Sacramento Regional County Sanitation District

Interceptor Sequencing Study

Technical Memorandum 14
Development of Model Loads for Non-SASD Contributing Agencies

June 2010

Technical Memorandum – DRAFT

Sacramento Regional County Sanitation District
Interceptor Sequencing Study

Subject: **Development of Model Loads for Non-SASD Contributing Agencies**

Prepared by: Chris van Lienden and Gisa Ju (RMC)

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This Technical Memorandum (TM) describes the development of the model loads for the contributing agencies of the Sacramento Regional County Sanitation District (SRCSD) interceptor system, except for the Sacramento Area Sewer District (SASD). These contributing agencies are the Cities of Sacramento, Folsom, and West Sacramento. The model loads are used as inputs to the SRCSD interceptor model developed by SRCSD/SASD Capacity Management staff for the Interceptor Sequencing Study (ISS). The information in this TM will be incorporated into the TM on Model Development and Model Loading Procedures for the ISS.

This TM is organized as follows:

1. Sewer Basin Delineation
2. Development of Existing Base Wastewater Flow Loads and Contributing Areas
3. Model Load Calibration
4. Development of Buildout Model Loads
5. Summary of Model Loads

Each section includes a discussion of the information and methodology used for each of the three contributing agencies.

1 Sewer Basin Delineation

Sewer basins, in the context of the SRCSD interceptor model, represent areas of contributing agency sewer systems that discharge to specific manholes on the SRCSD interceptor. Sewer basins were delineated for each of the contributing agencies along with each basin's identified "load manhole" on the interceptor. The following numbering system was used to identify the sewer basins:

- NS-x (North) Sacramento sewer basins discharging to the Dry Creek/Natomas Interceptor.
- SS-x (South) Sacramento sewer basins discharging to the City Interceptor.
- F-x Folsom sewer basins discharging to the Folsom or Folsom East Interceptors.
- WS-x West Sacramento sewer basins discharging to the Lower Northwest Interceptor.

Sewer basins were delineated based on maps, reports, and GIS data (shapefiles) provided by each of the contributing agencies, as described below. The sewer basins and their associated SRCSD interceptor load manholes are listed in Table 2, Contributing Agency Existing Model Loads, located at the end of this TM.

1.1 Sacramento

Sewer basins contributing to the SRCSD interceptor system were delineated based on a GIS file of City sewer basins (sewer_basins.shp) received from the City of Sacramento. These smaller City basins were compared with the City's sewer atlas to merge basins draining to the same SRCSD interceptor manhole. The boundaries were further modified for some basins based on examination of the City's sewer atlas and GIS files of city sewer pipes and manholes. The merged basins for the City of Sacramento are shown in **Figure 1** (North Sacramento) and **Figure 2** (South Sacramento). Note that the portions of the City of

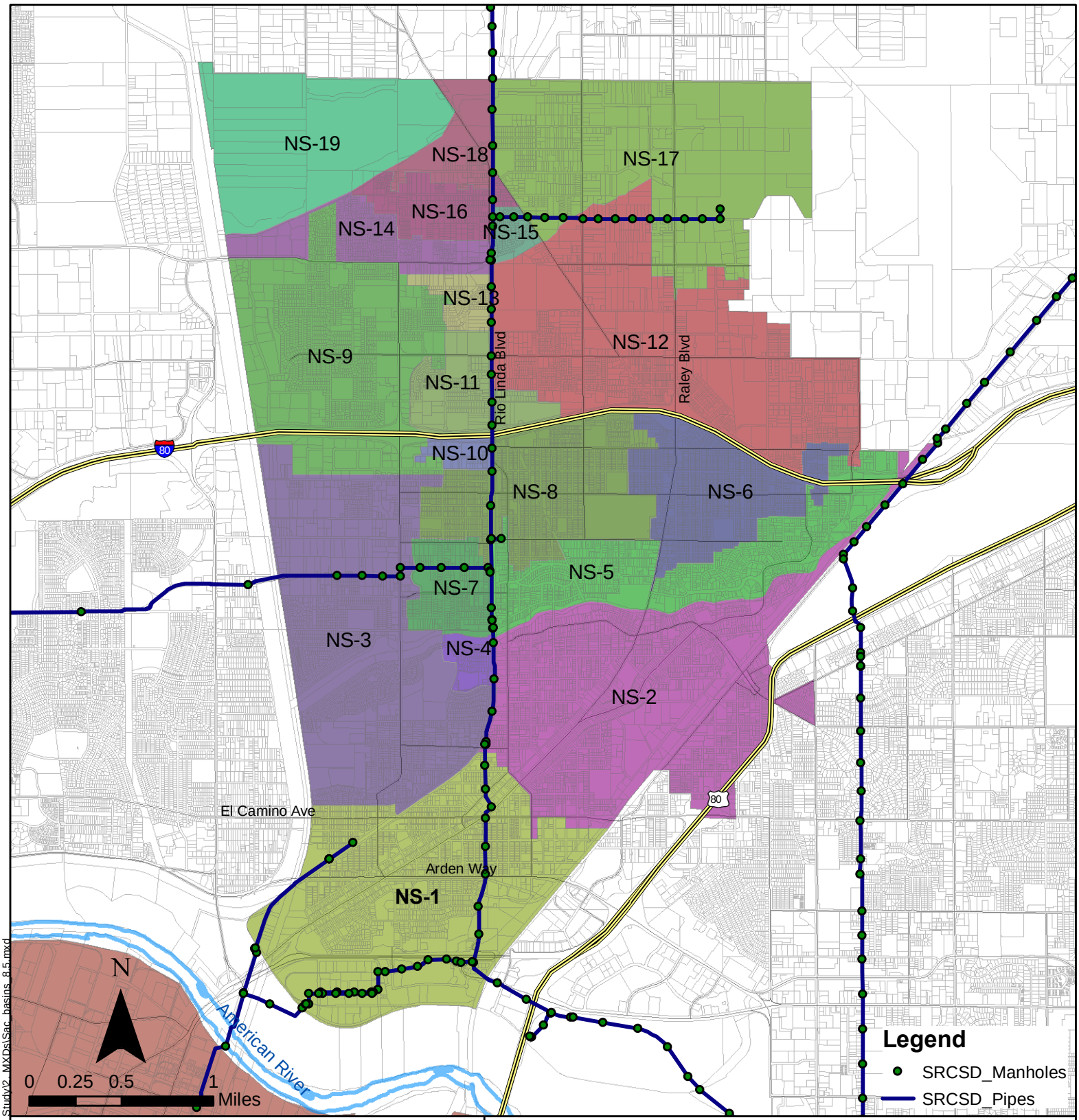

Figure 1

North Sacramento Sewer Basins

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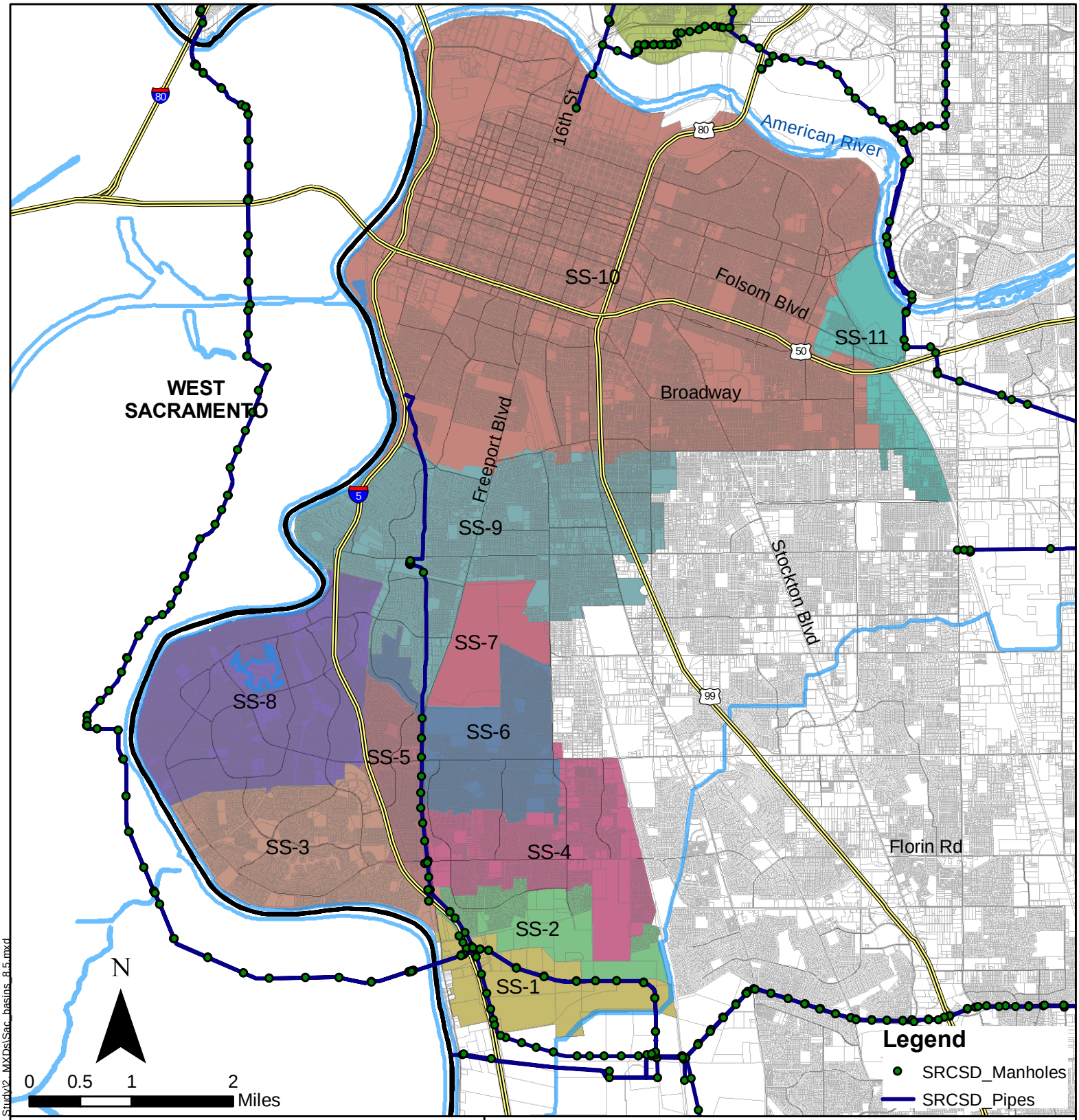

Figure 2

South Sacramento Sewer Basins

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Sacramento that are part of SASD are included in the SASD model maintained by Capacity Management staff and are not addressed in this TM.

In some cases, a basin which does not discharge directly to the interceptor but discharges into another sewer basin was not merged with that downstream basin. This was the case with basin NS-9, which discharges to the City's Sump 87 pump station. Flows from Sump 87 are currently conveyed into the City's Basin 85 (interceptor basin NS-3). Since the City is considering diverting flows from Sump 87 directly eastward to the interceptor in the future, these two basins were kept separate to allow for modeling of this potential diversion.

Similarly, basin NS-6 does not discharge directly to the interceptor but discharges into basin NS-2, with potential overflow via a weir structure to basin NS-5. For this reason, basin NS-6 was kept as a separate basin, but a portion of its estimated load was allocated to basin NS-5, as discussed in the next section of the TM.

Basin SS-11 is a small area of the City of Sacramento's separate sewer system that discharges into the combined sewer system (basin SS-10). Although both basins discharge to the same location on the interceptor system (Sump 2), basin SS-11 was kept separate to allow for use of different wet weather parameters than those used for the combined system basin SS-10.

1.2 Folsom

Sewer basins for the City of Folsom were delineated based on the major flow sewersheds defined in the "City of Folsom Wastewater Collection System Capacity Analysis Update" (February 2008) and provided as a GIS file (*basins.shp*) by the City of Folsom. These City sewersheds were merged into three sewer basins, each representing an area that drains to the same SRCSD manhole or pump station. Specifically, the basins represent the areas tributary to Folsom's 27-inch trunk sewer (basin F-1), 33-inch trunk sewer (basin F-2), and the SRCSD Iron Point Road Pump Station (basin F-3). A future Basin F-4 was defined to represent the City's future annex area south of Highway 50. The merged sewer basins for Folsom are shown in **Figure 3**.

1.3 West Sacramento

Sewer basins for the City of West Sacramento were delineated based on the City of West Sacramento's "Wastewater Master Plan and Connection to the Lower Northwest Interceptor" (April 2003) and the "Southport Sanitary Sewer Master Plan" (April 2003). Sewer basin boundaries were digitized in GIS based on the mapping included in these reports and GIS files of sewer pipes and manholes provided by the City. Sewer basins defined in the Southport Sanitary Sewer Master Plan that drained to the same pump station or SRCSD manhole were merged. An additional sewer basin (WS-5) was delineated corresponding to an area of future development in the southern part of the City. The merged sewer basins for West Sacramento are presented in **Figure 4**.

2 Development of Existing Base Wastewater Flow Loads and Contributing Areas

Base wastewater flow (BWF) represents sanitary flow contributions from residential, commercial, industrial, and institutional dischargers. SRCSD traditionally expresses these contributions in the form of "equivalent single family dwelling units," or ESDs. An ESD represents the flow equivalent of the average BWF contributed by a single family home. SRCSD assumes that a multi-family residential dwelling unit has a BWF contribution of 0.75 ESDs. Non-residential flow equivalents vary by size of enterprise and type of use.

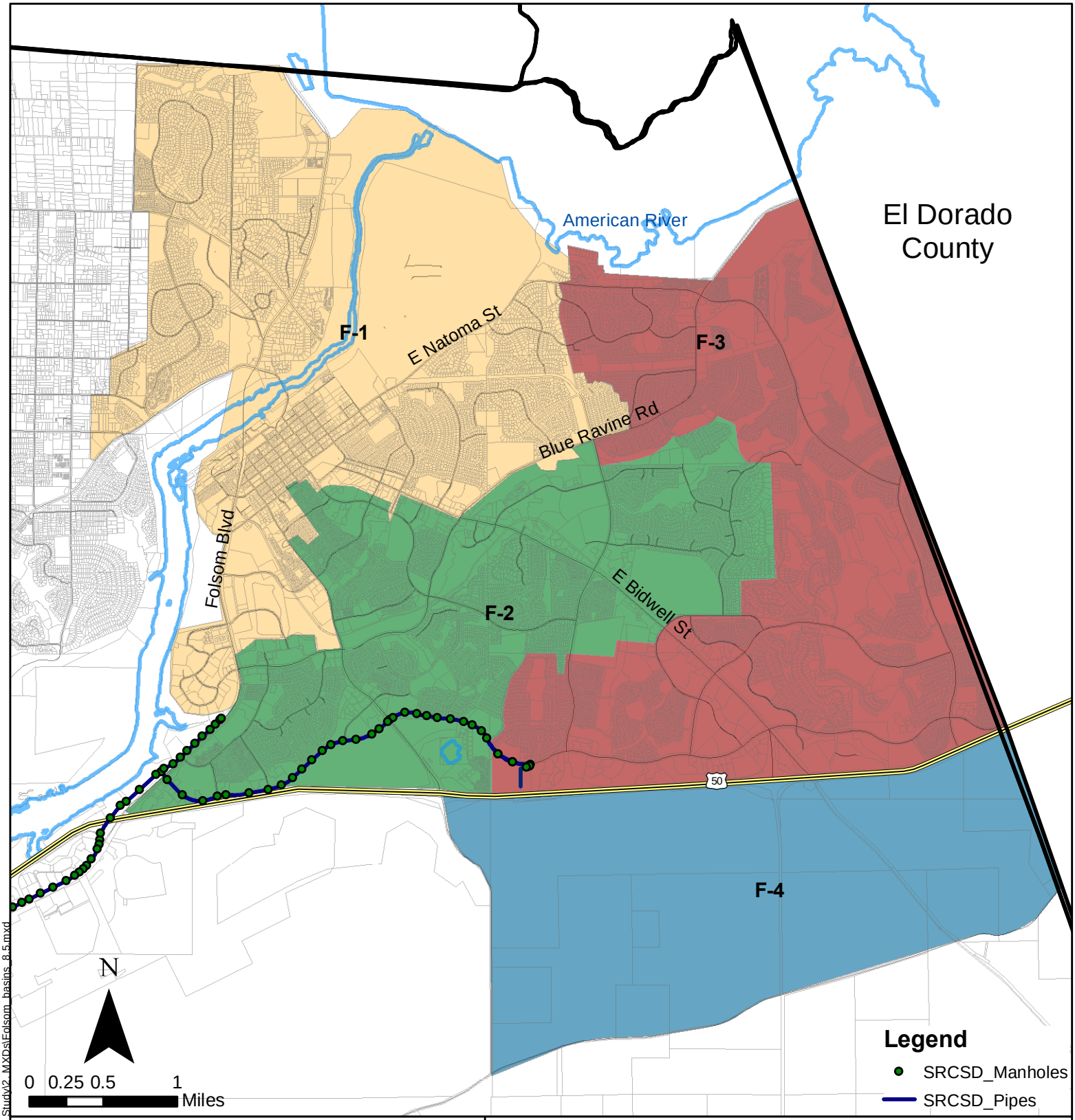

Figure 3

Folsom Sewer Basins

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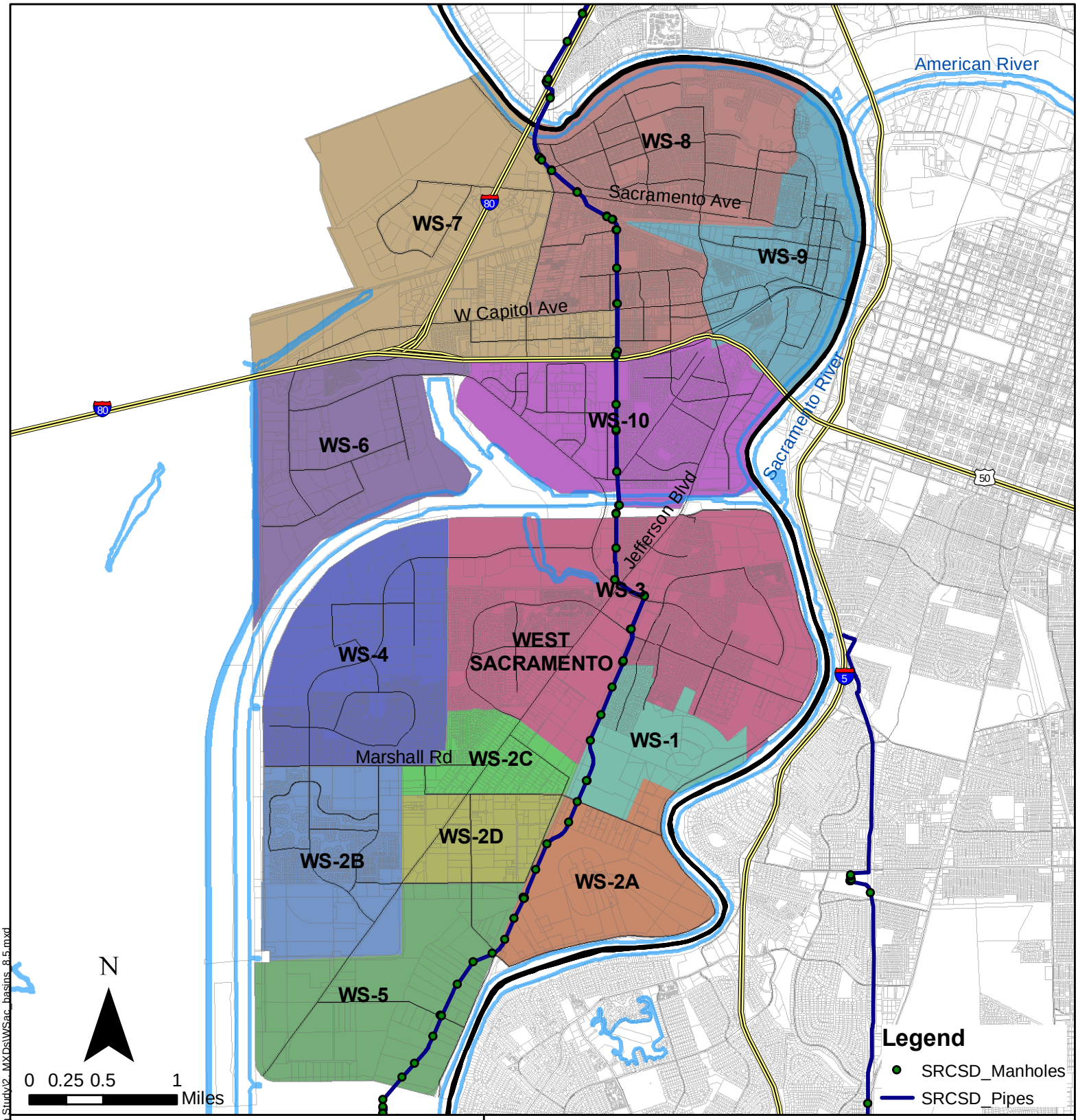

Figure 4

West Sacramento Sewer Basins

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While SRCSD has historically used a design BWF value of 310 gpd/ESD, it is well documented by flow monitoring data that actual flow contributions are lower. Therefore, 280 gpd/ESD was used for the initial development of existing contributing agency loads for this study.

SASD maintains a comprehensive customer billing database which identifies the actual number of ESDs for each parcel in its service area. This type of data, however, is not available for the other contributing agencies. Therefore, alternative methods had to be used to develop existing BWF loads, depending on the specific data available for each agency. The specific methodologies used for Sacramento, Folsom, and West Sacramento are described in the subsections below.

Contributing area is the size of an area (in acres) that potentially contributes infiltration and inflow (I/I) to the sewer system. Contributing area may be expressed as a net acreage (e.g., sum of parcel lot sizes for sewered parcels) or gross acreage. Existing contributing areas were developed for each sewer basin as part of the development of BWF loads, as discussed in the sections on dry and wet weather calibration later in this TM.

The existing BWF loads and contributing areas for all sewer basins are listed in Table 2, Contributing Agency Existing Model Loads, located at the end of this TM.

2.1 Sacramento

Existing BWF loads for the City of Sacramento were developed based on parcel, land use, and sewer connection information. The parcel GIS file (landuse_finalv3.shp) received from the City of Sacramento contained information on the 2005 land use for each parcel in the City. This file was compared with three other GIS files to assign additional information to each parcel:

1. The merged sewer basin shapefile (as described above in Section 1.1) was used to assign a sewer basin to each parcel.
2. xyCoords_full.shp, a sewer connection shapefile created from an Excel table provided by the City of coordinates for all sewer connections in the City, was used to determine which parcels had active connections and whether the connection type was commercial or residential. Parcels with multiple sewer connection types were assigned the most common type.
3. Address_with_basins.shp, an address shapefile received from the City, was used to determine the number of units present in each parcel for residential connections.

ESDs for each connected parcel were determined based on the sewer connection type and land use as shown in **Table 1**.

Parcels without a sewer connection were assigned zero ESDs. Large parcels identified by land use mapping as Transportation, Public Use, Parks, and Open Space were examined on aerial photography, and ESDs were edited to an appropriate value.

Contributing acreage was set equal to parcel acreage, up to a maximum of 1 acre/ESD (so as not to overestimate I/I from very large, underdeveloped parcels). Contributing acreage and ESDs from each parcel were then summed by merged sewer basin to determine total load at each SRCSD loading node.

As noted previously, discussions with City of Sacramento staff revealed that a weir structure diverted flows from basin NS-6 through both the NS-2 and NS-5 basins. Therefore, a portion of the contributing acreage and ESDs in NS-6 was allocated to basin NS-5. The allocation was based on analysis of the meter data as part of dry weather calibration, discussed later in this TM.

Table 1 – ESD Calculation for City of Sacramento

Connection Type[1]	Land Use[2]	ESDs
Residential	Single-Family Residential[3]	# Units * 1
	Multi-Family Residential[3]	# Units * 0.75
Commercial	Commercial[4]	Acreage * 3
	Industrial[5]	Acreage * 1

Notes:
1. Type of connection as defined in City of Sacramento active connections data.
2. Type of use determined based on information in the parcel (landuse_finalv3) shapefile.
3. No of units determined based on # of addresses in the parcel.
4. Commercial parcels assumed to have 3 ESDs/acre based on typical average existing non-residential ESD density for SASD.
5. Industrial parcels were originally assumed to have 3 ESDs/acre, but this value was reduced to 1 ESD/acre based on dry weather model calibration.

2.2 Folsom

Existing loadings for City of Folsom sewer basins were developed using the 2008 version of Folsom's InfoWorks model. The model includes estimated population, non-residential flow, and contributing area for each sewershed (subcatchment) in the Folsom system based on the methodology described in the City's 2008 Wastewater Collection System Capacity Analysis Update. As described in that report, population and non-residential land uses were determined based on existing sewer accounts, 2007 Draft Zoning Map designations, and General Plan land use densities.

Folsom's model was calibrated to flow monitoring data, resulting in use of different per capita unit flow factors for each sewershed. The factors ranged from 65 to 135 gpcd. For purposes of estimating loads for the interceptor basins, sewershed populations were adjusted to determine the equivalent population based on an assumed per capita flow of 100 gpcd. Non-residential flows for Folsom were based on Folsom's assumed areal flow factors of 1,500 gpd/acre for commercial and industrial land uses and 1,000 gpd/acre for schools. Folsom Prison was considered a point load of 1 mgd in the model (however, the Capacity Analysis Update report states that the flow from Folsom Prison is 1.25 mgd).

The total equivalent population, non-residential flow (designated as "additional foul flow" in the InfoWorks model), and contributing areas were summed for the sewersheds located within each interceptor sewer basin. Note that the existing loadings for the Folsom sewer basins are not expressed as ESDs, but could be converted if necessary using appropriate flow conversion factors.

2.3 West Sacramento

The City of West Sacramento did not have sufficient existing land use or sewer connection information to develop specific BWF loads by parcel or sewer basin. Therefore, existing ESDs for the sewer basins were estimated by fitting modeled flow to metered pump station data, as discussed later in this TM. Where multiple sewer basins contributed to the same pump station, ESDs were allocated in proportion to the estimated sewered area in each merged sewer basin. Sewered areas were estimated as total basin area for most basins, or based on the aggregate of all parcels appearing to be served by (e.g., adjacent to) existing sewers based on GIS sewer mapping for partially-sewered basins (e.g., WS-1). Contributing

acreage was calculated based on the total gross sewered area of the basin. Note that estimates of existing ESDs were not made for basins that do not drain to pump stations (i.e., WS-1).

3 Model Load Calibration

To verify the estimates of existing BWF loads and to determine appropriate I/I rates and parameters for existing development for the contributing agencies, a model was developed in InfoWorks to represent the contributing interceptor sewer basins. The model does not include a true sewer network, only a set of "dummy" pipes, each representing the flow from a specific sewer basin discharging to the interceptor system. This allows use of the capabilities of the InfoWorks model software to compare modeled versus metered flows, as well as to develop the loading data for the sewer basins (called "subcatchments" in InfoWorks) in a format that can be easily uploaded to the interceptor model.

Flow monitoring data for calibration of the contributing agency load "model" were derived from several sources, as listed below:

- Temporary flow monitoring conducted as part of the ISS from late January through March 2008 on major trunk sewers in the City of Sacramento sewer system that discharge to SRCSD interceptors.
- Pump station flow data from the City of Sacramento for Sumps 2, 21, 55, and 119 (note: the data for Sump 55 was found to be suspect, therefore was not used).
- Temporary flow monitoring data conducted for the City of Sacramento in the winter 2007/08 as part of its ongoing sewer master plan for Basins 85 and 87.
- Flow monitoring data for permanent meters installed in the City of Folsom sewer system on the City's 27- and 33-inch trunk sewers.
- Pump station flow data for the SRCSD Iron Point Road (FE3B) Pump Station.
- Pump station flow data for City of West Sacramento pump stations.

Only loads for basins with available flow monitoring data were calibrated using the model. For other basins, generally smaller ones, BWF characteristics and I/I parameters were assumed to be similar to adjacent calibrated basins.

3.1 Dry Weather Flow Calibration

The purpose of dry weather flow calibration is to verify that the estimates of ESDs (or population), BWF unit flow factors, diurnal BWF profiles, and estimated groundwater infiltration (GWI) rates result in model flows that reasonably match actual measured flows for dry weather (non-rainfall) periods. For the contributing agency load model, non-rainfall days during the January through March 2008 temporary flow monitoring period were used for dry weather calibration.

As discussed previously, an ESD flow factor of 280 gpd was selected to represent the existing average BWF contribution in the SRCSD service area for purposes of estimating contributing agency loads. This value is generally consistent with historical flow data, although it is recognized that actual unit flows may vary from one area to another. (For Folsom, as noted previously, a unit factor of 100 gpcd was used because the City has population-based residential loading estimates.)

The BWF diurnal profile developed and used for previous SASD models was initially used for all sewer basins. To better match the flow patterns for some basins, alternate diurnal patterns for both residential and industrial areas were created, as well as distinct weekday and weekend profiles. Graphs of the diurnal profiles used for the contributing agency basins are shown in **Attachment A** to this TM.

Where modeled flows were found to be lower than measured flows, it was assumed that the difference represented GWI. GWI was estimated based on the difference between modeled and measured average

flows during non-rainfall periods, and converted to areal rates (gpd/acre) based on the basin contributing area.

The contributing agency dry weather calibration results (plots comparing measured to model-simulated flows, called "observed vs. predicted graphs" in InfoWorks) are included in **Attachment B** to this TM. The resulting BWF, diurnal profiles, and GWI rates for all basins are tabulated in Table 2, Contributing Agency Existing Model Loads, at the end of this TM.

It should be noted that the approach used for dry weather calibration for the non-SASD contributing agencies, as described in this TM, differs from that currently used by the SASD Capacity Management section. SASD develops specific ESD rates (gpd/ESD) and diurnal profiles for each flow meter area. The ESD rates and diurnal profiles are assumed to include GWI. While it may not be essential that the calibration approach used for all SRCSD contributing agencies be the same, it will be important to understand the differences when comparing flow parameters (e.g., ESD factors and I/I rates) between agencies. This issue will likely need to be further explored later in the ISS project.

3.1.1 Sacram ento

For the City of Sacramento sewer basins, the estimated average BWF was calculated by the model based on the ESD loads determined as described in Section 2.1 of this TM, using an average BWF factor of 280 gpd/ESD. The model-calculated flows were compared to measured average dry weather (non-rainfall period) flows for each of the flow monitoring locations. Where the difference between modeled and metered flows differed significantly, further investigation was conducted. This led to some modifications in ESD loads (for example, assumed contributing acreages for some large non-residential parcels were reduced based on land use type and review of aerial photography, adjustments were made to basin NS-6 loadings because of the flow split described previously in this TM, etc.).

As noted above, in cases where measured dry weather flows were higher than model-calculated flows, it was assumed that the difference represented GWI. Calculated GWI rates ranged from zero to 1,400 gpd/acre (in basin SS-3). The high GWI in basin SS-3, in the "pocket" area of Sacramento, is consistent with studies conducted by the City.

In general, the calibration resulted in reasonably good matches (within about 10 percent) of dry weather flows.

3.1.2 Fol som

For Folsom, model-generated flows based on the merged and adjusted data in the City's InfoWorks model, as described in Section 2.2 of this TM, were compared to the City's flow monitoring data for the 27- and 33-inch trunks and data from SRCSD's Iron Point Pump Station. Overall, the modeled flows matched very well to the meter flows. Some GWI was added for basins F-2 and F-3.

3.1.3 West Sacramento

As discussed previously, there was not sufficient information available to develop estimates of ESDs for West Sacramento. Therefore, ESDs by basin were back-calculated based on metered pump station flows, assuming an ESD rate of 280 gpd and GWI as needed to give a reasonable match with the pump station flow and diurnal pattern. Two of the pump stations (Largo and South) had poor flow data; therefore, engineering judgment was used as necessary to estimate ESDs and GWI for the basins tributary to these pump stations.

3.2 Wet Weather Flow Calibration

Wet weather calibration was conducted using the same sources of flow monitoring data as described above for dry weather calibration. The primary period used for wet weather calibration was the month of

January 2008, during which major storm events occurred on January 4 and January 22 (for the temporary meters installed for this ISS project in the City of Sacramento system, only data for the January 22 event was available).

The wet weather calibration process was used to determine appropriate model rainfall-dependent infiltration/inflow (RDI/I) parameters for each of the contributing agency basins, using the InfoWorks fixed runoff model and the same three RDI/I components (called "runoff surfaces" in InfoWorks) as used in the SASD model. The three runoff surfaces represent, respectively, fast, medium, and slow responses to rainfall. The calibration process determined the percentage of rainfall entering the sewer system for each of the three runoff surfaces for each basin.

The contributing agency wet weather calibration results are included in **Attachment C** to this TM. The resulting RDI/I percentages for all basins are tabulated in Table 2, Contributing Agency Existing Model Loads, at the end of this TM.

4 Development of Buildout Model Loads

The ISS project team has developed preliminary criteria and methodology for estimating future flow inputs to the SRCSD interceptor system. The concept includes development of "realistic" and "conservative" land use criteria. "Realistic" criteria assumes future development and redevelopment at densities that are similar to existing or recent development in the Sacramento area. Realistic densities would be used primarily for evaluating the performance of existing facilities and the timing of need for new interceptors. "Conservative" criteria are values at the higher end of allowable density ranges, and would primarily be used for sizing future interceptor facilities. More detailed discussion of design flow criteria are presented in a separate TM prepared for the ISS.

Buildout model loads were developed based on land use maps and planning documents of the contributing agencies and their land use jurisdictions. Specifically, a Consolidated Land Use (CLU) Map representing the most current planning information from all of the land use jurisdictions within the SRCSD study area was created from available land use GIS and other planning data sources. The CLU map utilizes a set of consolidated land use categories, each with defined realistic and conservative ESD densities. The CLU map was used to estimate the realistic and conservative buildout ESDs for new development and redevelopment areas in the SRCSD study area. (As discussed below, a different methodology was used for Folsom, since the City already has an InfoWorks model with a defined buildout scenario.) Specifically, future ESDs for all parcels that are not currently connected to the sewer system, or parcels located within areas specifically identified as future development or redevelopment areas, were determined based on this CLU map. Detailed descriptions of the process and assumptions used to develop the CLU map and identify future development and redevelopment areas are provided in a separate TM.

The following subsections describe the development of buildout model loads for each of the non-SASD contributing agencies. The resulting buildout loads for all basins are tabulated in Table 3, Contributing Agency Buildout Model Loads, at the end of this TM. Note that model loads for interim conditions between existing and buildout were developed subsequent to the work described in this TM and are documented separately.

4.1 Sacramento

For the City of Sacramento, the current connection status of each parcel was defined through the existing load development process described previously. For parcels identified as not currently connected, or for parcels located within an identified new development or redevelopment area, the appropriate CLU category was assigned to the parcel based on a spatial overlay of the CLU map. The realistic and conservative ESDs were then computed for the parcel based on its area in acres and the densities

(ESDs/acre) associated with its CLU category. Contributing areas were calculated in the same way as for existing loads. Finally, the total ESDs for realistic and conservative scenarios and total contributing acres for new development and redevelopment parcels were summed by merged sewer basin to determine the total incremental buildout load for each SRCSD loading node.

4.2 Folsom

Folsom's 2008 InfoWorks model includes model data for both existing and buildout scenarios. In Folsom's model, buildout loads are identified as distinct subcatchments. This enabled the incremental buildout population (converted to equivalent population based on an assumed per capita flow of 100 gpd, as was done for existing population) and non-residential flow to be determined for each sewer subbasin and associated interceptor basin. The model only includes the area within the existing City limits; therefore, the City's model buildout estimates do not include the South of Highway 50 area.

As described previously in the discussion of the development of existing BWF loads, Folsom's data includes estimated residential population and estimated non-residential flow, computed based on General Plan densities and assumed unit flow factors as documented in the 2008 Capacity Analysis Update report. Based on these densities and flow factors used, Folsom's projections would appear to be more consistent with the "conservative" densities developed for the CLU map. Therefore, the model projections were assumed to represent the conservative scenario, and the equivalent populations and non-residential flows for the realistic scenario were estimated as 70 percent of the conservative values. This ratio is consistent with the typical ratio of realistic to conservative densities developed for the CLU categories.

For the South of Highway 50 area, proposed land uses, as shown in the Land Use Statistics table on the City's Folsom SOI Conceptual Land Use Plan, were converted to CLU categories, as described previously, and realistic and conservative ESD projections were calculated accordingly.

4.3 West Sacramento

For the City of West Sacramento, it was assumed that buildout loads would be accurately represented using the CLU map. Land uses from the CLU map were spatially overlayed on the merged sewer basins to determine buildout land uses in each sewer basin. Realistic and conservative ESDs were then computed based on the area in acres and the densities associated with the CLU categories. Contributing areas were calculated by summing the area from the CLU categories that contribute to BWF. Finally, the total ESDs for realistic and conservative scenarios and total contributing acres were summed by merged sewer basin and compared with the existing loads to determine the total incremental buildout load for each SRCSD loading node.

5 Summary of Model Loads

The existing interceptor basins and associated model loads and I/I parameters for the non-SASD contributing agencies are summarized in **Table 2.** **Table 3** presents the incremental and total buildout loads.

