



## CITY OF MORRO BAY

### PUBLIC WORKS DEPARTMENT

955 Shasta Avenue  
Morro Bay, CA 93442

## Large Peak Flood Control Requirement

The design of any proposed development site shall handle water generated by storms and not alter the peak rate, concentration or location of historic flow patterns. The only projects exempt from this requirement, are those that are located in areas that have no potential for downstream flooding. For example, projects along the west side of the Embarcadero that drain directly to the bay are exempt from flood control requirements.

The Project Engineer shall provide a Hydrology Analysis demonstrating that post-development peak runoff flows are reduced to within 5% of the pre-development flows from the 10, 25, 50 and 100-year rainfall events. For the purposes of runoff flow control, the pre-development condition shall be natural soil and vegetation.

### Methods:

- Detention basin design shall include development of a post-construction runoff hydrograph that is routed through the basin. If NRCS TR-20 is used, the following assumptions shall apply:
  - Storm Type: Type 1, 24-hr, San Luis Obispo D, or custom rainfall curve for Morro Bay<sup>1</sup>
  - Antecedent Moisture Condition: 2
  - Storm Duration: 24 hours
  - 24-hour rainfall depths: per NOAA Precipitation maps (<http://hdsc.nws.noaa.gov/hdsc/pfds>)
- Detention storage may be surface or subsurface. Parking areas may be used for detention as long as flood depth does not exceed six inches in the 100-year event.
- Multi-purpose basins may be designed to address both water quality and runoff control criteria, as well as overlap with any stormwater requirements.
- For other detention basin design standards, refer to the current version of the SLO County Public Improvement Standards.

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<sup>1</sup> Some hydrologic modeling programs, such as HydroCAD v.10, have built in Storm Types for San Luis Obispo (taken from the SLO Creek WMP). Such programs also have the ability to create custom storm curves. The analysis may use the standard Type 1 or one of the storm types specific to the site.