

**From:** [Latimer, Jim](#)  
**To:** [Arsenault, Dan](#); [Cobb, Michael](#)  
**Subject:** Shallow estuaries (some characteristics)  
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Some thoughts from the literature about “shallow estuaries”

(b) (5)

- “Shallow estuarine habitats that include emergent marsh, submerged aquatic vegetation, mangroves, and tidal flats are extremely productive and often support large nekton populations.”

LAWRENCE P. ROZAS, THOMAS J. MINELLO Estuaries Vol. 20, No. 1, p. 199-213 March 1997

- “Macroalgal blooms are generated by nutrient loading to shallow waters where the bottom is within the photic zone.”

Valiela, I., J. McClelland, J. Hauxwell, P.J. Behr, D. Hersh, and K. Foreman. 1997. Macroalgal blooms in shallow estuaries: controls and ecophysiological and ecosystem consequences. Limnology and Oceanography 42: 1105-1118.

- “In shallow estuaries, the “tidal prism” (The volume of water that flows in and out of the estuary on the tidal cycle) creates strong currents in the saltier layer because the volume of water in the tidal prism is confined to a shallow layer.” <http://www.des.ucdavis.edu/faculty/Richerson/ESP30/Estuaries.pdf>
- “< 3 m deep “

Summer Algal blooms in shallow estuaries: Definition, mechanisms, and link to eutrophication

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Limnol. Oceanogr., 52(1), 2007, 370–384