Table 2
Contributing Agency Existing Model Loads

Interceptor Basin	SRCSD Load Node	Meter[a]	Contributing Agency Basins	Cont. Area (ac)	Pop.[b]	Non-Res. Flow[c] (mgd)	Diurnal Profile	Est. BWF (mgd)	GWI rate (gpad)	GWI (mgd)	Fast RDI/I Percent	Medium RDI/I Percent	Slow RDI/I Percent	Total RDI/I Percent	RDI/I and GWI Assumptions
NS-1	N17-MH0014A	Meter 8	84, 304, 305	511	3,027	-	Alt Res	0.85		-	1.5	1.5	0.5	3.5	
NS-2	N17-MH0023A	Meters 6&7	79, 80, 81, 303	609	2,971	-	Alt Res	0.83		-	3.5	5.0	8.5	17.0	
NS-3	N17-MH0023A	Sump 85	85	488	2,891	-	Res	0.81	625	0.60	3.5	2.5	0.5	6.5	
NS-4	N17-MH0026A		part of 303	25	139	-	Res	0.04	625	0.02	3.5	2.5	0.5	6.5	Same as NS-3
NS-5	N17-MH0028F	Meter 5	part of 303	242	2,327	-	Alt Res	0.65	650	0.16	6.5	6.5	8.5	21.5	
NS-6	N17-MH0023A	Meters 6&7	part of 303	198	378	-	Alt Res	0.11		-	3.5	5.0	8.5	17.0	
NS-7	N17-MH0028C		105	57	245	-	Res	0.07	625	0.04	3.5	2.5	0.5	6.5	Same as NS-3
NS-8	N17-MH0030A	Meter 4	303	280	1,539	-	Alt Res	0.43	500	0.14	3.5	5.0	8.5	17.0	
NS-9	N17-MH0023A	Sump 87	87, 131	468	2,245	-	Res	0.63	475	0.22	1.0	1.5	2.0	4.5	
NS-10	N17-MH0032A		part of 303	11	37	-	Res	0.01	475	0.01	1.0	1.5	2.0	4.5	Same as NS-9
NS-11	N17-MH0035A		part of 301	74	524	-	Res	0.15	475	0.04	1.0	1.5	2.0	4.5	Same as NS-9
NS-12	N17-MH0037A	Meter 3	302, 106	351	1,305	-	Res	0.37	150	0.05	1.0	2.0	3.0	6.0	
NS-13	N17-MH0039A		part of 301	22	100	-	Res	0.03	475	0.01	1.0	1.5	2.0	4.5	Same as NS-9
NS-14	N17-MH0041A	Meter 2	146, SW part of 301	101	486	-	Res	0.14		-	1.5	2.5	4.0	8.0	
NS-15	N17-MH0043A		part of 301	19	135	-	Res	0.04		-	1.5	2.5	4.0	8.0	Same as NS-14
NS-16	N17-MH0045A		NW part of 301	79	289	-	Res	0.08		-	1.5	2.5	4.0	8.0	Same as NS-14
NS-17	N17-MH0046A	Meter 1	146, west part of 301	185	369	-	Alt Res	0.10		-	1.0	1.5	2.0	4.5	
NS-18	N17-MH0046A		west part of 301	15	47	-	Res	0.01		-	1.0	1.5	2.0	4.5	Same as NS-17
NS-19	N17-MH0048A		306	0	0	-	Res	-		-	1.0	1.5	2.0	4.5	Same as NS-17
SS-1	N25-MH0018A		88	16	47	-	Res	0.01	350	0.01	6.5	3.0	2.0	11.5	Same as SS-2
SS-2	N25-MH0021A	Meter 12	53, part of 354	203	1,301	-	Res	0.36	350	0.07	6.5	3.0	2.0	11.5	
SS-3	N25-MH0023A	Meter 11	135, 136, 137, 143, 145, part of 354	941	6,581	-	Res	1.84	1,400	1.32	1.2	1.5	1.0	3.7	
SS-4	N25-MH0025A	Meter 10	40, 45, 49, 57, part of 354	933	4,915	-	Res	1.38	200	0.19	2.5	1.5	2.0	6.0	
SS-5	N25-MH0025A	Meter 9	40, 45, 49, 57, part of 354	329	1,541	-	Alt Res	0.43		-	2.5	1.5	2.0	6.0	
SS-6	N25-MH0033A	Sump 21	21	748	4,125	-	Alt Res	1.15		-	3.5	1.0	0.5	5.0	
SS-7	N25-MH0035A		355	2	2	-	Ind	0.00		-	3.5	1.0	0.5	5.0	Same as SS-6
SS-8	N25-MH0035A	Sump 55	55, 127, 127	1,556	9,726	-	Res	2.72	1,400	2.18	1.2	1.5	1.0	3.7	Same as SS-3
SS-9	N25-MH0035A	Sump 119	119, 42, 120, 121	2,181	11,195	-	Alt Res	3.13	225	0.49	3.5	5.0	0.5	9.0	
SS-10	N25-MH0035A	Sump 2	Combined	5,564	43,032	-	Res	12.05	825	4.59	20.0	10.0	5.0	35.0	
SS-11	N25-MH0035A	Sump 2	32,48	529	1,876	-	Res	0.53		-	3.5	1.0	0.5	5.0	Same as SS-6
F-1	N37-MH0066D	27" trunk	1-6, 14	3,901	19,976	1.633	Folsom	3.63		-	0.5	0.5	1.0	2.0	
F-2	N37-MH0066D	33" trunk	10-13, 15, 17	2,496	25,218	0.880	Folsom	3.40	350	0.88	1.0	2.5	4.0	7.5	
F-3	N40-MH0003A	FE3B PS	7-9, 16	2,272	12,783	0.348	Folsom	1.63	100	0.23	0.0	1.0	0.5	1.5	
WS-1	N55-MH0016A		Area 4	69	0	-	Res	-	150	0.01	0.3	0.3	0.5	1.0	Same as WS-2
WS-2A	N55-MH0011A		Area 2	0	0	-	Res	-	150	-	0.3	0.3	0.5	1.0	Same as WS-2
WS-2B	N55-MH0011A	Largo PS	Area 1	385	985	-	Res	0.28	150	0.06	0.3	0.3	0.5	1.0	
WS-2C	N55-MH0011A	Largo PS	Area 1, 3	68	174	-	Res	0.05	150	0.01	0.3	0.3	0.5	1.0	
WS-2D	N55-MH0011A		Area 1	0	0	-	Res	-	150	-	0.3	0.3	0.5	1.0	Same as WS-2
WS-3	N55-MH0020A	Southport PS	Areas 5,6,8,9,10,11,12	1,470	3,600	-	Res	1.01	210	0.31	0.4	0.3	0.3	0.9	
WS-4	N55-MH0020A	Bridgeway PS	Area 7	523	1,382	-	Res	0.39	110	0.06	0.5	0.5	1.0	2.0	
WS-5	N55-MH0005A			0	0	-	Res	-	150	-	0.3	0.3	0.5	1.0	Same as WS-2
WS-6	N55-MH0020A	Industrial PS	Industrial	912	1,108	-	Alt Ind	0.31	110	0.10	0.4	0.0	0.3	0.6	
WS-7	N55-MH0020A	Northport PS	Northport	1,652	2,551	-	Ind	0.71	130	0.22	0.8	0.0	0.3	1.0	
WS-8	N55-MH0020A	Bryte PS	Bryte	1,578	4,983	-	Res	1.40	360	0.57	1.0	0.0	0.0	1.0	
WS-9	N55-MH0020A	Jefferson PS	Jefferson	843	1,008	-	Res	0.28	210	0.18	0.9	0.0	0.0	0.9	
WS-10	N55-MH0020A	South PS	South	1,163	1,855	-	Res	0.52	210	0.12	0.9	0.0	0.0	0.9	Same as WS-9

[a] Meter X from 2008 ISS flow monitoring program; others are contributing agency permanent meters

[b] Represents total ESDs for Sacramento and West Sacramento; equivalent residential population for Folsom

[c] Non-residential flow for Folsom only

Table 3
Contributing Agency Buildout Model Loads

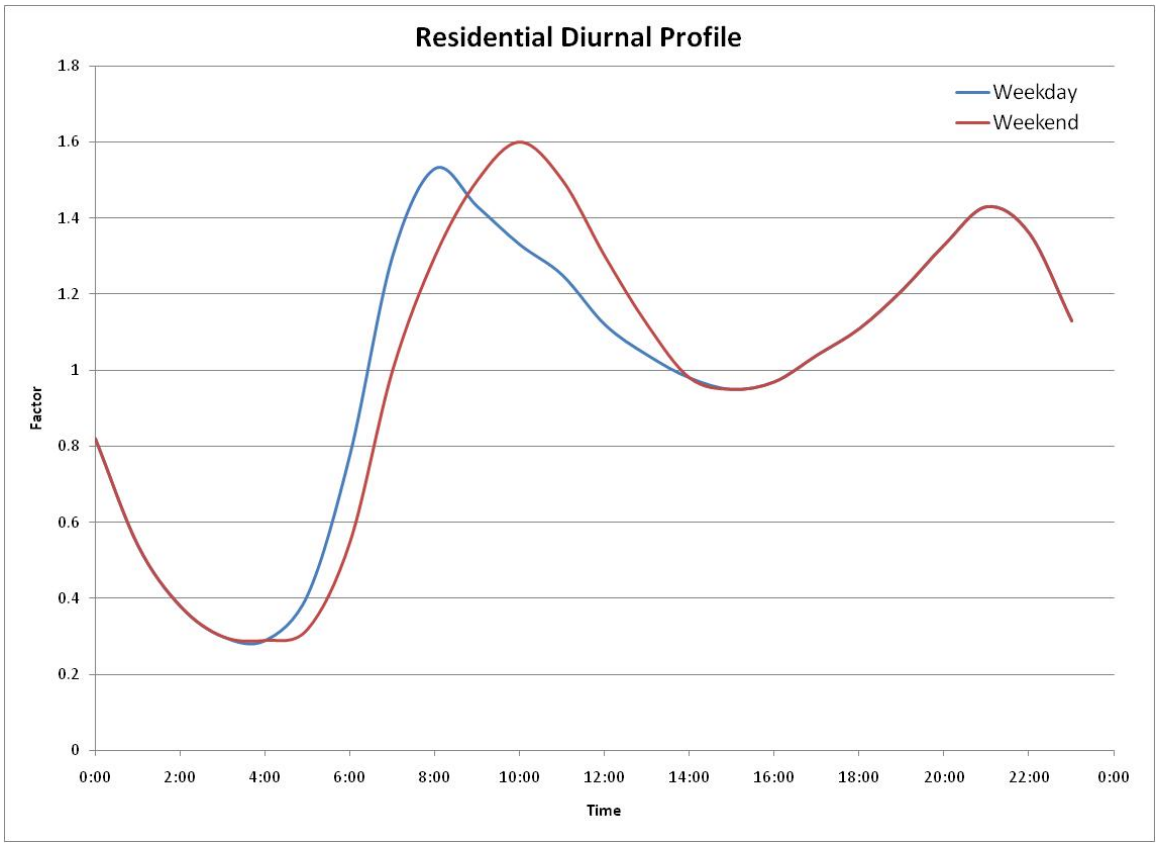
Interceptor Basin	SRCSD Load Node	Existing			Incremental Buildout					Total Buildout				
		Cont. Area (ac)	Pop.[a]	Add'l. Flow[b] (mgd)	Cont. Area (ac)	Realistic Pop.[a]	Conserv. Pop.[a]	Realistic Flow[b] (mgd)	Conserv. Flow[b] (mgd)	Cont. Area (ac)	Realistic Pop.[a]	Conserv. Pop.[a]	Realistic Flow[b] (mgd)	Conserv. Flow[b] (mgd)
NS-1	N17-MH0014A	511	3,027	-	283	1,936	2,600	-	-	793	4,964	5,628	-	-
NS-2	N17-MH0023A	609	2,971	-	208	1,789	2,352	-	-	818	4,760	5,323	-	-
NS-3	N17-MH0023A	488	2,891	-	227	1,694	2,228	-	-	715	4,585	5,119	-	-
NS-4	N17-MH0026A	25	139	-	0	4	6	-	-	25	144	145	-	-
NS-5	N17-MH0028F	242	2,327	-	95	660	854	-	-	336	2,986	3,181	-	-
NS-6	N17-MH0023A	198	378	-	34	403	551	-	-	231	781	929	-	-
NS-7	N17-MH0028C	57	245	-	46	790	976	-	-	104	1,035	1,221	-	-
NS-8	N17-MH0030A	280	1,539	-	40	611	758	-	-	320	2,150	2,298	-	-
NS-9	N17-MH0023A	468	2,245	-	106	425	601	-	-	574	2,669	2,845	-	-
NS-10	N17-MH0032A	11	37	-	17	40	61	-	-	29	77	98	-	-
NS-11	N17-MH0035A	74	524	-	62	457	566	-	-	136	981	1,090	-	-
NS-12	N17-MH0037A	351	1,305	-	539	3,154	4,226	-	-	890	4,459	5,531	-	-
NS-13	N17-MH0039A	22	100	-	37	218	278	-	-	60	317	377	-	-
NS-14	N17-MH0041A	101	486	-	24	134	185	-	-	125	619	671	-	-
NS-15	N17-MH0043A	19	135	-	12	64	82	-	-	31	199	217	-	-
NS-16	N17-MH0045A	79	289	-	27	159	203	-	-	105	448	492	-	-
NS-17	N17-MH0046A	185	369	-	635	1,937	2,769	-	-	820	2,306	3,137	-	-
NS-18	N17-MH0046A	15	47	-	43	267	350	-	-	58	314	397	-	-
NS-19	N17-MH0048A	0	0	-	0	0	0	-	-	0	0	0	-	-
SS-1	N25-MH0018A	16	47	-	1,131	5,685	7,863	-	-	1,146	5,732	7,910	-	-
SS-2	N25-MH0021A	203	1,301	-	54	253	359	-	-	257	1,554	1,659	-	-
SS-3	N25-MH0023A	941	6,581	-	170	1,547	2,011	-	-	1,111	8,128	8,592	-	-
SS-4	N25-MH0025A	933	4,915	-	125	936	1,310	-	-	1,058	5,852	6,225	-	-
SS-5	N25-MH0025A	329	1,541	-	68	813	1,148	-	-	397	2,353	2,689	-	-
SS-6	N25-MH0033A	748	4,125	-	26	236	335	-	-	774	4,361	4,460	-	-
SS-7	N25-MH0035A	2	2	-	9	29	50	-	-	11	31	52	-	-
SS-8	N25-MH0035A	1,556	9,726	-	172	1,311	1,684	-	-	1,728	11,037	11,410	-	-
SS-9	N25-MH0035A	2,181	11,195	-	268	2,984	3,906	-	-	2,449	14,180	15,102	-	-
SS-10	N25-MH0035A	5,564	43,032	-	1,439	27,401	46,023	-	-	7,003	70,433	89,055	-	-
SS-11	N25-MH0035A	529	1,876	-	167	1,403	1,876	-	-	697	3,279	3,751	-	-
F-1[c]	N37-MH0066D	3,901	19,976	1.633	200	450	643	0.405	0.471	4,101	20,426	20,619	2.037	2.104
F-2	N37-MH0066D	2,496	25,218	0.880	304	2,218	3,169	0.194	0.278	2,800	27,437	28,387	1.074	1.158
F-3	N40-MH0003A	2,272	12,783	0.348	938	4,200	6,000	0.634	0.906	3,211	16,983	18,783	0.982	1.254
F-4	N37-MH0066D	0	0	-	3,329	9,159	13,690	-	-	3,329	9,159	13,690	-	-
WS-1	N55-MH0016A	69	0	-	1,258	1,258	1,832	-	-	1,327	1,258	1,832	-	-
WS-2A	N55-MH0011A	0	0	-	1,173	1,173	1,931	-	-	1,173	1,173	1,931	-	-
WS-2B	N55-MH0011A	385	985	-	1,760	775	1,630	-	-	2,145	1,760	2,615	-	-
WS-2C	N55-MH0011A	68	174	-	245	71	211	-	-	313	245	385	-	-
WS-2D	N55-MH0011A	0	0	-	318	318	370	-	-	318	318	370	-	-
WS-3	N55-MH0020A	1,470	3,600	-	8,491	4,891	7,716	-	-	9,961	8,491	11,316	-	-
WS-4	N55-MH0020A	523	1,382	-	3,348	1,966	3,849	-	-	3,872	3,348	5,231	-	-
WS-5	N55-MH0005A	0	0	-	4	4	5	-	-	4	4	5	-	-
WS-6	N55-MH0020A	912	1,108	-	2,691	1,583	3,427	-	-	3,603	2,691	4,535	-	-
WS-7	N55-MH0020A	1,652	2,551	-	4,726	1,022	2,996	-	-	6,378	3,573	5,547	-	-
WS-8	N55-MH0020A	1,578	4,983	-	10,151	5,168	8,204	-	-	11,729	10,151	13,187	-	-
WS-9	N55-MH0020A	843	1,008	-	10,885	9,877	12,234	-	-	11,728	10,885	13,242	-	-
WS-10	N55-MH0020A	1,163	1,855	-	5,853	3,998	6,165	-	-	7,016	5,853	8,020	-	-

[a] Represents total ESDs for Sacramento, West Sacramento, and Folsom basin F-4; equivalent residential population only for Folsom basins F-1, F-2, and F-3

[b] Non-residential flow for Folsom basins F-1, F-2, and F-3 only

[c] Buildout non-residential flow includes additional 0.25 mgd for Folsom prison

Attachment A
Diurnal Profiles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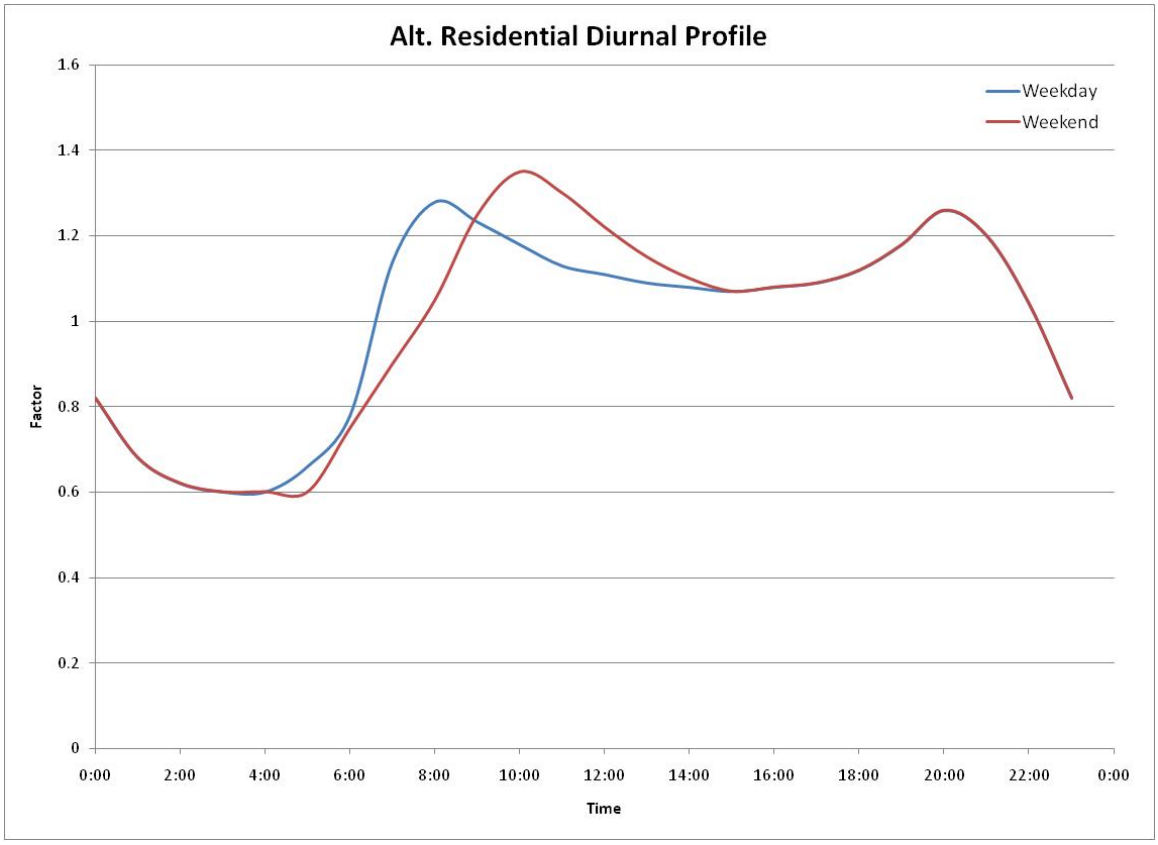
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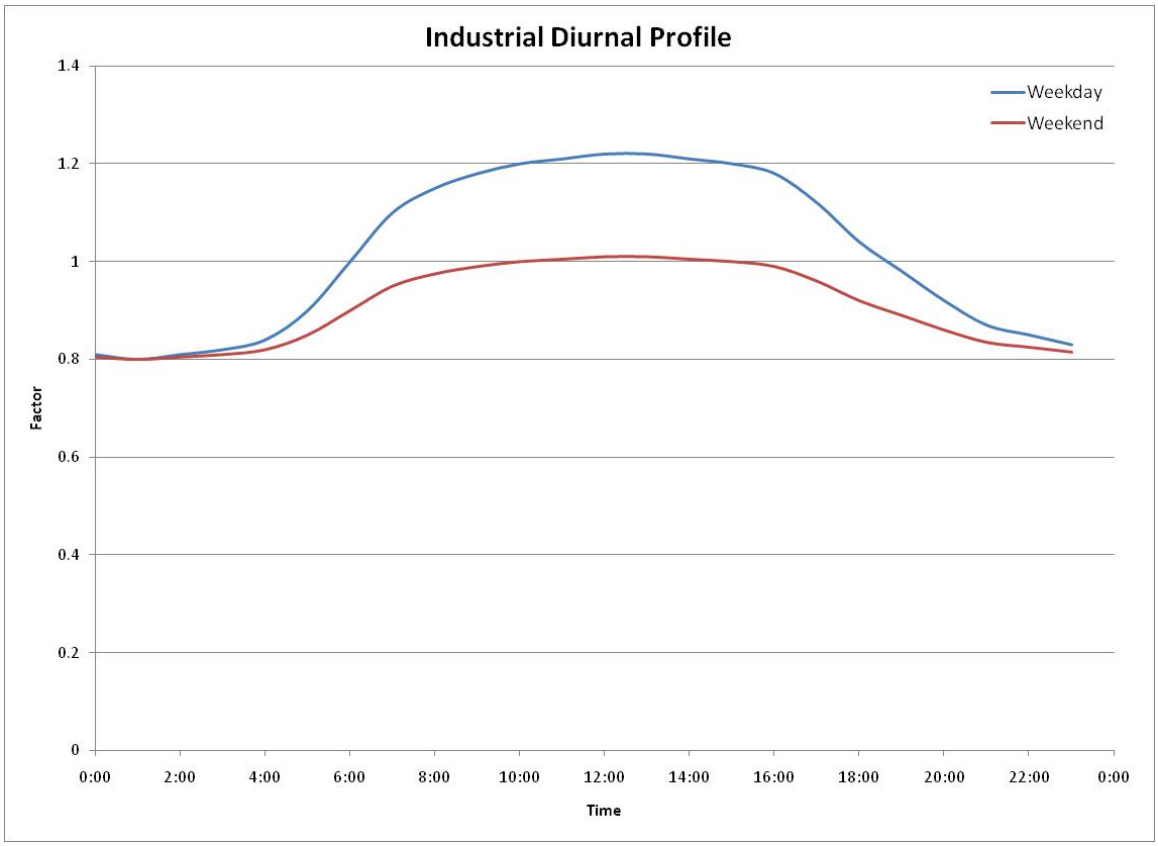
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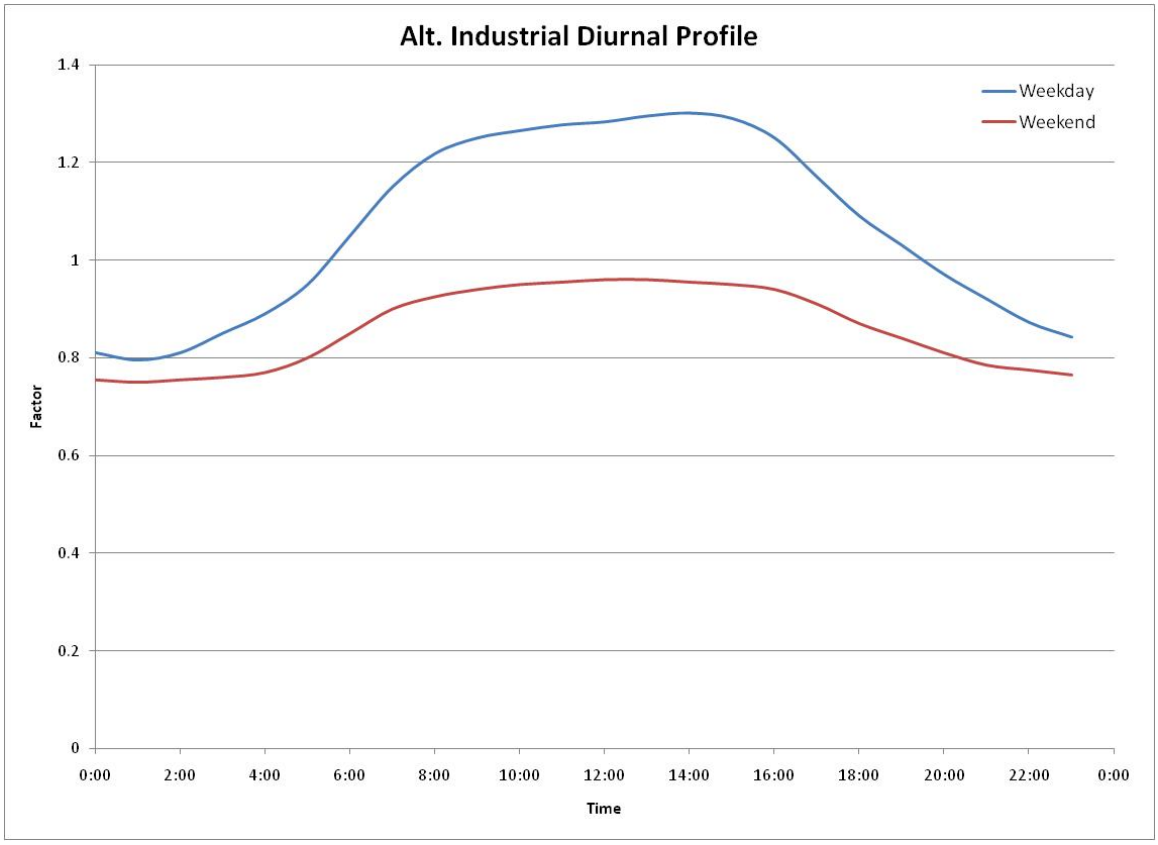
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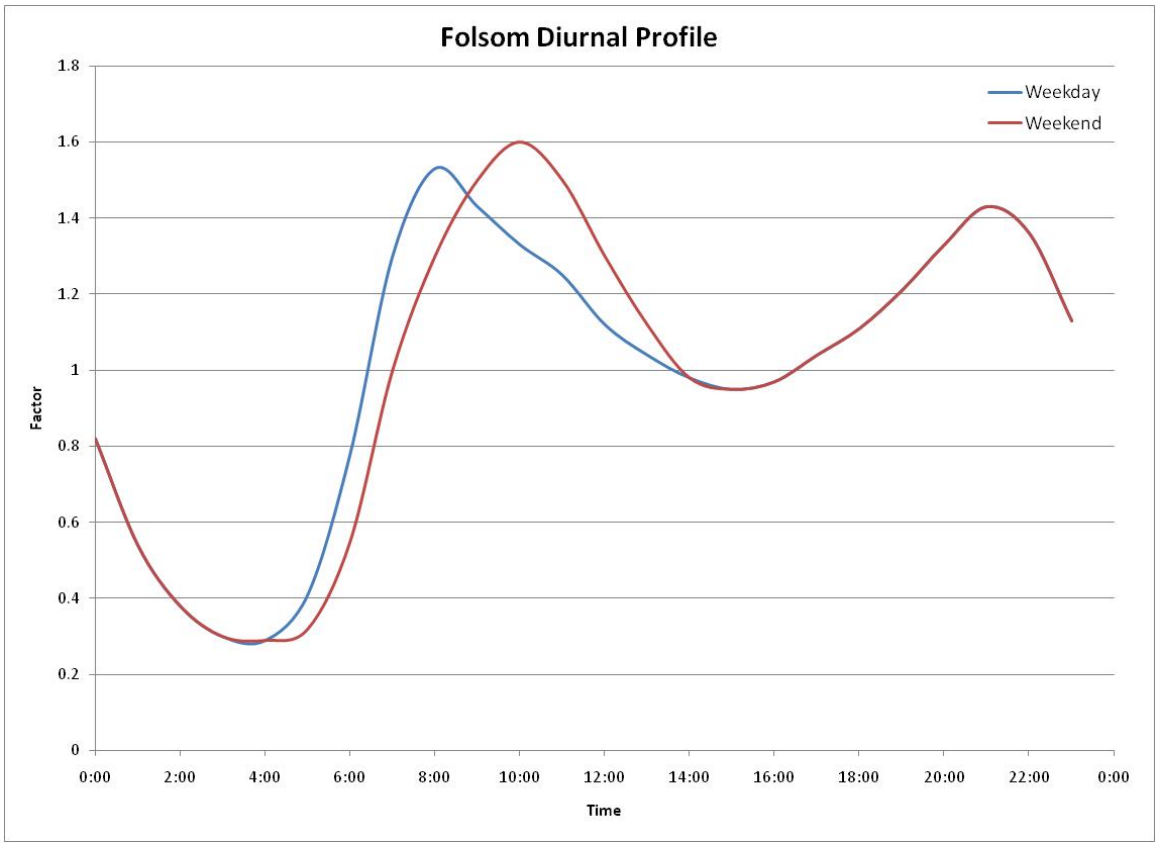
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Attachment B
Dry Weather Calibration Plots

Observed / Predicted Plot Produced by gju (1/9/2009 6:08:21 PM) Page 1 of 15
Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
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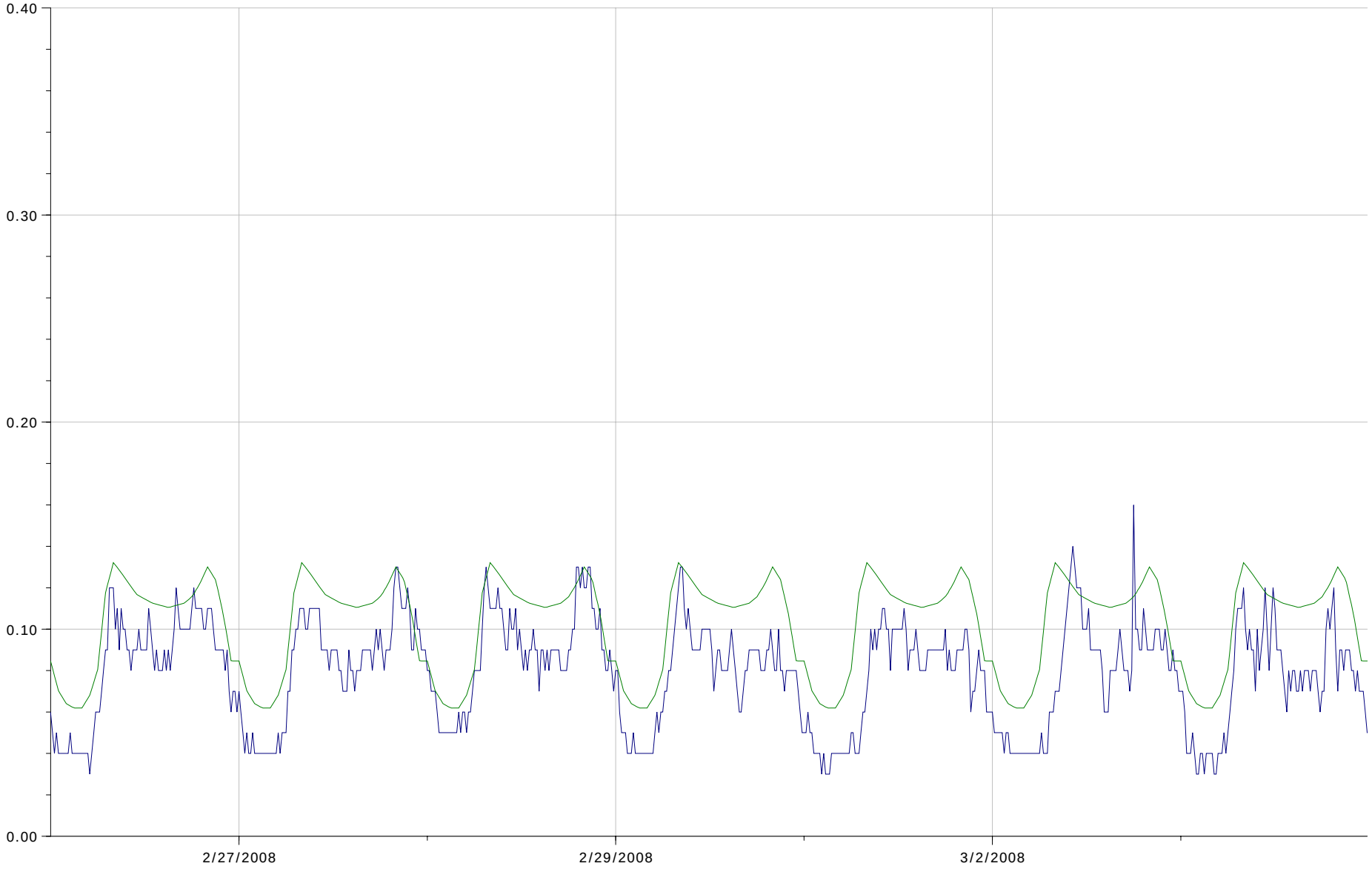
Graph Template: >SRCSD_CA>Graph Template Group>Sacramento 15m Flow Meter Graph (1/9/2009 6:07:26 PM)

Flow Survey Location (Obs.) Site 1 410N19.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.030	0.160	0.551
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Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
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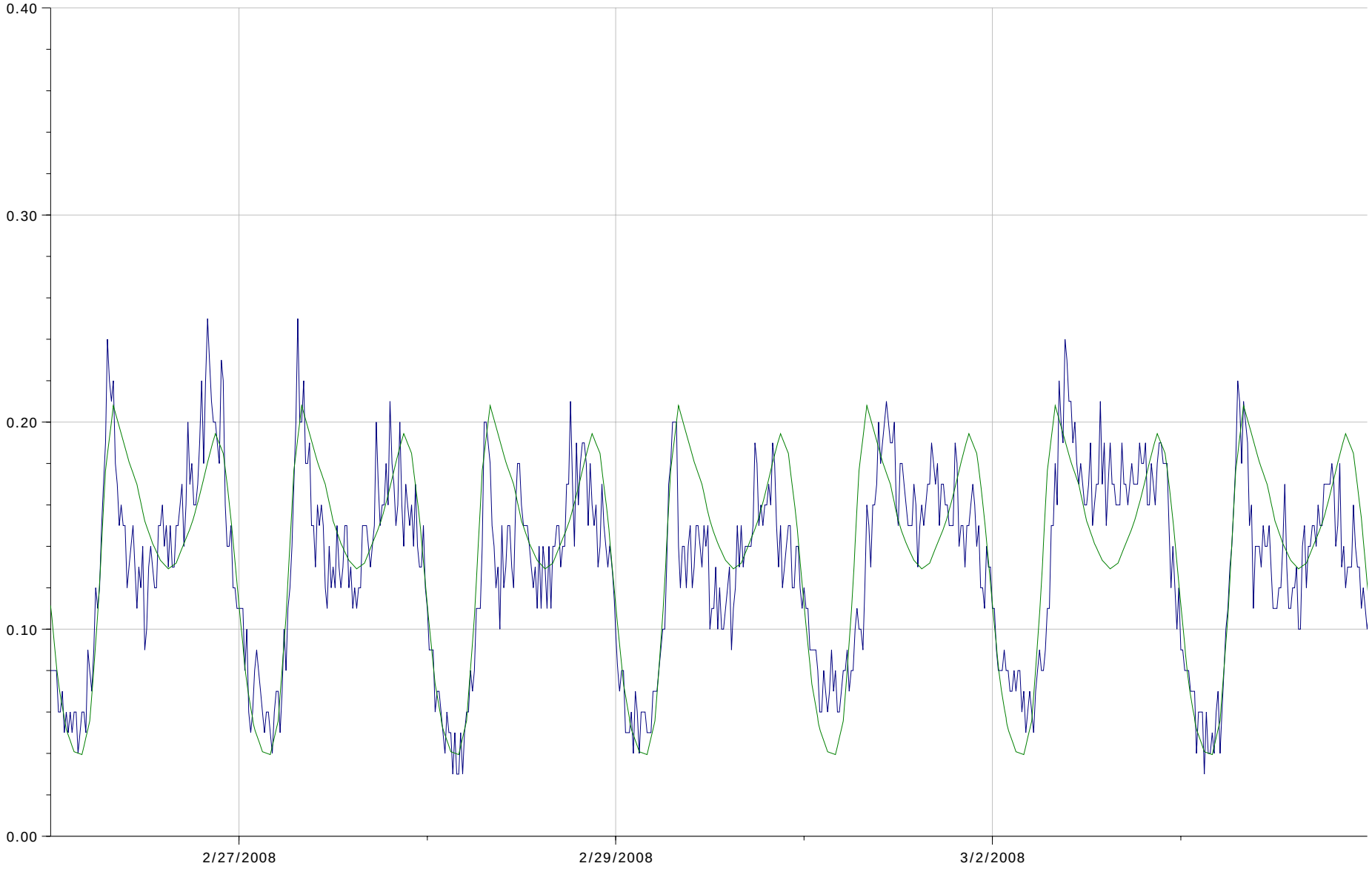
Flow Survey Location (Obs.) Site 2 704O19.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.030	0.250	0.916
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	0.039	0.208	0.953

Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
Sim: >SRCSD_CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF (1/9/2009 5:38:56 PM)
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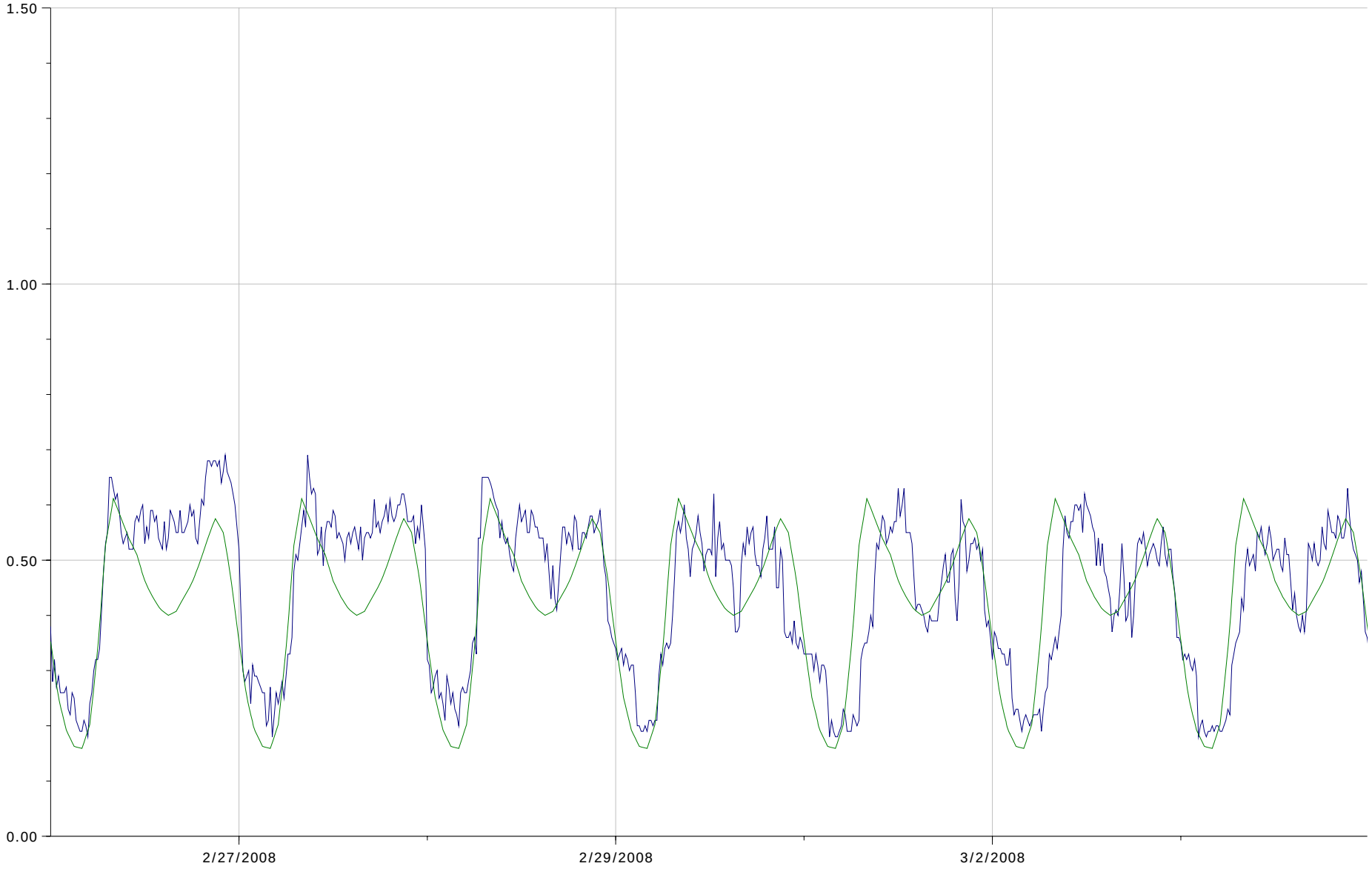
Flow Survey Location (Obs.) Site 3 101Q19.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.180	0.690	3.118
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	0.159	0.611	2.931

Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
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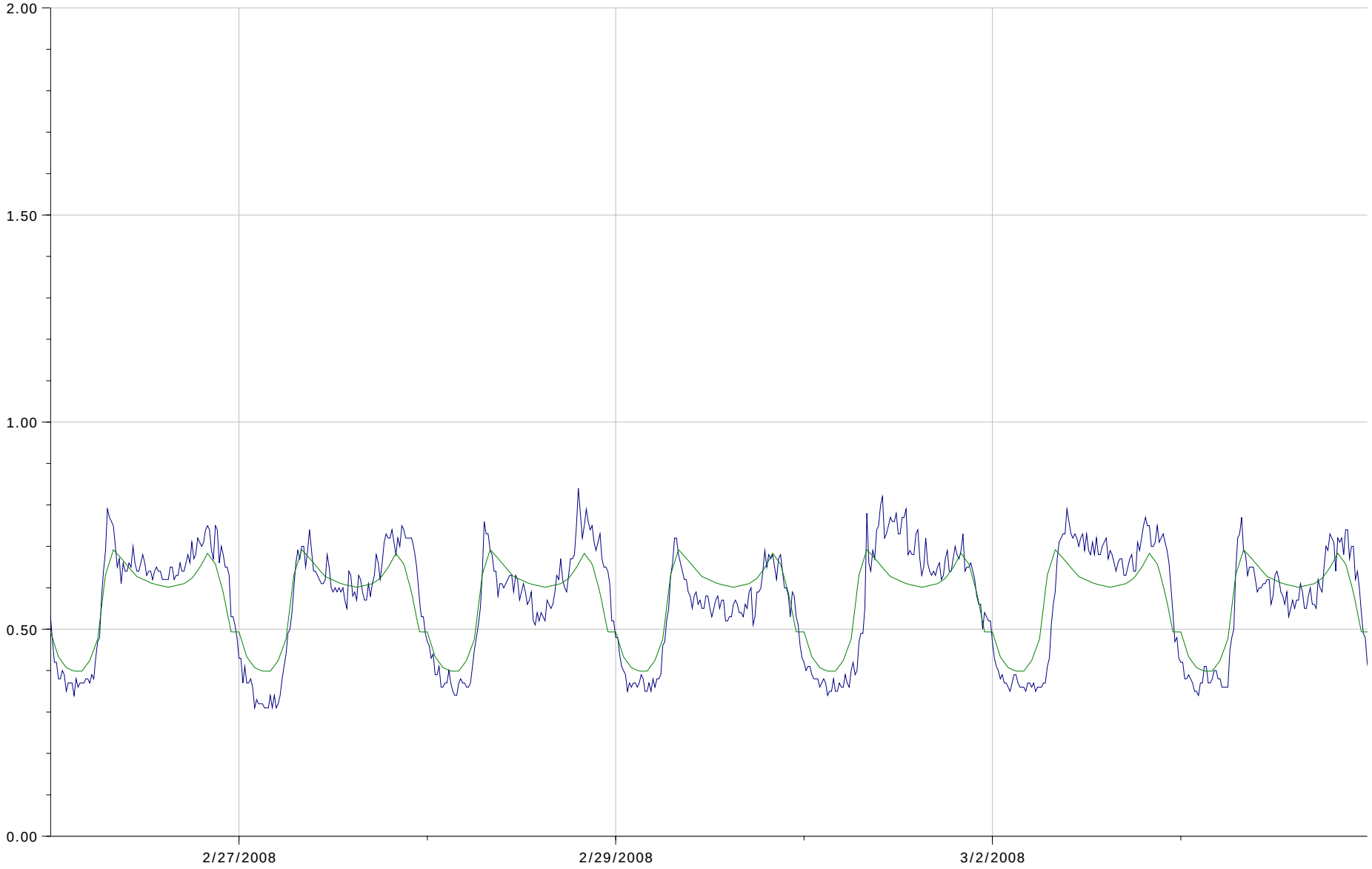
Flow Survey Location (Obs.) Site 4 719S19.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.310	0.840	3.972
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	0.399	0.692	3.980

Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
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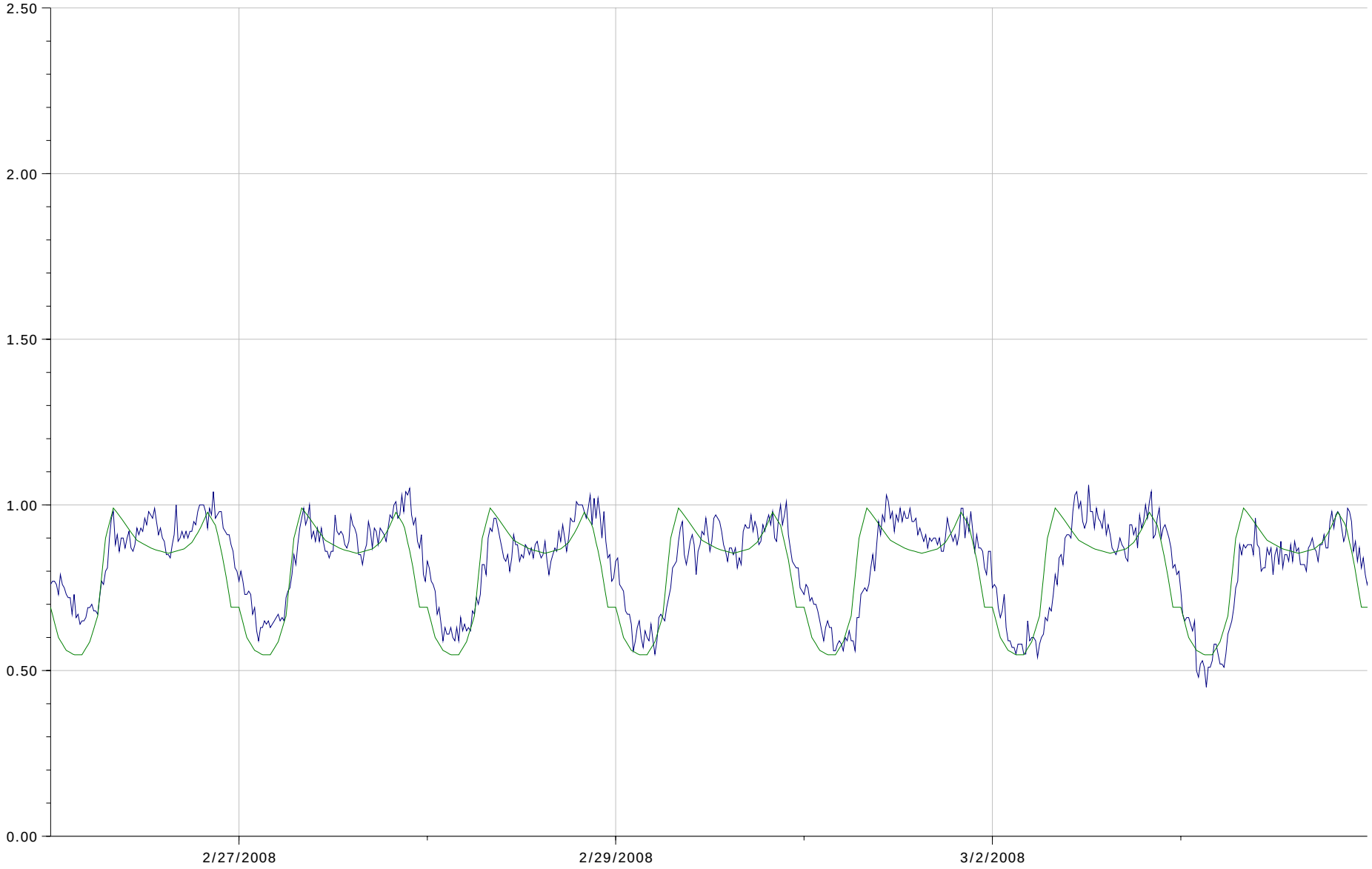
Flow Survey Location (Obs.) Site 5 120U19.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.450	1.060	5.789
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Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
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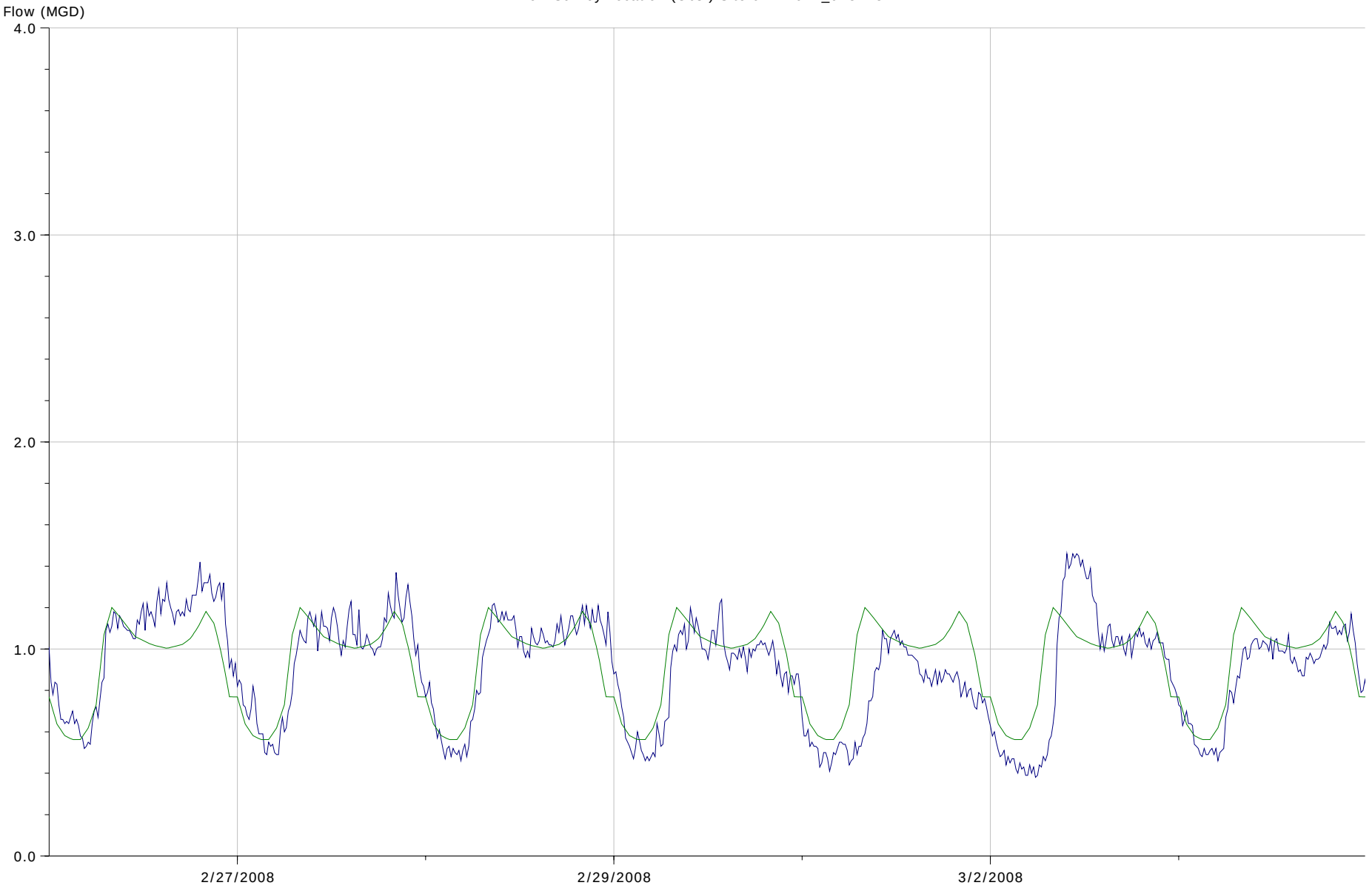
Flow Survey Location (Obs.) Site 6 + 7 912_913V18.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.380	1.460	6.327
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	0.563	1.200	6.527

Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
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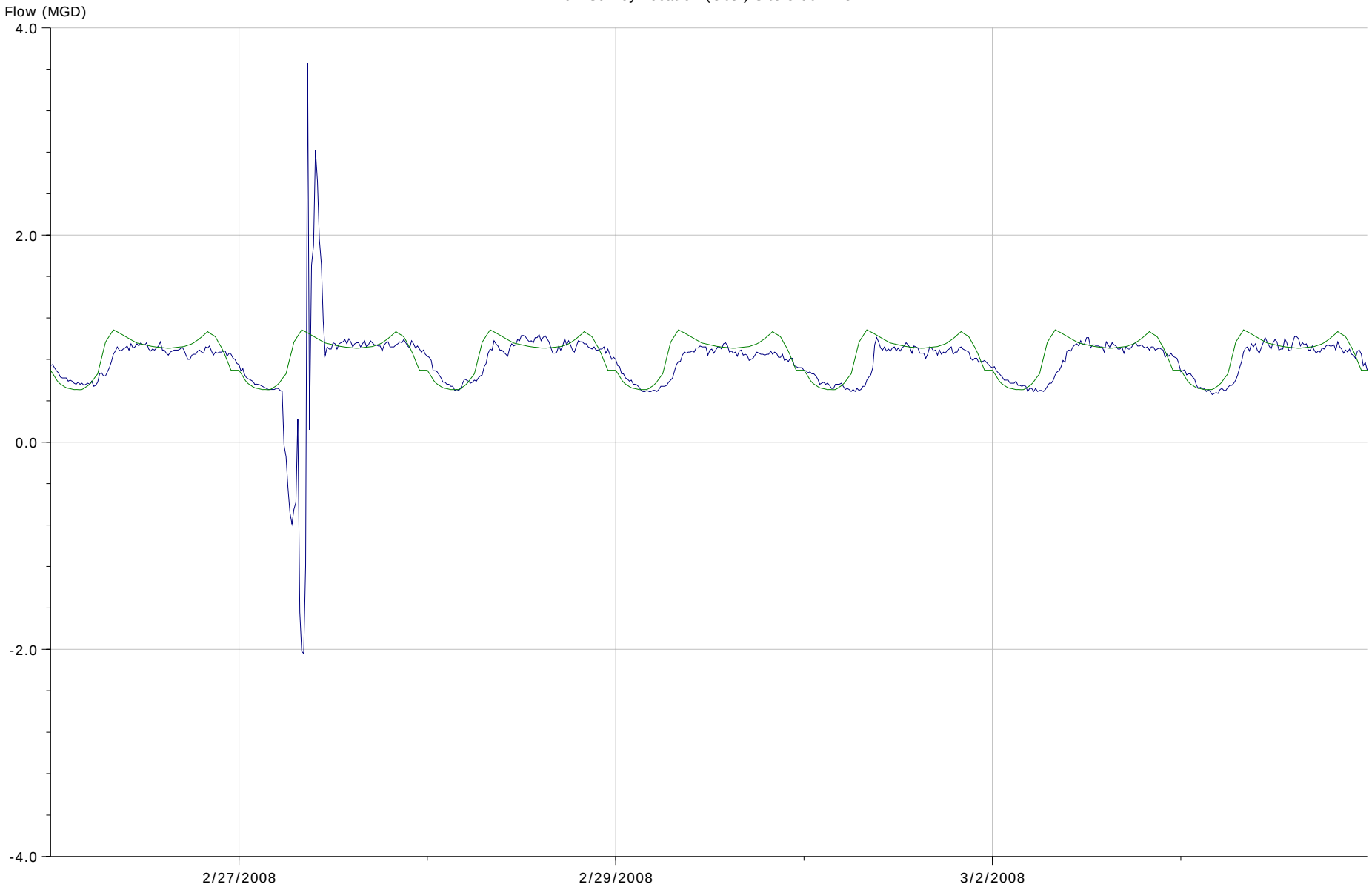
Flow Survey Location (Obs.) Site 8 901Y18.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	-2.040	3.660	5.656
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	0.509	1.085	5.900

Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
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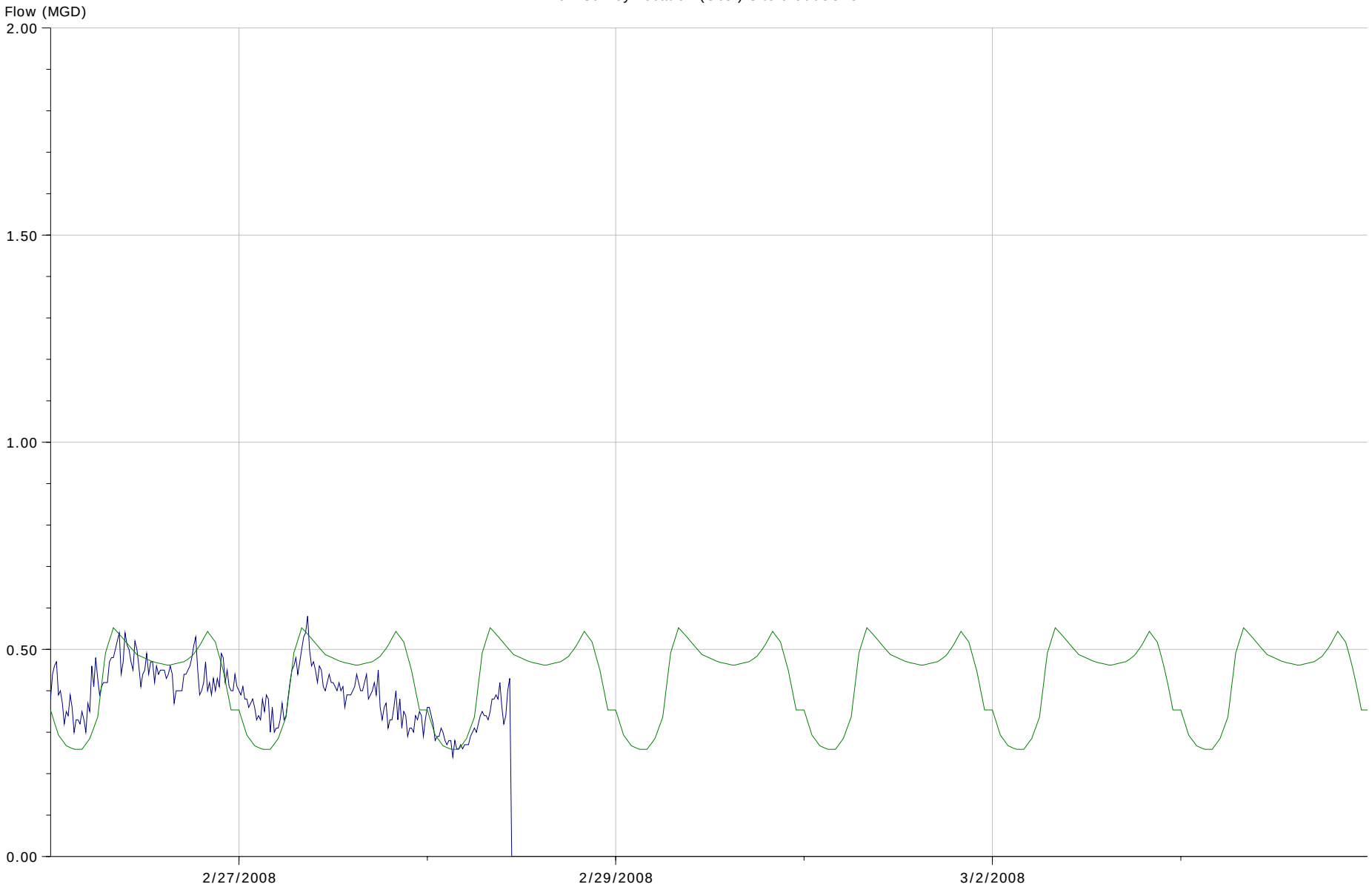
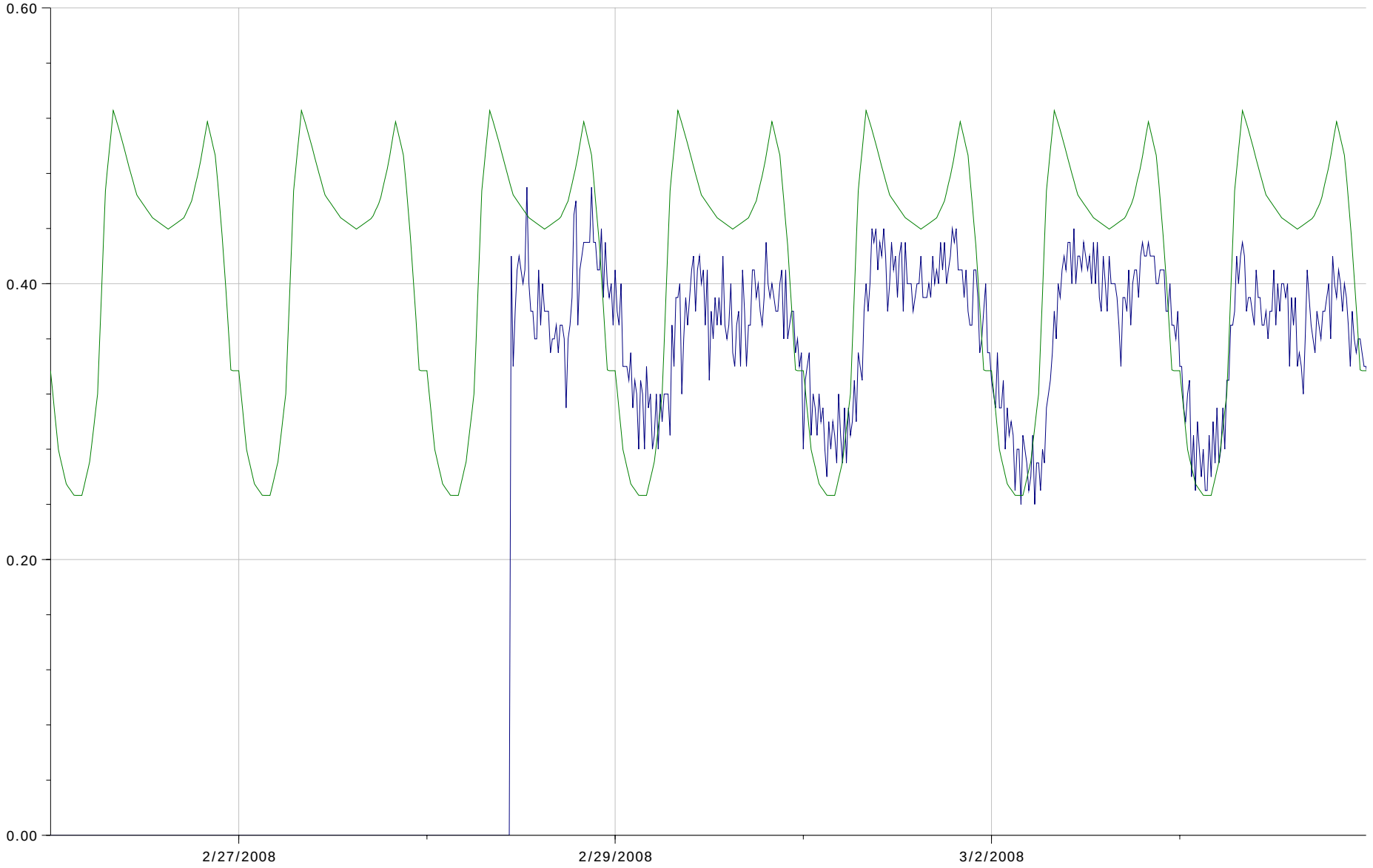
Flow Survey Location (Obs.) Site 9 506UU13.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.000	0.580	0.957
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	0.259	0.552	3.002

Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
Sim: >SRCSD_CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF (1/9/2009 5:38:56 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sacramento 15m Flow Meter Graph (1/9/2009 6:07:26 PM)

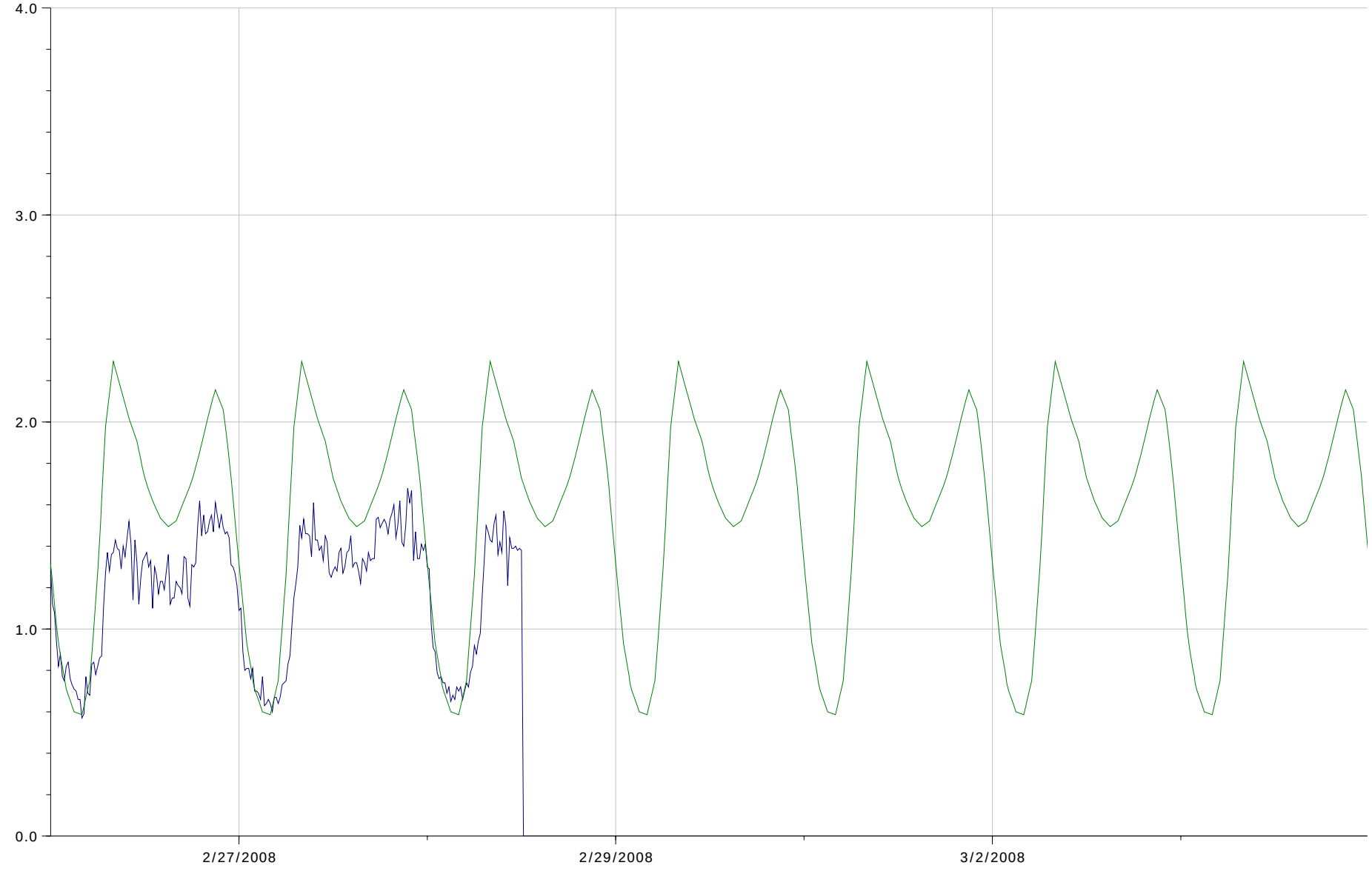
Flow Survey Location (Obs.) Site 9A 801TT13.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.000	0.470	1.676
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	0.247	0.526	2.859

Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
Sim: >SRCSD_CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF (1/9/2009 5:38:56 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sacramento 15m Flow Meter Graph (1/9/2009 6:07:26 PM)

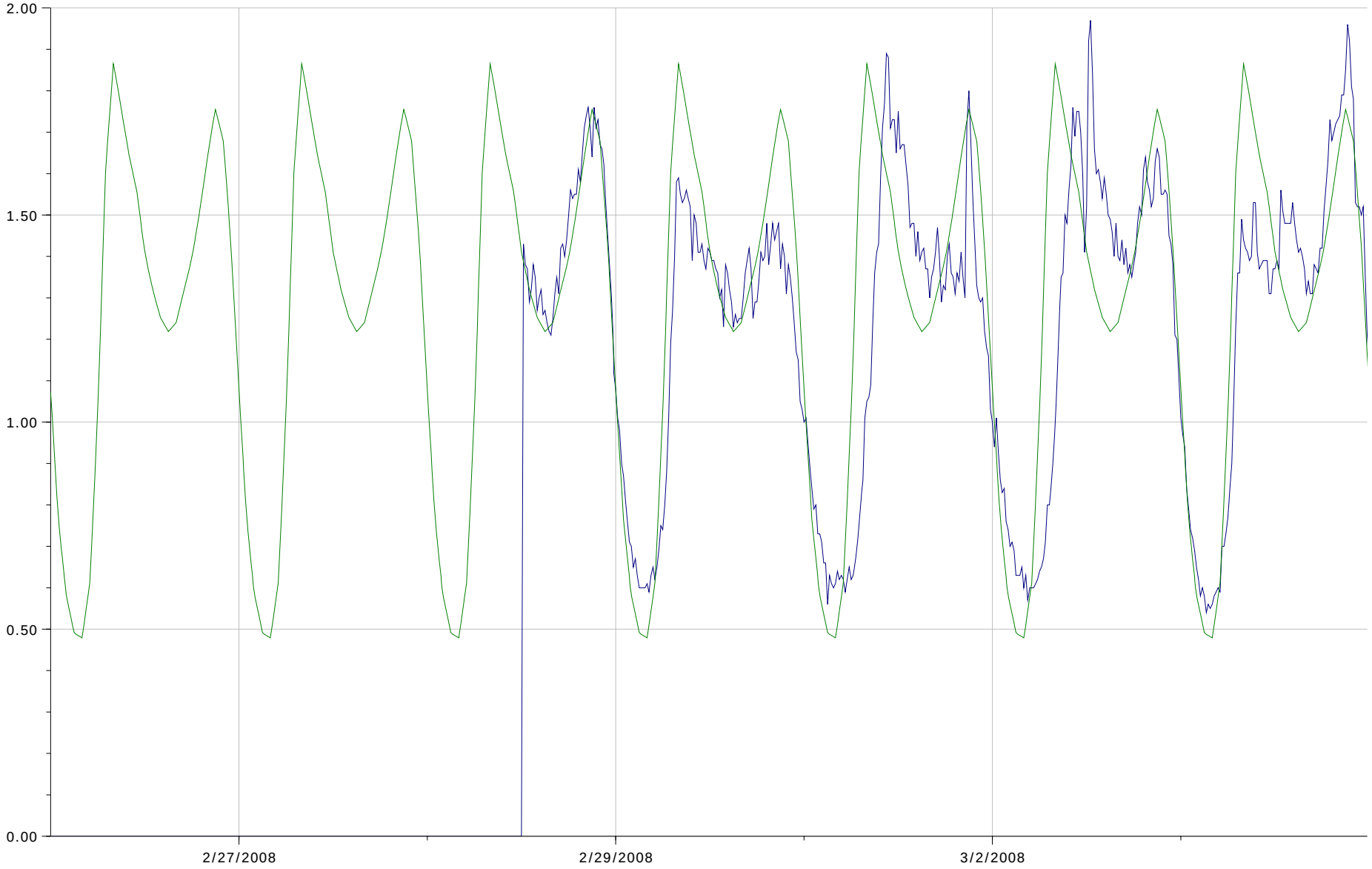
Flow Survey Location (Obs.) Site 10 504UU13.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.000	1.680	2.948
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	0.586	2.293	10.955

Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
Sim: >SRCSD_CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF (1/9/2009 5:38:56 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sacramento 15m Flow Meter Graph (1/9/2009 6:07:26 PM)

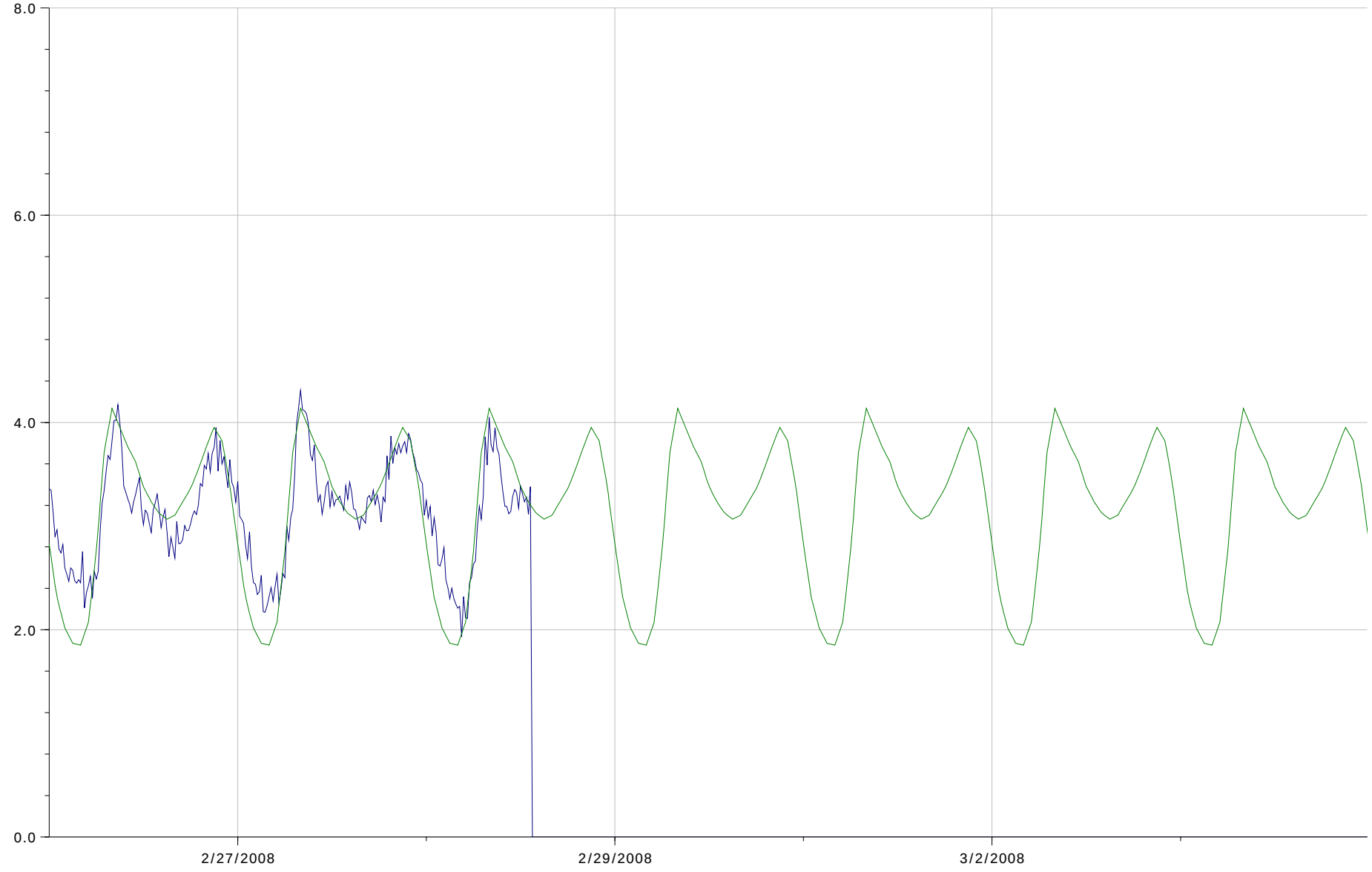
Flow Survey Location (Obs.) Site 10A 520UU14.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.000	1.970	5.620
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	0.479	1.865	8.931

Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
Sim: >SRCSD_CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF (1/9/2009 5:38:56 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sacramento 15m Flow Meter Graph (1/9/2009 6:07:26 PM)

