Community Profile: Corte Madera

Corte Madera is a primarily residential community with several large commercial areas that take advantage of the highway corridor. These commercial areas serve the entire region and include outdoor malls, auto dealerships, restaurants, and other local business. In the near-term, 230 acres could be exposed to sea level rise. By the long-term, 906 acres could be exposed to sea level rise and 994 acres could be exposed with an additional 100-year storm surge. Key vulnerabilities in Corte Madera include:

- Homes along the tributaries to Corte Madera Creek may be vulnerable in the near-term.
- Commercial areas on Paradise Drive may be vulnerable to sea level rise in the near-term, and storm surges sooner.
- Segments of the 101 could be vulnerable to seasonal storm surges in the near-term, and sea level rise in the medium to long-term. Access to the community from the US Highway 101 corridor may become increasingly difficult with chronic flooding.
- Marin Country Day School, Marin Montessori, Cove Elementary, and Neil Cummins elementary could be vulnerable across the scenarios.
- Mariner Cove and Marina Village are already susceptible to subsidence and could be vulnerable to sea level rise surface flooding in the near-term.
- Madera Gardens and the Corte Madera Town Center could be vulnerable to the 100-year storm surge in the medium-term, scenario 4, and sea level rise in the long-term, scenario 6.
- Stormwater pump stations could become tidally influenced and overburdened. If the pump station fails or capacity is exceeded, the surrounding neighborhoods could flood.
- Marsh land degradation or loss at the shoreline and Corte Madera Creek tributaries.
- The fire station on Paradise Drive could experience flooding impacts and access issues in the medium-term.
- Police serving the community are headquartered in Larkspur. Flooded roads could increase response times, and at worst, low lying areas become blocked to vehicles.
- California Highway Patrol (CHP) Marin headquarters is vulnerable to subsidence and sea level rise in the medium-term.

IMPACTS AT-A-GLANCE: SCENARIO 6

<table>
<thead>
<tr>
<th>1,500+ living units</th>
<th>9,500+ people</th>
</tr>
</thead>
<tbody>
<tr>
<td>994 acres exposed</td>
<td>79 commercial parcels</td>
</tr>
<tr>
<td>16 miles of roads</td>
<td></td>
</tr>
</tbody>
</table>

| Storm, tidal, and subsidence impacts already occur |
| $1.4 billion worth of assessed property value; assets vulnerable; $1.5 billion in single family market value |

Map 77. Corte Madera Sea Level Rise and 100-year Storm Surge Scenarios

1 2016 dollars
Vulnerable Assets
Corte Madera's most vulnerable assets in the near-term include commercial and residential south of US Highway 101 and along Corte Madera Creek. In the long-term, flooding could pass through the US Highway 101 corridor, flooding commercial development, and residential west of the highway.

Land
Corte Madera is one of the County's large municipalities and has relatively long length of shoreline that is protected by armoring with development not too far behind in most cases. Corte Madera also features productive tidal marshes that may help preventing major flooding before the medium-term. Note also, that Corte Madera city limits extend well into the upland valleys. However, unlike communities further south, Corte Madera has considerable low-lying areas, especially historic marshes filled for development.

Acres
In the near-term, 230 acres, or eight percent of Corte Madera, could be exposed to tidal flooding and another 200 acres could be exposed to storm surge flooding only. In Medium-term scenario 3, eleven percent of Corte Madera, or about 300 acres could be exposed to sea level rise tidal flooding at MHHW. With the additional 100-year storm surge in scenario 4, twice this area could face nuisance storm-surge flooding. In the long-term more than thirty percent of Corte Madera could be subject to MHHW tidal flooding and 100-year storm surge flooding.

Table 84. Corte Madera Exposed Acres

<table>
<thead>
<tr>
<th>Scenarios</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Near-term</td>
<td>230</td>
</tr>
<tr>
<td>430</td>
<td>15</td>
</tr>
<tr>
<td>Medium-term</td>
<td>313</td>
</tr>
<tr>
<td>640</td>
<td>22</td>
</tr>
<tr>
<td>Long-term</td>
<td>906</td>
</tr>
<tr>
<td>994</td>
<td>35</td>
</tr>
</tbody>
</table>

