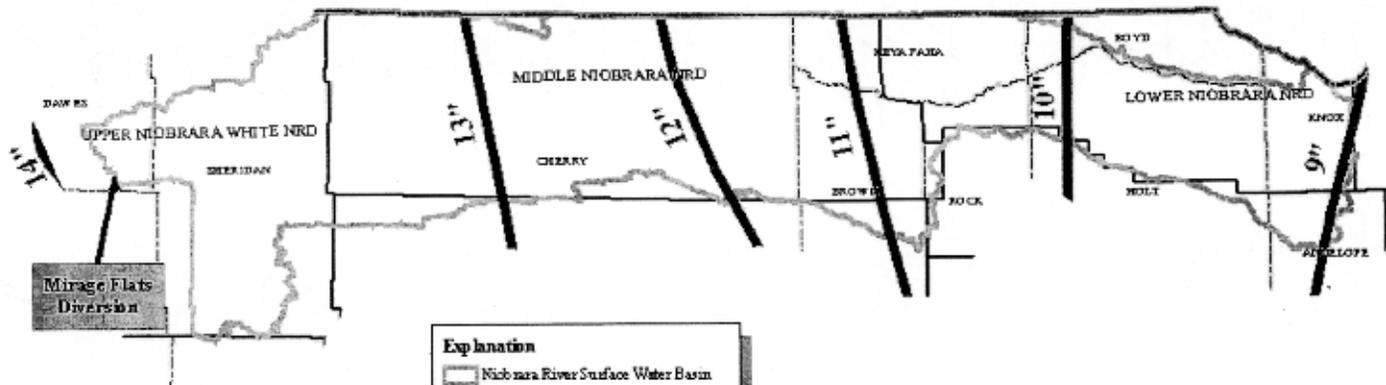
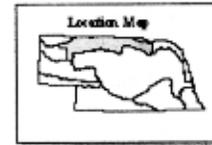


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Net Corn Crop Irrigation Requirement NIOBRARA RIVER SURFACE WATER BASIN BELOW MIRAGE FLATS DIVERSION



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Explanation

- Niobrara River Surface Water Basin
- Net Corn Crop Irrigation Requirement

Cultural Features

- County Boundary
- State Boundary
- NRD Boundary

Source: DNR, 2005



Base map produced by Kevin Schwartzman, April 27, 2006
Base map approved June 1, 2006
Corn irrigation requirement map produced by Kevin Schwartzman June 5, 2006

Figure 6-7 Net corn crop irrigation requirement, Lower Niobrara River Basin

6.6 Surface Water Closing Records

Table 6-1 records all surface water administration that has occurred in the basin between 1987 and 2006.

Table 6-1 Surface water administration in the Lower Niobrara River Basin, 1987-2006

| Year | Water Body | Days | Closing Date | Opening Date |
|------|-----------------------------|------|--------------|--------------|
| 1991 | North Branch Verdigre Creek | 3 | Jul 26 | Jul 29 |

In May 2007, the entire Niobrara River Basin upstream of the Spencer Hydropower facility was closed to appropriations junior to NPPD's permits due to NPPD's call for administration. The closing orders were lifted soon after that, when NPPD took the hydropower plant offline for regularly scheduled maintenance. NPPD then withdrew its call until August 1, in order to allow those irrigators who chose to do so time to enter into subordination agreements with NPPD.

6.7 Evaluation of Current Development

6.7.1 Current Water Supply

The previous twenty-year period was used as an estimate of the expected future twenty-year flows. In 2007, NPPD, the owner of the Spencer Hydropower facility and holder of surface water permits for power production, notified the Department that, beginning in 2007 and continuing into the future, it will request administration for its water rights. Thus, to analyze the availability of water for irrigation rights above the Spencer Hydropower facility, the Department analyzed the last twenty years of flows to predict the expected number of days that irrigation rights junior to the Spencer Hydropower facility would be turned off for the senior Spencer Hydropower right. When the senior appropriation (Spencer Hydropower) is satisfied, it is assumed that all junior irrigation rights are able to divert.

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The results of the analysis conducted for the Lower Niobrara River Basin upstream of Spencer Hydropower and downstream of Spencer Hydropower are shown in Tables 6-2 and 6-3.

Table 6-2 Estimated number of days surface water is available for diversion upstream of Spencer Hydropower with current development

| Year | July 1 though August 31 Number of Days Surface Water is Available for Diversion | May 1 through September 30 Number of Days Surface Water is Available for Diversion |
|----------------|--|---|
| 1987 | 4 | 16 |
| 1988 | 2 | 34 |
| 1989 | 0 | 0 |
| 1990 | 0 | 13 |
| 1991 | 0 | 34 |
| 1992 | 5 | 6 |
| 1993 | 16 | 37 |
| 1994 | 2 | 17 |
| 1995 | 0 | 62 |
| 1996 | 0 | 64 |
| 1997 | 6 | 43 |
| 1998 | 8 | 41 |
| 1999 | 8 | 45 |
| 2000 | 0 | 13 |
| 2001 | 3 | 19 |
| 2002 | 0 | 5 |
| 2003 | 0 | 15 |
| 2004 | 0 | 0 |
| 2005 | 0 | 27 |
| 2006 | 0 | 0 |
| Average | 2.7 | 24.6 |

Table 6-3 Estimated number of days surface water is available for diversion downstream of Spencer Hydropower with current development

| Year | July 1 though August 31 Number of Days Surface Water is Available for Diversion | May 1 through September 30 Number of Days Surface Water is Available for Diversion |
|---------|---|--|
| 1987 | 62 | 153 |
| 1988 | 62 | 153 |
| 1989 | 62 | 153 |
| 1990 | 62 | 153 |
| 1991 | 59 | 150 |
| 1992 | 62 | 153 |
| 1993 | 62 | 153 |
| 1994 | 62 | 153 |
| 1995 | 62 | 153 |
| 1996 | 62 | 153 |
| 1997 | 62 | 153 |
| 1998 | 62 | 153 |
| 1999 | 62 | 153 |
| 2000 | 62 | 153 |
| 2001 | 62 | 153 |
| 2002 | 62 | 153 |
| 2003 | 62 | 153 |
| 2004 | 62 | 153 |
| 2005 | 62 | 153 |
| 2006 | 62 | 153 |
| Average | 61.9 | 152.9 |

The comparison of the near-term water supply days available for diversion to the number of days surface water is required to be available to divert 65% and 85% of the NCCIR is detailed tables 6-4 and 6-5. The results indicate that the Lower Niobrara River Basin upstream of Spencer Hydropower provides to the most junior water right an average of 2.7 days available for diversion between July 1 and August 31 and 24.6 days available for diversion between May 1 and September 30.

