

**M 4.0, 15.7 km (9.7 mi) SW of Westmorland, CA**

Origin Time: Sun 2016-07-31 16:21:06 UTC (09:21:06 local)

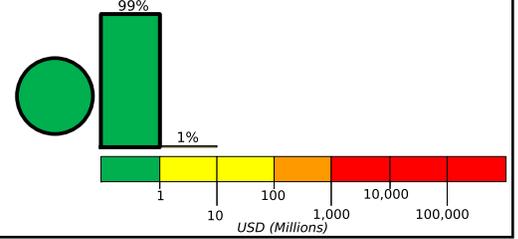
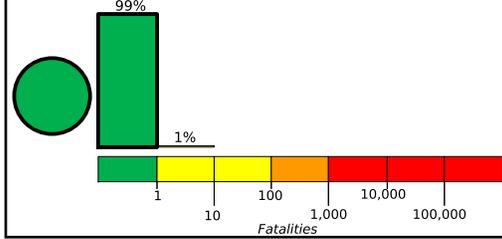
Location: 32.96°N 115.76°W Depth: 3 km

Created: 2 days, 3 hours after earthquake

**Estimated Fatalities**

Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.

**Estimated Economic Losses**

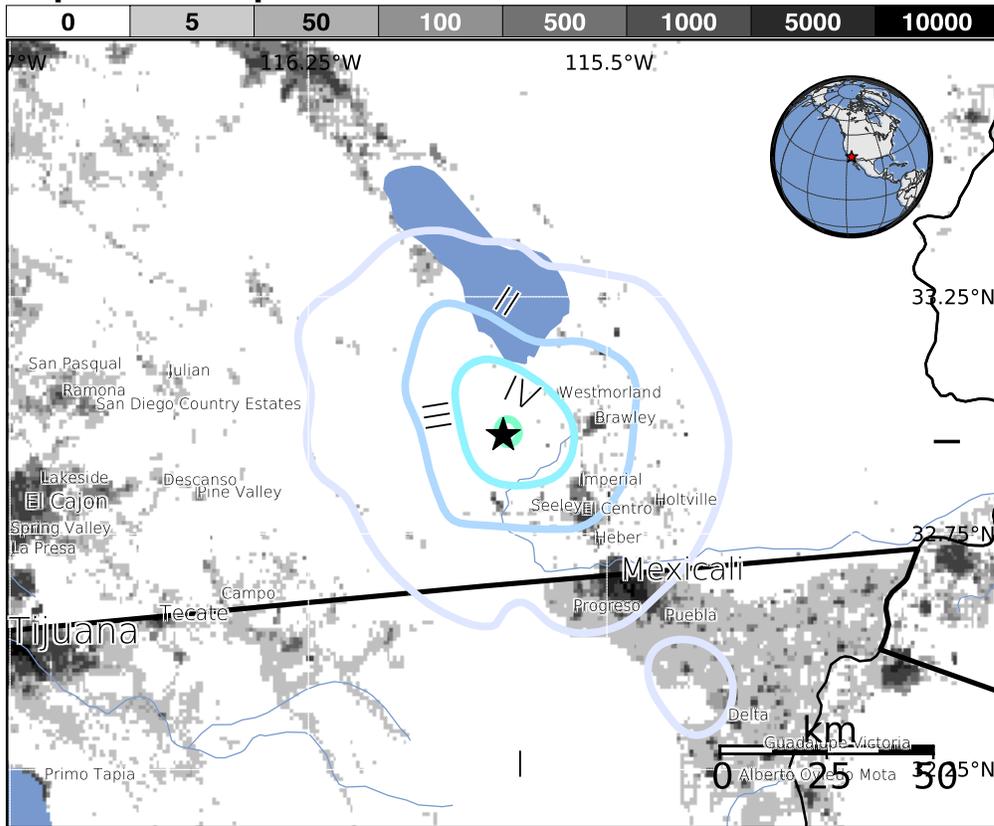


**Estimated Population Exposed to Earthquake Shaking**

ESTIMATED POPULATION EXPOSURE (k = x1000)		2,616k*	907k	1k	0	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	none	none	none	V. Light	Light	Moderate	Moderate/Heavy	Heavy	V. Heavy
	Vulnerable Structures	none	none	none	Light	Moderate	Moderate/Heavy	Heavy	V. Heavy	V. Heavy

\*Estimated exposure only includes population within the map area.

**Population Exposure**



**Structures:**

Overall, the population in this region resides in structures that are highly resistant to earthquake shaking, though some vulnerable structures exist.

**Historical Earthquakes (with MMI levels):**

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1986-07-13	195	5.8	V(9,528k)	0
1991-06-28	252	5.6	VII(8k)	1
1994-01-17	293	6.7	IX(181k)	33

Recent earthquakes in this area have caused secondary hazards such as landslides and liquefaction that might have contributed to losses.

**Selected City Exposure**

from GeoNames.org

MMI	City	Population
III	Westmorland	2k
III	Brawley	25k
III	Imperial	15k
III	Seeley	2k
III	El Centro	43k
III	Calipatria	8k
II	Mexicali	597k
I	Tijuana	1,376k
I	El Cajon	99k
I	Yuma	93k

bold cities appear on map

(k = x1000)