Source: MarinMap, CoSMoS

Table 85. Corte Madera Vulnerable Parcels at MHHW

<table>
<thead>
<tr>
<th>Scenarios</th>
<th>Parcels</th>
</tr>
</thead>
<tbody>
<tr>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Near-term</td>
<td>9</td>
</tr>
<tr>
<td>201</td>
<td>6</td>
</tr>
<tr>
<td>Medium-term</td>
<td>68</td>
</tr>
<tr>
<td>635</td>
<td>17</td>
</tr>
<tr>
<td>Long-term</td>
<td>1,104</td>
</tr>
<tr>
<td>1,535</td>
<td>42</td>
</tr>
</tbody>
</table>

Source: MarinMap, CoSMoS

Parcels
Examining how this acreage is divided into parcels for development and reservation, and what uses are on the land can provide a representation of the human activities that could be vulnerable in Corte Madera. In the near-term, few parcels could be vulnerable to tidal flooding; however, 200 could be vulnerable to 100-year storm surge flooding. In the medium-term, nearly 70 parcels could experience tidal flooding. Several of these are marshes and parklands, though some residential parcels off Lucky Drive could be vulnerable to flooding by this time period. A 100-year storm could flood, almost 20 percent of parcels with bay storm waters. In the long-term, more than 1,100 parcels may be subject to tidal and storm-surge flooding. These parcels constitute one-third of Corte Madera's parcels. With an addition 100-year storm surge, more than 40 percent of Corte Madera could be impacted by flooding. This level of flooding would be devastating to development and property owners.
Across land uses, the majority of acreage in the near-term is dedicated to tax exempt lands, which are typically parks and open space, and this case, mostly marshes. Residential is also vulnerable in the Marina Village and Mariners Cove. In the medium-term, commercial parcels along San Clemente Drive could expect tidal impacts in the parking lots. In the long-term, all of the marshes are flooded, as are most of the neighborhoods east of Paradise Drive. These nearly 1,000 parcels account for thirty percent of Corte Madera residential parcels. The eighty parcels that could expect tidal flooding impacts on a regular basis account for seventy percent of commercial parcels in Corte Madera. This is a significant portion of commercial properties in the community. Moreover, these businesses serve as a regional center of commerce serving more than just the Corte Madera community. Several of the businesses also sell high value items, such as cars, furniture, and more. Of note, a few industrial use parcels could face tidal flooding.

**Buildings**

Buildings on the flatlands of Corte Madera were built on filled in marshes that extend to Kentfield, and are already vulnerable to subsidence. East of U.S> High 101, Mariner Cove is built on fill and is not levee protected. Marina Village is protected to the north by a levee. However, the eastern side of Marina Village is raised by fill and may be susceptible to sea level rise along San Clemente Creek first. Mariners Cove may be susceptible to sea level rise along San Clemente Creek as well. Further east along the roadway are commercial centers that are fronted by marsh lands tempered with an earthen levee used as a trail. These commercial areas, including Aegis Senior Living complex, may be vulnerable across all of the sea level rise scenarios, first impacting the low-lying car dealership area and spreading outwards.

In long-term scenario 5, the area north of US 101 including the Corte Madera Town Center, could also be impacted. While it is plausible this area could be reached by storms in the medium-term, long-term sea level rise could burden the area with regular tidal influences. Water could also impact the area north of the highway from the creek system and channels extending into the city. This area is also impacted by stormwater backups due to tidal influences that would worsen. In fact, this issue may have led to a two week shut down of half of Neil Cummings Elementary School.
As seen in Table 88, in the near-term, buildings are not impacted until the 100-year storm surge condition is applied, amounting to 255 buildings. In the medium-term, nearly 140 buildings may be vulnerable to tidal flooding. And more than six hundred more buildings is vulnerable with the 100-year storm surge coincidence. These figures constitute one-fifth of the community’s buildings. By scenario 5, nearly 1,300 buildings could expect tidal flooding impacts, and a few hundred more could be damaged from storm surge impacts.

Table 89 indicates how many buildings could fill with one, two, or ten feet of water when flooded due to sea level rise at MHHW. In the near-term, five vulnerable buildings could expect less than or equal to two feet of tide waters. This trend continues for the majority of the buildings in scenario 3 as well. In long-term scenario 5, 500 buildings could be flooded with up to three of salt water. More than 650 buildings could be flooded with more than three feet and up to six feet of water, and about 125 buildings could be flooded with between six and nine feet of salt water on a regular basis. These properties would be unusable in their current state.

