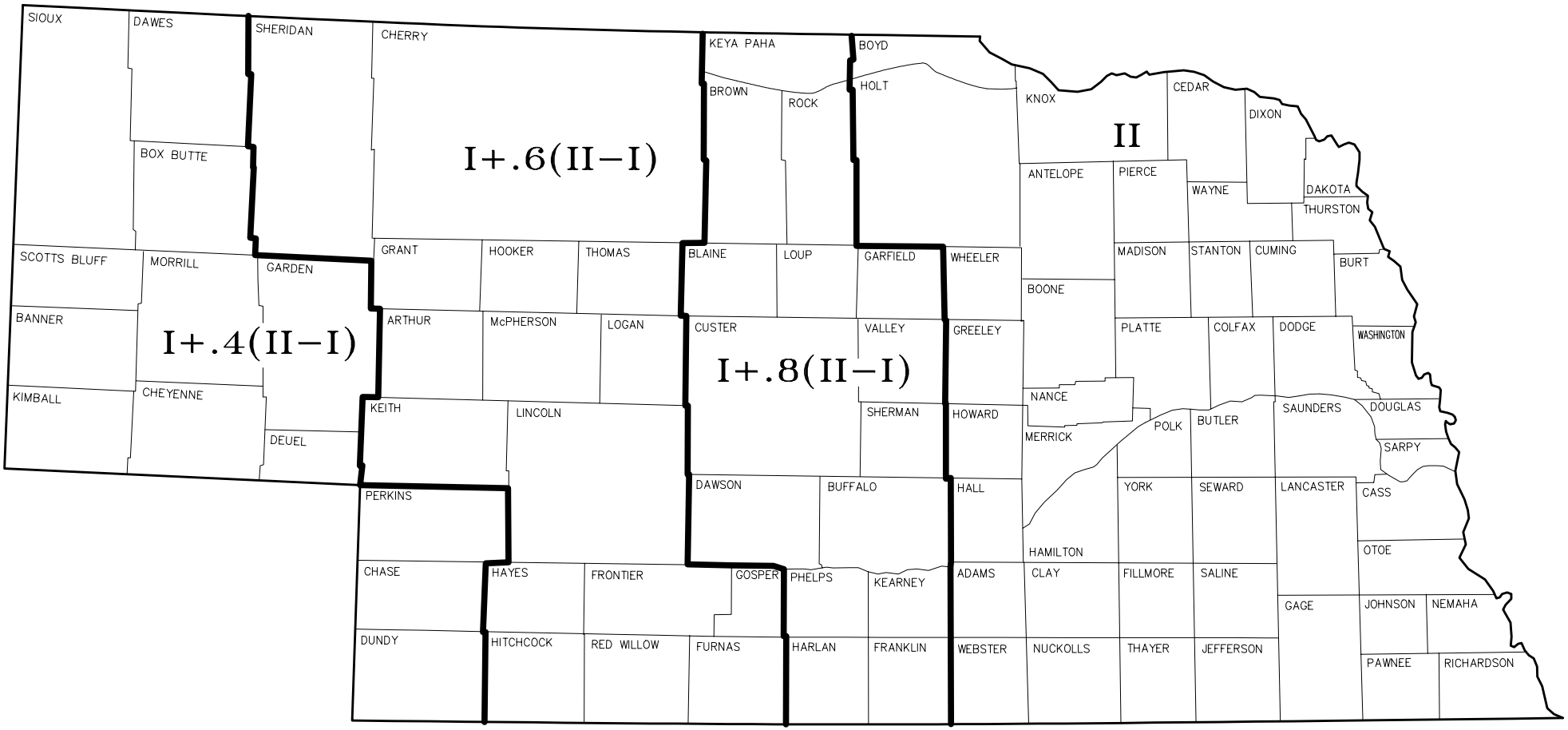


ANTECEDENT RUNOFF CONDITIONS IN NEBRASKA

(Engineering Field Manual Notice, NE-37, September 1987)

NE 2-84a

USDA—Natural Resources Conservation Service

Soil Cover Complex Numbers
For Use On All Earth Dams In Nebraska And All Other
Conservation Practices In The Area Shown On Page NB 2-30 Which Is Marked

(Antecedent ~~Moisture~~ Runoff-Condition II)

