

ORAL PRESENTATION

DIATOMS OF THE GENUS *THALASSIOSIRA* FROM THE TIDAL SAN JOAQUIN RIVER, STOCKTON, CALIFORNIA USA

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Several species of the diatom genus *Thalassiosira* Cleve, were observed in freshwater phytoplankton samples collected from a fifty-two kilometer reach of the San Joaquin River in the vicinity of Stockton, California, USA. The study was conducted between the South Airport Way bridge near Vernalis and the Stockton Deep Water Ship Channel during fall and summer of both 2005 and 2006. The entire reach is freshwater habitat with the lower twenty-eight km strongly influenced by tidal flow reversals driven by the San Francisco Estuary. Ninety four whole water samples were collected from surface waters during the months of July, August, September and October in 2005 and the months of July and August in 2006. Six species of *Thalassiosira* were identified using scanning electron and light microscopy: *T. weissflogii* (Grunow), *T. incerta* (Makarova), *T. decipiens* (Grunow), *T. visurgis* (Grunow), *T. lacustris* (Grunow) and *T. gessneri* Hustedt. Of the species observed, only *T. weissflogii* has been previously reported in the freshwater portion of the San Joaquin River. The other five species have been previously reported from sites in the San Joaquin - San Francisco Estuary characterized as brackish, suggesting they are distributed in waters of various salinities ranging from freshwater to brackish within the river and estuary.