The following example will step through multiple crop year rate capping process. We are given the following 35's for crop years 2000 and 2001 for the listed type and practice.
An abbeviated Record 1C (not all prior yield and rate fields are shown) is also displayed for each year

2000 APH rates for wheat in Box Butte Co., Nebraska

TYPE: (997) No Type Specified PRAC: (005) Summerfallow

14.0 & Below	R01	0.518
15.0 - 19.0	R02	0.401
20.0 - 24.0	R03	0.264
25.0 - 28.0	R04	0.190
29.0 - 34.0	R05	0.146
35.0 - 38.0	R06	0.122
39.0 - 43.0	R07	0.106
44.0 - 48.0	R08	0.093
49.0 & Above	R09	0.088

2001 APH rates for wheat in Box Butte Co., Nebraska

Type: (997)NTS -- No Type Specified PRAC: Summerfallow -- SF (005)

REFERENCE YIELD(BU)	31.5
REFERENCE RATE	0.128
EXPONENT	-1.924
FIXED RATE LOAD	0.023

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Capping Example # 1

Year 1

CY 2001

The 1C record (abbreviated fields and field names)

crop yr	state	county	crop	IP	prac	type	ref yld	ref rate	exponent	sign	fixed rate	pr yld 3	pr bpr 3	pr yld 4	pr bpr 4	pr yld 5	pr bpr 5	ref yld	ref rate	exponent	sign	fixed rate
2001	31	13	0011	90	005	997	31.5	0.128	1.924	-	0.023	24.0	0.264	28.0	0.190	34.0	0.146	31.5	0.128	1.924	-	0.023
																		Initial year same as current				

CY 2001 Assume APH Yield of : 25 bu

Calculate the current year's yield ratio (rounded to 2 decimals) **1**

25/31.5 = .79

Calculate the current year's uncapped base premium rate (rounded to 8 decimals) **2**

[[.79**-1.924] * .128 + .023] = .22445379

Refer to prior year capped APH rate for 25 bu and multiply by 1.2 **3**

[.190 * 1.2] = .228

Calculate the prior years yield ratio **4**

25/31.5 = .79

Calculate the prior years continuous rating base premium rate and multiply by 1.2 **5**

[[.79**-1.924] * .128 + .023] *1.2 = .26934455

Determine the preliminary base premium rate (lower of 2, 3 and 5) **6**

[.22445379, .228, .26934455] = .22445379

Year 2

CY 2002

The 1C record (abbreviated fields and field names)

crop yr	state	county	crop	IP	prac	type	ref yld	ref rate	exponent	sign	fixed rate	pr yld 3	pr bpr 3	pr yld 4	pr bpr 4	pr yld 5	pr bpr 5	ref yld	ref rate	exponent	sign	fixed rate
2002	31	13	0011	90	005	997	31.5	0.128	1.924	-	0.023	24.0	0.317	28.0	0.228	34.0	0.175	31.5	0.128	1.924	-	0.023
												2000 rates updated by 20%				Capped		2001 continuous rate function				

CY 2002 Assume APH Yield of : 27 bu

Calculate the current year's yield ratio (rounded to 2 decimals) **1**

27/31.5 = .86

Calculate the current year's uncapped base premium rate (rounded to 8 decimals) **2**

[[.86**-1.924] * .128 + .023] = .19409407

Refer to prior year capped APH rate for 27 bu and multiply by 1.2 **3**

[.228 * 1.2] = .274

Calculate the prior years yield ratio **4**

27/31.5 = .86

Calculate the prior years continuous rating base premium rate and multiply by 1.2 **5**