Land Use	Cover: Treatment or practice	Cover: Hydrologic condition	Hydrologic soil group A	B	C	D
Fallow	Straight row	--	77	86	91	94
Row crops	"	Poor	72	81	88	91
	"	Good	67	78	85	89
	Contoured	Poor	70	79	84	88
	"	Good	65	75	82	86
	Contoured & terraced	Poor	66	74	80	82
	"	Good	62	71	78	81
Small grain	Straight row	Poor	65	76	84	88
	"	Good	63	75	83	87
	Contoured	Poor	63	74	82	85
	"	Good	61	73	81	84
	Contoured & terraced	Poor	61	72	79	82
	"	Good	59	70	78	81
Close-seeded legumes* or rotation meadow	Straight row	Poor	66	77	85	89
	"	Good	58	72	81	85
	Contoured	Poor	64	75	83	85
	"	Good	55	69	78	83
	Contoured & terraced	Poor	63	73	80	83
	"	Good	51	67	76	80
Pasture or range		Poor	68	79	86	89
		Fair	49	69	79	84
		Good	39	61	74	80
	Contoured	Poor	47	67	81	88
	"	Fair	25	59	75	83
	"	Good	6	35	70	79
Meadow		Good	30	58	71	78
Woods		Poor	45	66	77	83
		Fair	36	60	73	79
		Good	25	55	70	77
Farmsteads		----	59	74	82	86
Roads (dirt)+		----	72	82	87	89
(hard surface)+		----	74	84	90	92

*Close-drilled or broadcast +Including right-of-way

Soil Cover Complex Numbers
For Use On All Earth Dams In Nebraska And All Other
Conservation Practices In The Area Shown On Page NB 2-30
Which Is Marked

(Antecedent ~~Moisture~~ Runoff Condition II)

Land Use	Cover: Treatment or practice	Cover: Hydrologic condition	Hydrologic soil group A	B	C	D
Fallow	Straight row					
	Poor residue cover	----	76	85	90	93
	Good residue cover	----	74	83	88	90
Row crops	Straight row					
	Poor residue cover	Poor	71	80	87	90
	Poor residue cover	Good	66	77	84	88
	Good residue cover	Poor	69	78	84	87
	Good residue cover	Good	64	75	82	85
Small grain	Straight row					
	Poor residue cover	Poor	64	75	83	87
	Poor residue cover	Good	62	74	82	86
	Good residue cover	Poor	62	73	81	85
	Good residue cover	Good	60	72	80	84
Row crops or small grain	Contoured or contoured & terraced	Poor or good	For poor residue cover, use values in table on pg. NB 2-30. For good residue cover, decrease curve numbers in same table by 1.			

Poor residue cover - Less than 20% of the surface is covered with residue. (750 lb/ac row crops and 300 lb/ac small grain)

Good residue cover - More than 20% of the surface is covered with residue with normal range being 20% and 40% surface covered with residue.

NOTE: Percent cover should be estimated at the time of year storms occur.

Soil Cover Complex Numbers
For All Conservation Practices in Nebraska Except Embankment Dams
In The Area Shown On Page NB 2-30 Which Is Marked

(Antecedent ~~Moisture~~ Runoff Condition I + .8 (II-I)

Land Use	Cover: Treatment or practice	Cover: Hydrologic condition	Hydrologic soil group A	B	C	D
Fallow	Straight row	----	74	83	89	92
Row crops	"	Poor	68	78	85	89
	"	Good	61	74	82	86
	Contoured	Poor	66	76	81	85
	"	Good	61	71	79	83
	Contoured & terraced	Poor	61	70	77	79
	"	Good	58	67	74	78
Small grain	Straight row	Poor	61	72	81	85
	"	Good	59	71	80	84
	Contoured	Poor	59	68	79	82
	"	Good	57	69	78	81
	Contoured & terraced	Poor	57	68	76	79
	"	Good	55	66	74	78
Close-seeded legumes* or rotation meadow	Straight row	Poor	61	74	82	86
	"	Good	54	68	78	82
	Contoured	Poor	60	71	80	82
	"	Good	51	65	74	80
	Contoured & terraced	Poor	59	69	77	80
	"	Good	47	61	72	77
Pasture or range		Poor	64	76	83	86
		Fair	45	65	76	81
		Good	35	57	68	77
	Contoured	Poor	43	61	78	85
	"	Fair	23	55	71	80
	"	Good	6	32	66	76
Meadow		Good	27	54	67	74
Woods		Poor	41	61	74	80
		Fair	33	56	69	76
		Good	23	51	66	73
Farmsteads		----	55	70	79	83
Roads (dirt)+		----	68	79	84	86
(hard surface)+		----	70	81	88	90