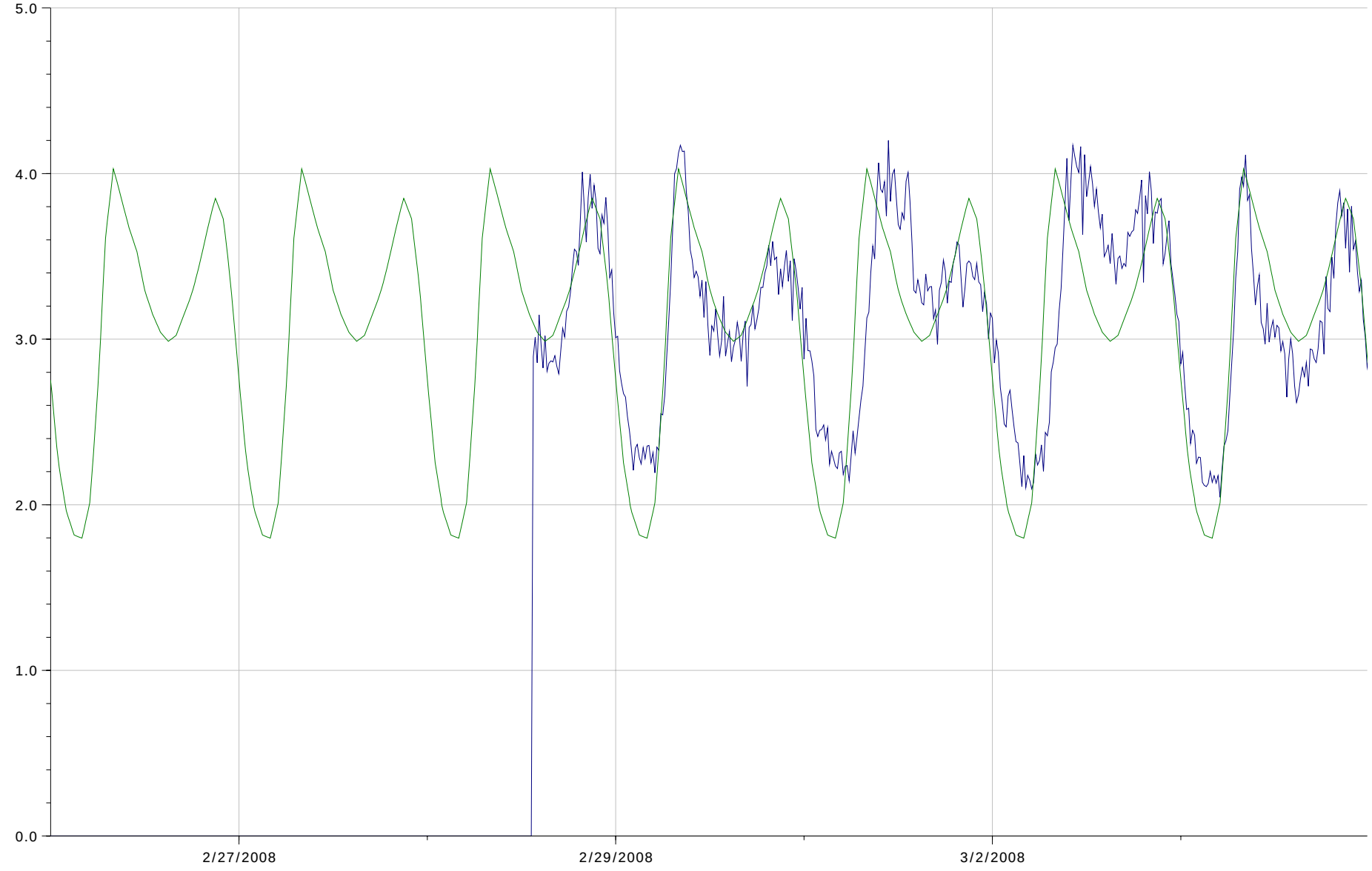
Flow Survey Location (Obs.) Site 11 302VV13.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.000	4.308	8.020
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	1.851	4.136	22.134

Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
Sim: >SRCSD_CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF (1/9/2009 5:38:56 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sacramento 15m Flow Meter Graph (1/9/2009 6:07:26 PM)

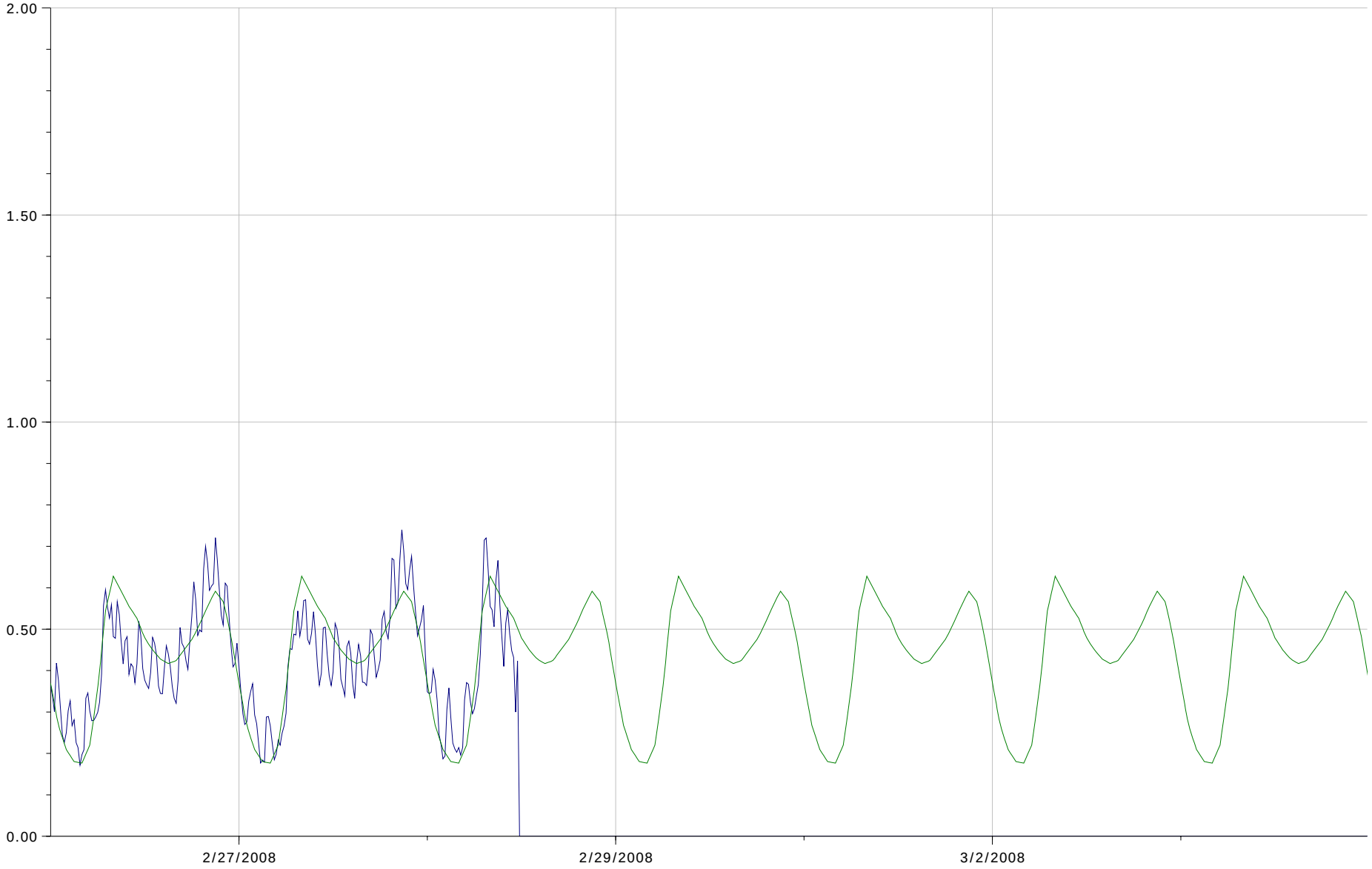
Flow Survey Location (Obs.) Site 11A 707UU13.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.000	4.200	13.967
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	1.799	4.029	21.557

Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
Sim: >SRCSD_CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF (1/9/2009 5:38:56 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sacramento 15m Flow Meter Graph (1/9/2009 6:07:26 PM)

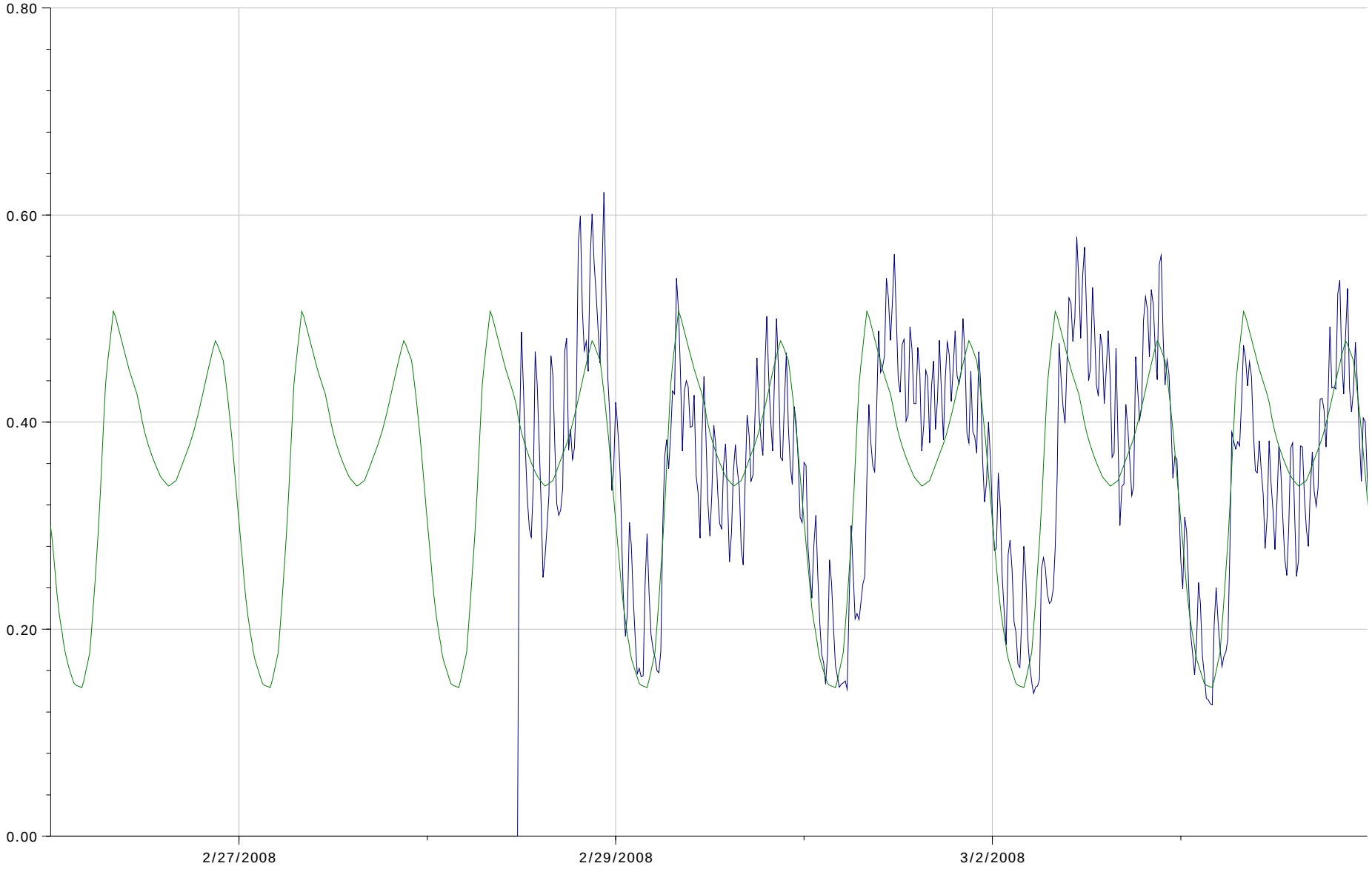
Flow Survey Location (Obs.) Site 12 702VV14.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.000	0.740	1.050
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	0.177	0.628	3.049

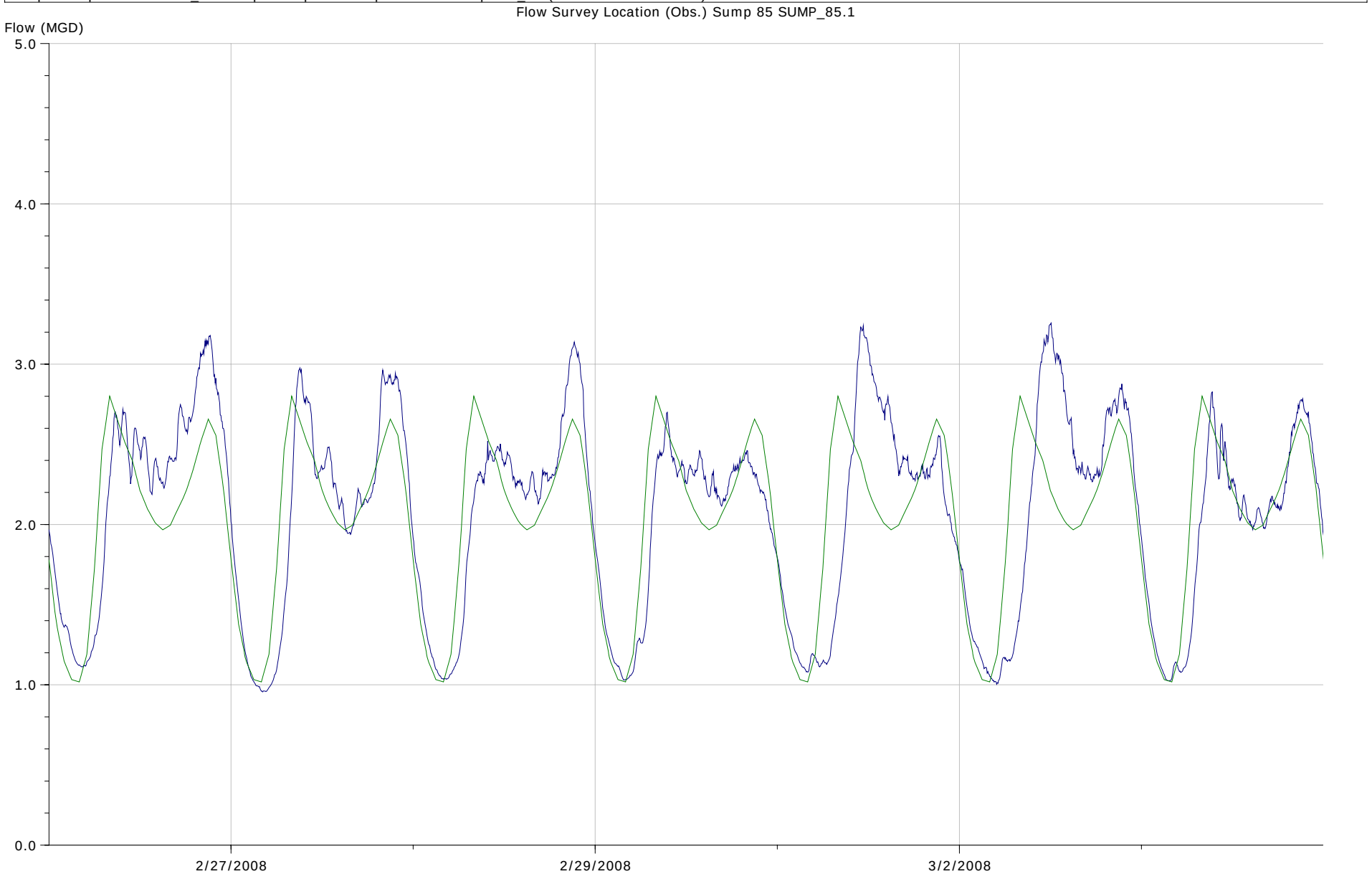
Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
Sim: >SRCSD_CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF (1/9/2009 5:38:56 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sacramento 15m Flow Meter Graph (1/9/2009 6:07:26 PM)

Flow Survey Location (Obs.) Site 12A 812VV14.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.000	0.622	1.626
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	0.144	0.507	2.472

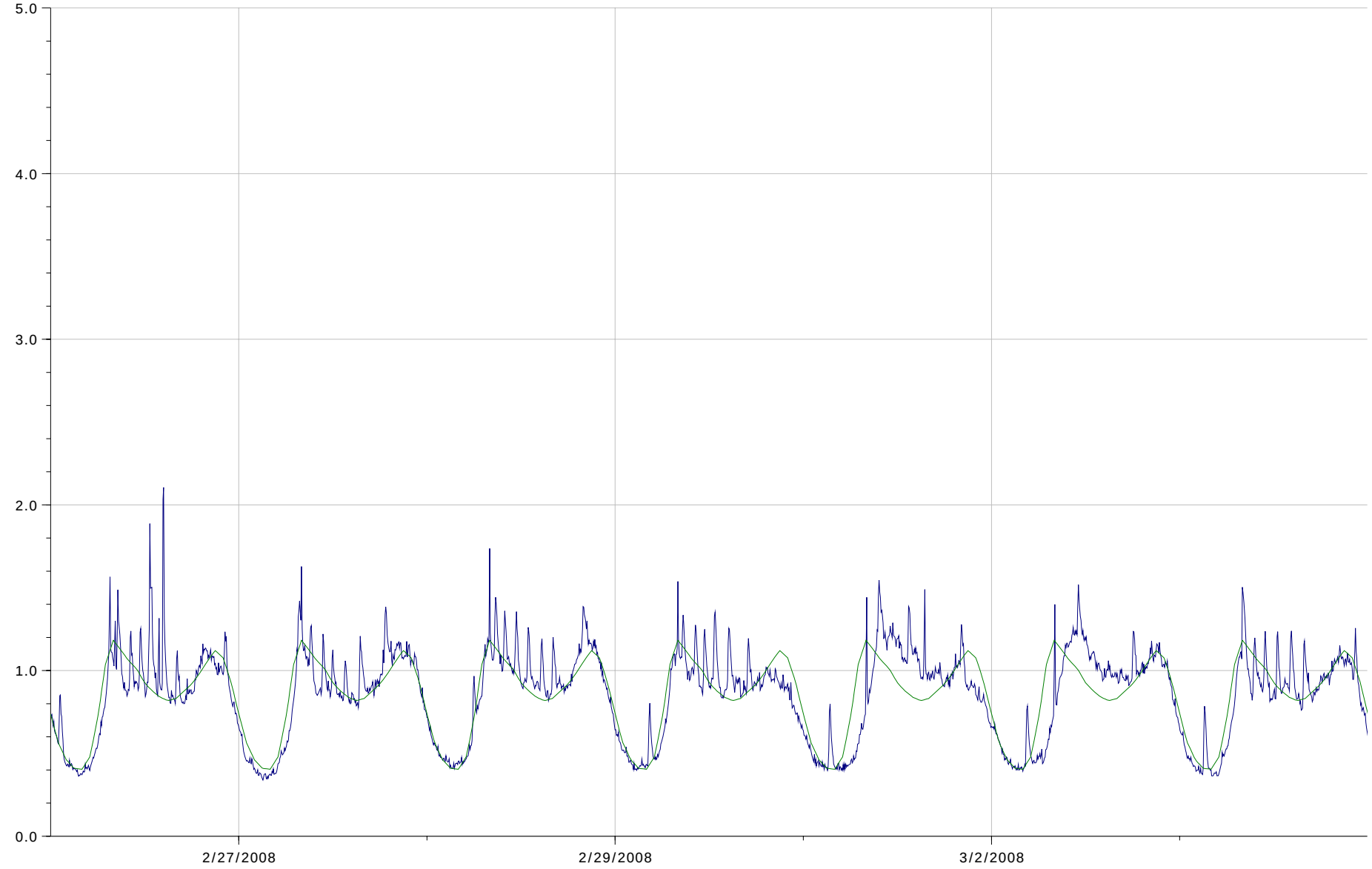
Observed / Predicted Plot Produced by GJu (1/10/2009 5:43:37 PM) Page 1 of 2
Flow Survey: >SRCSD_CA>Flow Survey Group>Sac 5m Sumps 85_87 (11/12/2008 3:37:37 PM)
Sim: >SRCSD_CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF (1/9/2009 5:38:56 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sac 5m Sumps 85_87 (1/9/2009 6:07:36 PM)



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.956	3.256	14.468
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	1.018	2.801	14.286

Flow Survey: >SRCSD_CA>Flow Survey Group>Sac 5m Sumps 85_87 (11/12/2008 3:37:37 PM)
Sim: >SRCSD_CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF (1/9/2009 5:38:56 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sac 5m Sumps 85_87 (1/9/2009 6:07:36 PM)

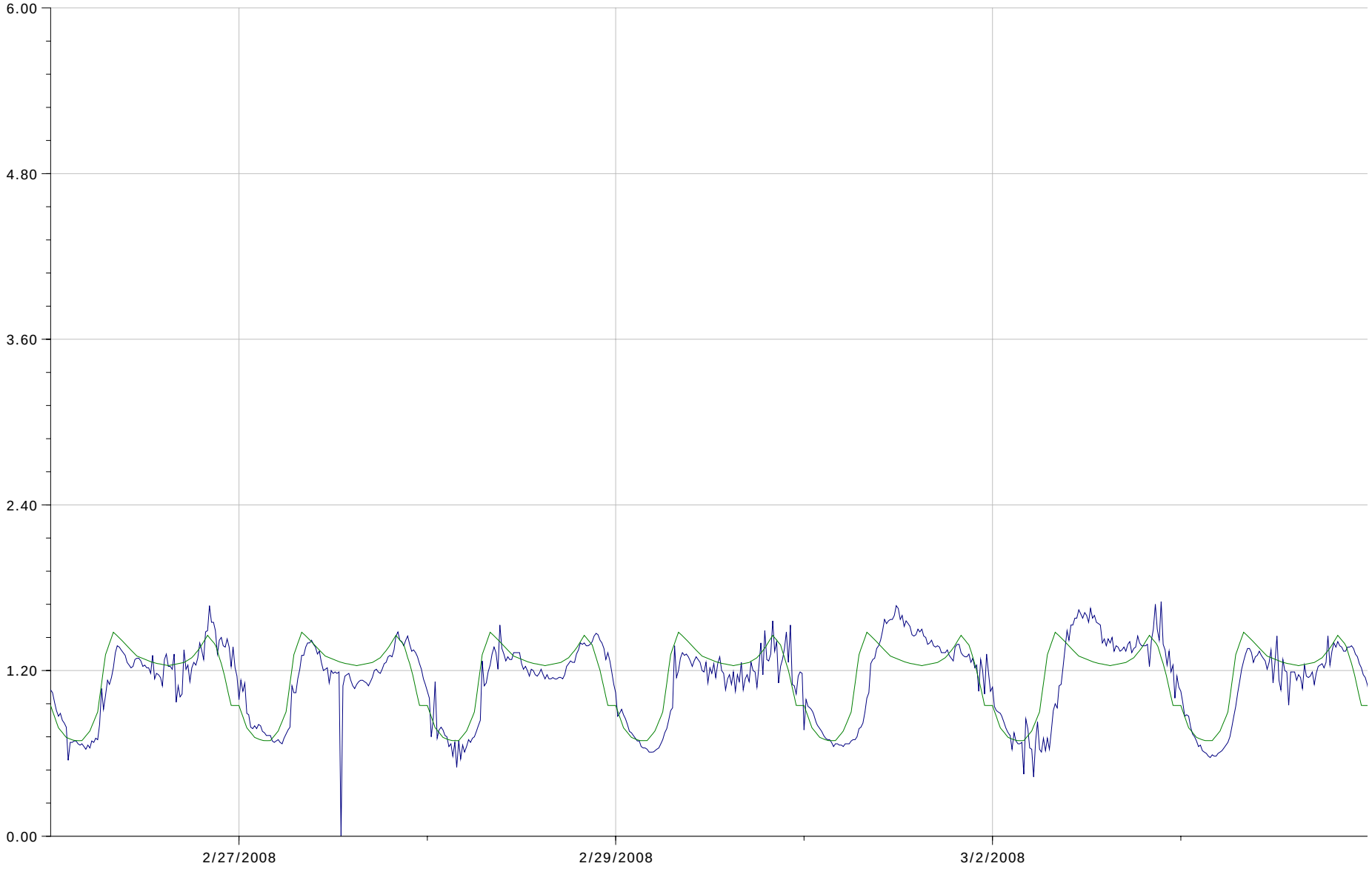
Flow Survey Location (Obs.) Sump 87 SUMP_87.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.339	2.106	5.991
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	0.404	1.182	5.959

Flow Survey: >SRCSD_CA>Flow Survey Group>Sac 15m Sumps 21_119_55 (11/13/2008 9:38:46 AM)
Sim: >SRCSD_CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF (1/9/2009 5:38:56 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sac 15m Sumps 21_119_55 (1/9/2009 6:07:41 PM)

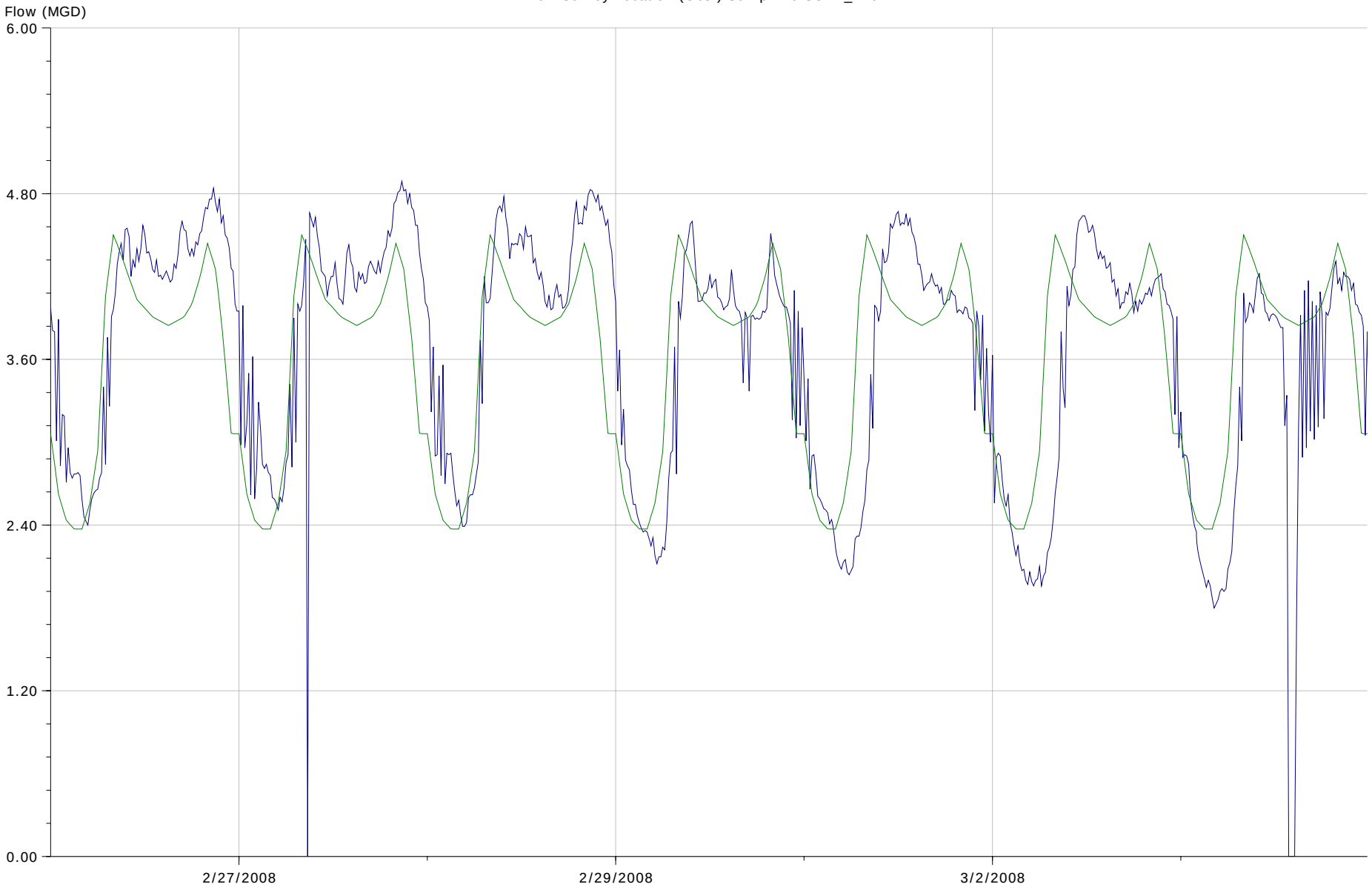
Flow Survey Location (Obs.) Sump 21 SUMP_21.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.000	1.700	7.859
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	0.693	1.478	8.038

Flow Survey: >SRCSD_CA>Flow Survey Group>Sac 15m Sumps 21_119_55 (11/13/2008 9:38:46 AM)
Sim: >SRCSD_CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF (1/9/2009 5:38:56 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sac 15m Sumps 21_119_55 (1/9/2009 6:07:41 PM)

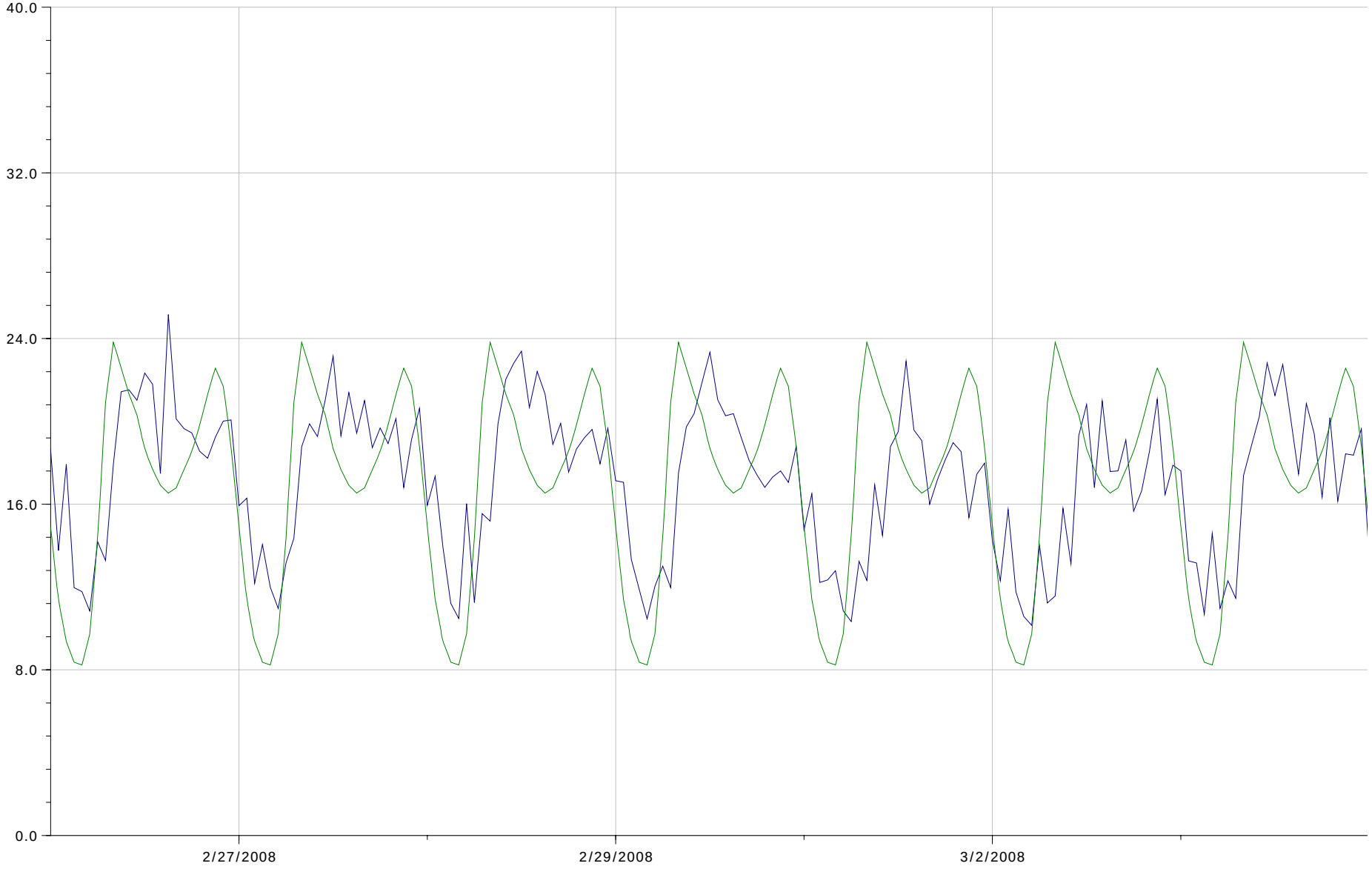
Flow Survey Location (Obs.) Sump 119 SUMP_119.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.000	4.890	25.514
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	2.372	4.501	25.255

Observed / Predicted Plot Produced by GJu (1/10/2009 5:48:18 PM) Page 1 of 1
Flow Survey: >SRCSD_CA>Flow Survey Group>Sac_Combined (11/21/2008 1:22:10 PM)
Sim: >SRCSD_CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF (1/9/2009 5:38:56 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sump2 (1/9/2009 6:07:51 PM)

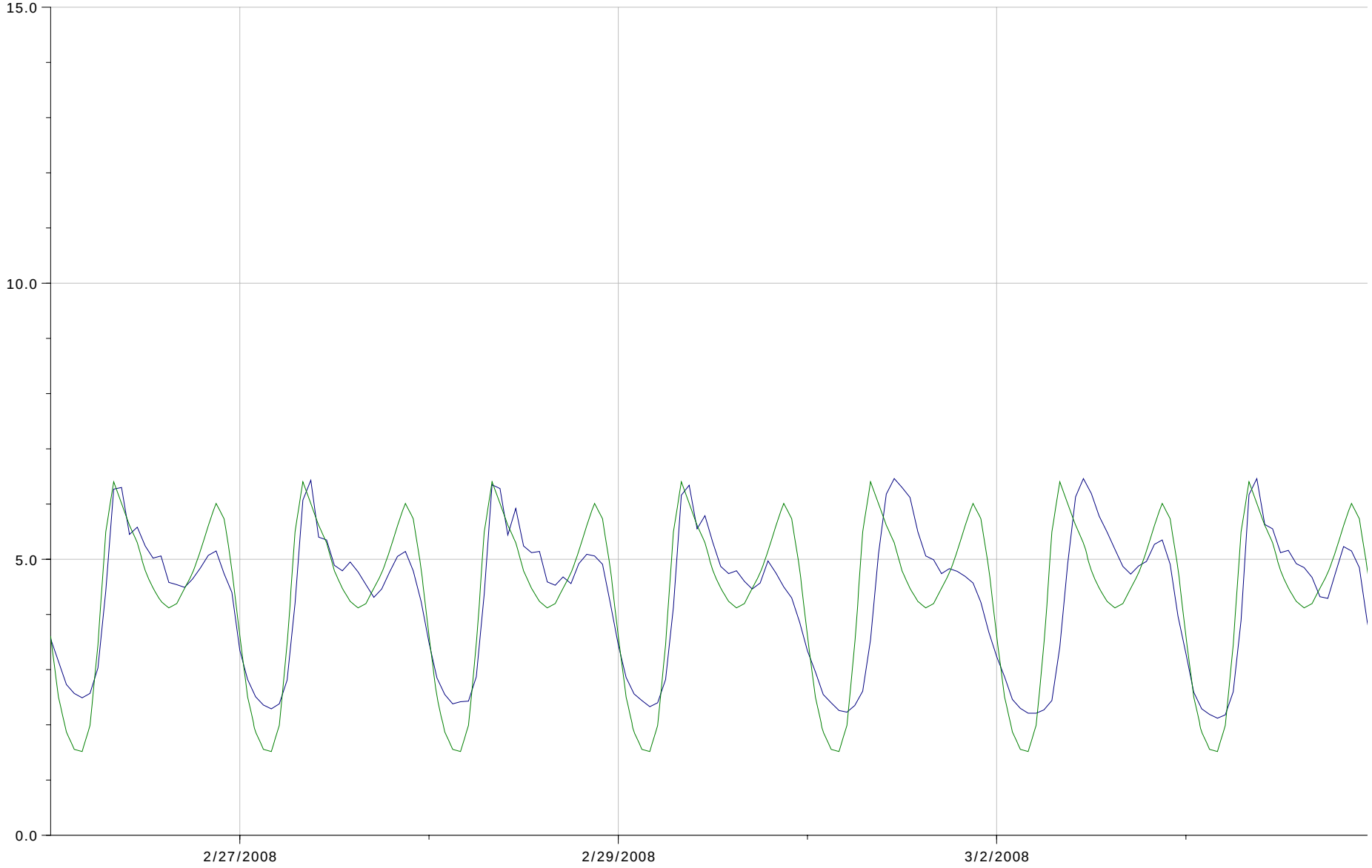
Flow Survey Location (Obs.) Combined SUMP_2.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	10.150	25.160	120.191
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	8.237	23.818	120.264

Observed / Predicted Plot Produced by GJu (1/10/2009 5:53:02 PM) Page 1 of 3
Flow Survey: >SRCSD_CA>Flow Survey Group>Folsom Hourly Data (11/12/2008 3:45:54 PM)
Sim: >SRCSD_CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF (1/9/2009 5:38:56 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Folsom_Hourly (1/9/2009 6:07:55 PM)

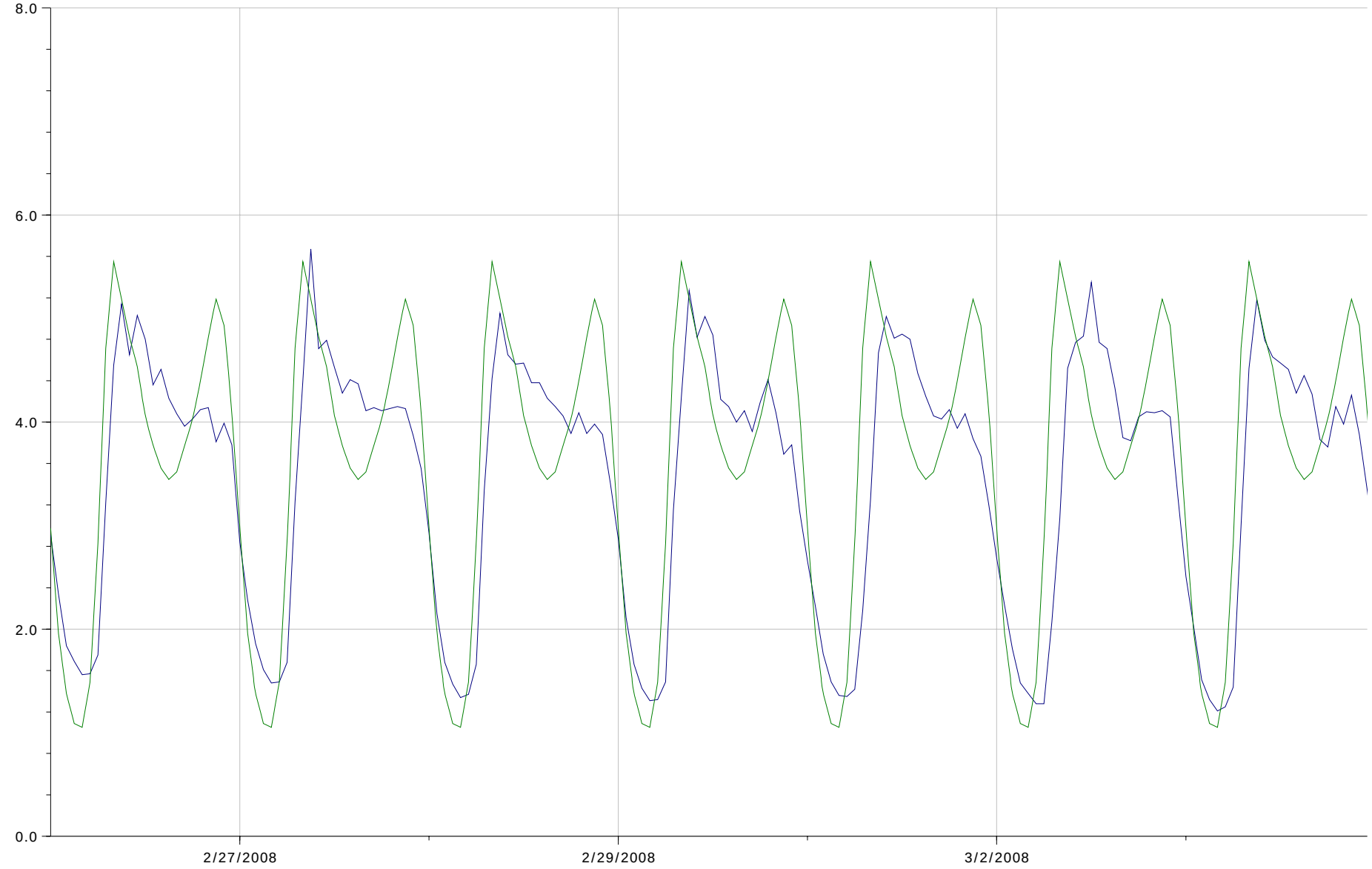
Flow Survey Location (Obs.) 33-inch B14-9327.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	2.120	6.460	30.113
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	1.517	6.403	30.115