Table 90 estimates costs using FEMA Hazus post-disaster damage tagging levels for buildings and their contents. These figures are based on scenario 6, the worst case scenario examined in this assessment. This analysis assumes every building experiences the same damage level, such that if all 1,500 buildings are yellow-tagged, up to $25 million in damages could incur. At the high end, more than $700 million² of structural damages could occur. Reality would likely reflect mix of these damage levels.

The maps on the following pages illustrate vulnerable buildings by scenario. The areas in the call out circles enable the reader the see areas that are difficult to see on the large scale map. The circles do not indicate that these areas are more vulnerable than others along the shoreline.

---

² 2016 dollars
CORTE MADERA

Map 78. Corte Madera Vulnerable Buildings

Vulnerable Assets
- School
- Emergency Shelter
- Fire Station
- Law Enforcement

Vulnerable Buildings
- Scene 1: 10" Sea Level Rise (SLR)
- Scene 2: 10" SLR+Storm Surge
- Scene 3: 20" Sea Level Rise
- Scene 4: 20" SLR+Storm Surge
- Scene 5: 60" Sea Level Rise
- Scene 6: 60" SLR+Storm Surge

Location Indicators
- Unincorporated
- Municipality
- Road
- Bay
- Inland Extent: Sea Level @ 60"*100-year Storm

Marin County

Disclaimer: Vulnerability Assessment maps, tables, etc. can be used as a resource to help identify potential hazardous areas and vulnerable assets. Marin County, and data providers here in, make no warranties of the accuracy or completeness of maps and data. Maps are representational and subject to future revision. Local site conditions must be examined. Commercial use is prohibited.
Transportation
Nearly every road west of Highway 101 is vulnerable in the near-to-medium terms with a 100-year storm surge. By scenario 5, all of these roads and tens more on the east side of the US Highway 101 could expect tidal flooding. Several of the roads east of US Highway 101 are already, and will continue to be, vulnerable to subsidence. In addition, due to the orientation of the commercial sites, already stressed parking lots could experience impacts first.

Table 91 lists the vulnerable roads and trails in Corte Madera by onset. In near-term scenario 2, 3 miles of road could experience nuisance storm surge flooding. In medium-term scenario 3, 1 mile of road could experience tidal flooding. In scenario 4, this figure jumps to nine miles. This temporary flooding; however, may not be as problematic as roads that only experience may be able to tolerate short-term salt water exposure. Finally, in the long-term 14 miles could experience tidal flooding, and two more could experience storm surge flooding. Fourteen miles of road closed down twice a day for several days a month several months of the year would be extremely burdensome for travelers. Especially considering the regional impacts of US Highway 101 flooding where it interchanges with Interstate 580.

Preliminary conversations with Caltrans indicate that Caltrans is well aware of the existing and arising concerns in the County. According to Caltrans and the CoSMoS model shows flooding at low spots of US Highway 101 between Corte Madera and San Rafael. These low spots typically benefit from levees and pumps others operate to protect the larger area from flooding. These locations are south of Tamalpais Drive to Nellen Avenue, and from Corte Madera Creek to Lucky Drive.

Transit service along the vulnerable roads could also be compromised. Impacts to transit service could disproportionately impact low-income and Aegis residents. Both Golden Gate Transit and Marin Transit operate in the area. Golden Gate Transit routes 18, 22, 17, 24, 27, 36, 70, 71, 80, and 117 pass through the area at the following stops:

- Paradise Dr. and Madera Del Presidio Ave.,
- Paradise Dr. and Harbor Dr.,
- 33 San Clemente Dr.,
- Hwy 101 and Lucky Dr.,
- Hwy 101 and Tamalpais Dr., and
- Hwy 101 and Paradise Dr.

Marin Transit routes 113 and 117 also travel through area with stops at:

- Tamal Vista Blvd. and Sandpiper Circle,
- Madera Blvd. and Monona Dr.
- Madera Blvd. and Mohawk Ave.,
- Paradise Dr. and Madera Del Presidio Ave.,
- Paradise Dr. and Harbor Dr.,
- Paradise Dr. and El Camino Dr.,
- Paradise Dr. and Seawolf Passage,
- Paradise Dr. and Robin Dr., and
- 33 San Clemente Drive
- Tamal Vista Blvd. and Council Crest Dr.
- Paradise Bus Pads.

Lost or compromised function of these ground transportation features could cut off access to Corte Madera, leading to negative economic impacts for local and regional businesses, emergency vehicle accessibility impacts, residents and commuters dependent on US Highway 101.

