

Table 684-3

Criteria for Use and  
Treatment of Land under  
Sprinkler Irrigation Systems

Intake:Design:Family:Group :	Surface Soil Texture Subsoil Permeability	Representative Soil Series	Typical Slope Limits	Suitable Crops	Problems and Limitations
0.1 1	Clays, silty clays, clay loam, silty clay loams, (with slowly & very slowly permeable soils).	Albaton cl Luton sic Wabash sic Adair cl Crete sicl Pawnee cl Wymore sicl Boyd sic	0-11	All crops commonly grown in the area	Very low intake rate. Excessive runoff, Highly erosive on slopes. Excessive evaporation losses. Transpiration and evaporation may exceed actual intake rate.
0.3 2 & 3	Silt loam, loam silty clay loam, loams (with slow or moderately slow permeability).	Butler sicl Colo sicl Dawes l Wood River sil Belfore sicl Burchard cl Hastings sicl Moody sicl Sharpsburg sicl	0-11	All crops commonly grown in area.	Water erosion, wheel track ruts, low intake rate.
0.5 4	Silt loam, loam, (with moderately slow or moderate permeability).	Bazile sil Hall sil Holder sil Holdrege sil Judson sil Keith l Richfield sil	0-11	All crops commonly grown in area.	Low intake rate, wind erosion, water erosion, and runoff.

(Nebraska Irrigation Guide, April 1983)

## NEBRASKA AMENDMENT

Table 684-3 (Continued)

Intake:Design:Family:Group :	Surface Soil Texture : Subsoil Permeability :	Representative Soil Series :	Typical Slope Limits :	Suitable Crops :	Problems and Limitations :
3.0 11 & 12	Loamy fine sand, loamy sand, fine sand, fine sandy loam, loamy very fine sand, (with rapid permeability).	Bankard lfs Dunday lfs Inavale lfs Thurman lfs Valent fs Valentine fs	0-11	Corn and sorghum for grain, wheat, barley, oats, pasture or hay.	Wind erosion, low available water capacity, possible inadequate crop residues Very high intake rate.
.5-1.0 13	Loam, silt loam, very fine sandy loam, sandy loam, loamy sand, loamy fine sand. (Soils with shallow, moderately deep, or deep profiles).	Meadin Pivot Platte Simeon	0-6	Corn and sorghum for grain, small grain, close sown crops and pasture and hay.	Wind erosion, low available water holding capacity. possible inadequate crop residues. (Variable intake rate depending on soils).

REQUIRED CONSERVATION TREATMENT NECESSARY FOR BOTH WIND AND WATER EROSION MUST BE APPLIED AS A PREREQUISITE TO CONSIDERATION OF SPRINKLER IRRIGATION CRITERIA.

POORLY DRAINED SOILS AND FREQUENTLY FLOODED AREAS ARE NOT SUITABLE FOR SPRINKLER IRRIGATION.

CLASS VI AND VII LANDS ARE NOT SUITABLE UNLESS THE LAND CAPABILITY CLASS CAN BE IMPROVED TO CLASS IV OR BETTER FOR IRRIGATION. ECONOMICS ARE NOT CONSIDERED.

Table 684-3 (Continued)

Intake:Design:Family:Group :	Surface Soil Texture :	Subsoil Permeability :	Representative Soil Series :	Typical Slope Limits :	Suitable Crops :	Problems and Limitations :
3.0 & 11 & 12	Loamy fine sand, loamy sand, fine sand, fine sandy loam, loamy very fine sand, (with rapid permeability).		Bankard lfs Dunday lfs Inavale lfs Thurman lfs Valent fs Valentine fs	0-11	Corn and sorghum for grain, wheat, barley, oats, pasture or hay.	Wind erosion, low available water capacity, possible inadequate crop residues Very high intake rate.
.5-1.0 & 0.5 & higher	13 Loam, silt loam, very fine sandy loam, sandy loam, loamy sand, loamy fine sand. (Soils with shallow, moderately deep, or deep profiles).		Meadin Pivot Platte Simeon	0-6	Corn and sorghum for grain, small grain, close sown crops and pasture and hay.	Wind erosion, low available water holding capacity. possible inadequate crop residues. (Variable intake rate depending on soils).

REQUIRED CONSERVATION TREATMENT NECESSARY FOR BOTH WIND AND WATER EROSION MUST BE APPLIED AS A PREREQUISITE TO CONSIDERATION OF SPRINKLER IRRIGATION CRITERIA.

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