Sentence or two on model purpose -- who developed the model and what do they intend to use it for (include refs to previous version, or to studies that have already used the model ... e.g., SLOC Supply Options Study for PRB model)

In 2013, GSFLOW was identified as a model that could replace the Monterey Peninsula Water Management District’s outdated Carmel Valley Simulation Model, which was used as a planning tool to optimize water supply operations on the Carmel River. The purpose of the new Carmel River Basin Hydrologic Model (CRBHM), based on GSFLOW, is to quantify changes in aquifer storage, river flow and in turn steelhead habitat caused by changes in municipal pumping to legal limits. It was also designed to measure and compare the effects of various water supply projects on aquifer storage and Carmel River flows. The model is currently being developed by the Monterey Peninsula Water Management District with Huntington Hydrologic and Mike Hutnak. As of October 19, 2016, the CRBHM is currently being calibrated by Rich Niswonger at the USGS

Sentence or two on model extent (narrative description, with reference to sub-area figure)

The extent of the CRBHM model is based on the watershed boundary of the Carmel River (see map below). The model area is 34.4 km2, 532,672 model cells, cell are 100m by 100 m.

Few sentences on key model inputs related to climate, sea level, and socioecon.

The key model inputs are precipitation from the long term record at the old San Clemente Reservoir site. Additional inputs include: municipal pumping by California American Water in the Carmel Valley Alluvial Aquifer, as well as private pumpers, and mountain block pumping.

- Few sentences on model code/packages/configuration, calibration period and calibration targets, etc.

Code is GSFLOW (MODFLOW-NWT and PRMS), UZF1, SFR2, LAK7, WELL. Calibration period includes years between 1995-2005. Calibration targets include time series of streamflow at several gages in the watershed and groundwater levels throughout the basin.