Flow Survey: >SRCSD_CA>Flow Survey Group>Folsom Hourly Data (11/12/2008 3:45:54 PM)
Sim: >SRCSD_CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF (1/9/2009 5:38:56 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Folsom_Hourly (1/9/2009 6:07:55 PM)

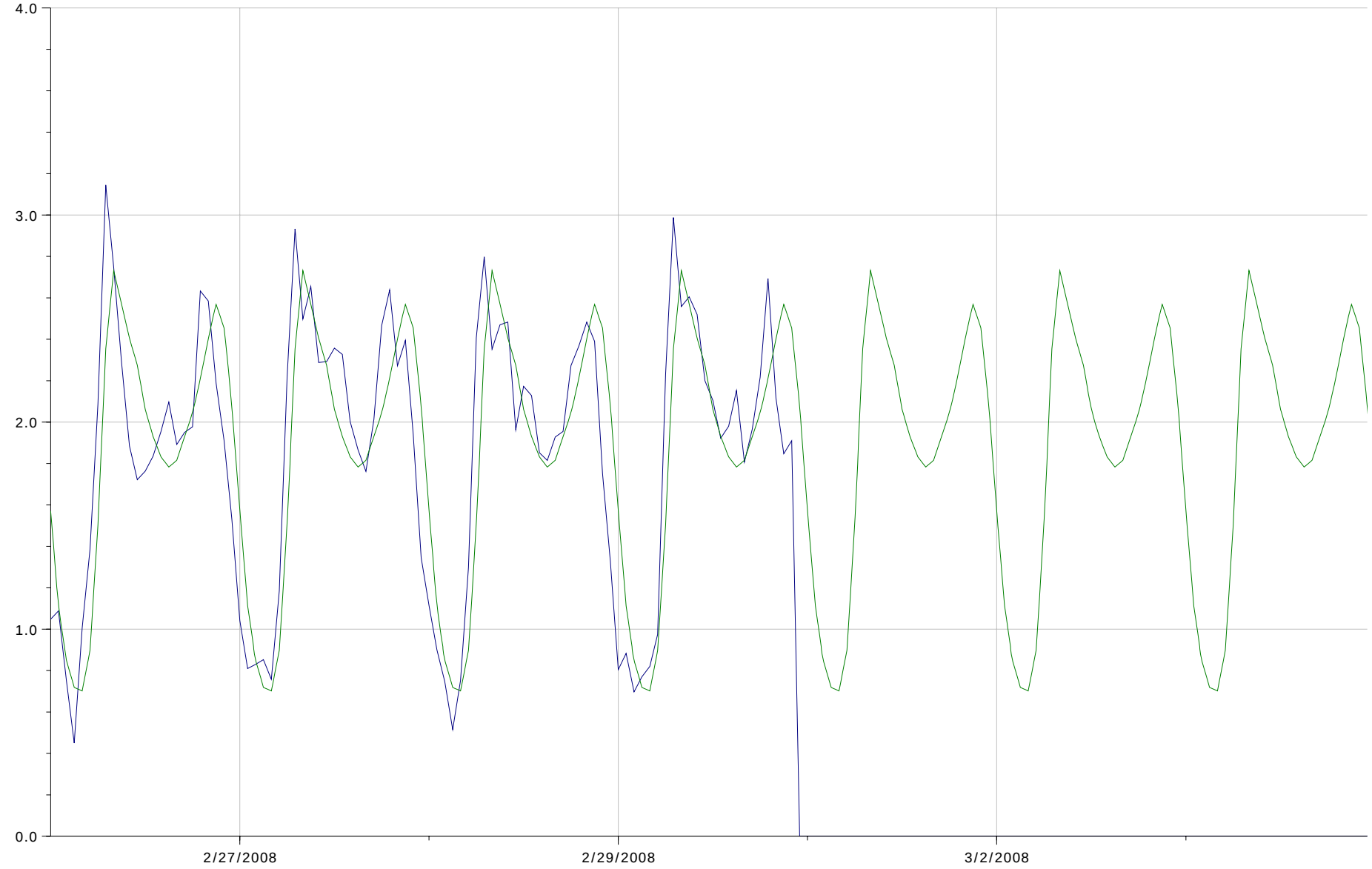
Flow Survey Location (Obs.) 27-inch B14-0046.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	1.210	5.670	24.371
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	1.052	5.549	25.320

Flow Survey: >SRCSD_CA>Flow Survey Group>Folsom Hourly Data (11/12/2008 3:45:54 PM)
Sim: >SRCSD_CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF (1/9/2009 5:38:56 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Folsom_Hourly (1/9/2009 6:07:55 PM)

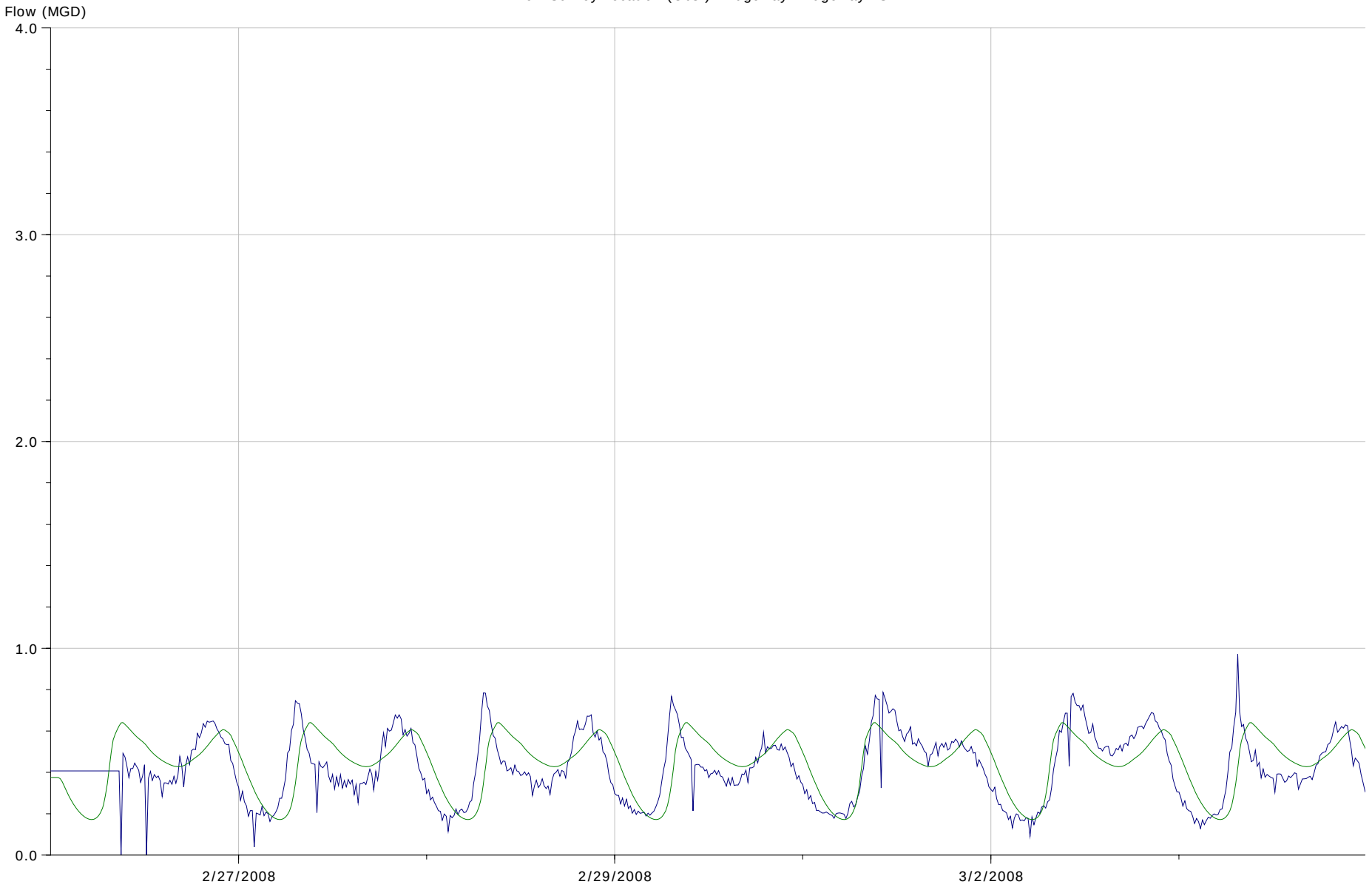
Flow Survey Location (Obs.) FE3B_PS B09-6728.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.000	3.145	7.340
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	0.702	2.731	13.013

Flow Survey: >SRCSD_CA>Flow Survey Group>WS PS 15m (11/21/2008 9:40:50 AM)
Sim: >SRCSD_CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF (1/9/2009 5:38:56 PM)
Graph Template: >SRCSD_CA>Graph Template Group>WS PSs (1/9/2009 6:07:45 PM)

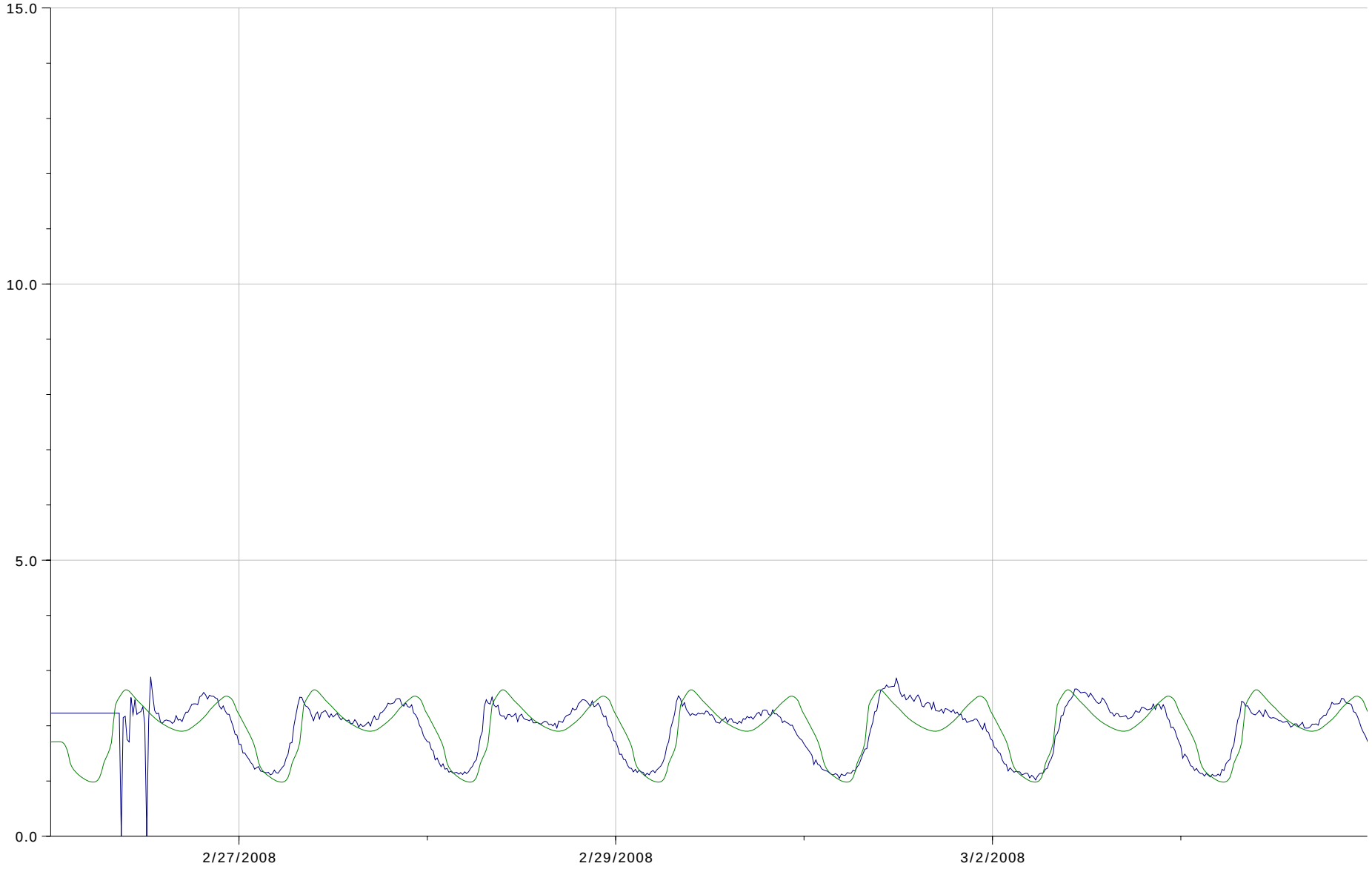
Flow Survey Location (Obs.) Bridgeway Bridgeway PS.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.000	0.971	2.959
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	0.172	0.640	3.115

Flow Survey: >SRCSD_CA>Flow Survey Group>WS PS 15m (11/21/2008 9:40:50 AM)
Sim: >SRCSD_CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF (1/9/2009 5:38:56 PM)
Graph Template: >SRCSD_CA>Graph Template Group>WS PSs (1/9/2009 6:07:45 PM)

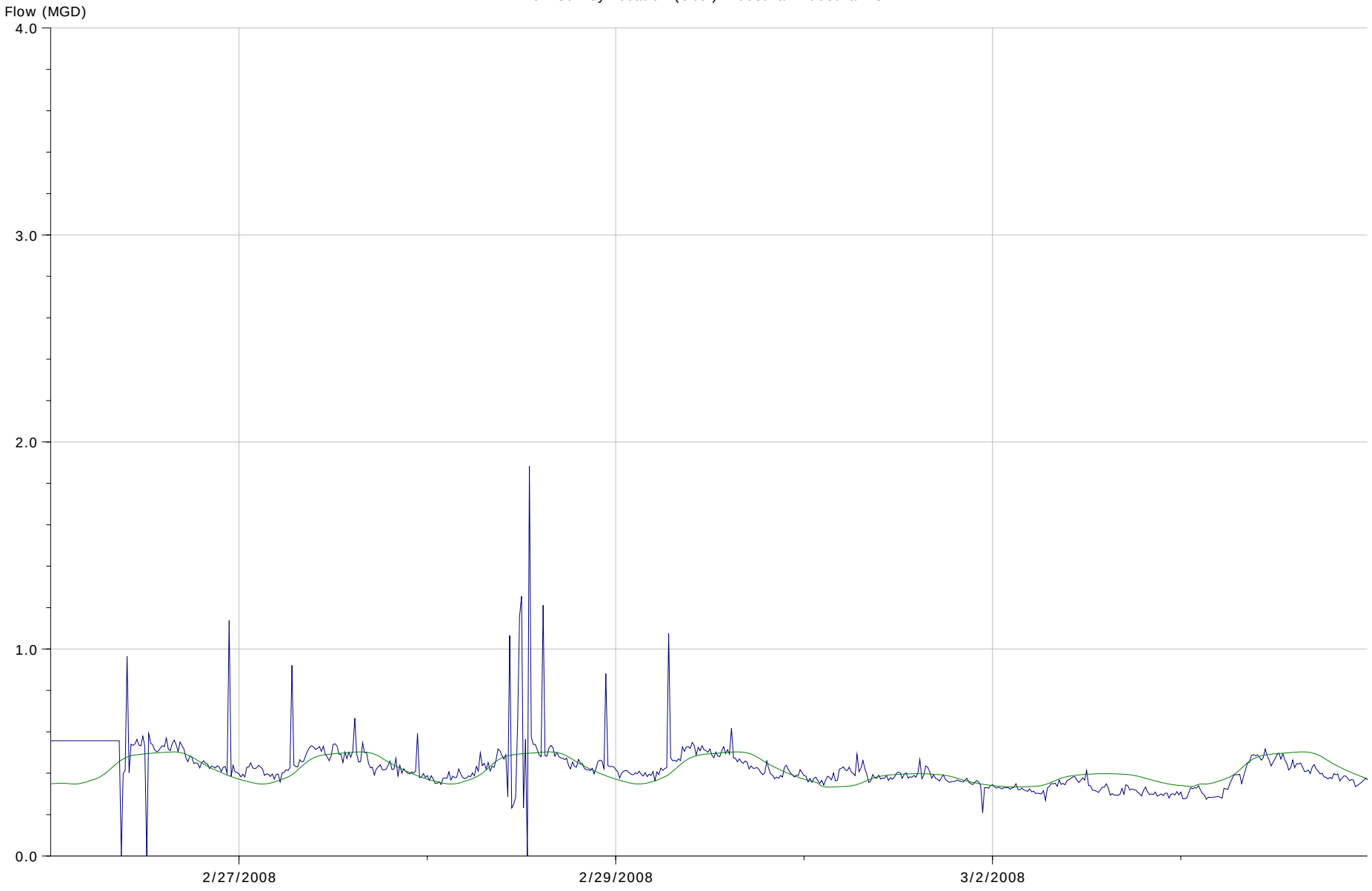
Flow Survey Location (Obs.) Bryte Bryte PS.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.000	2.885	13.806
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	0.980	2.651	13.736

Flow Survey: >SRCSD_CA>Flow Survey Group>WS PS 15m (11/21/2008 9:40:50 AM)
Sim: >SRCSD_CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF (1/9/2009 5:38:56 PM)
Graph Template: >SRCSD_CA>Graph Template Group>WS PSs (1/9/2009 6:07:45 PM)

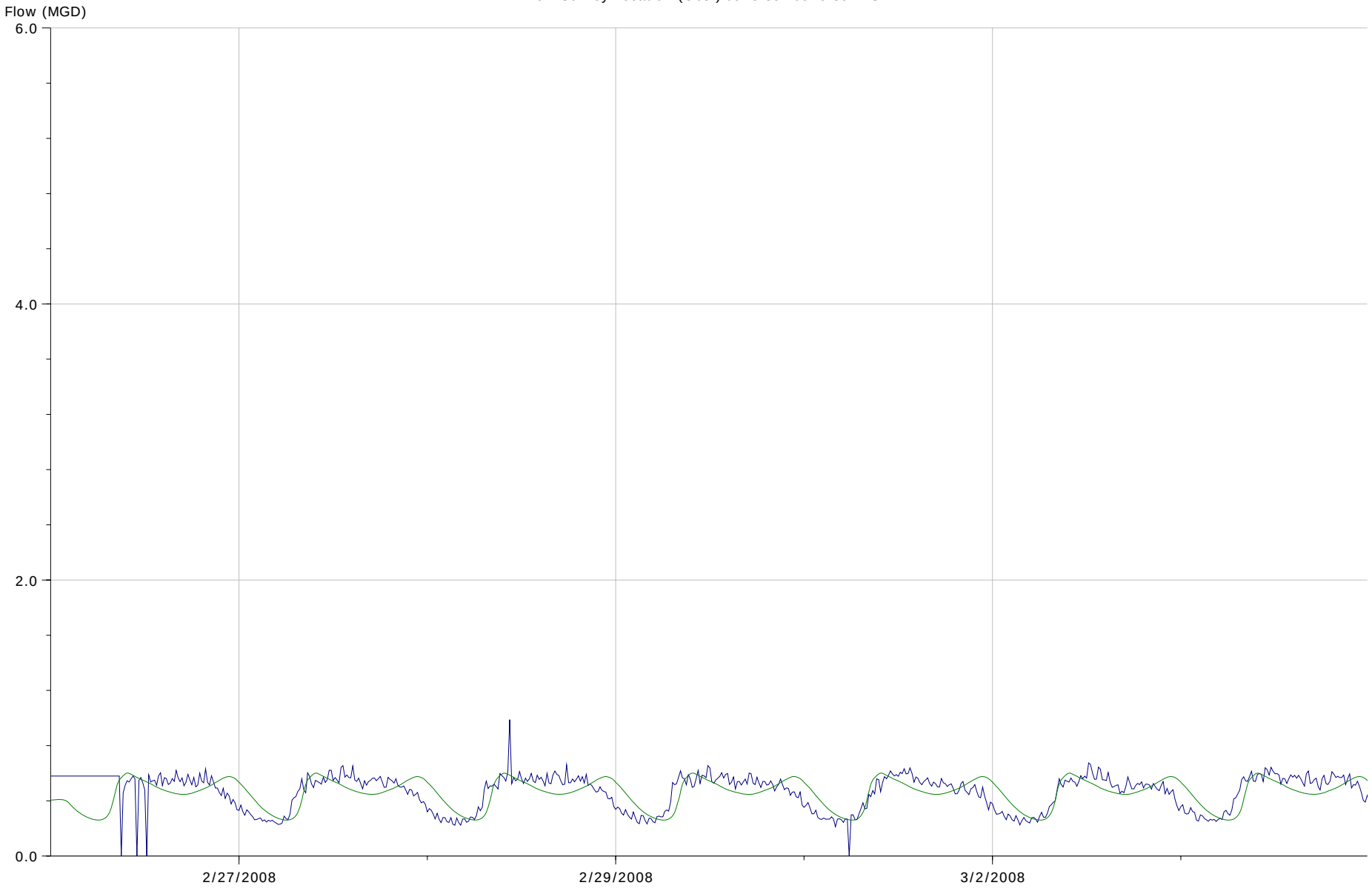
Flow Survey Location (Obs.) Industrial Industrial PS.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.000	1.885	2.981
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	0.333	0.503	2.889

Flow Survey: >SRCSD_CA>Flow Survey Group>WS PS 15m (11/21/2008 9:40:50 AM)
Sim: >SRCSD_CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF (1/9/2009 5:38:56 PM)
Graph Template: >SRCSD_CA>Graph Template Group>WS PSs (1/9/2009 6:07:45 PM)

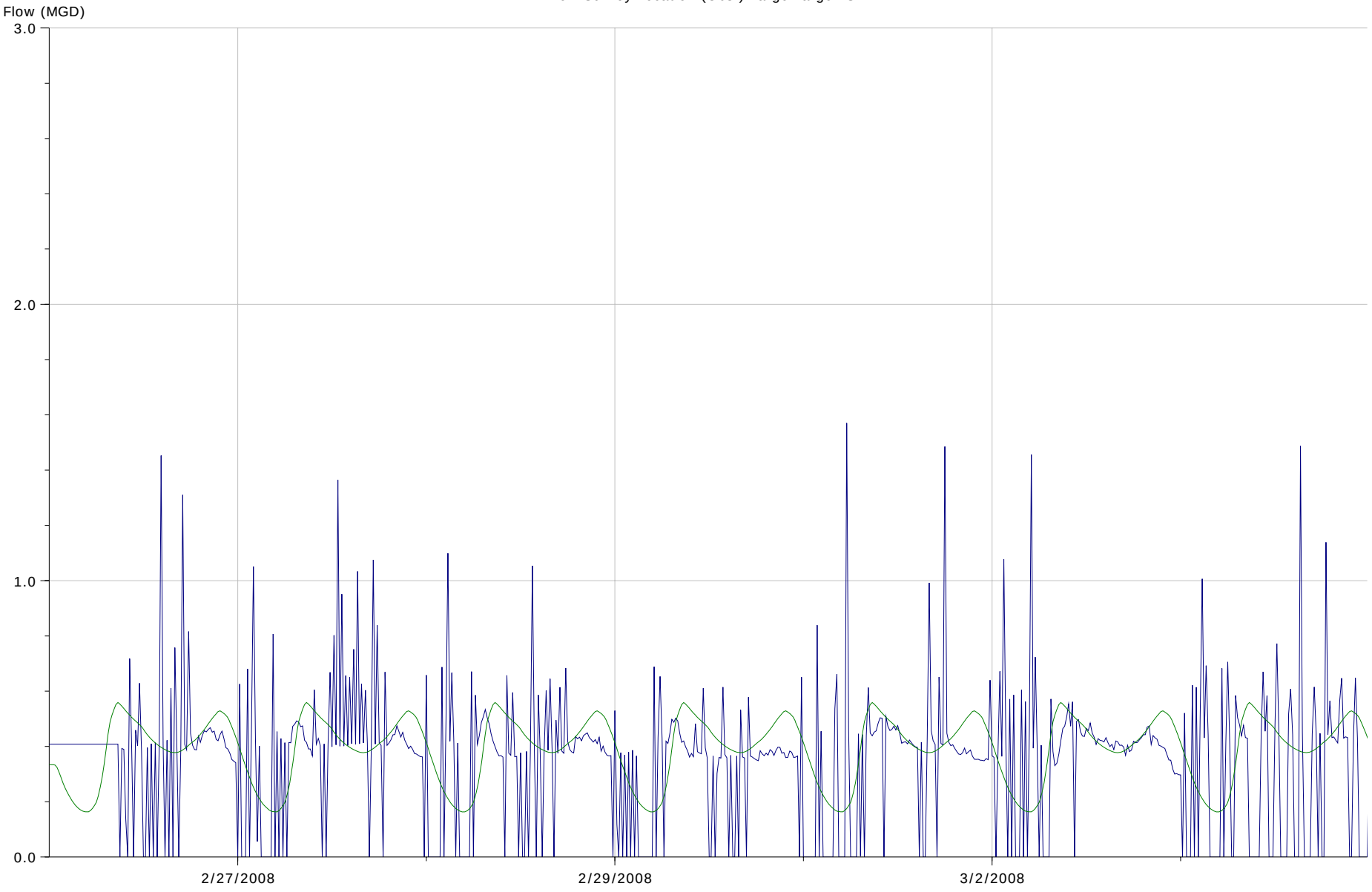
Flow Survey Location (Obs.) Jefferson Jefferson PS.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.000	0.988	3.265
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	0.261	0.601	3.212

Flow Survey: >SRCSD_CA>Flow Survey Group>WS PS 15m (11/21/2008 9:40:50 AM)
Sim: >SRCSD_CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF (1/9/2009 5:38:56 PM)
Graph Template: >SRCSD_CA>Graph Template Group>WS PSs (1/9/2009 6:07:45 PM)

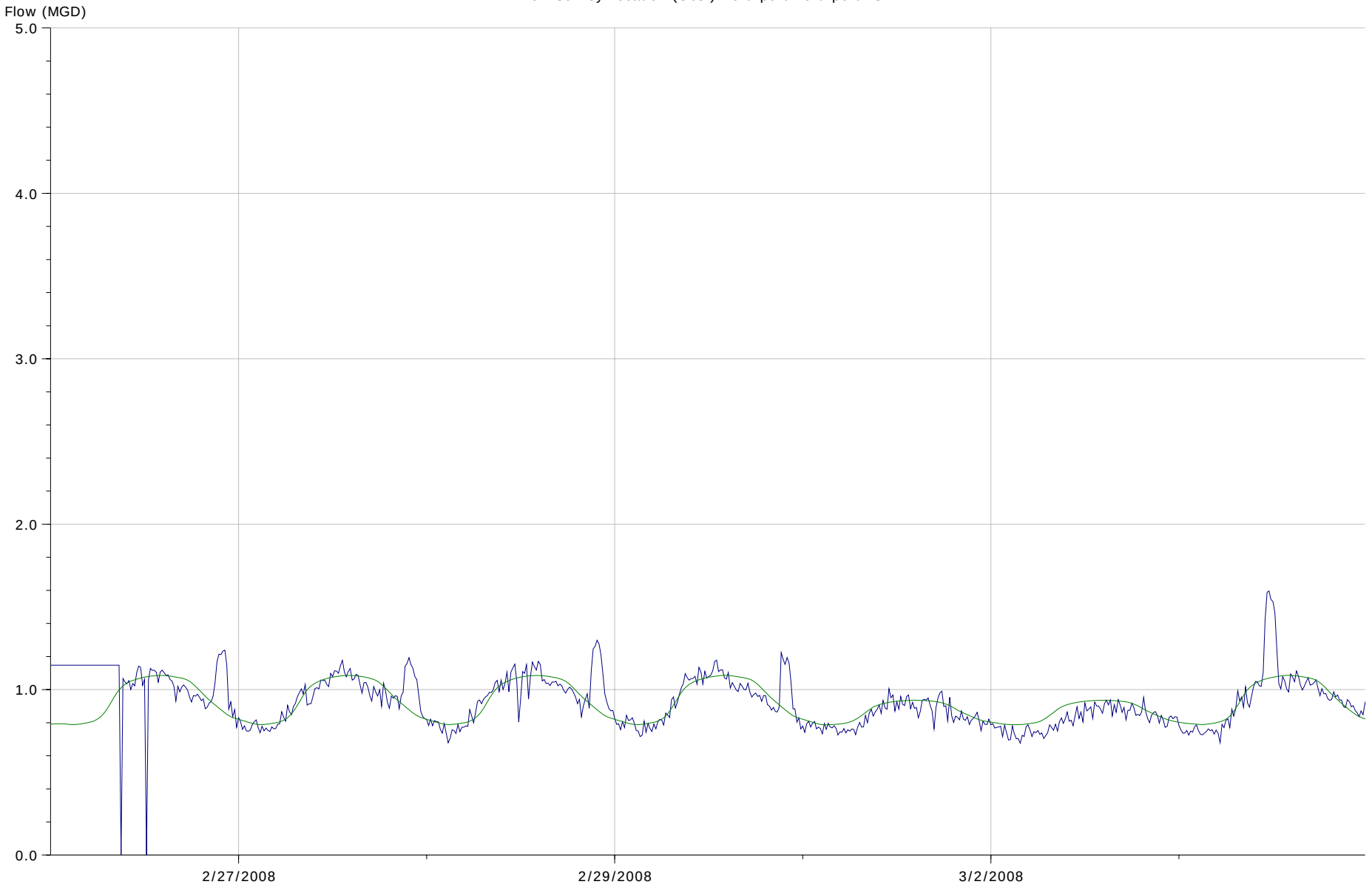
Flow Survey Location (Obs.) Largo Largo PS.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.000	1.571	2.454
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	0.164	0.559	2.749

Flow Survey: >SRCSD_CA>Flow Survey Group>WS PS 15m (11/21/2008 9:40:50 AM)
Sim: >SRCSD_CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF (1/9/2009 5:38:56 PM)
Graph Template: >SRCSD_CA>Graph Template Group>WS PSs (1/9/2009 6:07:45 PM)

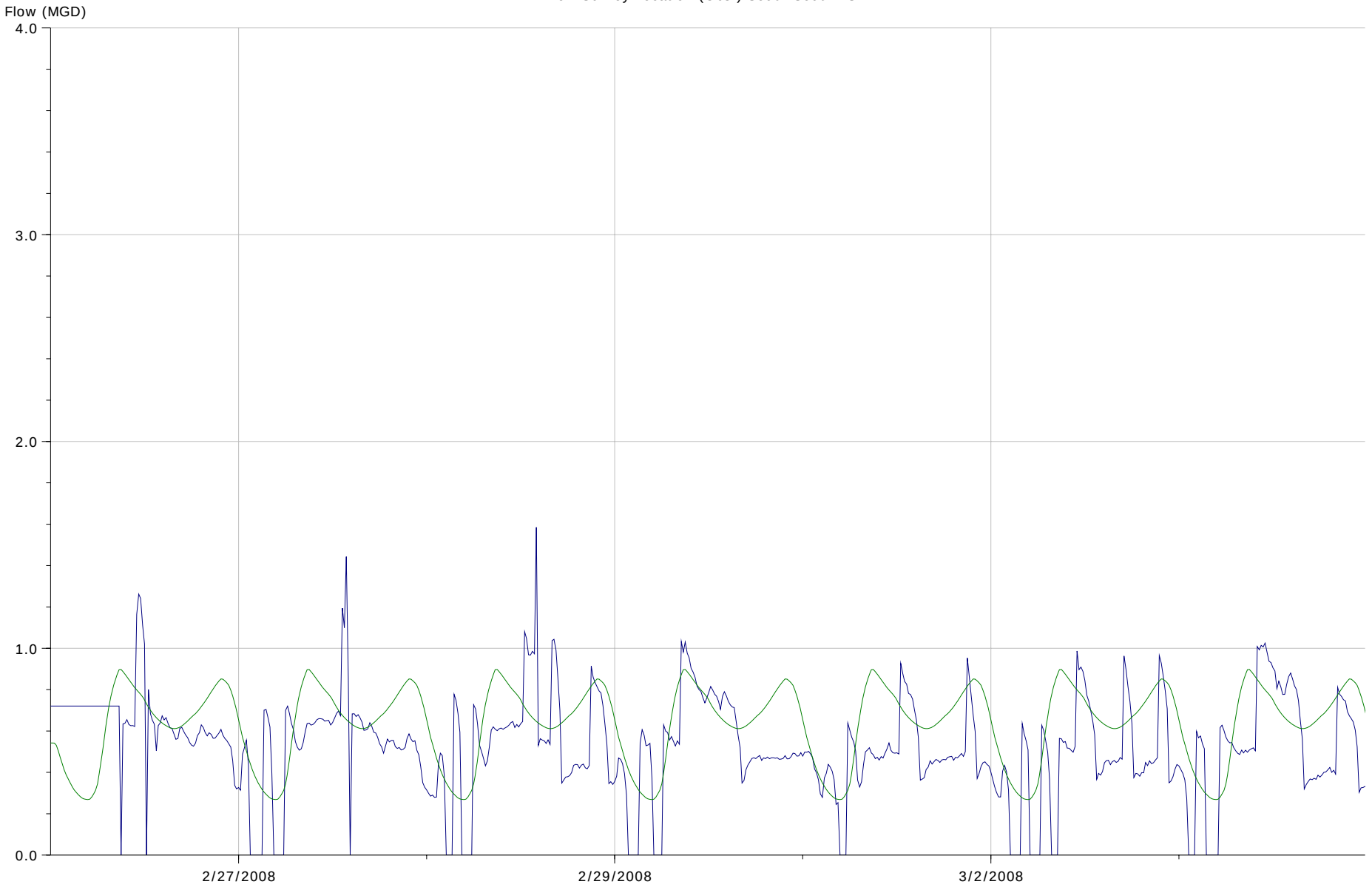
Flow Survey Location (Obs.) Northport Northport PS.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.000	1.596	6.520
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	0.787	1.086	6.443

Flow Survey: >SRCSD_CA>Flow Survey Group>WS PS 15m (11/21/2008 9:40:50 AM)
Sim: >SRCSD_CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF (1/9/2009 5:38:56 PM)
Graph Template: >SRCSD_CA>Graph Template Group>WS PSs (1/9/2009 6:07:45 PM)

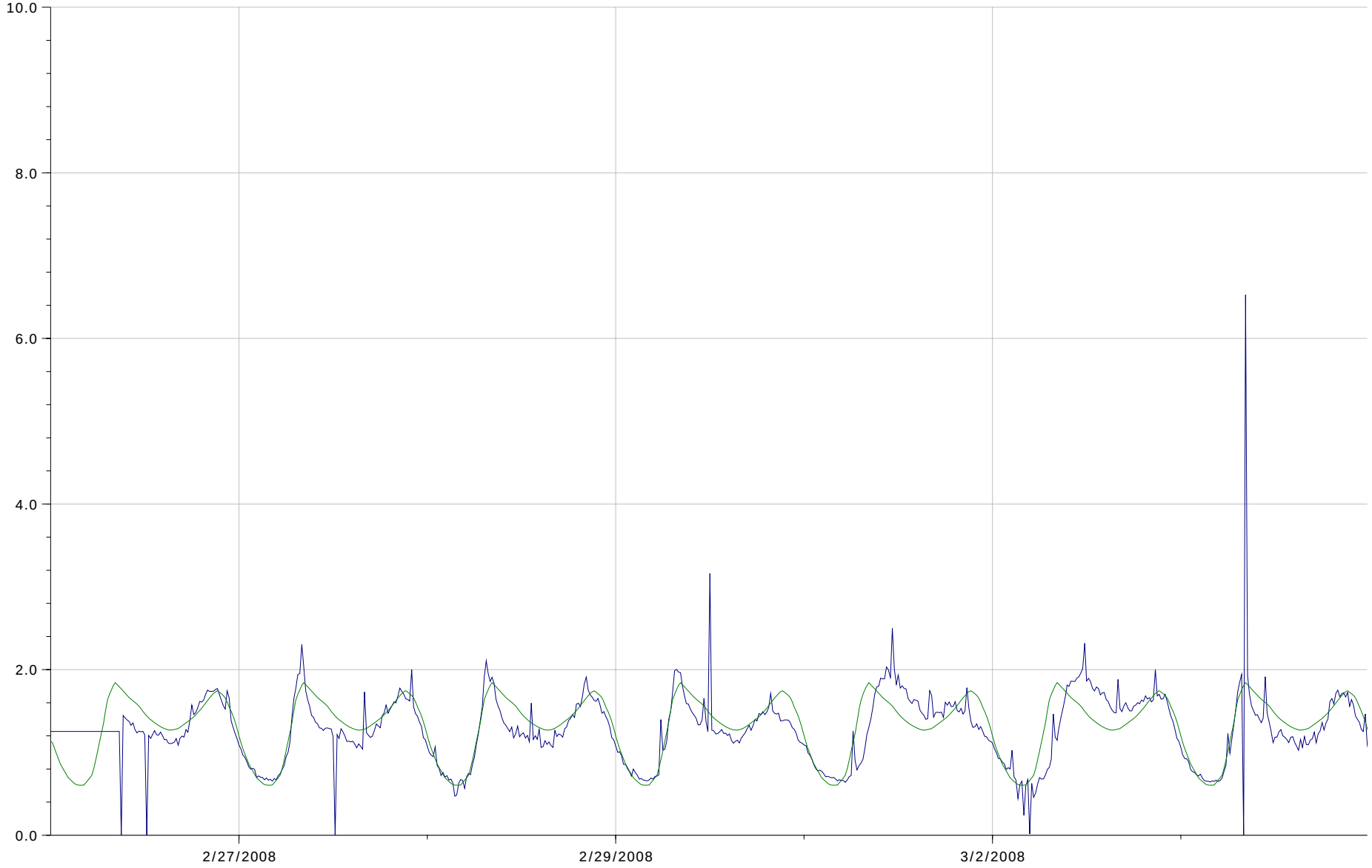
Flow Survey Location (Obs.) South South PS.1



