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Superior Court of California,
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06/10/2024
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18 *The County of Marin, individually*
19 *and on behalf of the People of the State of California*

20 **SUPERIOR COURT OF THE STATE OF CALIFORNIA**
IN AND FOR THE COUNTY OF SAN FRANCISCO

21 COORDINATION PROCEEDING
22 SPECIAL TITLE [CRC 3.550(c)]

JUDICIAL COUNCIL COORDINATION
PROCEEDING NO. 5310

23 **FUEL INDUSTRY CLIMATE CASES**

Case No.: CJC-24-005310

25 **THIS CASE RELATES TO:**

26 *The County of Marin, individually and on*
27 *behalf of The People of the State of California*
28 *v. Chevron Corporation et al., Marin County*
Superior Court,

FIRST AMENDED COMPLAINT FOR:

1. PUBLIC NUISANCE ON BEHALF OF THE PEOPLE OF THE STATE OF CALIFORNIA;
2. PUBLIC NUISANCE;

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Case No.: CIV1702586

THE COUNTY OF MARIN, individually and
on behalf of THE PEOPLE OF THE STATE
OF CALIFORNIA,

Plaintiffs,

vs.

CHEVRON CORPORATION; CHEVRON
U.S.A. INC.; EXXONMOBIL
CORPORATION; EXXONMOBIL OIL
CORPORATION; BP P.L.C.; BP AMERICA;
INC.; SHELL PLC; SHELL USA, INC.;
SHELL OIL PRODUCTS COMPANY LLC;
CITGO PETROLEUM CORP.;
CONOCOPHILLIPS; CONOCOPHILLIPS
COMPANY; PHILLIPS 66; PHILLIPS 66
COMPANY; TOTAL E&P USA INC.; TOTAL
SPECIALTIES USA INC.; ENI S.p.A.; ENI
OIL & GAS INC.; ANADARKO
PETROLEUM CORP.; OCCIDENTAL
PETROLEUM CORP.; OCCIDENTAL
CHEMICAL CORP.; REPSOL S.A.; REPSOL
ENERGY NORTH AMERICA CORP.;
REPSOL TRADING USA CORP.;
MARATHON OIL COMPANY; MARATHON
OIL CORPORATION; MARATHON
PETROLEUM CORP.; HESS CORP.; DEVON
ENERGY CORP.; DEVON ENERGY
PRODUCTION COMPANY, L.P.; ENCANA
CORP.; APACHE CORP.; and DOES 1
through 100, inclusive,

Defendants.

- 3. STRICT LIABILITY – FAILURE TO WARN;
- 4. PRIVATE NUISANCE;
- 5. NEGLIGENCE;
- 6. NEGLIGENCE – FAILURE TO WARN; and
- 7. TRESPASS.

JURY TRIAL DEMANDED

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1 **I. INTRODUCTION**

2 1. Defendants, major corporate members of the fossil fuel industry, have known for
3 decades that unrestricted consumption of their fossil fuel products create greenhouse gas pollution
4 that warms the planet and changes our climate. They have known for decades that those impacts
5 could be catastrophic and that only a narrow window existed to take action before the
6 consequences would become irreversible. They have nevertheless engaged in a coordinated, multi-
7 front effort to conceal and deny their own knowledge of those consequences, discredit the growing
8 body of publicly available scientific evidence connecting fossil fuel consumption to climate
9 change, and persistently create doubt in the minds of consumers, the media, journalists, teachers,
10 business leaders, and the public about the reality and severity of climate change. At the same time,
11 Defendants have promoted and profited from a massive increase in the consumption of oil, coal,
12 and natural gas, which has in turn caused an enormous, foreseeable, and avoidable increase in
13 global greenhouse gas pollution and a concomitant increase in the concentration of greenhouse
14 gases,¹ particularly carbon dioxide (“CO₂”) and methane, in the Earth’s atmosphere. Those
15 disruptions of the Earth’s otherwise balanced carbon cycle have substantially contributed to a wide
16 range of dire climate change-related effects, including global warming, rising atmospheric and
17 ocean temperatures, ocean acidification, melting polar ice caps and glaciers, more extreme and
18 volatile weather, and sea level rise. Plaintiffs, the People of the State of California and Marin
19 County,² along with the County’s residents, taxpayers, and infrastructure, suffer the consequences.

20 2. Defendants are vertically integrated extractors, producers, refiners, manufacturers,
21 distributors, promoters, marketers, and sellers of fossil fuel products. Decades of scientific
22 research show that pollution from Defendants’ fossil fuel products plays a direct and substantial
23 role in the unprecedented rise in emissions of greenhouse gas pollution and increased atmospheric
24 CO₂ concentrations since the mid-20th century. This dramatic increase in atmospheric carbon

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26 ¹ As used in this Complaint, “greenhouse gases” refers collectively to carbon dioxide, methane,
27 and nitrous oxide. Where a source refers to a specific gas or gases, or when a process relates only
28 to a specific gas or gases, this Complaint refers to them by name.

² As used in this Complaint, “Marin County” refers to all areas within the geographic boundaries
of the County, including incorporated towns and cities.

1 dioxide and other greenhouse gases is the main driver of the gravely dangerous changes occurring
2 to the global climate.

3 3. Anthropogenic (human-caused) greenhouse gas pollution, primarily in the form of
4 CO₂, is far and away the dominant cause of climate change and sea level rise.³ The primary source
5 of this pollution is the extraction, production, and consumption of coal, oil, and natural gas,
6 referred to collectively in this Complaint as “fossil fuel products.”⁴

7 4. The rate at which Defendants have extracted and sold fossil fuel products has
8 exploded since the Second World War, as have emissions from those products. The substantial
9 majority of all greenhouse gas emissions in history has occurred since the 1950s, a period known
10 as the “Great Acceleration.”⁵ About three quarters of all industrial CO₂ emissions in history have
11 occurred since the 1960s,⁶ and more than half have occurred since the late 1980s.⁷ The annual rate
12 of carbon dioxide emissions from production, consumption, and use of fossil fuels has increased
13 by more than 60% since 1990.⁸

14 5. Defendants have known for more than 50 years that greenhouse gas pollution from
15 their fossil fuel products has a significant impact on the Earth’s climate and sea levels. Defendants’
16 awareness of the damaging consequences of their products’ ordinary use corresponds almost
17 exactly with the Great Acceleration, and with skyrocketing greenhouse gas emissions. Armed with
18

19 ³ See IPCC, 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I,
20 II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change
21 [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland. Page 6,
22 Figure SMP.3, <https://www.ipcc.ch/report/ar5/syr/>.

22 ⁴ See C. Le Quéré et al., Global Carbon Budget 2016, *Earth Syst. Sci. Data* 8, 632 (2016),
23 <http://www.earth-syst-sci-data.net/8/605/2016/>. Cumulative emissions since the beginning of the
24 industrial revolution to 2015 were 413 GtC attributable to fossil fuels, and 190 GtC attributable
25 to land use change. Id. Global CO₂ emissions from fossil fuels and industry remained nearly
26 constant at 9.9 GtC in 2015, distributed among coal (41 %), oil (34 %), gas (19 %), cement (5.6
27 %), and gas flaring (0.7 %). Id. at 629.

25 ⁵ Will Steffen et al., The Trajectory of the Anthropocene: The Great Acceleration (2015),
26 <http://journals.sagepub.com/doi/abs/10.1177/2053019614564785>.

26 ⁶ R.J. Andres et al., A synthesis of carbon dioxide emissions from fossil-fuel combustion,
27 *Biogeosciences*, 9, 1851 (2012), <http://www.biogeosciences.net/9/1845/2012/>.

27 ⁷ Id.

28 ⁸ Le Quéré et al. (2016), supra note 4, at 630.

1 that knowledge, Defendants took steps to protect their own assets from these threats through
2 immense internal investment in research, infrastructure improvements, and plans to exploit new
3 opportunities in a warming world.

4 6. But instead of warning consumers and the public about the dangers of fossil fuels,
5 Defendants mounted disinformation campaigns to undermine the burgeoning scientific consensus
6 on climate change; create doubt in the minds of consumers, the media, teachers, and the public
7 about the dire consequences of burning fossil fuels; and delay the necessary transition to a lower-
8 carbon future. Defendants' climate deception campaigns, and their aggressive promotion of fossil
9 fuel products despite knowing of their dangers, had the purpose and effect of unduly and
10 substantially inflating and sustaining the market for fossil fuels. Defendants' tortious and deceptive
11 conduct, both individually and collectively, drove fossil fuel consumption and delayed the
12 transition to a lower-carbon future. This caused an enormous, foreseeable, and avoidable increase
13 in anthropogenic greenhouse gas emissions and accelerated global warming, bringing devastating
14 consequences to the County and its people.

15 7. Extreme flooding events will more than double in frequency on California's Pacific
16 coast, including in Marin County, by 2050.⁹ Flooding and storms will become more frequent and
17 more severe, and average sea level will rise substantially along California's coast and in the San
18 Francisco Bay Area, including Marin County. The County, bordered on three sides by water and
19 among the most vulnerable counties to sea level rise in California, has already spent significant
20 funds to study and mitigate the effects of global warming. Sea level rise already adversely affects
21 the County and jeopardizes Marin's wastewater systems, beaches, parks, roads, civil infrastructure,
22 essential public services, and communities. Global warming has also resulted in increased risk of
23 extreme wildfire in and around the County, which has already and will continue to require
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25 ⁹ Sean Vitousek et al., Doubling of coastal flooding frequency within decades due to seal-level
26 rise, Nature Scientific Reports (May 18, 2017), [https://www.nature.com/articles/s41598-017-](https://www.nature.com/articles/s41598-017-01362-7)
27 [01362-7](https://www.nature.com/articles/s41598-017-01362-7) ("Only 10 cm of SLR doubles the flooding potential in high-latitude regions with small
28 shape parameters, notably the North American west coast . . ."); USGS, In Next Decades,
Frequency of Coastal Flooding Will Double Globally (May 18, 2017),
<https://www.usgs.gov/news/next-decades-frequency-coastal-flooding-will-double-globally>.

1 significant investment in preparation and recovery. To make matters worse, drought and wildfire
2 conditions exacerbate the impact of heavy storms, resulting in more extreme flooding and
3 landslides in the County. These impacts, as well as extreme heat, present myriad public health
4 harms in the County, felt first and worst by its most vulnerable communities.

5 8. Defendants' promotion, marketing, and sale of fossil fuel products, and
6 simultaneous concealment of the known hazards of those products, substantially, actually, and
7 proximately caused Plaintiffs' injuries.

8 9. Accordingly, the County brings a claim against Defendants for Public Nuisance on
9 behalf of the People of California; and the County brings claims against Defendants for Public
10 Nuisance, Strict Liability for Failure to Warn, Private Nuisance, Negligence, Negligent Failure to
11 Warn, and Trespass.

12 10. Plaintiffs do not seek relief as to state-owned property and assets. Plaintiffs do not
13 seek any remedy for harms or violations for which the State or State agencies have exclusive
14 authority to recover damages or obtain injunctive relief.

15 11. Plaintiffs hereby disclaim injuries arising on federal property and those arising from
16 Defendants' provision of non-commercial, specialized fossil fuel products to the federal
17 government for military and national defense purposes. Plaintiffs seek no recovery or relief
18 attributable to these injuries.

19 12. Plaintiffs do not seek to impose liability on Defendants for their direct emissions of
20 greenhouse gases and do not seek to restrain Defendants from engaging in their business
21 operations.

22 13. By this action, the County seeks to ensure that the parties responsible for causing
23 and exacerbating climate change-related harms to the County bear the costs of its impacts, rather
24 than Plaintiffs, local taxpayers, or residents.

25 **II. PARTIES**

26 **A. Plaintiffs**

27 14. Plaintiff, the People of the State of California ("the People"), by and through the
28 County Counsel of Marin County, brings this suit pursuant to Code of Civil Procedure section 731,

1 and Civil Code sections 3479, 3480, 3491, and 3494, to abate the nuisance caused by the effects
2 of climate change in the County's jurisdiction.

3 15. Plaintiff County of Marin ("the County") is a political subdivision of the State of
4 California. It is a county located in the San Francisco Bay Area, immediately north of the Golden
5 Gate Bridge, with its county seat in San Rafael.

6 a. The County forms a southward facing peninsula with the Pacific Ocean to
7 the West, the San Francisco Bay to the East, Sonoma County to the North, and the city of San
8 Francisco to the South.

9 b. Flooding associated with high tides and storm surges already impacts the
10 County's infrastructure and disrupts the County's citizens' lives on a regular, recurring basis.
11 These impacts are expected to increase in frequency and severity as sea level rise accelerates. Sea
12 level has already risen significantly along both the County's bay- and ocean-adjacent coasts. Marin
13 County will experience significant and dangerous sea level rise by the year 2100¹⁰ that will
14 continue and accelerate in the presence of unmitigated greenhouse gas pollution.

15 c. The sea level rise impacts on the County associated with an increase in
16 average mean sea level height include, but are not limited to, increased inundation and flooding in
17 natural and built environments with higher tides and intensified wave and storm surge events;
18 aggravated wave impacts, including erosion, damage, and destruction of built structures, as well
19 as natural features like cliffs, beaches, and dunes, with consequent landslides; changes in sediment
20 supply that could alter or destroy natural coastal habitats like beaches and wetlands, which would
21 otherwise naturally mitigate sea level rise impacts; saltwater intrusion on groundwater aquifers,
22 agricultural land, and infrastructure; magnification of other climate change impacts, due to the
23 superimposition of sea level rise on shifts in precipitation patterns that result in more rain and
24 attendant flooding; increased frequency and severity of storms that cause erosion, flooding, and
25 temporary sea level rise increases; and others. Compounding these environmental impacts are

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27 ¹⁰ Gary Griggs et al., Rising Seas in California: An Update on Sea-Level Rise Science, California
28 Ocean Science Trust, at 26, Table 1(b) (April 2017), <http://www.opc.ca.gov/webmaster/ftp/pdf/docs/rising-seas-in-california-an-update-on-sea-level-rise-science.pdf>.

1 cascading social and economic impacts, which are secondary and tertiary injuries that arise out of
2 physical sea-level rise injuries to the County.

3 d. Thousands of acres within Marin County are exposed and vulnerable to
4 regular tidal flooding with sea level rise of at least ten inches.¹¹ In the near-term, sea level rise of
5 ten inches will inundate and/or flood an area containing nearly 2,000 parcels and almost 800
6 buildings, potentially impacting tens of thousands of residents, employees, and visitors.¹² By 2030,
7 sea level along Marin County coasts is expected to rise significantly and dangerously.¹³

8 e. Sea level rise of five feet will expose over 16,000 acres in Marin County to
9 regular tidal flooding, impacting over 8,000 parcels, 9,000 buildings, and hundreds of thousands
10 of County residents, employees, and visitors.¹⁴

11 f. Other climate impacts on the County include, but are not limited to, extreme
12 precipitation events that cause extensive flooding and increased risk and severity of dangerous
13 landslides and debris flows, as well as increased risk of extreme wildfires. The County will also
14 experience public health harms disproportionately borne by communities made vulnerable by
15 geographic, racial, or income disparities, including, but not limited to, illness and injury from
16 extreme heat, extreme weather, air quality impacts from wildfire smoke, and increased vector
17 borne illnesses.

18 g. The County owns, operates, and is responsible for civil infrastructure
19 including, but not limited to levees, stormwater and sewage transport systems, an airport, and
20 roads. The County owns, leases and/or controls real property within its jurisdiction. Much of the
21 County's infrastructure and real property is on or near the Pacific Ocean and San Francisco Bay
22

23 _____
24 ¹¹ See County of Marin, Marin Bay Waterfront Adaptation and Vulnerability Evaluation
25 (BayWAVE), at 25 (June 20, 2017), [http://www.marincounty.org/main/baywave/vulnerability-](http://www.marincounty.org/main/baywave/vulnerability-assessment)
26 [assessment](http://www.marincounty.org/main/baywave/vulnerability-assessment); County of Marin, Marin Ocean Coast Sea Level Rise Vulnerability Report
27 (CSMART) at x (May 2016), [https://www.marincounty.org/-](https://www.marincounty.org/-/media/files/departments/cd/planning/slr/c-smart/2018/01_draft_title_pages_toc_va_slr_18_02_05)
28 [/media/files/departments/cd/planning/slr/c-](https://www.marincounty.org/-/media/files/departments/cd/planning/slr/c-smart/2018/01_draft_title_pages_toc_va_slr_18_02_05)
[smart/2018/01_draft_title_pages_toc_va_slr_18_02_05](https://www.marincounty.org/-/media/files/departments/cd/planning/slr/c-smart/2018/01_draft_title_pages_toc_va_slr_18_02_05).

¹² See BayWAVE (2017), supra note 11, at 25; CSMART (2016), supra note 11, at 24.

¹³ BayWAVE (2017), supra note 11, at xviii, Table 1.

¹⁴ Id. at xxv; CSMART (2016), supra note 11, at 24.

1 coasts, and has already suffered damage from rising sea levels and will suffer increasing damage
2 in the future through rising sea levels and through the exacerbation of natural climate phenomena
3 such as coastal erosion and El Niño.

4 **B. Defendants**

5 16. When reference in this complaint is made to an act or omission of the Defendants,
6 unless specifically attributed or otherwise stated, such references should be interpreted to mean
7 that the officers, directors, agents, employees, or representatives of the Defendants committed or
8 authorized such an act or omission, or failed to adequately supervise or properly control or direct
9 their employees while engaged in the management, direction, operation, or control of the affairs
10 of Defendants, and did so while acting within the scope of their employment or agency.

11 17. **Chevron Entities: Chevron Corporation and Chevron U.S.A. Inc.**

12 a. Defendant **Chevron Corporation** is a multinational, vertically integrated
13 energy and chemicals company incorporated in Delaware, with its global headquarters and
14 principal place of business in San Ramon, California. Chevron Corporation, through its
15 predecessor Standard Oil Company of California, has been registered to do business in California
16 since 1926. Chevron Corporation was formerly known as, did or does business as, and/or is the
17 successor in liability to Standard Oil Company of California (also known as “Socal”), Texaco Inc.,
18 and ChevronTexaco Corporation.

19 b. Chevron Corporation operates through a web of United States and
20 international subsidiaries at all levels of the fossil fuel supply chain. Chevron Corporation and its
21 subsidiaries’ operations include, but are not limited to: exploration, development, production,
22 storage, transportation, and marketing of crude oil and natural gas; refining crude oil into
23 petroleum products and marketing those products; and manufacturing and marketing commodity
24 petrochemicals, plastics for industrial uses, and fuel and lubricant additives.

25 c. Chevron Corporation controls and has controlled group-wide decisions
26 about the quantity and rate of fossil fuel production and sales, including those of its subsidiaries.
27 Chevron Corporation determines whether and to what extent its corporate holdings market,
28 produce, and/or distribute fossil fuel products.

1 d. Chevron Corporation controls and has controlled group-wide decisions,
2 including those of its subsidiaries, related to marketing, advertising, greenhouse gas emissions,
3 and climate change resulting from the company’s fossil fuel products, and communications
4 strategies concerning climate change and the link between fossil fuel use and climate-related
5 impacts on the environment and humans. Overall accountability for climate change within
6 Chevron Corporation lies with Chevron Corporation’s Board of Directors and Executive
7 Committee.

8 e. Defendant **Chevron U.S.A. Inc.** is a wholly owned subsidiary of Chevron
9 Corporation that acts on Chevron Corporation’s behalf and is subject to Chevron Corporation’s
10 control. Chevron U.S.A. Inc. is a Pennsylvania corporation, with its principal place of business in
11 San Ramon, California. Through its predecessors, Chevron U.S.A. Inc. has been registered to do
12 business in California since 1965. Chevron U.S.A. Inc. was formerly known as, did or does
13 business as, and/or is the successor in liability to Gulf Oil Corporation, Gulf Oil Corporation of
14 Pennsylvania, Chevron Products Company, Chevron Chemical Company, and Chevron Chemical
15 Company LLC.

16 f. Defendants Chevron Corporation and Chevron U.S.A. Inc., together with
17 their predecessors, successors, parents, subsidiaries, affiliates, and divisions, are collectively
18 referred to herein as “Chevron.”

19 g. Plaintiffs’ claims against Chevron arise out of and are related to the acts and
20 omissions of Chevron in California and elsewhere that caused and will cause injuries in California,
21 including in Marin County.

22 h. Chevron has purposefully directed its tortious conduct toward California by
23 distributing, marketing, advertising, promoting, and supplying its fossil fuel products in California,
24 with knowledge that the intended use of those products for combustion has caused and will
25 continue to cause climate change-related harms in Marin county, including Plaintiffs’ injuries.
26 Chevron’s statements in California and elsewhere made in furtherance of its campaign of deception
27 about and denial of climate change, and Chevron’s affirmative promotion of its fossil fuel products
28 as safe with knowledge of how the intended use of those products would cause climate change-

1 related harms, were designed to conceal and mislead consumers and the public, including Marin
2 County and its residents, about the serious adverse consequences that would result from continued
3 use of Chevron's products. That conduct was purposefully directed to reach and influence Marin
4 County and its residents to continue unabated use of Chevron's fossil fuel products in California.

5 i. Over the last several decades and continuing to the present day, Chevron
6 spent millions of dollars on radio, television, online, social media, and outdoor advertisements in
7 the California market related to its fossil fuel products. Since at least 1970, and continuing to the
8 present day, Chevron has advertised in print publications circulated widely to California
9 consumers, including but not limited to the following: The Atlantic, Life, National Geographic,
10 The New York Times, Sports Illustrated, Time Magazine, The Wall Street Journal, and The
11 Washington Post. As further detailed herein, these include advertisements containing false or
12 misleading statements, misrepresentations, and/or material omissions obfuscating the connection
13 between the production and use of Chevron's fossil fuel products and climate change, and/or
14 misrepresenting Chevron's products or Chevron itself as environmentally friendly.

15 j. Significant quantities of Chevron's fossil fuel products are or have been
16 transported, traded, distributed, promoted, marketed, manufactured, sold, and/or consumed in
17 California, from which activities Chevron derives and has derived substantial revenue. Chevron
18 conducts and controls, either directly or through franchise agreements, retail fossil fuel sales at gas
19 station locations throughout California, at which locations it promotes, advertises, and sells its
20 fossil fuel products under its various brand names, including Chevron, Texaco, and other brand
21 names. Chevron operates over 1,500 Chevron-branded petroleum service stations in California.
22 Chevron has owned and operated an oil refinery in Richmond, California, since 1902, and has
23 owned and operated an oil refinery in El Segundo, California, since 1911. During the period
24 relevant to this Complaint, Chevron sold a substantial percentage of all retail gasoline sold in
25 California.

26 k. Chevron historically directed its fossil fuel product advertising, marketing,
27 and promotional campaigns to California, including through maps that identified the locations of
28 its service stations in California. Chevron markets and advertises its fossil fuel products in

1 California to California residents by maintaining an interactive website available to prospective
2 customers by which it directs California residents to Chevron’s nearby retail service stations.
3 Chevron markets and sells engine lubricants and motor oils to California customers under its Delo,
4 IsoClean, Techron, and Havoline brand names at retail outlets. Chevron offers a proprietary credit
5 card known as the “Chevron Techron Advantage Credit Card,” which allows consumers in
6 California to pay for gasoline and other products at Chevron-branded service stations, and which
7 encouraged California consumers to use Chevron-branded service stations by offering various
8 rewards, including discounts on gasoline purchases at Chevron service stations and cash rebates.
9 Chevron further maintains two smartphone applications known as the “Chevron App” and the
10 “Texaco App,” both part of the “Chevron Texaco Rewards” program. The program offers
11 California consumers a cashless payment method for gasoline and other products at Chevron- and
12 Texaco-branded service stations. California consumers utilize the payment method by providing
13 their credit card information through the application. California consumers can also receive
14 rewards, including discounts on gasoline purchases, by registering their personal identifying
15 information in the apps and by using the applications to identify and activate gas pumps at Chevron
16 and Texaco service stations during a purchase.

17 18. **Exxon Entities: Exxon Mobil Corporation and ExxonMobil Oil Corporation**

18 a. Defendant **Exxon Mobil Corporation** is a New Jersey corporation
19 headquartered in Spring, Texas, and has been registered to do business in California since 1972.
20 Exxon Mobil Corporation is a multinational, vertically integrated energy and chemical company
21 and one of the largest publicly traded international oil and gas companies in the world. Exxon
22 Mobil Corporation was formerly known as, did or does business as, and/or is the successor in
23 liability to Exxon Corporation; ExxonMobil Refining and Supply Company; Exxon Chemical
24 U.S.A.; ExxonMobil Chemical Corporation; ExxonMobil Chemical U.S.A.; ExxonMobil Refining
25 & Supply Corporation; Exxon Company, U.S.A.; Standard Oil Company of New Jersey; and
26 Mobil Corporation.

27 b. Defendant **ExxonMobil Oil Corporation** is a wholly owned subsidiary of
28 Exxon Mobil Corporation, acts on Exxon Mobil Corporation’s behalf, and is subject to Exxon

1 Mobil Corporation's control. ExxonMobil Oil Corporation is a New York corporation
2 headquartered in Spring, Texas, and has been registered to do business in California since 1959.
3 ExxonMobil Oil Corporation was formerly known as, did or does business as, and/or is the
4 successor in liability to Mobil Oil Corporation. ExxonMobil Oil Corporation is engaged in the
5 business of oil and natural gas production, refining, marketing, and distribution.

6 c. Exxon Mobil Corporation controls and has controlled group-wide decisions
7 about the quantity and rate of fossil fuel production and sales, including those of its subsidiaries.
8 Exxon Mobil Corporation's 2022 Form 10-K filed with the United States Securities and Exchange
9 Commission represents that its success, including its "ability to mitigate risk and provide attractive
10 returns to shareholders, depends on [its] ability to successfully manage [its] overall portfolio,
11 including diversification among types and locations of [its] projects, products produced, and
12 strategies to divest assets." Exxon Mobil Corporation determines whether and to what extent its
13 subsidiaries market, produce, and/or distribute fossil fuel products.

14 d. Exxon Mobil Corporation controls and has controlled group-wide
15 decisions, including those of its subsidiaries, related to marketing, advertising, greenhouse gas
16 emissions and climate change resulting from the company's fossil fuel products, and
17 communications strategies concerning climate change and the link between fossil fuel use and
18 climate-related impacts on the environment and humans. Exxon Mobil Corporation's Board holds
19 the highest level of direct responsibility for climate change policy. Exxon Mobil Corporation's
20 Chairman of the Board and Chief Executive Officer, its President, and the other members of its
21 Management Committee have been actively engaged in discussions relating to greenhouse gas
22 emissions and the risks of climate change on an ongoing basis. Exxon Mobil Corporation requires
23 its subsidiaries, when seeking funding for capital investments, to provide estimates of project costs
24 related to greenhouse gas emissions.

25 e. Defendants Exxon Mobil Corporation, ExxonMobil Oil Corporation, and
26 their predecessors, successors, parents, subsidiaries, affiliates, and divisions, are collectively
27 referred to herein as "Exxon."
28

1 f. Plaintiffs' claims against Exxon arise out of and are related to the acts and
2 omissions of Exxon in California and elsewhere that caused and will cause injuries in California,
3 including in Marin county.

4 g. Exxon consists of numerous divisions and affiliates in all areas of the fossil
5 fuel industry, including exploration for and production of crude oil and natural gas; manufacture
6 of petroleum products; and transportation, promotion, marketing, and sale of crude oil, natural gas,
7 and petroleum products. Exxon is also a major manufacturer and marketer of commodity
8 petrochemical products.

9 h. Exxon has purposefully directed its tortious conduct toward California by
10 distributing, marketing, advertising, promoting, and supplying its fossil fuel products in California,
11 with knowledge that the intended use of those products for combustion has caused and will
12 continue to cause climate change-related harms in Marin county, including Plaintiffs' injuries.
13 Exxon's statements in California and elsewhere made in furtherance of its campaign of deception
14 about and denial of climate change, and Exxon's affirmative promotion of its fossil fuel products
15 as safe with knowledge of how the intended use of those products would cause climate change-
16 related harms, were designed to conceal and mislead consumers and the public, including Marin
17 county and its residents, about the serious adverse consequences that would result from continued
18 use of Exxon's products. That conduct was purposefully directed to reach and influence Marin
19 county and its residents to continue unabated use of Exxon's fossil fuel products in California.

20 i. Over the past several decades and continuing to the present day, Exxon
21 spent millions of dollars on radio, television, online, social media, and outdoor advertisements in
22 the California market related to its fossil fuel products. Since at least 1972, and continuing to the
23 present day, Exxon has advertised its fossil fuel products in print publications circulated widely to
24 California consumers, including but not limited to: The Atlantic, Life, National Geographic, The
25 New York Times, People, Sports Illustrated, Time, The Wall Street Journal, and The Washington
26 Post. As further detailed herein, these include advertisements containing false or misleading
27 statements, misrepresentations, and/or material omissions designed to hide the connection between
28

1 the production and use of Exxon’s fossil fuel products and climate change, and/or misrepresenting
2 Exxon’s products or Exxon itself as environmentally friendly.

3 j. Significant quantities of Exxon’s fossil fuel products are or have been
4 transported, traded, distributed, promoted, marketed, manufactured, sold, and/or consumed in
5 California, from which activities Exxon derives and has derived substantial revenue. Exxon owns
6 and operates a petroleum storage and transport facility in the San Ardo Oil Field in San Ardo,
7 California. Exxon and its predecessors owned and operated an oil refinery in Torrance, California
8 from 1966 to 2016, shortly after an explosion disabled the refinery. Exxon Co. USA, an
9 ExxonMobil subsidiary, operated a petroleum refinery in Benicia, California, from 1968 to 2000.
10 Exxon also—both directly and through its subsidiaries and/or predecessors-in-interest—has
11 supplied substantial quantities of fossil fuel products to California during the period relevant to
12 this Complaint. Currently, Exxon promotes, markets, and sells gasoline and other fossil fuel
13 products to California consumers through approximately 600 Exxon- and Mobil-branded
14 petroleum service stations in California. During the period relevant to this Complaint, Exxon sold
15 a substantial percentage of all retail gasoline in California. Exxon also markets and sells petroleum
16 products, including engine lubricants and motor oils sold under the “Mobil 1” brand name, to
17 California customers through local retailers.

18 k. Exxon historically directed its fossil fuel product advertising, marketing,
19 and promotional campaigns to California residents, including through maps that identify the
20 locations of its service stations in California. To this day, Exxon continues to market and advertise
21 its fossil fuel products in California to California residents by maintaining an interactive website
22 available to prospective customers that directs California residents to Exxon’s nearby retail service
23 stations and lubricant distributors. Further, Exxon promotes its products in California by regularly
24 updating and actively promoting its mobile device application, “Exxon Mobil Rewards+,”
25 throughout California, which encourages California users to consume fuel at Exxon stations in
26 California in exchange for rewards on every fuel purchase.

1 19. **BP Entities: BP P.L.C. and BP America Inc.**

2 a. Defendant **BP P.L.C.** is a multinational, vertically integrated energy and
3 petrochemical public limited company, registered in England and Wales with its principal place of
4 business in London, England. BP P.L.C. consists of three main operating segments: (1) exploration
5 and production, (2) refining and marketing, and (3) “gas and low-carbon energy.” BP P.L.C. is the
6 ultimate parent company of numerous subsidiaries, referred to collectively as the “BP Group,”
7 which explore for and extract oil and gas worldwide; refine oil into fossil fuel products such as
8 gasoline; and market and sell oil, gasoline, other refined petroleum products, and natural gas
9 worldwide. BP P.L.C.’s subsidiaries explore for oil and natural gas under a wide range of licensing,
10 joint arrangement, and other contractual agreements.

11 b. BP P.L.C. controls and has controlled group-wide decisions about the
12 quantity and rate of fossil fuel production and sales, including those of its subsidiaries. BP P.L.C.
13 is the ultimate decisionmaker on fundamental decisions about the BP Group’s core business, i.e.,
14 the volume of group-wide fossil fuels to produce and market, including among BP P.L.C.’s
15 subsidiaries. For instance, BP P.L.C. reported that, in 2016–17, it brought online thirteen major
16 exploration and production projects. These contributed to a 12% increase in the BP Group’s overall
17 fossil fuel product production. These projects were carried out by BP P.L.C.’s subsidiaries. Based
18 on these projects, BP P.L.C. expects the BP Group to deliver to customers 900,000 barrels of new
19 product per day by 2021. BP P.L.C. further reported that in 2017 it sanctioned three new
20 exploration projects in Trinidad, India, and the Gulf of Mexico.

21 c. BP P.L.C. controls and has controlled group-wide decisions, including
22 those of its subsidiaries, related to marketing, advertising, climate change, and greenhouse gas
23 emissions from its fossil fuel products, as well as communications strategies concerning climate
24 change and the link between fossil fuel use and climate-related impacts on the environment and
25 humans. BP P.L.C. makes decisions on production and use of fossil fuel reserves for the entire BP
26 Group based on factors including climate change. BP P.L.C.’s Board of Directors is the company’s
27 highest decision-making body, with direct responsibility for the BP Group’s policies concerning
28 climate change policies. BP P.L.C.’s chief executive is responsible for maintaining the BP Group’s

1 system of internal control that governs the BP Group’s business conduct. BP P.L.C.’s senior
2 leadership directly oversees a carbon steering group, which manages climate-related matters and
3 consists of two committees—both overseen directly by the board—focused on climate-related
4 investments.

5 d. Defendant **BP America Inc.** is a wholly owned subsidiary of BP P.L.C. that
6 acts on BP P.L.C.’s behalf and is subject to BP P.L.C.’s control. BP America Inc. is a vertically
7 integrated energy and petrochemical company incorporated in the state of Delaware with its
8 headquarters and principal place of business in Houston, Texas. BP America Inc. is registered to
9 do business in California. BP America Inc. consists of numerous divisions and affiliates in all
10 aspects of the fossil fuel industry, including exploration for and production of crude oil and natural
11 gas; manufacture of petroleum products; and transportation, marketing, and sale of crude oil,
12 natural gas, and petroleum products. BP America Inc. was formerly known as, did or does business
13 as, and/or is the successor in liability to Amoco Corporation (formerly Standard Oil Company of
14 Indiana), Amoco Oil Company, ARCO Products Company, Atlantic Richfield New Jersey
15 Corporation, Atlantic Richfield Company (a Delaware Corporation), BP Exploration & Oil, Inc.,
16 BP Products North America Inc., BP Amoco Corporation, BP Amoco Plc, BP Oil, Inc., BP Oil
17 Company, Standard Oil of Ohio (SOHIO), and The Atlantic Richfield Company and its division,
18 the Arco Chemical Company.

19 e. Defendants BP P.L.C. and BP America, Inc., together with their
20 predecessors, successors, parents, subsidiaries, affiliates, and divisions, are collectively referred to
21 herein as “BP.”

22 f. Plaintiffs’ claims against BP arise out of and are related to the acts and
23 omissions of BP in California and elsewhere that caused or will cause injuries in California,
24 including in Marin county.

25 g. BP has purposefully directed its tortious conduct toward California by
26 distributing, marketing, advertising, promoting, and supplying its fossil fuel products in California,
27 with knowledge that the intended use of those products for combustion have caused and will
28 continue to cause climate change-related harms in Marin County, including Plaintiffs’ injuries.

1 BP's statements in California and elsewhere made in furtherance of its campaign of deception
2 about and denial of climate change, and BP's affirmative promotion of its fossil fuel products as
3 safe with knowledge of how the intended use of those products would cause climate change-related
4 harms, were designed to conceal and mislead consumers and the public, including Marin county
5 and its residents, about the serious adverse consequences that would result from continued use of
6 BP's products. That conduct was purposefully directed to reach and influence Marin county and
7 its residents to continue unabated use of BP's fossil fuel products in California.

8 h. Over the last several decades and continuing to the present day, BP—
9 especially BP p.l.c.—spent millions of dollars on radio, television, online, social media, and
10 outdoor advertisements in the California market related to its fossil fuel products. Since at least
11 1988 and continuing to the present day, BP has advertised in print publications circulated widely
12 to California consumers, including but not limited to the following: The Atlantic, Life, Newsweek,
13 The New York Times, Sports Illustrated, Time, The Wall Street Journal, and The Washington
14 Post. As further detailed herein, these include advertisements containing false or misleading
15 statements, misrepresentations, and/or material omissions obfuscating the connection between the
16 production and use of BP's fossil fuel products and climate change, and/or misrepresenting BP's
17 products or BP itself as environmentally friendly.

18 i. Significant quantities of BP's fossil fuel products are or have been
19 transported, traded, distributed, promoted, marketed, manufactured, sold, and/or consumed in
20 California, from which activities BP derives and has derived substantial revenue. BP conducts and
21 controls, either directly or through franchise agreements, retail fossil fuel sales at gas station
22 locations in substantial portions of California, at which locations it promotes, advertises, and sells
23 its fossil fuel products under its ARCO brand name. Among other operations, BP operates more
24 than 300 ARCO-licensed and branded gas stations in California, and distributes and markets
25 petroleum-based lubricants marketed under the Castrol brand name throughout California. From
26 2000 to 2013, BP also owned and operated an oil refinery in Carson, California. During the period
27 relevant to this Complaint, BP sold a substantial percentage of all retail gasoline sold in California.

28

1 BP's marketing and trading business maintains an office in Irvine, California. BP maintains an
2 energy research center in San Diego, California.

3 j. BP historically directed its fossil fuel product advertising, marketing, and
4 promotional campaigns to California, including through maps that identified the locations of its
5 service stations in California. BP markets and advertises its fossil fuel products in California to
6 California residents by maintaining an interactive website available to prospective customers by
7 which it directs California residents to BP's nearby retail service stations and/or lubricant
8 distributors.

9 20. **Shell Entities: Shell plc, Shell USA, Inc., and Shell Oil Products Company LLC**

10 a. Defendant Shell plc (formerly Royal Dutch Shell PLC) is a vertically
11 integrated multinational energy and petrochemical company. Shell plc is incorporated in England
12 and Wales, with its headquarters and principal place of business in The Hague, Netherlands. Shell
13 plc is the ultimate parent company of numerous divisions, subsidiaries, and affiliates, referred to
14 collectively as the "Shell Group," that engage in all aspects of fossil fuel production, including
15 exploration, development, extraction, manufacturing and energy production, transport, trading,
16 marketing, and sales.

