Helpful Hint for Determining Wind Erodibility Index (WEI).

For nutrient management (NRCS 590 standard) planning purposes and for operations needing coverage under DENR's 2017 general permit, water and wind erosion, both have to be taken into account. The Revised Universal Soil Loss Equation (RULSE2) or most recent water erosion prediction technology for water erosion, must be run for all fields. Wind erosion calculation, Wind Erosion Prediction System (WEPS), will only need to be run for fields with predominate soils having a Wind Erodibility Index (WEI) of 134 or greater, or if a wind erosion resource concern exists. This helpful hint or guide outlines three different ways of determining WEI. If use of the tools below indicate a WEI of 134 or greater, please contact the NRCS for assistance in running the Wind Erosion Prediction System (WEPS) to determine wind erosion.

 Refer to the SD eFTOG > Section II > Statewide Soil and Site > Information > Section 6 "CNMP Folder" (<u>https://efotg.sc.egov.usda.gov/</u>). Then refer to the county folder you are working in and select the map titled "<u>County" Wind Erosion Index or Greater Map</u>. (Figure 1) An Adobe PFD file (Figure 2) will open up for that county showing the locations of soils with WEI equal to and great than 134. This map can be saved for future purposed.

Figure2



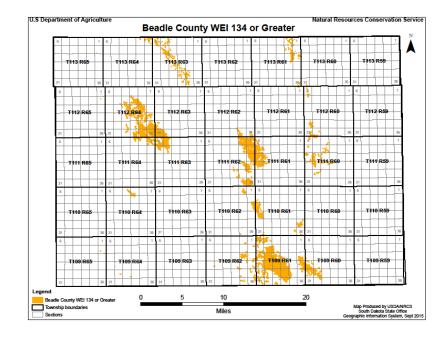


Figure 1

2) Refer to Soil Survey Table 1 – Soil Interpretive Groups (Figure 3) for WEI. Soils on this table are listed by county and soil property. Refer to the WEI column and cross reference it with dominate soil in the field. Table 1 can be found on the SD eFOTG > Section II > Soil Survey Information (<u>https://efotg.sc.egov.usda.gov/</u>) (Figure 4). This table can be saved as an Abode file, for future use.

