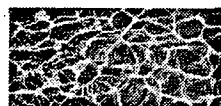




## Surface Water

- Water Dedicated to the Public
- Appropriation System - 1895
- Priority
- Preference
- Property Right



## Appropriations

(Permits)

- Type
  - Natural Flow
  - Storage
  - Storage Use
  - Natural Lake
  - Wells Within 50 Feet of Stream

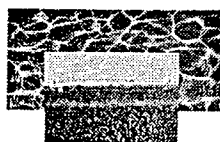


## Appropriations -

Approval or Denial

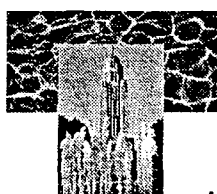


- Beneficial Use
- Unappropriated Water
- Public Interest
- Public Welfare



## Beneficial Use

- Perfection of Water Right
- Adjudication



## Water Administration

- Regulation
- Closing



## Modifying Appropriations

- Relocations
- Transfers
- Incidental Underground Storage
- Changes in Returns and Delivery Systems



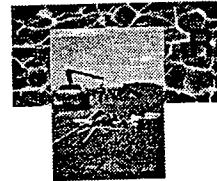
## Miscellaneous

- Irrigation - Maximum Allowed from Natural Flow
  - Rate - 1 cfs per 70 acres
  - Volume - 3 acre-feet per Acre Annually
- Maximum Allowed from Storage
  - Beneficial Use  
(Map Transfers Exception)



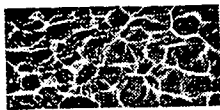
## Ground Water

- Belongs to Public
- Landowners Have Right to Make Reasonable and Beneficial Use on Overlying Lands Subject to Correlative Rights of Others and Public Management Policies.
- Preferences



## Registrations - 1957

- All Water Wells Drilled After September 9, 1993
- Responsibility is Land Owner



## Permits

- Construction - NRD Management Areas
- Transfers
  - Across State Lines
  - Industrial
  - Geothermal
  - Public Water Supply
- Spacing



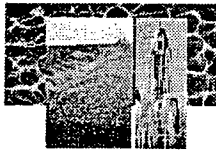
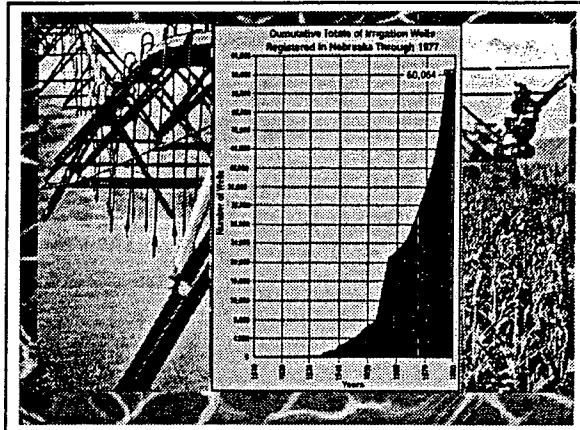
## Ag and Domestic Transfers

- Complaints to Local NRDs
- Refer to DWR



## Well Spacing

- 600 Feet Between Irrigation Wells
- 1,000 Feet Between Irrigation and Industrial, Irrigation and Public Water Supply, Industrial and Industrial, Industrial and Public Water Supply, and Public Water Supply and Public Water Supply



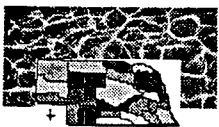
## History of Groundwater Management and Protection Act

- 1975 LB 577 Allowed Control Areas
- 1982 LB 375 Allowed GW Mgt. Areas After Approval of GW Mgt. Plan
- 1986 LB 894 Special Protection Area Legislation
- 1991 LB 51 Required NRD's to Address GW Quality in Mgt. Plans
- 1996 LB 108 Allowed or can Require Management of SW-GW Relationships - Consolidated Mgt. Authorities



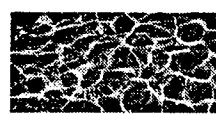
## Act Gives NRD's and Others Powers Related to:

- Groundwater Quantity
- Groundwater Quality
- Integrated Management of Hydrologically Connected Groundwater and Surface Water
  - Conflicts Between GW and SW Use
  - Disputes Over Interstate Compacts and Decrees
  - Carrying Out State Contracts or Agreements



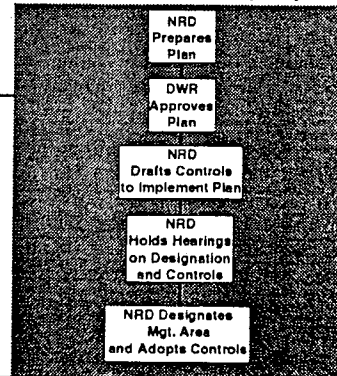
## Districts Required to Prepare Groundwater Management Plan that Includes:

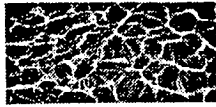
- Information About GW Supply
- Discussion of Quantity and/or Quality Problems Experienced/Expected
- Management Objectives with a Proposed GW Reservoir Life Goal
- GW Quality Goals and Solutions
- Proposed Controls



## Designation the Easy Way

### NRD Water Management Area Designation the Easy Way





## Options for Management Area Designation

1. NRD on its Own for:
  - A. Ground Water Quantity
  - B. Ground Water Quality
  - C. Integrated Management
2. NRD With DWR Participation and Assistance for:
  - A. Integrated Management
3. DEQ on its Own for:
  - A. Ground Water Quality (*Old SPA Process*)
4. DWR on its Own for:
  - A. Integrated Management (*Limited to Disputes Over Interstate Compacts and Decrees or Other Formal State Contracts or Agreements*)



