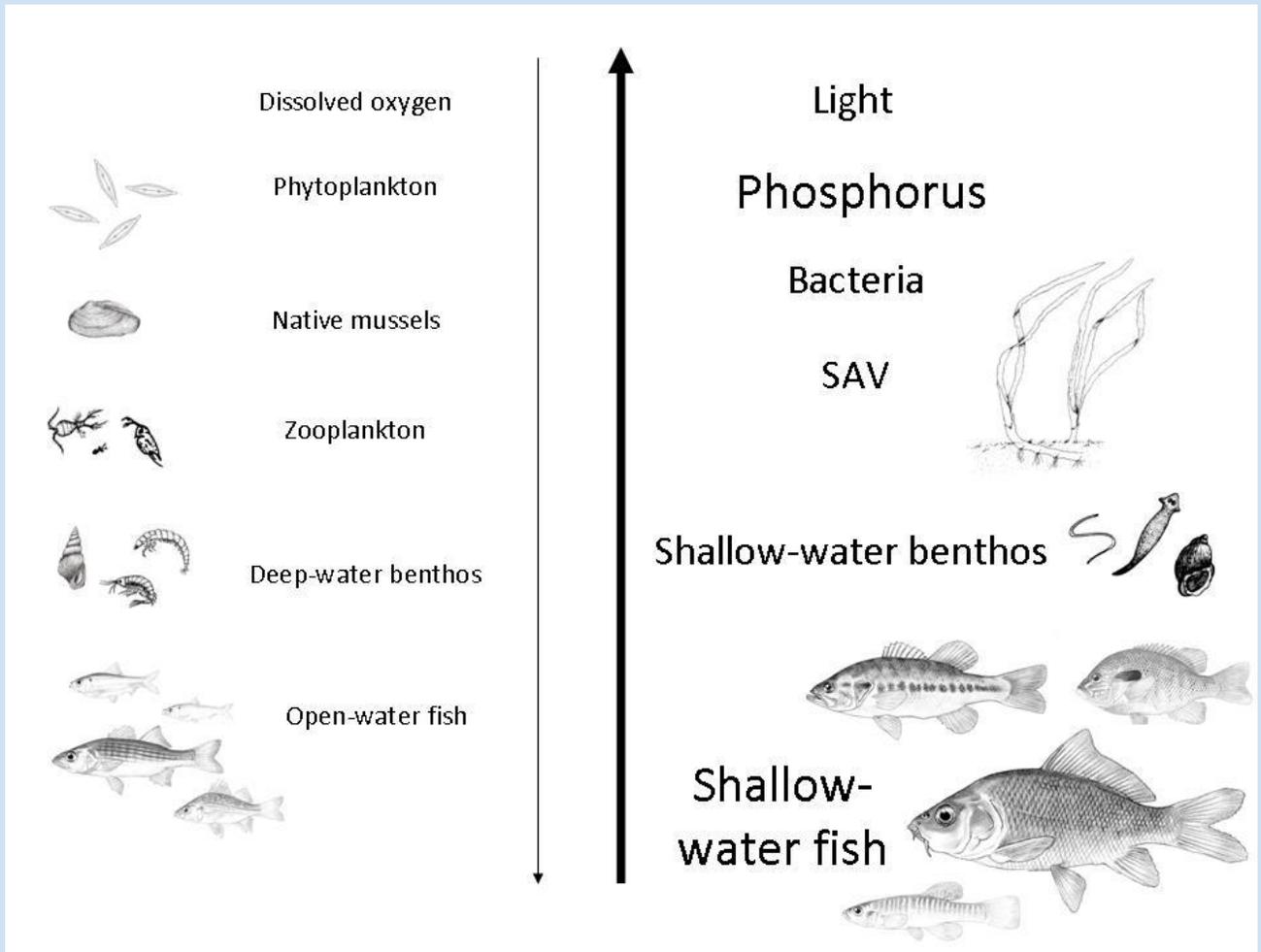


The zebra mussel invasion: What are the potential effects to the Upper Chesapeake Bay ecosystem?

Based on over two decades of research in the Great Lakes and elsewhere, changes to key parts of the Upper Chesapeake Bay ecosystem are possible. These direct and indirect effects, like reductions in plankton, dissolved oxygen, and open-water fishes along with increases in bacteria and phosphorus would have negative consequences for natural resource users and Bay restoration goals.



Others changes could be perceived as benefits, such as greater water clarity, SAV coverage, and shallow-water fishes. Increased phosphorus and clarity also fuels harmful algal blooms, which create dead zones and fish kills. These benefits are often an artifact of scale (“the water is clear around my dock this summer”) and rarely outweigh the long-term impacts. The effects of species invasions can vary by physical setting. Predicting the extent of ecological impact from zebra mussel invasion in Maryland may be difficult, emphasizing the need to document impacts.

Larry J. Hogan Jr.
Governor
Boyd K. Rutherford
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