*Close-drilled or broadcast +Including right-of-way

(Engineering Field Manual Notice NE 37, 9/87)

Soil Cover Complex Numbers
For All Conservation Practices in Nebraska Except Embankment Dams
In The Area Shown On Page NB 2-30 Which Is Marked
Runoff
(Antecedent ~~Moisture~~ Condition I + .8 (II-I)

Land Use	Cover: Treatment or practice	Cover: Hydrologic condition	Hydrologic soil group A	B	C	D
Fallow	Straight row					
	Poor residue cover	----	72	82	88	91
	Good residue cover	----	70	80	86	88
Row crops	Straight row					
	Poor residue cover	Poor	67	77	84	88
	Poor residue cover	Good	61	74	81	85
	Good residue cover	Poor	65	74	81	85
	Good residue cover	Good	60	71	79	82
Small grain	Straight row					
	Poor residue cover	Poor	60	71	80	84
	Poor residue cover	Good	58	70	79	83
	Good residue cover	Poor	58	69	78	82
	Good residue cover	Good	56	68	77	81
Row crops or small grain	Contoured or contoured & terraced	Poor or good	For poor residue cover, use values in table on pg. NB 2-30. For good residue cover decrease curve numbers in same table by 1.			

Poor residue cover - Less than 20% of the surface is covered with residue. (750 lb/ac row crops and 300 lb/ac small grain)

Good residue cover - More than 20% of the surface is covered with residue with normal range being 20% and 40% surface covered with residue.

NOTE: Percent cover should be estimated at the time of year storms occur.

Soil Cover Complex Numbers
For All Conservation Practices in Nebraska Except Embankment Dams
In The Area Shown On Page NB 2-30 Which Is Marked

(Antecedent ~~Moisture~~ Runoff Condition I + .6 (II-I)

Land Use	Cover Treatment or practice	Hydrologic condition	Hydrologic soil group A	B	C	D
Fallow	Straight row	----	70	81	87	91
Row crops	"	Poor	65	74	83	87
	"	Good	59	71	80	84
	Contoured	Poor	63	72	77	81
	"	Good	57	68	76	81
	Contoured & terraced	Poor	58	67	73	76
	"	Good	54	64	71	74
Small grain	Straight row	Poor	57	69	78	83
	"	Good	55	68	77	82
	Contoured	Poor	55	67	76	80
	"	Good	53	65	74	78
	Contoured & terraced	Poor	53	65	72	76
	"	Good	51	63	71	74
Close-seeded legumes* or rotation meadow	Straight row	Poor	58	70	80	84
	"	Good	50	65	74	80
	Contoured	Poor	56	68	77	80
	"	Good	63	62	71	77
	Contoured & terraced	Poor	55	66	73	77
	"	Good	43	60	69	73
Pasture or range		Poor	60	72	81	84
		Fair	41	62	72	78
		Good	32	53	67	73
	Contoured	Poor	39	59	74	83
	"	Fair	20	51	68	77
	"	Good	6	28	63	72
Meadow		Good	24	50	64	71
Woods		Poor	37	58	70	77
		Fair	30	52	66	72
		Good	20	47	63	70
Farmsteads		----	51	66	78	81
Roads (dirt)+		----	65	76	82	84
(hard surface)+		----	67	78	86	88

*Close-drilled or broadcast +Including right-of-way

(Engineering Field Manual Notice NE-37, 9/87)

Soil Cover Complex Numbers
For All Conservation Practices in Nebraska Except Embankment Dams
In The Area Shown On Page NB 2-30 Which Is Marked

(Antecedent ~~Moisture~~ Runoff Condition I + .6 (II-I)

Land Use	Cover: Treatment or practice	Cover: Hydrologic condition	Hydrologic soil group A	B	C	D
Fallow	Straight row					
	Poor residue cover	----	69	80	86	90
	Good residue cover	----	67	77	83	86
Row crops	Straight row					
	Poor residue cover	Poor	64	73	82	86
	Poor residue cover	Good	58	70	78	83
	Good residue cover	Poor	62	71	78	82
	Good residue cover	Good	56	68	76	80
Small grain	Straight row					
	Poor residue cover	Poor	56	68	77	82
	Poor residue cover	Good	54	67	76	81
	Good residue cover	Poor	54	66	74	80
	Good residue cover	Good	52	65	73	78
Row crops or small grain	Contoured or contoured & terraced	Poor or good	For poor residue cover, use values in table on pg. NB 2-30. For good residue cover, decrease curve numbers in same table by 1.			

