The Severn Barrage project proposes to develop marine renewable energy by building a barrage (dam) stretching from the English coast to the Welsh coast across the Severn Estuary and Bristol Channel. This presentation will highlight recent research on the application of computational hydro-environmental models to predict the impacts of the proposed Severn Barrage project on tidal currents and sediment transport as well as bacterial-sediment interactions.

Current research indicates that the Barrage has the potential to reduce the tidal currents in this highly dynamic estuary. This would lead to reduced suspended sediment loads (particularly upstream of the barrage), increased light penetration within the water column, potentially significant shifts in food web structure, and increased diversity of sediment-dwelling organisms and other aquatic life in the estuary.

Contact: Martina Koller at (916) 445 – 5838 or martina.koller@deltacouncil.ca.gov