IN REPLY TO:

The Lower Niobrara River Basin downstream of Spencer Hydropower provides 61.9 days available for diversion between July 1 and August 31 and 152.9 days available for diversion between May 1 and

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September 30. The results indicate that the current water supply is unable to satisfy all the surface



appropriations upstream of Spencer Hydropower but is able to satisfy all surface water appropriations downstream of Spencer Hydropower.

Table 6-4 Comparison between the number of days required to meet the net corn crop irrigation requirement and number of days surface water is available for diversion, Lower Niobrara River Basin upstream of Spencer Hydropower

| | Number of Days Necessary to Meet the 65% and 85% of Net Corn Crop Irrigation Requirement | Near-Term Supply Average Number of Days Available for Diversion (1987-2006) |
|---|---|--|
| July 1 – August 31 (65% Requirement) | 36.9 | 2.7 days (34.2 days below the requirement) |
| May 1 – September 30 (85% Requirement) | 48.3 | 24.6 days (23.7 days below the requirement) |

Table 6-5 Comparison between the number of days required to meet the net corn crop irrigation requirement and number of days surface water is available for diversion, Lower Niobrara River Basin downstream of Spencer Hydropower

| | Number of Days Necessary to Meet the 65% and 85% of Net Corn Crop Irrigation Requirement | Near-Term Supply Average Number of Days Available for Diversion (1987-2006) |
|---|---|--|
| July 1 – August 31 (65% Requirement) | 23.6 to 25.6 | 61.9 days (at least 36.3 days above the requirement) |
| May 1 – September 30 (85% Requirement) | 30.9 to 33.4 | 152.9 days (at least 119.5 days above the requirement) |

6.7.2 Erosion of Irrigation Rights Upstream of Spencer Hydropower

The erosion rule was applied to evaluate whether, at the time that junior surface water irrigation appropriations upstream of Spencer Hydropower were granted, flows could have satisfied the 65/85 rule and, therefore, whether the junior rights have been eroded. The results of the analysis are shown in Table 6-6 below. The results indicate that a junior surface water irrigation appropriation granted in 2001 would have been able to divert on average 4.0 days between July 1 and August 31 and 31.0 days between May 1 and September 30 for the twenty-year period prior to 2001. This is greater than the average number of days that are currently available for diversion (2.7 days between July 1 and August 31 and 24.6 days between May 1 and September 30) by 1.3 days and 6.5 days, respectively. Thus, the junior irrigation rights have been eroded. As a result of the analysis, the Niobrara River upstream of Spencer Hydropower is designated fully appropriated.

Table 6-6 Comparison between the number of days available to junior appropriators for diversion at the time appropriations were obtained and the number of days currently available for diversion, in the Lower Niobrara River Basin upstream of Spencer Hydropower

| | Number of Days Required to Meet the Net Corn Crop Irrigation Requirement | Number of Days Available to a Junior Irrigator between 1982-2001 | Number of Days Currently Available for Diversion (1987-2006) |
|--|--|--|--|
| July 1 – August 31 (65% Requirement) | 36.9 | 4.0 | 2.7 |
| May 1 – September 30 (85% Requirement) | 48.3 | 31.0 | 24.6 |

6.7.3 Fully Appropriated Area

Based on the analysis of current water supplies, the hydrologically connected subbasin upstream of the Spencer Hydropower facility is considered to be fully appropriated (Figure 6-8). The calculation of

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impacts from existing wells was not completed for the subbasin upstream of the Spencer Hydropower facility, because the addition of impacts from wells would only further decrease future water supplies.



IN REPLY TO:

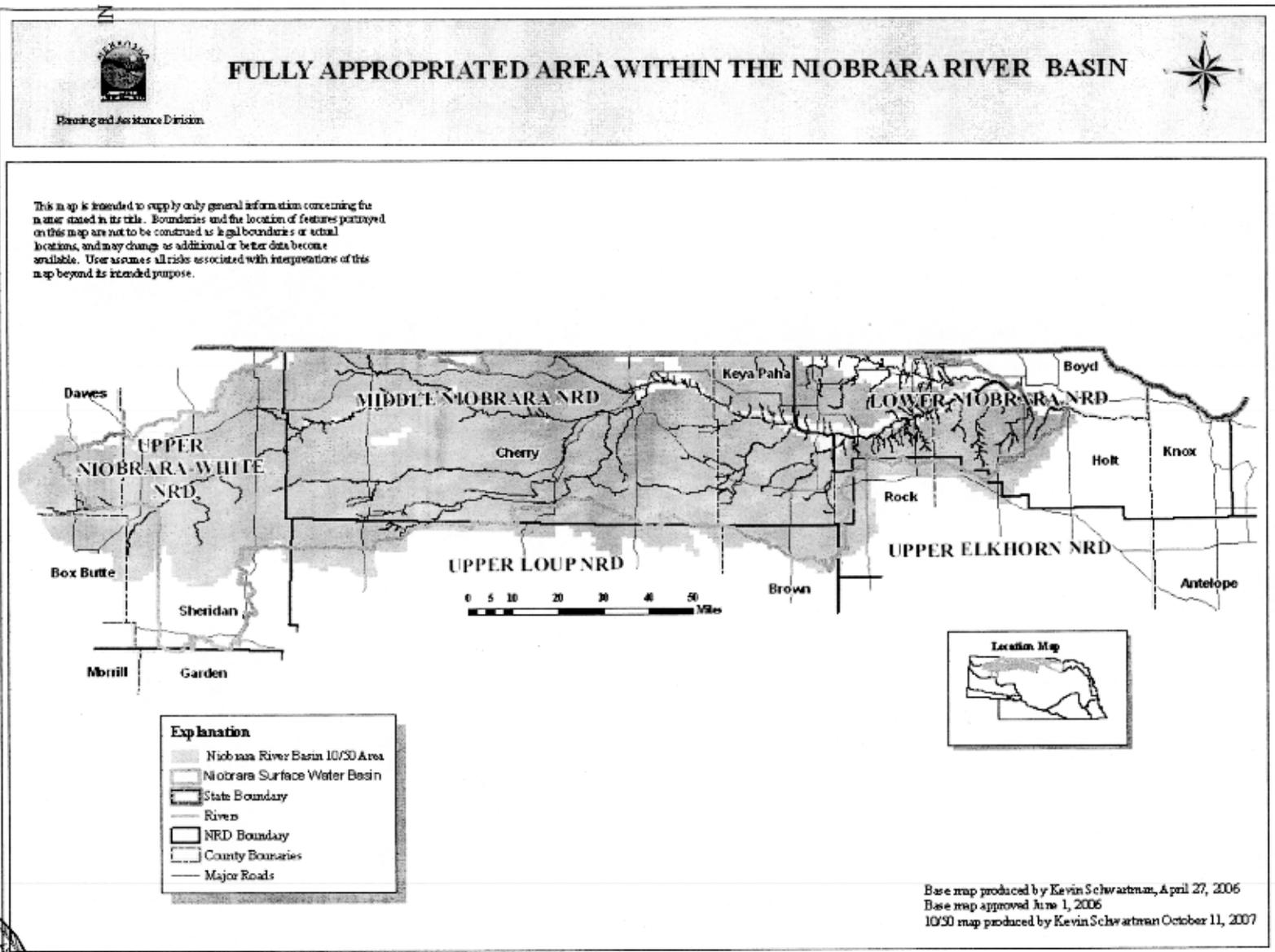
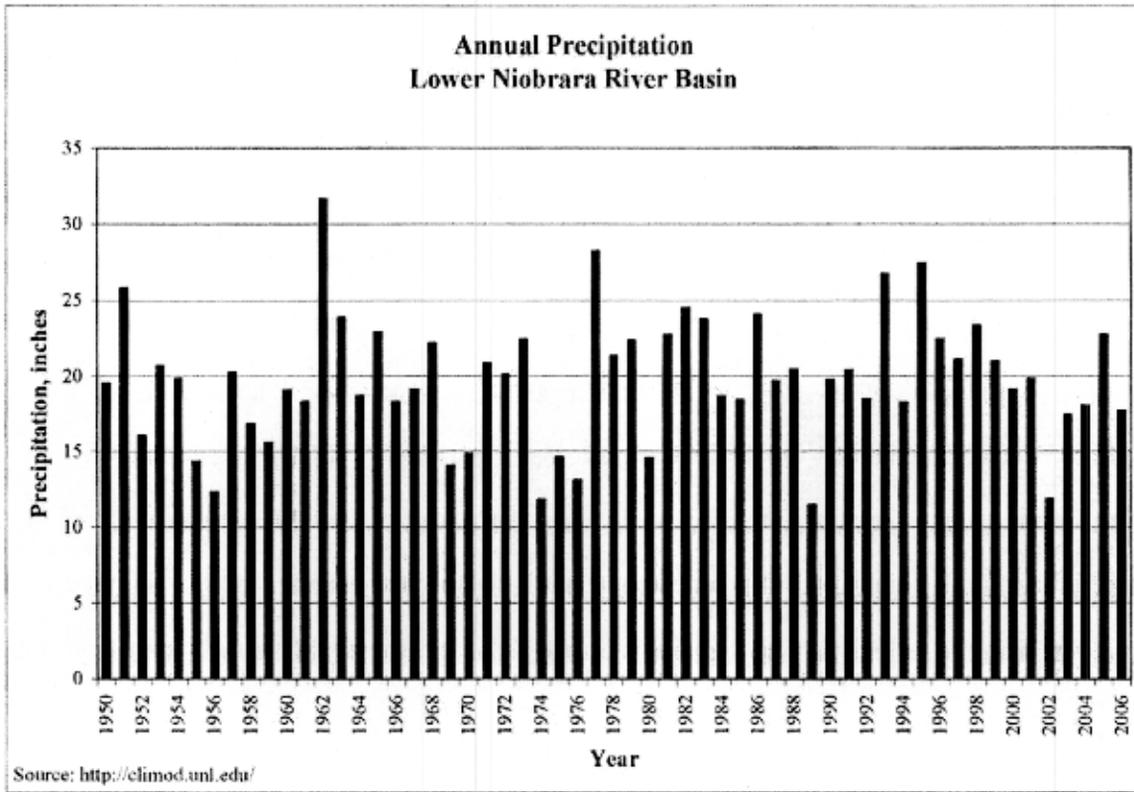


Figure 6-8 Area designated as fully appropriated within the Niobrara River Basin

6.7.4 Future Water Supply for Niobrara Subbasin Downstream of Spencer Hydropower Facility

In order to complete the long-term evaluation of surface water supplies for the Lower Niobrara River Basin downstream of Spencer Hydropower, a future twenty-year water supply for this portion of the basin must be estimated. The basin's water sources are precipitation, which runs off as direct streamflow and infiltrates into the ground to discharge as baseflow, ground water movement into the basin, which discharges as baseflow, and streamflow from the upper Niobrara River. Using methodology published in the *Journal of Hydrology* (Wen and Chen, 2005), a nonparametric Mann-Kendall trend test of the weighted average precipitation in the basin was completed. The analysis showed no statistically significant trend in precipitation ($P > 0.95$) over the past fifty years (Figure 6-9). No statistical analyses of ground water movement into the basin or streamflow from the upper Niobrara River were made due to the lack of data. Therefore, using the previous twenty years of streamflow data as the best estimate of the future surface water supply is a reasonable starting point for applying the lag depletions from ground water wells.

