

Summary of "Freshwater Inflows for Estuaries"

SIFN WebEx Oct. 29, 2009

Estuaries are the most productive ecosystems on the earth, and freshwater inflows are the single most important determinant of that productivity. Altering the timing and amount of inflows reduces the overall productivity of the bays and changes habitat character, which in turn, impacts fisheries.

Freshwater inflows are important to coastal ecosystems because they:

- Maintain the salinity to sustain juvenile fish and shrimp
- Provide much of the nutrients and phytoplankton that form the base of the estuarine food web
- Flush pollutants from bays
- Sustain a mosaic of habitats from salt marshes to grass flats to oyster bars
- Signal fish to spawn or move to a different habitat

Two speakers presented information about determining inflow requirements for estuaries in their states. Cindy Loeffler, Texas Parks and Wildlife Department, began the discussion among coastal southern states about determining flow requirements for estuaries by describing the Texas methodology and their progress over the last 10 years. Sid Flannery of Florida's Southwest Water Management District described their recent minimum flow determination for the Alafia River estuary.

Download the presentations.