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Linking data access to data models to applications: The Estuary Data Mapper

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The U.S. Environmental Protection Agency (US EPA) is developing e-Estuary, a decision-support system for coastal management. E-Estuary has three elements: an estuarine geo-referenced relational database, watershed GIS coverages, and tools to support decision-making. To facilitate data access for estuaries and associated coastal watersheds around the U.S., we are developing the Estuary Data Mapper (EDM), a stand-alone program requiring only internet access to allow users to identify, visualize, and download multi-media environmental data and geospatial coverages. The downloaded data can be imported into an ArcMap data model for estuaries and watersheds using tools developed for the ArcMap Toolbox, then used to run applications. Examples will be given for downloading inputs to 1) a diagnostic tool for estuary eutrophication, 2) a simple spreadsheet tidal prism model, and 3) a predictive model for seagrass habitat.

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