



Exhibit 3.1 – Past Earthquake and Flood Documentation

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Earthquake activity of Magnitudes from 6.3 to 7.2:

Imperial County-area historical earthquake activity is above California state average. It is 2508% greater than the overall U.S. average.

1. On 5/19/1940 at 04:36:40, a magnitude 7.2 (7.2 UK, Class: Major, Intensity: VIII - XII) earthquake occurred 21.6 miles away from the county center, causing \$33,000,000 total damage
2. On 12/31/1934 at 18:45:56, a magnitude 7.1 (7.1 UK) earthquake occurred 25.0 miles away from the county center
3. On 10/15/1979 at 23:16:54, a magnitude 7.0 (5.7 MB, 6.9 MS, 7.0 ML, 6.4 MW) earthquake occurred 13.5 miles away from the county center
4. On 11/24/1987 at 13:15:56, a magnitude 6.7 (6.0 MB, 6.6 MS, 6.7 ML, 6.1 ML, Class: Strong, Intensity: VII - IX) earthquake occurred 28.0 miles away from Imperial County center
5. On 11/24/1987 at 01:54:14, a magnitude 6.5 (5.7 MB, 6.2 MS, 6.5 ML, 5.8 ML) earthquake occurred 24.8 miles away from the county center, causing 2 deaths (2 other deaths), causing \$4,000,000 total damage
6. On 4/26/1981 at 12:09:28, a magnitude 6.3 (5.5 MB, 6.0 MS, 6.3 ML, 5.6 ML) earthquake occurred 13.9 miles away from the county center

Magnitude types: body-wave magnitude (MB), local magnitude (ML), surface-wave magnitude (MS), moment magnitude (MW)

USGS has recorded 137 lesser magnitude earthquakes (<6) since 1975 within a 10 Km radius around the project centroid.²

1. 1.93km NW of El Centro, California2014-07-03 12:14:36 UTC-07:0011.3 km
2. 2.47km W of Holtville, California2014-06-13 08:20:21 UTC-07:009.5 km
3. 2.68km W of Holtville, California2014-06-13 04:37:49 UTC-07:0010.0 km

¹ <http://www.city-data.com/county/Imperial_County-CA.html>

² Search is based on the following query:

<<http://earthquake.usgs.gov/earthquakes/map/#%7B%22feed%22%3A%221404750821630%22%2C%22sort%22%3A%22newest%22%2C%22mapprojection%22%3A%5B%5B-85%2C0%5D%2C%5B85%2C360%5D%5D%2C%22viewModes%22%3A%7B%22help%22%3Afalse%2C%22list%22%3Atrue%2C%22map%22%3Atrue%2C%22settings%22%3Afalse%7D%2C%22autoUpdate%22%3Afalse%2C%22search%22%3A%7B%22id%22%3A%221404750821630%22%2C%22name%22%3A%22Search%20Results%22%2C%22isSearch%22%3Atrue%2C%22params%22%3A%7B%22starttime%22%3A%221900-06-30%2000%3A00%3A00%22%2C%22latitude%22%3A32.814%2C%22longitude%22%3A-115.569%2C%22minradiuskm%22%3A1%2C%22maxradiuskm%22%3A10%2C%22minmagnitude%22%3A1%2C%22endtime%22%3A%222014-07-07%2023%3A59%3A59%22%2C%22maxmagnitude%22%3A6%2C%22orderby%22%3A%22time%22%7D%7D>>