Figure 6-9 Annual precipitation, Lower Niobrara River Basin



6.7.5 Depletions Analysis for Niobrara Subbasin Downstream of Spencer Hydropower Facility

The future depletions analysis was not conducted for the Niobrara River upstream of Spencer Hydropower, since current levels of development are already unable to satisfy the 65/85 rule and the erosion rule. The depletion analysis was performed on the basin downstream of Spencer Hydropower to estimate expected depletions to streamflow. The SDF methodology, as documented in the "Methodology" section, was used to conduct this analysis. The results estimate the future streamflow at the mouth of the Niobrara River would be depleted by 48 cfs in twenty-five years due to lag impacts from current well development.



6.7.6 Evaluation of Current Levels of Development against Future Water Supplies

The comparison of the near-term water supply days available for diversion to the number of days surface water is required to be available to divert 65% and 85% of the NCCIR for the Niobrara River Basin downstream of Spencer Hydropower is detailed in Table 6-7. No estimate of the twenty-year average number of days available for diversion was made, because no surface water administration has historically occurred on the Niobrara River itself downstream of the Spencer Hydropower facility. Even though the future water supplies were not estimated, the current number of days in which surface water was available for diversion far exceeds the number of days necessary to meet the NCCIR. Thus, it is unlikely that this portion of the basin would be fully appropriated.

Table 6-7 Comparison between the number of days required to meet the net corn crop irrigation requirement and number of days surface water is available for diversion, Lower Niobrara River Basin downstream of Spencer Hydropower

| | Number of Days Necessary to Meet the 65% and 85% of Net Corn Crop Irrigation Requirement | Near-Term Supply Average Number of Days Available for Diversion (1987-2006) |
|---|---|--|
| July 1 – August 31 (65% Requirement) | 23.6 to 25.6 | 61.9 days (at least 36.3 days above the requirement) |
| May 1 – September 30 (85% Requirement) | 30.9 to 33.4 | 152.9 days (at least 119.5 days above the requirement) |

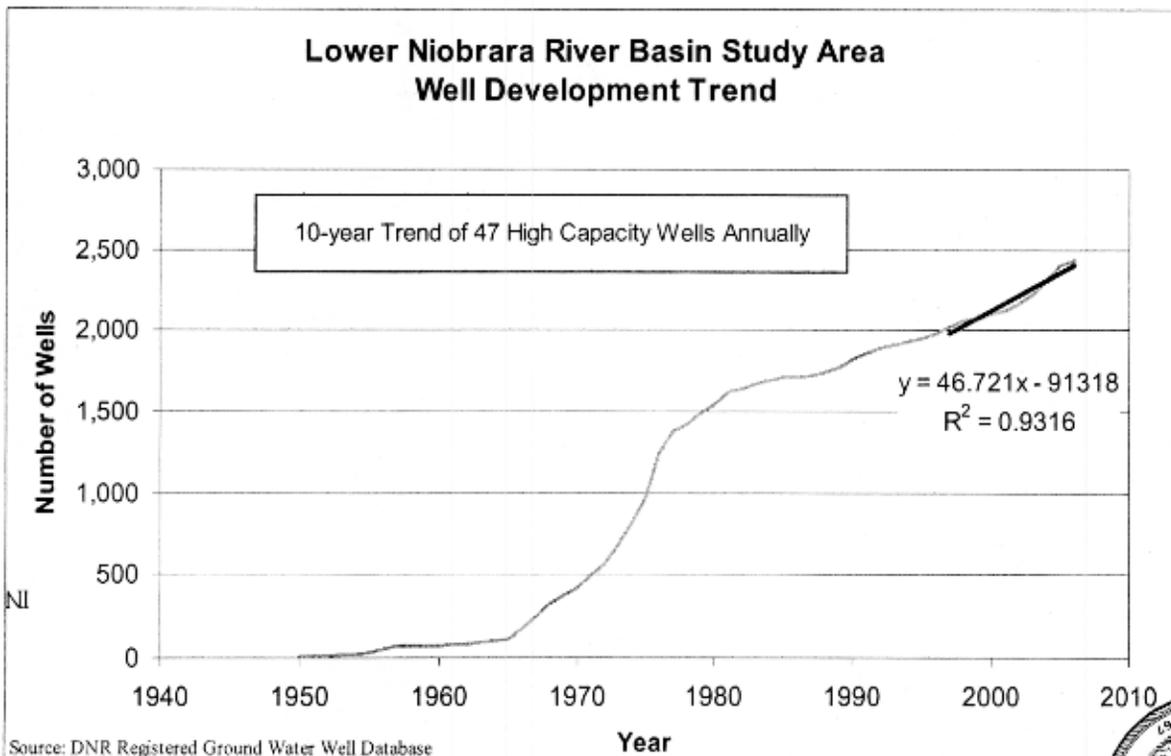
6.8 Evaluation of Predicted Future Development for Niobrara Subbasin Downstream of Spencer Hydropower Facility

As a result of designating the basin above Spencer Hydropower as fully appropriated, estimates of the number of high capacity wells (wells pumping greater than 50 gpm) that would be completed over the

next twenty-five years, if no new legal constraints on the construction of such wells were imposed, were calculated only for the Niobrara River Basin downstream of Spencer Hydropower. The estimated number of high capacity wells was calculated based on extrapolating the present-day rate of increase in well development into the future (Figure 6-10). The present-day rate of development is based on the linear trend of the previous ten years of development. Based on the analysis of the past ten years of development, the rate of increase in high capacity wells is estimated to be 47 wells per year in the basin.

For the depletion analysis, it is assumed that further ground water development will most likely be in the form of high capacity wells for irrigation purposes. Each future well was placed in an area where the soil is classified as irrigable by the U.S. Department of Agriculture and at least 1,400 feet away from existing high capacity wells, which is slightly larger than the radius of an average center pivot.

Figure 6-10 High capacity well development, Lower Niobrara River Basin downstream of Spencer Hydropower



Source: DNR Registered Ground Water Well Database

IN REPLY TO:

Ann Blead
Director

DEPARTMENT OF NATURAL RESOURCES

STATE OF NEBRASKA

Dave Heineman
Governor



The future depletions due to current and future well development that could be expected to affect streamflow in the basin were estimated using SDF methodology. The results estimate the future streamflow at the mouth of the Niobrara to be depleted by 125 cfs in ten years, 166 cfs in fifteen years, 232 cfs in twenty years, and 299 cfs in twenty-five years.

