



Estuary Principles and Concepts

Education plays an important role in protecting our estuaries. An estuarine-literate person understands the interconnectedness and interdependence of estuarine systems with other Earth systems in both time and space; can communicate about estuaries in a meaningful way; and is able to make scientifically informed and responsible decisions regarding estuaries and coastal areas. To create an estuarine-literate society, the National Estuarine Research Reserve System has developed six estuarine principles and concepts. Educators can use this framework to build lessons and curricula that teach their students the importance of estuaries and what people can do to help protect them.



“Estuary Principles and Concepts” Used by the Reserve System Education Program:

Principle 1	Estuaries are interconnected with the world ocean and with major systems and cycles on Earth.
Principle 2	Estuaries are dynamic ecosystems with tremendous variability within and between them in physical, chemical, and biological components.
Principle 3	Estuaries support an abundance of life, and a diversity of habitat types.
Principle 4	Ongoing research and monitoring is needed to increase our understanding of estuaries and to improve our ability to protect and sustain them.
Principle 5	Humans, even those living far from the coast, rely on goods and services supplied by estuaries.
Principle 6	Human activities can impact estuaries by degrading water quality or altering habitats; therefore, we are responsible for making decisions to protect and maintain the health of estuaries.