[[.86**-1.924] * .128 + .023] *1.2 = .23291288

Determine the preliminary base premium rate (lower of 2, 3 and 5) **6**

[.19409407, .274, .23291288] = .19409407

Year 3

CY 2003

The 1C record (abbreviated fields and field names)

crop yr	state	county	crop	IP	prac	type	ref yld	ref rate	exponent	sign	fixed rate	pr yld 3	pr bpr 3	pr yld 4	pr bpr 4	pr yld 5	pr bpr 5	ref yld	ref rate	exponent	sign	fixed rate
2003	31	13	0011	90	005	997	35	0.133	2.000	-	0.022	24.0	0.380	28.0	0.274	34.0	0.210	31.5	0.128	1.924	-	0.023
												2000 rates updated by 20%				Capped		2002 continuous rate function				

CY 2003

Assume APH Yield of : 29 bu

Assume RMA updated reference yield to 35 bu and rate variables

Calculate the current year's yield ratio (rounded to 2 decimals) **1**

29/35 = .83

Calculate the current year's uncapped base premium rate (rounded to 8 decimals) **2**

[[.83**-2.000] * .133 + .022] = .21506140

Refer to prior year capped APH rate for 29 bu and multiply by 1.2 **3**

[.210 * 1.2] = .252

Calculate the prior years yield ratio **4**

29/31.5 = .92

Calculate the prior years continuous rating base premium rate and multiply by 1.2 **5**

[[.92**-1.924] * .128 + .023]*1.2 = .20792811

Determine the preliminary base premium rate (lower of 2, 3 and 5) **6**

[.21506140, .252, .20792811] = .20792811

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Year 4

CY 2004

The 1C record (abbreviated fields and field names)

crop yr	state	county	crop	IP	prac	type	ref yld	ref rate	exponent	sign	fixed rate	pr yld 3	pr bpr 3	pr yld 4	pr bpr 4	pr yld 5	pr bpr 5	ref yld	ref rate	exponent	sign	fixed rate
2004	31	13	0011	90	005	997	35	0.133	2.000	-	0.022	24.0	0.320	28.0	0.244	34.0	0.178	35	0.133	2.000	-	0.022
												2000 rates updated by 20%				Capped		2003 continuous rate function				

CY 2004 Assume APH Yield of: 27 bu

Calculate the current year's yield ratio (rounded to 2 decimals) **1**

27/35 = .77

Calculate the current year's uncapped base premium rate (rounded to 8 decimals) **2**

[[.77**-2.000] * .133 + .022] = .24632113

Refer to prior year capped APH rate for 27 bu and multiply by 1.2 **3**

[.244 * 1.2] = .293

Calculate the prior years yield ratio **4**

27/35 = .77

Calculate the prior years continuous rating base premium rate and multiply by 1.2 **5**

[[.77**-2.000] * .133 + .022] *1.2 = .29558536

Determine the preliminary base premium rate (lower of 2, 3 and 5) **6**

[.24632113, .293, .29558536] = .24632113

Capped rates in year 3

yield	prior yr rate	current yr rate	cap
15	0.731	0.824	YES
16	0.654	0.723	YES
17	0.589	0.640	YES
18	0.534	0.593	YES
19	0.487	0.531	YES
20	0.446	0.479	YES
21	0.399	0.435	YES
22	0.370	0.397	YES
23	0.343	0.364	YES
24	**0.320**	0.335	YES
25	0.299	0.318	YES
26	0.275	0.294	YES
27	0.259	0.274	YES
28	**0.244**	0.255	YES
29	0.231	0.239	YES
30	0.219	0.224	YES
31	0.208	0.211	YES
32	0.195	0.203	YES
33	0.186	0.192	YES
34	**0.178**	0.182	YES
35	0.170	0.172	YES
36	0.163	0.164	YES
37	0.157	0.156	
38	0.149	0.149	
39	0.143	0.144	YES
40	0.138	0.138	
41	0.134	0.132	
42	0.129	0.127	
43	0.124	0.122	
44	0.120	0.118	
45	0.116	0.113	
46	0.113	0.111	
47	0.110	0.107	
48	0.107	0.103	
49	0.103	0.100	