Trails along and through the marshes are also vulnerable in the near-term. These paths are typically on or near shoreline armoring. Several miles of bike path and sidewalk along the vulnerable roads are also vulnerable across all scenarios.

The maps on the following pages illustrate vulnerable transportation features. The areas in the call out circles enable the reader to see areas that are difficult to see on the large scale map. The circles do not indicate that these areas are more vulnerable than others along the shoreline.

Table 91. Corte Madera Vulnerable Transportation Assets

<table>
<thead>
<tr>
<th>Near-term</th>
<th>Medium-term</th>
<th>Long-term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 1</td>
<td>Scenario 2</td>
<td>Scenario 3</td>
</tr>
<tr>
<td>None</td>
<td>3 miles</td>
<td>1 mile</td>
</tr>
</tbody>
</table>

Roads in scenario 2
Apache Rd
Arrowhead Ln
Birch Ave
Cheyenne Way
Chickasaw Ct
Council Crest Dr
Edgemar Way
Hickory Ave
Lakeside Dr
Madera Blvd
Madera del Presidio Dr
Meadowsweet Dr
Mohave Ct
Mohawk Ave
Monona Dr
Navajo Ln
Sanford St
Seamast Passage
Seminole Ave
Tradewind Passage

Roads in scenarios 2 and 4
Diamond Head Passage
El Camino Dr
Estrada Ln
Flying Cloud Course
Foremast Cv
Granada Dr
Key Largo Course
Key Largo Cv
Lanyard Cv
Meadow Creek Dr
Morning Star Course
Pacific Queen Passage
Paloma Dr
Prince Royal Dr
Prince Royal Passage
Sandpiper Cir
Sanctuary Passage
San Francisco Passage
Simon Ranch Rd
Spindrift Passage
Staghound Passage
Wornum Dr

M = Marin County; C = State of California; L = Local Municipality; P = Private. Source: MarinMap, CoSMoS
Map 79. Corte Madera Vulnerable Transportation Assets

Vulnerable Assets
- Bike path
- Bay Trail
- Trail
- MT Bus Stop
- GGT Bus Stop
- Ferry

Vulnerable Roads
- @10' Sea Level Rise (SLR)
- @10' SLR+ 100-year Storm Surge
- @20' Sea Level Rise
- @20' SLR+ 100-year Storm Surge
- @60' Sea Level Rise
- @60' SLR+ 100-year Storm Surge

Location Indicators
- Unincorporated
- Municipality
- Road
- Bay
- Inland Extent: Sea Level @ 60'+100-year Storm

Disclaimer: Vulnerability Assessment maps, tables, etc. can be used as a resource to help identify potential hazardous areas and vulnerable assets. Marin County and data providers here in, make no warranties of the accuracy or completeness of maps and data. Maps are representational and subject to future revision. Local site conditions must be examined. Commercial use is prohibited.
Utilities
Corte Madera’s Sanitary District No. 2 will likely face issues common in other shoreline communities in the study area, including:

- Underground pipes face compounding pressure forces from water and the road,
- Road erosion and collapse with underlain pipes,
- Saltwater inflow and infiltration causing inefficiencies in wastewater treatment,
- Continuously subsiding soils or fill, and
- Escalating activity, capacity demands, energy consumption, and wear and tear on pump stations in stormwater and wastewater systems,
- Aging individual site connections for water, sewer, and electrical, and
- Flood waters interrupting access for employees to reach work sites.

In addition, PG&E has a natural gas pipe line along US Highway 101, Paradise Drive, and Madera del Presidio Drive towards Paloma Drive. They also have transmission towers and lines that travel from Larkspur through the hills across the Corte Madera marshes.

Natural Resources
Corte Madera has a rich estuary and marsh system that support robust wildlife populations in the Corte Madera Ecological Reserve, Triangle Marsh, and the lagoon habitats. The marsh lands are extensive and may be able to withstand sea level rise impacts; however, because many sections abut levees, roads, or development, the marshes could get squeezed out in the long-term and turn to mud flats and open water.

The longfin smelt, Ridgway Rail, and Salt Marsh harvest mouse are the listed endangered species recorded in this area. The smelt is list as threatened on the California species list and a candidate for the federal list. The Ridgway Rail and Harvest mouse are federally listed. The San Pablo Song sparrow, though not listed, is unique to the area and has potential habitat in the exposed area.