Poor residue cover - Less than 20% of the surface is covered with residue. (750 lb/ac row crops and 300 lb/ac small grain)

Good residue cover - More than 20% of the surface is covered with residue with normal range being 20% and 40% surface covered with residue.

NOTE: Percent cover should be estimated at the time of year storms occur.

Soil Cover Complex Numbers
For All Conservation Practices in Nebraska Except Embankment Dams
In The Area Shown On Page NB 2-30 Which Is Marked

(Antecedent ~~Moisture~~ Runoff Condition I + .4 (II-I)

Land Use	Cover: Treatment or practice	Cover: Hydrologic condition	Hydrologic soil group A	B	C	D
Bare Ground ~~Fallow~~	Straight row	----	67	78	84	89
Row crops	"	Poor	61	71	80	84
	"	Good	56	68	76	81
	Contoured	Poor	59	69	75	80
	"	Good	54	65	73	78
	Contoured & terraced	Poor	55	64	70	73
	"	Good	51	60	68	71
Small grain	Straight row	Poor	54	66	75	80
	"	Good	52	65	74	79
	Contoured	Poor	52	64	73	76
	"	Good	50	62	71	75
	Contoured & terraced	Poor	50	61	69	73
	"	Good	48	59	68	71
Close-seeded legumes* or rotation meadow	Straight row	Poor	55	67	76	81
	"	Good	47	61	71	76
	Contoured	Poor	53	65	74	77
	"	Good	44	58	62	74
	Contoured & terraced	Poor	52	62	70	74
	"	Good	40	56	66	70
Pasture or range		Poor	57	69	78	81
		Fair	38	58	69	75
		Good	28	50	64	70
	Contoured	Poor	36	56	71	80
	"	Fair	17	48	65	74
	"	Good	6	25	60	69
Meadow		Good	21	47	60	68
Woods		Poor	35	55	67	74
		Fair	26	49	62	69
		Good	17	44	59	67
Farmsteads		----	48	64	73	78
Roads (dirt)+		----	61	73	79	81
(hard surface)+		----	64	75	83	86

*Close-drilled or broadcast +Including right-of-way

(Engineering Field Manual Notice NE-37, 9/87)

Soil Cover Complex Numbers
For All Conservation Practices in Nebraska Except Embankment Dams
In The Area Shown On Page NB 2-30 Which Is Marked
Runoff
(Antecedent ~~Moisture~~ Condition I + .4 (II-I)

Land Use	Cover: Treatment or practice	Cover: Hydrologic condition	Hydrologic soil group A	B	C	D
Fallow	Straight row					
	Poor residue cover	----	66	76	83	87
	Good residue cover	----	64	74	80	83
Row crops	Straight row					
	Poor residue cover	Poor	60	70	79	83
	Poor residue cover	Good	55	67	75	80
	Good residue cover	Poor	58	68	75	79
	Good residue cover	Good	53	65	73	76
Small grain	Straight row					
	Poor residue cover	Poor	53	65	74	79
	Poor residue cover	Good	51	64	73	78
	Good residue cover	Poor	51	62	71	76
	Good residue cover	Good	49	61	70	75
Row crops or small grain	Contoured or contoured & terraced	Poor or good	For poor residue cover, use values in table on pg. NB 2-30. For good residue cover, decrease curve numbers in same table by 1.			

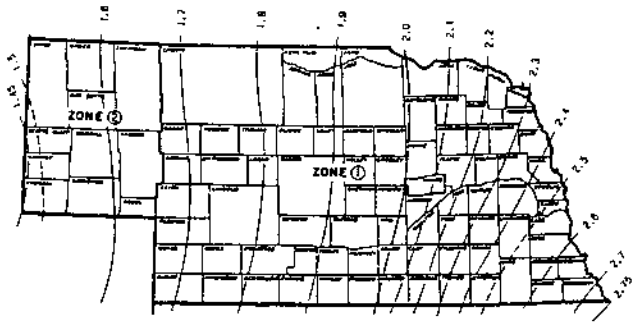
Poor residue cover - Less than 20% of the surface is covered with residue. (750 lb/ac row crops and 300 lb/ac small grain)

Good residue cover - More than 20% of the surface is covered with residue with normal range being 20% and 40% surface covered with residue.

NOTE: Percent cover should be estimated at the time of year storms occur.