17 b. Shell plc controls and has controlled group-wide decisions about the
18 quantity and rate of fossil fuel production and sales, including those of its subsidiaries. Shell plc's
19 Board of Directors determines whether and to what extent Shell subsidiary holdings around the
20 globe produce Shell-branded fossil fuel products. For instance, in 2015, a Shell plc subsidiary
21 employee admitted in a deposition that its Board of Directors made the decision about whether to
22 drill a particular oil deposit off the coast of Alaska.

23 c. Shell plc controls and has controlled group-wide decisions, including those
24 of its subsidiaries, related to marketing, advertising, greenhouse gas emissions and climate change
25 resulting from the company's fossil fuel products, and communications strategies concerning
26 climate change and the link between fossil fuel use and climate-related impacts on the environment
27 and humans. Overall accountability for climate change within the Shell Group lies with Shell plc's
28 Chief Executive Officer and Executive Committee. For instance, at least as early as 1988, Shell

1 plc, through its predecessors and subsidiaries, was researching company-wide CO₂ emissions and
2 concluded that the Shell Group accounted for 4% of the CO₂ emitted worldwide from combustion,
3 and that climatic changes could compel the Shell Group, as controlled by Shell plc, to examine the
4 possibilities of expanding and contracting its business accordingly.

5 d. Defendant Shell USA, Inc. (formerly Shell Oil Company) is a wholly
6 owned subsidiary of Shell plc that acts on Shell plc's behalf and is subject to Shell plc's control.
7 Shell USA, Inc. is incorporated in Delaware, with its principal place of business in Houston, Texas.
8 Shell USA, Inc. has been registered to do business in California since 1949. Shell USA, Inc. was
9 formerly known as, did or does business as, and/or is the successor in liability to Shell Oil
10 Company; Shell Oil; Deer Park Refining LP; Shell Oil Products US; Shell Chemical LP; Shell
11 Trading (US) Company; Shell Energy Resources Company; Shell Energy Services Company,
12 L.L.C.; The Pennzoil Company; and Pennzoil-Quaker State Company.

13 e. Defendant Shell Oil Products Company LLC is a wholly owned subsidiary
14 of Shell USA, Inc., that acts on Shell USA, Inc.'s behalf and is subject to Shell USA, Inc.'s control.
15 Shell Oil Products Company LLC is incorporated in Delaware, with its principal place of business
16 in Houston, Texas, and has been registered to do business in California since 2001. Shell Oil
17 Products Company LLC was formerly known as, did or does business as, and/or is the successor
18 in liability to Shell Oil Products Company, which was a Delaware corporation that converted to a
19 limited liability company in 2001.

20 f. Defendants Shell plc, Shell USA, Inc., Shell Oil Products Company LLC,
21 and their predecessors, successors, parents, subsidiaries, affiliates, and divisions are collectively
22 referred to herein as "Shell."

23 g. Plaintiffs' claims against Shell arise out of and are related to the acts and
24 omissions of Shell in California and elsewhere that caused and will cause injuries in California,
25 including in Marin county.

26 h. Shell has purposefully directed its tortious conduct toward California by
27 distributing, marketing, advertising, promoting, and supplying its fossil fuel products in California,
28 with knowledge that the intended use of those products for combustion has caused and will

1 continue to cause climate change-related harms in Marin county, including Plaintiffs' injuries.
2 Shell's statements in California and elsewhere made in furtherance of its campaign of deception
3 about and denial of climate change, and Shell's affirmative promotion of its fossil fuel products as
4 safe with knowledge of how the intended use of those products would cause climate change-related
5 harms, were designed to conceal these harms and mislead consumers and the public, including
6 Marin county and its residents, about the serious adverse consequences that would result from
7 continued use of Shell's products. That conduct was purposefully directed to reach and influence
8 Marin county and its residents, to continue unabated use of Shell's fossil fuel products in
9 California.

10 i. Over the last several decades and continuing to the present day, Shell spent
11 millions of dollars on radio, television, online, social media, and outdoor advertisements in the
12 California market related to its fossil fuel products. Since at least 1970, and continuing to the
13 present day, Shell has advertised its fossil fuel products in print publications circulated widely to
14 California consumers, including but not limited to the following: The Atlantic, The Economist,
15 Life, National Geographic, Newsweek, The New York Times, Sports Illustrated, Time Magazine,
16 The Wall Street Journal, and The Washington Post. As further detailed herein, these include
17 advertisements containing false or misleading statements, misrepresentations, and/or material
18 omissions obfuscating the connection between the production and use of Shell's fossil fuel
19 products and climate change, and/or misrepresenting Shell's products or Shell itself as
20 environmentally friendly.

21 j. Significant quantities of Shell's fossil fuel products are or have been
22 transported, traded, distributed, promoted, marketed, manufactured, sold, and/or consumed in
23 California, from which activities Shell derives and has derived substantial revenue. Shell conducts
24 and controls, either directly or through franchise agreements, retail fossil fuel sales at gas station
25 locations throughout California, at which locations it promotes, advertises, and sells its fossil fuel
26 products under its Shell brand name. Shell operates over 1,000 Shell-branded petroleum service
27 stations in California. During the period relevant to this Complaint, Shell sold a substantial
28 percentage of all retail gasoline sold in California. Shell also supplies, markets, and promotes its

1 Pennzoil line of lubricants at retail and service stations throughout California. From 1924 to 1992,
2 Shell owned and operated an oil refinery in Carson, California, where it now owns and operates
3 the property as a distribution facility for petroleum and petroleum products throughout Southern
4 California. From 1915 to 2020, Shell owned and operated an oil refinery in Martinez, California.
5 From 1998-2007, Shell owned and operated an oil refinery in Wilmington, California. From 1998
6 to 2005, Shell owned and operated an oil refinery in Bakersfield, California.

7 k. Shell historically directed its fossil fuel product advertising, marketing, and
8 promotional campaigns to California, including through maps that identified the locations of its
9 service stations in California. Shell markets and advertises its fossil fuel products in California to
10 California residents by maintaining an interactive website available to prospective customers by
11 which it directs California residents to Shell's nearby retail service stations. Shell offers a
12 proprietary credit card known as the "Shell Fuel Rewards Card," which allows consumers in
13 California to pay for gasoline and other products at Shell-branded service stations, and which
14 encourages consumers to use Shell-branded gas stations by offering various rewards, including
15 discounts on gasoline purchases. Shell further maintains a smartphone application known as the
16 "Shell US App" that offers California consumers a cashless payment method for gasoline and other
17 products at Shell-branded service stations. California consumers utilize the payment method by
18 providing their credit card information through the application. California consumers can also
19 receive rewards, including discounts on gasoline purchases, by registering their personal
20 identifying information in the Shell US App and using the application to identify and activate gas
21 pumps at Shell service stations during a purchase.

22 21. **Citgo Petroleum Corporation ("Citgo")**

23 a. Citgo is a direct, wholly owned subsidiary of PDV America, Incorporated,
24 which is a wholly owned subsidiary of PDV Holding, Incorporated. These organizations' ultimate
25 parent is Petroleos de Venezuela, S.A. ("PDVSA"), an entity wholly owned by the Republic of
26 Venezuela that plans, coordinates, supervises and controls activities carried out by its subsidiaries.
27 Citgo is incorporated in the State of Delaware and maintains its headquarters in Houston, Texas.

1 b. Citgo and its subsidiaries are engaged in the refining, marketing, and
2 transportation of petroleum products including gasoline, diesel fuel, jet fuel, petrochemicals,
3 lubricants, asphalt, and refined waxes.

4 c. Citgo is registered to do business in the State of California and has
5 designated an agent for service of process in California. Citgo further does substantial fossil fuel
6 product-related business in California, and a substantial portion of its fossil fuel products are
7 extracted, refined, transported, traded, distributed, marketed, and/or sold in California. For
8 instance, Citgo sells significant volumes of fossil-fuel derived consumer motor oils and automobile
9 lubricants through retail and wholesale distributors. Citgo further sells a wide variety of greases
10 and oils for use in construction, mining, agricultural, and metalworking machinery and vehicles,
11 and in many other industrial and commercial settings, through licensed distributors in California.

12 22. **ConocoPhillips Entities: ConocoPhillips, ConocoPhillips Company,**
13 **Phillips 66, and Phillips 66 Company**

14 a. Defendant **ConocoPhillips** is a multinational energy company incorporated
15 in Delaware, with its principal place of business in Houston, Texas. ConocoPhillips consists of
16 numerous divisions, subsidiaries, and affiliates that execute ConocoPhillips’s fundamental
17 decisions related to all aspects of fossil fuel production, including exploration, extraction,
18 production, manufacture, transport, and marketing.

19 b. ConocoPhillips controls and has controlled group-wide decisions about the
20 quantity and rate of fossil fuel production and sales, including those of its subsidiaries.
21 ConocoPhillips determines whether and to what extent its corporate holdings market, produce,
22 and/or distribute fossil fuel products. ConocoPhillips’s most recent annual report to the Securities
23 and Exchange Commission subsumes the operations of ConocoPhillips’s subsidiaries under its
24 name. In ConocoPhillips’s Form 10-K filed with the Securities and Exchange Commission for
25 Fiscal Year 2022, the company represents that its value—for which ConocoPhillips maintains
26 ultimate responsibility—is a function of its decisions to direct subsidiaries to develop crude oil,
27 bitumen, natural gas, and natural gas liquids from ConocoPhillips’s reserves into fossil fuel
28 products and to explore for and replace those reserves with more fossil fuels: “Unless we

1 successfully develop resources, the scope of our business will decline, resulting in an adverse
2 impact to our business. . . . If we are not successful in replacing the resources we produce with
3 good prospects for future organic development or through acquisitions, our business will decline.”
4 ConocoPhillips optimizes the ConocoPhillips group’s oil and gas portfolio to fit ConocoPhillips’s
5 strategic plan. For example, in November 2016, ConocoPhillips announced a plan to generate \$5
6 billion to \$8 billion of proceeds over two years by optimizing its business portfolio, including its
7 fossil fuel product business, to focus on low cost-of-supply fossil fuel production projects that
8 strategically fit its development plans.

9 c. ConocoPhillips controls and has controlled group-wide decisions, including
10 those of its subsidiaries, related to marketing, advertising, climate change and greenhouse gas
11 emissions from its fossil fuel products, and communications strategies concerning climate change
12 and the link between fossil fuel use and climate-related impacts on the environment and
13 communities. For instance, ConocoPhillips’s board has the highest level of direct responsibility
14 for climate change policy within the company. ConocoPhillips has developed and purportedly
15 implements a corporate Climate Change Action Plan to govern climate change decision-making
16 across all entities in the ConocoPhillips group.

17 d. Defendant **ConocoPhillips Company** is a wholly owned subsidiary of
18 ConocoPhillips that acts on ConocoPhillips’s behalf and is subject to ConocoPhillips’s control.
19 ConocoPhillips Company is incorporated in Delaware, with its principal place of business in
20 Houston, Texas, and has been registered to do business in California since 1947. ConocoPhillips
21 Company was formerly known as, did or does business as, and/or is the successor in liability to
22 Phillips Petroleum Company.

23 e. Defendant **Phillips 66** is a multinational energy and petrochemical
24 company incorporated in Delaware, with its principal place of business in Houston, Texas. It
25 encompasses downstream fossil fuel processing, refining, transport, and marketing segments that
26 were formerly owned and/or controlled by ConocoPhillips.

27 f. Defendant **Phillips 66 Company** is a wholly owned subsidiary of Phillips
28 66 that acts on Phillips 66’s behalf and is subject to Phillips 66’s control. Phillips 66 Company is

1 incorporated in Delaware, with its principal place of business in Houston, Texas, and has been
2 registered to do business in California since 2011. Phillips 66 Company had been registered since
3 1964 under a different name, Phillips Chemical Company, which was a wholly owned subsidiary
4 of the Phillips Petroleum Company. Phillips Chemical Company changed its name to Phillips 66
5 Company in 1985, and that iteration of Phillips 66 Company was terminated in 1991. Phillips 66
6 Company was formerly known as, did or does business as, and/or is the successor in liability to
7 Phillips Petroleum Company; Phillips Chemical Company; Conoco, Inc.; Tosco Corporation; and
8 Tosco Refining Co.

9 g. Defendants ConocoPhillips, ConocoPhillips Company, Phillips 66, and
10 Phillips 66 Company, as well as their predecessors, successors, parents, subsidiaries, affiliates, and
11 divisions, are collectively referred to herein as “ConocoPhillips.”

12 h. Plaintiffs’ claims against ConocoPhillips arise out of and are related to the
13 acts and omissions of ConocoPhillips in California and elsewhere that caused and will cause
14 injuries in California, including in Marin county.

15 i. ConocoPhillips has purposefully directed its tortious conduct toward
16 California by distributing, marketing, advertising, promoting, and supplying its fossil fuel products
17 in California, with knowledge that the intended use of those products for combustion has caused
18 and will continue to cause climate change-related harms in Marin county, including Plaintiffs’
19 injuries. ConocoPhillips’s statements in California and elsewhere made in furtherance of its
20 campaign of deception about and denial of climate change, and ConocoPhillips’s affirmative
21 promotion of its fossil fuel products as safe with knowledge of how the intended use of those
22 products would cause climate change-related harms, were designed to conceal and mislead
23 consumers and the public, including Marin County and its residents, about the serious adverse
24 consequences that would result from continued use of ConocoPhillips’s products. That conduct
25 was purposefully directed to reach and influence consumers and the public, including Marin
26 County and its residents, to continue unabated use of ConocoPhillips’s fossil fuel products in
27 California.

1 j. Over the last several decades and continuing to the present day,
2 ConocoPhillips spent millions of dollars on radio, television, online, social media, and outdoor
3 advertisements in the California market related to its fossil fuel products. Since at least 1970, and
4 continuing to the present day, ConocoPhillips has advertised in print publications circulated widely
5 to California consumers, including but not limited to the following: The Atlantic, Life, National
6 Geographic, Newsweek, The New York Times, People, Sports Illustrated, Time Magazine, The
7 Wall Street Journal, and The Washington Post. As further detailed herein, these include
8 advertisements containing false or misleading statements, misrepresentations, and/or material
9 omissions obfuscating the connection between the production and use of ConocoPhillips's fossil
10 fuel products and climate change, and/or misrepresenting ConocoPhillips's products or
11 ConocoPhillips itself as environmentally friendly.

12 k. Significant quantities of ConocoPhillips's fossil fuel products are or have
13 been transported, traded, distributed, promoted, marketed, manufactured, sold, and/or consumed
14 in California, from which activities ConocoPhillips derives and has derived substantial revenue.
15 ConocoPhillips conducts and controls, either directly or through franchise agreements, retail fossil
16 fuel sales at gas station locations throughout California, at which locations it promotes, advertises,
17 and sells its fossil fuel products under its various brand names, including Conoco, Phillips 66, and
18 76. ConocoPhillips also markets and sells to California customers at retail outlets engine lubricants
19 and motor oils under its Phillips 66, Kendall, and Red Line brand names. ConocoPhillips operates
20 hundreds of 76-branded petroleum service stations throughout California. During the period
21 relevant to this Complaint, ConocoPhillips sold a substantial percentage of all retail gasoline sold
22 in California.

23 l. ConocoPhillips does substantial fossil fuel product-related business in
24 California, and a substantial quantity of its fossil fuel products are extracted, refined, transported,
25 traded, distributed, marketed, and/or sold in California. For instance, ConocoPhillips owns and/or
26 operates oil and natural gas terminals in Richmond and Los Angeles, California; owns and operates
27 oil refineries in Arroyo Grande, Colton, and Wilmington, California; and distributes
28 ConocoPhillips fossil fuel products throughout California. Phillips 66 also owns and operates oil

1 refineries in Rodeo, Santa Maria, and Los Angeles, California. All of these refineries were owned
2 and operated by ConocoPhillips and its predecessors-in-interest from 1997 to 2012.

3 m. ConocoPhillips has historically directed its fossil fuel product advertising,
4 marketing, and promotional campaigns to California, including through maps identifying its
5 services throughout California. ConocoPhillips markets and advertises its fossil fuel products in
6 California to California residents by maintaining an interactive website available to prospective
7 customers by which it directs California residents to ConocoPhillips's nearby retail service
8 stations. ConocoPhillips offers a proprietary credit card known as the "76 Credit Card," which
9 allows consumers in California to pay for gasoline and other products at 76-branded service
10 stations, and which encourages California consumers to use 76-branded service stations by
11 offering various rewards, including discounts on gasoline purchases at 76-branded service stations
12 and cash rebates. ConocoPhillips further maintains a nationwide smartphone application known as
13 the "Fuel Forward App." The application offers California consumers a cashless payment method
14 for gasoline and other products at 76-branded service stations. California consumers utilize the
15 payment method by providing their credit card information through the application. California
16 consumers can also apply for a 76 Credit Card through the application. By registering their
17 personal identifying information in the application and by using the application to identify and
18 activate gas pumps at 76-branded service stations, California consumers can receive additional
19 rewards, such as further discounts on ConocoPhillips gasoline purchases.

20 23. **Total Entities: Total E&P USA Inc. and Total Specialties USA Inc.**

21 a. **Total E&P USA Inc.** is a wholly owned subsidiary of Total S.A.—a French
22 energy conglomerate—engaged in the North American segment of Total SA's fossil fuel products-
23 related business. Total E&P USA Inc. and its subsidiaries are involved in the exploration for,
24 extraction, transportation, research, and marketing of Total S.A.'s fossil fuel products. Total E&P
25 USA Inc. is registered to do business in the State of California and has designated an agent for
26 service of process in California.

27 b. **Total Specialties USA Inc.,** is a wholly owned subsidiary of Total SA,
28 involved in the marketing and distribution of Total S.A.'s fossil fuel products. Total Specialties

1 USA Inc. is incorporated in the State of Delaware and headquartered in Houston, Texas. Total
2 Specialties USA Inc. is registered to do business in the State of California and has designated an
3 agent for service of process in California. Total Specialties USA Inc. does substantial fossil fuel
4 product-related business in California, and a substantial portion of its fossil fuel products are
5 extracted, refined, transported, traded, distributed, marketed, and/or sold in California. For
6 instance, Total Specialties USA Inc. maintains regular distributorship relationships with several
7 California distributors of Total fossil fuel products, including engine oils, lubricants, greases, and
8 industrial petroleum products.

9 24. **Eni Entities: Eni S.p.A. and Eni Oil & Gas Inc.**

10 a. **Eni S.p.A.** is a vertically integrated, multinational energy company
11 focusing on petroleum and natural gas. Eni is incorporated in the Republic of Italy, with its
12 principal place of business in Rome, Italy. With its consolidated subsidiaries, Eni engages in the
13 exploration, development and production of hydrocarbons; in the supply and marketing of gas,
14 liquid natural gas, and power; in the refining and marketing of petroleum products; in the
15 production and marketing of basic petrochemicals, plastics and elastomers; in commodity trading;
16 and in electricity marketing and generation.

17 b. **Eni Oil & Gas Inc.** is incorporated in Texas, with its principal place of
18 business in Houston, Texas. Eni Oil & Gas Inc., is a wholly owned subsidiary of Eni America Ltd.,
19 a Delaware corporation doing business in the United States. Eni America, Ltd. Is a wholly owned
20 subsidiary of Eni UHL Ltd., a British corporation with its registered office in London, United
21 Kingdom. Eni UHL Ltd. is a wholly owned subsidiary of Eni ULT, Ltd., a British corporation with
22 its registered office on London, United Kingdom. Eni ULT, Ltd. is a wholly owned subsidiary of
23 Eni Lasmo Plc, a British corporation with its registered office on London, United Kingdom. Eni
24 Investments Plc, a British corporation with its registered office in London, United Kingdom, holds
25 a 99.9% ownership interest in Eni Lasmo Plc (the other 0.01% ownership interest is held by
26 another Eni entity, Eni UK Ltd, a British corporation with its registered office in London, United
27 Kingdom). Eni S.p.A owns a 99.99% interest in Eni Investments Plc. Eni UK Ltd. holds the
28 remainder interest in Eni Investments Plc. Collectively, these entities are referred to as “Eni.”

1 c. Eni Oil & Gas Inc. is a successor-in-interest to Golden Eagle Refining
2 Company, Inc. (“Golden Eagle”). At times relevant to this complaint, Golden Eagle did substantial
3 fossil fuel-related business in California. Specifically, Golden Eagle owned and/or operated oil
4 refineries in Carson (Los Angeles County) and Martinez (Contra Costa County), California, and
5 owned and/or operated oil pipelines in or near Long Beach (Los Angeles County), California.

6 25. **Anadarko Petroleum Corp. (“Anadarko”)**

7 a. Anadarko is incorporated in the State of Delaware and maintains its
8 principal place of business in The Woodlands, Texas. Anadarko is a multinational, vertically
9 integrated energy company comprised of multiple upstream and downstream segments. These
10 include exploration, production, gathering, processing, treating, transporting, marketing, and
11 selling fossil fuel products derived primarily from petroleum and natural gas. In the United States,
12 Anadarko entities operate fossil fuel product exploration and production concerns in Texas, the
13 Gulf of Mexico, Alaska, the Powder River Basin, Utah, Colorado, and the Marcellus Shale
14 Formation. Anadarko operates fossil fuel product production and exploration activities
15 internationally in Algeria, Ghana, Mozambique, and Columbia, among others. Anadarko is
16 registered to do business in California and has designated an agent for service of process in
17 California.

18 b. Anadarko is a successor-in-interest to HS Resources Inc. (“HS”). HS was
19 an energy company headquartered in San Francisco, San Francisco County, California. It owned
20 natural gas reserves in Colorado, North Dakota, South Dakota, Montana, and along the coasts of
21 Texas and Louisiana, which it extracted and imported to California. HS was acquired by Kerr-
22 McGee Corporation in 2001. Kerr-McGee was an energy exploration and production company
23 owning oil and natural gas rights in the Gulf of Mexico, Colorado, and Utah, with its corporate
24 headquarters in Oklahoma. Anadarko Petroleum Corporation acquired Kerr-McGee Corporation
25 in 2006.

1 26. **Occidental Entities: Occidental Petroleum Corporation and Occidental**
2 **Chemical Corporation**

3 a. **Occidental Petroleum Corporation** is a multinational, vertically
4 integrated energy and chemical company incorporated in the State of Delaware and with its
5 principal place of business in Houston, Texas. Occidental’s operations consist of three segments:
6 Occidental’s operations consist of three segments: (1) the exploration for, extraction of, and
7 production of oil and natural gas products; (2) the manufacture and marketing of chemicals and
8 vinyls; and (3) processing, transport, storage, purchase, and marketing of oil, natural gas, and
9 power. Occidental Petroleum Corporation is registered to do business in the State of California
10 and has designated an agent for service of process in the State of California.

11 b. **Occidental Chemical Corporation**, a manufacturer and marketer of
12 petrochemicals, such as polyvinyl chloride resins, is a wholly owned subsidiary of Occidental
13 Petroleum Corporation. Occidental Chemical Corporation is registered to do business in the State
14 of California and has designated an agent for service of process in the State of California.

15 c. Defendants Occidental Petroleum Corporation and Occidental Chemical
16 Corporation are collectively referred to as “Occidental.”

17 d. Occidental does substantial fossil fuel product-related business in the State
18 of California, and a substantial portion of its fossil fuel products are extracted, refined, transported,
19 traded, distributed, marketed and/or sold in California. For instance, Occidental extracted and
20 transported its fossil fuel products from approximately 30,900 drilling locations within the San
21 Joaquin, Los Angeles, Ventura, and Sacramento Basins in California.

22 e. In addition, Occidental conducts has conducted substantial activities in the
23 state, including marketing and promotion; efforts to avoid or minimize regulation of greenhouse
24 gas pollution in and from California; and efforts to influence statutory and regulatory debate
25 regarding fossil fuel consumption, electric power distribution, and greenhouse gas pollution
26 policies such that the exercise of jurisdiction comports with traditional notions of fair play and
27 substantial justice. Since 1999, Occidental Petroleum Corp. and its subsidiaries have reported more
28 than \$4.6 million in lobbying expenditures directed at numerous statutory and regulatory proposals

1 before the California legislature and executive agencies, including the California Energy
2 Commission, California Air Resources Board, and California Public Utilities Commission, related
3 to its fossil fuel products business.

4 27. **Repsol Entities: Repsol S.A., Repsol Energy North America Corporation, and**
5 **Repsol Trading USA Corporation**

6 a. **Repsol S.A.** is a vertically integrated, multinational global energy company,
7 incorporated in the Kingdom of Spain, with its principal place of business in Madrid, Spain. Repsol
8 is involved in multiple aspects of the fossil fuel industry, including exploration, production,
9 marketing, and trading. Repsol engages in significant fossil fuel exploration and production
10 activities in the United States, including in the Gulf of Mexico, the Marcellus Shale in
11 Pennsylvania, the Eagle Ford Shale in South Texas, the Mississippi Lime in Oklahoma and Kansas,
12 the North Slope in Alaska, and the Trenton-Black River in New York. Defendants Repsol S.A.,
13 Repsol Energy North America Corporation, Repsol Trading USA Corporation are collectively
14 referred to as “Repsol.”

15 b. Repsol does substantial fossil fuel product-related business in the State of
16 California, and a substantial portion of its fossil fuel products are extracted, refined, transported,
17 traded, distributed, marketed and/or sold in California. For instance, Repsol subsidiary **Repsol**
18 **Energy North America Corporation**, incorporated in the State of Texas and with its principal
19 place of business in The Woodlands, Texas, is listed as a natural gas procurement, storage,
20 transportation, scheduling, and risk management provider by Pacific Gas and Electric, a California
21 utility. Repsol Energy North America Corporation is registered to do business in California and
22 has designated an agent for service of process in California. Repsol **subsidiary Repsol Trading**
23 **USA Corporation**, incorporated in the State of Texas and with its principal place of business in
24 The Woodlands, Texas, is also registered do business in California and has designated an agent
25 for service of process in California. Additionally, Repsol represents on its website that it is
26 engaging in strategic opportunities involving its fossil fuel products in California, which may
27 consist of crude oil, gasoline, diesel, and/or jet fuel.

1 28. **Marathon Entities: Marathon Oil Company, Marathon Oil Corporation, and**
2 **Marathon Petroleum Corporation**

3 a. **Marathon Oil Company** is an energy company incorporated in the State
4 of Ohio and with its principal place of business in Houston, Texas. Marathon Oil Company is
5 registered to do business in California and has designated an agent for service of process in
6 California. Marathon Oil Company is a corporate ancestor of Marathon Oil Corporation and
7 Marathon Petroleum Company.

8 b. Marathon Oil Company is a successor-in-interest to Husky Oil Ltd.
9 (“Husky”), which it acquired in 1984. During times relevant to this Complaint, Husky operated oil
10 production facilities near Santa Maria (Santa Barbara County), California, where it produced
11 nearly 1,100 barrels per day. During the period relevant to this litigation, Husky did substantial
12 fossil fuel product-related business in California.

13 c. **Marathon Oil Corporation** is a multinational energy company
14 incorporated in the State of Delaware and with its principal place of business in Houston, Texas.
15 Marathon Oil Corporation consists of multiple subsidiaries and affiliates involved in the
16 exploration for, extraction, production, and marketing of fossil fuel products.

17 d. **Marathon Petroleum Corporation** is a multinational energy company
18 incorporated in Delaware and with its principal place of business in Findlay, Ohio. Marathon
19 Petroleum Corporation was spun off from the operations of Marathon Oil Corporation in 2011. It
20 consists of multiple subsidiaries and affiliates involved in fossil fuel product refining, marketing,
21 retail, and transport, including both petroleum and natural gas products.

22 e. Defendants Marathon Oil Company, Marathon Oil Corporation, and
23 Marathon Petroleum Corporation are collectively referred to as “Marathon.”

24 f. Marathon has purposefully directed its tortious conduct toward California
25 by distributing, marketing, advertising, promoting, and supplying its fossil fuel products in
26 California, with knowledge that the intended use of those products for combustion has caused and
27 will continue to cause climate change-related harms in Marin County, including Plaintiffs’ injuries.
28 That conduct was purposefully directed to reach Marin County and obscure the dangers of

1 Marathon's fossil fuel products from Marin and its residents such that the use of Marathon's fossil
2 fuel products in Marin County would not decline.

3 29. **Hess Corporation ("Hess")**

4 a. Hess Corp. is a global, vertically integrated petroleum exploration and
5 extraction company incorporated in the State of Delaware with its headquarters and principal place
6 of business in New York, New York.

7 b. Hess is engaged in the exploration, development, production,
8 transportation, purchase, marketing and sale of crude oil and natural gas. Its oil and gas production
9 operations are located primarily in the United States, Denmark, Equatorial Guinea, Malaysia,
10 Thailand, and Norway. Prior to 2014, Hess also conducted extensive retail operations in its own
11 name and through subsidiaries. Hess owned and operated more than 1,000 gas stations throughout
12 the United States, including in California during times relevant to this complaint. Prior to 2013,
13 Hess also operated oil refineries in the continental United States and U.S. Virgin Islands.

14 c. Hess has purposefully directed its tortious conduct toward California by
15 distributing, marketing, advertising, promoting, and supplying its fossil fuel products in California,
16 with knowledge that the intended use of those products for combustion has caused and will
17 continue to cause climate change-related harms in Marin County, including Plaintiffs' injuries.
18 That conduct was purposefully directed to reach Marin County and obscure the dangers of Hess's
19 fossil fuel products from Marin and its residents such that the use of Hess's fossil fuel products in
20 Marin County would not decline.

21 30. **Devon Energy Entities: Devon Energy Corp. and Devon Energy Production**
22 **Company, L.P.**

23 a. **Devon Energy Corp.** is an independent energy company engaged in the
24 exploration, development, and production of oil, and natural gas. It is incorporated in the State of
25 Delaware and maintains its principal place of business in Oklahoma City, Oklahoma. Devon is
26 engaged in multiple aspects of the fossil fuel industry, including exploration, development,
27 production, and marketing of its fossil fuel products.

28 b. **Devon Energy Production Company, L.P.** is a Devon subsidiary

1 registered to do business in the State of California and with a designated agent for service of
2 process in California. Devon Energy does substantial fossil fuel product-related business in
3 California.

4 c. Devon Energy Corp. is a successor-in-interest to the Pauley Petroleum
5 Company (“Pauley”). At times relevant to this complaint, Pauley did substantial fossil-fuel related
6 business in California. Specifically, this included owning and operating a petroleum refinery in
7 Newhall (Los Angeles County), California from 1959 to 1989, and a refinery in Wilmington (Los
8 Angeles, Los Angeles County), California from 1988 to 1992. Pauley merged with Hondo Oil and
9 Gas Co. (“Hondo”) in 1987. Subsequently, Devon Energy Corp. acquired Hondo in 1992.

10 d. Defendants Devon Energy Production Company, L.P. and Devon Energy
11 Corp. are collectively referred to as “Devon.”

12 31. **Encana Corporation (“Encana”)**

13 a. Encana is a Canadian corporation with its principal place of business in
14 Calgary, Alberta, Canada. Encana is an extractor and marketer of oil and natural gas and has
15 facilities including gas plants and gas wells in Colorado, Texas, Wyoming, Louisiana, and
16 New Mexico. By approximately 2005, Encana was the largest independent owner and operator of
17 natural gas storage facilities in North America.

18 b. Encana has done and continues to do substantial fossil fuel product-related
19 business in California. Between 1997 and 2006, Encana owned and operated the Wild Goose
20 Storage underground natural gas storage facility in Butte County, California. In 2003, Encana
21 began transporting natural gas through a 25-mile pipeline from the Wild Goose Station to a Pacific
22 Gas & Electric Co. (“PG&E”) compressor station in Colusa County, where gas entered the main
23 PG&E pipeline. Encana invested in a 100 billion cubic foot expansion of the facility in 2004,
24 bringing gas storage capacity at Wild Goose to 24 billion cubic feet.

25 32. **Apache Corporation (“Apache”)**

26 a. Apache is a publicly traded Delaware corporation with its principal place of
27 business in Houston, Texas. Apache is an oil and gas exploration and production company, with
28

1 crude oil and natural gas exploration and extraction operations in the United States, Canada, Egypt,
2 and in the North Sea.

3 b. During the time at issue, Apache extracted natural gas from wells developed
4 on approximately seven million acres of land held in the Canadian provinces of British Columbia,
5 Alberta, and Saskatchewan, and Apache did substantial fossil fuel product-related business in
6 California. Apache transported a substantial volume of the natural gas extracted from its Canadian
7 holdings to California, where it sold that gas to electric utilities, end-users, other fossil fuel
8 companies, supply aggregators, and other fossil fuel marketers. Apache directed sales of its natural
9 gas to California in addition to markets in Washington state, Chicago, and western Canada, to
10 intentionally retain a diverse customer base and maximize profits from the differential price rates
11 and demand levels in those respective markets.

12 **C. Doe Defendants**

13 33. The true names and capacities, whether individual, corporate, associate, or
14 otherwise of Defendants Does 1 through 100, inclusive, are unknown to Plaintiffs, who therefore
15 sue said Defendants by such fictitious names pursuant to California Code of Civil Procedure
16 Section 474. Plaintiffs are informed and believe, and on that basis allege, that each of the
17 fictitiously named Defendants is responsible in some manner for the acts and occurrences herein
18 alleged, and that Plaintiffs' damages were caused by such Defendants.

19 **D. Relevant Non-Parties: Defendants' Agents and Front Groups**

20 34. As detailed below, each Defendant had actual knowledge, or should have known,
21 that its fossil fuel products were hazardous in that the intended use of the fossil fuel products for
22 combustion would substantially contribute to climate change and result in harms to Plaintiffs.
23 Defendants obtained knowledge of the hazards of their products independently and through their
24 membership and involvement in trade associations such as API.

25 35. Defendants employed, financed, and participated in several industry-created front
26 groups to serve their mission of flooding the markets with climate change disinformation and
27 denialism. These organizations, acting on behalf of and under Defendants' supervision and control,
28 assisted the deception campaign by implementing public advertising and outreach campaigns to

1 discredit climate science, as well as funding scientists to cast doubt upon climate science and upon
2 the extent to which climate change is caused by human activity. In sum, Defendants, through their
3 front groups, engaged in a significant marketing campaign that misrepresented and concealed the
4 dangers of their fossil fuel products with the aim of protecting or enhancing sales of these products
5 to consumers, including consumers in California. Defendants actively supervised, facilitated,
6 consented to, and/or directly participated in the misleading messaging of these front groups, from
7 which Defendants profited significantly, including in the form of increased sales in California.

8 36. **The American Petroleum Institute (API)**

9 a. API is a national trade association representing the oil and gas industry,
10 formed in 1919. API’s purpose is to advance its members’ collective business interests, which
11 includes increasing consumer consumption of oil and gas for the financial profit of Defendants
12 and other oil and gas companies. Among other functions, API also coordinates members of the
13 petroleum industry, gathers information of interest to the industry, and disseminates that
14 information to its members.

15 b. Acting on behalf of and under the supervision and control of Defendants,
16 API has, since at least 1988, participated in and led several coalitions, front groups, and
17 organizations that have promoted disinformation about the climate impacts of fossil fuel products
18 to consumers—including, but not limited to, the Global Climate Coalition, Partnership for a Better
19 Energy Future, Coalition for American Jobs, Alliance for Energy and Economic Growth, and
20 Alliance for Climate Strategies. These front groups were formed to promote climate disinformation
21 and advocacy from a purportedly objective source, when in fact these groups were financed and
22 controlled by Defendants and other oil and gas companies. Defendants have benefited from the
23 spread of this disinformation because, among other things, it has ensured a thriving consumer
24 market for oil and gas, resulting in substantial profits for Defendants. In effect, API acts and has
25 acted as a marketing arm for its member companies, including Defendants. Over the last several
26 decades, API has spent millions of dollars on television, newspaper, radio, social media, and
27 internet advertisements in the California market.

1 c. Member companies participate in API strategy, governance, and operation
2 through their membership dues and by contributing company officers and other personnel to API
3 boards, committees, and task forces. Defendants have collectively steered the policies and trade
4 practices of API through membership, Executive Committee roles, and/or providing budgetary
5 funding for API. Defendants have used their control over and involvement in API to develop and
6 execute a long-term advertising and communications campaign centered on climate change
7 denialism. The goal of the campaign was to influence consumer demand for Defendants' fossil
8 fuel products. Defendants directly controlled, supervised, and participated in API's misleading
9 messaging regarding climate change. That conduct directly impacted California, as Defendants
10 worked with API to create and disseminate misleading advertisements that promote consumption
11 of fossil fuel products in California.

12 d. The following Defendants and/or their predecessors in interest are and/or
13 have been API members at times relevant to this litigation: Chevron, ExxonMobil, Shell,
14 ConocoPhillips, Anadarko, Occidental, Repsol, Marathon, EnCana, BP, Citgo, Hess, and Apache.
15 Each of these Defendants consistently holds API leadership positions, participates in API
16 committees and task forces formed to address climate change issues, makes decisions that
17 determine API's conduct, and works with other Defendants to achieve these ends. Their control of
18 and leadership roles in API are longstanding, deeply rooted, and continuous throughout relevant
19 time periods.

20 e. For example, Defendants served as corporate officers during the relevant
21 time period, including executives from Exxon, Shell, Chevron, ConocoPhillips, Marathon, Hess
22 and BP serving as API Board Chairman and on the Board's Executive Committee. Exxon's CEO
23 served on API's Executive Committee, including as President and Chairman, for 21 of the 29 years
24 between 1991 and 2020.¹⁵ Multiple high-level executives from Exxon, such as Presidents, Vice
25 Presidents, CEOs, COOs, and Chairmans, served on API's Board in each year between 1994-2002.
26 BP's CEO served as API's Chairman in 1988, 1989, and 1998. Multiple high-level executives
27

28 ¹⁵ 1991, 1996–1997, 2001, 2002, 2003, 2005–2016, 2018–2020.