	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.000	1.585	3.701
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	0.268	0.898	4.451

Flow Survey: >SRCSD_CA>Flow Survey Group>WS PS 15m (11/21/2008 9:40:50 AM)
Sim: >SRCSD_CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF (1/9/2009 5:38:56 PM)
Graph Template: >SRCSD_CA>Graph Template Group>WS PSs (1/9/2009 6:07:45 PM)

Flow Survey Location (Obs.) Southport Southport PS.1

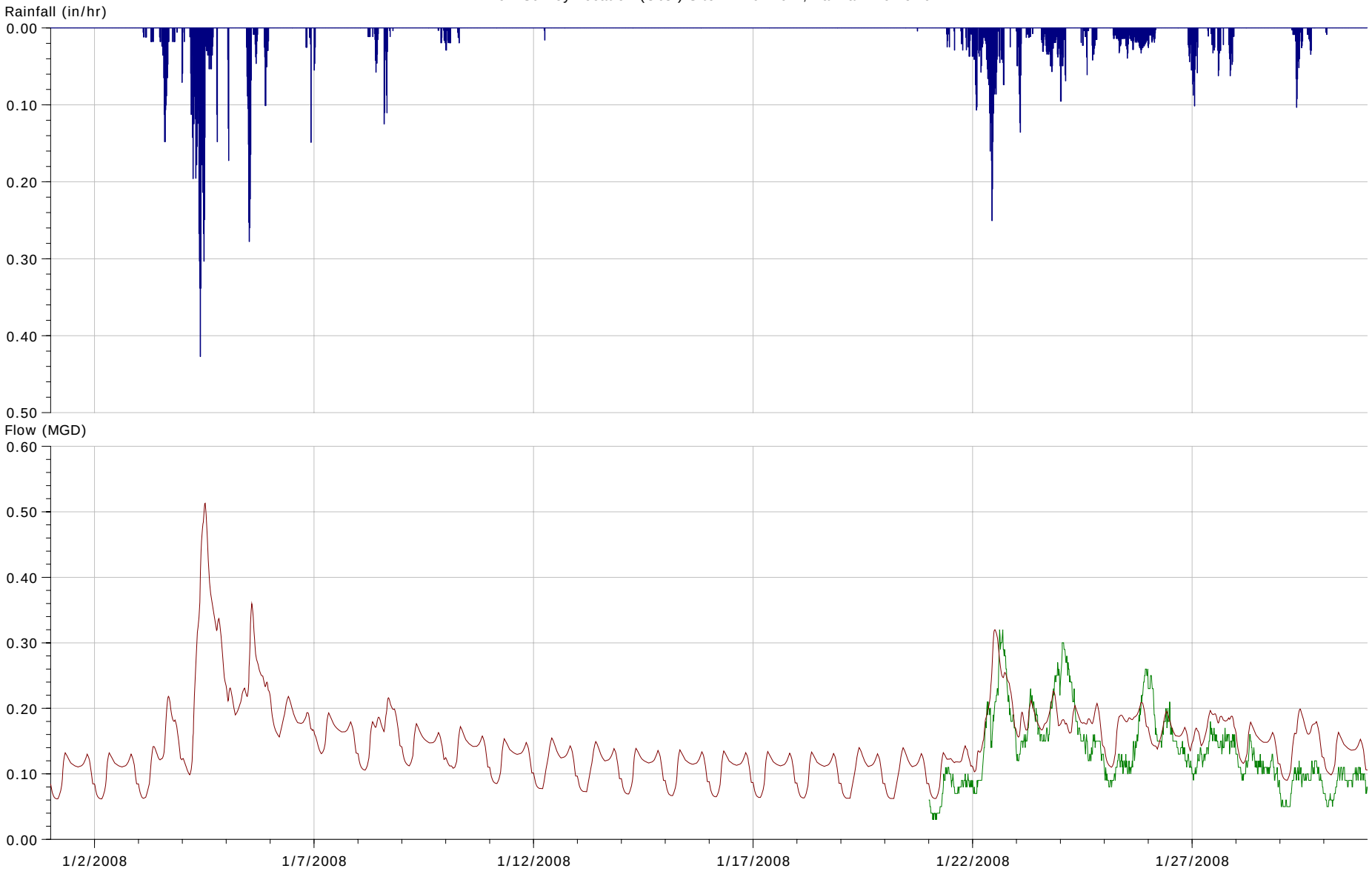


	Flow (MGD)		
	Min	Max	Volume (US Mgal)
Obs.	0.000	6.528	8.972
..._CA>Run Group>Cal#7_test 2 (Gisa's revisions)!!>DWF	0.603	1.843	9.228

Attachment C
Wet Weather Calibration Plots

Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 2:42:36 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sacramento 15m Flow Meter Graph (1/10/2009 6:04:24 PM)

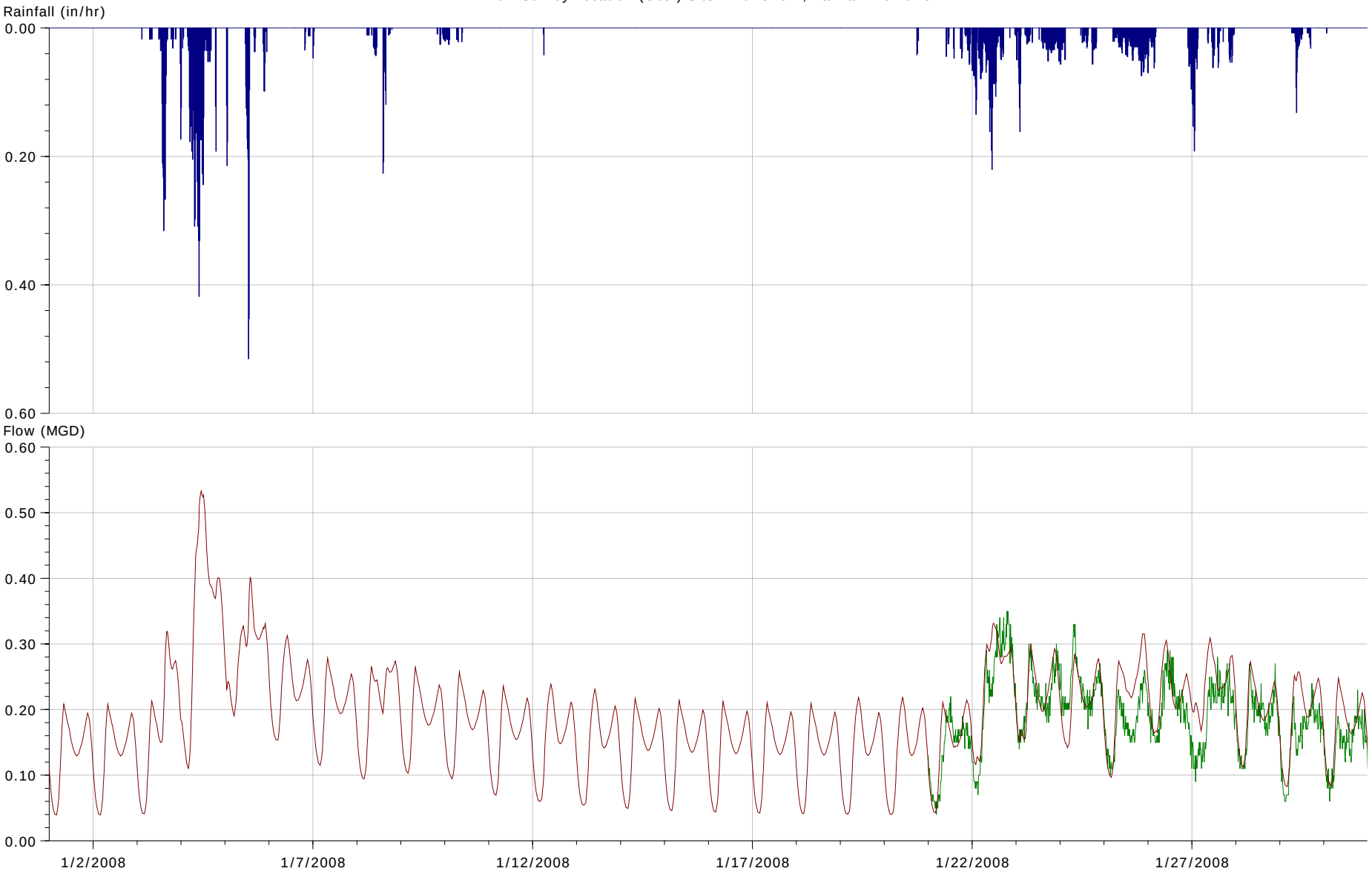
Flow Survey Location (Obs.) Site 1 410N19.1, Rainfall Profile: 9



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	5.959	0.427	0.008			
Obs.				0.030	0.320	1.344
...Gisa's trials)>Rainfall Event_fixed!				0.062	0.513	4.368

Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 2:42:36 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sacramento 15m Flow Meter Graph (1/10/2009 6:04:24 PM)

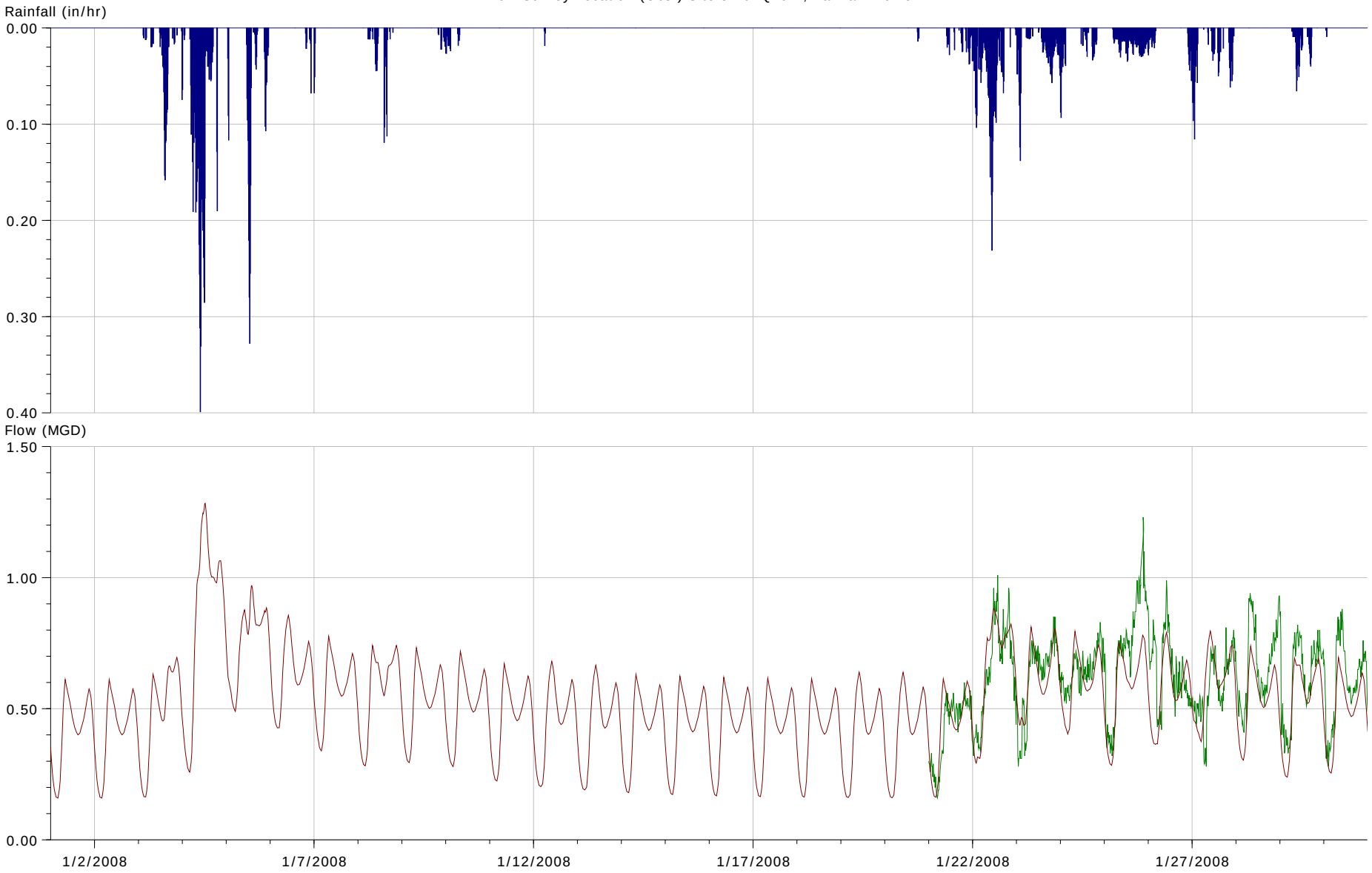
Flow Survey Location (Obs.) Site 2 704O19.1, Rainfall Profile: 8



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	7.422	0.515	0.010			
Obs.				0.040	0.350	1.889
...Gisa's trials)>Rainfall Event_fixed!				0.039	0.533	5.639

Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 2:42:36 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sacramento 15m Flow Meter Graph (1/10/2009 6:04:24 PM)

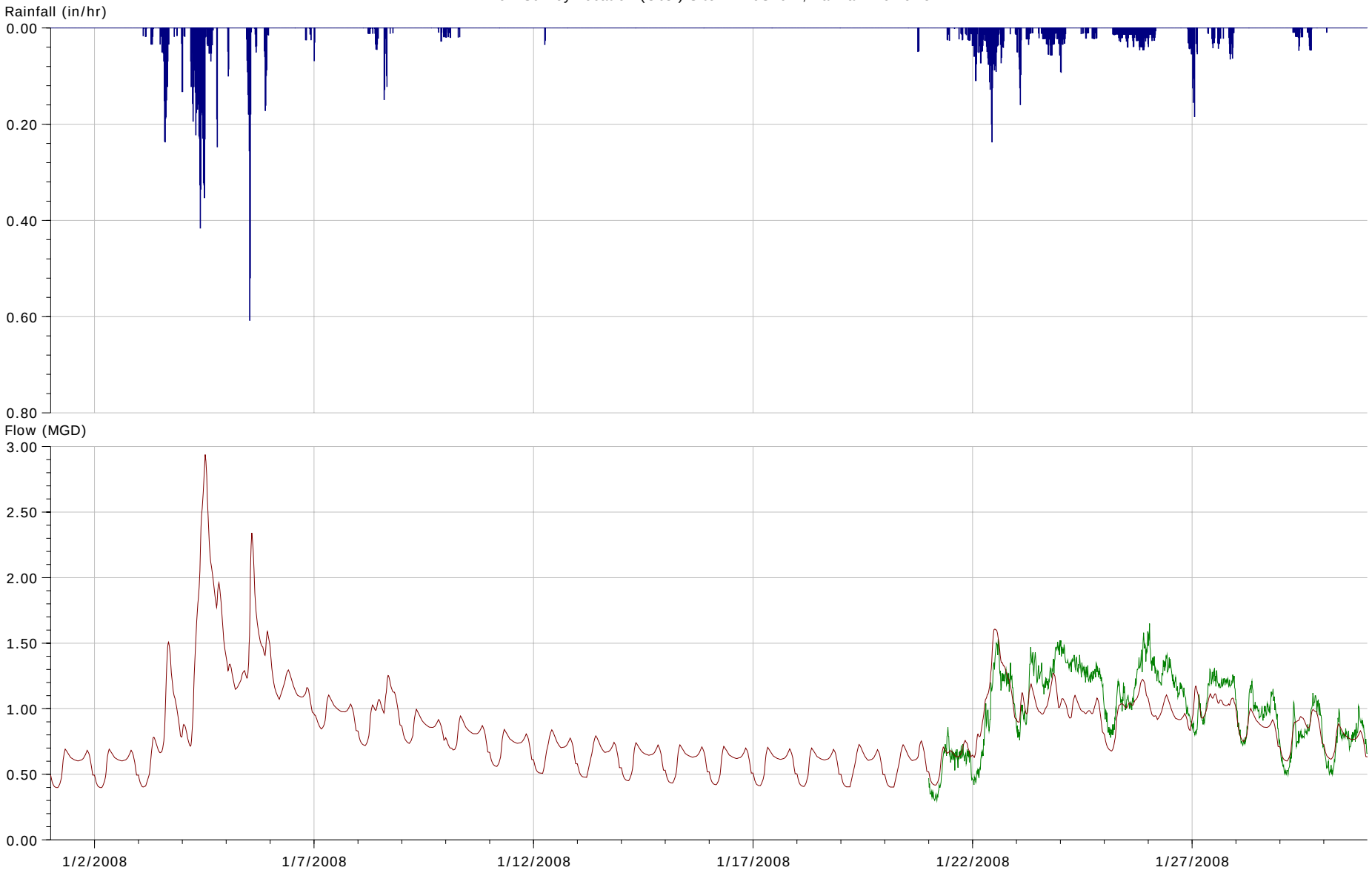
Flow Survey Location (Obs.) Site 3 101Q19.1, Rainfall Profile: 7



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	5.913	0.399	0.008			
Obs.				0.160	1.230	6.182
...Gisa's trials)>Rainfall Event_fixed!				0.159	1.284	15.790

Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 2:42:36 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sacramento 15m Flow Meter Graph (1/10/2009 6:04:24 PM)

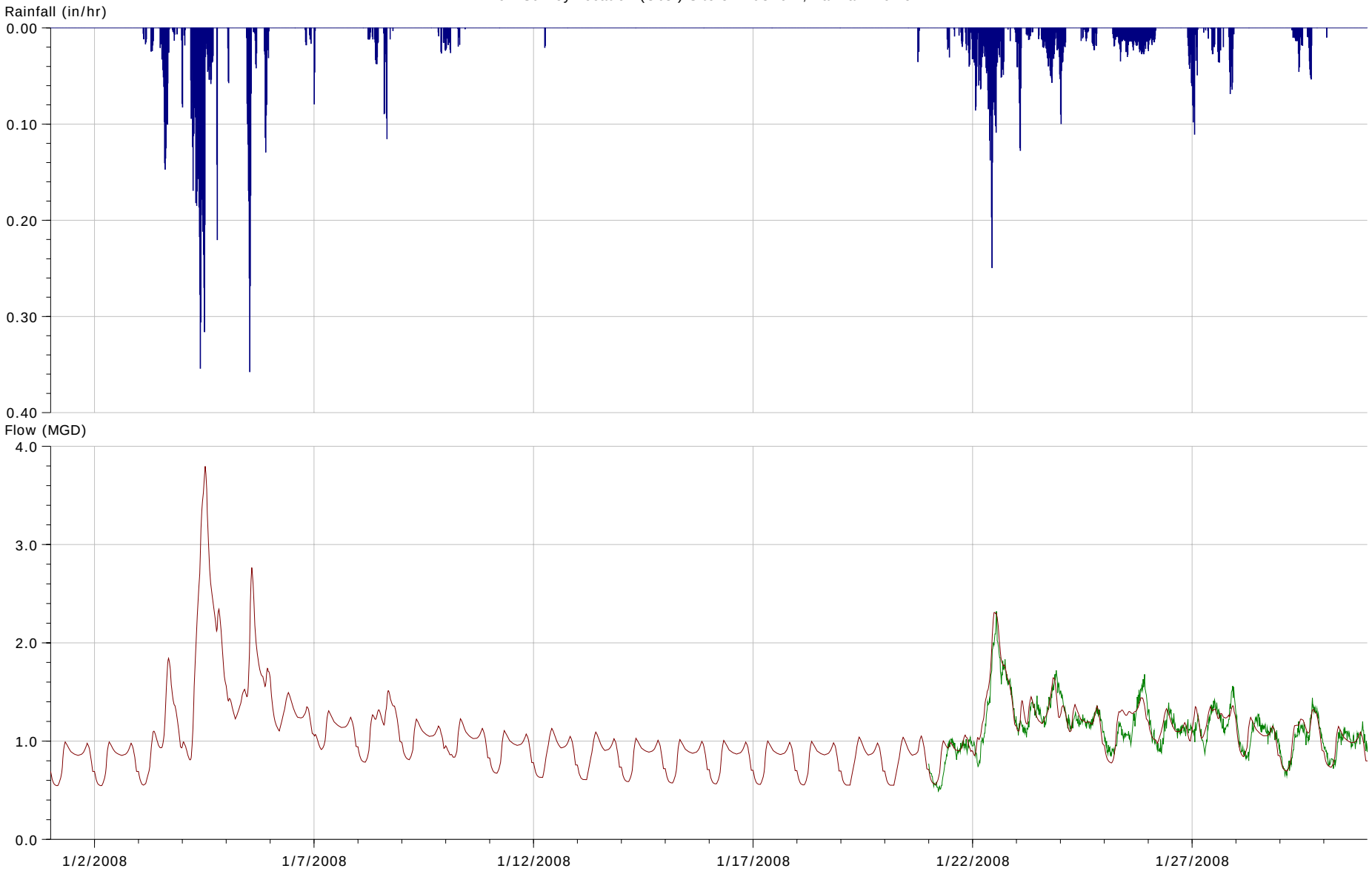
Flow Survey Location (Obs.) Site 4 719S19.1, Rainfall Profile: 5



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	6.590	0.608	0.009			
Obs.				0.300	1.650	10.040
...Gisa's trials)>Rainfall Event_fixed!				0.399	2.938	25.225

Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 2:42:36 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sacramento 15m Flow Meter Graph (1/10/2009 6:04:24 PM)

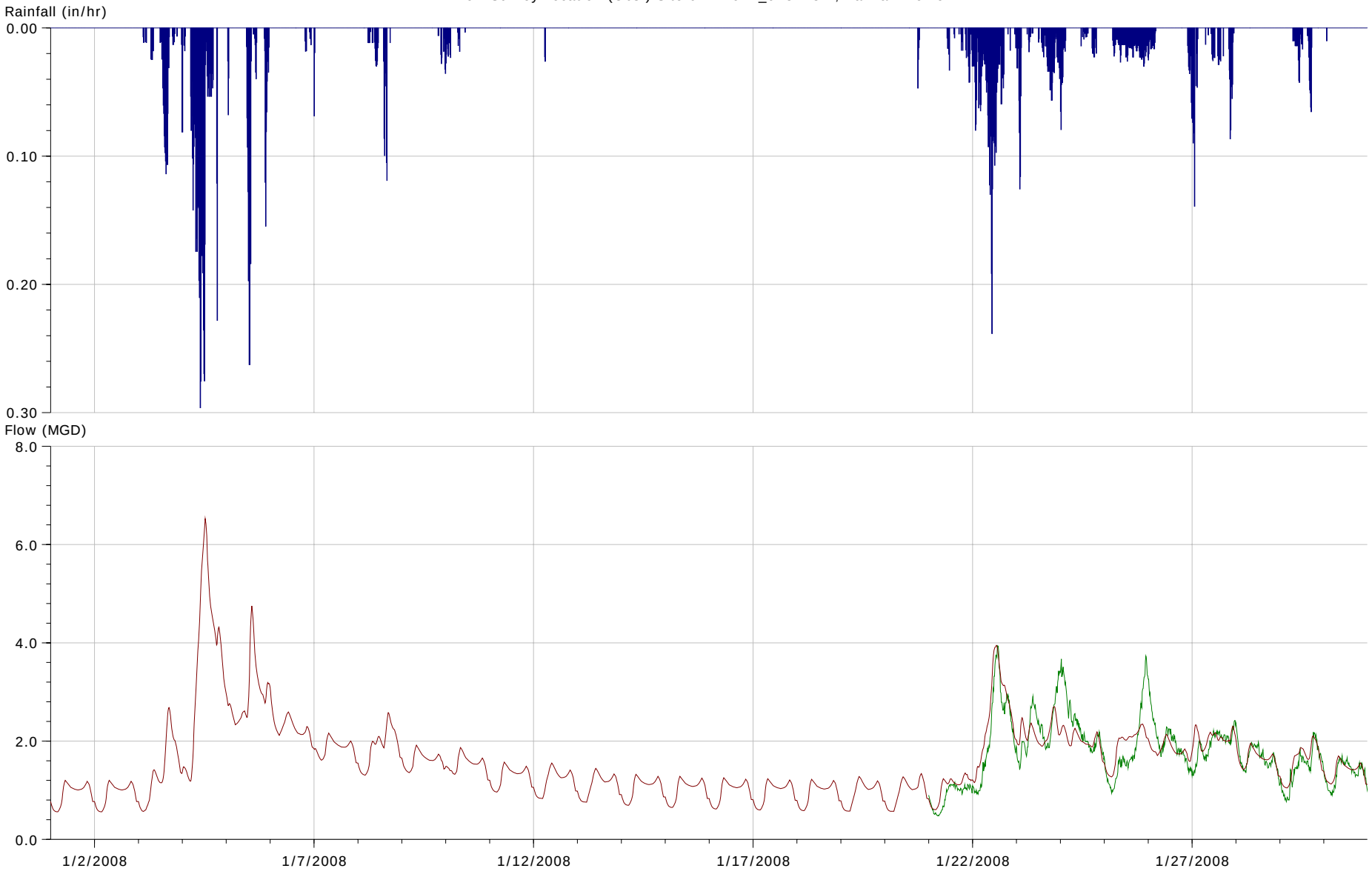
Flow Survey Location (Obs.) Site 5 120U19.1, Rainfall Profile: 4



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	5.712	0.357	0.008			
Obs.				0.490	2.320	11.332
...Gisa's trials)>Rainfall Event_fixed!				0.548	3.797	31.925

Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 2:42:36 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sacramento 15m Flow Meter Graph (1/10/2009 6:04:24 PM)

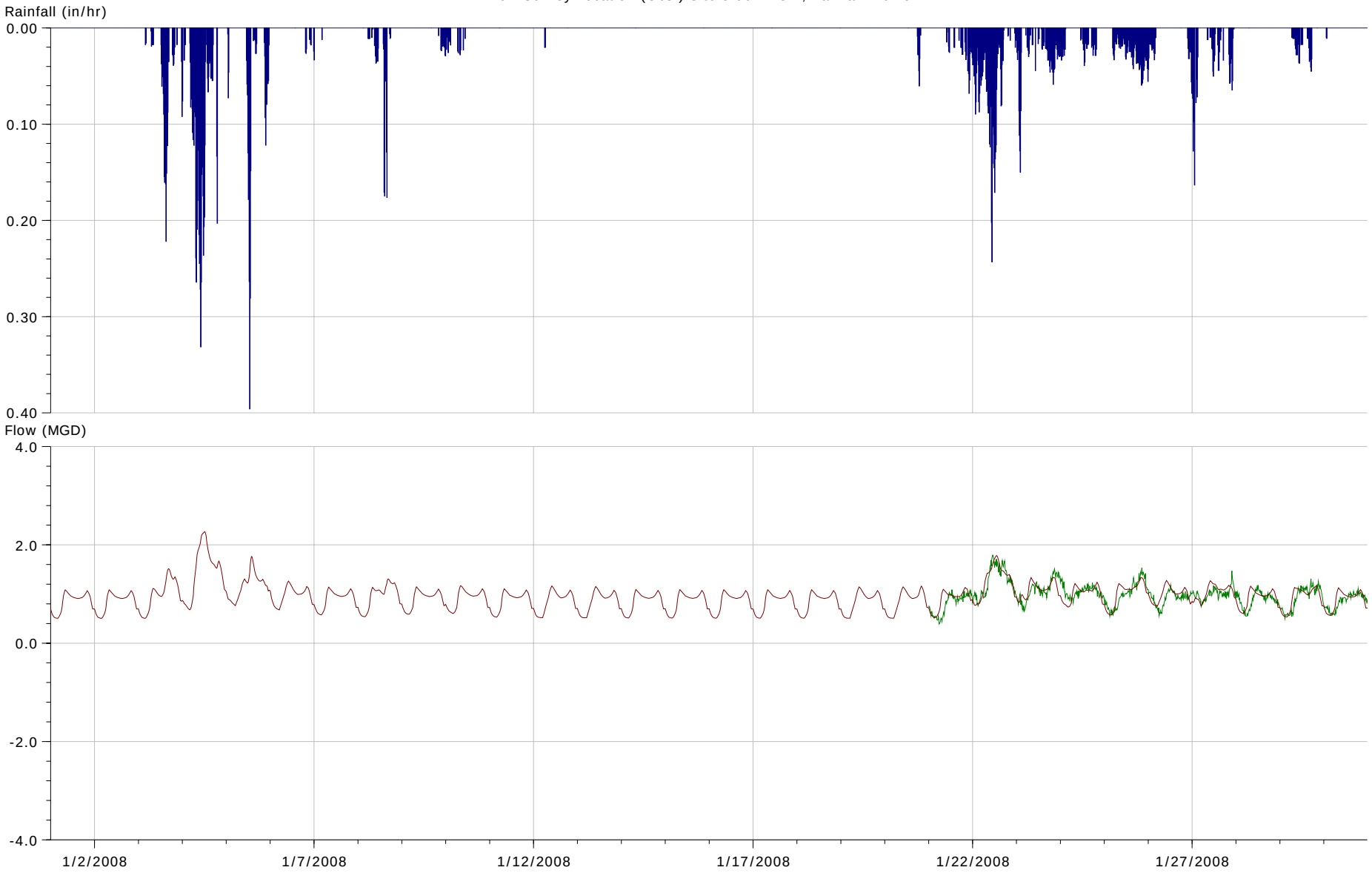
Flow Survey Location (Obs.) Site 6 + 7 912_913V18.1, Rainfall Profile: 2



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	5.504	0.296	0.008			
Obs.				0.480	3.940	17.921
...Gisa's trials)>Rainfall Event_fixed!				0.563	6.526	47.740

Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 2:42:36 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sacramento 15m Flow Meter Graph (1/10/2009 6:04:24 PM)

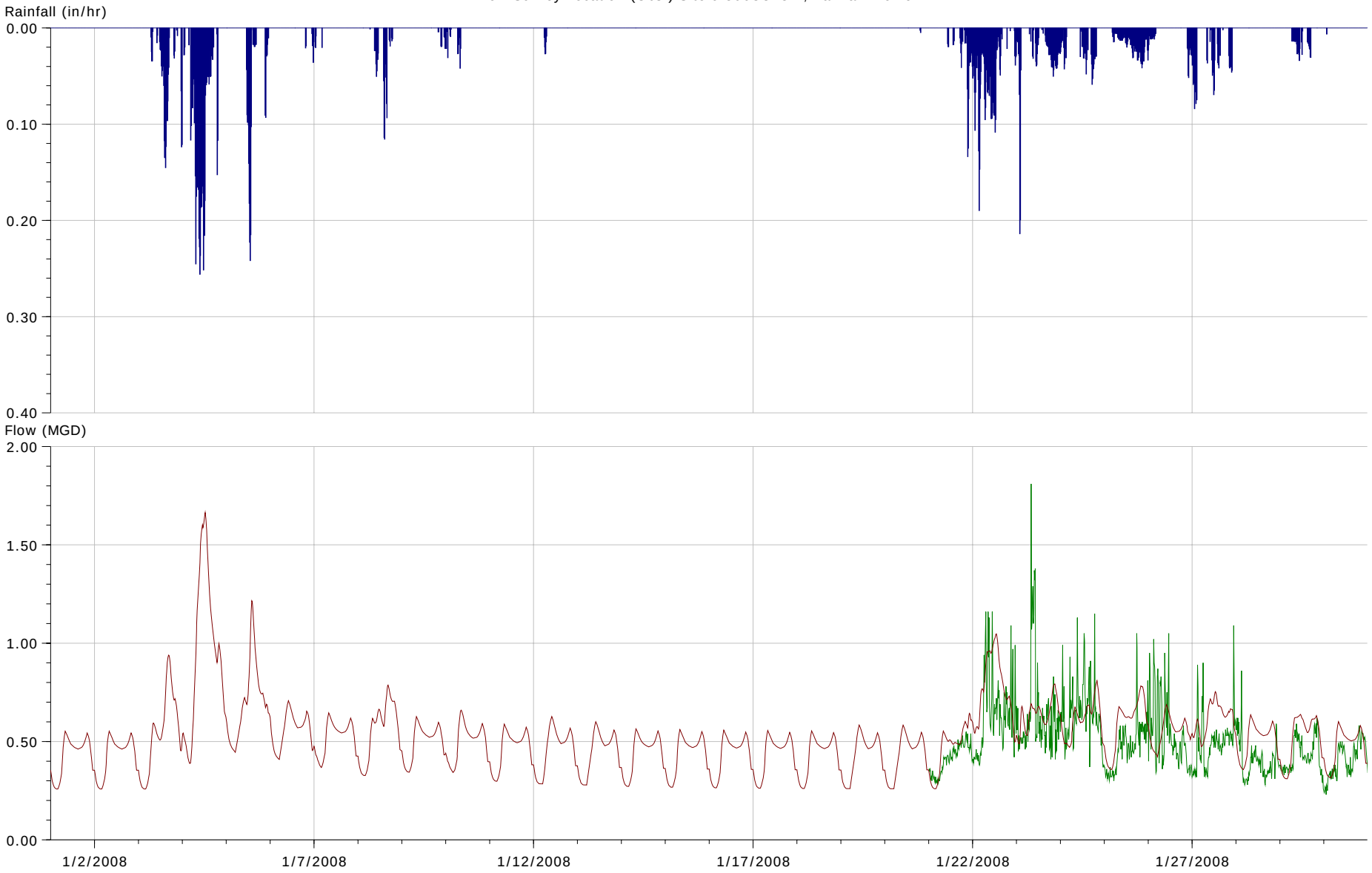
Flow Survey Location (Obs.) Site 8 901Y18.1, Rainfall Profile: 1



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	6.651	0.396	0.009			
Obs.				0.390	1.790	9.764
...Gisa's trials)>Rainfall Event_fixed!				0.509	2.267	28.466

Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 2:42:36 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sacramento 15m Flow Meter Graph (1/10/2009 6:04:24 PM)

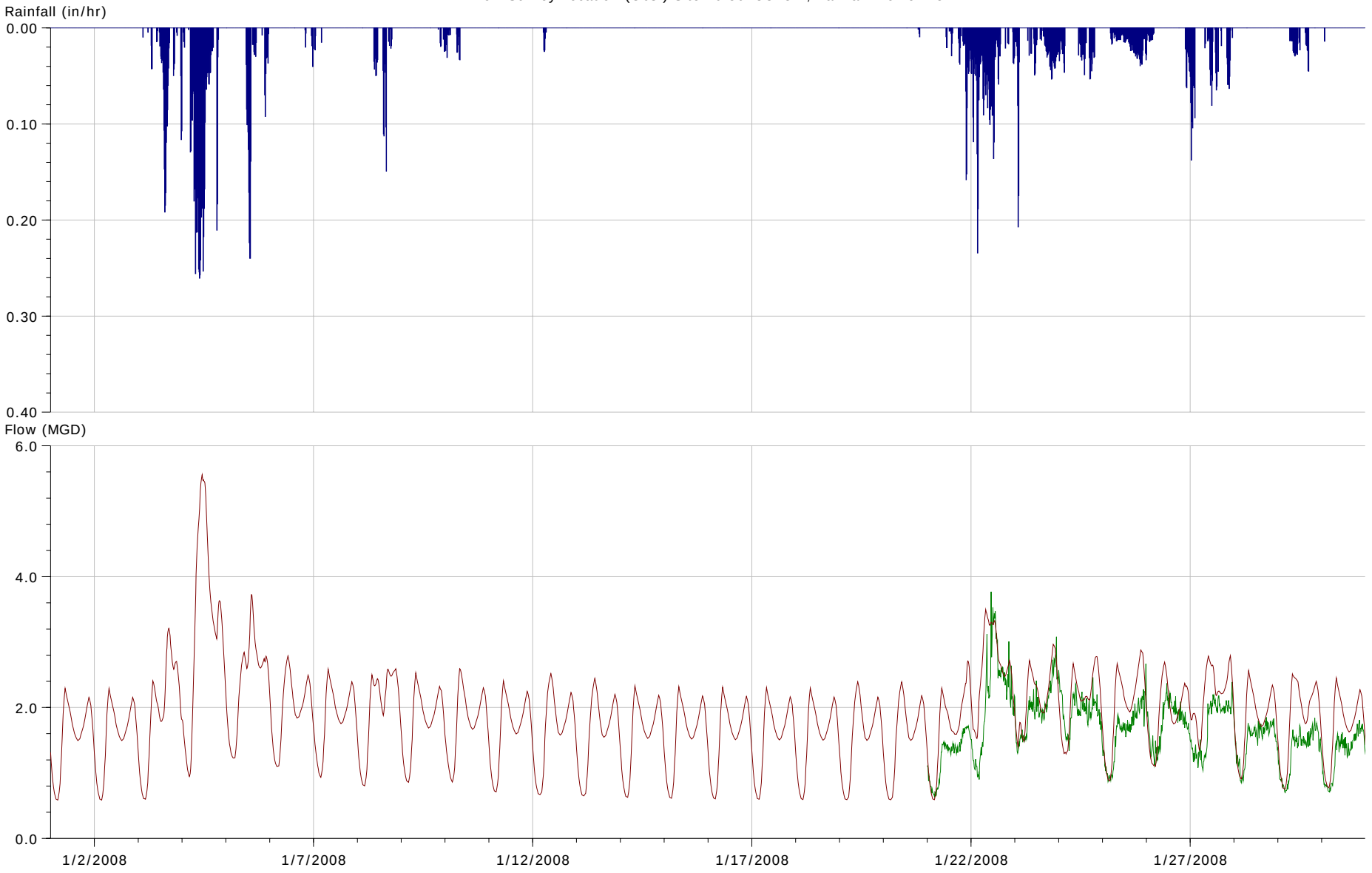
Flow Survey Location (Obs.) Site 9 506UU13.1, Rainfall Profile: 17



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	5.784	0.256	0.008			
Obs.				0.230	1.810	5.085
...Gisa's trials)>Rainfall Event_fixed!				0.259	1.664	15.875

Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 2:42:36 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sacramento 15m Flow Meter Graph (1/10/2009 6:04:24 PM)