Map unit name and components Alwilda loam, 0 to 2 perce Alwilda		Surf. tex.	Slope	т	Drain.	Hyd.					Cap. class				
Alwiida						grp.	Kw	Kf	WEG	WEI	nirr.	MLRA	CTSG	Forage suitability group name	Ecological site/RAN SITE* (see footnote
	85	L	0-2	3	SE	в	.28	.28	6	48	IIIe9	55C	6g	Very Droughty Loam	Sandy
Ario loam															
Ario	85	L	0.2	3	VP	B/D	.24	.24	4L	86	Vw1	55C	10	Not suited	Linear Meadow
Beadle loam, 0 to 3 percer	nt slopes														
Beadle	85	L	0-3	5	w	С	.24	.24	6	48	lis1	55C	4	Clayey Subsoil	Clayey
Beadle loam, 3 to 6 percer	nt slopes														
Beadle	85	L.	3-6	5	w	С	.24	.24	8	48	Ille3	55C	4	Clayey Subsoil	Clayey
Beadle-Dudley complex, 0	to 3 perce	ent slopes													
Beadle	45	L	0-3	5	W	C	.24	.24	6	48	lis1	55C	4	Clayey Subsoil	Clayey
Dudley	35	SIL	0.2	2	MW	C	.37	.37	6	48	IV\$2	55C	9c	Claypan	Claypan
Betts-Ethan loams, 15 to 4		slopes													
Betts	55	L	25-40	5	w	С		.24	4L	86	VIIe3	55C	10	Not suited	Thin Upland
Ethan	25	L	15-25	5	w	8	.24	.24	4L	86	VIe3	55C	10	Limy Upland	Thin Upland
Blendon fine sandy loam,	0 to 3 perc	cent slope	5												
Blendon	85	FSL	0-3	5	w	Α	.15	.15	3	86	IIIe7	55C	5	Droughty Loam	Sandy
Blendon fine sandy loam,	3 to 6 perc	cent slope	\$												
Blendon	85	FSL	3-6	5	w	A	.15	.15	3	86	IIIe8	55C	5	Droughty Loam	Sandy
	alopes, rare	aly flooded													
	90	L			MW	C	.20	.20	6	48	lic	55C	1	Overflow	Loamy Overflow
		i slopes, fr													
	85	L.	0-2	5	MW	С	.20	.20	6	48	VW	55C	1	Overflow	Loamy Overflow
		SICL	0.2	5	P	C/D	.28	.28	4	86	IVw1	55C	10	Wet	Clayey Overflow
				5	w	в	.24	.24	6	48	lle	55C	3	Loam	Loamy
		L													Loamy
Ethan		L.										55C		Limy Upland	Thin Upland
Bonilla	20	L	2-6	5	MW	в	.24	.24	6	48	lle	55C	1	Overflow	Loamy Overflow
Clamo-Bonilla loams, 0 to		slopes		-		-									
Clamo-Bonilla loams, 0 to Clamo Bonilla	2 percent 55 32	L	0-2	5	W	B	.24	.24	6	48	lic	55C 55C	3	Loam	Loamy Loamy Overflow
	Baade Beade loam, 3 to 6 percer Beade Beade Dudley complex, 0 Beade Dudley Dudley Betts-Eman Isams, 15 to - Betts-Eman Isams, 15 to - Betts-Eman Isams, 15 to - Betts-Eman Eman Bencon Isams, 15 to - Ben Isams, 15 to 6 percer Clarmo Clarmo-Benta Isam-Bontia Isam Clarmo	Beade 65 Beade loam, 3 to 6 percet loopes Beade load, 3 to 6 percet Beade load, 8 to 13 perce Beade load, 9 to 3 perce Beade load, 9 to 3 Ether Lemand, 15 to 40 percet Bendon fine sandy (Joan, 15 to 3 Bendon fine sandy (Joan, 15 to 5 Bendon fine sandy (Joan, 15 to 5 Clamo Bendon Joan, 2 to 5 Decret same, 2 percent same, 2 to 5 Clamo Bendon Joan, 2 to 5 Decret Joan, 2 to 5 De	Backle OS L Backle burn, 31 of percent stopes Backle burn, 31 of percent stopes Backle burdly cycles, 0 to 3 percent stopes Backle burdly value, 15 of 40 percent stopes Betts Elman back, 51 or 40 percent stopes Betts and burdly burdly burdly burdly Betts Elman 2 bit 3 percent stope Bendon free andry barn, 31 of percent stopes Clamo Ben 6 SiCL Clamo Alber, 21 of percent stopes Clamo 90 L Clamo High-Borndonia barn, 21 of percent stopes Clamo Alber, 21 of percent stopes	Beade 65 L 0-30 Beade 65 L 3-97 Beade 65 L 3-97 Beade 65 L 0-0 Beade 10-3 percent stopes 5 Beade Beade 56 L 0-3 2-54 Brann (25) 2 L 15-3 2-54 Brann (25) 2 L 15-3 2-54 Brann (25) 2 L 15-35 2-54 16-35 Brann (25) 5 FSL 0-35 2-54 16-35 2-54 16-35 2-54 16-35	Beader 65 L 0-3 5 Beade loam, 36 of Serrent stoges Beade loam, 36 of Serrent stoges Serrent stoges Serrent stoges Beade loam, 36 of Serrent stoges Serrent stoges Serrent stoges Serrent stoges Beade loam, 36 of Serrent stoges Serrent stoges Serrent stoges Serrent stoges Beade loam, 36 of Serrent stoges Serrent stoges Serrent stoges Serrent stoges Beindo mfe sandy (sam, 10-13 percent stoges Serrent stoges Serrent stoges Serrent stoges Beindo mfe sandy (sam, 10-13 percent stoges Serrent stoges Serrent stoges Serrent stoges Beindo mfe sandy (sam, 10-16 percent stoges Serrent stoges Serrent stoges Serrent stoges Beindo mfe sandy (sam, 20-6 percent stoges Serrent stoges Serrent stoges Serrent stoges Beindo mfe sandy (sam, 20-6 percent stoges Serrent stoges Serrent stoges Serrent stoges Clamo ding, 20-6 percent stoges Serrent stoges Serrent stoges Serrent stoges Clamo ding, 20-6 percent stoges Serrent stoges Serrent stoges Sererent stoges Clamo ding, 20-	Beade 65 L 0-3 5 W Beade 65 L 3-6 5 W Beade 65 L 3-6 5 W Beade 65 L 0-3 5 W Beade 65 L 0-3 5 W Beade 645 L 0-3 5 W Beade 45 L 0-3 5 W Beade 45 L 0-2 2 W Bets 50 25 L 15.25 W Bendon free stangly (bam, 10-3) aprecent latepes E W E Montant 5 W Bendon free stangly (bam, 13-6) aprecent