1 from BP served on API's Board of Directors between 1994-2002. The Chairman and CEO of BP's
2 predecessor ARCO served as API treasurer in 1998 and Chairman in 1999. Chevron's CEO served
3 as API Chairman in 1994, 1995, 1997, 1998, 2003, and 2012. In 2002, Chevron's CEO served as
4 API treasurer. Chairman and CEO of Chevron's predecessor Texaco served as API Board
5 Chairman in 2001, and as treasurer in 1999. Multiple high-level executives from Chevron served
6 on API's Board of Directors in each year between 1994-2002. Shell's President served as API
7 treasurer in 1997 and sat on the Board's Executive Committee from at least 2005-2006. Multiple
8 high-level Shell executives served on API's Board of Directors between 1994-2002.
9 ConocoPhillips Chairman and CEO was API Chairman from 2016-2018, and currently serves on
10 API's Executive Committee. In 2020, API elected Phillips 66 Chairman and CEO to serve a two-
11 year term as its Board President, and Phillips 66's current President and CEO is on the API Board's
12 Executive Committee. Multiple high-level ConocoPhillips executives served on API's Board of
13 Directors between 1994-2002. Marathon or its predecessors' CEOs served on the API Board's
14 Executive Committee across multiple decades, for example Marathon's then-CEO was Treasurer
15 and testified to Congress on behalf of API in 1994. Multiple high-level executives from Marathon
16 served on API's Board of Directors between 1994-2002. Multiple CITGO high-level executives
17 served on API's Board of Directors between 1995-2002. Hess high-level executives served on
18 API's Board of Directors in 1994 and 1995; and Hess' CEO currently serves on the API Board's
19 Executive Committee and served on API's Board of Directors from at least 2015-2021. Multiple
20 high-level executives from Occidental served on API's Board of Directors between 1994-2002.
21 Anadarko or its predecessors' high-level executives served on API's Board of Directors between
22 1994-2002. Anadarko's then-President and COO served on API's Executive Committee as
23 treasurer in 2001.

24 f. Relevant information was shared among API and Defendants and
25 Defendants' predecessors-in-interest through the following: (1) API's distribution of information
26 to its members, and/or (2) participation of the Defendants' officers and other personnel, and those
27 of the Defendants' predecessors-in-interest, on API boards, committees, and task forces. This
28 includes representatives of Exxon, Chevron, BP, Shell, ConocoPhillips, and Marathon sitting on

1 both API's Committee for Air and Water Conservation and a special advisory group to API's
2 Committee for Public Affairs, which worked together to develop research reports on air emissions
3 and other environmental topics. Different representatives of Exxon, Chevron, BP, Shell,
4 ConocoPhillips, and Marathon rotated in and out of these positions throughout the time periods
5 discussed in this complaint. Representatives from Marathon sat on the Executive Committee to
6 API's Engineering and Technical Research Committee and on the Committee for Air and Water
7 Conservation. Representatives from Chevron and Exxon chaired API's Engineering and Technical
8 Research Committee, and representatives from BP and Exxon chaired API's Health and Biological
9 Research Committee, also developing research documents. Different representatives of Exxon,
10 Chevron, BP, Shell and ConocoPhillips rotated in and out of these positions throughout the time
11 periods discussed in this complaint.¹⁶

12 37. **The Information Council for the Environment (ICE)** was formed by coal
13 companies and their allies, including Western Fuels Association and the National Coal
14 Association. Associated companies included Pittsburg and Midway Coal Mining (Chevron).¹⁷

15 38. **The Global Climate Coalition (GCC)** was an industry group formed to preserve
16 and expand consumer demand for fossil fuels by publicly casting doubt on climate science and
17 opposing greenhouse gas emission reduction initiatives. The GCC was founded in 1989 in reaction
18 to the first meeting of the Intergovernmental Panel on Climate Change (IPCC), the United Nations
19 body for assessing the science related to climate change, and to NASA scientist James Hansen's
20 presentation to the Senate Committee on Energy and Natural Resources, in which Hansen
21 emphasized that climate change was already happening and would lead to dire consequences if left
22 unaddressed. The GCC disbanded in or around 2001. Founding members included API, Shell Oil
23 Company (currently, Shell); Texaco, Inc. (currently, Chevron); Amoco (currently, BP); ARCO
24

25 ¹⁶ American Petroleum Institute, Comm. For Air and Water Conservation & Comm. On Public
26 Affairs, Environmental Research: A Status Report (1972) (listing members of relevant
27 committees and their fossil fuel company affiliations),
<https://files.eric.ed.gov/fulltext/ED066339.pdf>.

28 ¹⁷ Hereinafter, parenthetical references to Defendants indicate corporate ancestry and/or
affiliation.

1 (owned by BP at the time); and Phillips Petroleum Company (currently, ConocoPhillips). GCC
2 board membership during its existence included high-level executives from the founding members
3 and Chevron, Exxon, and Mobil (Exxon). Tom Lambrix, director of government relations for
4 Phillips Petroleum, was the first chairman of the GCC. Exxon was also a corporate member of the
5 GCC over the course of the GCC's existence. The GCC Board of Directors was composed of high-
6 level executives from the fossil fuel industry: in 1994, for instance, the GCC Board was composed
7 of executives from API, Exxon, Phillips Petroleum Company (ConocoPhillips), and Texaco
8 (Chevron).¹⁸ In 1995, GCC's Board of Directors included high-level executives from Texaco
9 (Chevron), American Petroleum Institute, ARCO, and Phillips Petroleum Company.¹⁹

10 **III. AGENCY**

11 39. At all times herein mentioned, each of the Defendants was the agent, servant,
12 partner, aider and abettor, co-conspirator, and/or joint venturer of each of the remaining
13 Defendants herein and was at all times operating and acting within the purpose and scope of said
14 agency, service, employment, partnership, conspiracy, and joint venture and rendered substantial
15 assistance and encouragement to the other Defendants, knowing that their conduct was wrongful
16 and/or constituted a breach of duty.

17 **IV. JURISDICTION AND VENUE**

18 40. This court's personal jurisdiction over Defendants named herein is proper because
19 each Defendant maintains substantial contacts with California by and through their fossil fuel
20 business operations in this state, as described above, and because Plaintiffs' injuries described
21 herein arose out of and relate to those operations and occurred in California. Each Defendant
22 purposefully availed itself of the California market, and thus of the benefits of the laws of the State,
23 during all times relevant to this Complaint, so as to render California courts' exercise of
24 jurisdiction over each Defendant consistent with traditional notions of fair play and substantial

25 _____
26 ¹⁸ GCC Board Member List and Background Information, Climate Investigations Center (1994),
27 [https://www.climatefiles.com/denial-groups/global-climate-coalition-collection/1994-board-](https://www.climatefiles.com/denial-groups/global-climate-coalition-collection/1994-board-member-list-general-info/)
28 [member-list-general-info/](https://www.climatefiles.com/denial-groups/global-climate-coalition-collection/1994-board-member-list-general-info/).

¹⁹ GCC IRS 1024 and Attachments, Climate Investigations Center (1995),
<https://www.documentcloud.org/documents/5798254-GCC-IRS-1023#document/p17>

1 justice. Each Defendant researched, developed, manufactured, designed, marketed, distributed,
2 released, promoted, and/or otherwise sold its fossil fuel products in markets around the United
3 States, including within California.

4 41. Additionally, jurisdiction is proper over each non-resident Defendant for the
5 following reasons:

6 a. With respect to its subsidiaries, each non-resident Defendant controls and
7 has controlled its direct and indirect subsidiaries' decisions about the quantity and extent of its
8 fossil fuel production and sales; determines whether and to what extent to market, produce, and/or
9 distribute its fossil fuel products; and controls and has controlled its direct and indirect
10 subsidiaries' decisions related to its marketing and advertising, specifically communications
11 strategies concerning climate change and the link between fossil fuel use and impacts on the
12 environment. Each subsidiary Defendant is the agent of its parent Defendant. As agents, the
13 subsidiaries of each non-resident Defendant conducted activities in California at the direction and
14 for the benefit of its parent company. Specifically, the subsidiaries furthered each parent
15 company's campaign of deception and denial through misrepresentations, omissions, and
16 affirmative promotion of the company's fossil fuel products as safe with knowledge of the climate
17 change-related harms that would result from the intended use of those products, all of which
18 resulted in climate change-related injuries in Marin County and increased sales to the parent
19 company. The subsidiaries' jurisdictional activities are properly attributed to each parent company
20 and serve as a basis to assert jurisdiction over each of the non-resident Defendant parent
21 companies.

22 b. Through their various agreements with dealers, franchises, or otherwise, the
23 Defendants direct and control the branding, marketing, sales, promotions, image development,
24 signage, and advertising of their branded fossil fuel products at their respectively branded gas
25 stations in California, including point-of-sale advertising and marketing. The Defendants dictate
26 which grades and formulations of their gasoline may be sold at their respectively branded stations.

27 c. Defendants, in coordination with API and other organizations, conspired to
28 conceal and misrepresent the known dangers of burning fossil fuels, to knowingly withhold

1 material information regarding the consequences of using fossil fuel products, to spread knowingly
2 false and misleading information to the public regarding the weight of climate science research,
3 and to promote their fossil fuel products which they knew were harmful. Through their own actions
4 and through their membership and participation in climate denialist front groups, API and each
5 Defendant were and are members of that conspiracy. Defendants committed substantial acts to
6 further the conspiracy in California by making misrepresentations and misleading omissions to
7 California consumers about the existence, causes, and effects of global warming; by affirmatively
8 promoting the Defendants' fossil fuel products as safe, with knowledge of the disastrous impacts
9 that would result from the intended use of those products; and by failing to warn California
10 consumers about the disastrous impacts of fossil fuel use. A substantial effect of the conspiracy
11 has also and will also occur in Marin County, as the County and its residents have suffered and
12 will suffer injuries from Defendants' wrongful conduct, including but not limited to the following:
13 sea level rise, massive storms, flooding, extreme heat, reduced air quality, wildfire, draught,
14 landslides, and other social and economic consequences of these environmental changes.
15 Defendants knew or should have known based on information provided to them from their internal
16 research divisions, affiliates, trade associations, and industry groups that their actions in California
17 and elsewhere would result in these injuries in and to Marin County and its residents. Finally, the
18 climate effects described herein are direct and foreseeable results of Defendants' conduct in
19 furtherance of the conspiracy.

20 42. The Superior Court of California for Marin County is a court of general jurisdiction
21 and therefore has subject matter jurisdiction over this action.

22 43. Venue is proper in Marin County pursuant to Code of Civil Procedure sections 395
23 and 395.5, because the injury giving rise to the County's claims occurred in Marin County.
24 Defendants have contributed to the creation of a public nuisance in Marin County, and the Marin
25 County Counsel has the right and authority to seek abatement of that nuisance on behalf of the
26 People of the State of California. Injuries Marin County has suffered personally have also occurred
27 within Marin County.

28 44. Additionally, venue is also proper in San Francisco County for pre-trial purposes

1 pursuant to the February 5, 2024 order from Judge Treat in Contra Costa Superior Court and
2 February 9, 2024 order from the Judicial Council of California. This and other actions are
3 coordinated into JCCP 5310, Fuel Industry Climate Cases, in San Francisco County.

4 **V. FACTUAL BACKGROUND**

5 **A. Global Warming—Observed Effects and Known Cause**

6 45. The Earth is warming at a rate unprecedented in human history.

7 46. The Earth’s atmosphere is warming, sea level is rising, snow and ice cover is
8 diminishing, oceans are warming and acidifying, and hydrologic systems have been altered, among
9 other rapidly accelerating changes to our climate. These changes are directly harming people’s
10 health, lives, lifestyles, and livelihoods, including in Marin County. According to the IPCC, the
11 evidence that humans are causing this warming of the Earth is unequivocal.²⁰ Greenhouse gas
12 emissions caused by human activities are the most significant driver of climate change.²¹ Over the
13 past couple of decades, those emission rates have exceeded those predicted under previous “worst
14 case” global emissions scenarios.

15 47. Greenhouse gases are largely byproducts of human combustion of fossil fuels to
16 produce energy and the use of fossil fuels to create petrochemical products. While there are several
17 greenhouse gases contributing to climate change, CO₂ is the primary greenhouse gas emitted as a
18 result of human activities.

19 48. Atmospheric and ocean temperatures have both increased substantially since the
20 beginning of the global industrial revolution, and the rate of warming has also dramatically
21 increased since the end of World War II.

22 49. In the geological short term, ocean and land surface temperatures have increased at
23 a rapid pace during the late 20th and early 21st centuries:

24 a. 2023 was the hottest year on record by globally averaged surface
25 temperatures, exceeding mid-20th century mean ocean and land surface temperatures by
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27 ²⁰ IPCC, Climate Change 2021: The Physical Science Basis, , at v, 4, 41, 63, 150, 425, 506
(2021), https://report.ipcc.ch/ar6/wg1/IPCC_AR6_WGI_FullReport.pdf.

28 ²¹ Id. at 41.

1 approximately 2.12° F. Each month in 2023 was hotter by globally averaged surface temperatures
2 than those respective months in any previous year. June, July, August, September, October,
3 November and December 2023 were all the hottest average surface temperatures for those
4 months.²²

5 b. The second hottest year on record by globally averaged surface
6 temperatures was 2016, and the third hottest was 2020.²³

7 c. The ten hottest years on record by globally averaged surface temperature
8 have all occurred since 2014.²⁴

9 50. The average global surface and ocean temperature in 2023 was approximately 2.12°
10 F warmer than the 20th century baseline, which is the greatest positive anomaly observed since at
11 least 1850.²⁵ The increase in hotter temperatures and more frequent positive anomalies during the
12 Great Acceleration is occurring both globally and locally, including in Marin County. The graph
13 below shows the increase in global land and ocean temperature anomalies since 1850, as measured
14 against the 1901–2000 global average temperature.²⁶

25 ²² NOAA National Center for Environmental Information, Annual 2023 Global Climate Report
26 (Jan. 2024), <https://www.ncei.noaa.gov/access/monitoring/monthly-report/global/202313>.

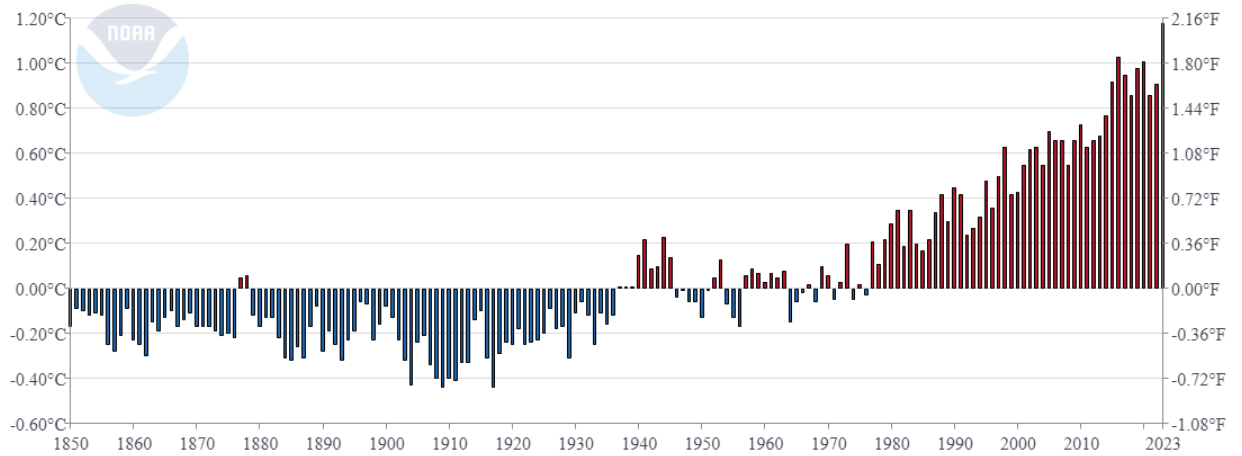
27 ²³ Id.

28 ²⁴ Id.

²⁵ Id.

²⁶ See id.

1 **Global Land and Ocean**
2 January-December Temperature Anomalies



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10 **Figure 1: Global Land and Ocean Temperature Anomalies, January – December**

11 51. Prior to World War II, most anthropogenic CO₂ emissions were caused by land-use
12 practices, such as forestry and agriculture, which altered the ability of the land and global biosphere
13 to absorb CO₂ from the atmosphere; the impacts of such activities on Earth's climate were
14 relatively minor. Since the beginning of the Great Acceleration, however, both the annual rate and
15 total volume of human CO₂ emissions have increased enormously following the advent of major
16 uses of oil, gas, and coal. The graph below shows that while CO₂ emissions attributable to forestry
17 and other land-use change have remained relatively constant, total emissions attributable to fossil
18 fuels have increased dramatically since the 1950s.²⁷

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25 ²⁷ Global Carbon Project, [Global Carbon Budget 2016](http://www.globalcarbonproject.org/carbonbudget/16/files/GCP_CarbonBudget_2016.pdf) (Nov. 14, 2016),
26 www.globalcarbonproject.org/carbonbudget/16/files/GCP_CarbonBudget_2016.pdf, citing
27 CDIAC; R.A. Houghton et al., [Carbon emissions from land use and land-cover change](http://www.biogeosciences.net/9/5125/2012/bg-9-5125-2012.html) (2012),
28 <http://www.biogeosciences.net/9/5125/2012/bg-9-5125-2012.html>; Louis Giglio et al., [Analysis of daily, monthly, and annual burned area using the fourth-generation global fire emissions database](http://onlinelibrary.wiley.com/doi/10.1002/jgrg.20042/abstract) (2013), <http://onlinelibrary.wiley.com/doi/10.1002/jgrg.20042/abstract>; Le Quéré et al., [supra](#) note 4.

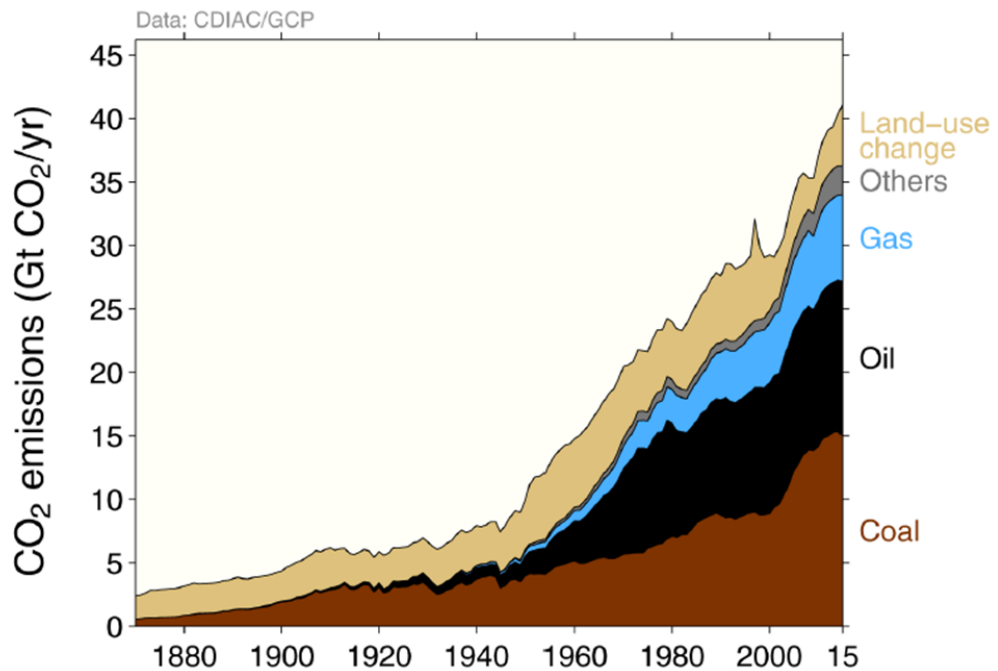


Figure 2: Total Annual Carbon Dioxide Emissions by Source, 1860-2015

52. As human reliance on fossil fuels for industrial and mechanical processes has increased, so too have greenhouse gas emissions, especially of CO₂. The Great Acceleration is marked by a massive increase in the annual rate of fossil fuel emissions: more than half of all cumulative CO₂ emissions have occurred since 1988.²⁸ The rate of CO₂ emissions from fossil fuels and industry, moreover, has increased threefold since the 1960s, and by more than 60% since 1990.²⁹ The graph below illustrates the increasing rate of global CO₂ emissions since the industrial era began.³⁰

²⁸ Andres et al. (2012), *supra* note 6, at 1851.

²⁹ Le Quéré et al. (2016), *supra* note 4, at 630 (“Global CO₂ emissions from fossil fuels and industry have increased every decade from an average of 3.1±0.2 GtC/yr in the 1960s to an average of 9.3±0.5 GtC/yr during 2006–2015”).

³⁰ Peter Frumhoff et al. *The Climate Responsibilities of Industrial Carbon Producers*, 132 *Climatic Change* 157–171, 164 (2015).

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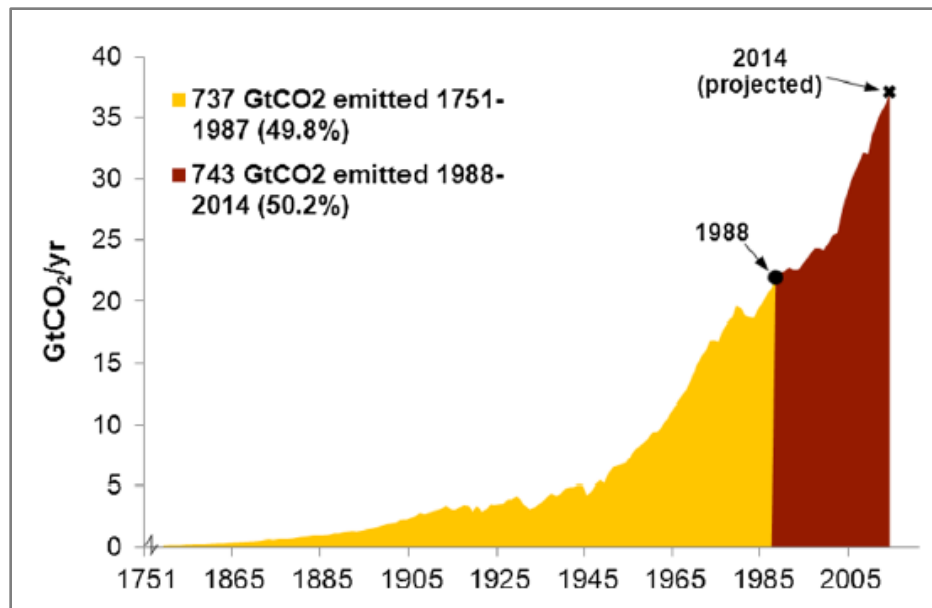


Figure 3: Cumulative Annual Anthropogenic Carbon Dioxide Emissions, 1751-2014

53. Since 1960, the concentration of CO₂ in the atmosphere has spiked from under 320 parts per million (ppm) to approximately 423 ppm.³¹ The concentration of atmospheric CO₂ has also been accelerating. From 1960 to 1970, atmospheric CO₂ increased by an average of approximately 0.9 ppm per year; over the last five years, it has increased by approximately 2.4 ppm per year.³²

54. The graph below indicates the tight nexus between the sharp increase in emissions from the combustion of fossil fuels and the steep rise of atmospheric concentrations of CO₂.

³¹ Trends in Atmospheric Carbon Dioxide: Full Record, Global Monitoring Laboratory, <https://gml.noaa.gov/ccgg/trends/mlo.html>.

³² Trends in Atmospheric Carbon Dioxide: Growth Rate, Global Monitoring Laboratory <https://gml.noaa.gov/ccgg/trends/gr.html>.

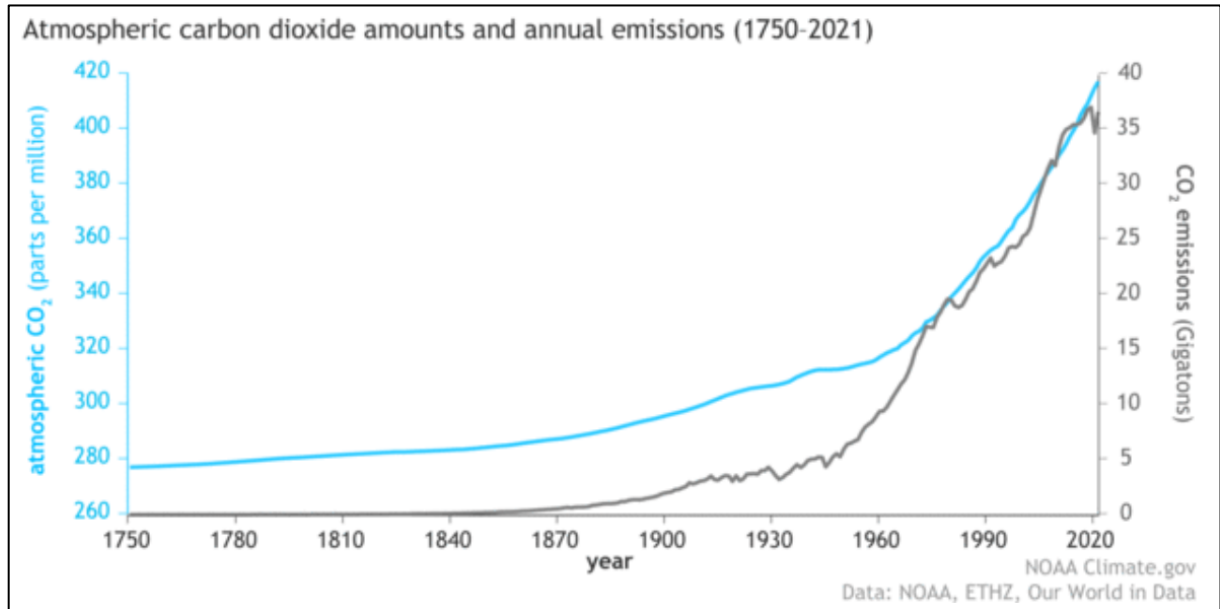


Figure 4: Atmospheric CO₂ Concentration and Annual Emissions³³

Because of the increased burning of fossil fuel products, concentrations of greenhouse gases in the atmosphere are now at an unprecedented level, one not seen in at least three million years.³⁴

55. As greenhouse gases accumulate in the atmosphere, the Earth radiates less energy back to space. This accumulation and associated disruption of the Earth's energy balance have myriad environmental and physical consequences, including, but not limited to, the following:

- a. Warming of the Earth's average surface temperature, both locally and globally, and increased frequency and intensity of heat waves.
- b. Sea level rise, due to the thermal expansion of warming ocean waters and runoff from melting glaciers and ice sheets.
- c. Changes to the global climate generally, bringing about longer droughts and dry periods interspersed with fewer and more severe periods of precipitation, and associated

³³ Rebecca Lindsey, Climate Change: Atmospheric Carbon Dioxide, Climate.gov (May 12, 2023), <https://www.climate.gov/news-features/understanding-climate/climate-change-atmospheric-carbon-dioxide>.

³⁴ More CO₂ than ever before in 3 million years, shows unprecedented computer simulation, Science Daily (Apr. 3, 2019), <https://www.sciencedaily.com/releases/2019/04/190403155436.htm>.

1 impacts to the quantity and quality of water resources available to both human and ecological
2 systems.

3 d. Increased frequency and intensity of extreme weather events due to
4 increases in evaporation, evapotranspiration, and precipitation, a consequence of the warming
5 atmosphere's increased ability to hold moisture.

6 e. Adverse impacts on human health associated with extreme weather,
7 extreme heat, worsening air quality, and vector-borne illnesses.

8 f. Flooding and inundation of land and infrastructure, increased erosion,
9 higher wave run-up and tides, increased frequency and severity of storm surges, saltwater
10 intrusion, and other impacts of higher sea levels.

11 g. Ocean acidification, primarily due to the increased uptake of atmospheric
12 carbon dioxide by the oceans.

13 h. Changes to terrestrial and marine ecosystems, and consequent impacts on
14 the populations and ranges of flora and fauna.

15 **B. Defendants Went to Great Lengths to Understand, and Either Knew or Should**
16 **Have Known the Dangers Associated With Their Fossil Fuel Products.**

17 56. For decades, Defendants have known that their fossil fuel products pose risks of
18 "severe" and even "catastrophic" impacts on the global climate through the work and warnings of
19 their own scientists and/or through trade associations such as API. Defendants consistently
20 researched or funded research into significant issues relevant to fossil fuels, and were aware of
21 significant scientific reports on climate change science and impacts at the time they were issued.
22 Thus, Defendants developed a sophisticated understanding of climate change that far exceeded the
23 knowledge of the public, ordinary consumers, and Plaintiffs. Yet each Defendant decided to
24 continue its conduct and commit itself to massive fossil fuel production. This was a deliberate
25 decision to place company profits ahead of human safety and well-being, and to foist onto the
26 public the costs of abating and adapting to the public nuisance of global warming.

27 57. Although concealed at the time, the industry's knowledge was later uncovered by
28 journalists at Inside Climate News and the Los Angeles Times, among others. In 1954, geochemist

1 Harrison Brown and his colleagues at the California Institute of Technology wrote to API,
2 informing the trade association that preliminary measurements of natural archives of carbon
3 in tree rings indicated that fossil fuels had caused atmospheric carbon dioxide levels to increase
4 by about 5% since 1840.³⁵ API provided those scientists funding for various research projects, and
5 measurements of carbon dioxide continued for at least one year and possibly longer, although the
6 results were never published or otherwise made available to the public.³⁶ In 1957, H.R. Brannon
7 of Humble Oil Company (predecessor-in-interest to Exxon) measured an increase in atmospheric
8 carbon dioxide attributable to fossil fuels, similar to—and in agreement with—that measured by
9 Harrison Brown.³⁷

10 58. In 1959, API organized a centennial celebration of the American oil industry at
11 Columbia University in New York City.³⁸ High-level representatives of Defendants were in
12 attendance. One of the keynote speakers was nuclear physicist Edward Teller. Teller warned the
13 industry that “a temperature rise corresponding to a 10[%] increase in carbon dioxide will be
14 sufficient to melt the icecap and submerge . . . [a]ll the coastal cities.” Teller added that since “a
15 considerable percentage of the human race lives in coastal regions, I think that this chemical
16 contamination is more serious than most people tend to believe.”³⁹ Following his speech, Teller
17 was asked to “summarize briefly the danger from increased carbon dioxide content in the
18 atmosphere in this century.” He responded that “there is a possibility the icecaps will start melting
19 and the level of the oceans will begin to rise.”⁴⁰

22 ³⁵ See Benjamin Franta, Early Oil Industry Knowledge of CO2 and Global Warming, 8 Nature
23 Climate Change 1024, 1024–25 (2018).

24 ³⁶ Id.

25 ³⁷ Id.; H.R. Brannon, Jr. et al., Radiocarbon Evidence on the Dilution of Atmospheric and
26 Oceanic Carbon by Carbon from Fossil Fuels, 38 Am. Geophysical Union Transactions 643,
27 644–46 (1957).

28 ³⁸ See Allan Nevins & Robert G. Dunlop, Energy and Man: A Symposium (Appleton-Century-
Crofts, New York 1960); see also Franta (2018), supra note 35, at 1024–25.

³⁹ Edward Teller, Energy Patterns of the Future, in Energy and Man: A Symposium, 53–72
(1960).

⁴⁰ Id. at 70.

1 59. In 1965, the president of API, Frank Ikard, relayed the findings of a recent report
2 to leaders of the fossil fuel industry at API’s annual meeting, saying, “[o]ne of the most important
3 predictions of the report is that carbon dioxide is being added to the earth’s atmosphere by the
4 burning of coal, oil, and natural gas at such a rate that by the year 2000 the heat balance will be so
5 modified as possibly to cause marked changes in climate beyond local or even national efforts,”
6 and quoting the report’s finding that “the pollution from internal combustion engines is so serious,
7 and is growing so fast, that an alternative nonpolluting means of powering automobiles, buses, and
8 trucks is likely to become a national necessity.”⁴¹

9 60. Thus, by 1965, Defendants and their predecessors-in-interest were aware that the
10 scientific community had found that fossil fuel products, if used profligately, would cause global
11 warming by the end of the century, and that such global warming would have wide-ranging and
12 costly consequences.

13 61. By 1965, concern about the risks of anthropogenic greenhouse gas emissions
14 reached the highest level of the United States’ scientific community. In that year, President Lyndon
15 B. Johnson’s Science Advisory Committee Panel on Environmental Pollution reported that by the
16 year 2000, anthropogenic CO₂ emissions would “modify the heat balance of the atmosphere to
17 such an extent that marked changes in climate . . . could occur.”⁴² President Johnson announced in
18 a special message to Congress that “[t]his generation has altered the composition of the atmosphere
19 on a global scale through . . . a steady increase in carbon dioxide from the burning of fossil fuels.”⁴³

20 62. These statements from the Johnson Administration, at a minimum, put Defendants
21 on notice of the potentially substantial dangers to people, communities, and the planet associated
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25 ⁴¹ Ikard, Meeting the Challenges of 1966, in Proceedings of the American Petroleum Institute
(1965), at 13, <https://www.documentcloud.org/documents/5348130-1965-API-Proceedings>.

26 ⁴² President’s Science Advisory Committee, Restoring the Quality of Our Environment: Report
27 of the Environmental Pollution Panel, at 9 (Nov. 1965),
<https://hdl.handle.net/2027/uc1.b4315678>.

28 ⁴³ President Lyndon B. Johnson, Special Message to Congress on Conservation and Restoration
of Natural Beauty (Feb. 8, 1965), <http://acsc.lib.udel.edu/items/show/292>.

1 with use of their fossil fuel products. Moreover, Defendants had amassed a considerable body of
2 knowledge on the subject through their own independent efforts.

3 63. In 1968, API received a report from the Stanford Research Institute, which it had
4 hired to assess the state of research on environmental pollutants, including carbon dioxide.⁴⁴ The
5 assessment endorsed the findings of President Johnson’s Scientific Advisory Council from three
6 years prior, stating that carbon dioxide emissions were “almost certain” to produce “significant”
7 temperature increases by 2000, and that these emissions were almost certainly attributable to fossil
8 fuels. The report warned of “major changes in the earth’s environment” and a “rise in sea levels,”
9 and concluded: “there seems to be no doubt that the potential damage to our environment could be
10 severe.” The scientists warned of “melting of the Antarctic ice cap” and informed API that “[p]ast
11 and present studies of CO₂ are detailed and seem to explain adequately the present state of CO₂ in
12 the atmosphere.” What was missing, the scientists said, was work on “air pollution technology
13 and . . . systems in which CO₂ emissions would be brought under control.”⁴⁵

14 64. In 1969, the Stanford Research Institute delivered a supplemental report on air
15 pollution to API, projecting with alarming particularity that atmospheric CO₂ concentrations
16 would reach 370 parts per million (“ppm”) by 2000.⁴⁶ This projection turned out to almost exactly
17 match the actual CO₂ concentrations measured in 2000 of 369.64 ppm.⁴⁷ The report explicitly
18 connected the rise in CO₂ levels to the combustion of fossil fuels, finding it “unlikely that the
19 observed rise in atmospheric CO₂ has been due to changes in the biosphere.”

20 65. By virtue of their membership and participation in API at that time, Defendants
21 received or should have received the Stanford Research Institute reports and were on notice of
22 their conclusions.

24 ⁴⁴ Elmer Robinson & R.C. Robbins, Sources, Abundance, and Fate of Gaseous Atmospheric
25 Pollutants, Stanford Rsch. Inst. (Feb. 1968),
<https://www.smokeandfumes.org/documents/document16>.

26 ⁴⁵ Id. at 108, 112.

27 ⁴⁶ Elmer Robinson & R.C. Robbins, Sources, Abundance, and Fate of Gaseous Atmospheric
Pollutants Supplement, Stanford Rsch. Inst. (June 1969).

28 ⁴⁷ NASA Goddard Institute for Space Studies, Global Mean CO₂ Mixing Ratios (ppm):
Observations, <https://data.giss.nasa.gov/modelforce/ghgases/Fig1A.ext.txt>.

1 66. In 1969, Shell memorialized an ongoing 18-month project to collect ocean data
2 from oil platforms to develop and calibrate environmental forecasting theories related to predicting
3 wave, wind, storm, sea level, and current changes and trends.⁴⁸ Several Defendants and/or their
4 predecessors in interest participated in the project, including Esso Production Research Company
5 (Exxon), Mobil Research and Development Company (Exxon), Pan American Petroleum
6 Corporation (BP), Gulf Oil Corporation (Chevron), Texaco Inc. (Chevron), and the Chevron Oil
7 Field Research Company.

8 67. In 1972, API members, including Defendants, received a status report on all
9 environmental research projects funded by API. The report summarized the 1968 SRI report
10 describing the impact of Defendants' fossil fuel products on the environment, including global
11 warming and sea level rise. Industry participants who received this report include: American
12 Standard of Indiana (BP), Asiatic (Shell), Ashland (Marathon), Atlantic Richfield (BP), British
13 Petroleum (BP), Chevron Standard of California (Chevron), Cities Service (Citgo), Continental
14 (ConocoPhillips), Dupont (former owner of Conoco), Esso Research (Exxon), Ethyl (formerly
15 affiliated with Esso, which was subsumed by Exxon), Getty (Lukoil/Exxon), Gulf (Chevron,
16 among others), Humble Standard of New Jersey (Exxon/Chevron/BP), Marathon, Mobil (Exxon),
17 Pan American (BP), Phillips (ConocoPhillips), Shell, Standard of Ohio (BP), Texaco (Chevron),
18 Union (Chevron), Edison Electric Institute (representing electric utilities), Bituminous Coal
19 Research (coal industry research group), Mid-Continent Oil & Gas Association (presently the U.S.
20 Oil & Gas Association, a national trade association), Western Oil & Gas Association, National
21 Petroleum Refiners Association (presently the American Fuel and Petrochemical Manufacturers
22 Association, a national trade association), Champlin (Anadarko), Skelly (Lukoil/Exxon), Colonial
23 Pipeline (ownership has included BP, Citgo, Exxon, ConocoPhillips, Chevron entities, among
24 others) and Caltex (Chevron), among others.⁴⁹

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27 ⁴⁸ M.M. Patterson, An Ocean Data Gathering Program for the Gulf of Mexico, Society of
28 Petroleum Engineers (1969), <https://www.onepetro.org/conference-paper/SPE-2638-MS>.

⁴⁹ American Petroleum Institute, Environmental Research, A Status Report, Committee for Air
and Water Conservation (January 1972), <http://files.eric.ed.gov/fulltext/ED066339.pdf>.

