BAY AREA
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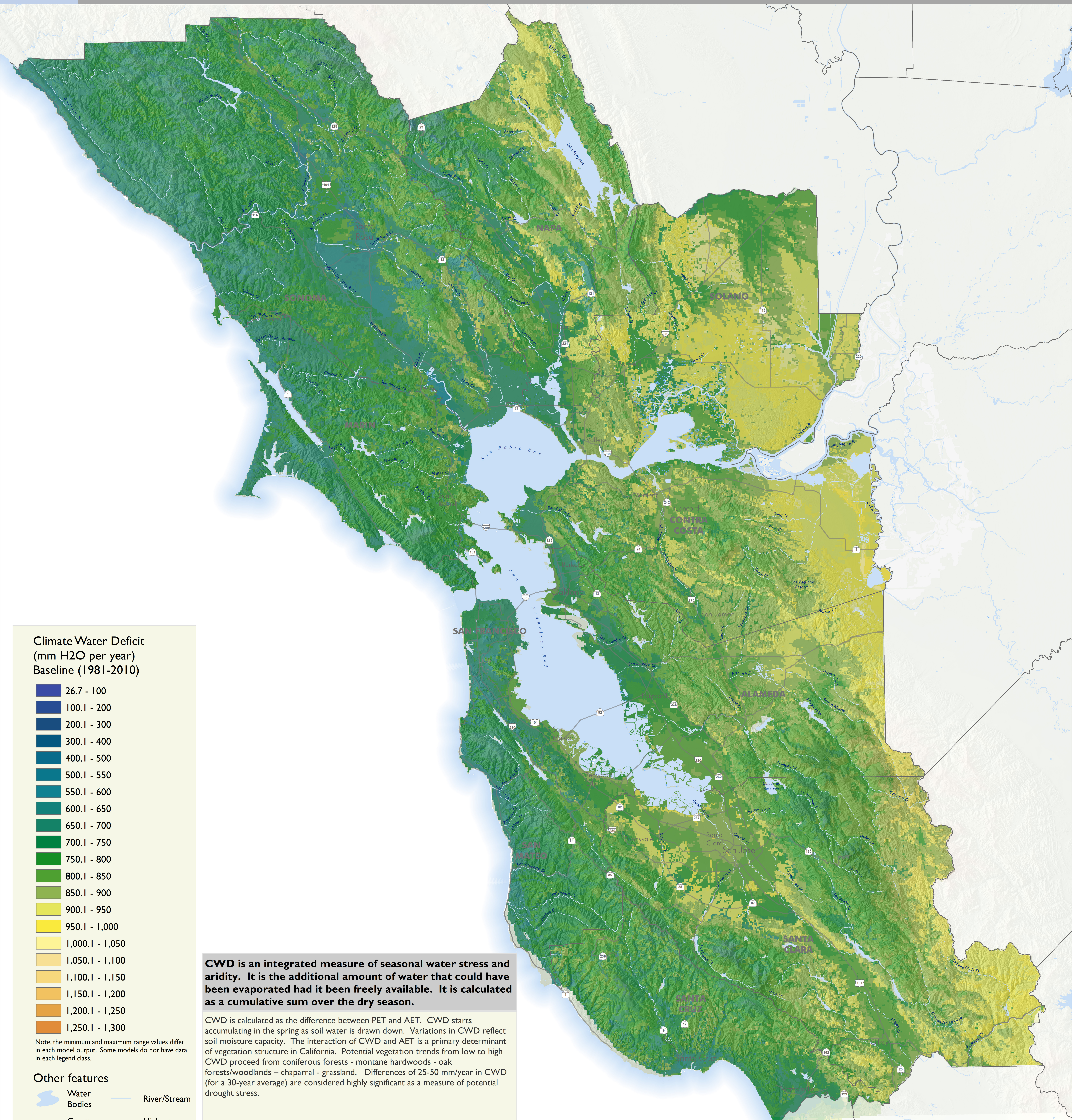
Climate Water Deficit (CWD) 1981 - 2010



Climate Water Deficit (mm H2O per year) Baseline (1981-2010)

- 26.7 - 100
- 100.1 - 200
- 200.1 - 300
- 300.1 - 400
- 400.1 - 500
- 500.1 - 550
- 550.1 - 600
- 600.1 - 650
- 650.1 - 700
- 700.1 - 750
- 750.1 - 800
- 800.1 - 850
- 850.1 - 900
- 900.1 - 950
- 950.1 - 1,000
- 1,000.1 - 1,050
- 1,050.1 - 1,100
- 1,100.1 - 1,150
- 1,150.1 - 1,200
- 1,200.1 - 1,250
- 1,250.1 - 1,300

Note, the minimum and maximum range values differ in each model output. Some models do not have data in each legend class.

Other features

- Water Bodies
- River/Stream
- County
- Highway

0 5 10 Miles

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CWD is an integrated measure of seasonal water stress and aridity. It is the additional amount of water that could have been evaporated had it been freely available. It is calculated as a cumulative sum over the dry season.

CWD is calculated as the difference between PET and AET. CWD starts accumulating in the spring as soil water is drawn down. Variations in CWD reflect soil moisture capacity. The interaction of CWD and AET is a primary determinant of vegetation structure in California. Potential vegetation trends from low to high CWD proceed from coniferous forests - montane hardwoods - oak forests/woodlands – chaparral - grassland. Differences of 25-50 mm/year in CWD (for a 30-year average) are considered highly significant as a measure of potential drought stress.

- Increased CWD means higher water stress for vegetation, and greater risk of fire. Greatly increased CWD (50-100+ mm/year over 30 years) can lead to death of existing vegetation through drought stress.
- Decreased CWD means less water stress and potentially lower fire risk.

Map Produced by GreenInfo Network, using ESRI software. August 2013

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