latepes, freety chardward Colored S MV Damo land, 10-2 percent latepes, freety chardward Colored S MV Damo land, 10-2 percent latepes L 0-2 MV Damo land, 10-2 percent latepes L 2 MV <	Beader 65 L 0-3 5 W C Beade loan, 35 06 protect larges Beade-Dutity complex 05 3 precent larges Beade-Dutity complex 05 2 L 0-3 5 W C Beade Beade-Dutity complex 05 3 precent larges Beade-Dutity complex 05 2 L 0-24 0 S W C Beade Beade Dutity complex 05 3 precent larges Beaden free sandy loan, 10 5 precent larges, free point Beaden free sandy loan, 10 5 precent larges, free point Beaden free sandy loan, 20 5 precent larges, free point Damo large, 10 2 percent larges, free point Damo large, 10 4 percent larges, 10 4 point Damo large, 10 4 percent larges Q S W A Compo 6 SL 0-2 5 M C C Compo 5 L 0-2 5 M C Compo 5 L 0-2 5 M C Compo 6 SL 0-2 5 W C Damo Cama, 10 6 percent larges, 10 4	Beade 65 L O-3 5 W C 2 Beade 85 L 3-6 5 W C 24 Beade 85 L 3-6 5 W C 24 Beade 95 L 0-3 5 W C 24 Beade 15 Vel 0-3 5 W C 24 Beade 25 L 0-2 2 W C 37 Betts 55 L 240 S W C 37 Betts 5 L 1524 S W C 34 Betts 5 K 15 9 K 34 35 Betts 5 FBL 36 S W A 15 Betts 5 K 6 K 16 36 16 36 36 36 36	Beade 65 L O-3 5 W C 24 24 Beade Bit L J-6 5 W C 24 24 Beade Bit L J-6 5 W C 24 24 Beade Bit L J-6 5 W C 24 24 Beade Dutley J5 Bit C-0 5 W C 24 24 Ether Data S2 L 15-25 W C 24 24 Ethon D-3 Servet stopes C 24 24 24 Ethon D-3 Servet stopes C 24 24 24 Bendon free stopes S L 15-25 W A 15 15 Setted fram Abanda Setteres S SU A 15 15 Setted fram Abanda S FBL	Beach 65 L 0-3 5 W C 2.4 2.4 6 Beach curity convert slopes Beach 3.6 5 W C 2.4 6 Beach 0.65 V.1 3.6 S W C 2.4 2.4 6 Beach 0.65 V.1 0.3 5 W C 2.4 2.4 6 Beach 0.65 V.1 0.3 5 W C 2.4 2.4 6 Beach 0.65 0.5 V C 2.4 2.4 4.1 Ether 5.16 0.2 2.4 0.6 7.2 2.4 4.4 Ether 5.5 V C 2.4 2.4 4.1 Ether 5.6 V C 2.4 3.4 4.1 Ether 5.6 V N A 1.5 1.5 3 Bion oftor 5.6	Beach 65 L 0-3 5 W C 2.4 2.4 6 4.0 Beach curls operater stopes Beach 3.6 5 W C 2.4 2.4 6 4.0 Beach 0.65 V C 2.4 2.4 6 4.0 Beach 0.65 V C 3.7 7 5 4.0 Beach 0.65 V C 3.7 7 6 4.0 Beach 5.5 L 0.2 2.4 W C 3.7 7 6 4.0 Beach 5.5 L 0.24.0 W C 3.4 4.4 65 Beach 6.5 V A 1.5 1.5 3 85 Beach 6.8 FBL 3.4 5 W A 1.5 1.5 3 85 Beach 6.8 FBL 3.4 5 W	Beach 65 L 0-3 5 W C 24 24 6 40 Is1 Beach curity compress targes Beach 36 5 W C 24 24 6 40 IIIa1 Beach 0.45 L 3.6 5 W C 24 24 6 40 IIIa3 Beach 0.45 L 0.3 5 W C 24 24 6 40 IIIa3 Beach 55 L 2.540 5 W C 24 24 4L 60 VIIa3 Beach 55 L 2.540 5 W C 24 24 4L 60 VIIa3 Beach 55 L 2.540 5 W C 24 24 4L 60 VIIa3 Beach 1.3 1.5 1.5 3 60 IIIc7 IIIc7 IIc7 <th>Beach 65 L 0-3 5 W C 24 24 6 48 III 55C Beach 15 L 3-6 5 W C 24 24 6 48 III 55C Beach 165 L 3-6 5 W C 24 24 6 48 III 55C Beach 15 L 0-2 5 W C 24 24 6 48 III 55C Beach 15 0 2 2 W C 24 24 6 48 III 55C Beach 5 L 15.5 W R 24 24 60 Vila3 55C Beach 16.3 15.5 W R 15 15 3 86 IIII 55C Beach 15.0 15.6 16.0 IIII 55C II</th> <th>Beach 65 L 0-3 5 W C 24 24 6 48 III1 55C 4 Beach cuttery comperent suppers Beach 65 L 3-6 5 W C 24 24 6 48 III-3 55C 4 Beach 0.65 L 3-6 5 W C 24 24 6 48 III-3 55C 4 Beach 0.65 L 0.7 5 8L 0.7 24 24 4 48 181 55C 4 Beach 55 L 0.540 V C 27 24 24 4L 66 Vika 55C 10 Bith 55 L 55 W B 24 24 4L 66 Vika 55C 10 Bith 56 L 55 W A .15 .15 3</th> <th>Beach 65 L 0-3 5 W C 24 24 6 40 III 55C 4 Clayry Subsol Beach 65 L 3-6 5 W C 24 4 6 40 IIII 55C 4 Clayry Subsol Beach 65 L 3-6 5 W C 24 4 6 48 IIII 55C 4 Clayry Subsol Durity 35 8L 0-2 2 W C 24 4 6 48 IIII 55C 4 Clayry Subsol Beth 5 4 2-2 5 W C 24 4L 66 Via3 55C 10 Notsubed Beth 5 L 15.5 W B 24 24 66 Via3 55C 10 Notsubed Beth 15.0 5 W A 15</th>	Beach 65 L 0-3 5 W C 24 24 6 48 III 55C Beach 15 L 3-6 5 W C 24 24 6 48 III 55C Beach 165 L 3-6 5 W C 24 24 6 48 III 55C Beach 15 L 0-2 5 W C 24 24 6 48 III 55C Beach 15 0 2 2 W C 24 24 6 48 III 55C Beach 5 L 15.5 W R 24 24 60 Vila3 55C Beach 16.3 15.5 W R 15 15 3 86 IIII 55C Beach 15.0 15.6 16.0 IIII 55C II	Beach 65 L 0-3 5 W C 24 24 6 48 III1 55C 4 Beach cuttery comperent suppers Beach 65 L 3-6 5 W C 24 24 6 48 III-3 55C 4 Beach 0.65 L 3-6 5 W C 24 24 6 48 III-3 55C 4 Beach 0.65 L 0.7 5 8L 0.7 24 24 4 48 181 55C 4 Beach 55 L 0.540 V C 27 24 24 4L 66 Vika 55C 10 Bith 55 L 55 W B 24 24 4L 66 Vika 55C 10 Bith 56 L 55 W A .15 .15 3	Beach 65 L 0-3 5 W C 24 24 6 40 III 55C 4 Clayry Subsol Beach 65 L 3-6 5 W C 24 4 6 40 IIII 55C 4 Clayry Subsol Beach 65 L 3-6 5 W C 24 4 6 48 IIII 55C 4 Clayry Subsol Durity 35 8L 0-2 2 W C 24 4 6 48 IIII 55C 4 Clayry Subsol Beth 5 4 2-2 5 W C 24 4L 66 Via3 55C 10 Notsubed Beth 5 L 15.5 W B 24 24 66 Via3 55C 10 Notsubed Beth 15.0 5 W A 15