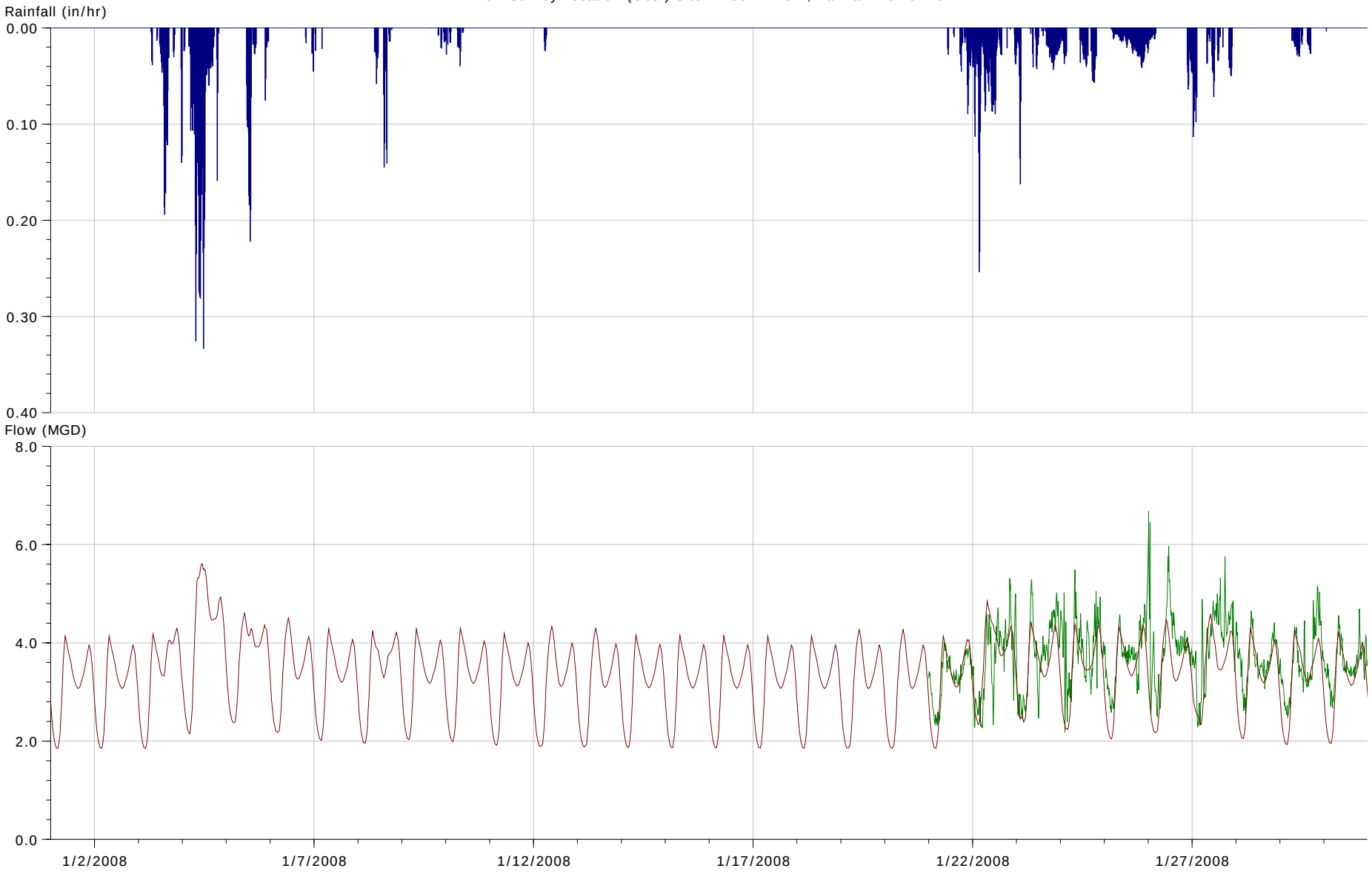
Flow Survey Location (Obs.) Site 10 504UU13.1, Rainfall Profile: 15



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	6.394	0.261	0.009			
Obs.				0.640	3.770	16.615
...Gisa's trials)>Rainfall Event_fixed!				0.586	5.557	56.384

Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 2:42:36 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sacramento 15m Flow Meter Graph (1/10/2009 6:04:24 PM)

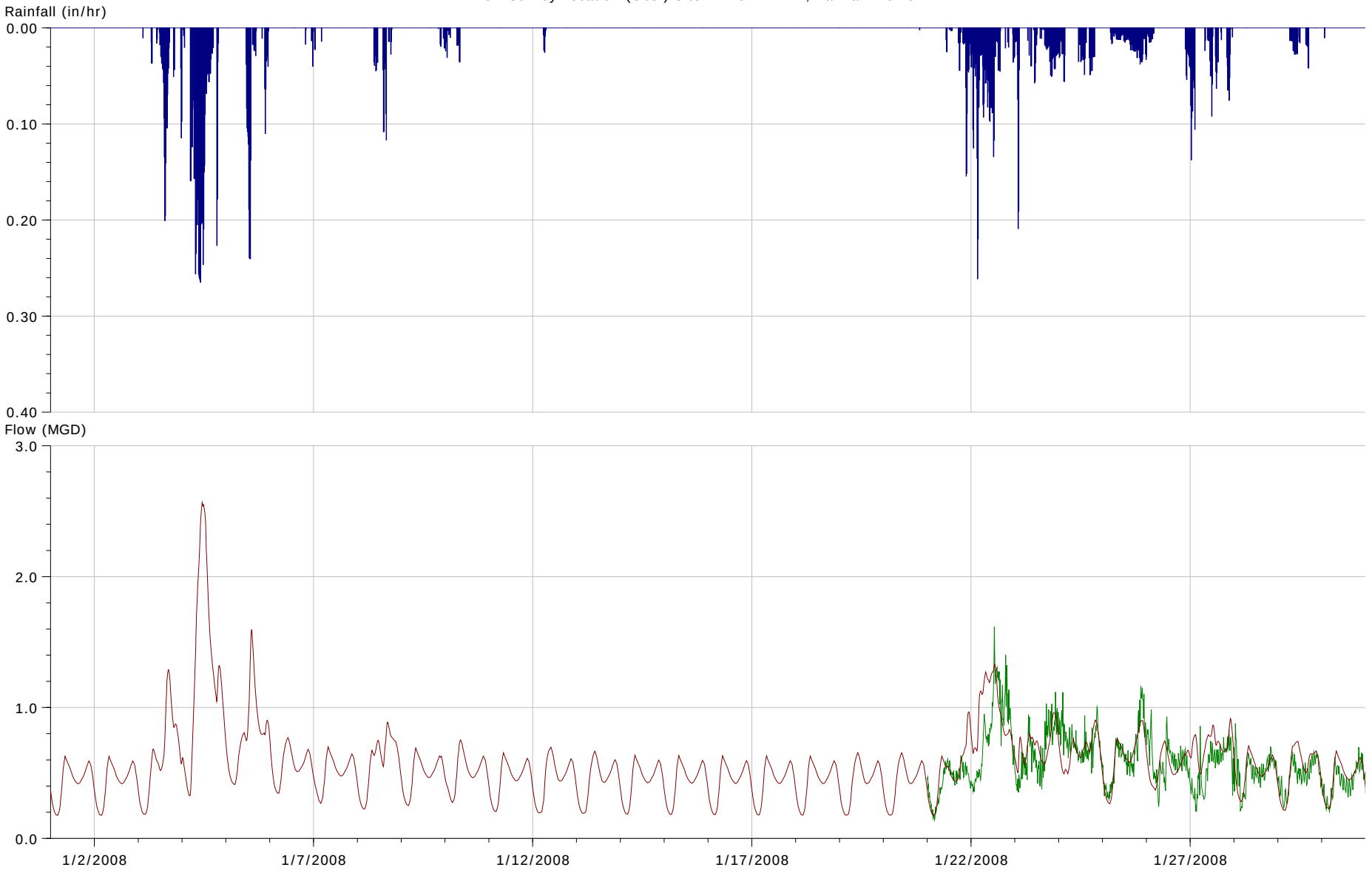
Flow Survey Location (Obs.) Site 11 302VV13.1, Rainfall Profile: 13



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	5.907	0.333	0.008			
Obs.				2.181	6.676	37.093
...Gisa's trials)>Rainfall Event_fixed!				1.851	5.613	100.309

Flow Survey: >SRCSD_CA>Flow Survey Group>Sacramento 15m Flow Meters (11/12/2008 11:49:24 AM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 2:42:36 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sacramento 15m Flow Meter Graph (1/10/2009 6:04:24 PM)

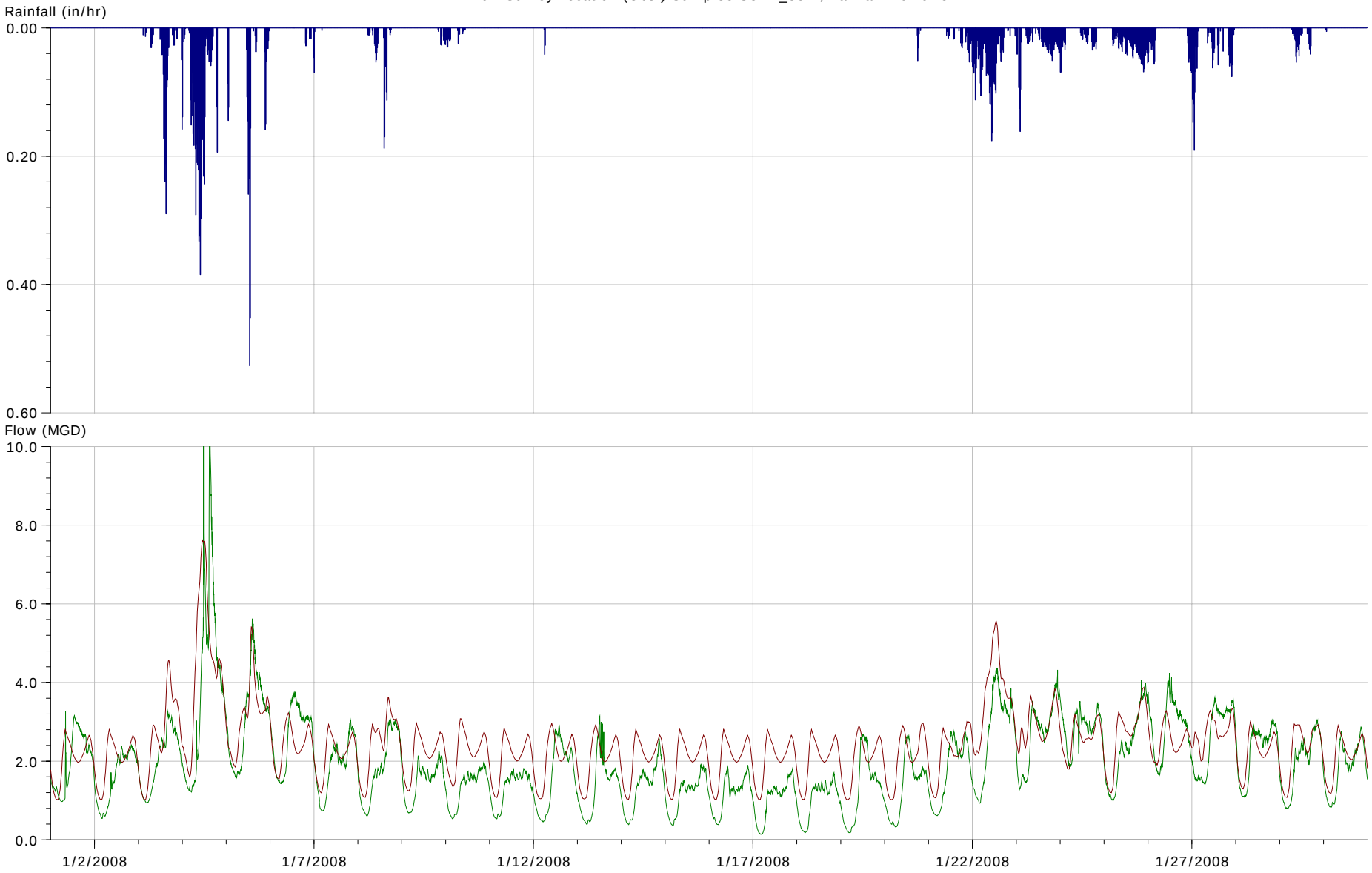
Flow Survey Location (Obs.) Site 12 702VV14.1, Rainfall Profile: 11



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	6.290	0.265	0.009			
Obs.				0.140	1.617	5.850
...Gisa's trials)>Rainfall Event_fixed!				0.177	2.566	17.003

Observed / Predicted Plot Produced by GJu (1/11/2009 3:10:43 PM) Page 1 of 2
Flow Survey: >SRCSD_CA>Flow Survey Group>Sac 5m Sumps 85_87 (11/12/2008 3:37:37 PM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 2:42:36 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sac 5m Sumps 85_87 (1/10/2009 6:04:32 PM)

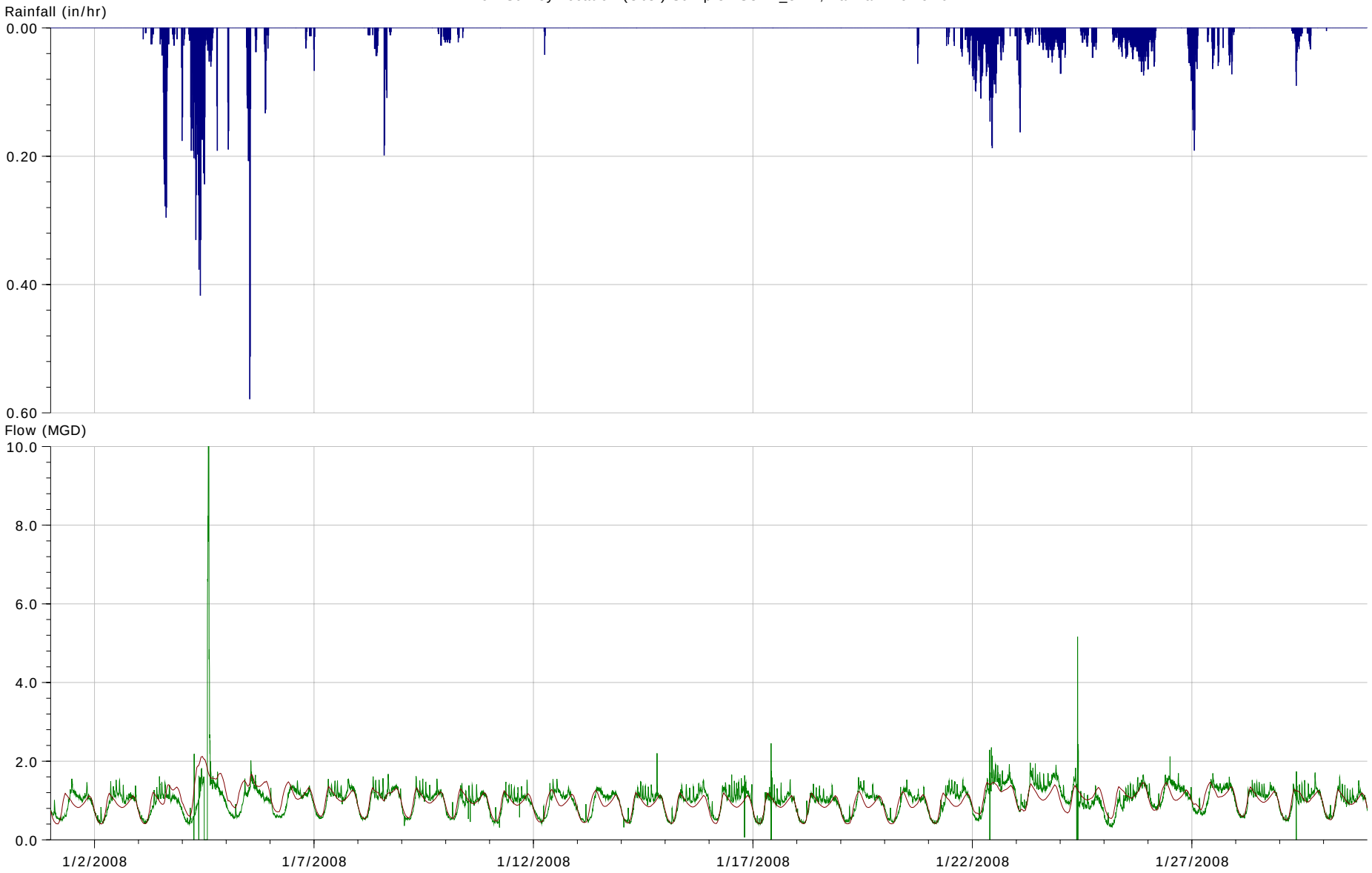
Flow Survey Location (Obs.) Sump 85 SUMP_85.1, Rainfall Profile: 3



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	7.258	0.527	0.010			
Obs.				0.139	27.129	58.475
...Gisa's trials)>Rainfall Event_fixed!				1.018	7.614	72.427

Flow Survey: >SRCSD_CA>Flow Survey Group>Sac 5m Sumps 85_87 (11/12/2008 3:37:37 PM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 2:42:36 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sac 5m Sumps 85_87 (1/10/2009 6:04:32 PM)

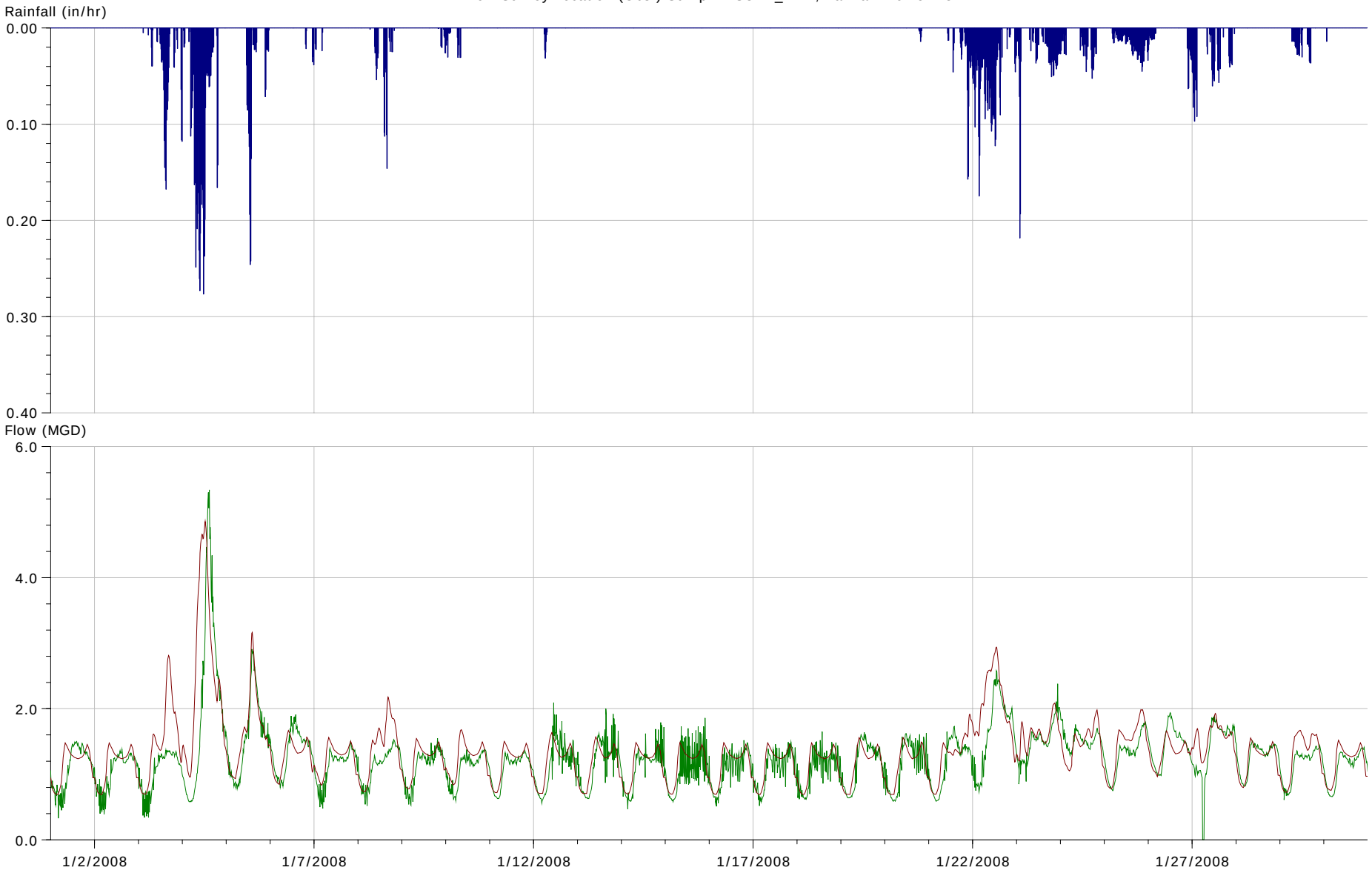
Flow Survey Location (Obs.) Sump 87 SUMP_87.1, Rainfall Profile: 6



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	7.541	0.578	0.010			
Obs.				-0.004	10.864	30.312
...Gisa's trials)>Rainfall Event_fixed!				0.404	2.119	29.680

Observed / Predicted Plot Produced by GJu (1/11/2009 3:12:27 PM) Page 1 of 3
Flow Survey: >SRCSD_CA>Flow Survey Group>Sac 15m Sumps 21_119_55 (11/13/2008 9:38:46 AM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 2:42:36 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sac 15m Sumps 21_119_55 (1/10/2009 6:04:36 PM)

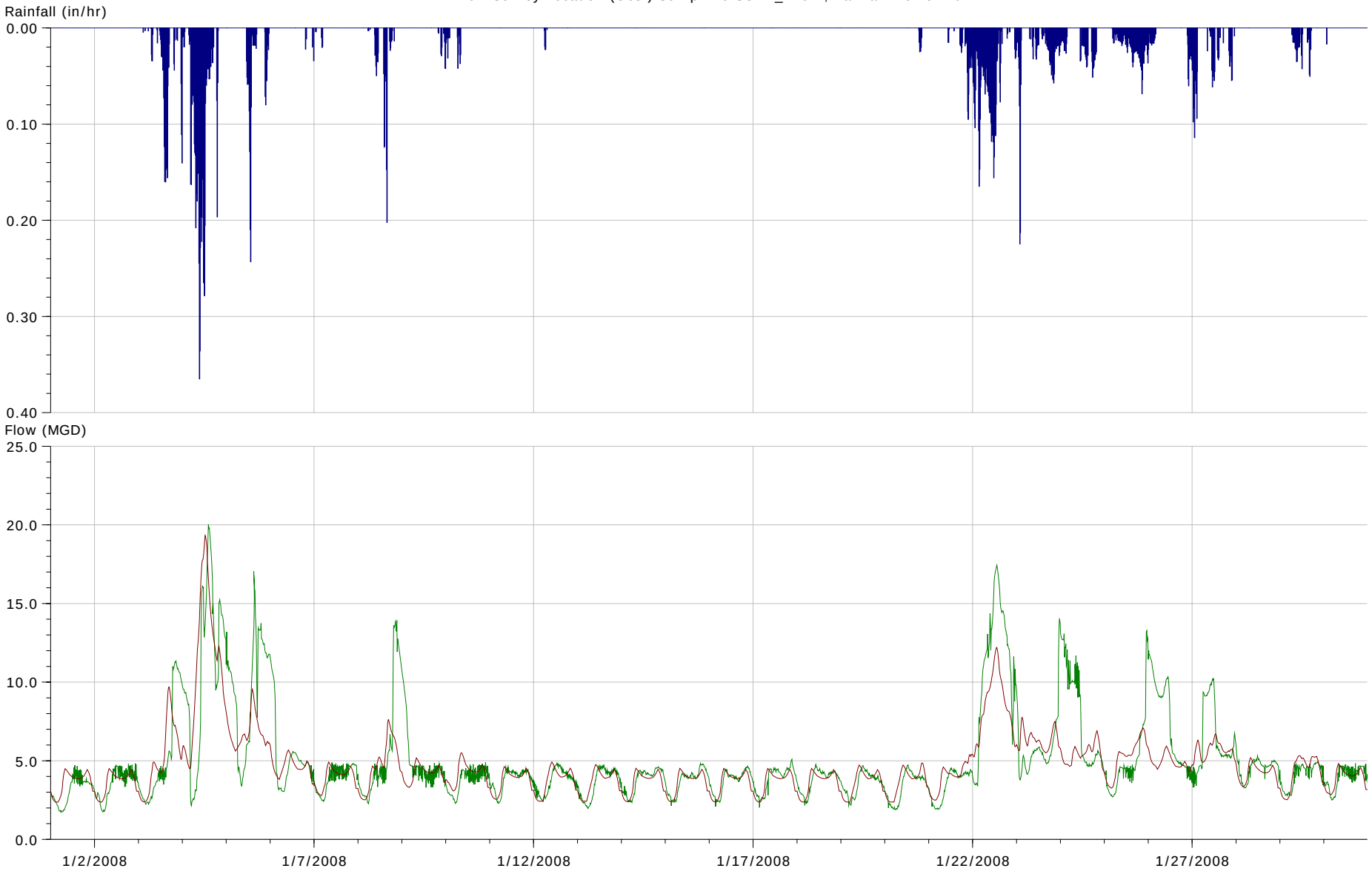
Flow Survey Location (Obs.) Sump 21 SUMP_21.1, Rainfall Profile: 18



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	6.046	0.277	0.008			
Obs.				0.000	5.340	37.352
...Gisa's trials)>Rainfall Event_fixed!				0.693	4.856	40.533

Flow Survey: >SRCSD_CA>Flow Survey Group>Sac 15m Sumps 21_119_55 (11/13/2008 9:38:46 AM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 2:42:36 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sac 15m Sumps 21_119_55 (1/10/2009 6:04:36 PM)

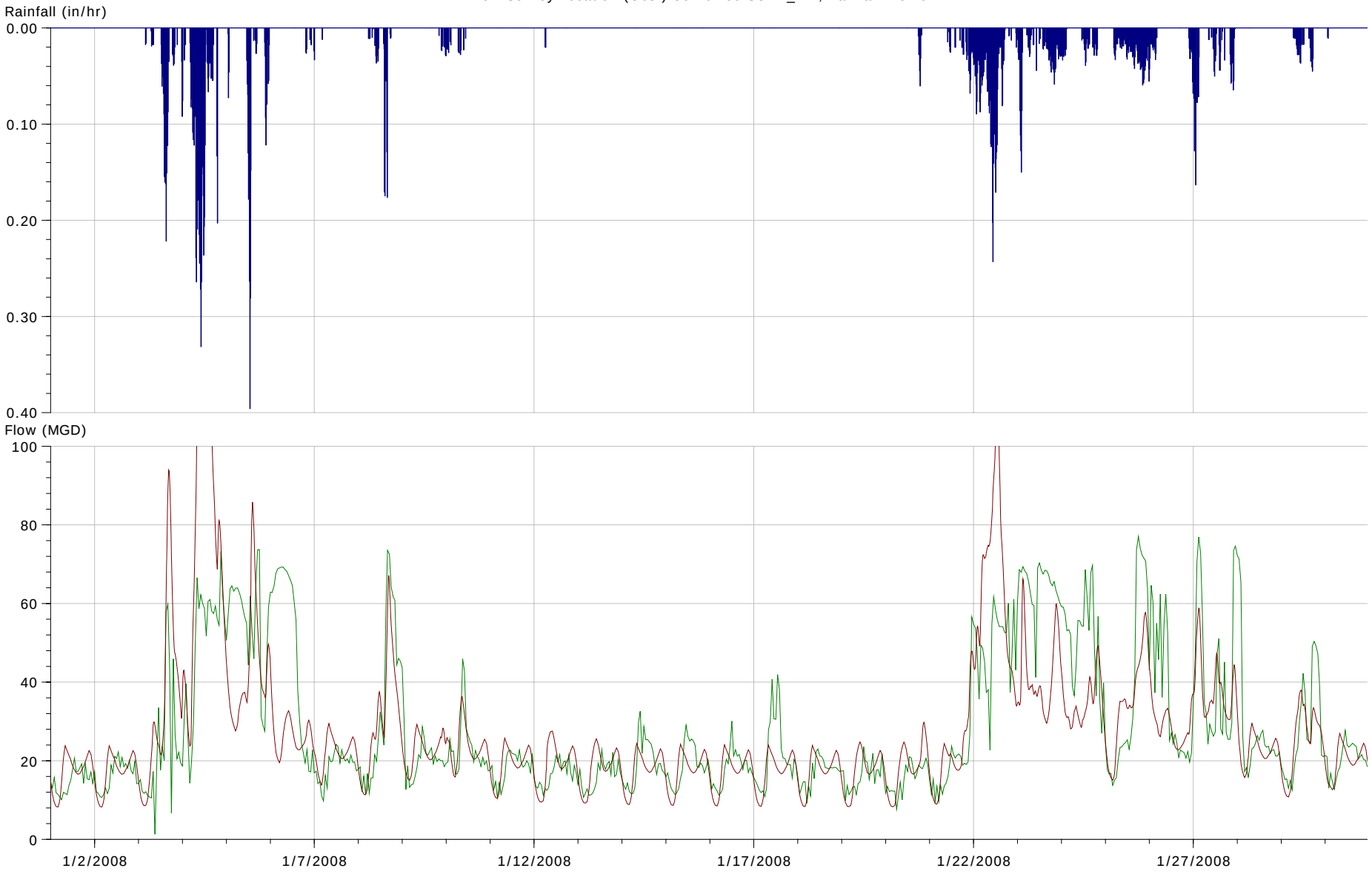
Flow Survey Location (Obs.) Sump 119 SUMP_119.1, Rainfall Profile: 20



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	6.194	0.365	0.009			
Obs.				1.720	20.030	152.443
...Gisa's trials)>Rainfall Event_fixed!				2.372	19.318	141.063

Observed / Predicted Plot Produced by GJu (1/11/2009 3:13:30 PM) Page 1 of 1
Flow Survey: >SRCSD_CA>Flow Survey Group>Sac_Combined (11/21/2008 1:22:10 PM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 2:42:36 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Sump2 (1/10/2009 6:04:44 PM)

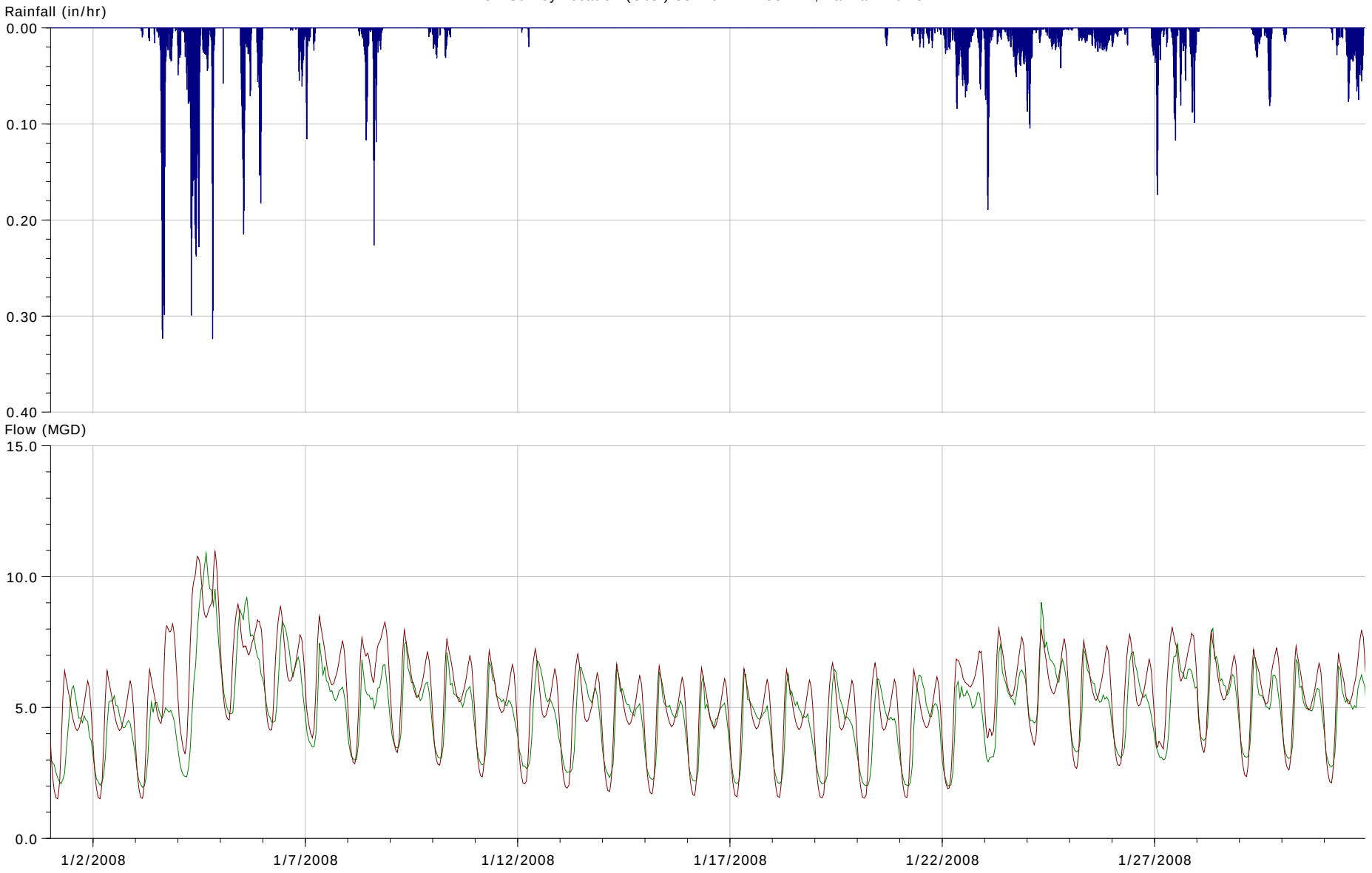
Flow Survey Location (Obs.) Combined SUMP_2.1, Rainfall Profile: 1



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	6.651	0.396	0.009			
Obs.				1.290	77.060	859.737
...Gisa's trials)>Rainfall Event_fixed!				8.237	125.021	830.825

Flow Survey: >SRCSD_CA>Flow Survey Group>Folsom Hourly Data (11/12/2008 3:45:54 PM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 3:25:34 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Folsom_Hourly (1/10/2009 6:04:49 PM)

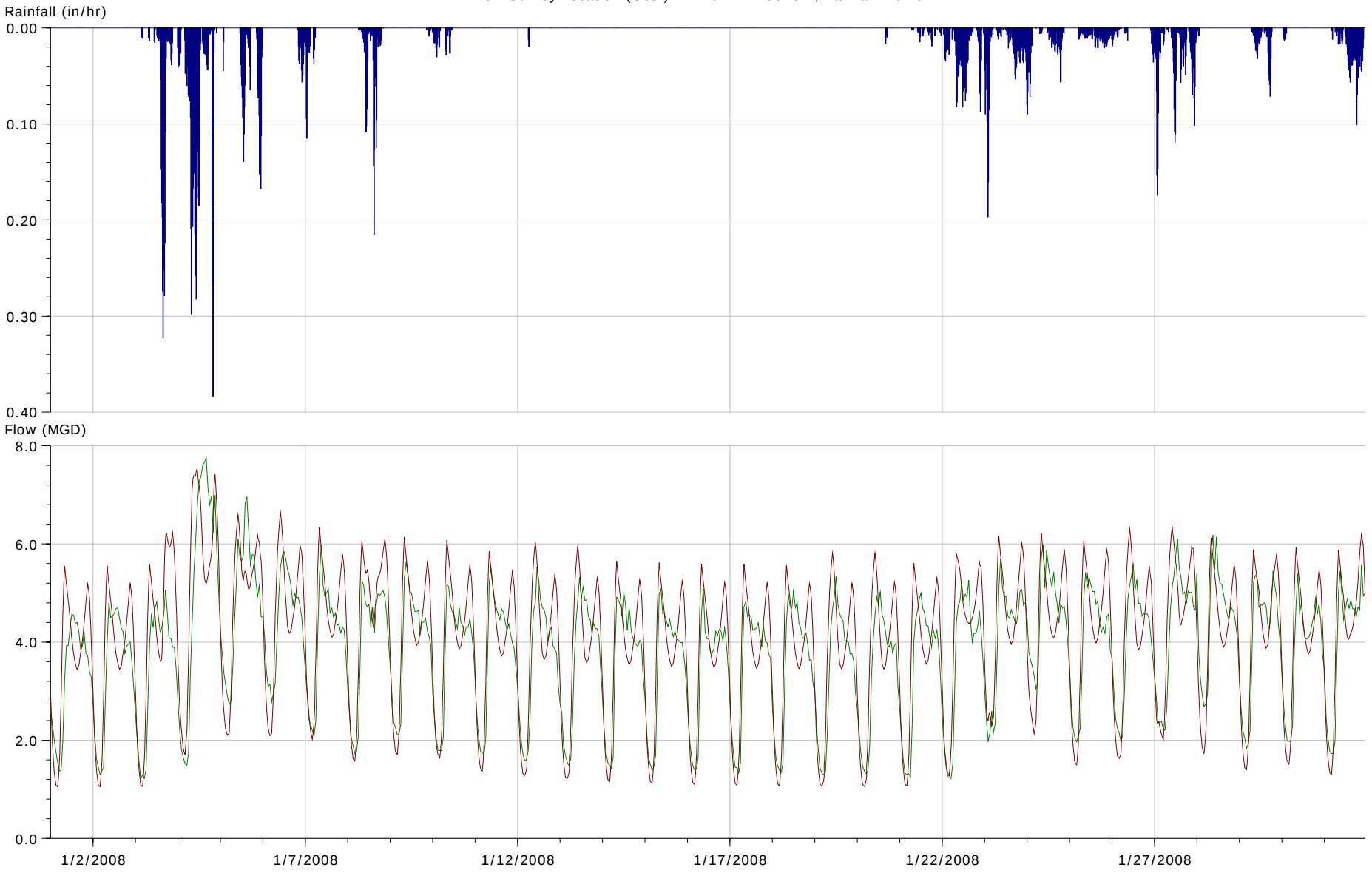
Flow Survey Location (Obs.) 33-inch B14-9327.1, Rainfall Profile: 1



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	6.944	0.324	0.009			
Obs.				1.950	10.890	151.124
...Gisa's trials)>Rainfall Event_fixed!				1.517	10.955	164.659

Flow Survey: >SRCSD_CA>Flow Survey Group>Folsom Hourly Data (11/12/2008 3:45:54 PM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 3:25:34 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Folsom_Hourly (1/10/2009 6:04:49 PM)