4. 1.78km E of Imperial, California2014-06-13 04:35:25 UTC-07:009.9 km
5. 2.08km W of Holtville, California2014-06-13 04:30:20 UTC-07:009.0 km
6. 2.58km WNW of Holtville, California2014-06-13 03:01:12 UTC-07:009.1 km
7. 1.78km E of El Centro, California2014-04-14 09:16:06 UTC-07:0010.2 km
8. 1.68km WNW of Holtville, California2014-04-04 02:22:25 UTC-07:0011.8 km
9. 1.81km WSW of Heber, California2014-03-28 15:21:30 UTC-07:007.1 km
10. 1.47km E of Imperial, California2014-03-11 03:12:40 UTC-07:0010.8 km
11. 1.92km SW of Imperial, California2014-03-10 17:57:08 UTC-07:0011.9 km
12. 1.58km W of Holtville, California2014-02-15 16:10:12 UTC-07:0011.0 km
13. 1.88km W of Holtville, California2014-02-15 15:53:13 UTC-07:0010.2 km
14. 1.73km N of Heber, California2014-02-11 18:03:36 UTC-07:0014.2 km
15. 1.52km SE of El Centro, California2014-02-11 17:44:00 UTC-07:0013.8 km
16. 1.63km SE of El Centro, California2014-02-10 16:33:10 UTC-07:0012.3 km
17. 1.42km S of Imperial, California2014-01-05 02:10:27 UTC-07:0015.5 km
18. 1.86km ENE of Imperial, California2014-01-04 13:45:30 UTC-07:008.7 km
19. 2.16km ENE of Imperial, California2014-01-04 13:37:37 UTC-07:009.0 km
20. 1.83km NNW of El Centro, California2014-01-04 12:25:42 UTC-07:0010.9 km
21. 2.17km ENE of Imperial, California2014-01-04 09:00:07 UTC-07:009.7 km
22. 2.77km ENE of Imperial, California2014-01-04 05:12:43 UTC-07:0010.1 km
23. 2.27km ENE of Imperial, California2014-01-04 05:01:52 UTC-07:009.3 km
24. 1.58km E of Imperial, California2014-01-04 05:00:06 UTC-07:0010.3 km
25. 1.47km ENE of Imperial, California2014-01-04 03:31:16 UTC-07:007.8 km
26. 1.67km ENE of Imperial, California2014-01-04 03:25:36 UTC-07:008.1 km
27. 1.87km ENE of Imperial, California2014-01-04 02:40:02 UTC-07:008.7 km
28. 1.62km N of Heber, California2013-12-01 02:49:59 UTC-07:0012.4 km
29. 1.21km N of El Centro, California2013-11-11 22:38:48 UTC-07:0012.9 km
30. 1.37km W of Holtville, California2013-11-08 10:25:45 UTC-07:0010.7 km
31. 2.08km W of Holtville, California2013-11-08 10:07:03 UTC-07:008.8 km
32. 1.67km W of Holtville, California2013-11-08 09:46:59 UTC-07:0010.5 km
33. 1.96km NE of Imperial, California2013-09-28 11:09:59 UTC-07:008.8 km
34. 1.86km NE of Imperial, California2013-09-28 10:22:20 UTC-07:0011.9 km
35. 1.57km NE of Imperial, California2013-09-21 18:27:58 UTC-07:009.6 km
36. 1.74km NW of El Centro, California2013-08-08 14:57:48 UTC-07:0013.8 km
37. 1.42km SE of El Centro, California2013-07-30 15:09:29 UTC-07:008.3 km
38. 1.63km NNE of Heber, California2013-07-24 12:32:44 UTC-07:009.8 km
39. 2.44km NNE of Heber, California2013-07-23 21:45:51 UTC-07:0013.7 km
40. 1.31km E of El Centro, California2013-05-19 11:51:37 UTC-07:0018.3 km
41. 1.67km SW of El Centro, California2013-04-28 12:40:22 UTC-07:0012.6 km
42. 1.71km NNW of El Centro, California2013-04-07 08:42:12 UTC-07:0012.1 km
43. 2.04km SW of Imperial, California2013-04-05 01:20:20 UTC-07:0013.1 km
44. 1.52km WSW of Imperial, California2013-04-04 22:58:16 UTC-07:0016.8 km
45. 1.62km ESE of El Centro, California2013-03-09 19:29:36 UTC-07:0010.1 km
46. 1.33km WSW of Imperial, California2013-02-11 21:00:01 UTC-07:0010.1 km
47. 1.63km WSW of Imperial, California2013-02-11 20:46:05 UTC-07:009.4 km
48. 1.28km WNW of Holtville, California2013-02-03 11:02:40 UTC-07:009.3 km
49. 3.7Southern California2012-12-15 13:13:24 UTC-07:0014.9 km