For the same reasons stated in Section 6.7.5 above, no estimates of future water supplies were computed. Even though the effects on future water supplies were not estimated, the current number of days in which surface water was available for diversion far exceeds the number of days necessary to meet the NCCIR in the Niobrara River Basin downstream of Spencer Hydropower. Therefore, it is unlikely that the lag effect will cause this portion of the basin to be fully appropriated.

6.9 Analysis of Long Pine Instream Flow Surface Water Appropriation

The future surface water supply for the instream flow appropriation in the basin was evaluated by applying the erosion rule on a monthly basis. The twenty-year estimate of the future average number of days when the instream flow appropriation would be met at the time of the appropriation application was compared to the twenty-year average estimate of the number days when the instream flow appropriations would be met using the future depleted surface water supply. The results are shown in Table 6-8. Results show no erosion in any month. The long-term surface water supply in the basin is sufficient for the instream flow appropriation in the basin.

Table 6-8 Long Pine Creek instream flow appropriation evaluation

| Month | Estimate of Future Days When Flows Met at Time of Application | Estimate of Future Days Flows Met Using Long-Term Water Supply |
|-----------|---|--|
| October | 31.0 | 31.0 |
| November | 30.0 | 30.0 |
| December | 31.0 | 31.0 |
| January | 31.0 | 31.0 |
| February | 28.0 | 28.0 |
| March | 31.0 | 31.0 |
| April | 30.0 | 30.0 |
| May | 31.0 | 31.0 |
| June | 30.0 | 30.0 |
| July | 31.0 | 31.0 |
| August | 31.0 | 31.0 |
| September | 30.0 | 30.0 |

6.10 Sufficiency to Avoid Noncompliance

There are no compacts on any portions of the Lower Niobrara River Basin in Nebraska.

6.11 Ground Water Recharge Sufficiency

The streamflow is sufficient to sustain over the long term the beneficial uses from wells constructed in aquifers dependent on recharge from the stream, for reasons explained in Appendix H.

6.12 Current Studies being Conducted to Assist with Future Analysis

IN REPLY TO:

A substantial portion of the Niobrara River Basin on the south side of the river is included in the Elkhorn-

Loup ground water model (ELM), which is currently being developed to evaluate the ground water-

Director

Ann Bleed

DEPARTMENT OF NATURAL RESOURCES

STATE OF NEBRASKA

Dave Heineman

surface water relationship and the water supply of the Elkhorn and Loup River Basins. Although not



developed specifically to evaluate the water supply in the Niobrara River Basin, this model may eventually be adapted to analyze water resources in the basin. Efforts will be made to incorporate results from this model into future reports.

6.13 Relevant Data Provided by Interested Parties

The Department received letters from two interested parties, the National Park Service and the U.S. Fish and Wildlife Service, concerning the social, economic, and environmental impacts of additional hydrologically connected surface water and ground water uses on the Fort Niobrara National Wildlife Refuge, the Niobrara Wilderness Area, and the Niobrara National Scenic River. The letters can be found in Appendix A and are included in this report for informational purposes, as required by Section 46-713(1)(c). The two federal agencies urged the Department to consider their potential, unquantified, federally reserved water rights in its evaluation of the Lower Niobrara River Basin; however, current methodology requires an interest to be represented by a quantifiable amount to be considered in the evaluation.

6.14 Conclusions

Based upon the evaluation of available information, the Department has reached a preliminary conclusion that the Lower Niobrara River Basin upstream of Spencer Hydropower is fully appropriated. The designation as fully appropriated is a result of two factors: 1) the current number of days available for diversion is less than the necessary to satisfy all water user including irrigators and the Spencer Hydropower facility and 2) irrigation rights that are junior to the calling senior right have been eroded. The Niobrara River Basin downstream of Spencer Hydropower is not currently included in the fully appropriated designation.

Bibliography of Hydrogeologic References for Lower Niobrara River Basin

Conservation and Survey Division. 2005. *Mapping of Aquifer Properties-Transmissivity and Specific Yield-for Selected River Basins in Central and Eastern Nebraska*. Lincoln.

Nebraska Department of Natural Resources. 2005. *2006 Annual Evaluation of Availability of Hydrologically Connected Water Supplies*. Lincoln.

Wen, F.J., and X.H. Chen. 2005. Streamflow trends and depletion study in Nebraska with a focus on the Republican River Basin. *Water Resources Research* (In Review).

IN REPLY TO:

DEPARTMENT OF NATURAL RESOURCES
Ann Bleed
Director

Dave Heineman
Governor



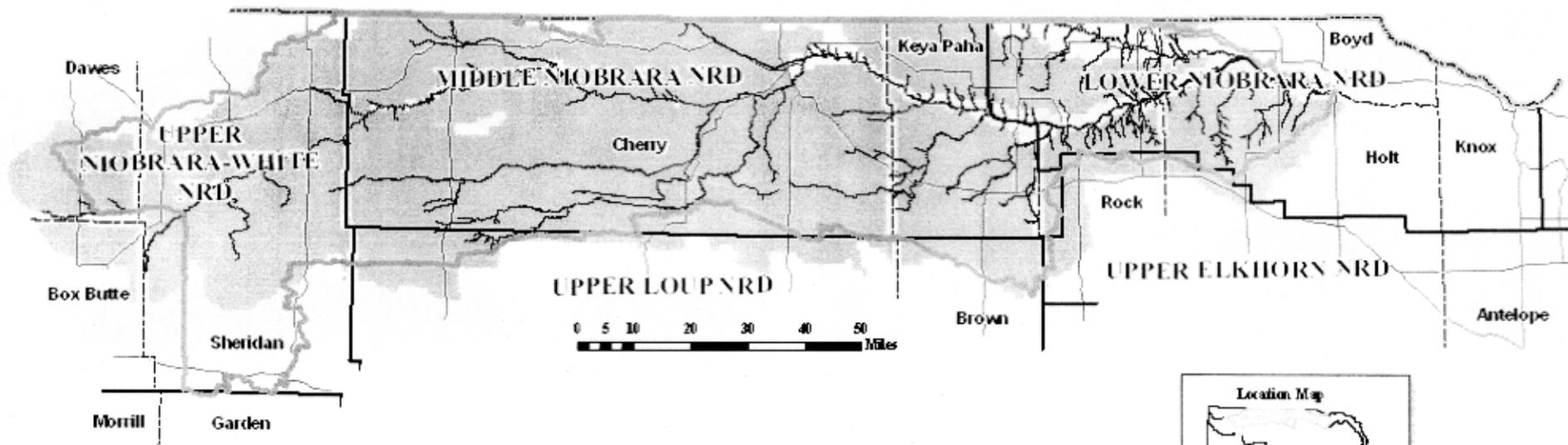


Planning and Assistance Division

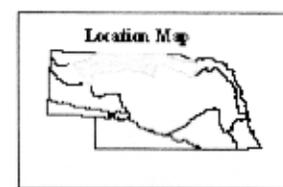
FULLY APPROPRIATED AREA WITHIN THE NIOBRARA RIVER BASIN



This map is intended to supply only general information concerning the matter stated in its title. Boundaries and the location of features portrayed on this map are not to be construed as legal boundaries or actual locations, and may change as additional or better data become available. User assumes all risks associated with interpretations of this map beyond its intended purpose.



| Explanation | |
|-------------|---------------------------------|
| | Niobrara River Basin 10/50 Area |
| | Niobrara Surface Water Basin |
| | State Boundary |
| | NRD Boundary |
| | County Boundaries |
| | Rivers |
| | Major Roads |

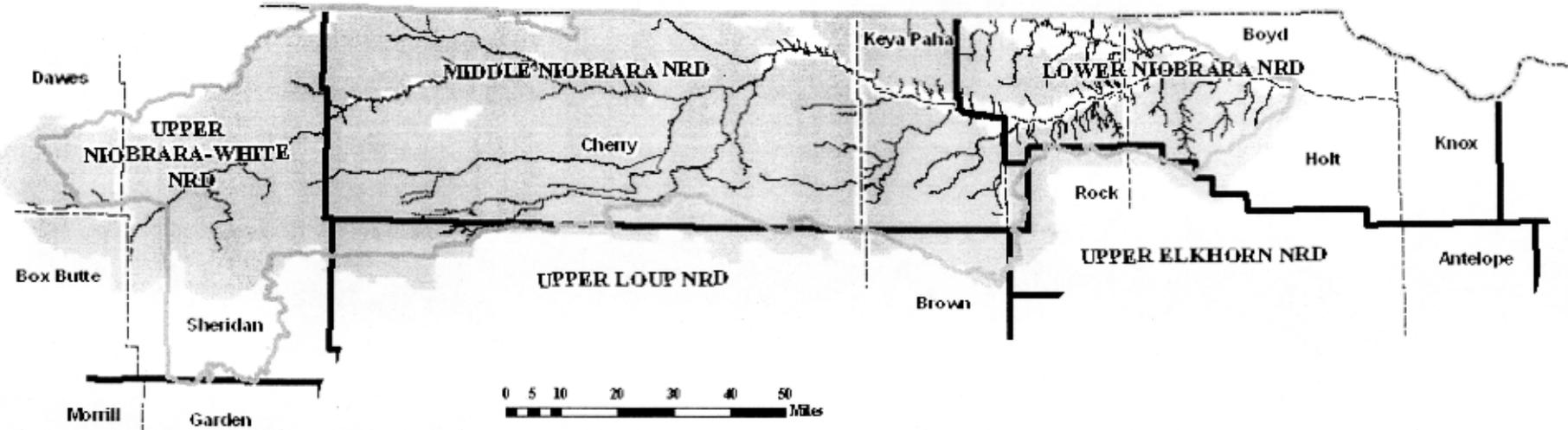


Base map produced by Kevin Schwartzman, April 27, 2006
 Base map approved June 1, 2006
 10/50 map produced by Kevin Schwartzman October 11, 2007



Planning and Assistance Division

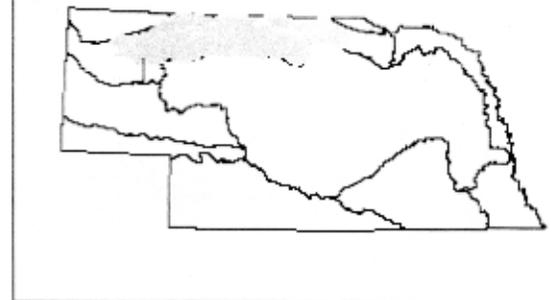
LOWER NIOBRARA RIVER BASIN GROUND WATER 10/50 MANAGEMENT AREA



Explanation

- Niobrara River Basin 10/50 Area
- Niobrara Surface Water Basin
- State Boundary
- NRD Boundaries
- County Boundaries
- Rivers

Location Map



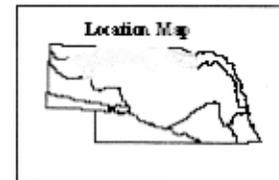
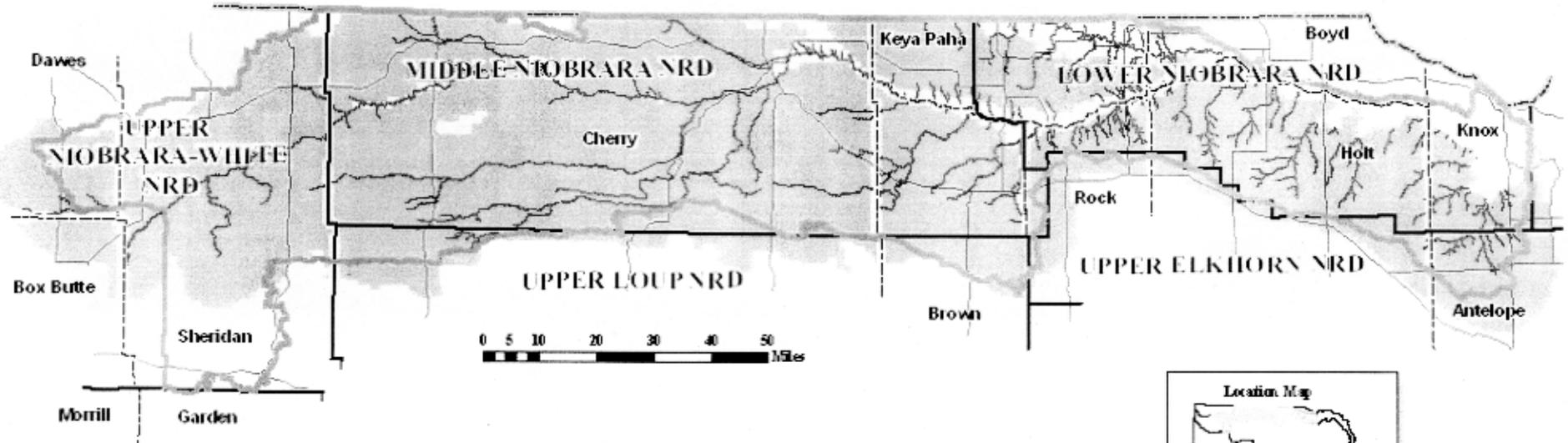


