# **Appendix 1: Summary of data sources**

Prepared by:

Thomas Jabusch

San Francisco Estuary Institute Richmond, CA 94804 The model outputs generated by this project as well as the public data sources that we used in the analyses are listed below, in two sections, <Project Output Data> and <Data Sources>. Each dataset has a link and a brief summary description.

## **Project Output Data**

#### DSM<sub>2</sub>

The Delta Simulation Model 2 - DSM2 (Version 8.1.2, released 11/01/2013) was used to a) perform a mass balance for ammonium (NH4), nitrate (NO3), dissolved inorganic nitrogen (DIN), and total nitrogen (TN), for the period 2006 to 2011, for the entire Delta and for each of seven subregions; and b) to model volumetric sources at 11 monitoring locations, for the period 2000 to 2012. Mass balance output was generated with the DSM2-QUAL module and volumetric output with the DSM2-HYDRO module.

DSM2 mass balance output (Excel files):

https://drive.google.com/open?id=0ByNfB7kXiXcWRWg0SjRpQ2NKVEk

- Boundary loads https://drive.google.com/open?id=0B6OFZ0VyadOddGVURS13Yk15Y3M
- Individual load movements for all seven subregions https://drive.google.com/open?id=0B6OFZ0VyadOdSkF0RHFCMGthaXc

#### DSM2 volumetric output (.csv files):

https://drive.google.com/open?id=0B-DCvkdKIAt2RFJKRkh0bnVEOHc

- Station C3 https://drive.google.com/open?id=0B-DCvkdKIAt2RFJKRkh0bnVEOHc
- Station C10 https://drive.google.com/open?id=0B-DCvkdKIAt2TVhjZnlwVjdodW8
- Station D4 https://drive.google.com/open?id=0B-DCvkdKIAt2UWFGRjNaU0VHRXc
- Station D6 https://drive.google.com/open?id=0B-DCvkdKIAt2TDZVZXFmREhRZEE
- Station D7 https://drive.google.com/open?id=0B-DCvkdKIAt2V0xYOVRoZURXdjA
- Station D8 https://drive.google.com/open?id=0B-DCvkdKIAt2ZmZEQ0I1NTNMWkU
- Station D19 https://drive.google.com/open?id=0B-DCvkdKIAt2TkMtSTRhU1RDOW8
- Station D26 https://drive.google.com/open?id=0B-DCvkdKIAt2bGQ0T3hRbHItUHc
- Station D28A https://drive.google.com/open?id=0B-DCvkdKIAt2V25BZ2pLLVRIak0
- Station MD10 https://drive.google.com/open?id=0B-DCvkdKIAt2Ukh4YXFtYzMtT1E
- Station P8

#### **Data Sources**

## Dayflow

http://www.water.ca.gov/dayflow/

Dayflow is a computer program designed to estimate daily average Delta outflow. The program uses daily river inflows, water exports, rainfall, and estimates of Delta agriculture depletions to estimate the "net" flow at the confluence of the Sacramento and San Joaquin Rivers, nominally at Chipps Island. Dayflow is computed once per year following the water year (October 1). Dayflow output can be downloaded from the dayflow webpages.

Source: California Department of Water Resources (DWR), Environmental Planning and Information Branch, Dayflow Program

### Discrete Water Quality Data

http://www.water.ca.gov/bdma/meta/Discrete/data.cfm

The DWR Environmental Monitoring Program conducts discrete monitoring of general water quality and nutrients at 12 sites representing main in- and outflows of the Delta, under the umbrella of the Interagency Ecological Program (IEP). Most of the current sampling stations and variables have been monitored since 1970. Beginning in 1975, the water quality sampling times were planned to occur within a one-hour window of the expected occurrence of high tide slack at the sampling location. Samples are acquired monthly.

Source: DWR, Bay-Delta Monitoring and Analysis Section, Environmental Monitoring Program