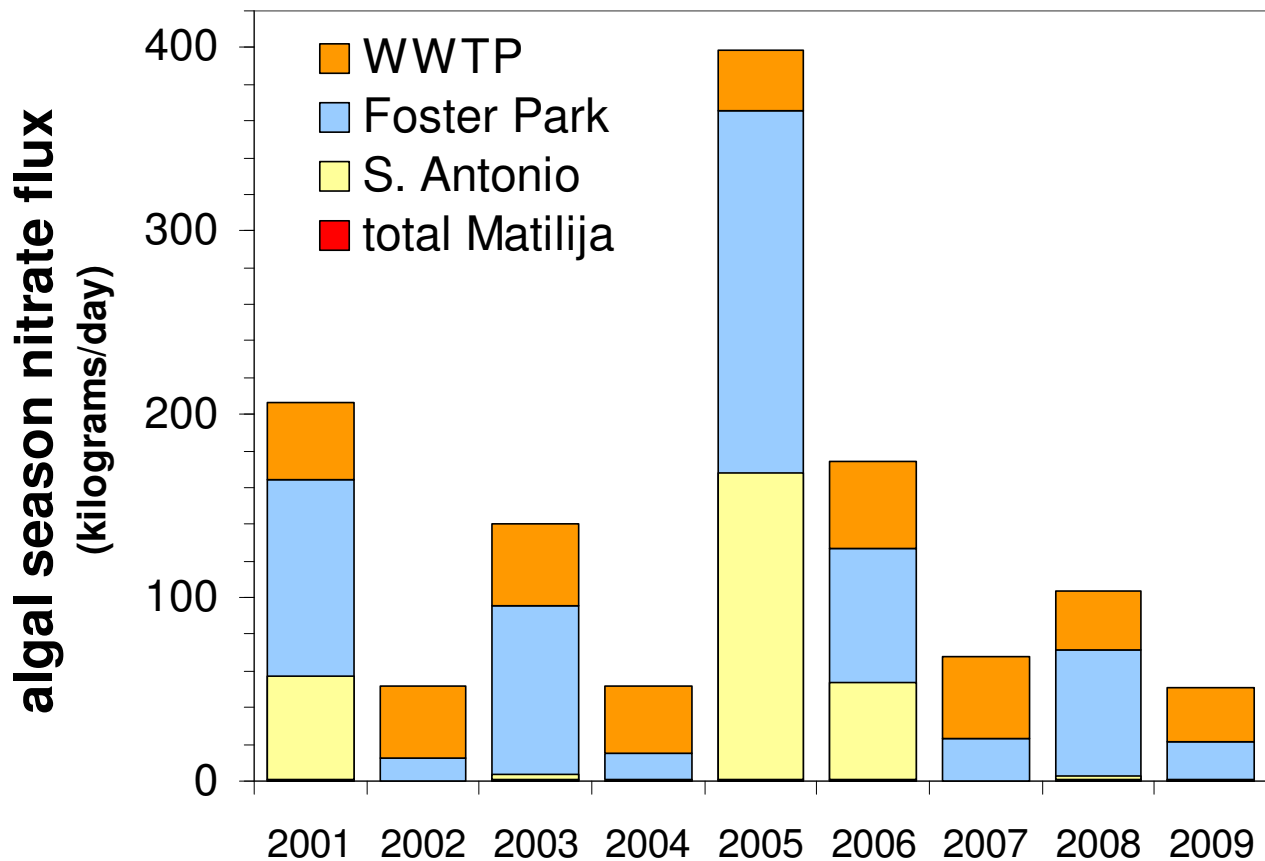


## Where Do the Nitrate Come From?



Here's the answer. Call this the executive summary for those of you who don't want to read my full report. Since I tend to the verbose, this figure sums it all up, and shows where all the nitrate in the Ventura River system is coming from.

The graph shows *flux*. Flux is the technical word for the amount of any constituent carried downstream by flow. The constituent in this case is nitrate, and the amount is measured in kilograms per day. Flux is calculated by multiplying concentration by flow, and this figure shows the magnitude of the various nitrate fluxes originating from different parts of the watershed, and how they vary from dry-season to dry-season. It's not the annual flux (which is considerably greater), but only the average amount of nitrate available during the algal season, the dry-season, if you will. That time when winter rains have been over for some while and almost all the water seen flowing in streams and the river comes from surfacing groundwater.

Different regions of the watershed contribute different, and varying, amounts of nitrate: from the minuscule contributions of the upper watershed (barely visible in red); to those from San Antonio, important mainly in wet years (but probably playing an important role in the first month or two at the beginning of every algal season); to surfacing, high-nitrate groundwater from the middle Ventura above Foster Park (blue); to a relatively steady WWTP contribution, the major source of lower river nitrate in drier years.