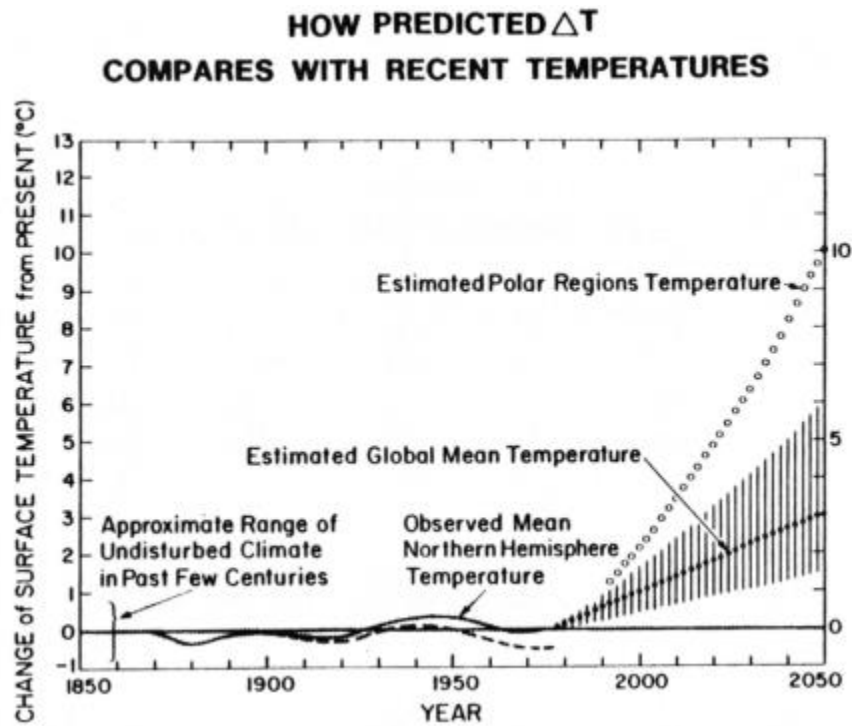
1 68. In 1977, James Black of Exxon gave a presentation to Exxon executives on the
2 “greenhouse effect,” which was summarized in an internal memo the following year. Black
3 reported that “current scientific opinion overwhelmingly favors attributing atmospheric carbon
4 dioxide increase to fossil fuel consumption,” and that doubling atmospheric carbon dioxide would,
5 according to the best climate model available, “produce a mean temperature increase of about 2°C
6 to 3°C over most of the earth,” with two to three times as much warming at the poles.⁵⁰ Black
7 reported that the impacts of global warming would include “more rainfall,” which would “benefit
8 some areas and would harm others,” and that “[s]ome countries would benefit, but others could
9 have their agricultural output reduced or destroyed.” “Even those nations which are favored,
10 however, would be damaged for a while since their agricultural and industrial patterns have been
11 established on the basis of the present climate.” Finally, Black reported that “[p]resent thinking
12 holds that man has a time window of five to ten years before the need for hard decisions regarding
13 changes in energy strategies might become critical.”⁵¹ The figure below, reproduced from Black’s

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26 ⁵⁰ J.F. Black, Exxon Research and Engineering Co., memorandum to F.G. Turpin, Exxon
27 Research and Engineering Co. re The Greenhouse Effect (June 6, 1978), at 2, 23,
[https://www.documentcloud.org/documents/2805568-1978-Exxon-Presentation-on-
GreenhouseEffect](https://www.documentcloud.org/documents/2805568-1978-Exxon-Presentation-on-GreenhouseEffect).

28 ⁵¹ Id. at 2.

1 memo, illustrates Exxon's understanding of the timescale and magnitude of global warming that
2 its products would cause.



17 **Figure 5: Future Global Warming Predicted Internally by Exxon in 1977**

18 69. Black's report also stated:

19 There is general scientific agreement that the most likely manner in which mankind
20 is influencing the global climate is through carbon dioxide release from the burning
21 of fossil fuels . . . [and that] Man has a time window of five to ten years before the
22 need for hard decisions regarding changes in energy strategies might become
23 critical.⁵²

24 70. Thereafter, Exxon engaged in a research program to study the environmental fate
25 of fossil fuel-derived greenhouse gases and their impacts, which included publication of peer-
26 reviewed research by Exxon staff scientists and the conversion of a supertanker into a research
27 vessel to study the greenhouse effect and the role of the oceans in absorbing anthropogenic CO₂.

28 ⁵² Id.

1 Much of this research was shared in a variety of fora, symposia, and shared papers through trade
2 associations and directly with other Defendants.

3 71. Exxon scientists made the case internally for using company resources to build
4 corporate knowledge about the impacts of the promotion, marketing, and consumption of
5 Defendants' fossil fuel products. Exxon climate researcher Henry Shaw wrote in 1978: "The
6 rationale for Exxon's involvement and commitment of funds and personnel is based on our need
7 to assess the possible impact of the greenhouse effect on Exxon business. Exxon must develop a
8 credible scientific team that can critically evaluate the information generated on the subject and be
9 able to carry bad news, if any, to the corporation."⁵³ Shaw's internal memo to Exxon's John W.
10 Harrison reported that "[t]he climatic effects of carbon dioxide release may be the primary limiting
11 factor on energy production from fossil fuels[.]"⁵⁴ Moreover, Shaw emphasized the need to
12 collaborate with universities and government to more completely understand what he called the
13 "CO₂ problem."⁵⁵

14 72. In 1979, API and its members, including Defendants, convened a Task Force to
15 monitor and share cutting edge climate research among the oil industry. The group was initially
16 called the CO₂ and Climate Task Force, but changed its name to the Climate and Energy Task
17 Force in 1980 (hereinafter referred to as "API CO₂ Task Force"). API kept and distributed meeting
18 minutes to Task Force members. Membership included senior scientists and engineers from nearly
19 every major U.S. and multinational oil and gas company, including Exxon, Mobil (Exxon), Amoco
20 (BP), Phillips (ConocoPhillips), Texaco (Chevron), Shell, Sunoco, Sohio (BP) as well as Standard
21 Oil of California (Chevron) and Gulf Oil (Chevron, among others). The Task Force was charged
22 with assessing the implications of emerging science on the petroleum and gas industries and
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26 ⁵³ Henry Shaw, Memo to Edward David Jr. on the "Greenhouse Effect", Exxon Research and
Engineering Company (December 7, 1978).

27 ⁵⁴ Henry Shaw, Environmental Effects of Carbon Dioxide, Climate Investigations Ctr. (Oct. 31,
1977), <https://www.industrydocuments.ucsf.edu/docs/tpwl0228>.

28 ⁵⁵ Id.

1 identifying where reductions in greenhouse gas emissions from Defendants' fossil fuel products
2 could be made.⁵⁶

3 73. Also in 1979, API sent its members a background memo related to the API CO₂
4 and Climate Task Force's efforts, stating that CO₂ concentrations were rising steadily in the
5 atmosphere, and predicting when the first clear effects of climate change might be felt.⁵⁷

6 74. That same year, Exxon Research and Engineering reported that: "The most widely
7 held theory [about increasing CO₂ concentration] is that the increase is due to fossil fuel
8 combustion, increasing CO₂ concentration will cause a warming of the earth's surface, and the
9 present trend of fossil fuel consumption will cause dramatic environmental effects before the year
10 2050."⁵⁸ Further, the report stated that unless fossil fuel use was constrained, there would be
11 "noticeable temperature changes" associated with an increase in atmospheric CO₂ from about 280
12 parts per million before the Industrial Revolution to 400 parts per million by the year 2010.⁵⁹ Those
13 projections proved remarkably accurate—atmospheric CO₂ concentrations surpassed 400 parts per
14 million in May 2013, for the first time in millions of years.⁶⁰ In 2015, the annual average CO₂
15 concentration rose above 400 parts per million, and in 2016 the annual low surpassed 400 parts
16 per million, meaning atmospheric CO₂ concentration remained above that threshold all year.⁶¹

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19 ⁵⁶American Petroleum Institute, AQ-9 Task Force Meeting Minutes (March 18, 1980),
20 [http://insideclimatenews.org/sites/default/files/documents/AQ-](http://insideclimatenews.org/sites/default/files/documents/AQ-9%20Task%20Force%20Meeting%20%281980%29.pdf)
21 [9%20Task%20Force%20Meeting%20%281980%29.pdf](http://insideclimatenews.org/sites/default/files/documents/AQ-9%20Task%20Force%20Meeting%20%281980%29.pdf) (AQ-9 refers to the "CO₂ and Climate"
22 Task Force).

23 ⁵⁷ Neela Banerjee, Exxon's Oil Industry Peers Knew About Climate Dangers in the 1970s, Too,
24 Inside Climate News (Dec. 22, 2015), [https://insideclimatenews.org/news/22122015/exxon-](https://insideclimatenews.org/news/22122015/exxon-mobil-oil-industry-peers-knew-about-climate-change-dangers-1970s-american-petroleum-institute-api-shell-chevron-texaco)
25 [mobil-oil-industry-peers-knew-about-climate-change-dangers-1970s-american-petroleum-](https://insideclimatenews.org/news/22122015/exxon-mobil-oil-industry-peers-knew-about-climate-change-dangers-1970s-american-petroleum-institute-api-shell-chevron-texaco)
26 [institute-api-shell-chevron-texaco](https://insideclimatenews.org/news/22122015/exxon-mobil-oil-industry-peers-knew-about-climate-change-dangers-1970s-american-petroleum-institute-api-shell-chevron-texaco).

27 ⁵⁸ W.L. Ferrall, Exxon Memo to R.L. Hirsch about "Controlling Atmospheric CO₂", Exxon
28 Research and Engineering Company (Oct. 16, 1979),
[http://insideclimatenews.org/sites/default/files/documents/CO2%20and%20Fuel%20Use%20Pro-](http://insideclimatenews.org/sites/default/files/documents/CO2%20and%20Fuel%20Use%20Projections.pdf)
jections.pdf.

⁵⁹ Id.

⁶⁰ Nicola Jones, How the World Passed a Carbon Threshold and Why it Matters, Yale
Environment 360 (Jan. 26, 2017), [http://e360.yale.edu/features/how-the-world-passed-a-carbon-](http://e360.yale.edu/features/how-the-world-passed-a-carbon-threshold-400ppm-and-why-it-matters)
threshold-400ppm-and-why-it-matters.

⁶¹ Id.

1 75. In 1980, API's CO₂ Task Force members discussed the oil industry's responsibility
2 to reduce CO₂ emissions by changing refining processes and developing fuels that emit less CO₂.
3 In or around February 29, 1980, Dr. John Laurmann, a "recognized expert in the field of CO₂ and
4 climate," made a presentation to its members.⁶² The meeting lasted for seven hours and included a
5 "complete technical discussion" of global warming caused by fossil fuels, including "the scientific
6 basis and technical evidence of CO₂ buildup, impact on society, methods of modeling and their
7 consequences, uncertainties, policy implications, and conclusions that can be drawn from present
8 knowledge." His presentation identified the "scientific consensus on the potential for large future
9 climatic response to increased CO₂ levels" as a reason for API members to have concern with the
10 "CO₂ problem" and informed attendees that there was "strong empirical evidence that rise [in CO₂
11 concentration was] caused by anthropogenic release of CO₂, mainly from fossil fuel
12 combustion."⁶³ Moreover, Dr. Laurmann warned that the amount of CO₂ in the atmosphere could
13 double by 2038, which he said would likely lead to a 2.5° C (4.5° F) rise in global average
14 temperatures with "major economic consequences." He then told the Task Force that models
15 showed a 5°C (9° F) rise by 2067, with "globally catastrophic effects."⁶⁴ He also suggested that,
16 despite uncertainty, "THERE IS NO LEEWAY" in the time for acting. A taskforce member and
17 representative of Texaco leadership present at the meeting posited that the API CO₂ Task Force
18 should develop ground rules for energy release of fuels and the cleanup of fuels as they relate to
19 CO₂ creation. Attendees to the presentation also included scientists and executives from API,
20 Exxon, and SOHIO (a predecessor to BP), and the minutes of the meeting were distributed to the
21 entire Task Force. API minutes show that the Task Force discussed topics including "the technical
22 implications of energy source changeover," "ground rules for energy release of fuels and the

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24 ⁶² J.J. Nelson, American Petroleum Institute, Letter to AQ-9 Task Force re The CO₂ Problem;
25 Addressing Research Agenda Development (Mar. 18, 1980), at 2,
<https://www.industrydocuments.ucsf.edu/docs/gffl0228>.

26 ⁶³ American Petroleum Institute, AQ-9 Task Force Meeting Minutes (March 18, 1980),
27 [http://insideclimateneeds.org/sites/default/files/documents/AQ-](http://insideclimateneeds.org/sites/default/files/documents/AQ-9%20Task%20Force%20Meeting%20%281980%29.pdf)
28 [9%20Task%20Force%20Meeting%20%281980%29.pdf](http://insideclimateneeds.org/sites/default/files/documents/AQ-9%20Task%20Force%20Meeting%20%281980%29.pdf) (AQ-9 refers to the "CO₂ and Climate"
Task Force).

⁶⁴ Id.

1 cleanup of fuels as they relate to CO₂ creation,” and researching “the Market Penetration
2 Requirements of Introducing a New Energy Source into World Wide Use.”⁶⁵ The Task Force even
3 asked the question “what is the 50 year future of fossil fuels?”

4 76. In 1980, the API CO₂ Task Force also discussed a potential area for investigation:
5 alternative energy sources as a means of mitigating CO₂ emissions from Defendants’ fossil fuel
6 products. These efforts called for research and development to “Investigate the Market Penetration
7 Requirements of Introducing a New Energy Source into World Wide Use.” Such investigation was
8 to include the technical implications of energy source changeover, research timing, and
9 requirements.⁶⁶

10 77. By 1980, Exxon’s senior leadership had become intimately familiar with the
11 greenhouse effect and the role of CO₂ in the atmosphere. In that year, Exxon Senior Vice President
12 and Board member George Piercy questioned Exxon researchers on the minutiae of the ocean’s
13 role in absorbing atmospheric CO₂, including whether there was a net CO₂ flux out of the ocean
14 into the atmosphere in certain zones where upwelling of cold water to the surface occurs, because
15 Piercy evidently believed that the oceans could absorb and retain higher concentrations of CO₂
16 than the atmosphere.⁶⁷ This inquiry aligned with Exxon supertanker research into whether the
17 ocean would act as a significant CO₂ sink that would sequester atmospheric CO₂ long enough to
18 allow unabated emissions without triggering dire climatic consequences. As described below,
19 Exxon eventually scrapped this research before it produced enough data from which to derive a
20 conclusion.⁶⁸

21
22
23 ⁶⁵ Id.

24 ⁶⁶ Id.

25 ⁶⁷ Neela Banerjee, More Exxon Documents Show How Much It Knew About Climate 35 Years
26 Ago, Inside Climate News (Dec. 1, 2015),
<https://insideclimatenews.org/news/01122015/documents-exxons-early-co2-position-senior-executives-engage-and-warming-forecast>.

27 ⁶⁸ Neela Banerjee et al., Exxon Believed Deep Dive Into Climate Research Would Protect Its
28 Business, Inside Climate News (Sept. 17, 2015),
<https://insideclimatenews.org/news/16092015/exxon-believed-deep-dive-into-climate-research-would-protect-its-business>.

1 78. Also in 1980, Imperial Oil (Exxon) reported to Esso and Exxon managers and
2 environmental staff that increases in fossil fuel usage aggravates CO₂ in the atmosphere. Noting
3 that the United Nations was encouraging research into the carbon cycle, Imperial reported that
4 there was “no doubt” that fossil fuels were aggravating the build-up of CO₂ in the atmosphere and
5 that “[t]echnology exists to remove CO₂ from [fossil fuel power plant] stack gases but removal of
6 only 50% of the CO₂ would double the cost of power generation.” Imperial also reported that its
7 coordination department had been internally evaluating its and Exxon’s products to determine
8 whether disclosure of a human health hazard was necessary. The report notes that Section (8e) of
9 Toxic Substances Control Act, 55 U.S.C. §§ 1601 et seq., requires that anyone who discovers that
10 a material or substance in commercial use is or may be a significant risk to human health must
11 report such findings to the Environmental Protection Agency within 15 days. Although greenhouse
12 gases are human health hazards (because they have serious consequences in terms of global food
13 production, disease virulence, and sanitation infrastructure, among other impacts), neither
14 Imperial, Exxon, nor any other Defendant has ever filed a disclosure with the U.S. Environmental
15 Protection Agency pursuant to the Toxic Substances Control Act.

16 79. Exxon scientist Roger Cohen warned his colleagues in a 1981 internal
17 memorandum that “future developments in global data gathering and analysis, along with advances
18 in climate modeling, may provide strong evidence for a delayed CO₂ effect of a truly substantial
19 magnitude,” and that under certain circumstances it would be “very likely that we will
20 unambiguously recognize the threat by the year 2000.”⁶⁹ Cohen had expressed concern that the
21 memorandum mischaracterized potential effects of reckless CO₂ emissions from Defendants’
22 fossil fuel products: “. . . it is distinctly possible that the . . . [Exxon Planning Division’s] scenario
23 will produce effects which will indeed be catastrophic (at least for a substantial fraction of the
24 world’s population).”⁷⁰

25 _____
26 ⁶⁹ Roger W. Cohen, Exxon Memo to W. Glass about possible “catastrophic” effect of CO₂,
27 Exxon Inter-Office Correspondence (Aug. 18, 1981),
[http://www.climatefiles.com/exxonmobil/1981-exxon-memo-on-possible-emission-](http://www.climatefiles.com/exxonmobil/1981-exxon-memo-on-possible-emission-consequences-of-fossil-fuel-consumption/)
28 [consequences-of-fossil-fuel-consumption/](http://www.climatefiles.com/exxonmobil/1981-exxon-memo-on-possible-emission-consequences-of-fossil-fuel-consumption/).

⁷⁰ Id.

1 80. In 1981, Exxon’s Henry Shaw, the company’s lead climate researcher at the time,
2 prepared a summary of Exxon’s current position on the greenhouse effect for Edward David Jr.,
3 president of Exxon Research and Engineering, stating in relevant part:

- 4 • “Atmospheric CO₂ will double in 100 years if fossil fuels grow at 1.4%/ a².
- 5 • 3°C global average temperature rise and 10°C at poles if CO₂ doubles.
- 6 ○ Major shifts in rainfall/agriculture
- 6 ○ Polar ice may melt”⁷¹

7 81. In 1982, another report prepared for API by scientists at the Lamont-Doherty
8 Geological Observatory at Columbia University recognized that atmospheric CO₂ concentration
9 had risen significantly compared to the beginning of the industrial revolution from about 290 parts
10 per million to about 340 parts per million in 1981 and acknowledged that despite differences in
11 climate modelers’ predictions, all models indicated a temperature increase caused by
12 anthropogenic CO₂ within a global mean range of 4° C (7.2° F). The report advised that there was
13 scientific consensus that “a doubling of atmospheric CO₂ from [] pre-industrial revolution value
14 would result in an average global temperature rise of (3.0 ± 1.5)°C [5.4 ± 2.7° F].” It went further,
15 warning that “[s]uch a warming can have serious consequences for man’s comfort and survival
16 since patterns of aridity and rainfall can change, the height of the sea level can increase
17 considerably and the world food supply can be affected.”⁷² Exxon’s own modeling research
18 confirmed this, and the company’s results were later published in at least three peer-reviewed
19 scientific papers.⁷³

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21
22 ⁷¹ Henry Shaw, Exxon Memo to E. E. David, Jr. about “CO₂Position Statement”, Exxon Inter-
Office Correspondence (May 15, 1981),
23 <https://insideclimatenews.org/sites/default/files/documents/Exxon%20Position%20on%20CO2%20%281981%29.pdf>.

24 ⁷² American Petroleum Institute, Climate Models and CO₂ Warming: A Selective Review and
Summary, Lamont-Doherty Geological Observatory (Columbia University) (March 1982),
25 [https://assets.documentcloud.org/documents/2805626/1982-API-Climate-Models-and-CO2-](https://assets.documentcloud.org/documents/2805626/1982-API-Climate-Models-and-CO2-Warming-a.pdf)
26 [Warming-a.pdf](https://assets.documentcloud.org/documents/2805626/1982-API-Climate-Models-and-CO2-Warming-a.pdf).

27 ⁷³ See Roger W. Cohen, Exxon Memo summarizing findings of research in climate modeling,
Exxon Research and Engineering Company (Sept. 2, 1982),
28 [https://insideclimatenews.org/sites/default/files/documents/%2522Consensus%2522%20on%20](https://insideclimatenews.org/sites/default/files/documents/%2522Consensus%2522%20on%20CO2%20Impacts%20(1982).pdf)
[CO2%20Impacts%20\(1982\).pdf](https://insideclimatenews.org/sites/default/files/documents/%2522Consensus%2522%20on%20CO2%20Impacts%20(1982).pdf) (discussing research articles).

1 82. Also in 1982, Exxon’s Environmental Affairs Manager distributed a primer on
2 climate change to a “wide circulation [of] Exxon management . . . intended to familiarize Exxon
3 personnel with the subject.”⁷⁴ The primer also was “restricted to Exxon personnel and not to be
4 distributed externally.”⁷⁵ The primer compiled science on climate change available at the time, and
5 confirmed fossil fuel combustion as a primary anthropogenic contributor to global warming. The
6 report estimated a CO₂ doubling around 2090 based on Exxon’s long-range modeled outlook. The
7 author warned that the melting of the Antarctic ice sheet could result in global sea level rise of five
8 feet which would “cause flooding on much of the U.S. East Coast, including the State of Florida
9 and Washington, D.C.”⁷⁶ Indeed, it warned that “there are some potentially catastrophic events
10 that must be considered,” including sea level rise from melting polar ice sheets. It noted that some
11 scientific groups were concerned “that once the effects are measurable, they might not be
12 reversible.”⁷⁷

13 83. In a summary of Exxon’s climate modeling research from 1982, Director of
14 Exxon’s Theoretical and Mathematical Sciences Laboratory Roger Cohen wrote that “the time
15 required for doubling of atmospheric CO₂ depends on future world consumption of fossil fuels.”
16 Cohen concluded that Exxon’s own results were “consistent with the published predictions of more
17 complex climate models” and “in accord with the scientific consensus on the effect of increased
18 atmospheric CO₂ on climate.”⁷⁸

19 84. At the fourth biennial Maurice Ewing Symposium at the Lamont-Doherty
20 Geophysical Observatory in October 1982, attended by members of API, Exxon Research and
21

22 ⁷⁴ M. B. Glaser, Exxon Memo to Management about “CO₂ ‘Greenhouse’ Effect”, Exxon
23 Research and Engineering Company (Nov. 12, 1982),
24 <http://insideclimatenews.org/sites/default/files/documents/1982%20Exxon%20Primer%20on%20CO2%20Greenhouse%20Effect.pdf>.

25 ⁷⁵ Id.

26 ⁷⁶ Id.

27 ⁷⁷ Id.

28 ⁷⁸ Roger W. Cohen, Exxon Memo summarizing findings of research in climate modeling, Exxon Research and Engineering Company (September 2, 1982), [https://insideclimatenews.org/sites/default/files/documents/%2522Consensus%2522%20on%20CO2%20Impacts%20\(1982\).pdf](https://insideclimatenews.org/sites/default/files/documents/%2522Consensus%2522%20on%20CO2%20Impacts%20(1982).pdf).

1 Engineering Company president E.E. David delivered a speech titled: “Inventing the Future:
2 Energy and the CO₂ ‘Greenhouse Effect.’”⁷⁹ His remarks included the following statement: “[i]t
3 is ironic that the biggest uncertainties about the CO₂ buildup are not in predicting what the climate
4 will do, but in predicting what people will do.”

5 85. Throughout the early 1980s, at Exxon’s direction, Exxon climate scientist Henry
6 Shaw forecasted emissions of CO₂ from fossil fuel use. Those estimates were incorporated into
7 Exxon’s 21st century energy projections and were distributed among Exxon’s various divisions.
8 Shaw’s conclusions included an expectation that atmospheric CO₂ concentrations would double in
9 2090 per the Exxon model, with an attendant 2.3–5.6° F average global temperature increase. Shaw
10 compared his model results to those of the U.S. EPA, the National Academy of Sciences, and the
11 Massachusetts Institute of Technology, indicating that the Exxon model predicted a longer delay
12 than any of the other models, although its temperature increase prediction was in the mid-range of
13 the four projections.⁸⁰

14 86. During the 1980s, many Defendants formed their own research units focused on
15 climate modeling. The API, including the API CO₂ Task Force, provided a forum for Defendants
16 to share their research efforts and corroborate their findings related to anthropogenic greenhouse
17 gas emissions.⁸¹

18 87. During this time, Defendants’ statements express an understanding of their
19 obligation to consider and mitigate the externalities of reckless promotion, marketing, and sale of
20 their fossil fuel products. For example, in 1988, Richard Tucker, the president of Mobil Oil,
21

22 ⁷⁹ E. E. David, Jr., Inventing the Future: Energy and the CO₂ Greenhouse Effect: Remarks at the
23 Fourth Annual Ewing Symposium, Tenafly, NJ (1982),
<http://sites.agu.org/publications/files/2015/09/ch1.pdf>.

24 ⁸⁰ Neela Banerjee, More Exxon Documents Show How Much It Knew About Climate 35 Years
25 Ago, Inside Climate News (Dec. 1, 2015),
<https://insideclimatenews.org/news/01122015/documents-exxons-early-co2-position-senior-executives-engage-and-warming-forecast>.

26 ⁸¹ Neela Banerjee, Exxon’s Oil Industry Peers Knew About Climate Dangers in the 1970s, Too,
27 Inside Climate News (December 22, 2015),
<https://insideclimatenews.org/news/22122015/exxon-mobil-oil-industry-peers-knew-about-climate-change-dangers-1970s-american-petroleum-institute-api-shell-chevron-texaco>.
28

1 presented at the American Institute of Chemical Engineers National Meeting, the premier
2 educational forum for chemical engineers, where he stated:

3 [H]umanity, which has created the industrial system that has transformed civilities,
4 is also responsible for the environment, which sometimes is at risk because of
5 unintended consequences of industrialization. . . .Maintaining the health of this life-
6 support system is emerging as one of the highest priorities. . . .W]e must all be
7 environmentalists.

8 The environmental covenant requires action on many fronts...the low-atmosphere
9 ozone problem, the upper-atmosphere ozone problem and the greenhouse effect, to
10 name a few. . . .Our strategy must be to reduce pollution before it is ever generated
11 – to prevent problems at the source.

12 Prevention means engineering a new generation of fuels, lubricants and chemical
13 products.... Prevention means designing catalysts and processes that minimize or
14 eliminate the production of unwanted byproducts. . . .Prevention on a global scale
15 may even require a dramatic reduction in our dependence on fossil fuels – and a
16 shift towards solar, hydrogen, and safe nuclear power. It may be possible that – just
17 possible – that the energy industry will transform itself so completely that observers
18 will declare it a new industry. . . .Brute force, low-tech responses and money alone
19 won't meet the challenges we face in the energy industry.⁸²

20 88. In 1987, Shell published an internal “brief for companies of the Royal Dutch/Shell
21 Group” titled “Air pollution: an oil industry perspective.” In this report, the company described
22 the greenhouse effect as occurring “largely as a result of burning fossil fuels and deforestation.”⁸³
23 Shell further acknowledged the “concern that further increases in carbon dioxide levels could cause
24 climatic changes, notably a rise in overall temperature, having major environmental, social and
25 economic consequences.”⁸⁴

26 89. In 1988, the Shell Greenhouse Effect Working Group issued a confidential internal
27 report, “The Greenhouse Effect,” which acknowledged global warming’s anthropogenic nature:
28 “Man-made carbon dioxide, released into and accumulated in the atmosphere, is believed to warm

25 ⁸² Richard E. Tucker, High Tech Frontiers in the Energy Industry: The Challenge Ahead, AIChE
26 National Meeting (Nov. 30, 1988),
<https://hdl.handle.net/2027/pur1.32754074119482?urlappend=%3Bseq=522>.

27 ⁸³ Shell Briefing Service, Air pollution: an oil industry perspective, at 4 (1987),
<https://www.documentcloud.org/documents/24359057-shell-briefing-service-air-pollution-an-oil-industry-perspective-nr1-1987>.

28 ⁸⁴ Id. at 5.

1 the earth through the so-called greenhouse effect.” The authors also noted the burning of fossil
2 fuels as a primary driver of CO2 buildup and warned that warming could “create significant
3 changes in sea level, ocean currents, precipitation patterns, regional temperature and weather.”
4 They further pointed to the potential for “direct operational consequences” of sea level rise on
5 “offshore installations, coastal facilities and operations (e.g. platforms, harbors, refineries,
6 depots).”⁸⁵

7 90. Similar to early warnings by Exxon scientists, the 1988 Shell report noted that “by
8 the time the global warming becomes detectable it could be too late to take effective
9 countermeasures to reduce the effects or even to stabilise the situation.”⁸⁶ The authors mentioned
10 the need to consider policy changes on multiple occasions, noting that “the potential implications
11 for the world are . . . so large that policy options need to be considered much earlier” and that
12 research should be “directed more to the analysis of policy and energy options than to studies of
13 what we will be facing exactly.”⁸⁷

14 91. In 1989, Esso Resources Canada (Exxon) commissioned a report on the impacts of
15 climate change on existing and proposed natural gas facilities in the Mackenzie River Valley and
16 Delta, including extraction facilities on the Beaufort Sea and a pipeline crossing Canada’s
17 Northwest Territory.⁸⁸ It reported that “large zones of the Mackenzie Valley could be affected
18 dramatically by climatic change” and that “the greatest concern in Norman Wells [oil town in
19 North West Territories, Canada] should be the changes in permafrost that are likely to occur under
20 conditions of climate warming.” The report concluded that, in light of climate models showing a
21 “general tendency towards warmer and wetter climate,” operation of those facilities would be
22

23 ⁸⁵ Shell Internationale Petroleum, Greenhouse Effect Working Group, The Greenhouse Effect
24 (May 1988), at 1, 27, available at [https://www.documentcloud.org/documents/4411090-
Document3.html#document/p9/a411239](https://www.documentcloud.org/documents/4411090-Documents3.html#document/p9/a411239).

25 ⁸⁶ Id. at 4.

26 ⁸⁷ Id. at 1, 6.

27 ⁸⁸ Stephen Lonergan and Kathy Young, An Assessment of the Effects of Climate Warming on
28 Energy Developments in the Mackenzie River Valley and Delta, Canadian Arctic, Energy
Exploration & Exploitation, Vol. 7, Issue 5 (Oct. 1, 1989),
<http://journals.sagepub.com/doi/abs/10.1177/014459878900700508>.

1 compromised by increased precipitation, increase in air temperature, changes in permafrost
2 conditions, and significantly, sea level rise and erosion damage.⁸⁹ The authors recommended
3 factoring these eventualities into future development planning and also warned that “a rise in sea
4 level could cause increased flooding and erosion damage on Richards Island.”

5 92. In the mid-1990s, Exxon, Shell and Imperial Oil (Exxon) jointly undertook the
6 Sable Offshore Energy Project in Nova Scotia. The project’s own Environmental Impact Statement
7 declared: “The impact of a global warming sea-level rise may be particularly significant in Nova
8 Scotia. The long-term tide gauge records at a number of locations along the N.S. coast have shown
9 sea level has been rising over the past century For the design of coastal and offshore structures,
10 an estimated rise in water level, due to global warming, of 0.5 m [1.64 feet] may be assumed for
11 the proposed project life (25 years).”⁹⁰

12 93. Climate change research conducted by Defendants and their industry associations
13 frequently acknowledged uncertainties in their climate modeling—those uncertainties, however,
14 were merely with respect to the magnitude and timing of climate impacts resulting from fossil fuel
15 consumption, not that significant changes would eventually occur. The Defendants’ researchers
16 and the researchers at their industry associations harbored little doubt that climate change was
17 occurring and that fossil fuel products were, and are, the primary cause. Despite the overwhelming
18 information about the threats to people and the planet posed by continued use of their fossil fuel
19 products, Defendants failed to act as they reasonably should have to mitigate or avoid those dire
20 adverse impacts. Defendants instead adopted the position, as described below, that they had a
21 license to continue the unfettered pursuit of profits from those products—including by intentionally
22 misleading and deceiving the public regarding these threats. This position was an abdication and
23 contravention of Defendants’ responsibility to consumers and the public, including the County, to
24 act on their unique knowledge of the reasonably foreseeable hazards of reckless promotion and
25 consumption of their fossil fuel products.

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27 ⁸⁹ Id.

28 ⁹⁰ ExxonMobil, Sable Project Development Plan, vol. 3, Environmental Impact Statement (Feb. 1996), at 4-77.

1 94. In 1991, Ken Croasdale, a senior ice researcher for Exxon’s subsidiary Imperial
2 Oil, stated to an audience of engineers that greenhouse gas concentrations are rising “due to the
3 burning of fossil fuels. Nobody disputes this fact.”⁹¹

4 95. Defendants also meticulously examined plausible scenarios if they failed to act in
5 the face of their internal knowledge. For instance, Shell evaluated in a 1989 internal confidential
6 planning document the issue of “climate change – the greenhouse effect, global warming,” which
7 the document identified as “the most important issue for the energy industry.”⁹² The document
8 compared a scenario in which society “addresses the potential problem” with one in which it does
9 not. Acknowledging that “[c]hanging emission levels ... and changing atmospheric CO₂
10 concentration has been likened to turning around a VLCC [very large crude carrier],” even
11 “substantial efforts” by 2010 would have “hardly any impact on CO₂ concentration.” In later years,
12 however, the impacts are “strikingly different;” early efforts “will not prevent the problem arising,
13 but ... could mitigate the problem.” The document described the consequences of failing to address
14 the problem right away:

15 These seem small changes but they mask more dramatic temperature changes which
16 would take place at temperate latitudes. There would be more violent weather –
17 more storms, more droughts, more deluges. Mean sea level would rise at least 30
18 cm. Agricultural patterns would be most dramatically changed. Something as
19 simple as a moderate change in rainfall pattern disrupts eco-systems, and many
20 species of trees, plants, animals and insects would not be able to move and adapt.

21 The changes would, however, most impact on humans. In earlier times, man was
22 able to respond with his feet. Today, there is no place to go because people already
23 stand there. Perhaps those in industrial countries could cope with a rise in sea level
24 (the Dutch examples) but for poor countries such defences are not possible. The
25 potential refugee problem ... could be unprecedented. Africans would push into
26 Europe, Chinese into the Soviet Union, Latins into the United States, Indonesians

25 ⁹¹ Jerving et al., Special Report: What Exxon Knew About Global Warming’s Impact on the
26 Arctic, L.A. Times (Oct. 10, 2015), [https://www.latimes.com/business/la-na-advexxon-arctic-](https://www.latimes.com/business/la-na-advexxon-arctic-20151011-story.html)

27 ⁹² Shell, Scenarios 1989–2010: Challenge and Response (Oct. 1989), at 33,
28 [https://www.documentcloud.org/documents/23735737-1989-oct-confidential-shell-group-](https://www.documentcloud.org/documents/23735737-1989-oct-confidential-shell-group-planning-scenarios-1989-2010-challenge-and-response-disc-climate-refugees-and-shift-to-non-fossil-fuels)
planning-scenarios-1989-2010-challenge-and-response-disc-climate-refugees-and-shift-to-non-
fossil-fuels.

1 into Australia. Boundaries would count for little – overwhelmed by the numbers.
2 Conflicts would abound. Civilization could prove a fragile thing.⁹³

3 96. In another 1989 confidential internal planning document, Shell anticipated that
4 “public/media pressures” to “adopt[] environmental programmes” such as “much tighter targets
5 for CO₂ emissions” could prompt “effective consumer responses” that “will lead to intense and
6 unpredictable pressures on business.”⁹⁴ The scenario envisioned that “[c]oncerns about global
7 warming and depletion will depress production of fossil fuels, their market share declining as
8 renewables are actively promoted,” given that “[w]here there can be real consumer choice it will
9 be a dominant force, especially where interest is heightened by obvious environmental impact.”⁹⁵

10 97. In yet another scenario published in a 1998 internal report, Shell paints an eerily
11 prescient scene:

12 In 2010, a series of violent storms causes extensive damage to the eastern coast of
13 the U.S. Although it is not clear whether the storms are caused by climate change,
14 people are not willing to take further chances. The insurance industry refuses to
15 accept liability, setting off a fierce debate over who is liable: the insurance industry
16 or the government. After all, two successive IPCC reports since 1993 have
17 reinforced the human connection to climate change . . . Following the storms, a
18 coalition of environmental NGOs brings a class-action suit against the US
19 government and fossil-fuel companies on the grounds of neglecting what scientists
(including their own) have been saying for years: that something must be done. A
social reaction to the use of fossil fuels grows, and individuals become ‘vigilante
environmentalists’ in the same way, a generation earlier, they had become fiercely
anti-tobacco. Direct-action campaigns against companies escalate. Young
consumers, especially, demand action.⁹⁶

20 98. Despite the overwhelming information about the threats to people and the planet
21 posed by continued use of their fossil fuel products, Defendants failed to act as they reasonably
22 should have to mitigate or avoid those dire adverse impacts. Defendants instead adopted the
23

24 _____
25 ⁹³ Id. at 36.

26 ⁹⁴ See Shell UK, UK Scenarios 1989 (Nov. 1989), at 31, 34, available at
<https://embed.documentcloud.org/documents/24359062-snippets-of-confidential-shell-uk-november-1989-scenarios>.

27 ⁹⁵ Id. at 34.

28 ⁹⁶ Royal Dutch/Shell Group, Group Scenarios 1998–2020 115, 122 (1998), available at
<http://www.documentcloud.org/documents/4430277-27-1-Compiled.html>.

1 position, as described below, that they had a license to continue the unfettered pursuit of profits
2 from those products—including by intentionally misleading and deceiving the public regarding
3 these threats. This position was an abdication and contravention of Defendants’ responsibility to
4 consumers and the public, including the County, to act on their unique knowledge of the reasonably
5 foreseeable hazards of reckless promotion and sale of their fossil fuel products.

6 **C. Despite Their Early Knowledge That Global Warming Was Real and Posed**
7 **Grave Threats, Defendants Did Not Disclose Known Harms Associated with**
8 **the Extraction, Promotion, and Consumption of Their Fossil Fuel Products**
9 **and Instead Affirmatively Acted to Obscure Those Harms and Engaged in a**
10 **Campaign to Deceptively Protect and Expand the Use of their Fossil Fuel**
11 **Products.**

12 99. Notwithstanding Defendants’ early knowledge of climate change, Defendants have
13 engaged in advertising and communications campaigns intended to promote their fossil fuel
14 products by downplaying the harms and risks of global warming. Initially, the campaigns tried to
15 show that global warming was not occurring. More recently, the campaigns have sought to
16 minimize the risks and harms from global warming. The deception campaigns had the purpose and
17 effect of inflating and sustaining the market for fossil fuels, which—in turn—drove up greenhouse
18 gas emissions, accelerated global warming, delayed the energy economy’s transition to a lower-
19 carbon future, and brought about devastating climate change impacts to Marin County.

