

Surface Water Monitoring Results

Monitoring was conducted on November 8, 2005, December 1, 2005, and January 18, 2006 according to methods outlined in the County's MRP. Samples requiring analytical analysis were submitted to the appropriate analytical laboratory within the required holding times. Each monitoring event was characterized by a 24-hour rainfall of differing intensities with the November 8, 2005 event totaling 0.08 inches, the December 1, 2005 event totaling 0.66 inches, and the January 18, 2006 event totaling 0.56 inches as measured at the Sonora Weather Station (elevation 1,749 feet) (CDEC, 2006). The 24-hour precipitation amounts that occurred over this three month sampling period are graphically depicted in **Figure 5-2** and provide further indication of the rainfall events leading up to or preceding each of the three events. Creek flows, measured in velocity, were recorded to provide additional correlation with the water quality data (e.g., turbidity, TSS, etc.).

**TABLE 5-2
DESCRIPTIONS OF SAMPLING LOCATIONS**

Sample Site Designation^a	Sample Site Location (Latitude/Longitude)	General Land Uses Assessed^b (Percent of Watershed Area)
Turnback Creek (TB-1)	37 deg 57' 0.0"	Rural, Estate, and Low-Density Residential; General Commercial; Timber Production; Light Industrial
Lower Sullivan Creek (SV-1)	37 deg 55' 12.0"	Rural, Estate and High and Low-Density Residential; General and Heavy Commercial; Grazing; Heavy and Light Industrial; Business Park
Upper Sullivan Creek (SV-2)	38 deg 0' 36.0"	Rural, Estate and High and Low-Density Residential; General Commercial; Grazing; Timber Production
Mormon Creek (MM-1)	37 deg 59' 24.0"	Rural, Estate and High and Low-Density Residential; General and Heavy Commercial; Light Industrial ; Airport (Mixed Use)
Groveland Creek (GV-1)	37 deg 51' 0.0"	Rural, Estate and High and Low-Density Residential; General and Heavy Commercial; Mixed Use
Woods Creek (WD-1)	37 deg 56' 24.0"	Rural, Estate and High and Low-Density Residential; General and Heavy Commercial; Grazing; Light Industrial; Business Park
Curtis Creek (CT-1)	37 deg 57' 0.0"	Rural, Estate, High and Low-Density Residential; General and Heavy Commercial; Grazing; Heavy and Light Industrial; Business Park

^a Ambient Surface Water Sampling Sites – Water samples were collected and analyzed for constituents list in Table 5-3.

^b Upstream land uses were determined based on interpretation of the County's zoning coverage.

SOURCE: ESA, 2006