50. 2.8Southern California2012-11-23 02:51:21 UTC-07:009.7 km
51. 1.9Southern California2012-11-04 18:38:33 UTC-07:008.1 km
52. 2.9Southern California2012-10-04 06:12:29 UTC-07:0014.6 km
53. 2.8Southern California2011-07-19 13:07:50 UTC-07:0011.8 km
54. 3.0Southern California2011-03-05 20:32:32 UTC-07:0015.6 km
55. 3.1Southern California2011-01-24 17:55:36 UTC-07:0014.6 km
56. 1.34km WSW of Imperial, California2010-04-24 12:08:49 UTC-07:008.1 km
57. 2.6Southern California2010-03-17 23:39:38 UTC-07:0015.0 km
58. 3.1Southern California2010-02-06 02:12:27 UTC-07:0015.4 km
59. 2.0Southern California2010-02-05 21:10:30 UTC-07:0011.3 km
60. 2.7Southern California2009-03-02 12:48:16 UTC-07:0015.5 km
61. 3.1Southern California2008-06-03 08:41:32 UTC-07:0015.0 km
62. 2.9Southern California2008-06-03 08:33:47 UTC-07:0014.3 km
63. 2.9Southern California2008-06-03 05:51:45 UTC-07:0014.2 km
64. 2.5Southern California2007-12-05 00:02:51 UTC-07:0014.8 km
65. 2.9Southern California2007-06-16 00:38:29 UTC-07:0018.1 km
66. 3.4Southern California2003-01-20 07:57:02 UTC-07:0021.6 km
67. 3.0Southern California2002-03-26 04:28:33 UTC-07:0016.5 km
68. 2.9Southern California2000-06-17 04:04:22 UTC-07:004.7 km
69. 2.8Southern California2000-06-14 21:35:17 UTC-07:004.8 km
70. 3.2Southern California2000-06-14 21:32:36 UTC-07:004.1 km
71. 2.8Southern California2000-06-14 16:08:23 UTC-07:004.7 km
72. 2.8Southern California2000-06-14 15:53:16 UTC-07:004.7 km
73. 3.6Southern California2000-06-14 15:39:27 UTC-07:008.8 km
74. 2.8Southern California2000-06-14 15:25:07 UTC-07:004.7 km
75. **4.5**Southern California2000-06-14 14:49:18 UTC-07:004.9 km
76. 3.4Southern California2000-06-14 14:29:02 UTC-07:004.7 km
77. 3.2Southern California2000-06-14 14:20:24 UTC-07:0011.1 km
78. 2.9Southern California2000-06-14 14:12:15 UTC-07:005.1 km
79. 3.1Southern California2000-06-14 13:36:02 UTC-07:004.9 km
80. 2.8Southern California2000-06-14 12:32:37 UTC-07:004.8 km
81. 3.9Southern California1999-07-23 19:01:26 UTC-07:0015.4 km
82. 3.7Southern California1999-07-23 18:13:22 UTC-07:0015.6 km
83. 3.3Southern California1999-01-01 12:51:24 UTC-07:0014.6 km
84. 3.2Southern California1999-01-01 12:31:29 UTC-07:0014.9 km
85. 2.7Southern California1994-03-01 06:55:30 UTC-07:0015.4 km
86. 3.3Southern California1993-06-05 16:58:05 UTC-07:0015.8 km
87. 2.8Southern California1992-12-30 18:16:21 UTC-07:0015.4 km
88. 3.4Southern California1987-11-24 13:23:22 UTC-07:009.0 km
89. 3.2Southern California1985-08-28 21:55:04 UTC-07:0010.0 km
90. 2.7Southern California1981-11-09 08:54:40 UTC-07:006.0 km
91. 3.0Southern California1981-04-22 23:15:51 UTC-07:0010.0 km
92. 3.0Southern California1980-02-26 16:42:40 UTC-07:005.0 km
93. 3.3Southern California1979-10-20 07:52:55 UTC-07:007.0 km
94. 3.4Southern California1979-10-17 12:03:02 UTC-07:002.0 km
95. 3.2Southern California1979-10-16 17:15:17 UTC-07:006.0 km