Hearing and Assistance Division

Map of Geographic Area within which Surface Water and Ground Water Are Hydrologically Connected For Purposes of the Determination of Fully Appropriated NIOBRARA RIVER SURFACE WATER BASIN BELOW MIRAGE FLATS DIVERSION



This map is intended to supply only general information concerning the matter stated in its title. Boundaries and the location of features portrayed on this map are not to be construed as legal boundaries or actual locations, and may change as additional or better data become available. User assumes all risks associated with interpretations of this map beyond its intended purpose.



| Explanation | |
|-------------|------------------------------------|
| | Niobrara River Basin 10/50 Area |
| | Niobrara River Surface Water Basin |
| | NRD Boundary |
| | County Boundaries |
| | Major Roads |
| | Rivers |

Base map produced by Kevin Schwartzman, April 27, 2006
Base map approved June 1, 2006
10/50 map produced by Kevin Schwartzman October 11, 2007

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Department of Geosciences
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Physical and chemical hydrogeology, Groundwater-surface water interactions, Hydrology, Hydrogeologic modeling, Aquifer hydraulics and hydrogeophysics

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My research focuses on theoretical and applied hydrogeology over a broad range of scales - from a few centimeters to hundreds of kilometers: groundwater-surface water interactions, characterization of heterogeneity in sedimentary systems, modeling groundwater flow and mass transport, and groundwater remediation.

Examples of my studies of groundwater-surface water interactions in Europe, Central Asia, and the U.S. include effects of groundwater withdrawals on small streams in Belarus; heterogeneity properties of a shallow aquifer in Neckar Valley, Germany; salt accumulation in vadose zone under irrigated lands in Uzbekistan; morphological features of the sand bars, stream depletion under pumping conditions, and alluvium properties along more than 300 km of the Platte River, Nebraska.

List of current funded studies includes:

1. Salinity of lakes in the Sand Hills, Nebraska (NSF). This study investigates fascinating spatial patterns of salinity utilizing broad range of methods including direct-push techniques for aquifer characterization, resistivity and electromagnetic methods of geophysics, numerical modeling of variable density flow, water chemistry and isotopes, Landsat imagery, and GIS.
2. Biocomplexity of the Sand Hills with a multi-disciplinary team of ecologists, hydrologists, and meteorologists (NSF). I explore groundwater recharge under current and future climate change scenarios using vadose zone modeling.
3. Remediation of explosives and solvents at the Superfund site (Mead, Nebraska) using permanganate injection (EPA). This study utilizes our capabilities of single-borehole techniques for aquifer characterization.
4. Plume conceptualization and monitoring combining hydraulic testing and electrical resistivity methods after permanganate injection (DoD)

Together with colleagues in the U.S. and abroad, we utilize and develop a broad array of hydrogeological techniques that include hydraulic and pneumatic tests (slug, borehole flowmeter, dipole flow), modeling, geophysics (ground-penetrating radar, electrical resistivity tomography), and remote sensing (thermal infrared imagery). Our equipment includes data loggers, sensors, ground-penetrating radar, borehole flowmeter, dipole probes, water-sampling instruments, pumps, packers, computers, and modeling software.

I teach groundwater modeling, mass transport in groundwater, and field methods in hydrogeology within Hydrogeology Specialization framework. My students have very successful employment records in academia, federal and state agencies, the environmental and oil industry, in the U.S. and abroad; and I am always glad to hear their news.

Selected Publications

- Zlotnik, V.A., M. Burbach, J. Swinehart, D. Bennett, S. Fritz, D. Loope, 2007, A case study of direct push methods for aquifer characterization in dune-lake environments, *Environmental and Engineering Geoscience*, v. XIII, no 3, 205-216
- Zlotnik, V.A., T. Wang, J. Nieber, J. Šimunek, 2007, Verification of Numerical Solutions of the Richards Equation Using a Traveling Wave Solution, *Advances in Water Resour.*, v. 30, 1973-1980
- Kollet, S.J., and V.A. Zlotnik, 2005, Influence of aquifer heterogeneity and return flow on pumping test data interpretation, *J. Hydrology*, 300, 267-285
- Zlotnik, V.A., 2004, A concept of maximum stream depletion rate for leaky aquifers in alluvial valleys, *Water Resources Research*, v. 40(6), W06507, doi: 10.1029/2003 WR002932.
- Cardenas, M.B.R., J. Wilson, and V.A. Zlotnik, 2004, Impact of heterogeneity, bed forms, and stream curvature on subchannel hyporheic exchange, *Water Resources Research*, v. 40(8), W08307, doi 10.1029/2003/2004WR003008
- Kollet, S. and V.A. Zlotnik, 2003, Stream depletion predictions using data of pumping tests in heterogeneous stream-aquifer system in the Great Plains, USA , *J. Hydrology* , v. 281/1-2, 96-114.