Ref. U.S. W.B.
TP-40
1961

NEBRASKA RAINFALL IN INCHES
24 Hour Storm ~~Zone 1 and 2~~
Partial Duration



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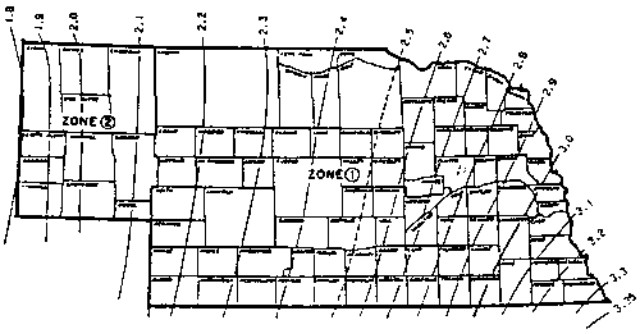

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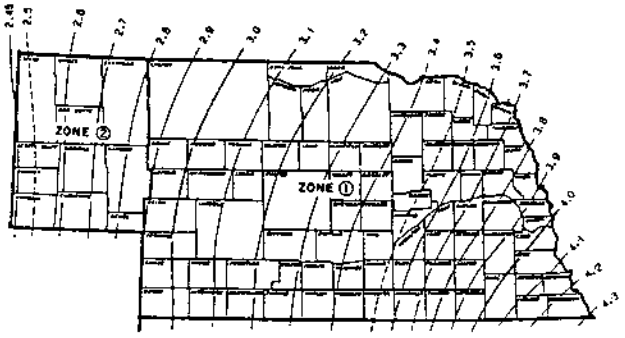

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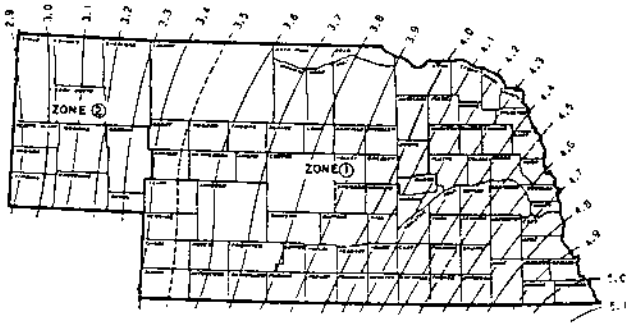

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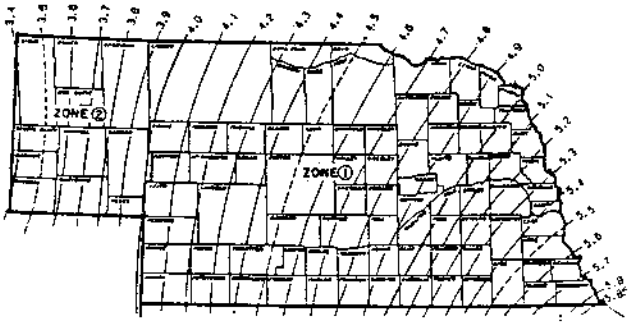

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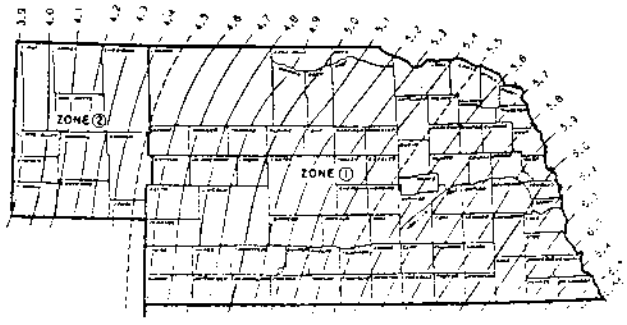

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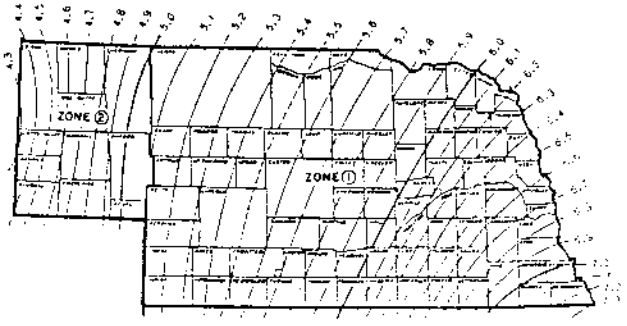

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