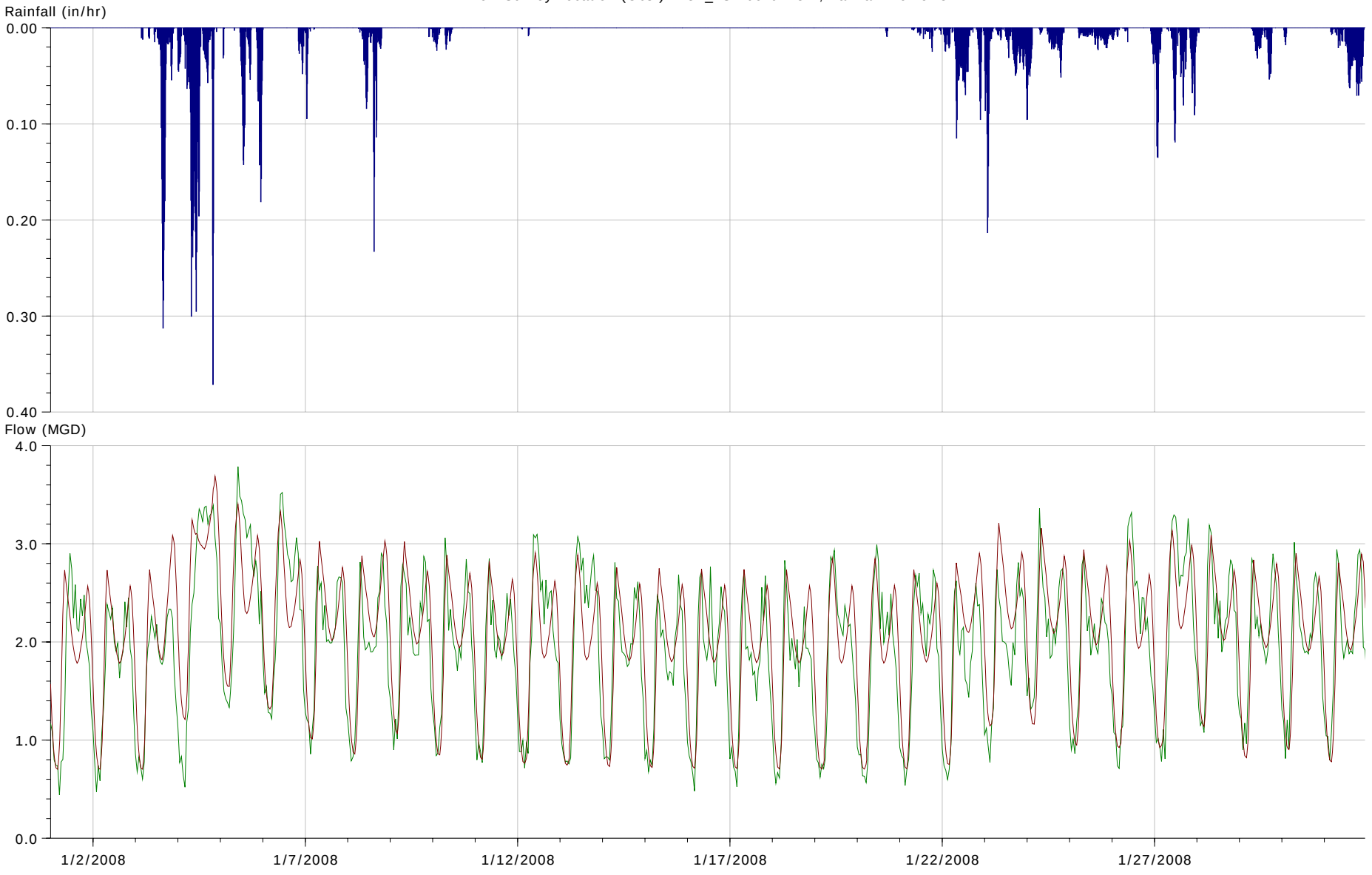
Flow Survey Location (Obs.) 27-inch B14-0046.1, Rainfall Profile: 2



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	6.635	0.383	0.009			
Obs.				1.210	7.760	119.971
...Gisa's trials)>Rainfall Event_fixed!				1.052	7.513	126.048

Observed / Predicted Plot Produced by GJu (1/11/2009 3:26:40 PM) Page 3 of 3
Flow Survey: >SRCSD_CA>Flow Survey Group>Folsom Hourly Data (11/12/2008 3:45:54 PM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 3:25:34 PM)
Graph Template: >SRCSD_CA>Graph Template Group>Folsom_Hourly (1/10/2009 6:04:49 PM)

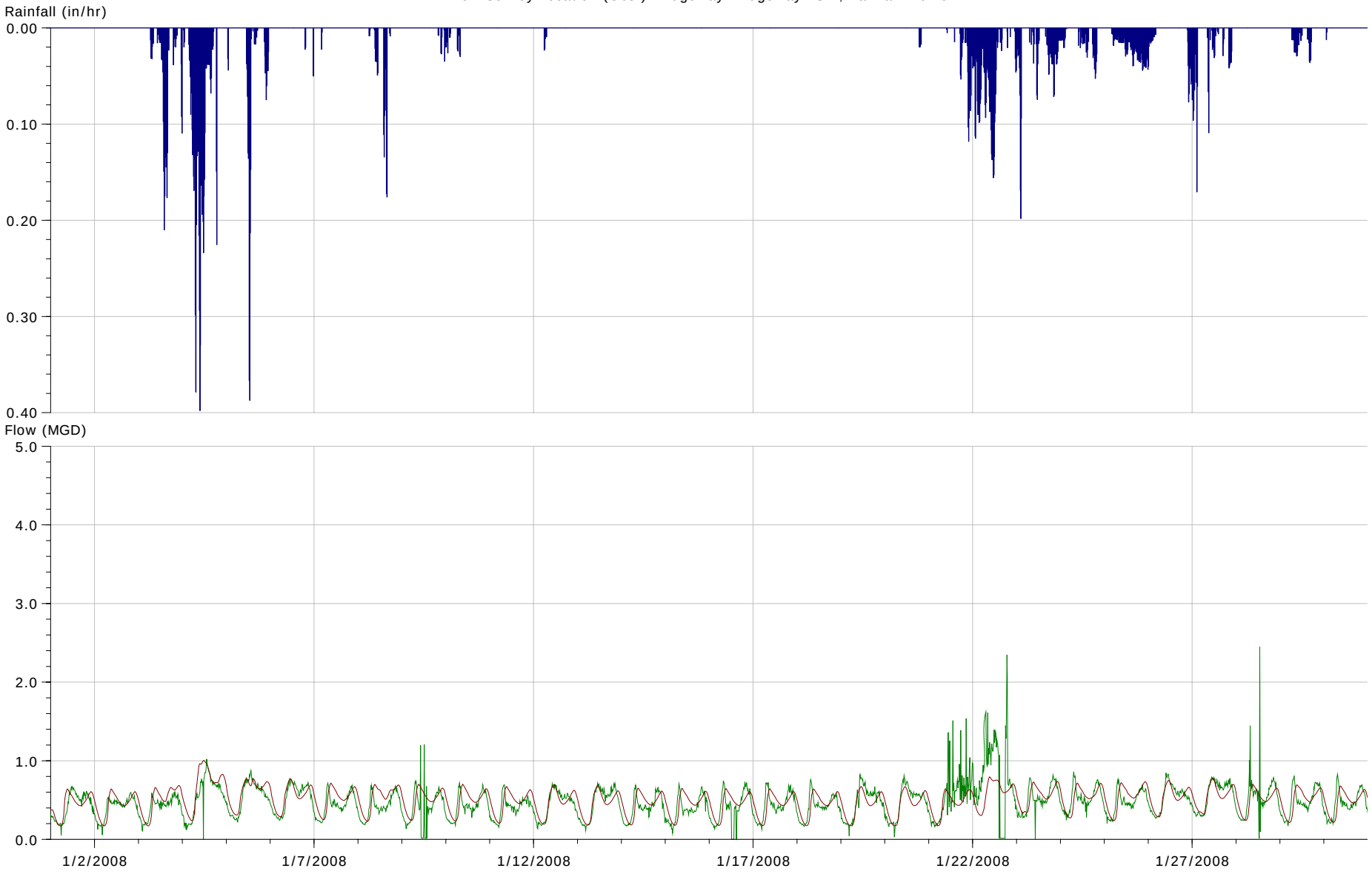
Flow Survey Location (Obs.) FE3B_PS B09-6728.1, Rainfall Profile: 3



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	6.618	0.371	0.009			
Obs.				0.440	3.787	60.202
...Gisa's trials)>Rainfall Event_fixed!				0.702	3.687	63.462

Observed / Predicted Plot Produced by GJu (1/11/2009 3:15:23 PM) Page 1 of 8
Flow Survey: >SRCSD_CA>Flow Survey Group>WS PS 15m (11/21/2008 9:40:50 AM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 2:42:36 PM)
Graph Template: >SRCSD_CA>Graph Template Group>WS PSs (1/10/2009 6:04:40 PM)

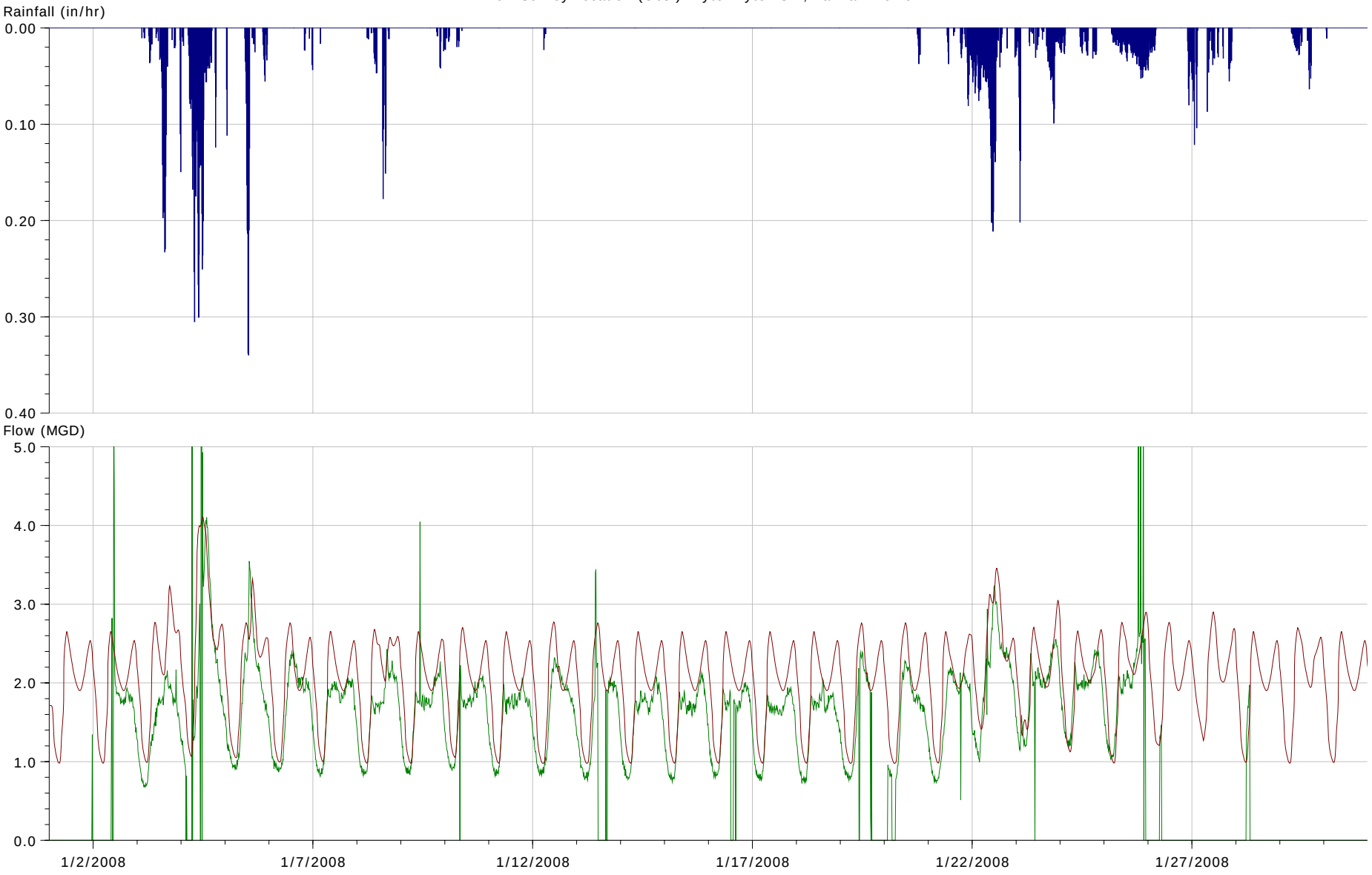
Flow Survey Location (Obs.) Bridgeway Bridgeway PS.1, Rainfall Profile: 4



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	6.329	0.398	0.009			
Obs.				0.000	2.449	14.186
...Gisa's trials)>Rainfall Event_fixed!				0.172	1.004	15.082

Flow Survey: >SRCSD_CA>Flow Survey Group>WS PS 15m (11/21/2008 9:40:50 AM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 2:42:36 PM)
Graph Template: >SRCSD_CA>Graph Template Group>WS PSs (1/10/2009 6:04:40 PM)

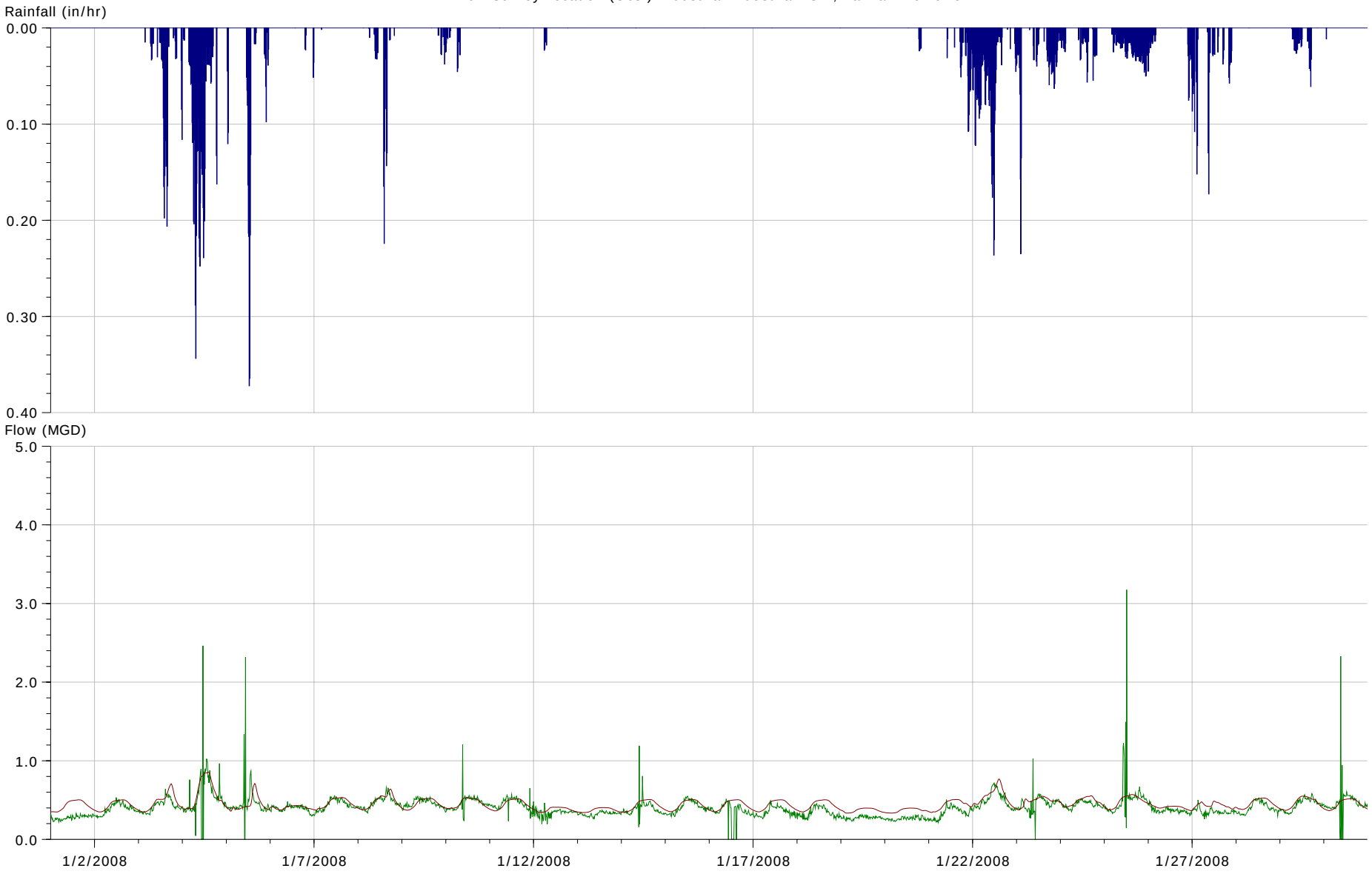
Flow Survey Location (Obs.) Bryte Bryte PS.1, Rainfall Profile: 7



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	6.256	0.340	0.009			
Obs.				0.000	7.567	38.319
...Gisa's trials)>Rainfall Event_fixed!				0.978	4.108	61.613

Flow Survey: >SRCSD_CA>Flow Survey Group>WS PS 15m (11/21/2008 9:40:50 AM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 2:42:36 PM)
Graph Template: >SRCSD_CA>Graph Template Group>WS PSs (1/10/2009 6:04:40 PM)

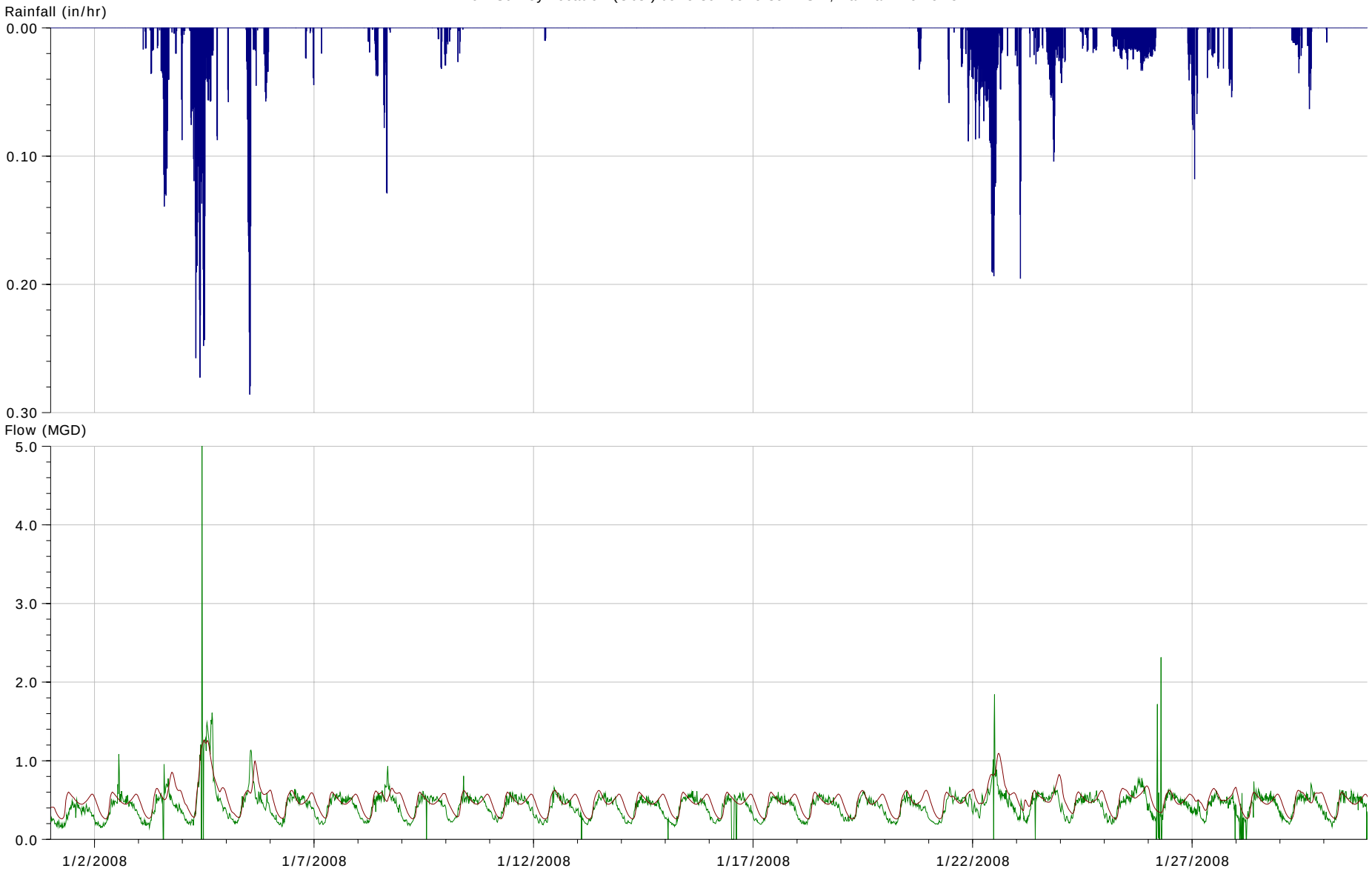
Flow Survey Location (Obs.) Industrial Industrial PS.1, Rainfall Profile: 5



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	6.556	0.372	0.009			
Obs.				0.000	3.174	12.098
...Gisa's trials)>Rainfall Event_fixed!				0.333	0.858	13.358

Flow Survey: >SRCSD_CA>Flow Survey Group>WS PS 15m (11/21/2008 9:40:50 AM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 2:42:36 PM)
Graph Template: >SRCSD_CA>Graph Template Group>WS PSs (1/10/2009 6:04:40 PM)

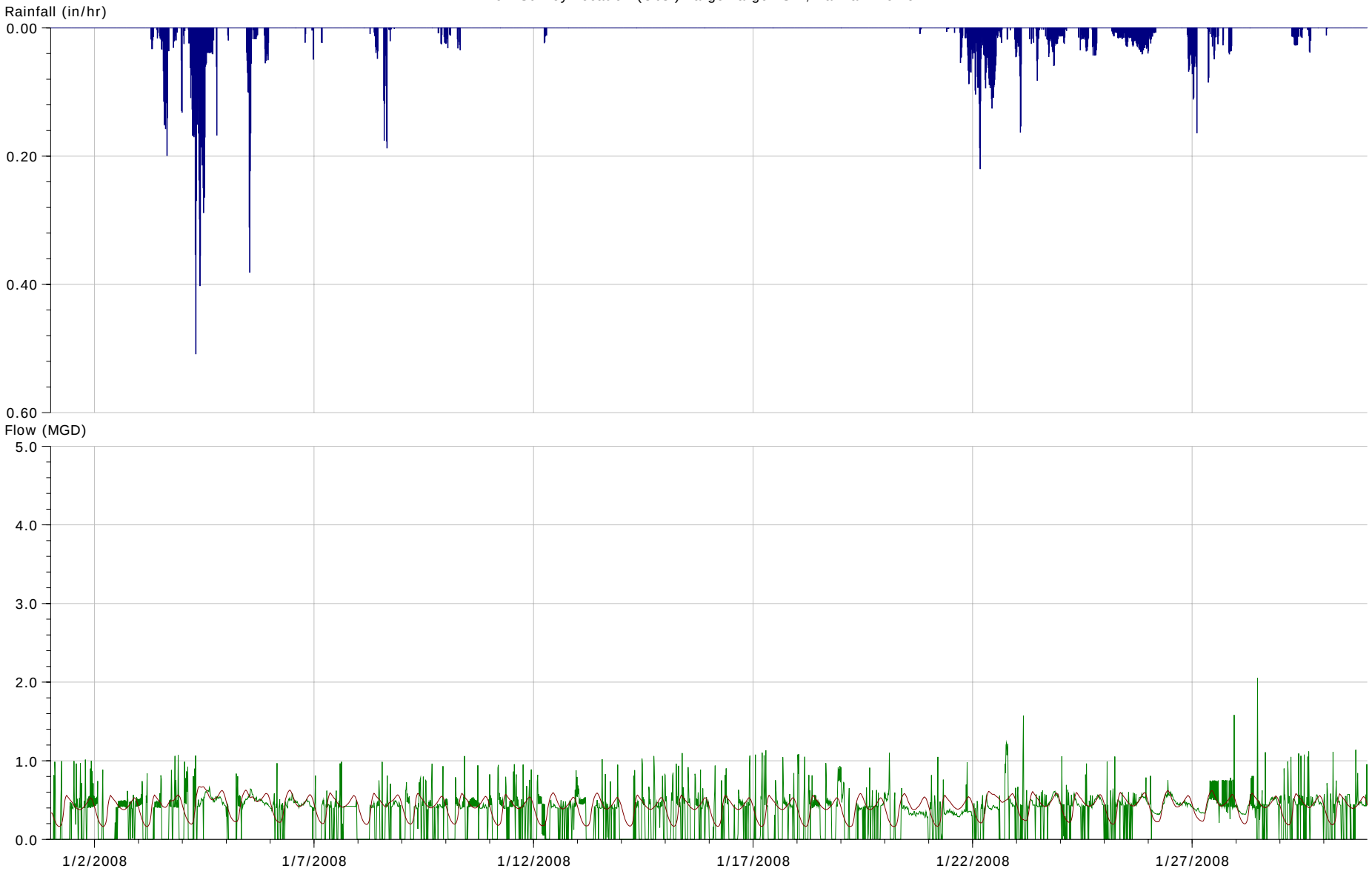
Flow Survey Location (Obs.) Jefferson Jefferson PS.1, Rainfall Profile: 8



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	5.546	0.286	0.008			
Obs.				0.000	5.099	12.812
...Gisa's trials)>Rainfall Event_fixed!				0.260	1.264	14.862

Flow Survey: >SRCSD_CA>Flow Survey Group>WS PS 15m (11/21/2008 9:40:50 AM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 2:42:36 PM)
Graph Template: >SRCSD_CA>Graph Template Group>WS PSs (1/10/2009 6:04:40 PM)

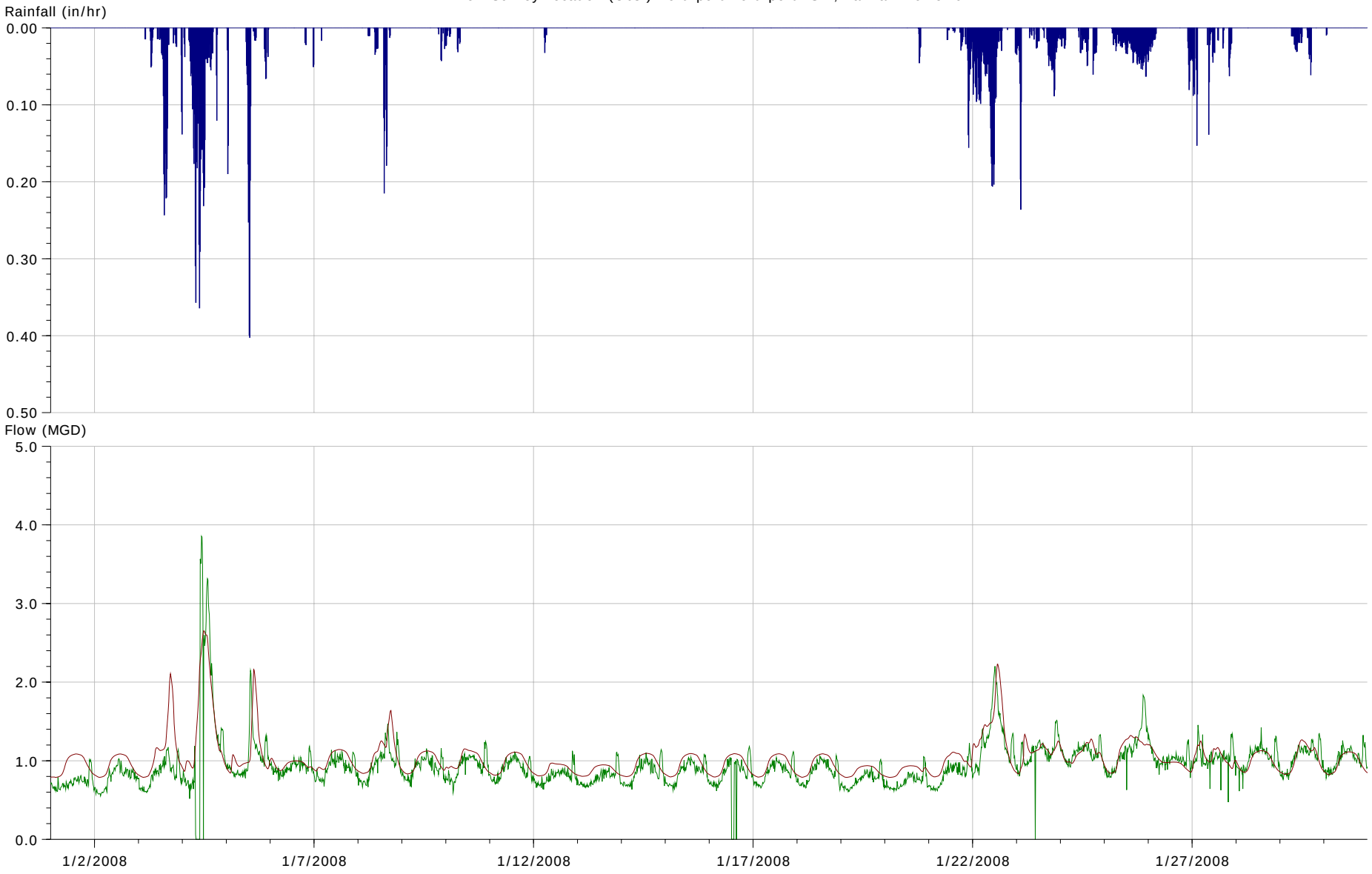
Flow Survey Location (Obs.) Largo Largo PS.1, Rainfall Profile: 2



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	6.422	0.508	0.009			
Obs.				0.000	2.054	10.244
...Gisa's trials)>Rainfall Event_fixed!				0.163	0.671	12.567

Flow Survey: >SRCSD_CA>Flow Survey Group>WS PS 15m (11/21/2008 9:40:50 AM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 2:42:36 PM)
Graph Template: >SRCSD_CA>Graph Template Group>WS PSs (1/10/2009 6:04:40 PM)

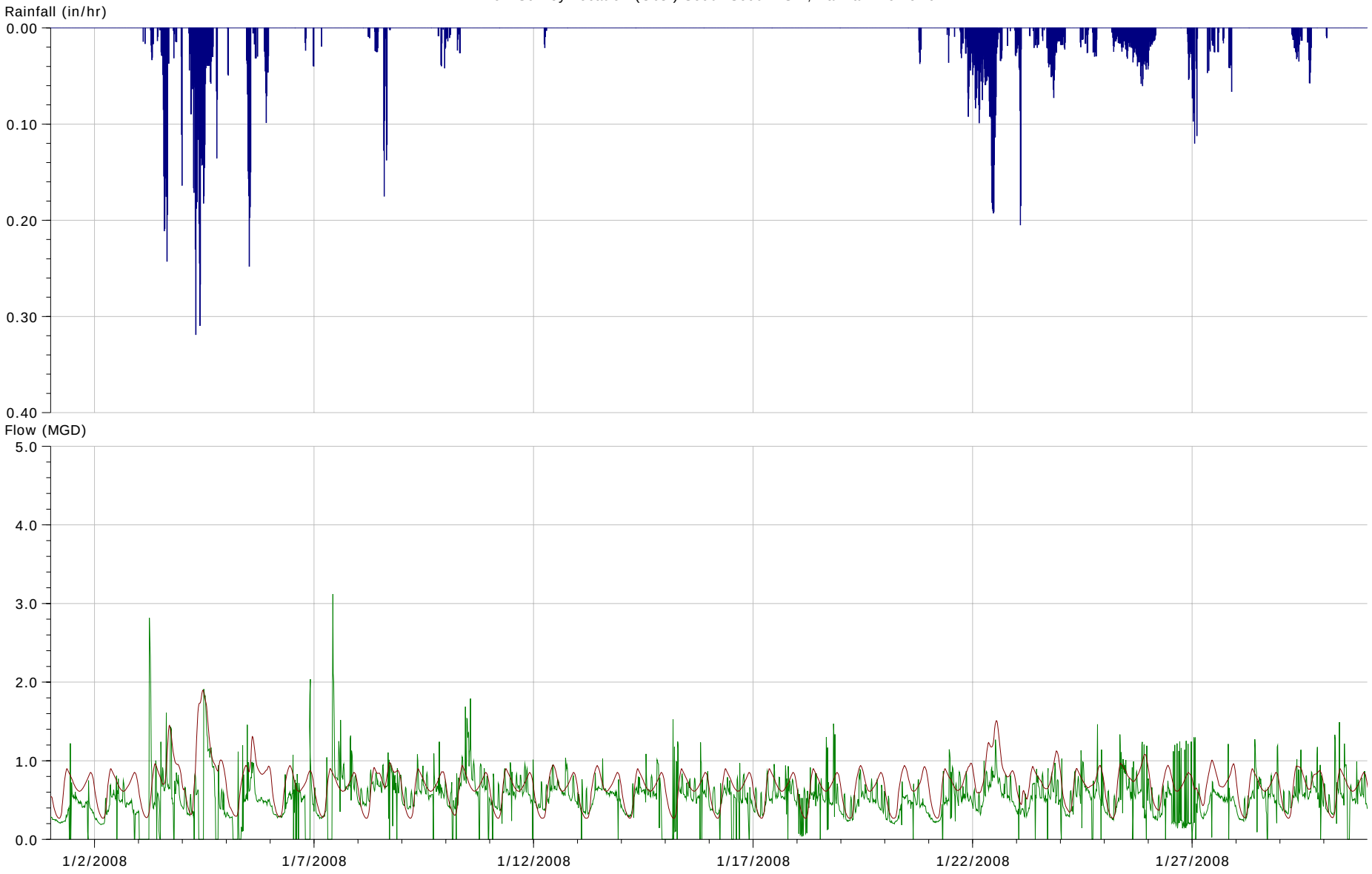
Flow Survey Location (Obs.) Northport Northport PS.1, Rainfall Profile: 6



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	6.899	0.402	0.010			
Obs.				0.000	3.856	28.278
...Gisa's trials)>Rainfall Event_fixed!				0.788	2.652	30.688

Flow Survey: >SRCSD_CA>Flow Survey Group>WS PS 15m (11/21/2008 9:40:50 AM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 2:42:36 PM)
Graph Template: >SRCSD_CA>Graph Template Group>WS PSs (1/10/2009 6:04:40 PM)

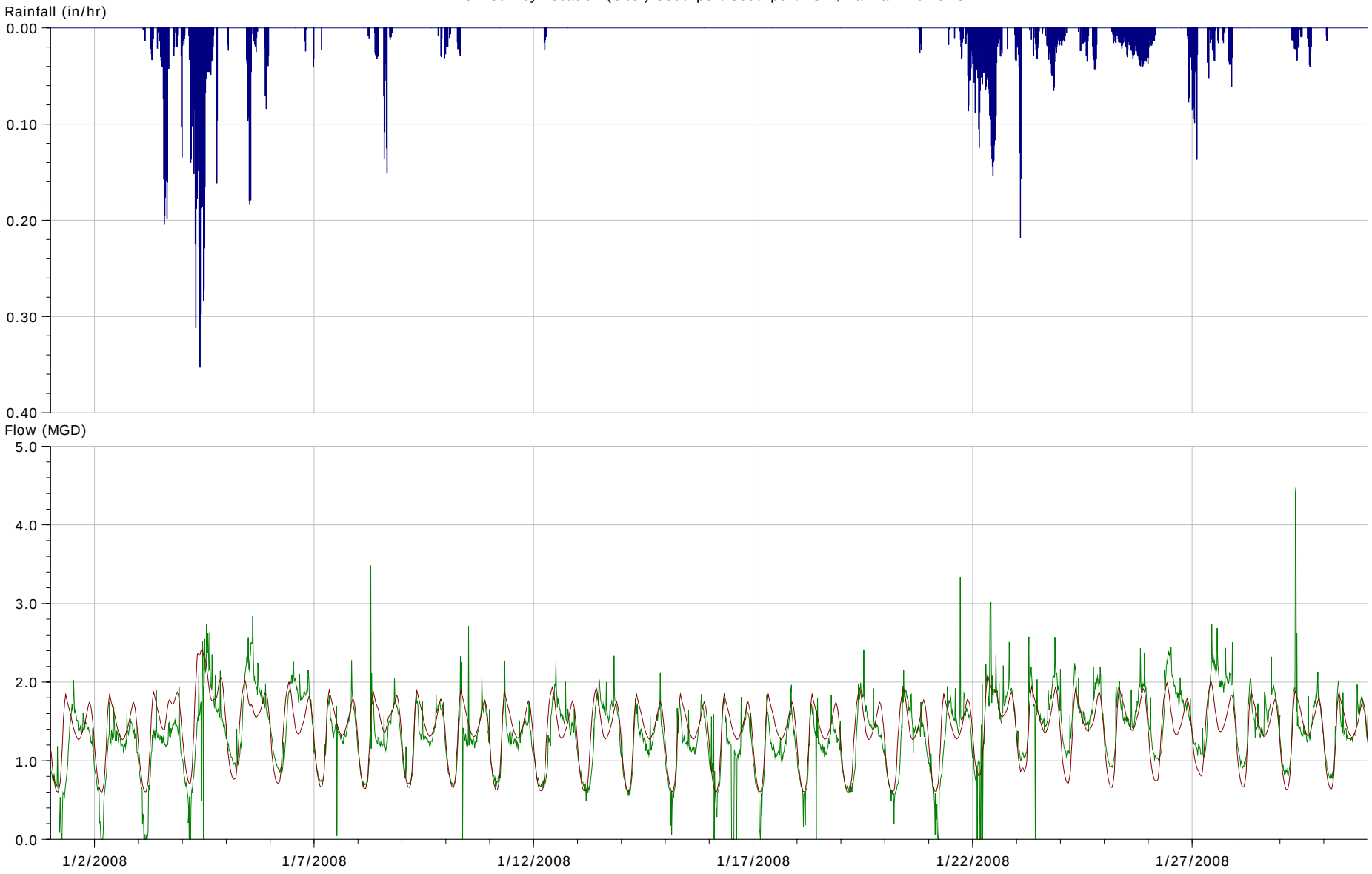
Flow Survey Location (Obs.) South South PS.1, Rainfall Profile: 9



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	6.018	0.319	0.008			
Obs.				0.000	3.121	15.917
...Gisa's trials)>Rainfall Event_fixed!				0.268	1.898	20.696

Flow Survey: >SRCSD_CA>Flow Survey Group>WS PS 15m (11/21/2008 9:40:50 AM)
Sim: >SRCSD_CA>Run Group>WWtest9 (start 1/1/08 35day) (Gisa's trials)>Rainfall Event_fixed! (1/11/2009 2:42:36 PM)
Graph Template: >SRCSD_CA>Graph Template Group>WS PSs (1/10/2009 6:04:40 PM)

Flow Survey Location (Obs.) Southport Southport PS.1, Rainfall Profile: 3



	Rainfall			Flow (MGD)		
	Depth (in)	Peak (in/hr)	Average (in/hr)	Min	Max	Volume (US Mgal)
Rain	6.140	0.353	0.009			
Obs.				0.000	4.474	40.489
...Gisa's trials)>Rainfall Event_fixed!				0.603	2.413	41.579