96. 3.3Southern California1979-10-16 16:23:52 UTC-07:005.0 km
97. 3.0Southern California1979-10-16 06:14:57 UTC-07:005.0 km
98. **4.5**Southern California1979-10-16 04:46:56 UTC-07:005.0 km
99. 3.0Southern California1979-10-16 01:14:34 UTC-07:005.0 km
100.3.5Southern California1979-10-16 00:35:03 UTC-07:006.0 km
101.3.0Southern California1979-10-15 22:41:17 UTC-07:005.0 km
102.3.1Southern California1979-10-15 22:38:02 UTC-07:005.0 km
103.3.2Southern California1979-10-15 22:23:01 UTC-07:005.0 km
104.3.5Southern California1979-10-15 22:16:15 UTC-07:005.0 km
105.3.5Southern California1979-10-15 18:33:49 UTC-07:005.0 km
106.3.6Southern California1979-10-15 18:07:12 UTC-07:005.0 km
107.4.2Southern California1979-10-15 16:55:04 UTC-07:001.0 km
108.2.8Southern California1978-10-31 23:42:22 UTC-07:006.0 km
109.3.3Southern California1978-08-14 17:22:50 UTC-07:0014.0 km
110.2.7Southern California1978-05-30 22:16:49 UTC-07:0010.0 km
111.3.1Southern California1978-04-11 04:39:42 UTC-07:0018.0 km
112.3.2Southern California1978-03-14 21:09:39 UTC-07:005.0 km
113.2.9Southern California1978-03-14 21:02:49 UTC-07:005.0 km
114.3.6Southern California1978-02-23 09:43:03 UTC-07:0019.0 km
115.2.6Southern California1977-11-16 10:29:17 UTC-07:004.0 km
116.3.4Southern California1977-11-15 12:13:16 UTC-07:005.0 km
117.4.1Southern California1977-11-13 22:36:55 UTC-07:005.0 km
118.3.3Southern California1977-11-13 22:30:40 UTC-07:007.0 km
119.3.8Southern California1977-11-13 22:23:36 UTC-07:004.0 km
120.3.7Southern California1977-11-13 22:18:02 UTC-07:006.0 km
121.3.1Southern California1977-11-13 22:13:45 UTC-07:005.0 km
122.3.8Southern California1977-11-13 22:05:20 UTC-07:003.0 km
123.3.0Southern California1977-11-13 21:49:56 UTC-07:006.0 km
124.3.0Southern California1977-11-13 20:19:07 UTC-07:005.0 km
125.3.1Southern California1977-11-13 19:32:14 UTC-07:005.0 km
126.3.4Southern California1977-11-13 19:10:18 UTC-07:005.0 km
127.**5.0**Southern California1977-11-13 19:05:47 UTC-07:005.0 km
128.3.1Southern California1977-11-13 17:33:31 UTC-07:004.0 km
129.3.9Southern California1977-11-13 17:11:35 UTC-07:005.0 km
130.3.2Southern California1977-11-13 09:25:19 UTC-07:005.0 km
131.3.9Southern California1977-10-28 14:24:52 UTC-07:0016.0 km
132.3.1Southern California1977-10-28 12:32:25 UTC-07:006.0 km
133.3.5Southern California1976-12-24 16:18:41 UTC-07:008.0 km
134.3.6Southern California1976-04-14 00:59:27 UTC-07:008.0 km
135.4.2Southern California1976-04-13 23:56:03 UTC-07:0013.0 km
136.3.2Southern California1976-04-13 20:53:02 UTC-07:008.0 km
137.3.1Southern California1975-08-17 18:25:22 UTC-07:0017.0 km