20 100. By 1988, Defendants had amassed a compelling body of knowledge about the role
21 of anthropogenic greenhouse gases, and specifically those emitted from the use of Defendants’
22 fossil fuel products, in causing global warming and sea level rise and the attendant consequences
23 for human communities and the environment. On notice that their deception and products were
24 causing global climate change and dire effects on the planet, Defendants were faced with the
25 decision of whether to take steps to limit the damages their fossil fuel products were causing and
26 would continue to cause for virtually every one of Earth’s inhabitants, including the People of the
27 State of California, and the County of Marin and its residents.

28 101. Defendants at any time before or thereafter could and should reasonably have taken
any of a number of steps to mitigate the damage caused by their deception and fossil fuel products,
and their own comments reveal an awareness of what some of these steps may have been. For

1 example, Defendants should have issued reasonable warnings to consumers and the public of the
2 dangers known to Defendants of the consumption of their fossil fuel products. Doing so would
3 have allowed consumers to act sooner and faster to reduce their fossil fuel consumption, and would
4 have stimulated consumer demand for non-carbon energy alternatives whose use does not imperil
5 the Earth’s climate. This process is now stutteringly underway, but was wrongfully delayed by
6 Defendants’ deception and continued downplaying of the reality and severity of climate change—
7 and of fossil fuels’ role in causing it.

8 102. Several key events during the period between 1988 and 1992 prompted Defendants
9 to pivot from researching and discussing climate change internally to affirmatively deceiving
10 consumers and the public about the climatic dangers of fossil fuels. As climate change—and the
11 role of fossil fuels in causing it—became an increasingly prominent concern, Defendants realized
12 that accurate consumer and public understanding of the dangers of fossil fuels would pose a
13 paramount threat to their business model, their assets, and their profits. Key events that precipitated
14 the shift from research to deception included the following:

15 a. In 1988, National Aeronautics and Space Administration (NASA) scientists
16 confirmed that human activities were actually contributing to global warming.⁹⁷ On June 23 of that
17 year, NASA scientist James Hansen’s presentation of this information to Congress engendered
18 significant news coverage and publicity for the announcement, including coverage on the front
19 page of the New York Times.

20 b. On July 28, 1988, Senator Robert Stafford and four bipartisan co-sponsors
21 introduced S. 2666, “The Global Environmental Protection Act,” to regulate CO₂ and other
22 greenhouse gases. Four more bipartisan bills to significantly reduce CO₂ pollution were introduced
23 over the following ten weeks, and in August, U.S. Presidential candidate George H.W. Bush
24 pledged that his presidency would “combat the greenhouse effect with the White House effect.”⁹⁸

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27 ⁹⁷ See Frumhoff et al. (2015), supra note 27, at 161.

28 ⁹⁸ N.Y. Times, The White House and the Greenhouse, May 9, 1998,
<http://www.nytimes.com/1989/05/09/opinion/the-white-house-and-the-greenhouse.html>.

1 Political will in the United States to reduce anthropogenic greenhouse gas emissions and mitigate
2 the harms associated with Defendants' fossil fuel products was gaining momentum.

3 c. In December 1988, the United Nations formed the Intergovernmental Panel
4 on Climate Change (IPCC), a scientific panel dedicated to providing the world's governments with
5 an objective, scientific analysis of climate change and its environmental, political, and economic
6 impacts.

7 d. In 1990, the IPCC published its First Assessment Report on anthropogenic
8 climate change,⁹⁹ in which it concluded that (1) "there is a natural greenhouse effect which already
9 keeps the Earth warmer than it would otherwise be," and (2) that

10 emissions resulting from human activities are substantially increasing the
11 atmospheric concentrations of the greenhouse gases carbon dioxide, methane,
12 chlorofluorocarbons (CFCs) and nitrous oxide. These increases will enhance the
13 greenhouse effect, resulting on average in an additional warming of the Earth's
surface. The main greenhouse gas, water vapour, will increase in response to global
warming and further enhance it.¹⁰⁰

14 The IPCC reconfirmed these conclusions in a 1992 supplement to the First Assessment report.¹⁰¹

15 e. The United Nations began preparation for the 1992 Earth Summit in Rio de
16 Janeiro, Brazil, a major, newsworthy gathering of 172 world governments, of which 116 sent their
17 heads of state. The Summit resulted in the United Nations Framework Convention on Climate
18 Change (UNFCCC), an international environmental treaty providing protocols for future
19 negotiations aimed at "stabiliz[ing] greenhouse gas concentrations in the atmosphere at a level that
20 would prevent dangerous anthropogenic interference with the climate system."¹⁰²

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24 ⁹⁹ See IPCC, Reports,

http://www.ipcc.ch/publications_and_data/publications_and_data_reports.shtml.

25 ¹⁰⁰ IPCC, Climate Change: The IPCC Scientific Assessment, Policymakers Summary (1990),

26 http://www.ipcc.ch/ipccreports/far/wg_I/ipcc_far_wg_I_spm.pdf.

27 ¹⁰¹ IPCC, 1992 IPCC Supplement to the First Assessment Report (1992),

http://www.ipcc.ch/publications_and_data/publications_ipcc_90_92_assessments_far.shtml.

28 ¹⁰² United Nations, United Nations Framework Convention on Climate Change, Article 2 (1992),

<https://unfccc.int/resource/docs/convkp/conveng.pdf>.

1 103. But rather than issuing warnings commensurate with their own understanding of
2 the risks posed by the expected and intended uses of fossil fuel products, Defendants embarked on
3 a decades-long series of campaigns designed to maximize continued dependence on their products.

4 104. Defendants' campaigns, which focused on concealing, discrediting, and/or
5 misrepresenting information that tended to support restricting consumption of (and thereby
6 decreasing demand for) Defendants' fossil fuel products, took several forms. The campaigns
7 enabled Defendants to accelerate their business practice of exploiting fossil fuel reserves, and to
8 concurrently externalize the social and environmental costs of their fossil fuel products. These
9 activities directly contradicted Defendants' own prior internal recognition that the science of
10 anthropogenic climate change was clear and that the greatest uncertainties involved responsive
11 human behavior, not scientific understanding of the issue.

12 105. Defendants—both on their own and jointly through industry and front groups such
13 as API, ICE, and the GCC—funded, conceived, planned, and carried out a sustained and
14 widespread campaign of denial and disinformation about the existence of climate change and their
15 products' contribution to it. The campaign included a long-term pattern of direct
16 misrepresentations and material omissions to consumers, as well as a plan to influence consumers
17 indirectly by affecting public opinion through the dissemination of misleading research to the
18 press, government, and academia. Although Defendants were competitors in the marketplace, they
19 combined and collaborated with each other and with API on this public campaign to misdirect and
20 stifle public knowledge in order to increase sales and protect profits. The effort included promoting
21 hazardous fossil fuel products through advertising campaigns that failed to warn of the existential
22 risks associated with the use of those products, and that were designed to influence consumers to
23 continue using Defendants' fossil fuel products irrespective of those products' damage to
24 communities and the environment.

25 106. In a secretly recorded video from 2021, an Exxon executive stated:

26 Did we aggressively fight against some of the science? Yes.

27 Did we join some of these shadow groups to work against some of the early
28 efforts? Yes, that's true. There's nothing illegal about that.

1 We were looking out for our investments. We were looking out for our
2 shareholders.”¹⁰³

3 107. In 1988, Joseph Carlson, an Exxon public affairs manager, described the “Exxon
4 Position,” which included among others, two important messaging tenets: (1) “[e]mphasize the
5 uncertainty in scientific conclusions regarding the potential enhanced Greenhouse Effect;” and
6 (2) “[r]esist the overstatement and sensationalization [sic] of potential greenhouse effect which
7 could lead to noneconomic development of non-fossil fuel resources.”¹⁰⁴

8 108. Reflecting on his time as an Exxon consultant in the 1980s, Professor Martin
9 Hoffert, a former New York University physicist who researched climate change, expressed regret
10 over Exxon’s “climate science denial program campaign” in his sworn testimony before Congress:

11 [O]ur research [at Exxon] was consistent with findings of the United Nations
12 Intergovernmental Panel on Climate Change on human impacts of fossil fuel
13 burning, which is that they are increasingly having a perceptible influence on
14 Earth’s climate. . . . If anything, adverse climate change from elevated CO₂ is
15 proceeding faster than the average of the prior IPCC mild projections and fully
16 consistent with what we knew back in the early 1980’s at Exxon. . . . I was greatly
17 distressed by the climate science denial program campaign that Exxon’s front office
18 launched around the time I stopped working as a consultant—but not collaborator—
19 for Exxon. The advertisements that Exxon ran in major newspapers raising doubt
20 about climate change were contradicted by the scientific work we had done and
21 continue to do. Exxon was publicly promoting views that its own scientists knew
22 were wrong, and we knew that because we were the major group working on this.¹⁰⁵

22 ¹⁰³ Jeff Brady, Exxon Lobbyist Caught on Video Talking About Undermining Biden’s Climate
23 Push, NPR (July 1, 2021), [https://www.npr.org/2021/07/01/1012138741/exxon-lobbyist-caught-](https://www.npr.org/2021/07/01/1012138741/exxon-lobbyist-caught-on-video-talks-about-undermining-bidens-climate-push)
24 [on-video-talks-about-undermining-bidens-climate-push](https://www.npr.org/2021/07/01/1012138741/exxon-lobbyist-caught-on-video-talks-about-undermining-bidens-climate-push).

24 ¹⁰⁴ Joseph M. Carlson, Exxon Memo on “The Greenhouse Effect” (Aug. 3, 1988), available at
25 [https://assets.documentcloud.org/documents/3024180/1998-Exxon-Memo-on-the-Greenhouse-](https://assets.documentcloud.org/documents/3024180/1998-Exxon-Memo-on-the-Greenhouse-Effect.pdf)
26 [Effect.pdf](https://assets.documentcloud.org/documents/3024180/1998-Exxon-Memo-on-the-Greenhouse-Effect.pdf).

26 ¹⁰⁵ Examining the Oil Industry’s Efforts to Suppress the Truth About Climate Change, Hearing
27 Before the Subcomm. on Civil Rights and Civil Liberties of the Comm. on Oversight and
28 Reform, 116th Cong. 7–8 (Oct. 23, 2019) (statement of Martin Hoffert, Former Exxon
Consultant, Professor Emeritus, Physics, New York University),
[https://oversight.house.gov/legislation/hearings/examining-the-oil-industry-s-efforts-to-suppress-](https://oversight.house.gov/legislation/hearings/examining-the-oil-industry-s-efforts-to-suppress-the-truth-about-climate-change)
[the-truth-about-climate-change](https://oversight.house.gov/legislation/hearings/examining-the-oil-industry-s-efforts-to-suppress-the-truth-about-climate-change).

1 109. Likewise, Shell “shaped a series of influential industry-backed publications that
2 downplayed or omitted key risks; emphasized scientific uncertainties; and pushed for more fossil
3 fuels, particularly coal.”¹⁰⁶ In 1992, for instance, Shell released a publication for wide external
4 distribution purporting to describe the “Basic Scientific Facts” of the “Potential Augmented
5 Greenhouse Effect.”¹⁰⁷ This document downplayed the scientific consensus (that Shell internally
6 acknowledged) by referring to the “relatively few established scientific fundamentals” regarding
7 the causes of climate change.¹⁰⁸ It also misleadingly suggested that a “particular cause” of global
8 warming was “difficult” to identify, even though Shell had identified the use of its products as a
9 significant contributor to the greenhouse effect in the previous decade.¹⁰⁹ (For example, in 1985,
10 a Shell UK environmental scientist had published an article laying out the scientific fact that
11 “[b]urning of fossil fuels which have taken millions of years to form has effectively upset the
12 balance [of the Carbon Cycle] leading to an increase in CO₂ in the atmosphere.”¹¹⁰)

13 110. A 1994 Shell report entitled “The Enhanced Greenhouse Effect: A Review of the
14 Scientific Aspects” similarly emphasized scientific uncertainty, noting, for example, that “the
15 postulated link between any observed temperature rise and human activities has to be seen in
16 relation to natural variability, which is still largely unpredictable.”¹¹¹

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20 ¹⁰⁶ Matthew Green, Lost Decade: How Shell Downplayed Early Warnings Over Climate Change,
21 DESMOG (Mar. 31, 2023), <https://www.desmog.com/2023/03/31/lost-decade-how-shell-downplayed-early-warnings-over-climate-change/>.

22 ¹⁰⁷ Jan Kuyper, Shell Group Planning, Business Environment Occasional Paper, Potential
23 Augmented Greenhouse Effect: Basic Scientific Facts (Sept. 1992), at 3, available at
24 <https://www.documentcloud.org/documents/24359060-1992-internal-shell-group-planning-report-potential-augmented-greenhouse-effect-and-depletion-of-the-ozone-layer>

25 ¹⁰⁸ Id. at 5.

26 ¹⁰⁹ Id.

27 ¹¹⁰ T.G. Wilkinson, Why and How to Control Energy Pollution: Can Harmonisation Work?, 8
28 Conservation & Recycling 7, 19 (1985), available at <https://www.documentcloud.org/documents/24359067-1985-03-why-and-how-to-control-energy-pollution-by-tg-wilkinson-shell>.

¹¹¹ P. Langcake, Shell Internationale Petroleum, The Enhanced Greenhouse Effect: A Review of
the Scientific Aspects (Dec. 1994), available at <https://www.documentcloud.org/documents/4411099-Documet11.html#document/p15/a411511>.

1 111. In 1996, Exxon released a publication called “Global Warming: Who’s Right?
2 Facts about a debate that’s turned up more questions than answers.” In the publication’s preface,
3 Exxon CEO Lee Raymond stated that “taking drastic action immediately is unnecessary since
4 many scientists agree there’s ample time to better understand the climate system.” The subsequent
5 article described the greenhouse effect as “unquestionably real and definitely a good thing,” while
6 ignoring the severe consequences that would result from the influence of the increased CO₂
7 concentration on the Earth’s climate. Instead, it characterized the greenhouse effect as simply
8 “what makes the earth’s atmosphere livable.” Directly contradicting their own internal reports and
9 peer-reviewed science, the article ascribed the rise in temperature since the late 19th century to
10 “natural fluctuations that occur over long periods of time” rather than to the anthropogenic
11 emissions that Exxon and other scientists had confirmed were responsible. The article also falsely
12 challenged the computer models that projected the future impacts of fossil fuel product
13 consumption, including those developed by Exxon’s own employees, as having been “proved to
14 be inaccurate.” The article contradicted the numerous reports circulated among Exxon’s staff, and
15 by API, by stating that “the indications are that a warmer world would be far more benign than
16 many imagine...moderate warming would reduce mortality rates in the US, so a slightly warmer
17 climate would be more healthful.” Raymond concluded his preface by attacking the basis for
18 reducing consumption of his company’s fossil fuel products as “drawing on bad science, faulty
19 logic, or unrealistic assumptions”—despite the important role that Exxon’s own scientists had
20 played in compiling those same scientific underpinnings.¹¹²

21 112. Imperial Oil (Exxon) CEO Robert Peterson falsely denied the established
22 connection between Defendants’ fossil fuel products and anthropogenic climate change in the
23 Summer 1998 Imperial Oil Review, “A Cleaner Canada”:

24 [T]his issue [referring to climate change] has absolutely nothing to do with
25 pollution and air quality. Carbon dioxide is not a pollutant but an essential
26 ingredient of life on this planet.... [T]he question of whether or not the trapping of

27 _____
28 ¹¹² Exxon Corp., Global warming: who’s right? (1996), available at
<https://www.documentcloud.org/documents/2805542-Exxon-Global-Warming-Whos-Right.html>.

1 'greenhouse gases will result in the planet's getting warmer...has no connection
2 whatsoever with our day-to-day weather.

3 There is absolutely no agreement among climatologists on whether or not the planet
4 is getting warmer, or, if it is, on whether the warming is the result of man-made
5 factors or natural variations in the climate...I feel very safe in saying that the view
6 that burning fossil fuels will result in global climate change remains an unproved
7 hypothesis.¹¹³

8 113. Exxon and Mobil (Exxon) paid for a series of "advertorials," advertisements
9 located in the editorial section of the New York Times and meant to look like editorials rather than
10 paid ads. These ads discussed various aspects of the public discussion of climate change and sought
11 to undermine the bases for transitioning away from fossil fuel consumption as unsettled science.
12 For example, the 1993 Mobil advertorial below argued that "what's wrong with so much of the
13 global warming rhetoric" is "[t]he lack of solid scientific data," and quoted a purportedly neutral
14 scientific expert who insisted that "there is a large amount of empirical evidence suggesting that
15 the apocalyptic vision is in error and that the highly touted greenhouse disaster is most
16 improbable."¹¹⁴ It also quoted another purportedly neutral scientist who asserted that "the net
17 impact [of a modest warming] may yet be beneficial."
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25 ¹¹³ Robert Peterson, A Cleaner Canada in Imperial Oil Review (1998), available at
26 [http://www.documentcloud.org/documents/2827818-1998-Imperial-Oil-Robert-Peterson-A-
Cleaner-Canada.html](http://www.documentcloud.org/documents/2827818-1998-Imperial-Oil-Robert-Peterson-A-Cleaner-Canada.html)

27 ¹¹⁴ Mobil, Apocalypse No, N.Y. Times, A19 (Feb. 25, 1993), available at
28 <https://www.documentcloud.org/documents/357243-1993-2-25-mob-nyt-apocalypse-no>.

Apocalypse no

For the first half of 1992, America was inundated by the media with dire predictions of global warming catastrophes, all of which seemed to be aimed at heating up the rhetoric from the Earth Summit in Rio de Janeiro last June.

Unfortunately, the media hype proclaiming that the sky was falling did not properly portray the consensus of the scientific community. After the Earth Summit, there was a noticeable lack of evidence of the sky actually falling and subsequent colder than normal temperatures across the country cooled the warming hysteria as well.

Everybody, of course, remembers the Earth Summit and the tons of paper used up in reporting on it—paper now buried in landfills around the world. But few people ever heard of a major document issued at the same time and called the "Heidelberg Appeal." The reason? It just didn't make "news."

Perhaps that is because the Appeal urged Summit attendees to avoid making important environmental decisions based on "pseudoscientific arguments or false and non-relevant data."

The Heidelberg Appeal was issued initially by some 264 scientists from around the world, including 52 Nobel Prize winners. Today, the Appeal carries the signatures of more than 2,300 scientists—65 of them Nobel Prize winners—from 79 countries. If nothing else, its message is illustrative of what's wrong with so much of the global warming rhetoric. The lack of solid scientific data.

Scientists can agree on certain facts pertaining to global warming. First, the greenhouse effect is a natural phenomenon; it accounts for the moderate temperature that makes our planet habitable. Second, the concentration of greenhouse gases (mainly carbon dioxide) has increased and there has been a slight increase in global temperatures over the past century. Finally, if present trends continue, carbon dioxide levels will double over the next 50 to 100 years.

Controversy arises when trying to link past changes in temperatures to increased concen-

trations of greenhouse gases. And it arises again when climate prediction models are used to conclude Earth's temperature will climb drastically in the next century and—based on such models—to propose policy decisions that could drastically affect the economy.

According to Arizona State University climatologist Dr. Robert C. Balling in his book, *The Heated Debate* (San Francisco: Pacific Research Institute for Public Policy, 1992), until knowledge of the interplay between oceans and the atmosphere improves, "model predictions must be treated with considerable caution." Moreover, models don't simulate the complexity of clouds, nor do they deal adequately with sea ice, snow or changes in intensity of the sun's energy.

And they don't stand up to reality testing. Comparing actual temperatures over the last 100 years against model calculations, the models predicted temperature increases higher than those that actually occurred. Moreover, most of the earth's temperature increase over the last century occurred before 1940. Yet, the real build-up in man-made CO₂ didn't occur until after 1940. Temperatures actually fell between 1940 and 1970.

Sifting through such data, Dr. Balling has concluded, "there is a large amount of empirical evidence suggesting that the apocalyptic vision is in error and that the highly touted greenhouse disaster is most improbable."

Other scientists have an even more interesting viewpoint. Notes atmospheric physicist S. Fred Singer, president of the Washington, D.C.-based Science & Environmental Policy Project, "the net impact [of a modest warming] may well be beneficial."

All of which would seem to suggest that the jury's still out on whether drastic steps to curb CO₂ emissions are needed. It would seem that the phenomenon—and its impact on the economy—are important enough to warrant considerably more research before proposing actions we may later regret.

Perhaps the sky isn't falling, after all.



Figure 6: "Apocalypse no" Advertorial

1 114. The first of those purportedly neutral scientific experts, Robert C. Balling,
2 acknowledged five years after the advertorial ran that he had received \$408,000 in research funding
3 from the fossil fuel industry over the past decade, including from ExxonMobil.¹¹⁵ The second, S.
4 Fred Singer, had previously been funded by tobacco companies to spread doubt about the scientific
5 claim that exposure to second-hand smoke causes cancer.¹¹⁶

6 115. Many other Exxon and Mobil advertorials falsely or misleadingly characterized the
7 state of climate science research to the readership of The New York Times' op-ed page. A sample
8 of these untruthful statements includes:

- 9 • “We don’t know enough about the factors that affect global warming and the
10 degree to which—if any—that man-made emissions (namely, carbon dioxide)
11 contribute to increases in Earth’s temperature.”¹¹⁷
- 12 • “[G]reenhouse-gas emissions, which have a warming effect, are offset by
13 another combustion product—particulates—which leads to cooling.”¹¹⁸
- 14 • “Even after two decades of progress, climatologists are still uncertain how—or
15 even if—the buildup of man-made greenhouse gases is linked to global
16 warming. It could be at least a decade before climate models will be able to link
17 greenhouse warming unambiguously to human actions. Important answers on
18 the science lie ahead.”¹¹⁹
- 19 • “[I]t is impossible for scientists to attribute the recent small surface temperature
20 increases to human causes.”¹²⁰
- 21 • “Within a decade, science is likely to provide more answers on what factors
22 affect global warming, thereby improving our decision-making. We just don’t
23 have this information today. Answers to questions about climate change will

24 ¹¹⁵ DeSmog, Robert C. Balling, Jr., <https://www.desmog.com/robert-c-balling-jr/>.

25 ¹¹⁶ Naomi Oreskes & Erik M. Conway, Merchants of Doubt: How a Handful of Scientists
26 Obscured the Truth on Issues from Tobacco Smoke to Global Warming, Bloomsbury Press 1st
27 ed. 150–54 (2011).

28 ¹¹⁷ Mobil, Climate Change: A Prudent Approach, N.Y. Times (Nov. 13, 1997), available at
[https://www.documentcloud.org/documents/705548-mob-nyt-1997-11-13-
climateprudentapproach.html](https://www.documentcloud.org/documents/705548-mob-nyt-1997-11-13-climateprudentapproach.html).

¹¹⁸ Mobil, Less Heat, More Light on Climate Change, N.Y. Times (July 18, 1996), available at
[https://www.documentcloud.org/documents/705544-mob-nyt-1996-jul-18-
lessheatmorelight.html](https://www.documentcloud.org/documents/705544-mob-nyt-1996-jul-18-lessheatmorelight.html).

¹¹⁹ Mobil, Climate Change: Where We Come Out, N.Y. Times (Nov. 20, 1997), available at
[https://www.documentcloud.org/documents/705549-mob-nyt-1997-11-20-
ccwherewecomeout.html](https://www.documentcloud.org/documents/705549-mob-nyt-1997-11-20-ccwherewecomeout.html).

¹²⁰ ExxonMobil, Unsettled Science (Mar. 23, 2000), reproduced in
[https://www.theguardian.com/environment/2021/nov/18/the-forgotten-oil-ads-that-told-us-
climate-change-was-nothing](https://www.theguardian.com/environment/2021/nov/18/the-forgotten-oil-ads-that-told-us-climate-change-was-nothing).

1 require more reliable measurements of temperature at many places on Earth,
2 better understanding of clouds and ocean currents along with greater computer
3 power.”¹²¹

4 116. A quantitative analysis of ExxonMobil’s climate communications between 1989
5 and 2004 found that, while 83% of the company’s peer-reviewed papers and 80% of its internal
6 documents acknowledged the reality and human origins of climate change, 81% of its advertorials
7 communicated doubt about those conclusions.¹²² ExxonMobil’s tendency to contradict its own
8 peer-reviewed research in statements meant for lay audiences also appeared at a year-to-year scale.
9 Based on this “statistically significant” discrepancy between internal and external
10 communications, the authors concluded that “ExxonMobil misled the public.”¹²³

11 117. Defendants—individually and through API, other trade associations, and various
12 front groups—mounted a deceptive public campaign in order to continue wrongfully promoting
13 and marketing their fossil fuel products, despite their own knowledge and the growing national
14 and international scientific consensus about the hazards of doing so.

15 118. One of the key organizations formed by Defendants to coordinate the fossil fuel
16 industry’s response to the world’s growing awareness of climate change was the International
17 Petroleum Industry Environmental Conservation Association (“IPIECA”). In 1987, the IPIECA
18 formed a “Working Group on Global Climate Change” chaired by Duane LeVine, Exxon’s
19 manager for science and strategy development. The Working Group also included Brian Flannery
20 from Exxon, Leonard Bernstein from Mobil, Terry Yosie from API, and representatives from BP,
21 Shell, and Texaco (Chevron). In 1990, the Working Group sent a strategy memo created by LeVine
22 to hundreds of oil companies around the world, including Defendants. This memo explained that,

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25 ¹²¹ Mobil, Science: What We Know and Don’t Know (1997), reproduced in
26 <https://www.theguardian.com/environment/2021/nov/18/the-forgotten-oil-ads-that-told-us-climate-change-was-nothing>.

27 ¹²² Geoffrey Supran & Naomi Oreskes, Assessing ExxonMobil’s Climate Change
28 Communications (1977–2014), 12 Envtl. Research Letters, IOP Publishing Ltd. 12 (2017),
<https://iopscience.iop.org/article/10.1088/1748-9326/aa815f/pdf>.

¹²³ Id.

1 to forestall a global shift away from burning fossil fuels for energy, the industry should emphasize
2 uncertainties in climate science.¹²⁴

3 119. In 1991, for example, the Information Council for the Environment (“ICE”), whose
4 members included affiliates, predecessors and/or subsidiaries of Defendants, including Pittsburg
5 and Midway Coal Mining (Chevron), and Island Creek Coal Company (Occidental), launched a
6 national climate change science denial campaign with full-page newspaper ads, radio commercials,
7 a public relations tour schedule, “mailers,” and research tools to measure campaign success.
8 Included among the campaign strategies was to “reposition global warming as theory (not fact).”
9 Its target audience included older less-educated males who are “predisposed to favor the ICE
10 agenda, and likely to be even more supportive of that agenda following exposure to new info.”¹²⁵

11 120. An implicit goal of ICE’s advertising campaign was to change public opinion. A
12 memo from Richard Lawson, president of the National Coal Association noted that “[p]ublic
13 opinion polls reveal that 60% of the American people already believe global warming is a serious
14 environmental problem. Our industry cannot sit on the sidelines in this debate.”¹²⁶

15 121. The following images are examples of ICE-funded print advertisements
16 challenging the validity of climate science, which sought to obscure the scientific consensus on
17 anthropogenic climate change in order to inflate consumer demand for fossil fuels:¹²⁷

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23 ¹²⁴ Benjamin A. Franta, Big Carbon’s Strategic Response to Global Warming, 1950–2020, at 140
(2022), <https://purl.stanford.edu/hq437ph9153>.

24 ¹²⁵ Id.

25 ¹²⁶ Naomi Oreskes, My Facts Are Better Than Your Facts: Spreading Good News about Global
26 Warming (2010), in Peter Howlett et al., How Well Do Facts Travel?: The Dissemination of
Reliable Knowledge, 136-166. Cambridge University Press.
doi:10.1017/CBO9780511762154.008.8

27 ¹²⁷ Union of Concerned Scientists, Deception Dossier #5: Coal’s “Information Council on the
28 Environment” Sham, 47–49 (1991), http://www.ucsusa.org/sites/default/files/attach/2015/07/Climate-Deception-Dossier-5_ICE.pdf.



Figure 7: ICE Advertisements

122. The Global Climate Coalition (“GCC”), on behalf of Defendants and other fossil fuel companies, spent millions of dollars on deceptive advertising campaigns and misleading material to discredit climate science and generate public uncertainty around the climate debate, and thereby inflate consumer demand for fossil fuels.¹²⁸ The GCC operated between 1989 and 2001. Its founding members included Defendants Exxon, Shell, Phillips Petroleum Company (ConocoPhillips), and API. Defendants BP and Chevron also participated as members of the GCC. William O’Keefe, former president of the GCC, was also a former executive of API.¹²⁹ GCC’s position on climate change contradicted decades of its members’ internal scientific reports by asserting that natural trends, not human combustion of fossil fuels, was responsible for rising global temperatures:

The GCC believes that the preponderance of the evidence indicates that most, if not all, of the observed warming is part of [a] natural warming trend which began approximately 400 years ago. If there is an anthropogenic component to this

¹²⁸ Id.

¹²⁹ Jeff Nesmith, Industry Promotes Skeptical View of Global Warming, Cox News Service (May 28, 2003), <http://www.heatisonline.org/contentserver/objecthandlers/index.cfm?ID=4450&Method=Full>.

1 observed warming, the GCC believes that it must be very small and must be
2 superimposed on a much larger natural warming trend.¹³⁰

3 123. The GCC's promotion of overt climate change skepticism also contravened its
4 internal assessment that such theories lacked scientific support. In December 1995, the GCC's
5 Science and Technology Advisory Committee ("GCC-STAC"), whose members included
6 employees of Mobil Oil Corporation (an Exxon predecessor) and API, drafted a primer on the
7 science of global warming for GCC members. The primer concluded that the GCC's contrarian
8 theories "do not offer convincing arguments against the conventional model of greenhouse gas
9 emission-induced climate change." However, the GCC excluded this section from the publicly
10 released version of the report.¹³¹ Nonetheless, for years afterward, the GCC and its members
11 continued to tout their contrarian theories about global warming, even though the GCC had
12 admitted internally these arguments were invalid. Between 1989 and 1998, the GCC spent \$13
13 million on one ad campaign to obfuscate the public's understanding of climate science and
14 undermine its trust in climate scientists.¹³² For example, the GCC distributed a video to hundreds
15 of journalists, which claimed that carbon dioxide emissions would increase crop production and
16 feed the hungry people of the world.¹³³

17 124. In a 1994 report, the GCC stated that "observations have not yet confirmed
18 evidence of global warming that can be attributed to human activities," and that "[t]he claim that
19 serious impacts from climate change have occurred or will occur in the future simply has not been
20

21 _____
22 ¹³⁰ Global Climate Coalition, Global Climate Coalition: An Overview 2 (Nov. 1996),
23 <http://www.climatefiles.com/denial-groups/global-climatecoalition-collection/1996-global-climate-coalition-overview/>.

24 ¹³¹ Memorandum from Gregory J. Dana, Assoc. of Int'l Auto. Mfrs., to AIAM Technical
25 Committee, Global Climate Coalition (GCC) - Primer on Climate Change Science - Final Draft
(Jan. 18, 1996), <http://www.webcitation.org/6FyqHawb9>.

26 ¹³² Wendy E. Franz, Kennedy School of Government, Harvard University, Science, Skeptics and
27 Non-State Actors in the Greenhouse, ENRP Discussion Paper E-98-18 13 (Sept. 1998),
<https://www.belfercenter.org/sites/default/files/legacy/files/Science%20Skeptics%20and%20Non-State%20Actors%20in%20the%20Greenhouse%20-%20E-98-18.pdf>.

28 ¹³³ Global Climate Coalition, http://www.sourcewatch.org/index.php/Global_Climate_Coalition
(last edited Dec. 25, 2019).

1 proven.”¹³⁴ In 1994, GCC Board of Directors was composed of high-level executives from API,
2 Exxon, Phillips Petroleum Company (ConocoPhillips), and Texaco (Chevron). Representatives
3 from Shell, Amoco (BP), and BP were also GCC members at that time.¹³⁵ In 1995, the GCC
4 published a booklet called “Climate Change: Your Passport to the Facts,” which stated, “While
5 many warnings have reached the popular press about the consequences of a potential man-made
6 warming of the Earth’s atmosphere during the next 100 years, there remains no scientific evidence
7 that such a dangerous warming will actually occur.”¹³⁶ In 1995, GCC’s Board of Directors
8 included high-level executives from Texaco (Chevron), API, ARCO, and Phillips Petroleum
9 Company.¹³⁷

10 125. In 1997, William O’Keefe, chairman of the GCC and executive vice president of
11 API, falsely wrote in a *Washington Post* op-ed, “[c]limate scientists don’t say that burning oil, gas,
12 and coal is steadily warming the earth.”¹³⁸ This statement contradicted the established scientific
13 consensus as well as Defendants’ own knowledge. Yet Defendants did nothing to correct the public
14 record, and instead continued to fund the GCC’s anti-scientific climate skepticism.

15 126. In addition to publicly spreading false and misleading information about the climate
16 science consensus, the GCC also sought to undermine credible climate science from within the
17 IPCC. After becoming a reviewer of IPCC’s Second Assessment Report in 1996, the GCC used
18 its position to accuse the convening author of a key chapter in the Report of modifying its
19

20 ¹³⁴ GCC, Issues and Options: Potential Global Climate Change (1994),
21 [http://www.climatefiles.com/denial-groups/global-climate-coalition-collection/1994-potential-
22 global-climate-change-issues](http://www.climatefiles.com/denial-groups/global-climate-coalition-collection/1994-potential-global-climate-change-issues).

23 ¹³⁵ 1994 GCC Board Member List and Background Information, Climate Investigations Center,
24 [https://www.climatefiles.com/denial-groups/global-climate-coalition-collection/1994-board-
25 member-list-general-info/](https://www.climatefiles.com/denial-groups/global-climate-coalition-collection/1994-board-member-list-general-info/).

26 ¹³⁶ GCC, Climate Change: Your Passport to the Facts, Climate Files (1995),
27 [http://www.climatefiles.com/denial-groups/global-climate-coalition-collection/1995-climate-
28 change-facts-passport](http://www.climatefiles.com/denial-groups/global-climate-coalition-collection/1995-climate-change-facts-passport).

29 ¹³⁷ 1995 GCC IRS 1024 and Attachments, Climate Investigations Center (1995),
30 <https://www.documentcloud.org/documents/5798254-GCC-IRS-1023#document/p17>

31 ¹³⁸ William O’Keefe, A Climate Policy, *The Washington Post* (July 5, 1997),
32 [https://www.washingtonpost.com/archive/opinions/1997/07/05/a-climate-policy/6a11899a-c020-
33 4d59-a185-b0e7eebf19cc/](https://www.washingtonpost.com/archive/opinions/1997/07/05/a-climate-policy/6a11899a-c020-4d59-a185-b0e7eebf19cc/).

1 conclusions. The GCC claimed that the author, climatologist Ben Santer, had engaged in
2 “scientific cleansing” that “understate[d] uncertainties about climate change causes and effect . . .
3 to increase the apparent scientific support for attribution of changes to climate to human
4 activities.”¹³⁹ The GCC also arranged to spread the accusation among reporters, editors of
5 scientific journals, and even the op-ed page of the Wall Street Journal.¹⁴⁰ This effort “was widely
6 perceived to be an attempt on the part of the GCC to undermine the credibility of the IPCC.”¹⁴¹

7 127. In the late 1990s, Defendants shifted away from openly denying anthropogenic
8 warming toward peddling a subtler form of climate change skepticism. Defendants became
9 alarmed by the significant legal judgments Big Tobacco now faced as a result of decades spent
10 publicly denying the health risks of smoking cigarettes, with a Shell employee explaining that the
11 company “didn’t want to fall into the same trap as the tobacco companies who have become
12 trapped in all their lies.”¹⁴² Defendants began to shift their communications strategy, claiming they
13 had accepted climate science all along.¹⁴³ Several large fossil fuel companies, including BP and
14 Shell, left the GCC (although all Defendants remained members of API).¹⁴⁴ At this point in time,
15 Defendants publicly claimed to accept the reality that the climate is changing (or Earth is warming)
16 and that climate change is anthropogenic.

17 128. Despite their shift in official public messaging, Defendants surreptitiously
18 continued to organize and fund programs designed to deceive the public about the weight and
19 veracity of the climate science consensus. In 1998, API convened a Global Climate Science
20 Communications Team (“GCSCCT”) whose members included representatives from Exxon,
21
22

23 ¹³⁹ Franz (1998), supra note 132, at 14.

24 ¹⁴⁰ Naomi Oreskes & Erik Conway, Merchants of Doubt: How a Handful of Scientists Obscured
25 the Truth on Issues from Tobacco Smoke to Global Warming, New York: Bloomsbury Press
26 205–13 (2011). See also S. Fred Singer, Climate Change and Consensus, Science vol. 271, no.
5249 (Feb. 2, 1996); Frederick Seitz, A Major Deception on 'Global Warming', Wall Street
Journal (June 12, 1996).

27 ¹⁴¹ Franz (1998), supra note 132, at 15.

28 ¹⁴² Nathaniel Rich, Losing Earth: A Recent History, London: Picador 186 (2020).

¹⁴³ Franta (2022), supra note 134, at 170.

¹⁴⁴ Id. at 177.

1 Chevron, and API.¹⁴⁵ There were no scientists on the “Global Climate Science Communications
2 Team.” Steve Milloy (a key player in the tobacco industry’s front group) and his organization, The
3 Advancement of Sound Science Coalition (“TASSC”), were founding members of the GCSCCT.
4 TASSC was a fake grassroots citizen group created by the tobacco industry to sow uncertainty by
5 discrediting the scientific link between exposure to second-hand cigarette smoke and increased
6 rates of cancer and heart disease. Philip Morris had launched TASSC on the advice of its public
7 relations firm, which advised Philip Morris that the tobacco company itself would not be a credible
8 voice on the issue of smoking and public health. TASSC, through API and with the approval of
9 Defendants, also became a front group for the fossil fuel industry, beyond its role in GCSCCT, using
10 the same tactics it had honed while operating on behalf of tobacco companies to spread doubt
11 about climate science. Although TASSC posed as a grassroots group of concerned citizens, it
12 received significant funding from Defendants. For example, between 2000 and 2004, Exxon
13 donated \$50,000 to Milloy’s Advancement of Sound Science Center; and an additional \$60,000 to
14 the Free Enterprise Education Institute and \$50,000 to the Free Enterprise Action Institute, both of
15 which were registered to Milloy’s home address.¹⁴⁶ The GCSCCT, including TASSC, represented a
16 continuation of Defendants’ concerted actions to sow doubt and confusion about climate change
17 in order to inflate consumer demand for fossil fuels.

