

**M 4.3, 32.0 km (19.9 mi) SW of Rio Dell, CA**

Origin Time: Thu 2016-01-07 05:49:52 UTC (21:49:52 local)

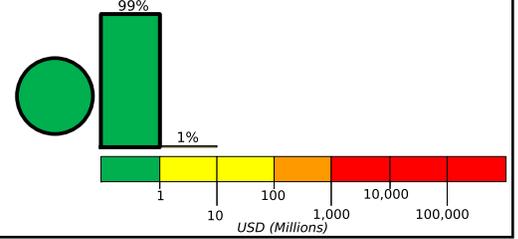
Location: 40.27°N 124.34°W Depth: 16 km

Created: 13 hours, 16 minutes 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**

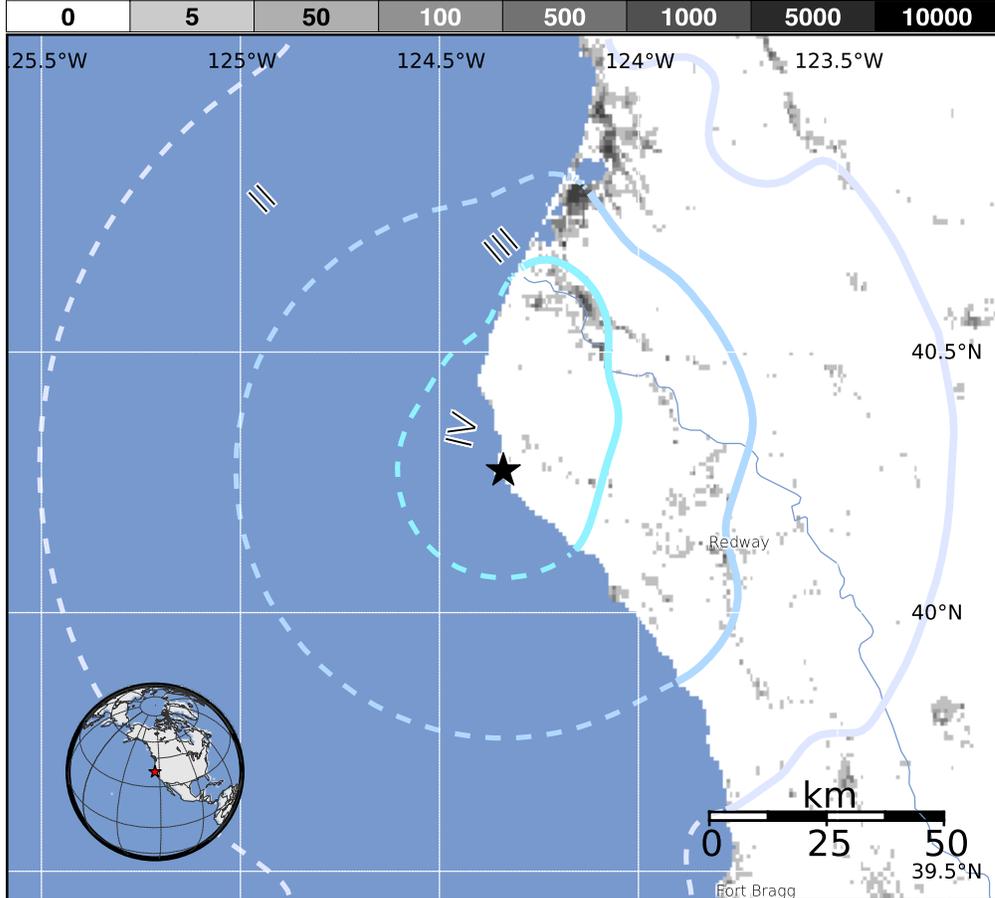


**Estimated Population Exposed to Earthquake Shaking**

| ESTIMATED POPULATION EXPOSURE (k = x1000) | 12k*                  | 120k   | 23k   | 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 |
|------------|------------|------|------------|----------------|
| 1991-07-13 | 244        | 6.8  | V(51k)     | 0              |
| 1980-01-24 | 364        | 5.8  | VII(31k)   | 1              |
| 1993-09-21 | 298        | 6.0  | VIII(24)   | 1              |

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 |
|-----|-------------------|------------|
| IV  | Ferndale          | 1k         |
| IV  | Fortuna           | 12k        |
| IV  | Rio Dell          | 3k         |
| IV  | Hydesville        | 1k         |
| III | Humboldt Hill     | 3k         |
| III | Pine Hills        | 3k         |
| III | Eureka            | 27k        |
| II  | Bayside           | 17k        |
| II  | Arcata            | 17k        |
| II  | McKinleyville     | 15k        |
| II  | <b>Fort Bragg</b> | <b>7k</b>  |

bold cities appear on map

(k = x1000)