The Ridgway’s rail is one of the largest rails in North America, very secretive, and primarily lives in salt and brackish marshes. The Corte Madera Ecological Reserve supports one of the densest populations of Ridgway’s rails in the northern San Francisco Bay.4

Salt marsh harvest mice are endangered because of habitat loss, fragmentation, and alteration.5 These mice are only found in the Bay area, including the marshes of Corte Madera; in the upper half of tidal salt marshes and the adjacent uplands during high tides.6 Sea level rise would greatly impact this species, especially if the mouse’s habitat is trapped by development. If high inundation rates occur in areas without upland habitat then reproduction could be reduced or eliminated.

Lastly, Chinook salmon, an endangered species, young use tidal marshes for cover and the feed as it out-migrates through the estuary. And steelhead trout, a special status species, use tidal marshes and creeks for foraging.7

---

Recreation
The Bay Trail (County Route 17), Sandra Marker Tail, Corte Madera/Larkspur Bike Path, marsh land pathways, and private boating infrastructure could be vulnerable to sea level rise in the near-term. Additionally, on street bike paths and sidewalks are also compromised. This would greatly impact bicyclists that ride the Tiburon Peninsula. These activities will likely shift to accommodate the changing circumstances of travel. In addition, the Best Western and Marin Suites could be vulnerable.

Emergency Services
Three emergency shelters in Corte Madera may be vulnerable in scenario 6. Fire Station 13 off of Paradise Drive is vulnerable in the long-term to sea level rise and could experience access impacts even sooner. The Tamalpais Drive fire station just misses exposure under these average high tide scenarios. Access south of the facility could be compromised due to flooding. The police headquarters are technically in Larkspur; however, similar access issues could also arise here. When traveling to Corte Madera, that fastest route from the station is typically using US Highway 101, which could likely be flooded to some degree during high tides under all of these scenarios. This could increase response times, and at worst, prevent responses entirely. Finally, the California Highway Patrol Office is in the exposure zone. To learn more about the site’s vulnerabilities see the Emergency Services Profile.

Cultural Resources
Corte Madera’s inventoried historic assets are located outside of the flood area.

Table 92 lists these assets and others in order of onset and severity of flooding. A 100-year storm surge would add an additional 1 to 3 feet of water to these properties. Note also, above average high tides could impact more properties than accounted for in this analysis.

A few additional select assets could also be vulnerable in scenario 6 with the additional 100-year storm surge condition. These are:

- Marin Lutheran Church (emergency shelter).

All three of these sites are existing emergency shelters that by the end of the century could be at the epicenter of emergency and unable to serve their function.

The maps on the following pages illustrate vulnerable utility, natural resource, recreation, emergency and historic features. The areas in the call out circles enable the reader the see areas that are difficult to see on the large scale map. The circles do not indicate that these areas are more vulnerable than others along the shoreline.
Table 92. Example Corte Madera Vulnerable Assets by Sea Level Rise Onset and Flooding at MHHW

<table>
<thead>
<tr>
<th>Asset</th>
<th>Scenarios</th>
<th>Near-term</th>
<th>Medium-term</th>
<th>Long-term</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Paradise Dr. commercial</td>
<td>0'-1'2&quot;</td>
<td>9&quot;-3'3&quot;</td>
<td>2'-8'4&quot;</td>
<td></td>
</tr>
<tr>
<td>Marina Village</td>
<td>0'-1'</td>
<td>4'-2'5&quot;</td>
<td>11'-6&quot;</td>
<td></td>
</tr>
<tr>
<td>Mariner Cove</td>
<td>0'-1'</td>
<td>2&quot;-2&quot;</td>
<td>5'3&quot;</td>
<td></td>
</tr>
<tr>
<td>CHP Headquarters</td>
<td>3&quot;</td>
<td>2'4&quot;</td>
<td>6&quot;</td>
<td></td>
</tr>
<tr>
<td>Shorebird Marsh</td>
<td>5'3&quot;</td>
<td>10'9&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bay Trail</td>
<td>0'-3'4&quot;</td>
<td>0'-8'6&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Madera Gardens</td>
<td>9&quot;-3&quot;</td>
<td>2'-7'4&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paradise Drive</td>
<td>0'-2'5&quot;</td>
<td>4&quot;-9&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neil Cummins Elementary</td>
<td>2'5&quot;</td>
<td>6'6&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Clemente Dr.</td>
<td>1'2&quot;-2'3&quot;</td>
<td>1'9&quot;-7'4&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tamalpais Dr.</td>
<td>0'-2'</td>
<td>2'-7'6&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corte Madera Town Center</td>
<td>2'</td>
<td>5'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aegis Senior Living</td>
<td>1'9&quot;</td>
<td>4'7&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Susan Marker Trail</td>
<td></td>
<td>1'2&quot;-7'6&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cove Elementary</td>
<td>11&quot;</td>
<td>2'3&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Village at Corte Madera</td>
<td>10&quot;</td>
<td>2&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higgins Dock</td>
<td>11'10&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Madera Gardens Lagoons</td>
<td></td>
<td>10'4&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Town Park</td>
<td>9'10&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hwy 101 NB</td>
<td>6&quot;-7'8&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Redwood Hwy.</td>
<td></td>
<td>1'2&quot;-6'8&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hwy 101 SB off ramp</td>
<td></td>
<td>1'-5'5&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ring Mountain</td>
<td>3'6&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skunk Hollow Park</td>
<td>3'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marin Montessori</td>
<td></td>
<td>1'7&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corte Madera Ecological Reserve</td>
<td></td>
<td>Floods at existing high tides</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: MarinMap, CoSMoS
Map 80. Corte Madera Vulnerable Wastewater Utility Assets