18 129. The GCSCCT continued Defendants’ efforts to expand the market for fossil fuels by
19 convincing the public that the scientific basis for climate change was in doubt. The multi-million-
20 dollar, multi-year plan, among other elements, sought to: (a) “[d]evelop and implement a national
21 media relations program to inform the media about uncertainties in climate science to generate
22

23 ¹⁴⁵ In 1998, the GCC Board included executives from API, Amoco (BP), Chevron, Exxon, Mobil
24 (Exxon), and Texaco (Chevron); and CEOs from ARCO (BP) and Amoco (BP) were on the
25 executive committee for API’s Board of Directors, and high-level executives from
26 ConocoPhillips, ARCO, Anadarko, Marathon, BP, Shell, Chevron, Citgo, and Exxon also served
as Board members; see 1998 GCC Membership, Climate Investigations Center (1998), available
at [https://www.climatefiles.com/denial-groups/global-climate-coalition-collection/1998-
membership/](https://www.climatefiles.com/denial-groups/global-climate-coalition-collection/1998-membership/).

27 ¹⁴⁶ Union of Concerned Scientists, Smoke, Mirrors & Hot Air: How ExxonMobil Uses Big
28 Tobacco’s Tactics to Manufacture Uncertainty on Climate Science (July 16, 2007),
<https://www.ucsusa.org/resources/smoke-mirrors-hot-air>.

1 national, regional, and local media coverage on the scientific uncertainties”; (b) “[d]evelop a
2 global climate science information kit for media including peer-reviewed papers that undercut the
3 ‘conventional wisdom’ on climate science”; (c) “[p]roduce . . . a steady stream of op-ed columns”;
4 and (d) “[d]evelop and implement a direct outreach program to inform and educate members of
5 Congress . . . and school teachers/students about uncertainties in climate science”¹⁴⁷—a blatant
6 attempt to deceive consumers and the general public in order to ensure a continued and unimpeded
7 market for their fossil fuel products.

8 130. Exxon, Chevron, and API directed and contributed to the development of the plan,
9 which plainly set forth the criteria by which the contributors would know when their efforts to
10 manufacture doubt had been successful. “Victory,” they wrote, “will be achieved when . . . average
11 citizens ‘understand’ (recognize) uncertainties in climate science” and “recognition of
12 uncertainties becomes part of the ‘conventional wisdom.’”¹⁴⁸ In other words, the plan was part of
13 Defendants’ goal to use disinformation to plant doubt about the reality of climate change in an
14 effort to maintain consumer demand for their fossil fuel products and their large profits.

15 131. In furtherance of these strategies, Defendants made misleading statements to
16 consumers about climate change, the relationship between climate change and their fossil fuel
17 products, and the urgency of the problem. Defendants made these statements in public fora and in
18 advertisements published in newspapers and other media with substantial circulation to California,
19 including national publications such as The New York Times, The Wall Street Journal, and The
20 Washington Post.

21 132. Another key strategy in Defendants’ efforts to discredit scientific consensus on
22 climate change and the IPCC was to bankroll scientists who, although accredited, held fringe
23 opinions that were even more questionable given the sources of their research funding. These
24 scientists obtained part or all of their research budget from Defendants directly or through

26 ¹⁴⁷ Email from Joe Walker to Global Climate Science Team, Draft Global Climate Science
27 Communications Plan (Apr. 3, 1998), available at
[https://assets.documentcloud.org/documents/784572/api-global-climate-science-](https://assets.documentcloud.org/documents/784572/api-global-climate-science-communications-plan.pdf)
28 [communications-plan.pdf](https://assets.documentcloud.org/documents/784572/api-global-climate-science-communications-plan.pdf).

¹⁴⁸ Id.

1 Defendant-funded organizations like API,¹⁴⁹ but they frequently failed to disclose their fossil fuel
2 industry underwriters.¹⁵⁰ During the early- to mid-1990s, Exxon directed some of this funding to
3 Dr. Fred Seitz, Dr. Fred Singer, and/or Seitz and Singer’s Science and Environmental Policy
4 Project (“SEPP”) in order to launch repeated attacks on mainstream climate science and IPCC
5 conclusions, even as Exxon scientists participated in the IPCC.¹⁵¹ Seitz, Singer, and SEPP had
6 previously been paid by the tobacco industry to create doubt in the public mind about the hazards
7 of smoking.¹⁵² Seitz and Singer were not climate scientists.

8 133. At least one industry-funded scientist, Dr. Wei-Hock Soon, contractually agreed to
9 allow donors to review his research before publication, and his housing institution agreed not to
10 disclose the funding arrangement without prior permission from his fossil fuel donors.¹⁵³ Between
11 2001 and 2012, various fossil fuel interests, including Exxon and API, paid Soon over \$1.2
12 million.¹⁵⁴ “Dr. Soon, in correspondence with his corporate funders, described many of his
13 scientific papers as ‘deliverables’ that he completed in exchange for their money.”¹⁵⁵ His
14 Defendant-funded research includes articles in scientific journals accusing the IPCC of overstating
15 the negative environmental effects of carbon dioxide emissions and arguing that the sun is
16 responsible for recent climate trends. Soon was also the lead author of a 2003 article that argued
17 that the climate had not changed significantly. The article was widely promoted by other denial
18

19 _____
20 ¹⁴⁹ Willie Soon and Sallie Baliunas, Proxy Climatic and Environmental Changes of the Past 1000
21 Years, *Climate Research* 23, 88-110 (Jan. 31, 2003), <http://www.int-res.com/articles/cr2003/23/c023p089.pdf>.

22 ¹⁵⁰ Newsdesk, Smithsonian Statement: Dr. Wei-Hock (Willie) Soon, *Smithsonian* (Feb. 26,
23 2015), <http://newsdesk.si.edu/releases/smithsonian-statement-dr-wei-hock-willie-soon>.

24 ¹⁵¹ Union of Concerned Scientists (2007), supra note 146.

25 ¹⁵² http://www.sourcewatch.org/index.php/S._Fred_Singer; http://www.sourcewatch.org/index.php/Frederick_Seitz.

26 ¹⁵³ Union of Concerned Scientists, Climate Deception Dossier #1: Dr. Wei-Hock Soon’s
27 Smithsonian Contracts (July 2015), [https://www.ucsusa.org/sites/default/files/attach/2015/07/](https://www.ucsusa.org/sites/default/files/attach/2015/07/The-Climate-Deception-Dossiers.pdf)
28 [The-Climate-Deception-Dossiers.pdf](https://www.ucsusa.org/sites/default/files/attach/2015/07/The-Climate-Deception-Dossiers.pdf) [<https://perma.cc/JL2V-XYGL>].

¹⁵⁴ Justin Gillis & John Schwartz, Deeper Ties to Corporate Cash for Doubtful Climate
Researcher, *N.Y. Times* (Feb. 21, 2015), [https://www.nytimes.com/2015/02/22/us/ties-to-](https://www.nytimes.com/2015/02/22/us/ties-to-corporate-cash-for-climate-change-researcher-Wei-Hock-Soon.html?mcubz=1)
[corporate-cash-for-climate-change-researcher-Wei-Hock-Soon.html?mcubz=1](https://www.nytimes.com/2015/02/22/us/ties-to-corporate-cash-for-climate-change-researcher-Wei-Hock-Soon.html?mcubz=1).

¹⁵⁵ Id.

1 groups funded by Exxon, including via “Tech Central Station,” a website supported by Exxon.¹⁵⁶
2 Soon published other bogus “research” in 2009, attributing global warming to solar activity, for
3 which Exxon paid him \$76,106.¹⁵⁷ This 2009 grant was made several years after Exxon had
4 publicly committed not to fund global warming deniers.¹⁵⁸

5 134. Defendants intended for the papers of authors they funded to be distributed to and
6 relied on by consumers when buying Defendants’ products, including by consumers in Marin.

7 135. Defendants have also funded dozens of think tanks, front groups, lobbyists, and
8 dark money foundations pushing climate change denial. These include the Competitive Enterprise
9 Institute, the Heartland Institute, Frontiers for Freedom, Committee for a Constructive Tomorrow,
10 and Heritage Foundation. From 1998 to 2014, ExxonMobil spent almost \$31 million funding
11 numerous organizations misrepresenting the scientific consensus that Defendants’ fossil fuel
12 products were causing climate change, sea level rise, and injuries to Marin, among other coastal
13 communities.¹⁵⁹

14 136. Philip Cooney, an attorney at API from 1996 to 2001, testified at a 2007
15 Congressional hearing that it was “typical” for API to fund think tanks and advocacy groups that
16 minimized fossil fuels’ role in causing climate change.¹⁶⁰

17 137. Creating a false sense of disagreement in the scientific community (despite the
18 consensus that its own scientists, experts, and managers had previously acknowledged) has had an
19 evident impact on public opinion. A 2007 Yale University-Gallup poll found that while 71% of
20 Americans personally believed global warming was happening, only 48% believed that there was

21 _____
22 ¹⁵⁶ Union of Concerned Scientists (2007), supra note 146, at 13–14.

23 ¹⁵⁷ Willie Soon FOIA Grants Chart 02 08 2011, Greenpeace, (Jan 28, 2011)
<https://www.documentcloud.org/documents/682765-willie-soon-foia-grants-chart-02-08-2011.html>.

24 ¹⁵⁸ http://www.socialfunds.com/shared/reports/1211896380_ExxonMobil_2007_Corporate_Citizenship_Report.pdf.

25 ¹⁵⁹ ExxonSecrets.org, ExxonMobil Climate Denial Funding 1998–2014,
26 <http://exxonsecrets.org/html/index.php>.

27 ¹⁶⁰ Allegations of Political Interference with Government Climate Change Science: Hearing
28 Before the Comm. on Oversight and Government Reform, 110th Cong. 324 (Mar. 19, 2007)
(statement of Philip A. Cooney), <https://www.govinfo.gov/content/pkg/CHRG-110hhrg37415/html/CHRG-110hhrg37415.htm>).

1 a consensus among the scientific community, and 40% believed there was a lot of disagreement
2 among scientists over whether global warming was occurring.¹⁶¹ Eight years later, a 2015 Yale-
3 George Mason University poll found that “[o]nly about one in ten Americans understands that
4 nearly all climate scientists (over 90%) are convinced that human-caused global warming is
5 happening, and just half . . . believe a majority do.”¹⁶² Further, it found that 33% of Americans
6 believe that climate change is mostly due to natural causes, compared to the 97% of peer-reviewed
7 papers that acknowledge that global warming is real and at least partly human-caused.¹⁶³ The lack
8 of progress, and even regress, in the public understanding of climate science over this period—
9 during which Defendants professed to accept the conclusions of mainstream climate science—
10 testifies to the success of Defendants’ deception campaign in thwarting dissemination of accurate
11 scientific expertise to the public regarding the effects fossil fuel consumption.

12 138. Defendants by and through their trade association memberships, worked directly,
13 and often in a deliberately obscured manner, to conceal and misrepresent fossil fuel products’
14 known dangers from consumers, the public, and Plaintiffs.

15 139. Beginning in 2015, journalists began to uncover mounting evidence of Defendants’
16 campaign of deception. In September 2015, journalists at Inside Climate News reported that, as
17 far back as the 1970s, Exxon had sophisticated knowledge of the causes and consequences of
18 climate change and of the role its products played in contributing to climate change.¹⁶⁴

19 140. Between October and December 2015, several journalists at the Energy and
20 Environment Reporting Project at Columbia University’s Graduate School of Journalism and the
21 Los Angeles Times also exposed the fact that, as far back as the 1970s, Exxon and other members

22
23 ¹⁶¹ American Opinions on Global Warming: A Yale/Gallup/Clearvision Poll, Yale Program on
Climate Change Communication (July 31, 2007),
24 <http://climatecommunication.yale.edu/publications/american-opinions-on-global-warming/>

25 ¹⁶² Leiserowitz et al., Climate Change in the American Mind, Yale Program on Climate Change
Comm. & Geo. Mason U., Ctr. for Climate Change Comm eds. (Oct. 2015),
26 [https://climatecommunication.yale.edu/wp-content/uploads/2015/11/Climate-Change-American-
Mind-October-20151.pdf](https://climatecommunication.yale.edu/wp-content/uploads/2015/11/Climate-Change-American-Mind-October-20151.pdf).

27 ¹⁶³ Id. at 7.

28 ¹⁶⁴ Neela Banerjee et al., Exxon: The Road Not Taken, Inside Climate News,
<https://insideclimatenews.org/project/exxon-the-road-not-taken/>.

1 of the fossil fuel industry had superior knowledge of the causes and consequences of climate
2 change and the role their products played in causing it.¹⁶⁵

3 141. In November 2017, the Center for International Environmental Law issued a report
4 revealing that Defendants, including API, had superior knowledge of the causes and consequences
5 of climate change and the role fossil fuel products played in causing it as early as the 1970s.¹⁶⁶

6 142. In September 2023, the Wall Street Journal reported that Exxon worked “behind
7 closed doors” to sow public doubt about climate change. The article was based on “documents
8 reviewed by the Journal, which haven’t been previously reported.”¹⁶⁷

9 **D. Defendants Could Have Chosen to Facilitate, and Be Part of, a Lower-Carbon**
10 **Future, but Instead Chose Corporate Profits and Continued Deception**

11 143. Defendants could have contributed to the global effort to mitigate the impacts of
12 greenhouse gas emissions by, for example issuing warnings commensurate with their own
13 understanding of the risks posed by the expected and intended uses of their fossil fuel products.
14 Instead, Defendants undertook a momentous effort to deceive consumers and the public about the
15 existential hazards of burning fossil fuels– all with the purpose and effect of perpetuating and
16 hyperinflating fossil fuel consumption and delaying the advent of alternative energy sources not
17 based on fossil fuels.

18 144. As a result of Defendants’ tortious, false and misleading conduct, consumers of
19 Defendants’ fossil fuel products in Marin County as elsewhere, have been deliberately and
20 unnecessarily deceived about: the role of fossil fuel products in causing global warming, sea level
21 rise; disruptions to the hydrologic cycle, and increased extreme precipitation, heat waves, and other
22 consequences of the climate crisis; the acceleration of global warming since the mid-twentieth
23

24 ¹⁶⁵ The Los Angeles Times published a series of three articles between October and December
25 2015.

26 ¹⁶⁶ Carol Muffett & Steven Feit, Smoke and Fumes: The Legal and Evidentiary Basis for
27 Holding Big Oil Accountable for the Climate Crisis, Center for Int’l Env’t L. (2017),
28 <https://www.ciel.org/reports/smoke-and-fumes>.

¹⁶⁷ Christopher M. Matthews & Collin Eaton, Inside Exxon’s Strategy to Downplay Climate
Change, The Wall Street J. (Sept. 14, 2023), <https://www.wsj.com/business/energy-oil/exxon-climate-change-documents-e2e9e6af>.

1 century and the continuation thereof; and the fact that the continued increase in fossil fuel
2 consumption creates severe environmental threats and significant economic costs for coastal
3 communities, including Marin County. Consumers and the public in Marin and elsewhere have
4 also been deceived about the depth and breadth of the state of the scientific evidence on
5 anthropogenic climate change, and in particular about the strength of the scientific consensus
6 demonstrating the role of fossil fuels in causing both climate change and a wide range of potentially
7 destructive impacts, including sea level rise, disruptions to the hydrologic cycle, extreme
8 precipitation, heat waves, and associated consequences.

9 145. By sowing doubt about the future consequences of unrestricted fossil fuel
10 consumption, Defendants' deception campaign successfully delayed the transition to alternative
11 energy sources, which Defendants forecasted could penetrate half of a competitive energy market
12 in 50 years if allowed to develop unimpeded. This delay caused emission of huge amounts of
13 avoidable greenhouse gases, thereby ensuring that the damage caused by climate change will be
14 substantially more severe than if Defendants had acted forthrightly, commensurate with their
15 internal knowledge of climate risks.

16 **E. In Contrast to Their Denial and Downplaying the Risks of Climate Change in**
17 **Public, Defendants' Internal Actions Demonstrate Their Awareness of and**
18 **Intent to Profit from Uses of Fossil Fuel Products They Knew Were**
Hazardous.

19 146. In contrast to their public-facing efforts challenging the validity of the scientific
20 consensus about anthropogenic climate change, Defendants' acts and omissions evidence their
21 internal acknowledgement of the reality of climate change and its likely consequences. Those
22 actions include, but are not limited to, making multi-billion-dollar infrastructure investments for
23 their own operations that acknowledge the reality of coming anthropogenic climate-related change.
24 Those investments included (among others), raising offshore oil platforms to protect against sea
25 level rise; reinforcing offshore oil platforms to withstand increased wave strength and storm
26 severity; developing technology and infrastructure to extract, store, and transport fossil fuels in a
27 warming arctic environment; and developing and patenting designs for equipment intended to
28

1 extract crude oil and/or natural gas in areas previously unreachable because of the presence of
2 polar ice sheets.

3 147. For example, oil and gas reserves in the Arctic that were not previously reachable
4 due to sea ice are becoming increasingly reachable as sea ice thins and melts due to climate
5 change.¹⁶⁸ In 1973 Exxon obtained a patent for a cargo ship capable of breaking through sea ice¹⁶⁹
6 and for an oil tanker¹⁷⁰ designed specifically for use in previously unreachable areas of the Arctic.

7 148. In 1974, Chevron obtained a patent for a mobile arctic drilling platform designed
8 to withstand significant interference from lateral ice masses,¹⁷¹ allowing for drilling in areas with
9 increased ice floe movement due to elevated temperature.

10 149. That same year, Texaco (Chevron) worked toward obtaining a patent for a method
11 and apparatus for reducing ice forces on a marine structure prone to being frozen in ice through
12 natural weather conditions,¹⁷² allowing for drilling in previously unreachable Arctic areas that
13 would become seasonally accessible.

14 150. Shell obtained a patent for an Arctic offshore platform adapted for conducting
15 operations in the Beaufort Sea in 1984.¹⁷³

16 151. In 1989, Norske Shell, Royal Dutch Shell's Norwegian subsidiary, altered designs
17 for a natural gas platform planned for construction in the North Sea to account for anticipated sea
18
19
20

21 ¹⁶⁸ Henderson & Loe, The Prospects and Challenges for Arctic Oil Development, Oxford
22 Institute for Energy Studies at 1 (Nov. 2014), <https://www.oxfordenergy.org/publications/the-prospects-and-challenges-for-arctic-oildevelopment/>.

23 ¹⁶⁹ Patents, Icebreaking cargo vessel, Exxon Research Engineering Co. (April 17, 1973),
24 <https://www.google.com/patents/US3727571>.

25 ¹⁷⁰ Patents, Tanker vessel, Exxon Research Engineering Co. (July 17, 1973),
26 <https://www.google.com/patents/US3745960>.

27 ¹⁷¹ Patents, Arctic offshore platform, Chevron Res (Aug. 27, 1974),
28 <https://www.google.com/patents/US3831385>.

¹⁷² Patents, Mobile, arctic drilling and production platform, Texaco Inc. (Feb. 26, 1974),
<https://www.google.com/patents/US3793840>.

¹⁷³ Shell Oil Co. Patent US4427320A, Arctic offshore platform, Shell Oil Co. (granted Jan. 24,
1984), <https://www.google.com/patents/US4427320>.

1 level rise. Those design changes were ultimately carried out by Shell’s contractors, adding
2 substantial costs to the project.¹⁷⁴

3 a. The Troll field, off the Norwegian coast in the North Sea, was proven to
4 contain large natural oil and gas deposits in 1979, shortly after Norske Shell was approved by
5 Norwegian oil and gas regulators to operate a portion of the field.

6 b. In 1986, the Norwegian parliament granted Norske Shell authority to
7 complete the first development phase of the Troll field gas deposits, and Norske Shell began
8 designing the “Troll A” gas platform, with the intent to begin operation of the platform in
9 approximately 1995. Based on the very large size of the gas deposits in the Troll field, the Troll A
10 platform was projected to operate for approximately 70 years.

11 c. The platform was originally designed to stand approximately 100 feet above
12 sea level—the amount necessary to stay above waves in a once-in-a-century strength storm.

13 d. In 1989, Shell engineers revised their plans to increase the above-water
14 height of the platform by 3 to 6 feet, specifically to account for higher anticipated average sea
15 levels and increased storm intensity due to global warming over the platform’s 70-year operational
16 life.¹⁷⁵

17 e. Shell projected that the additional 3 to 6 feet of above-water construction
18 would increase the cost of the Troll A platform by as much as \$40 million.

19 **F. Defendants’ Actions Have Slowed the Development of Alternative Energy**
20 **Sources and Exacerbated the Costs of Adapting to and Mitigating the Adverse**
21 **Impacts of the Climate Crisis.**

22 152. As greenhouse gas pollution accumulates in the atmosphere, some of which does
23 not dissipate for potentially thousands of years (namely CO₂), climate changes and consequent
24 adverse environmental changes compound, and their frequencies and magnitudes increase. As

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26 ¹⁷⁴ Greenhouse Effect: Shell Anticipates A Sea Change, N.Y. Times (December 20, 1989),
27 [http://www.nytimes.com/1989/12/20/business/greenhouse-effect-shell-anticipates-a-sea-
change.html](http://www.nytimes.com/1989/12/20/business/greenhouse-effect-shell-anticipates-a-sea-change.html).

28 ¹⁷⁵ Id.; Amy Lieberman & Suzanne Rust, Big Oil braced for global warming while it fought
regulations, L.A. Times (December 31, 2015), <http://graphics.latimes.com/oil-operations/>.

1 those adverse environmental changes compound and their frequencies and magnitudes increase,
2 so too do the physical, environmental, economic, and social injuries resulting therefrom.

3 153. Delayed societal development and adoption of alternative energy sources have
4 therefore increased environmental harms and increased the magnitude and cost to remediate harms
5 that have already occurred or are locked in by previous emissions. Therefore, Defendants’
6 campaign to obscure the science of climate change and to expand the use of fossil fuels greatly
7 increased and continues to increase the harms and rate of harms suffered by Plaintiffs. Had market
8 demand to transition away from fossil fuels—and for affordable, reliable sources of clean energy—
9 developed earlier, the subsequent impacts of climate change could have been avoided or mitigated.

10 154. Defendants have been aware for decades that clean energy presents a feasible
11 alternative to fossil fuels. In 1980, Exxon forecasted that non-fossil fuel energy sources, if pursued,
12 could penetrate half of a competitive energy market in approximately 50 years.¹⁷⁶ This internal
13 estimate was based on extensive modeling within the academic community, including research
14 conducted by the Massachusetts Institute of Technology’s David Rose, which concluded that a
15 transition to non-fossil energy could be achieved in around 50 years. Exxon circulated an internal
16 memo approving of Rose’s conclusions, stating they were “based on reasonable assumptions.”¹⁷⁷
17 But instead of pursuing a clean energy transition or warning consumers about the dangers of
18 burning fossil fuels, Defendants chose to deceive consumers to preserve Defendants’ profits and
19 assets. As a result, much time has been lost during which consumers and market forces would have
20 spurred a societal transition away from fossil fuels, which would have reduced or eliminated
21 entirely the harmful effects of climate change in Marin.

22 155. The costs of inaction and the opportunities to confront anthropogenic climate
23
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25 ¹⁷⁶ Shaw & McCall, Exxon Research and Engineering Company’s Technological Forecast: CO₂
26 Greenhouse Effect, at 5 (Dec. 18, 1980), available at <https://www.climatefiles.com/exxonmobil/1980-exxon-memo-on-the-co2-greenhouse-effect-andcurrent-programs-studying-the-issue/>.

27 ¹⁷⁷ Exxon Research and Engineering Company, Coordination and Planning Division, CO₂
28 Greenhouse Effect: A Technical Review, at 17–18 (Apr. 1, 1982), available at <https://www.climatefiles.com/exxonmobil/1982-memo-to-exxon-management-about-co2-greenhouse-effect/>.

1 change and sea level rise caused by normal consumption of their fossil fuel products, were not lost
2 on Defendants. In a 1997 speech by John Browne, Group Executive for BP America, at Stanford
3 University, Browne described Defendants' and the entire fossil fuel industry's responsibility and
4 opportunities to reduce use of fossil fuel products, reduce global CO₂ emissions, and mitigate the
5 harms associated with the use and consumption of such products:

6 A new age demands a fresh perspective of the nature of society and responsibility.

7 We need to go beyond analysis and to take action. It is a moment for change and
8 for a rethinking of corporate responsibility. . . .

9 [T]here is now an effective consensus among the world's leading scientists and
10 serious and well informed people outside the scientific community that there is a
11 discernible human influence on the climate, and a link between the concentration
of carbon dioxide and the increase in temperature.

12 The prediction of the IPCC is that over the next century temperatures might rise by
13 a further 1 to 3.5 degrees centigrade [1.8° – 6.3° F], and that sea levels might rise
14 by between 15 and 95 centimetres [5.9 and 37.4 inches]. Some of that impact is
probably unavoidable, because it results from current emissions. . . .

15 [I]t would be unwise and potentially dangerous to ignore the mounting concern.

16 The time to consider the policy dimensions of climate change is not when the link
17 between greenhouse gases and climate change is conclusively proven . . . but when
18 the possibility cannot be discounted and is taken seriously by the society of which
we are part. . . .

19 We [the fossil fuel industry] have a responsibility to act, and I hope that through
20 our actions we can contribute to the much wider process which is desirable and
necessary.

21 BP accepts that responsibility and we're therefore taking some specific steps.

22 To control our own emissions.

23 To fund continuing scientific research.

24 To take initiatives for joint implementation.

25 To develop alternative fuels for the long term.

26 And to contribute to the public policy debate in search of the wider global answers
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28

1 to the problem.”¹⁷⁸

2 156. Despite Defendants’ knowledge of the foreseeable, measurable harms associated
3 with the sale and use of their fossil fuel products, and despite the existence and Defendants’
4 knowledge of technologies and practices that could have helped to reduce the foreseeable dangers
5 associated with their fossil fuel products, Defendants continued to misleadingly market and
6 promote heavy fossil fuel use and conceal the connection between use of their products and the
7 climate crisis, dramatically increasing the cost of abatement. This campaign was intended to and
8 did reach and influence Marin consumers, along with consumers elsewhere.

9 157. At all relevant times, Defendants were deeply familiar with opportunities to reduce
10 the use of their fossil fuel products, reduce global CO₂ emissions associated therewith, and mitigate
11 the harms associated with the use and consumption of such products. Examples of that recognition
12 include, but are not limited to the following:

13 a. In 1961, Phillips Petroleum Company filed a patent application for a method
14 to purify gas, among other things, as “natural gas containing gasoline hydrocarbons can contain
15 undesirable amounts of sulfur and other compounds such as carbon dioxide which are undesirable
16 in the finished gasoline product.”¹⁷⁹

17 b. In 1963, Esso (Exxon) obtained multiple patents on technologies for fuel
18 cells, including on the design of a fuel cell and necessary electrodes,¹⁸⁰ and on a process for
19 increasing the oxidation of a fuel, specifically methanol, to produce electricity in a fuel cell.¹⁸¹

20 c. In 1970, Esso (Exxon) obtained a patent for a “low-polluting engine and
21 drive system” that used an interburner and air compressor to reduce pollutant emissions, including
22 CO₂ emissions, from gasoline combustion engines (the system also increased the efficiency of the
23

24 ¹⁷⁸ John Browne, BP Climate Change Speech to Stanford, Climate Files (May 19, 1997),
<http://www.climatefiles.com/bp/bp-climate-change-speech-to-stanford/>.
25 ¹⁷⁹ Phillips Petroleum Co., Patent US3228874A: Method for recovering a purified component
from a gas (filed Aug. 22, 1961), <https://patents.google.com/patent/US3228874>.
26 ¹⁸⁰ Patents, Fuel cell and fuel cell electrodes, Exxon Research Engineering Co. (Dec. 31, 1963),
27 <https://www.google.com/patents/US3116169>.
28 ¹⁸¹ Patents, Direct production of electrical energy from liquid fuels, Exxon Research Engineering
Co. (Dec. 3, 1963), <https://www.google.com/patents/US3113049>.

1 fossil fuel products used in such engines, thereby lowering the amount of fossil fuel product
2 necessary to operate engines equipped with this technology).¹⁸²

3 d. In 1980, Imperial Oil wrote in its “Review of Environmental Protection
4 Activities for 1978–79”: “There is no doubt that increases in fossil fuel usage and decreases in
5 forest cover are aggravating the potential problem of increased CO₂ in the atmosphere. Technology
6 exists to remove CO₂ from stack gases but removal of only 50% of the CO₂ would double the cost
7 of power generation.”¹⁸³

8 e. A 1987 company briefing produced by Shell on “Synthetic Fuels and
9 Renewable Energy” noted that while “immediate prospects” were “limited,” “nevertheless it is by
10 pursuing commercial opportunities now and in the near future that the valuable experience needed
11 for further development will be gained.” The brief also noted that “the task of replacing oil
12 resources is likely to become increasingly difficult and expensive and there will be a growing need
13 to develop lean, convenient alternatives. Initially these will supplement and eventually replace
14 valuable oil products. Many potential energy options are as yet unknown or at very early stages of
15 research and development. New energy sources take decades to make a major global contribution.
16 Sustained commitment is therefore needed during the remainder of this century to ensure that new
17 technologies and those currently at a relatively early stage of development are available to meet
18 energy needs in the next century.”¹⁸⁴

19 f. A 1989 article in a publication from Exxon Corporate Research for
20 company use only stated: “CO₂ emissions contribute about half the forcing leading to a potential
21 enhancement of the Greenhouse Effect. Since energy generation from fossil fuels dominates
22 modern CO₂ emissions, strategies to limit CO₂ growth focus near term on energy efficiency and
23 long term on developing alternative energy sources. Practiced at a level to significantly reduce the
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25 ¹⁸² Patents, Low-polluting engine and drive system, Exxon Research Engineering Co. (May 16,
1970), <https://www.google.com/patents/US3513929>.

26 ¹⁸³ Imperial Oil Ltd., Review of Environmental Protection Activities for 1978–1979 2 (Aug. 6,
1980), [http://www.documentcloud.org/documents/2827784-1980-Imperial-Oil-Review-of-
27 Environmental.html#document/p2](http://www.documentcloud.org/documents/2827784-1980-Imperial-Oil-Review-of-Environmental.html#document/p2).

28 ¹⁸⁴ Synthetic Fuels and Renewable Energy, Shell Service Briefing, no. 2, 1987,
<https://assets.documentcloud.org/documents/4411089/Document2.pdf>.

1 growth of greenhouse gases, these actions would have substantial impact on society and our
2 industry—near-term from reduced demand for current products, long term from transition to
3 entirely new energy systems.”¹⁸⁵

4 158. Defendants could have taken other practical, cost-effective steps to reduce the risk
5 created by their fossil fuel products and marketing. These alternatives could have included, among
6 other measures:

7 a. Accepting scientific evidence on the validity of anthropogenic climate
8 change and the damages it will cause people and communities, including Plaintiffs, and the
9 environment. Mere acceptance of that information would have altered the debate from *whether* to
10 combat climate change and sea level rise to *how* to combat it; and avoided much of the public
11 confusion that has ensued over nearly 30 years, since at least 1988;

12 b. Forthrightly communicating with Defendants’ shareholders, consumers,
13 banks, insurers, and Plaintiffs about the climate change-related hazards of Defendants’ fossil fuel
14 products that were known to Defendants, would have enabled those groups to make material,
15 informed decisions about whether and how to address climate change and sea level rise vis-à-vis
16 Defendants’ products;

17 c. Refraining from affirmative efforts, whether directly, through coalitions, or
18 through front groups, to distort consumer awareness of the climatic dangers of fossil fuels, and to
19 cause many consumers and business leaders to think the relevant science was far less certain than
20 it actually was; and

21 d. Sharing their internal scientific research with the public, and with other
22 scientists and business leaders, so as to increase public understanding of the scientific
23 underpinnings of climate change its relation to Defendants’ fossil fuel products.

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27 ¹⁸⁵ Brian Flannery, Greenhouse Science, Connections: Corporate Research, Exxon Research and
28 Engineering Company (Fall 1989), <http://www.climatefiles.com/exxonmobil/1989-exxon-mobil-article-technologys-place-marketing-mix>.

1 **G. Defendants Intended for Consumers to Use Their Fossil Fuel Products in a**
2 **Way Defendants Knew Was Harmful.**

3 159. Consumer use of fossil fuel products, particularly by driving gasoline-powered cars
4 and other vehicles, is a significant contributor to climate change. However, as a result of
5 Defendants' sustained and widespread campaign of disinformation, many Marin County
6 consumers have been unaware of the magnitude of the threat posed by their use of fossil fuels, or
7 of the relationship between their purchasing behavior and climate change.

8 160. Defendants have been aware for decades that clean energy presents a feasible
9 alternative to their fossil fuel products. In 1980, Exxon forecasted that non-fossil fuel energy
10 sources, if pursued, could penetrate half of a competitive energy market in approximately 50
11 years.¹⁸⁶ This internal estimate was based on extensive modeling within the academic community,
12 including research conducted by MIT's David Rose which concluded that a transition to non-fossil
13 energy could be achieved in around 50 years. Exxon circulated an internal memo approving of
14 Rose's conclusions, stating they were "based on reasonable assumptions."¹⁸⁷ But instead of
15 pursuing a clean energy transition or warning the public about the dangers of burning fossil fuels,
16 Defendants chose to deceive consumers to preserve their profits and assets.

17 161. By misleading Marin County consumers about the climate impacts of using fossil
18 fuel products, even to the point of claiming that certain of their products may benefit the
19 environment, and by failing to disclose the climate risks associated with their purchase and use of
20 those products, Defendants have deprived and are continuing to deprive consumers of information
21 about the consequences of their purchasing decisions.

22 162. Defendants intended for Marin County consumers to rely on their omissions and
23 concealments and to continue purchasing Defendants' fossil fuel products without regard for the
24 damage such products cause.

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¹⁸⁶ H. Shaw & P. P. McCall, Exxon Research and Engineering Company's Technological
Forecast: CO2 Greenhouse Effect 5 (Dec. 18, 1980).

28 ¹⁸⁷ CO2 Greenhouse Effect: A Technical Review, Coordination and Planning Division, Exxon
Research and Engineering Company 18 (Apr. 1, 1982).

1 163. Knowledge of the risks associated with the routine use of fossil fuel products is
2 material to Marin County consumers’ decisions to purchase and use those products. As with
3 cigarettes, history demonstrates that when consumers are made aware of the harmful effects or
4 qualities of the products they purchase, they often choose to stop purchasing them, to reduce their
5 purchases, or to make different purchasing decisions. This phenomenon holds especially true when
6 products have been shown to harm public health or the environment. For example, increased
7 consumer awareness of the role of pesticides in harming human health, worker health, and the
8 environment has spurred a growing market for food grown organically and without the use of
9 pesticides. With access to information about how their food is grown, consumers have demanded
10 healthier choices, and the market has responded.

11 164. A consumer who received accurate information that fossil fuel use was a primary
12 driver of climate change, and about the resultant dangers to the environment and to public health,
13 might have decreased the consumer’s use of fossil fuel products and/or demanded lower-carbon
14 transportation options. Indeed, recent studies and surveys have found that consumers with
15 substantial awareness of climate change are largely willing “to change their consumption habits .
16 . . . to help reduce the impacts of climate change.”¹⁸⁸ If consumers were aware of what the
17 Defendants knew about climate change when the Defendants knew it, consumers might have opted
18 to avoid or minimize airplane travel; avoid or combine car travel trips; carpool; switch to more
19 fuel-efficient vehicles, hybrid vehicles, or electric vehicles; demand more charging infrastructure
20 for electric vehicles; use a car-sharing service; seek transportation alternatives all or some of the
21 time, if and when available (e.g., public transportation, biking, or walking); or adopt any
22 combination of these choices. In addition, informed consumers often attempt to contribute toward

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27 ¹⁸⁸ The Conference Board, Changes in Consumers’ Habits Related to Climate Change May
28 Require New Marketing and Business Models (Oct. 26, 2022), <https://www.conference-board.org/topics/consumers-attitudes-sustainability/changes-in-consumer-habits-related-to-climate-change>.

1 solving environmental problems by supporting companies that they perceive to be developing
2 “green” or more environmentally friendly products.¹⁸⁹

3 165. As described herein, by casting doubt upon the scientific consensus on climate
4 change, Defendants deceived consumers about the relationship between consumption of fossil
5 fuels and climate change, and the magnitude of the threat posed by fossil fuel use. Consumers
6 equipped with complete and accurate knowledge about the climate and the public health effects of
7 continued consumption of fossil fuels would have likely formed a receptive customer base for
8 clean energy alternatives decades before such demand in fact developed. Instead, Defendants’
9 campaign of deception allowed them to exploit public uncertainty to reap substantial profits.

10 166. The delayed emergence of a scalable market for non-fossil fuel energy is
11 attributable to consumers’ industry-induced ignorance of the reality and severity of the climatic
12 consequences associated with normal use of fossil fuels. The societal transition to a low-carbon
13 economy would have been far cheaper and more efficient had Defendants publicly acknowledged
14 the conclusions reached by their own scientists and the broader scientific community. As a result
15 of this delay, huge quantities of avoidable greenhouse gas emissions have been released into the
16 atmosphere, causing greater total emissions, higher peak emissions, and all associated climatic
17 effects.

18 **H. Defendants’ Deceit Only Recently Came to Light, and Their Misconduct Is**
19 **Ongoing.**

20 167. The fact that Defendants and their proxies knowingly provided incomplete and
21 misleading information to the public, including Marin County consumers, only recently became
22 discoverable due to, among other things:

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25 ¹⁸⁹ See, e.g., Leiserwitz et al., Program on Climate Change Communication, Yale University,
26 Center for Climate Change Communication, George Mason University, Consumer Activism on
27 Global Warming (Sept. 2021), [https://climatecommunication.yale.edu/wp-](https://climatecommunication.yale.edu/wp-content/uploads/2021/12/consumer-activism-onglobal-warming-september-2021.pdf)
28 [content/uploads/2021/12/consumer-activism-onglobal-warming-september-2021.pdf](https://climatecommunication.yale.edu/wp-content/uploads/2021/12/consumer-activism-onglobal-warming-september-2021.pdf). About a
third of American consumers surveyed report “reward[ing] companies that are taking steps to
reduce global warming by buying their products” and “punish[ing] companies that are opposing
steps to reduce global warming by not buying their products” (*id.* at 3).