Figure 4

3) WEI can also be found Web Soil Survey (<u>http://websoilsurvey.nrcs.usda.gov/app/</u>). Once the field area has been defined (Area of Interest), select the "Soil Data Explorer" tab > then the "Soil Properties and Qualities" tab. Then under the Properties and Qualities Rates choose "Soil Erosion Factors" > "Wind Erodibility Index" > "View Rating". This will generate a map and table with WEI ratings. This map can be printed and/or saved, for future purposes. See figure 5.

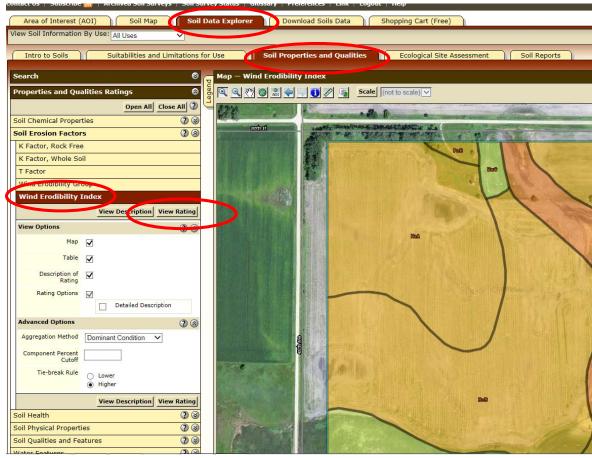


Figure 5

For questions please contact your local NRCS field office or:

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