Tracking fates of Central Valley freshwater flows

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Flow of fresh water into the San Francisco Estuary from Central Valley rivers drives many ecosystem processes and biological responses. Management of river flows is typically designed to maximize certain economic benefits. Information about Central Valley river flow management is generally not synthesized in a publicly accessible format that is easy to understand and available in near-real time. Using an automated data capture system that synchronizes with spreadsheets hosted on Google Documents, we provide daily updates of flow data synthesized from various agency sources. Data visualizations include unimpaired and actual estimates of Net Delta Outflow and percent of runoff diverted or stored. Users can choose to display current and historic data, toggle between different river gages and reservoirs, and can select among different visualization formats. Accompanying text informs the user of the importance of freshwater flows to the Bay-Delta ecosystem and implications of current management, and highlights noteworthy details about the currently-displayed visualization. This synthesis of publicly available water data into an informative and accessible format allows Californians and decision-makers to better understand the effects of current management.