1 a. Defendants’ above-described deception campaigns, which continue to this
2 day;

3 b. Defendants’ concealment and misrepresentations regarding the fact that
4 their products cause catastrophic harms; and

5 c. the fact that Defendants used front groups such as API, the Global Climate
6 Coalition, and the National Mining Association to obscure their involvement in these actions,
7 which put Plaintiffs off the trail of inquiry.

8 168. Moreover, Defendants’ tortious misconduct—in the form of misrepresentations,
9 omissions, and deceit—began decades ago and continues to this day. Now, rather than engaging
10 in outright denials of the existence of climate change, Defendants deflect attention from their role
11 in causing climate change by falsely portraying fossil fuel products as environmentally friendly,
12 climate-friendly, or otherwise less environmentally damaging than those products really are.

13 169. Defendants have continued to mislead the public about the impact of fossil fuel
14 products on climate change through “greenwashing.” Through recent advertising campaigns and
15 public statements in California and/or intended to reach California, including but not limited to
16 online advertisements and social media posts, Defendants falsely and misleadingly portray these
17 products as “green,” and the Defendants portray themselves as climate-friendly energy companies
18 that are deeply engaged in finding solutions to climate change. In reality, Defendants continue to
19 primarily invest in, develop, promote, and profit from fossil fuel products and heavily market those
20 products to consumers, with full knowledge that those products will continue to exacerbate climate
21 change harms.

22 170. Defendants’ greenwashing exploits Marin County consumers’ concerns about
23 climate change and their desire to purchase “green” products and spend their consumer dollars on
24 products and businesses that are taking substantial and effective measures to combat climate
25 change. Defendants’ false advertisements are likely to mislead Marin County consumers by giving
26 the impression that in purchasing the Defendants’ fossil fuel products, consumers are supporting
27 genuine, substantial, and effective measures to mitigate climate change through these companies’
28 alleged investments in clean energy. Defendants’ greenwashing ultimately attempts to persuade

1 Marin County consumers to support Defendants’ purported attempts to contribute to climate
2 change solutions by purchasing and consuming these products, including the Defendants’ fossil
3 fuel products.

4 171. As described above, Defendants, directly and/or through membership in other
5 organizations, continue to misrepresent their own activities, the fact that their products cause
6 climate change, and the danger presented by climate change. Exemplars of Defendants’ continuing
7 misrepresentations, omissions, and deceit follow below.

8 172. As recently as June 2018, a post on the official Shell blog stated: “the potential
9 extent of change in the climate itself could now be limited. In other words, the prospect of runaway
10 climate change might have passed.”¹⁹⁰ However, this statement is not supported by valid scientific
11 research, and was and is contradicted by various studies.¹⁹¹

12 173. In March 2018, Chevron issued a report entitled “Climate Change Resilience: A
13 Framework for Decision Making,” which misleadingly stated that “[t]he IPCC Fifth Assessment
14 Report concludes that there is warming of the climate system and that warming is due in part to
15 human activity.”¹⁹² In reality, the Fifth Assessment report concluded that “[i]t is *extremely likely*
16 [defined as 95–100% probability] that human influence has been the *dominant cause* of the
17 observed warming since the mid-20th century.”¹⁹³

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20 ¹⁹⁰ David Hone, Has Climate Change Run Its Course??, Shell Climate Change Blog (June 14,
21 2018), <https://blogs.shell.com/2018/06/14/has-climate-change-run-its-course>.

22 ¹⁹¹ See, e.g., Fiona Harvey, Carbon Emissions from Warming Soils Could Trigger Disastrous
23 Feedback Loop, The Guardian (Oct. 5, 2017), [https://www.theguardian.com/environment/2017/](https://www.theguardian.com/environment/2017/oct/05/carbon-emissions-warming-soils-higher-than-estimated-signalling-tipping-points)
24 [oct/05/carbon-emissions-warming-soils-higher-than-estimated-signalling-tipping-points](https://www.theguardian.com/environment/2017/oct/05/carbon-emissions-warming-soils-higher-than-estimated-signalling-tipping-points);
25 Jonathan Watts, Domino-Effect of Climate Events Could Move Earth into a ‘Hothouse’ State,
The Guardian (Aug. 7, 2018), [https://www.theguardian.com/environment/2018/aug/06/domino-](https://www.theguardian.com/environment/2018/aug/06/domino-effect-of-climate-events-could-push-earth-into-a-hothouse-state)
26 [effect-of-climate-events-could-push-earth-into-a-hothouse-state](https://www.theguardian.com/environment/2018/aug/06/domino-effect-of-climate-events-could-push-earth-into-a-hothouse-state); Fiona Harvey, ‘Tipping Points’
27 Could Exacerbate Climate Crisis, Scientists Fear, The Guardian (Oct. 9, 2018),
28 [https://www.theguardian.com/environment/2018/oct/09/tipping-points-could-exacerbate-climate-](https://www.theguardian.com/environment/2018/oct/09/tipping-points-could-exacerbate-climate-crisis-scientists-fear)
[crisis-scientists-fear](https://www.theguardian.com/environment/2018/oct/09/tipping-points-could-exacerbate-climate-crisis-scientists-fear).

¹⁹² Chevron, Climate Change Resilience: A Framework for Decision Making 20 (Mar. 2018),
<https://www.chevron.com/-/media/shared-media/documents/climate-change-resilience.pdf>.

¹⁹³ IPCC, Summary for Policymakers: Working Group I Contribution to the Fifth Assessment
Report 17 (2013), https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5_SPM_FINAL.pdf.

1 174. Despite this fact, in April 2017, Chevron CEO and Chairman of the Board John
2 Watson said on a podcast, “There’s no question there’s been some warming; you can look at the
3 temperatures data and see that. The question and debate is around how much, and how much is
4 caused by humans.”¹⁹⁴

5 175. Similarly, ConocoPhillips’s “Climate Change Position” as it appeared on the
6 company’s website through 2020 stated that human activity is “contributing to” climate change
7 and emphasizes “uncertainties,” even though the science is clear: “ConocoPhillips recognizes that
8 human activity, including the burning of fossil fuels, is contributing to increased concentrations of
9 greenhouse gases in the atmosphere that can lead to adverse changes in global climate. . . . While
10 uncertainties remain, we continue to manage greenhouse gas emissions in our operations and to
11 integrate climate change related activities and goals into our business planning.”¹⁹⁵

12 176. On May 27, 2015, at Exxon’s annual shareholder meeting, then-CEO Rex Tillerson
13 misleadingly downplayed global warming’s risks by stating that climate models used to predict
14 future impacts were unreliable: “What if everything we do it turns out our models are lousy, and
15 we don’t get the effects we predict? Mankind has this enormous capacity to deal with adversity,
16 and those solutions will present themselves as those challenges become clear.”¹⁹⁶ But as noted
17 above, in 1982 Exxon’s scientific staff stated, based upon the climate models, that there was a
18 “clear scientific consensus” with respect to the level of projected future global warming and
19 starting shortly thereafter Exxon relied upon the projections of climate models, including its own
20 climate models, in order to protect its own business assets. Tillerson’s statement reached
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23 ¹⁹⁴ Columbia Energy Exchange Podcast, John Watson, CEO, Chevron (Apr. 10, 2017),
24 <https://www.energypolicy.columbia.edu/us-energy-markets-policy>.

25 ¹⁹⁵ ConocoPhillips, Climate Change Position (Oct. 28, 2020),
26 <https://web.archive.org/web/20201028115814/https://www.conocophillips.com/sustainability/integrating-sustainability/sustainable-development-governance/policies-positions/climate-change-position/>.

27 ¹⁹⁶ Dallas Morning News, Exxon CEO: Let’s Wait for Science to Improve Before Solving
28 Problem of Climate Change (May 27, 2015),
<https://www.dallasnews.com/business/energy/2015/05/28/exxon-ceo-let-s-wait-for-science-to-improve-before-solving-problem-of-climate-change>.

1 consumers because it was reported in the press, including in California,¹⁹⁷ as is common when
2 fossil fuel company CEOs make statements regarding climate change and as Exxon had reason to
3 know would occur.

4 177. Until approximately early 2017, Exxon’s website continued to emphasize the
5 “uncertainty” of global warming science and impacts: “current scientific understanding provides
6 limited guidance on the likelihood, magnitude, or time frame” of events like temperature extremes
7 and sea level rise.¹⁹⁸ Exxon’s insistence on crystal-ball certainty was clear misdirection, since
8 Exxon knew that the fundamentals of climate science were well settled and showed global
9 warming to present a clear and present danger.¹⁹⁹

10 178. Until approximately early 2016, API’s website referred to global warming as
11 “possible man-made warming” and claimed that the human contribution is “uncertain.” API
12 removed this statement from its website in 2016 when journalistic investigations called attention
13 to API’s misleading statements on global warming and its participation in the climate change Task
14 Force during the late 1970s and early 1980s.

15 179. Defendants bombard the public and consumers with the following advertisements,
16 although these are a mere sliver of Defendants’ extensive campaigns. Defendants’ advertisements
17 must be understood in their proper context—as following Defendants’ substantial early knowledge
18 on global warming risks and impacts, and following a decades-long campaign of misleading
19 statements on global warming that primed the pump for massive use of their fossil fuel products.

20 a. Exxon’s “Lights Across America” website advertisement states that natural
21 gas is “helping dramatically reduce America’s emissions”²⁰⁰ even though natural gas is a fossil
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23 ¹⁹⁷ See, e.g., David Koenig, Exxon shareholders to vote on climate change, fracking, San Diego
24 Union-Tribune, May 27, 2015, [http://www.sandiegouniontribune.com/news/2015/may/27/exxon-
shareholders-to-vote-on-climate-change/](http://www.sandiegouniontribune.com/news/2015/may/27/exxon-shareholders-to-vote-on-climate-change/)

25 ¹⁹⁸ Formerly found at [http://corporate.exxonmobil.com/en/current-issues/climate-policy/meeting-
global-needs/managing-climate-change-business-risks](http://corporate.exxonmobil.com/en/current-issues/climate-policy/meeting-global-needs/managing-climate-change-business-risks).

26 ¹⁹⁹ See IPCC, Climate Change 2014, Impacts, Adaptation, and Vulnerability, Summary for
27 Policymakers, http://www.ipcc.ch/pdf/assessment-report/ar5/wg2/ar5_wgII_spm_en.pdf.

28 ²⁰⁰ [https://www.youtube.com/watch?v=tMu1CBjXfq4&list=PLIrXIHj7zayYGaExfTp_
B4t6gqTtkGf9A&index=6](https://www.youtube.com/watch?v=tMu1CBjXfq4&list=PLIrXIHj7zayYGaExfTp_B4t6gqTtkGf9A&index=6) (at 0:46).

1 fuel causing widespread planetary warming and harm to coastal cities like Marin County and the
2 use of natural gas competes with wind and solar, which have no greenhouse gas emissions.

3 b. In 2017, Shell’s CEO promoted massive fossil fuel use by stating that the
4 fossil fuel industry could play a “crucial role” in lifting people out of poverty.²⁰¹ A Shell website
5 promotion states: “We are helping to meet the world’s growing energy demand while limiting
6 CO₂ emissions, by delivering more cleaner-burning natural gas.”²⁰²

7 c. BP touts natural gas on its website as “a vital lower carbon energy source”
8 and as playing a “crucial role” in a transition to a lower carbon future.²⁰³ BP promotes continued
9 massive fossil fuel use as enabling two billion people to be lifted out of poverty.²⁰⁴

10 d. Chevron’s website implores the public that “we produce safe, reliable
11 energy products for people around the world.”²⁰⁵ Chevron also promotes massive use of fossil
12 fuels as the key to lifting people out of poverty: “Reliable and affordable energy is necessary for
13 improving standards of living, expanding the middle class and lifting people out of poverty. Oil
14 and natural gas will continue to fulfill a significant portion of global energy demand for decades
15 to come – even in a carbon-constrained scenario.”²⁰⁶ A prior Chevron advertisement still available
16 on the web promotes Chevron fossil fuels on a massive scale by stating that “our lives demand
17 oil.”²⁰⁷

20 ²⁰¹ Shell CEO speech (Mar. 9, 2017), <http://www.shell.com/media/speeches-and-articles/2017/deliver-today-prepare-for-tomorrow.html>.

21 ²⁰² Shell United States, Transforming Natural Gas, <http://www.shell.us/energy-and-innovation/transforming-natural-gas.html>.

22 ²⁰³ BP, Sustainability Report (2016), <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/sustainability/archive/archived-reports-and-translations/2016/bp-sustainability-report-2016.pdf>; Formerly found at: <http://www.bp.com/energytransition/shifting-towards-gas.html>.

23 ²⁰⁴ BP, BP energy outlook (July 2023), <http://www.bp.com/en/global/corporate/energy-economics/energy-outlook.html>.

24 ²⁰⁵ Chevron, Products and Services, <https://www.chevron.com/operations/products-services>.

25 ²⁰⁶ Chevron, Managing Climate Change Risks, <https://www.chevron.com/corporate-responsibility/climate-change/managing-climate-risk>.

26 ²⁰⁷ Chevron TV Ad (2009), <https://www.youtube.com/watch?v=-KyjTGMVTkA>.

1 e. ConocoPhillips promotes its fossil fuel products by stating that it
2 “responsibly suppl[ies] the energy that powers modern life.”²⁰⁸ Similarly, ConocoPhillips has the
3 following advertising slogan on its website: “Providing energy to improve quality of life.”²⁰⁹

4 **I. Marin Has Suffered, Is Suffering, and Will Suffer Injuries From Defendants’**
5 **Tortious Conduct.**

6 180. Defendants’ individual and collective conduct—including, but not limited to, their
7 failures to warn of the threats their fossil fuel products posed to the world’s climate; their wrongful
8 promotion of fossil fuel products and their concealment of known hazards associated with the use
9 of those products; and their public deception campaigns designed to obscure the connection
10 between their products and climate change and its environmental, physical, social, and economic
11 consequences—brought about or helped bring about climate change and consequent harms to
12 Marin. Such harms include: sea level rise and attendant flooding; increased frequency and intensity
13 of extreme precipitation events; increased frequency and intensity of extreme wildfire; reduced air
14 quality; and the cascading social, economic, health, and other consequences of these environmental
15 changes. These adverse impacts will continue to increase in frequency and severity in Marin
16 County and disproportionately impact the County’s more vulnerable low-income, limited English
17 speaking communities, children, and those with limited mobility or sensory abilities.

18 181. As an actual and proximate result of Defendants’ conduct, which was a substantial
19 factor in bringing about the aforementioned environmental changes, Plaintiffs have suffered and
20 will continue to suffer severe harms and losses. These include, but are not limited to, the following:
21 increased costs associated with public health impacts, environmental impacts, and economic
22 impacts; injury or destruction of County-owned or -operated facilities and property deemed critical
23 for operations, utility services, and risk management, as well as other assets that are essential to
24 community health, safety, and well-being; increased costs for responding to poor air quality,

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26 _____
27 ²⁰⁸ ConocoPhillips, The Changing Energy Landscape, <http://www.conocophillips.com/who-we-are/our-company/spirit-values/responsibility/Pages/the-changing-energy-landscape.aspx>.

28 ²⁰⁹ ConocoPhillips, Producing Energy, <http://www.conocophillips.com/what-we-do/producing-energy/Pages/default.aspx>.

1 increasingly frequent and intense weather events, including extreme heat, sea level rise, coastal
2 and inland storms and associated flooding, and extreme precipitation events, erosion, and
3 landslides; costs for mitigating impacts to groundwater caused by rising groundwater that saturates
4 contaminated soil, mobilizes pollutants, and corrodes solid waste landfills and hazardous waste
5 landfills; and increased planning and preparation costs for community adaptation and resilience to
6 climate change's effects.

7 182. Plaintiffs have already incurred, and will foreseeably continue to incur, injuries and
8 damages because of climate change-related sea level rise, disruptions to the hydrologic cycle
9 including increased frequency and severity of extreme precipitation, increased frequency and
10 severity of dangerous landslides, increased frequency and severity of heat waves, increased
11 frequency and severity of wildfires, increased public health hazards, and consequent social and
12 economic injuries associated with those physical and environmental changes, all of which have
13 been caused and/or exacerbated by Defendants' conduct.

14 183. But for Defendants' conduct, Plaintiffs would have suffered no or far less injuries
15 and damages than they have, and will foreseeably endure, due to expected anthropogenic sea level
16 rise, disruption of the hydrologic cycle, and associated consequences of those physical and
17 environmental changes.

18 **i. Sea Level Rise-Related Conditions and Injuries**

19 184. Marin County has experienced significant sea level rise over the last half century
20 attributable to Defendants' conduct, which caused a substantial portion of the 8 inches of sea level
21 rise the County has experienced in the last century.²¹⁰

22 185. Marin County obtained a Draft Sea Level Rise Vulnerability Analysis for its Bay-
23 adjacent coast in April, 2017, with a final version accepted by the County on June 20, 2017. The
24 County obtained a separate assessment for its Pacific Ocean-adjacent vulnerabilities in September
25 2015, finalized in May 2016.²¹¹ These assessments are the County's first analyses of the County's
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28 ²¹⁰ BayWAVE (2017), *supra* note 11, at xiv.

²¹¹ See CSMART (2016), *supra* note 11.

1 overall vulnerability to sea level rise and its impacts, including permanent inundation, temporary
2 flooding, erosion, and saltwater intrusion. The Assessments formally identify actual risks to the
3 County with sea level rise expected by the end of the 21st Century, and the consequences
4 associated with taking no action to prevent or mitigate the harms associated with those risks.

5 186. The San Francisco Bay Area, including Marin County, has experienced significant
6 sea level rise over the last half century attributable to Defendants' conduct.²¹² Marin County will
7 experience additional, significant, and dangerous sea level rise by 2100,²¹³ and the increases will
8 continue and accelerate. Additionally, Marin County will experience greater committed sea level
9 rise due to the "locked in" greenhouse gases already emitted.²¹⁴ The County will suffer greater
10 overall sea level rise than the global average.²¹⁵

11 187. In addition to weather and climate changes already observed, the County will suffer
12 extreme injuries in the future. For example, there is a 99% risk that the County experiences a
13 devastating three-foot flood before the year 2050, and a 47% chance that such a flood occurs before
14 2030.²¹⁶

15 188. Additionally, rising groundwater levels will create numerous challenges for the
16 continued use of public and private property, will require mitigation of impacts to groundwater
17 caused by rising groundwater that saturates contaminated soil, mobilizes pollutants, and corrodes
18 solid waste landfills and hazardous waste landfills.

19 189. Sea level rise is the physical consequence of (a) the thermal expansion of ocean
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22 ²¹² Griggs et al. (CA Ocean Protection Council Science Advisory Team Working Group), Rising
23 Seas in California: An Update on Sea-Level Rise Science, California Ocean Science Trust (April
24 2017) p. 23, box 2, figure 2.

25 ²¹³ Id. at 26, Table 1(b).

26 ²¹⁴ Clark et al. (2016), supra note 35, at 363–65.

27 ²¹⁵ Global sea level rise is projected to be 82.7 cm (32.6 inches) above 2000 levels by 2100. See
28 National Research Council, Sea-Level Rise for the Coasts of California, Oregon, and
Washington: Past Present and Future, at 107, Table 5.2 & 117, Table 5.3 (2012). The San
Francisco Bay Area sea level rise is projected to be 91.9 cm (36.2 inches) over 2000 by 2100. Id.

²¹⁶ Climate Central, Surging Seas Riskfinder, http://riskfinder.climatecentral.org/county/marin-county.ca.us?comparisonType=postal-code&forecastType=NOAA2017_int_p50&level=3&unit=ft.

1 waters as they warm; (b) increased mass loss from land-based glaciers that are melting as ambient
2 air temperature increases; and (c) the shrinking of land-based ice sheets due to increasing ocean
3 and air temperature.²¹⁷

4 190. Of the increase in energy that has accumulated in the Earth’s atmosphere between
5 1971 and 2010, more than 90% is stored in the oceans.²¹⁸

6 191. Anthropogenic forcing, in the form of greenhouse gas pollution largely from the
7 production, use and combustion of fossil fuel products, is the dominant cause of global mean sea
8 level rise since 1970, explaining at least 70% of the sea level rise observed between 1970 and
9 2000.²¹⁹ Natural radiative forcing—that is, causes of climate change not related to human
10 activity—“makes essentially zero contribution [to observed sea level rise] over the twentieth
11 century (2% over the period 1900-2005).”²²⁰

12 192. Anthropogenic greenhouse gas pollution is the dominant factor in each of the
13 independent causes of sea level rise, including the increase in ocean thermal expansion,²²¹ in
14 glacier mass loss, and in more negative surface mass balance from the ice sheets.²²²

15 193. There is a well-defined relation between cumulative emissions of CO₂ and
16 committed global mean sea level. This relation, moreover, holds proportionately for committed
17 regional sea level rise.²²³

18 194. Nearly 100% of the sea level rise from any projected greenhouse gas emissions
19 scenario will persist for at least 10,000 years.²²⁴ This owes to the long residence time of CO₂ in
20 the atmosphere that sustains temperature increases, and inertia in the climate system.²²⁵

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22 ²¹⁷ NOAA, Is sea level rising, Ocean Facts <http://oceanservice.noaa.gov/facts/sealevel.html>.

23 ²¹⁸ IPCC, 2014: Climate Change 2014: Synthesis Report, supra, page 4 (2014),
<https://www.ipcc.ch/report/ar5/syr/>.

24 ²¹⁹ Aimée B.A. Slangen et al., Anthropogenic Forcing Dominates Global Mean Sea-Level Rise
Since 1970, *Nature Climate Change*, Vol. 6, 701 (2016).

25 ²²⁰ Id.

26 ²²¹ Id.

27 ²²² Id.

28 ²²³ Clark et al. (2016), supra note 35, at 365.

²²⁴ Id. at 361.

²²⁵ Id. at 360.

1 195. Anthropogenic greenhouse gas pollution caused the increased frequency and
2 severity of extreme sea level events (temporary sea level height increases due to storm surges or
3 extreme tides, exacerbated by elevated baseline sea level) observed during the Great
4 Acceleration.²²⁶ The incidence and magnitude of extreme sea level events has increased globally
5 since 1970.²²⁷ The impacts of such events, which generally occur with large storms, high tidal
6 events, offshore low-pressure systems associated with high winds, or the confluence of any of
7 these factors,²²⁸ are exacerbated with higher average sea level, which functionally raises the
8 baseline for the destructive impact of extreme weather and tidal events. Indeed, the magnitude and
9 frequency of extreme sea level events can occur in the absence of increased intensity of storm
10 events, given the increased average elevation from which flooding and inundation events begin.
11 These effects, and others, significantly and adversely affect Plaintiffs, with increased severity in
12 the future.

13 196. Historical greenhouse gas emissions alone through 2000 will cause a global mean
14 sea level rise of at least 7.4 feet.²²⁹ Additional greenhouse gas emissions from 2001–2015 have
15 caused approximately 10 additional feet of committed sea level rise. Even immediate and
16 permanent cessation of all additional anthropogenic greenhouse gas emissions would not prevent
17 the eventual inundation of land at elevations between current average mean sea level and 17.4 feet
18 of elevation in the absence of adaptive measures.

19 197. The relationship between anthropogenic CO₂ emissions and committed sea level
20 rise is nearly linear and always positive. For emissions, including future emissions, from the year
21 2001, the relation is approximately 0.25 inches of committed sea level rise per 1 GtCO₂ released.
22 For the period 1965 to 2000, the relation is approximately 0.05 inches of committed sea level rose
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25 ²²⁶ IPCC, 2013: Summary for Policymakers, page 7, Table SPM.1 (2013),
https://www.ipcc.ch/pdf/assessment-report/ar5/wg1/WGIAR5_SPM_brochure_en.pdf.

26 ²²⁷ IPCC, Climate Change 2013: The Physical Science Basis, Contribution of Working Group I
27 to the Fifth Assessment Report of the IPCC at 290 (2013),
http://www.climatechange2013.org/images/report/WG1AR5_ALL_FINAL.pdf.

28 ²²⁸ Id.

²²⁹ Clark et al. (2016), supra note 35, at 365.

1 per 1 GtCO₂ released. For the period 1965 to 2015, normal use of Defendants’ fossil fuel products
2 caused a substantial portion of committed sea level rise. Each and every additional unit of CO₂
3 emitted from the use of Defendants’ fossil fuel products will add to the sea level rise already
4 committed to the geophysical system.

5 198. Projected onshore impacts associated with rising sea temperature and water level
6 include increases in flooding and erosion; increases in the occurrence, persistence, and severity of
7 storm surges; infrastructure inundation; public and private property damage; and pollution
8 associated with damaged control and waste infrastructure, and the lack thereof. All of these effects
9 significantly and adversely affect Plaintiffs.

10 199. Sea level rise has already taken grave tolls on inhabited coastlines. For instance, the
11 U.S. National Oceanic and Atmospheric Administration (“NOAA”) estimates that nuisance
12 flooding occurs from 300% to 900% more frequently within U.S. coastal communities today than
13 just 50 years ago.²³⁰

14 200. Nationwide, more than three quarters (76%) of flood days caused by high water
15 levels from sea level rise between 2005 and 2014 (2,505 of the 3,291 flood days) would not have
16 happened but for human-caused climate change. More than two-thirds (67%) of flood days since
17 1950 would not have happened without the sea level rise caused by increasing greenhouse gas
18 emissions.²³¹

19 201. Regional expressions of global mean sea level rise will differ, and are especially
20 influenced by changes in ocean and atmospheric dynamics, as well as the gravitational,
21 deformational, and rotational effects of the loss of glaciers and ice sheets.²³² Due to these effects,
22 Marin County will experience significantly greater absolute committed sea level rise than the
23 global mean.²³³

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26 ²³⁰ NOAA, Is sea level rising, Ocean Facts, <http://oceanservice.noaa.gov/facts/sealevel.html>.

27 ²³¹ Climate Central, Sea Level Rise Upping Ante on ‘Sunny Day’ Floods (Oct. 17, 2016),
<http://www.climatecentral.org/news/climate-change-increases-sunny-day-floods-20784>.

28 ²³² Clark et al. (2016), supra note 35, at 364.

²³³ See id., Figure 3(c).

1 202. Marin County’s topography, geography, and land use patterns make it particularly
2 susceptible to injuries from sea level rise; and the California coast south of Cape Mendocino,
3 including Marin County, is projected, due to its geophysical characteristics, to experience a higher
4 rate of sea level rise and a greater absolute amount of sea level rise than the global mean.²³⁴

5 203. Given an emissions scenario in which the current rate of greenhouse gas pollution
6 continues unabated, sea level in the San Francisco Bay Area, including Marin County, will rise
7 significantly and dangerously by the year 2100.²³⁵

8 204. Marin County anticipates a 1% annual-chance flood of at least three feet to occur
9 in any given year.²³⁶ Such an event, even with the minimum anticipated sea level rise, would
10 inundate thousands of additional acres of County land.²³⁷

11 205. Within the next 15 years, the County’s Bay-adjacent coast will endure multiple,
12 significant impacts from sea level rise. The San Rafael and Southern Marin shoreline communities
13 are most at risk from tidal and storm surge flooding. Regular tidal flooding will adversely impact
14 San Rafael east of US Highway 101, Bayfront Belvedere and Tiburon, Greenbrae, Waldo Point,
15 and Paradise Cay. Storm surge flooding could impact North Novato at Gness Field, Black Point
16 on the Petaluma River, lower Santa Venetia, Belvedere around the lagoon, Bayfront Corte Madera,
17 Bayfront Mill Valley, Marinship in Sausalito, Tamalpais Valley, and Almonte, in addition to the
18 communities vulnerable to tidal flooding. Eight miles of road will see tidal flooding within 15
19 years, including State Route 37 in Novato and US Highway 101 in Corte Madera and Larkspur.
20 Many of these flooded areas already experience seasonal and ‘king tide’ flooding. This will worsen

22 ²³⁴ Global sea level rise is projected to be 82.7 cm (32.6 inches) above 2000 levels by 2100. See
23 National Research Council, Sea-Level Rise for the Coasts of California, Oregon, and
24 Washington: Past Present and Future (2012) at page 107 at Table 5.2; page 117 at Table 5.3. The
25 San Francisco Bay Area sea level rise is projected to be 91.9 cm (36.2 inches) over 2000 by
26 2100. Id.

25 ²³⁵ Gary Griggs et al., Rising Seas in California: An Update on Sea-Level Rise Science,
26 California Ocean Science Trust, p. 26, Table 1(b) (April 2017),
27 <http://www.opc.ca.gov/webmaster/ftp/pdf/docs/rising-seas-in-california-an-update-on-sea-level-rise-science.pdf>.

28 ²³⁶ BayWAVE (2017), supra note 11, at 8, Figure 3.

²³⁷ Id. at 25.

1 in severity and become more frequent with tidal flooding potentially reaching the Canal area of
2 San Rafael, spreading to I-580. Water travel infrastructure such as ferry facilities in Larkspur,
3 Tiburon, and Sausalito used by daily commuters would be compromised. Public and private
4 marinas are also at risk. Finally, Southern Marin marshlands will undergo significant ecological
5 changes with serious repercussions for plants, insects, fish, and animals.²³⁸

6 206. By 2030, the County's ocean coast will endure multiple, significant impacts from
7 sea level rise. Beaches, marshlands, rocky intertidal habitat, and other ecological features in
8 Stinson Beach, Bolinas, Tomales Bay, and Muir Beach are at risk of erosion, and flooding.²³⁹
9 Water, wastewater, and stormwater transmission infrastructure, as well as onsite wastewater
10 treatment systems and septic systems are at risk in Stinson Beach, Bolinas, Tomales Bay, and
11 Inverness.²⁴⁰ Roads and bridges, including portions of Shoreline Highway, Middle Road, and
12 Valley Ford Lincoln School Road, will experience flooding, erosive forces, and/or storm surges
13 that could degrade or destroy sections thereof.²⁴¹ Buildings in Muir Beach, Bolinas and Dillon
14 Beach are compromised by accelerated erosion.²⁴²

15 207. At 5 feet of sea level rise along the County's Bay-adjacent coast, regular tidal
16 flooding will impact over 16,000 acres,²⁴³ expose over 8,000 parcels to flooding at the mean high
17 water level, and compromise 13,000 parcels that could flood during storm surges.²⁴⁴ Areas
18 impacted by such flooding include Sausalito west of Bridgeway Boulevard, Marin City, Mill
19 Valley, northern San Rafael, Bayside Acres, Country Club, and Kentfield. Minor storms alone
20 could account for millions of dollars in property damages.²⁴⁵ 100 miles of public and private roads
21 in the County will be vulnerable to tidal flooding, as well as critical public transportation
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24 ²³⁸ BayWAVE (2017), supra note 11, at xix.

25 ²³⁹ CSMART (2016), supra note 11, at x.

26 ²⁴⁰ Id. at xi.

27 ²⁴¹ Id.

28 ²⁴² Id.

²⁴³ BayWAVE (2017), supra note 11, at 27.

²⁴⁴ Id. at 32, Table 12.

²⁴⁵ Id. at xxiv.

1 infrastructure such as park-and-rides, several hundred bus stops, transit centers, and SMART Rail
2 routes. Two sanitary wastewater treatment plants, and sanitary sewer and stormwater transmission
3 infrastructure will regularly flood. Marshlands in the northern and southern county will be
4 inundated and experience disruptive salinity increases, as would agricultural land near Bel Marin
5 Keys, Hamilton Field, and the Novato Sanitary District.²⁴⁶

6 208. At approximate 6.7 feet of sea level rise along the County's ocean-adjacent coast,
7 1,300 parcels, including 1,100 buildings, 70% of which are residential, will be exposed to higher
8 sea levels and more destructive storms.²⁴⁷ Erosion would impair nearly 450 bluff top buildings in
9 Muir Beach, Stinson Beach, Bolinas, and Dillion Beach.²⁴⁸ Portions of Shoreline Highway, Sir
10 Francis Drake Boulevard, Calle del Arroyo, Wharf Road, and Olema-Bolinas Road will be
11 exposed to higher average sea level and storm threats at several locations, comprising about 7% of
12 all roads in vulnerable coastal areas, a situation exacerbated by low road density and lack of
13 alternative routes.²⁴⁹ Agricultural lands in the vicinity of Point Reyes Station, Muir Beach, and
14 Bolinas will face saltwater intrusion and erosion.²⁵⁰

15 209. The following figures describe the landward extent of future inundation and erosion
16 on Marin County's Bay-adjacent coast due to sea level rise to different elevations. As the image
17 shows, much of the County, including some of its most critical infrastructure and valuable Bay-
18 front property, will be inundated at less than one foot of sea level rise.²⁵¹

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25 ²⁴⁶ Id. at xxvi.

26 ²⁴⁷ CSMART (2016), supra note 11, at xx.

27 ²⁴⁸ Id.

28 ²⁴⁹ Id.

²⁵⁰ Id. at xxi.

²⁵¹ BayWAVE (2017), supra note 11, at 11, Table 4; and 12, Table 5.

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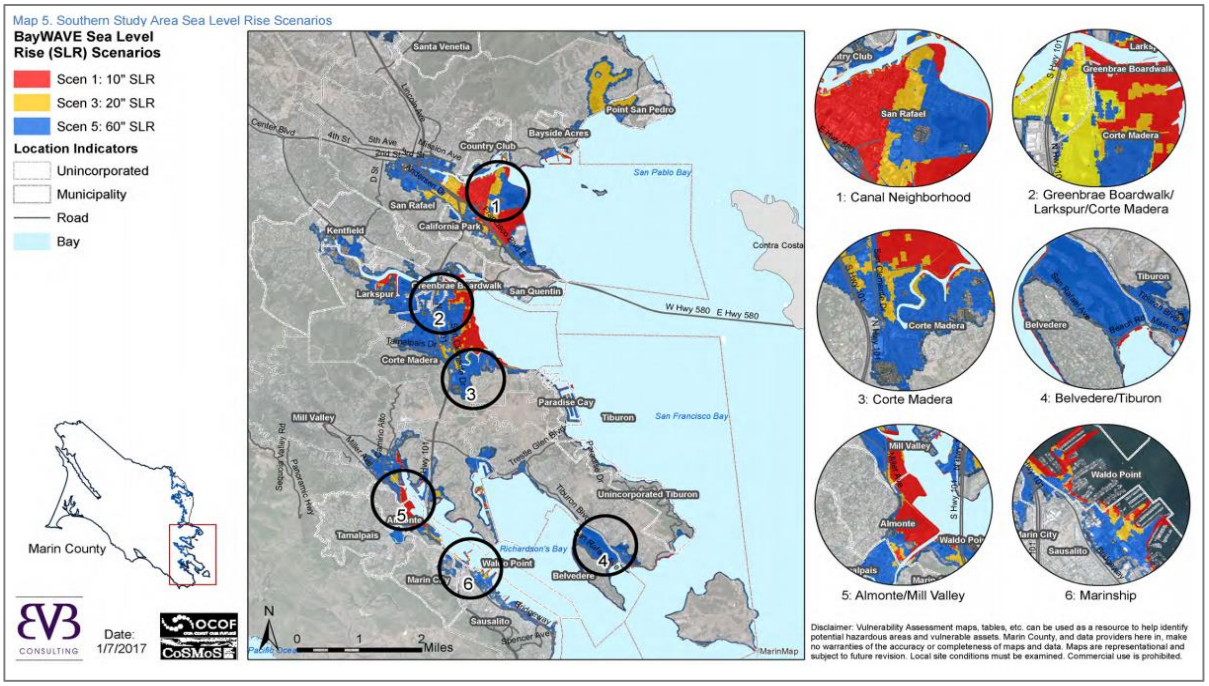


Figure 8: Southern Study Area Seal Level Rise Scenarios

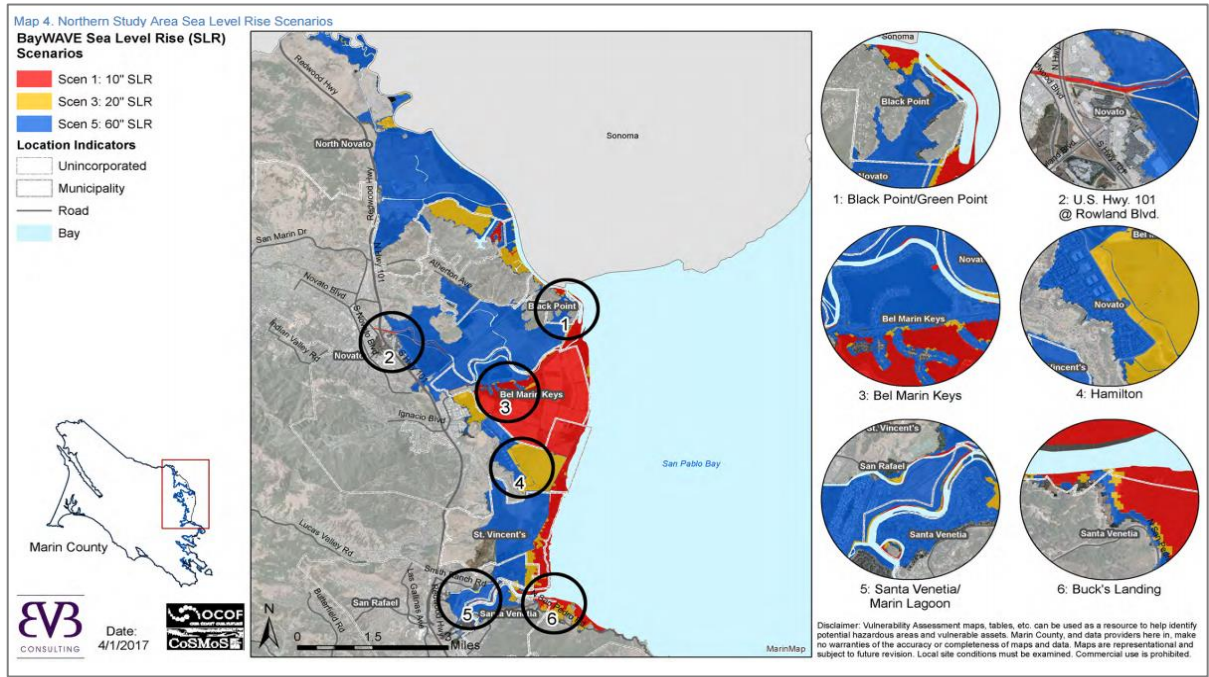


Figure 9: Northern Study Area Seal Level Rise Scenarios

210. As a direct and proximate result of the acts and omissions of the Defendants' alleged herein, Plaintiffs have incurred significant and material expenses related to planning for and predicting future sea level rise injuries to its real property, improvements thereon, civil

1 infrastructure, and citizens, so as to preemptively mitigate and/or prevent such injuries. This
2 includes performing a Sea Level Vulnerability Assessment in 2017 at significant expense to the
3 County, that describes potential injuries to the County, including, but not limited to, erosion of
4 bay-adjacent public land, erosion and/or inundation of privately owned properties and
5 displacement of residents within the County.

