



Climate Costs in 2040: California

\$22 Billion: That's the minimum down payment for short-term defense against rising seas in California.

As temperatures warm and coastal tides creep inland, communities across the country are facing billion-dollar price tags for basic coastal defenses. The Center for Climate Integrity partnered with Resilient Analytics, an engineering firm specializing in climate adaptation, and mapping and GIS specialists at the University of Colorado, to calculate the direct cost of building seawalls to protect the contiguous U.S. from the near term risks of rising seas. The above figure represents a conservative estimate of what it will take to safeguard businesses, homes, roads, and entire communities in California from chronic flooding by 2040 under a moderate sea-level-rise scenario.

How will California pay for protection?

Take a closer look at the damage:

TOP COUNTIES

1. Solano County: \$2.7 Billion
2. Humboldt County: \$2.5 Billion
3. Mendocino County: \$2.3 Billion
4. Santa Barbara County: \$2.0 Billion
5. Sonoma County: \$1.4 Billion
6. Marin County: \$1.1 Billion
7. San Joaquin County: \$1 Billion
8. San Diego County: \$984.1 Million
9. Contra Costa County: \$947.9 Million
10. San Mateo County: \$784.1 Million

TOP CONGRESSIONAL DISTRICTS

1. CA Congressional District 2: \$7.3 Billion
2. CA Congressional District 3: \$3.1 Billion
3. CA Congressional District 24: \$2.8 Billion
4. CA Congressional District 9: \$1.5 Billion
5. CA Congressional District 5: \$1.2 Billion
6. CA Congressional District 20: \$907.5 Million
7. CA Congressional District 18: \$737.9 Million
8. CA Congressional District 48: \$701.1 Million

TOP COASTAL CITIES

1. San Diego: \$357.2 Million
2. Fremont: \$347.5 Million
3. San Francisco: \$256.4 Million
4. Long Beach: \$246.3 Million
5. Newport Beach: \$235.8 Million
6. Huntington Beach: \$228.9 Million
7. Sea Ranch: \$228.6 Million
8. Imperial Beach: \$211.8 Million
9. Stockton: \$194.1 Million
10. Bodega Bay: \$179.8 Million

LENGTH OF SEAWALLS STATEWIDE

1,785 miles

9. CA Congressional District 14: \$598.2 Million

10. CA Congressional District 52: \$470 Million

The above costs are only a small portion of an ever increasing price-tag for adaptation and resilience in the fallout of climate change. From extreme weather events, severe heat, heavy rain, wildfires and flooding to growing impacts on ecosystem and human health, tourism, recreation, fishing, farming and more, the state of California will face a much wider range of costs to prepare for climate impacts. Communities are already paying to adapt and avoid irreparable damage to property, infrastructure, lives and livelihoods— yet most current and future expenditures have not been identified in budgetary planning.

The science is unimpeachably clear: under any emissions scenario, seas will rise substantially over the next several decades, and continue for at least several centuries. A failure to keep warming within 1.5 degrees Celsius by 2030 will result in mass extinction events, permanent ecosystem disruptions and life-threatening conditions for societies worldwide. According to intergovernmental assessments, meeting this ambitious goal will require bold and immediate action to drastically reduce emissions. And while the severity of harm depends on whether or not our government takes these warnings seriously, vulnerable communities are going to bear an unprecedented financial burden to adapt and rebuild in the face of unrelenting climate impacts.

As it stands, taxpayers are on the hook for the entirety of climate bills: past, present and future.

While home-owners and residents are saddled with 100% of these costs, big oil and gas companies are responsible for none. Unless something changes, communities will be forced to cut existing public services, raise taxes as the bill continues to expand, or abandon entire neighborhoods to inundation.

Elected officials can do better for their constituents.

As the scope and urgency of the crisis becomes increasingly apparent, politicians are unveiling policy proposals to respond to the threat of a warming world. But for a climate plan to be comprehensive and work for everyday Americans, it must address the question of “who pays” for adaptation and resilience.

Make Big Oil and Gas pay their fair share.

[Academic and nonprofit reports conclusively show](#) that big oil and gas companies knew burning fossil fuels would lead to dangerous consequences as early as 1968. While the industry’s internal scientists became leading experts in climate change, predicting the threats of our now-precarious present with startling accuracy, executives began paying to shield their own assets from the coming impacts. Instead of warning the public and leading the transition to clean energy, these companies ran a massively successful, multi-million dollar campaign to deliberately sow doubt about scientific realities and downplay risks.

Now they claim that they have no financial obligation – none – to pay for any of the damage caused to communities by climate change or defenses needed to protect against it.

Just as the tobacco industry was made to pay for harms they knew their products would cause, so too should climate polluters help citizens with the immense costs accrued from fossil fuel combustion.

California residents agree: after learning about industry deception and real examples of climate costs, 77% of state registered voters said they support holding big oil and gas companies accountable for a share of the damage.

The most direct path to recover damages is for elected officials at the city, county or state level to consider taking fossil fuel companies to court for their fair share of climate-related bills. That's why [14 cities and counties, including Richmond, Santa Cruz \(county and city\), Marin, San Mateo, Imperial Beach, Oakland and San Francisco + the state of Rhode Island](#) have already sued oil and gas majors for the costs associated with adapting to climate change. But there are other ways to enforce climate liability; for instance, local officials can begin by tracking climate costs at the city and county level in order to raise questions about who should pay, and can explore policies and ballot initiatives that help shift the burden away from taxpayers. For more examples, [check out our work in Florida](#).

To read the full report, see www.climatecosts2040.org. Visit www.payupclimatepolluters.org to learn more about efforts to make climate polluters pay their fair share.