

## #FieldNameRec

Mac\*8

Value

Grade Comments

NPhBio_max	<input data-bbox="338 155 472 183" type="text" value="?"/>	kgC/m^2	_____	Maximum attainable (observed) biomass density of nonphotosynthetic tissue. For InitConditions, this value will be multiplied by the IC_MULT_MAP^0.3 *MAC_IC_MULT (0.1-1.0 values in map)
PhBio_max	<input data-bbox="338 256 472 284" type="text" value="PhBio_imax"/>	kgC/m^2	_____	Maximum attainable (observed) biomass density of photosynthetic tissue. For InitConditions, this value will be multiplied by the IC_MULT_MAP^0.3 *MAC_IC_MULT (0.1-1.0 values in map)
mac_KsN	<input data-bbox="338 357 472 384" type="text" value="mac_KsN"/>	mg/L	_____	Half saturation coeff of inorganic nitrogen for the Mich-Ment nutrient uptake kinetics for macrophytes.
mac_KsP	<input data-bbox="338 457 472 485" type="text" value="mac_KsP"/>	mg/L	_____	Half saturation coeff of PO4 for the Mich-Ment nutrient uptake kinetics for macrophytes.
mac_MaxLAI	<input data-bbox="338 558 472 586" type="text" value="mac_MaxLAI"/>		_____	Macrophyte's maximum Leaf Area Index for a mature community = area of leaves/area of ground. Used in transpiration algorithm and algal shading.
mac_LightSat	<input data-bbox="338 659 472 686" type="text" value="?"/>	cal/cm/d	_____	Saturating light intensity (langleys/d = cal/cm^2 per day) for the macrophytes. Used in macrophyte sector, control function on growth.
mac_MaxHt	<input data-bbox="338 760 472 787" type="text" value="mac_MaxHt"/>	m	_____	Maximum height of mature plant associated with a unit plant density at maturity. Used in determining a current value of macrophyte height for hydrology and fire.
mac_TempOpt	<input data-bbox="338 844 472 872" type="text" value="?"/>	°C	_____	Optimal temperature for maximum primary production (degrees C). Used in macrophyte sector, control function on growth.
NPhBio_CtoOM	<input data-bbox="338 945 472 972" type="text" value="?"/>		_____	Mass ratio of organic carbon to total organic material in NonPhotoBiomass (ash free dry weight).
PhBio_CtoOM	<input data-bbox="338 1045 472 1073" type="text" value="?"/>		_____	Mass ratio of organic carbon to total organic material in PhotoBiomass (ash free dry weight).
NPhBio_NC	<input data-bbox="338 1146 472 1174" type="text" value="NPhBio_NC"/>		_____	Nitrogen:carbon ratio
NPhBio_PC	<input data-bbox="338 1247 472 1274" type="text" value="NPhBio_PC"/>		_____	Phosphorus:carbon ratio
PhBio_NC	<input data-bbox="338 1347 472 1375" type="text" value="PhBio_NC"/>		_____	Nitrogen:carbon ratio
PhBio_PC	<input data-bbox="338 1448 472 1476" type="text" value="PhBio_PC"/>		_____	Phosphorus:carbon ratio

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<b>NPhBio_RootDepth</b> <input type="text" value="?"/> m	—	Constant depth of roots below the sediment/soil surface (positive value) for the vegetation. Used in macrophyte & hydro sectors to determine water avail, and in fire sector.
<b>mac_spr_gr</b> <input type="text" value="mac_spr_gr"/>	—	Julian month (1-12) that has spring growth of shoots, period of translocation of carbohydrates from nonphoto to photobiomass.
<b>PhBio_rcNPP</b> <input type="text" value="?"/> 1/d	—	Max specific rate of net primary production.
<b>PhBio_rcMort</b> <input type="text" value="?"/> 1/d	—	Max specific rate of photobiomass mortality.
<b>mac_MaxRough</b> <input type="text" value="?"/> d/m <sup>0.33</sup>	—	The maximum Manning's n roughness associated with present vegetation when fully inundated by water. The relation of the total manning's n to water depth will range along the continuum from the roughness due to sediment only and roughness imparted by inundation of plants by water depth. Be sure this max value > the minimum roughness coeff.
<b>mac_MinRough</b> <input type="text" value="?"/> d/m <sup>0.33</sup>	—	The Manning's roughness coefficient for minimal/no vegetation. Be sure this value is less than the roughness coeff for the vegetation.
<b>mac_MaxCanopCond</b> <input type="text" value="?"/> mol m <sup>-2</sup> s <sup>-1</sup>	—	Maximum canopy conductance (units mol LEAFm <sup>-2</sup> sec <sup>-1</sup> ) for plant that is NOT water stressed. For simplicity, assume canopy conductance = unweighted mean of all leaves in canopy, using lit. values for leaf conductance. See Jarvis & McNaughton 1986.
<b>mac_CanopDecoupl</b> <input type="text" value="?"/>	—	Canopy couple/decouple factor describing how closely the saturation deficit at the canopy surface is linked to the saturation deficit outside the Planetary Boundary Layer. Units=dimless. SCALE dependent; this algorithm assumes model is geared towards large field, scale of hundreds to several thousand meters size. See Jarvis 1986. Values near 0 (perfectly coupled) for many tree canopies, near 1 for grassland-type canopies.
<b>NPhBio_AbvBel</b> <input type="text" value="?"/>	—	Proportion of the nonphotosynthetic biomass that is above the sediment relative to below the sediment. Dimensionless, used in fire algorithm to determine the amount available for above-surface fire. Must be non-zero.
<b>mac_watToler</b> <input type="text" value="?"/> m	—	Depth of ponded surface water above which plant growth becomes restricted. Used in growth control funtion. Must be non-zero (will fix in model to accomodate 0 value)
<b>mac_salin_thresh</b> <input type="text" value="?"/> ppt	<input type="checkbox"/>	Salinity threshold, above which plant growth decreases linearly with increasing salinity.