Communication from Bruce McIntosh aka Buffalo Bruce

From: Buffalo Bruce [mailto:buffalobruce@panhandle.net]
Sent: Thursday, January 03, 2008 12:24 PM
To: Kurtz, Tina
Subject: re: Niobrara Watershed

Hi Tina,

Western NE Resources Council is going on record recommending/concurring with NE Department of Natural Resources determination that the portion of the Niobrara River Basin including the surface watershed of the Niobrara River and its tributaries from the Marige Flats Diversion Dam to the Spenser Hydropower Dam and the ground water aquifers considered

to be hydrologically connected to that portion of the Niobrara River and its tributaries is fully appropriated.

Are you aware if the National Forest Service holds Natural/Wildlife flow right easements within the Pine Ridge streams as the US F & Wildlife Service does on the Niobrara? That was quite enlightening to me to hear of, at the Valentine meeting.

Insert is a photo that I took of Jack Bond sticking these large irrigation pipes into the Niobrara. I GPS recorded the site; checking on legality with the NRD; had 'quantity' brought up at the NR Council meetings etc. Bond also owns 4 miles of Dismal River front.

Thanks much.....Bruce
(308) 432-3458
(402) 416-3239 cell



Testimony provided to: Nebraska Department of Natural Resources
by: Independent Cattlemen of Nebraska
Concerning Gordon, Nebraska Hearing held 12/27/2007
Preliminary Determination on Full Appropriation of the Niobrara River

State of Nebraska
 Department of
 Natural Resources
 Filed in the Department of
 Natural Resources at 3:20
 O'clock P.M. this 3
 day of Jan, 2008
Tyann Koshne

Independent Cattlemen of Nebraska (ICON) recently learned of efforts on the part of the Nebraska Department of Natural Resources (DNR) to declare the Niobrara River basin as a fully appropriated river system. This action would curtail any further development of groundwater irrigation in north-central Nebraska. ICON's board of directors held an emergency conference call on December 30th to discuss taking action on this declaration. The board voted unanimously to submit testimony in opposition to the determination of full appropriation.

Independent Cattlemen of Nebraska has 400 members. Most of our members are stewards of the land, and many have been on the same land for generations. These individuals have seen Nebraska in years of abundance and they've seen it in years of drought.

The action to declare the Niobrara basin as a fully appropriated river basin surprised our members, and we feel that the decision is unwarranted. The vast north-central portion of Nebraska which drains through the Niobrara river system is made up almost entirely of cattle ranches. Groundwater irrigation in Cherry and Sheridan Counties is extremely rare. The nature of the land in this area precludes irrigation on an industrial scale because the soils are too delicate to sustain the plow. Landowners in the area know their soils and they place a high value on conserving resources under their control.

The porous soils in the sandhills have permitted almost all the rain which falls here to remain in the area. Over the course of many millennia, this groundwater has built up and filled the aquifer to capacity. This giant sponge has accumulated hundreds of feet of saturation throughout most of the area, with depths in excess of 1000 feet in the Hyannis area. The aquifer does come to the surface and drains through the streams and rivers which bisect the Sandhills—including the Niobrara.

When a cup of water is placed in a sink and filled above capacity, the excess water will spill over the lip of the cup and drain away. But when the cup is only half full, that cup must be replenished before water can again spill over and drain away.

Western Nebraska and Wyoming (where the Niobrara begins) experienced their 8th year of drought in 2007. West of Highway 61, rains in 2007 were sporadic and scarce, and the situation grew grimmer as one traveled farther west to the Wyoming border. Those arguing for fully appropriated status on the Niobrara cite the diminished stream flow as a reason to institute a moratorium on new irrigation in the basin. But they fail to recognize that unyielding drought is going to deplete a river system much more quickly than limited groundwater irrigation. In the Niobrara system it is impossible for our board to believe that irrigation has any effect at all on river flows. Like that cup mentioned above, the aquifer must be replenished before it can again revert to normal flows, and taking a

Page 2 – Independent Cattlemen of Nebraska Testimony 12/27/2007

one-year shortage of water and extrapolating from that anomaly a determination that the area is fully appropriated is irresponsible and misguided.

Surface water irrigators, power companies, recreational users, environmentalists, and other governmental entities have pressured DNR to take this action without good data to make that decision. Most of these entities have only a superficial knowledge of the sandhills, and little understanding of what drought does to a landscape. DNR should not yield to their scare tactics but should instead institute further studies.

There is a general lack of good sound data available to connect groundwater irrigation and lower water levels in the Niobrara and other rivers. Further, there are too few test wells in the Sandhills to make a good scientific determination that groundwater irrigation in the area has any affect at all on the Niobrara system. Even your own employees have indicated that there isn't enough data available to make a completely accurate determination of the groundwater area which affects the Niobrara. Over 400,000 acres of the Upper Loup NRD have been placed in the Niobrara basin by DNR employees based on outdated maps and flimsy data.

The COHYST study, which was performed on the Platte River system, shows a very thin correlation between groundwater irrigation and falling stream flows. No study of the caliber of COHYST has ever been done on the Niobrara river system.

Before taking such a drastic action as imposing a moratorium on new irrigation wells in the Niobrara river system, an exhaustive and unbiased study should be done of the system by the Nebraska Department of Natural Resources, the affected Natural Resource Districts, County Governments, and interested landowners. As a part of that study, DNR should examine existing surface water claims to the Niobrara to assess their validity and their legality. A COHYST-type study could answer many questions.

Imposing a moratorium on further irrigation will suppress land values and curtail economic development of the region. Nebraska has worked diligently to stabilize the economy in western Nebraska with little success. Nebraska is an agricultural state and is blessed with a remarkable resource in the aquifer which underlies the region. We must protect that asset, but we cannot impose restrictions on such a huge geographical area without thorough investigation and comprehensive information. We urge you to reject the full appropriation of the Niobrara river system at this time. Thank you.

Chris Abbott, President, Gordon, NE
David Wright, Vice-President, Neligh, NE
Katie Meyer, Secretary, Randolph, NE
Al Davis, Treasurer, Hyannis, NE
Jim Hanna, Brownlee, NE
John O'Dea, McCook, NE
Louis Day, Valentine, NE
Tom Cooper, Ericson, NE
Rod Gray, Harrison, NE
Rick Vander Wey, Valentine, NE