Most recent natural disasters:³

1. California Earthquake, Incident Period: April 4, 2010 to July 4, 2010, Major Disaster (Presidential) Declared (DR-1911): May 7, 2010, FEMA Id: FEMA-DR-1911, Natural disaster type: Earthquake
2. California Severe Winter Storms, Flooding, and Debris and Mud Flows, Incident Period: January 17, 2010 to February 6, 2010, Major Disaster (Presidential) Declared (DR-1884): March 8, 2010, FEMA Id: FEMA-DR-1884, Natural disaster type: Winter Storm, Flood
3. California Hurricane Katrina Evacuation, Incident Period: August 29, 2005 to October 1, 2005, Emergency Declared (EM-3248): September 13, 2005, FEMA Id: FEMA-EM-3248, Natural disaster type: Hurricane
4. California Severe Winter Storms, Flooding, Landslides, Mud Flows, Incident Period: February 13, 1995 to April 19, 1995, Major Disaster (Presidential) Declared (DR-1046): March 12, 1995, FEMA Id: FEMA-DR-1046, Natural disaster type: Winter Storm, Landslide, Flood
5. California Severe Storm, Winter Storm, Mud & Landslides, Flooding, Incident Period: January 5, 1993 to March 20, 1993, Major Disaster (Presidential) Declared (DR-979): February 3, 1993, FEMA Id: FEMA-DR-979, Natural disaster type: Winter Storm, Storm, Landslide, Flood
6. California Severe Freeze, Incident Period: December 19, 1990 to January 3, 1991, Major Disaster (Presidential) Declared (DR-894): February 11, 1991, FEMA Id: FEMA-DR-894, Natural disaster type: Freeze
7. California FLOODING, Incident Period: June 16, 1983 to February 1, 1984, Major Disaster (Presidential) Declared (DR-687): July 1, 1983, FEMA Id: FEMA-DR-687, Natural disaster type: Flood
8. California Flooding, Tropical Storm Kathleen, Incident Period: September 21, 1976, Major Disaster (Presidential) Declared (DR-521): September 21, 1976, FEMA Id: FEMA-DR-521, Natural disaster type: Tropical Storm, Flood

Natural/Manmade Disaster Potential (reported by the City of Imperial, Alexis Brown (Alexis Brown <abrown@cityofimperial.org>))

1. Union Pacific Railroad Line
2. Kinder and Morgan Energy Company
3. Our sewer plant is located in town
4. HWY 86: With a major CA State Hwy running through our City, we are not always aware what could be traveling through our City. Being in an agriculture community, different chemicals are transported throughout the Valley using HWY 86. Should an accident occur, those chemicals

³ Homefacts <http://www.city-data.com/county/Imperial_County-CA.html#ixzz36nh2mfrt>

- released could affect our water supply. This is just one example of what is transported using HWY 86.
5. NAF El Centro: With Imperial's proximity to NAF El Centro, it puts us in a flight path/fly over zone. Harrier Incident case and point.
 6. Strickland Oil: The City of Imperial is home to Kenny Strickland, Inc. an oil supply company based out of Hemet that has a distribution warehouse in the heart of our City. The warehouse houses products such as: Fuel- Diesel & Gasoline, Lubricants, Industrial Chemicals, AntiFreeze, Biodiesel and Equipment.
 7. AmeriGas Filling Station: The City of Imperial has an AmeriGas propane filling station located on Aten Road.