Vulnerable Assets
- AP
- Pump Station
- Junction
- Outlet
- Manhole
- Pipe

Location Indicators
- Unincorporated
- Municipality
- Road
- Bay

Inland Extent: Sea Level @ 60' + 100-year Storm Surge

Disclaimer: Vulnerability Assessment maps, tables, etc. can be used as a resource to help identify potential hazardous areas and vulnerable assets. Marin County and data providers here in make no warranties of the accuracy or completeness of maps and data. Maps are representational and subject to future revision. Local site conditions must be examined. Commercial use is prohibited.
Map 81. Corte Madera Vulnerable Gas and Electric Assets

Vulnerable Assets
- Solar Installation

PG&E Assets
- Electric Transmission Lines
- Natural Gas Pipeline
- Substation
- Transmission Tower

Location Indicators
- Unincorporated
- Municipality
- Road
- Bay

Inland Extent: Sea Level @ 66 ft +100-year Storm

Marin County
Map 83. Corte Madera Vulnerable Natural Resource Assets

Vulnerable Assets
- Streams
- Marsh
- Estuary
- Wetland

Location Indicators
- Unincorporated
- Municipality
- Road
- Bay

Inland Extent: Sea Level @ 60"+100-year Storm

Disclaimer: Vulnerability Assessment maps, tables, etc. can be used as a resource to help identify potential hazardous areas and vulnerable assets. Marin County and data providers here or, make no warranties of the accuracy or completeness of maps and data. Maps are representational and subject to future revision. Local site conditions must be examined. Commercial use is prohibited.

Marin County
Map 84. Corte Madera Vulnerable Recreation Assets

**Vulnerable Assets**
- School
- Bay Trail
- Trail
- Bikeway
- Park

**Location Indicators**
- Unincorporated
- Municipality
- Road
- Bay

Inland Extent: Sea Level @ 50"+100-year Storm

**Disclaimer:** Vulnerability Assessment maps, tables, etc. can be used as a resource to help identify potential hazardous areas and vulnerable assets. Marin County, and data providers here in, make no warranties of the accuracy or completeness of maps and data. Maps are representational and subject to future revision. Local site conditions must be examined. Commercial use is prohibited.
Map 85. Corte Madera Vulnerable Emergency Service Assets

Vulnerable Assets
- Fire Station
- Emergency Shelter
- Law Enforcement
- Medical Facility

Vulnerable Arterials & Highways
- Scen. 1: 10" Sea Level Rise (SLR)
- Scen. 2: 10"SLR+Storm Surge
- Scen. 3: 20"SLR
- Scen. 4: 20"SLR+Storm Surge
- Scen. 5: 60"SLR
- Scen. 6: 60"SLR+Storm Surge

Location Indicators
- Unincorporated
- Municipality
- Road
- Bay

Inland Extent: Sea Level
- 60"+100-year Storm

Disclaimer: Vulnerability Assessment maps, tables, etc. can be used as a resource to help identify vulnerable facilities and assets. Marin County and data providers here in, make no warranties of the accuracy or completeness of maps and data. Maps are representational and subject to future revision. Local site conditions must be examined. Commercial use is prohibited.