## NRD Controls To Address Management Plan Objectives Include

- Allocations of Withdrawals
- Rotation
- Well Spacing
- Metering/Monitoring
- Use of Best Management Practices
- Chemicals/Fertilizer Analysis of Water or Deep Soil
- Mandatory Education
- Moratorium on New Wells
- Other Reasonable Rules and Regulations
- Reduction of Use

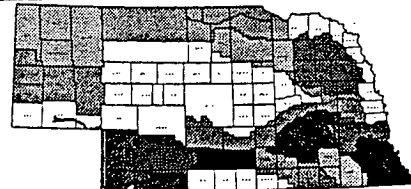


- Public Hearing Requirements
- Some New Wells in Management Area Must Have a Permit From the NRD Before Drilling

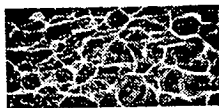


## GW Management Areas

Ground Water Management Areas



1. General Purpose (G.P.)	2. Local Purpose (L.P.)	3. Special Purpose (S.P.)
4. Local Purpose (L.P.)	5. Local Purpose (L.P.)	6. Local Purpose (L.P.)
7. Local Purpose (L.P.)	8. Local Purpose (L.P.)	9. Local Purpose (L.P.)
10. Local Purpose (L.P.)	11. Local Purpose (L.P.)	12. Local Purpose (L.P.)
13. Local Purpose (L.P.)	14. Local Purpose (L.P.)	15. Local Purpose (L.P.)
16. Local Purpose (L.P.)	17. Local Purpose (L.P.)	18. Local Purpose (L.P.)
19. Local Purpose (L.P.)	20. Local Purpose (L.P.)	21. Local Purpose (L.P.)
22. Local Purpose (L.P.)	23. Local Purpose (L.P.)	24. Local Purpose (L.P.)
25. Local Purpose (L.P.)	26. Local Purpose (L.P.)	27. Local Purpose (L.P.)
28. Local Purpose (L.P.)	29. Local Purpose (L.P.)	30. Local Purpose (L.P.)
31. Local Purpose (L.P.)	32. Local Purpose (L.P.)	33. Local Purpose (L.P.)
34. Local Purpose (L.P.)	35. Local Purpose (L.P.)	36. Local Purpose (L.P.)
37. Local Purpose (L.P.)	38. Local Purpose (L.P.)	39. Local Purpose (L.P.)
40. Local Purpose (L.P.)	41. Local Purpose (L.P.)	42. Local Purpose (L.P.)
43. Local Purpose (L.P.)	44. Local Purpose (L.P.)	45. Local Purpose (L.P.)
46. Local Purpose (L.P.)	47. Local Purpose (L.P.)	48. Local Purpose (L.P.)
49. Local Purpose (L.P.)	50. Local Purpose (L.P.)	51. Local Purpose (L.P.)
52. Local Purpose (L.P.)	53. Local Purpose (L.P.)	54. Local Purpose (L.P.)
55. Local Purpose (L.P.)	56. Local Purpose (L.P.)	57. Local Purpose (L.P.)
58. Local Purpose (L.P.)	59. Local Purpose (L.P.)	60. Local Purpose (L.P.)
61. Local Purpose (L.P.)	62. Local Purpose (L.P.)	63. Local Purpose (L.P.)
64. Local Purpose (L.P.)	65. Local Purpose (L.P.)	66. Local Purpose (L.P.)
67. Local Purpose (L.P.)	68. Local Purpose (L.P.)	69. Local Purpose (L.P.)
70. Local Purpose (L.P.)	71. Local Purpose (L.P.)	72. Local Purpose (L.P.)
73. Local Purpose (L.P.)	74. Local Purpose (L.P.)	75. Local Purpose (L.P.)
76. Local Purpose (L.P.)	77. Local Purpose (L.P.)	78. Local Purpose (L.P.)
79. Local Purpose (L.P.)	80. Local Purpose (L.P.)	81. Local Purpose (L.P.)
82. Local Purpose (L.P.)	83. Local Purpose (L.P.)	84. Local Purpose (L.P.)
85. Local Purpose (L.P.)	86. Local Purpose (L.P.)	87. Local Purpose (L.P.)
88. Local Purpose (L.P.)	89. Local Purpose (L.P.)	90. Local Purpose (L.P.)
91. Local Purpose (L.P.)	92. Local Purpose (L.P.)	93. Local Purpose (L.P.)
94. Local Purpose (L.P.)	95. Local Purpose (L.P.)	96. Local Purpose (L.P.)
97. Local Purpose (L.P.)	98. Local Purpose (L.P.)	99. Local Purpose (L.P.)
100. Local Purpose (L.P.)	101. Local Purpose (L.P.)	102. Local Purpose (L.P.)



## Other Important Items

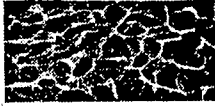
1. An NRD May Treat GW Users Differently on the Basis of Date of Drilling
  - Only Allowed for Integrated Mgt.
  - Effective Dates Limited
2. NRD May Treat GW Users Differently Based on Different Hydrologic Relationships



## Other Important Items (Continued)

3. Replacement Wells Must be Treated the Same as the Wells they Replace.
4. The SW Appropriations that can be Protected Through LB 108 do not include Instream Appropriations.
5. Interrelated Water Management Fund





**Federal Laws  
and  
Management**

- Bureau of Reclamation
- U.S. Army Corps of Engineers
- USDA - Natural Resources  
Conservation Service
- Federal Endangered Species Act