Pelletier, Greg (ECY)

From: Robert Ambrose [bobambrosejr@gmail.com]
Sent: Wednesday, July 27, 2011 5:25 PM
To: Pelletier, Greg (ECY)
Subject: base19 recommendations
Attachments: base19.xls

Greg, here are my recommendations for base19 calibration and sensitivity.

It looked to me that 18c was better than 18a, and so I recommend that we go with the lower Ke parameters. Although I like anc=0.10 better than 0.12, I still recommend going with both, and thus 19a and 19b. The anc=0.12 needs slightly higher gmax to approximate the right productivity.

Base19a differs from 18c in the following: lower GAM1 gmax (shallow and deep), lower GAM1 w_s (deep), lower GAM2 gmax (shallow), higher GAM2 Isat (deep), higher GAM2 Topt (deep).

For sensitivity, I'm emphasizing combinations of gmax and Isat. Also for SOD sensitivity, I'd like to run extremes, a low of 0 and a high of 5 g/m2-day. We should see a significant difference in bottom DO with that.

Spreadsheet attached. As always, I welcome your tweaks to this.

Bob

base 18 effort: 8.5 hrs
cum effort: 61.5 hrs
remaining: 14 hrs

	Simulation Series			
Parameters	19a		19b	
	shallow	deep	shallow	deep
General				
anc	0.10		0.12	
Ke_b	0.0365		0.0365	
Ke_c	0.640		0.640	
SOD	1.5x		1.5x	
GAM1				
gmax	2.3	2.3	2.5	2.5
Isat	40	30	40	30
Topt	11	10	11	10
ktg1	0.024	0.024	0.024	0.024
ktg2	0.024	0.024	0.024	0.024
cchl	60	60	60	60
k_n	24	24	24	24
k_R	0.08	0.07	0.08	0.07
k_D	0.03	0.03	0.03	0.03

w_s	0.5	0.4	0.5	0.4
GAM2				
gmax	2.3	2.5	2.5	2.7
Isat	70	75	70	75
Topt	16	16	16	16
ktg1	0.020	0.020	0.020	0.020
ktg2	0.020	0.020	0.020	0.020
cchl	50	50	50	50
k_n	28	28	28	28
k_R	0.07	0.07	0.07	0.07
k_D	0.03	0.03	0.03	0.03
w_s	0.2	0.2	0.2	0.2