6 211. As a direct and proximate result of Defendants' acts and omissions alleged herein,
7 Plaintiffs have incurred sea level rise-related injuries and damages. These include infrastructural
8 repair and reinforcement of roads and beach access.

9 212. As a direct and proximate result of Defendants' acts and omissions alleged herein,
10 Plaintiffs real property has been inundated by sea water, causing injury and damages thereto and
11 to improvements thereon, and preventing free passage on, use of, and normal enjoyment of that
12 real property, or permanently destroying it.

13 213. Without Defendants' tortious conduct, current sea level rise would have been far
14 less than the observed sea level rise to date.²⁵² Similarly, committed sea level rise that will occur
15 in the future would also be far less.²⁵³ Defendants' conduct as described herein is therefore an
16 actual, substantial, and proximate cause of Plaintiffs' sea level rise-related injuries.

17 **ii. Extreme Precipitation and Landslide-Related Conditions and Injuries**

18 214. Extreme precipitation events, with heavy rainfall falling over a small area, are a
19 substantial threat in Marin County and will continue to increase as a result of climate change
20 attributable to Defendants' conduct alleged herein.²⁵⁴ Recent estimates show that climate change
21 will result in storms in the San Francisco Bay Area that release up to 37% more precipitation by
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25 ²⁵² Robert E. Kopp et al., Temperature-driven Global Sea-level Variability in the Common Era,
26 Proceedings of the National Academy of Sciences, Vol. 113, No. 11, E1434-E1441, E1438
(2016), <http://www.pnas.org/content/113/11/E1434.full>.

27 ²⁵³ Clark et al. (2016), supra note 35, at 365.

28 ²⁵⁴ See Cal. Fourth Climate Change Assessment, San Francisco Bay Area Region, 19 (Jan. 2019), https://www.energy.ca.gov/sites/default/files/2019-11/Reg_Report-SUM-CCCA4-2018-005_SanFranciscoBayArea_ADA.pdf.

1 the year 2100.²⁵⁵ Warmer global temperatures leads to storm systems being able to hold a higher
2 volume of water, which is then released as increasingly unprecedented levels of precipitation.
3 These events result in flooding and landslides causing injuries to Plaintiffs.

4 215. Flooding occurs when extreme precipitation events lead to river systems being
5 overwhelmed, with floodwaters and debris overtopping the banks of creeks and rivers causing
6 inundation. In addition, failure of stormwater systems to adequately provide drainage leads to
7 inundation by surface runoff. Climate-driven storms also cause coastal flooding, where storm
8 surge results in inundation of coastal areas by ocean water.²⁵⁶ Climate-driven storms will result in
9 severe flooding occurring more frequently, at great cost to the County.²⁵⁷

10 a. A significant number of structures are at risk of riverine flooding in the
11 watersheds of Coyote Creek, Arroyo Corte Madera del Presidio, East and West Creek watersheds,
12 Corte Madera Creek, Novato and Rush Creeks, Miller Creek, Easkoot Creek (Stinson Beach),
13 Gallinas Creek.²⁵⁸

14 b. Areas vulnerable to coastal flooding include locations along Richardson
15 Bay, Tomales Bay, lower Las Gallinas Creek, the San Rafael Canal, East San Rafael and Novato
16 shorelines, and the outer Pacific coastline.²⁵⁹

17 c. Levee failure is most likely to occur due to extreme precipitation and high
18 tide events exacerbated by sea level rise. The levee-protected communities in the County are
19 vulnerable to flooding due to levee failure caused by these climate impacts, including Tamalpais
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22 ²⁵⁵ Chrsitina M. Patricola et al., Future changes in extreme precipitation over the San Francisco
23 Bay Area: Dependence on atmospheric river and extratropical cyclone events, 36 *Weather &*
24 *Climate Extremes* 1 (2022).

25 ²⁵⁶ Marin County Multi-Jurisdictional Local Hazard Mitigation Plan, at 54 (2018), [https://ago-](https://ago-item-storage.s3.amazonaws.com/f52ed461164c4a22924118d2cd08da5d/Marin-County-Multi-Jurisdictional-Local-Hazard-Mitigation-Plan-2018.pdf)
26 [item-storage.s3.amazonaws.com/f52ed461164c4a22924118d2cd08da5d/Marin-County-Multi-](https://ago-item-storage.s3.amazonaws.com/f52ed461164c4a22924118d2cd08da5d/Marin-County-Multi-Jurisdictional-Local-Hazard-Mitigation-Plan-2018.pdf)
27 [Jurisdictional-Local-Hazard-Mitigation-Plan-2018.pdf](https://ago-item-storage.s3.amazonaws.com/f52ed461164c4a22924118d2cd08da5d/Marin-County-Multi-Jurisdictional-Local-Hazard-Mitigation-Plan-2018.pdf).

28 ²⁵⁷ See Marin County Flood Control District, Adaptation Land Use Planning: Guidance for
29 Marin County Local Governments at 7 (2022), [https://marinflooddistrict.org/documents/](https://marinflooddistrict.org/documents/adaptation-land-use-planning-guidance/)
30 [adaptation-land-use-planning-guidance/](https://marinflooddistrict.org/documents/adaptation-land-use-planning-guidance/) (“The current 100-year flood return period would
31 shorten dramatically.”).

32 ²⁵⁸ Id. at 58.

33 ²⁵⁹ Id.

1 Valley, Santa Venetia, Corte Madera, Belvedere, and parts of Strawberry, Novato, and Ross
2 Valley.²⁶⁰

3 216. In 2021 to 2023, atmospheric river events bringing extreme precipitation to the
4 County resulted in significant localized flooding. For example, an atmospheric river resulted in
5 flooding of the only road in and out of Marin City, an unincorporated community along Richardson
6 Bay in Tamalpais Valley. Marin City is a historically redlined community already overburdened
7 by existing environmental health impacts, and is one of the highest density low-income
8 communities in Marin County.²⁶¹ In 2022, the flood waters turned streets into rivers, flooded
9 homes, and exposed residents to contaminated flood waters.²⁶² To ensure public safety, the County
10 has engaged in costly flood control planning efforts, and will need to incur significant costs to
11 upgrade tide gates and other infrastructure around Marin City. Needed infrastructure upgrades to
12 prepare for continued climate-exacerbated flooding events will total in the millions of dollars just
13 to protect this one community.²⁶³

14 217. Many of the County's most populated areas, pieces of critical infrastructure, and
15 key institutions (14 schools, 3 hospitals, and 13 police and fire stations) lie within the 100-year or
16 500-year floodplains.²⁶⁴ Critical water and wastewater facilities are also vulnerable to flooding,
17 which can lead to devastating public health harms.²⁶⁵ Transportation is and will continue to be
18 heavily impacted by flooding in the County.²⁶⁶

20 ²⁶⁰ Id. at 55.

21 ²⁶¹ San Francisco Estuary Partnership, Marin City Climate Resilience and Health Justice (2022),
22 [https://www.sfestuary.org/wp-](https://www.sfestuary.org/wp-content/uploads/2022/09/SFEP_RWNA_09.07_MarinCityClimate.090122.pdf)
23 [content/uploads/2022/09/SFEP_RWNA_09.07_MarinCityClimate.090122.pdf](https://www.sfestuary.org/wp-content/uploads/2022/09/SFEP_RWNA_09.07_MarinCityClimate.090122.pdf).

24 ²⁶² See Ezra David Romero, 'It Comes to Race': Marin City Residents Demand Flood
25 Protections, KQED (Nov. 1, 2022), [https://www.kqed.org/science/1980525/it-comes-to-race-](https://www.kqed.org/science/1980525/it-comes-to-race-marine-city-residents-demand-flood-protections)
26 [marin-city-residents-demand-flood-protections](https://www.kqed.org/science/1980525/it-comes-to-race-marine-city-residents-demand-flood-protections).

27 ²⁶³ See, e.g., Marin County Flood Control & Water Conservation District, Marin City Drainage
28 Study, 68–75 (Jan. 2018), [https://storage.googleapis.com/proudcity/marinwatershed](https://storage.googleapis.com/proudcity/marinwatershed-programca/uploads/2022/07/Marin-City-Drainage-Study.pdf)
29 [programca/uploads/2022/07/Marin-City-Drainage-Study.pdf](https://storage.googleapis.com/proudcity/marinwatershed-programca/uploads/2022/07/Marin-City-Drainage-Study.pdf).

30 ²⁶⁴ Marin County Multi-Jurisdictional Local Hazard Mitigation Plan (2018), supra note 256, at
31 62.

32 ²⁶⁵ Id. at 64.

33 ²⁶⁶ Id.

1 a. In Santa Venetia and Tamalpais Valley, low elevation relative to tides,
2 especially in the context of sea level rise, exacerbates flood conditions caused by heavy
3 precipitation. These areas rely on costly infrastructure, such as pump systems and levees, to keep
4 floodwaters from inundating homes. Recovery and the removal of floodwaters is especially
5 difficult and costly in these areas.²⁶⁷ The County has and will continue to incur significant cost
6 preparing for and recovering from flooding events in these and other low-lying communities along
7 the Bayshore.

8 b. In 2023, flooding in the County due to extreme precipitation and coincident
9 high tides inundated U.S. 101 and Highway 37 for an extended period of time, causing severe
10 traffic disruptions.²⁶⁸

11 218. Floods cause damage to County property, require costly recovery, and cause public
12 health hazards. To prepare for more frequent severe flooding, the County will incur significant
13 expense upgrading infrastructure, including by elevating sewers and roads.²⁶⁹

14 219. Plaintiffs have experienced and will continue to experience more frequent and
15 severe landslides and debris flows, which are particularly fast-moving and far-reaching landslides,
16 as a result of increased extreme precipitation events.²⁷⁰ Landslides occur in populated areas of the
17 County and can cause death and injury, damage private and public property and critical facilities
18 and infrastructure.²⁷¹ They routinely cause dangerous conditions on the County's roadways,
19 causing transportation hazards and requiring costly cleanup and recovery efforts. They also cause
20 harm to the County's natural resources and ecosystems. Increases in drought conditions and
21 wildfire also lead to increases in risk of catastrophic debris flows.

22
23
24 ²⁶⁷ Id.

25 ²⁶⁸ See James Torrez, Highway 37 in Marin County Closed, Continues to Be Flooded, KTVU
(Jan. 15, 2023), <https://www.ktvu.com/news/highway-37-in-marin-county-to-re-open-monday-morning>.

26 ²⁶⁹ Marin County Multi-Jurisdictional Local Hazard Mitigation Plan (2018), supra note 256, at
27 126.

28 ²⁷⁰ See id. at 48.

²⁷¹ See id. at 51.

1 a. In 2023, a severe storm caused a major mudslide in Novato which severely
2 damaged a frontage road adjacent to U.S. 101, resulting in millions of dollars of cleanup and repair
3 efforts, as well as safety hazard and transportation disruptions and risk to gas lines and other critical
4 infrastructure.²⁷²

5 **iii. Extreme Wildfire**

6 220. The County has experienced and will continue to experience increased risk of
7 wildfire attributable to Defendants' conduct. Higher temperatures will result in a higher number
8 of days that vegetation are at critically low moisture levels, extending the duration of fire season
9 through the year and increasing the overall acreage burned. Climate change also results in
10 increased tree mortality and harsher dry winds, both of which are conditions that result in more
11 severe and faster spreading fires.²⁷³ Climate change will increase the frequency, intensity and
12 duration of wildfire events impacting the County, resulting in injuries.

13 221. Housing and County property are at increased risk of damage from wildfire due to
14 Defendants' conduct. Structures are most at risk where it abuts or is intermixed with wildlands, in
15 wildland/urban interface areas. 65% of the County's living units, collectively worth more than \$98
16 billion, are located in the fire-vulnerable wildland-urban interface.²⁷⁴ The County has described
17 wildfire as "the greatest risk to human life and property in Marin County's densely populated
18 WUI."²⁷⁵ The County includes 23 communities on CalFIRE's Communities at Risk list, which
19 lists communities at high risk of damage due to their proximity to wildlands.²⁷⁶

20
21 ²⁷² Claire Hao, California's Storms May Have Set the Stage for Another Disaster: Deep
22 Landslides, S.F. Chron. (Apr. 1, 2023), [https://www.sfchronicle.com/climate/article/california-](https://www.sfchronicle.com/climate/article/california-landslides-marin-17866943.php)
23 landslides-marin-17866943.php; Alyssa Goard, As Mudslide Continues in Marin County, Crews
24 Race to Protect Gas Lines & Services, NBC Bay Area (Mar. 26, 2023),
25 <https://www.nbcbayarea.com/news/local/mudslide-marin-county-gas-lines/3190346>.

26 ²⁷³ Scott Alber, 2023 Marin County Unit Strategic Fire Plan & Community Wildfire Protection
27 Plan at 31 (May 2023), [https://cdnverify.osfm.fire.ca.gov/media/mhohv40u/2023-marin-county-](https://cdnverify.osfm.fire.ca.gov/media/mhohv40u/2023-marin-county-fire-plan.pdf)
28 fire-plan.pdf.

²⁷⁴ Id. at 2.

²⁷⁵ Marin County Multi-Jurisdictional Local Hazard Mitigation Plan (2018), supra note 256, at
76.

²⁷⁶ See id.; Cal. Bd. of Forestry and Fire Protection, Communities at Risk List,
<https://bof.fire.ca.gov/media/0x5eysuw/ada-communities-at-risk.pdf>.

1 222. The County has expended and will continue to expend significant funds studying,
2 planning, preparing for, and preventing increased wildfire injuries to the County and its residents.
3 Marin County Fire Department is the primary agency responsible for suppression of wildland fires
4 in the County. It is responsible for both fire protection and prevention across 200,000 acres within
5 the County. It is also responsible for fire protection in an additional 100,000 acres.²⁷⁷ The
6 Department owns and operates 8 fire stations and employs 220 firefighters.²⁷⁸ Climate-fueled
7 increases in fire frequency and severity have and will continue to require significant expenditure
8 by the County to meet fire fighting and prevention needs throughout these areas.

9 a. The County has incurred and will continue to incur significant damages to
10 implement wildfire mitigation measures. For example, the Department has implemented fuel
11 reduction and vegetation management projects using a variety of costly methods, including
12 mechanical vegetation removal, chipping, pile burning, and prescribed burns. These methods are
13 deployed to create defensible space around structures and neighborhoods, fuel-breaks along roads
14 and ridges, and broader fuel-reduction zones to reduce damages from fire when it inevitably
15 comes.²⁷⁹

16 b. The County has and will continue to incur damages from increased
17 insurance costs resulting from the increased wildfire risk attributable to.

18 c. The County has and will continue to incur significant expense educating
19 and engaging the public in fire prevention programs, as well as improving emergency
20 communications to mitigate the damage of wildfires in the County.²⁸⁰

21 223. Increased severity of wildfires due to climate change results in faster moving and
22 faster growing fires, requiring more efficient evacuation routes and procedures. The County has
23

24 _____
25 ²⁷⁷ Marin County Multi-Jurisdictional Local Hazard Mitigation Plan (2018), *supra* note 256, at
77.

26 ²⁷⁸ Alber (2023), *supra* note 278, at 6.

27 ²⁷⁹ *See, e.g., id.* at 76–84.

28 ²⁸⁰ FireSafe Marin, Marin Wildfire Prevention Authority, Local Wildfire Prevention &
Mitigation Initiative Factsheet, [https://www.firesafemarin.org/wp-
content/uploads/2019/08/JPA_FactSheet_Final.pdf](https://www.firesafemarin.org/wp-content/uploads/2019/08/JPA_FactSheet_Final.pdf).

1 and will continue to incur significant expense improving evacuation routes and infrastructure to
2 enhance traffic flow for safe evacuation to mitigate the damages of climate-fueled wildfires.²⁸¹

3 Currently, a large number of roads and driveways within the County do not meet California Fire
4 Code specifications and are categorized as “hazardous in terms of fire access and protection.”²⁸²

5 224. Marin County primarily gets its water from local supplies, making it more
6 vulnerable to local climate impacts such as wildfire.²⁸³ Because of the area’s seasonal rainfall, any
7 major wildfire in the Mt. Tamalpais watershed would result in silting, water quality degradation
8 and decreased water quantity in the reservoir system supplying 75% of the water used by central
9 and southern County.²⁸⁴

10 225. The County’s parks and open spaces are more vulnerable to wildfire than urban
11 areas. Wildfires in the County’s parks will result in loss of biodiversity and harm to natural
12 resources such as endangered and threatened species including coho salmon and the northern
13 spotted owl. Wildfires will increasingly contribute to habitat degradation in a major migratory bird
14 flyway and nesting areas in the County.²⁸⁵ Other environmental harms to the County are likely to
15 include spread of invasive plant species, disease and insect infestation, and soil sterilization.

16 226. The County has and will continue to incur injuries to the economy due to climate
17 change-driven wildfires. The County has extensive agriculture (livestock, aquaculture, field crops,
18 fruit, vegetable and nursery crops) over approximately 150,000 acres, some of which abuts or is
19 adjacent to wildlands with high wildfire risk. Wildfires within the County and wildfire smoke
20

21 _____
22 ²⁸¹ See *id.*

23 ²⁸² Marin County Multi-Jurisdictional Local Hazard Mitigation Plan (2018), *supra* note 256, at
24 99.

25 ²⁸³ See Cal. Fourth Climate Change Assessment, San Francisco Bay Area Region (2019), *supra*
26 note 254, at 42; see also Marin & Sonoma Counties, Agricultural Resilience in the Face of
27 Extreme Dry Conditions, 8 (2022), <https://ucanr.edu/sites/ucemarin/files/381805.pdf>
(describing water systems in Marin county, primarily relying on reservoirs in their service areas,
and otherwise relying on Russian River water system via agreements with Sonoma Water to the
north).

28 ²⁸⁴ Alber (2023), *supra* note 278, at 38.

²⁸⁵ Marin County Multi-Jurisdictional Local Hazard Mitigation Plan (2018), *supra* note 256, at
93.

1 impacting the County impact tourism to parks, valued in the hundreds of millions of dollars
2 annually.²⁸⁶ Wildfires cause displacement and disruption of the day-to-day activities of residents,
3 tourists, employees, and businesses. For many small businesses, the impacts of closures or loss of
4 property may result in permanent closure. Historically underserved populations are more likely to
5 lose jobs or income, experience prolonged unemployment, and face challenges finding affordable
6 housing when attempting to return to their communities. Increased displacement risk disrupts vital
7 social support networks that further isolate community members from resources.

8 **iv. Public Health Conditions & Injuries**

9 227. The County has and will continue to incur expenses in planning and preparing for,
10 and treating, the public health impacts associated with climate change attributable to Defendants'
11 conduct alleged herein. Extreme heat, extreme weather, drought, vector borne illnesses, sea level
12 rise and wildfire all have dire public health impacts projected to increase due to climate change.
13 The County has incurred and will continue to incur significant cost planning and preparing for
14 these public health impacts, and educating and engaging the public.²⁸⁷

15 228. Extreme weather, flooding and other climate hazards increase the incidence of
16 drowning, bring struck by objects, fire, explosions, electrocution, and exposure to toxic materials,
17 among others. Extreme weather and other climate hazards have and will continue to destroy
18 homes, schools and businesses, causing temporary and permanent displacement. Individuals and
19 families may experience post-traumatic stress, depression, and increased risk of suicide.²⁸⁸ 17% of
20 the County's residents live in a flood risk area.²⁸⁹

21
22
23 ²⁸⁶ Id. at 93.

24 ²⁸⁷ See, e.g., Marin County Unincorporated Area Climate Action Plan 2030, 41 (2020),
25 [https://www.marincounty.org/-/media/files/departments/cd/planning/sustainability/climate-and-
adaptation/cap-2030_12082020final.pdf](https://www.marincounty.org/-/media/files/departments/cd/planning/sustainability/climate-and-adaptation/cap-2030_12082020final.pdf); Marin County Sheriff's Office, Marin Operational Area
26 Emergency Operations Plan, 60 (2014), [https://marincounty.maps.arcgis.com/sharing/rest/
content/items/f6a98eea92074a40ad59d527f4cca6e3/data](https://marincounty.maps.arcgis.com/sharing/rest/content/items/f6a98eea92074a40ad59d527f4cca6e3/data).

27 ²⁸⁸ Maizlich et. al, Climate Change and Health Profile Report Marin County, 12 (Feb. 2017),
[https://www.cdph.ca.gov/Programs/OHE/CDPH%20Document%20Library/CHPRs/CHPR041M
arin_County2-23-17.pdf](https://www.cdph.ca.gov/Programs/OHE/CDPH%20Document%20Library/CHPRs/CHPR041Marin_County2-23-17.pdf).

28 ²⁸⁹ Id. at 19.

1 229. Extreme heat-induced public health impacts in the County will result in increased
2 risk of heat-related illnesses (mild heat stress to fatal heat stroke) and the exacerbation of pre-
3 existing conditions in the medically fragile, chronically ill, and vulnerable. Increased heat also
4 intensifies the photochemical reactions that produce smog and ground level ozone and fine
5 particulates (PM2.5), which contribute to and exacerbate respiratory disease in children and adults.
6 Increased heat and carbon dioxide enhance the growth of plants that produce pollen, which are
7 associated with allergies. Because of the County’s urban infrastructure, increased temperatures
8 will add to the heat load of buildings and exacerbate existing urban heat islands adding to the risk
9 of high ambient temperatures.²⁹⁰ As of 2010, more than 6,000 people work outdoors in the County,
10 and face increased risk of heat illness. 73% of households do not have air conditioning, which can
11 counter adverse effects of heat.²⁹¹

12 230. Increased frequency and intensity of wildfires will increase fire-related death and
13 injuries and increase respiratory and cardiovascular risks from smoke, ash, and fine particles.
14 Particulate matter in wildfire smoke causes burning eyes, runny nose and illness such as
15 bronchitis.²⁹² Wildfires may also result in repeated, temporary power outages which can be life-
16 threatening if essential medical devices cannot be operated, or food and medicine cannot be
17 properly refrigerated, or there is a loss of access to running water. 16% of County residents live in
18 a high-risk wildland fire area.²⁹³

19 231. Increased frequency and intensity of drought will create human health impacts by
20 reducing water availability to fight wildfires. Drought will also increase risk of exposure to health
21 hazards including wildfires, dust storms, extreme heat events, flash flooding, degraded water
22 quality, and reduced water quantity.²⁹⁴

23 _____
24 ²⁹⁰ Id. at 13.

25 ²⁹¹ Id. at 17.

26 ²⁹² See California Department of Public Health, Wildfire Smoke: Considerations for California’s
27 Public Health Officials 19–20 (Aug. 2022), [https://www.cdph.ca.gov/Programs/EPO/](https://www.cdph.ca.gov/Programs/EPO/CDPH%20Document%20Library/EOM%20Documents/Wildfire-Smoke-Considerations-CA-PHO_08-2022.pdf)
28 [CDPH%20Document%20Library/EOM%20Documents/Wildfire-Smoke-Considerations-CA-](https://www.cdph.ca.gov/Programs/EPO/CDPH%20Document%20Library/EOM%20Documents/Wildfire-Smoke-Considerations-CA-PHO_08-2022.pdf)
[PHO_08-2022.pdf](https://www.cdph.ca.gov/Programs/EPO/CDPH%20Document%20Library/EOM%20Documents/Wildfire-Smoke-Considerations-CA-PHO_08-2022.pdf).

²⁹³ See Maizlich et. al (2017), supra note 293, at 19.

²⁹⁴ See id. at 13.

1 232. In addition, a warming climate system, will create disease-related public health
2 impacts in the County, including but not limited to, increased incidence of emerging diseases and
3 vector-borne disease with migration of animal and insect disease vectors; physical and mental
4 health impacts associated with severe weather events, such as flooding, when they cause
5 population dislocation and infrastructure loss; exacerbation of existing respiratory disease,
6 cardiovascular disease, and stroke as a result of heatwaves and increased average temperature; and
7 respiratory distress, and exacerbation of existing disease.²⁹⁵

8 233. Sea level rise will increase risk of public health impacts in the County including,
9 but are not limited to, salt water intrusion into coastal aquifers reducing quality and quantity of
10 water supply; loss of recreational venues and hazards to infrastructure and public safety due to
11 coastal erosion; and indoor air quality problems from mold resulting from water intrusion.²⁹⁶
12 Public health impacts are likely to be disproportionately borne by communities made vulnerable
13 by geographic, racial, or income disparities.²⁹⁷

14 **VI. CAUSES OF ACTION**

15 **FIRST CAUSE OF ACTION**

16 **(Public Nuisance on Behalf of the People of the State of California)**

17 **(Against All Defendants)**

18 234. The People incorporate by reference each and every allegation in §§ I–V contained
19 above, as though set forth herein in full.

20 235. The People of the State of California, acting by and through the Marin County
21 Counsel, bring this claim seeking abatement pursuant to California public nuisance law, including
22 section 731 of the California Code of Civil Procedure, and sections 3479, 3480, 3491, and 3494
23 of the California Civil Code.

24 236. Defendants, individually and in concert with each other, by their affirmative acts
25 and omissions, have caused, created, assisted in the creation of, and/or maintained harmful climate

26 _____
27 ²⁹⁵ Id.

28 ²⁹⁶ Id.

²⁹⁷ Id. at 15.

1 change-related conditions, and continue to engage in that conduct. The climate change-related
2 conditions, including higher sea level, increased storm frequency and intensity, more frequent and
3 extreme heat events, reduced air quality, and increased flooding: (1) are harmful and dangerous to
4 human health; (2) are indecent and offensive to the senses of the ordinary person; (3) obstruct and
5 threaten to obstruct the free use of the People’s property so as to interfere with the comfortable
6 enjoyment of life and property; and (4) obstruct and threaten to obstruct the free passage and use
7 of public parks, squares, streets, bodies of water, and/or highways within Marin County. They
8 therefore constitute a nuisance.

9 237. Defendants, individually and in concert with each other, created, caused,
10 contributed to, and assisted in the creation of these and other climate change-related harms in
11 Marin by, among other things, affirmatively and deceptively promoting the sale and use of fossil
12 fuel products, including in Marin, which Defendants knew would cause or exacerbate climate
13 change and its impacts in Marin, including without limitation sea level rise, more frequent and
14 extreme precipitation events, coastal and inland flooding, more frequent and extreme heat events,
15 and reduced air quality. The affirmative misconduct also includes disseminating and funding the
16 dissemination of information intended to mislead consumers and the public regarding the risks of
17 climate change and its consequences that Defendants knew would inevitably follow from the
18 intended or reasonably foreseeable use of their products. It also includes engaging in other conduct
19 to manipulate and induce the public into continued and elevated consumption of fossil fuels and
20 delaying the shift to renewable energy in a way that exacerbates climate change harms.

21 238. Defendants’ nuisance-creating conduct included egregiously making untruthful,
22 deceptive, and/or misleading environmental marketing claims, explicit and implied, in violation of
23 Cal. Bus. & Prof. Code § 17580.5. The People are within the class of persons that statute seeks to
24 protect. Defendants’ misleading environmental marketing claims include, but are not limited to,
25 deceptively marketing fossil fuel products claimed to be “low carbon,” “emissions-reducing,”
26 “clean” and/or “green,” or otherwise environmentally beneficial or benign when in reality those
27 products contribute to climate change and are harmful to the health of the planet and its people;
28 and deceptively marketing their companies and their products as contributing to solutions to

1 climate change when in reality their investments in clean energy and alternative fuels pale in
2 comparison to their investments in expanding fossil fuel production.

3 239. The climate change-related harms that Defendants created, caused, contributed to,
4 and assisted in the creation of, constitute a substantial and unreasonable interference with and
5 obstruction of public rights and property, including, inter alia, the public rights to health, safety,
6 welfare, peace, comfort, and convenience of Marin residents and other citizens. These
7 interferences with public rights, which Defendants knew their affirmative wrongful promotion
8 would cause or exacerbate, include without limitation:

9 a. interference with the public's rights so regular and severe as to cause
10 permanent inundation;

11 b. the destruction of real and personal property, rather than mere annoyance;

12 c. the loss of property and infrastructure within Marin County;

13 d. Plaintiff's coastal property, which serves myriad uses including industrial,
14 residential, infrastructural, commercial and ecological, is not suitable for regular inundation;

15 e. Sea level rise, coastal inundation and flooding, and groundwater changes,
16 which obstruct the free passage and use of roads and property, impair water quality in groundwater
17 aquifers, damage critical public infrastructure, and lead to unprecedented and dangerous storm
18 surges that can cause injury or even deaths;

19 f. More frequent and extreme precipitation events, including atmospheric
20 rivers, which cause flooding that can damage public infrastructure, obstructing the free passage
21 and use of property;

22 g. More frequent and extreme heat events, which increase the risk of injury or
23 death from dehydration, heat stroke, heart attack, and respiratory problems; and

24 h. Public health harms including reduced air quality from smoke and
25 dangerous pollutants caused by more frequent and intense wildfires across California, which
26 exacerbates existing health conditions, damages lungs and increases rates of childhood asthma,
27 respiratory and heart disease, and death, and which reduces visibility and obstructs scenic views.

28

1 240. The harms caused by Defendants' nuisance-creating conduct are extremely grave
2 and far outweigh the social utility of that conduct.

3 241. This public nuisance affects and/or interferes with an entire community's and/or a
4 considerable number of persons in Marin County and the State of California right to health, safety,
5 peace, comfort, and convenience.

6 242. The People's injuries and threatened injuries from each Defendant's affirmative
7 acts or omissions are indivisible injuries. Each Defendant's past and ongoing conduct is a direct
8 and proximate cause of the People's injuries and threatened injuries. As a direct and proximate
9 result of Defendants' acts and omissions, Plaintiff will be required to expend significant public
10 resources to mitigate the impacts of climate-related harms throughout Marin.

11 243. As a direct and proximate result of Defendants' conduct, as set forth above, the
12 common rights enjoyed by the People of the State of California and by the general public in the
13 County of Marin have been unreasonably interfered with because Defendants knew or should have
14 known that their conduct would create a continuing problem with long-lasting significant negative
15 effects on the rights of the public.

16 244. Defendants' actions are a direct and legal cause of the public nuisance.

17 245. Defendants' acts and omissions as alleged herein are indivisible causes of the
18 People's injuries and damages as alleged herein.

19 246. Defendants are jointly and severally liable to the People for committing a public
20 nuisance.

21 247. The People of the State of California, acting through the County of Marin, have a
22 clearly ascertainable right to have the public nuisance created by Defendants abated.

23 248. The People seek an order of abatement requiring Defendants, and each of them
24 jointly and severally, to abate the nuisance, including by making payments into an abatement fund
25 to address the public nuisance.

26 249. Wherefore, the People of the State of California also pray for relief as set forth
27 below.

28

1 **SECOND CAUSE OF ACTION**

2 **(Public Nuisance on Behalf of Marin County)**

3 **(Against All Defendants)**

4 250. Plaintiff incorporates by reference each and every allegation in §§ I–V contained
5 above, as though set forth herein in full.

6 251. Defendants, individually and in concert with each other, by their affirmative acts
7 and omissions, have caused, created, assisted in the creation of, and/or maintained harmful climate
8 change-related conditions, and continue to engage in that conduct. The climate change-related
9 conditions, including higher sea level, increased storm frequency and intensity, more frequent and
10 extreme heat events, reduced air quality, and increased flooding: (1) are harmful and dangerous
11 to human health; (2) are indecent and offensive to the senses of the ordinary person; (3) obstruct
12 and threaten to obstruct the free use of the County’s property so as to interfere with the comfortable
13 enjoyment of life and property; and (4) obstruct and threaten to obstruct the free passage and use
14 of public parks, squares, streets, bodies of water, and/or highways within Marin County. They
15 therefore constitute a nuisance.

16 252. Defendants, and each of them, created, caused, contributed to, and assisted in the
17 creation of these and other climate change-related harms in Marin County by, among other things,
18 affirmatively and deceptively promoting the sale and use of fossil fuel products which Defendants
19 knew would cause or exacerbate climate change and its impacts in Marin County including without
20 limitation sea level rise, more frequent and extreme precipitation events, coastal and inland
21 flooding, more frequent and extreme heat events, and reduced air quality. The affirmative
22 misconduct also includes disseminating and funding the dissemination of information intended to
23 mislead consumers and the public regarding the risks of climate change and its consequences that
24 Defendants knew would inevitably follow from the intended or reasonably foreseeable use of their
25 products. It also includes engaging in other conduct to manipulate and induce the public into
26 continued and elevated consumption of fossil fuels and delaying the shift to renewable energy in
27 a way that exacerbates climate change harms.

1 253. Defendants’ nuisance-creating conduct included egregiously making untruthful,
2 deceptive, and/or misleading environmental marketing claims, explicit and implied, in violation of
3 Cal. Bus. & Prof. Code § 17580.5. Plaintiff is within the class of persons that statute seeks to
4 protect. Defendants’ misleading environmental marketing claims include, but are not limited to,
5 deceptively marketing fossil fuel products claimed to be “low carbon,” “emissions-reducing,”
6 “clean” and/or “green,” or otherwise environmentally beneficial or benign when in reality those
7 products contribute to climate change and are harmful to the health of the planet and its people;
8 and deceptively marketing their companies and their products as contributing to solutions to
9 climate change when in reality their investments in clean energy and alternative fuels pale in
10 comparison to their investments in expanding fossil fuel production.

11 254. The climate change-related harms that Defendants created, caused, contributed to,
12 and assisted in the creation of, constitute a substantial and unreasonable interference with and
13 obstruction of public rights and property, including, *inter alia*, the public rights to health, safety,
14 welfare, peace, comfort, and convenience of Marin County residents and other citizens. These
15 interferences with public rights, which Defendants knew their affirmative wrongful promotion
16 would cause or exacerbate, include without limitation:

17 a. interference with the public’s rights so regular and severe as to cause
18 permanent inundation;

19 b. the destruction of real and personal property, rather than mere annoyance;

20 c. the loss of property and infrastructure within Marin County, which will
21 actually be borne by its residents as loss of use of public property and infrastructure and diversion
22 of tax dollars away from other public services to sea level rise;

23 d. Plaintiff’s coastal property, which serves myriad uses including industrial,
24 residential, infrastructural, commercial and ecological, is not suitable for regular inundation;

25 e. Sea level rise, coastal inundation and flooding, and groundwater changes,
26 which obstruct the free passage and use of roads and property, impair water quality in groundwater
27 aquifers, damage critical public infrastructure, and lead to unprecedented and dangerous storm
28 surges that can cause injury or even deaths;

1 f. More frequent and extreme precipitation events, including atmospheric
2 rivers, which cause flooding that can damage public infrastructure, obstructing the free passage
3 and use of property;

4 g. More frequent and extreme heat events, which increase the risk of injury or
5 death from dehydration, heat stroke, heart attack, and respiratory problems; and

6 h. Public health harms including reduced air quality from smoke and
7 dangerous pollutants caused by more frequent and intense wildfires across California, which
8 exacerbates existing health conditions, damages lungs and increases rates of childhood asthma,
9 respiratory and heart disease, and death, and which reduces visibility and obstructs scenic views.

10 255. The harms caused by Defendants' nuisance-creating conduct are extremely grave
11 and far outweigh the social utility of that conduct.

12 256. This public nuisance affects and/or interferes with the rights of an entire community
13 and/or the rights of a considerable number of persons in Marin County to health, safety, peace,
14 comfort, and convenience.

15 257. In addition to the harms suffered by the public at large, Plaintiff has suffered special
16 injuries different in kind. Among other harms,

17 a. Plaintiff has been forced to spend or set aside significant funds to assess,
18 plan for, and enact infrastructure changes needed to mitigate rising sea levels on Plaintiff's publicly
19 owned beaches and other public coastal property;

20 b. Plaintiff has had to plan for and provide additional emergency and other
21 public services in response to more frequent and more intense flooding and storm surges on both
22 properties owned by Plaintiff, and properties owned, leased, and utilized by residents and visitors
23 to Plaintiff's communities.

24 258. Plaintiff's injuries and threatened injuries from each Defendant's affirmative acts
25 or omissions are indivisible injuries. Each Defendant's past and ongoing conduct is a direct and
26 proximate cause of Plaintiff's injuries and threatened injuries. As a direct and proximate result of
27 Defendants' acts and omissions, Plaintiff will be required to expend significant public resources
28 to mitigate the impacts of climate-related harms throughout Marin County.

1 259. Defendants' wrongful conduct was oppressive, malicious, and fraudulent, in that
2 their conduct was willful, intentional, and in conscious disregard for the rights of others.
3 Defendants' conduct was so vile, base, and contemptible that it would be looked down upon and
4 despised by reasonable people, justifying an award of punitive and exemplary damages in an
5 amount subject to proof at trial, and justifying equitable disgorgement of all profits Defendants
6 obtained through their unlawful and outrageous conduct.

7 260. As a direct and proximate result of Defendants' conduct, as set forth above, the
8 common rights enjoyed by the general public in Marin County have been unreasonably interfered
9 with because Defendants knew or should have known that their conduct would create a continuing
10 problem with long-lasting significant negative effects on the rights of the public.

11 261. Defendants' actions are a direct and legal cause of the public nuisance.

12 262. Defendants are jointly and severally liable to Plaintiff for committing a public
13 nuisance.

14 263. Plaintiff has a clearly ascertainable right to have the public nuisance created by
15 Defendants abated.

16 264. Wherefore, Plaintiff prays for relief as set forth below.

17 **THIRD CAUSE OF ACTION**

18 **(Strict Liability—Failure to Warn on behalf of Marin County)**

19 **(Against All Defendants)**

20 265. Plaintiff Marin County incorporates by reference each and every allegation in §§ I–
21 V contained above, as though set forth herein in full.

22 266. Defendants, individually and in concert with each other, heavily marketed,
23 promoted, and advertised fossil fuel products and their derivatives, which were sold or used by
24 their respective affiliates and subsidiaries. Defendants received direct financial benefit from their
25 affiliates' and subsidiaries' sales of fossil fuel products. Defendants' role as promoter and marketer
26 was integral to their respective businesses and a necessary factor in bringing fossil fuel products
27 and their derivatives to the consumer market, such that Defendants had control over, and a
28

1 substantial ability to influence, the manufacturing and distribution processes of their affiliates and
2 subsidiaries.

3 267. As manufacturers, advertisers, promoters, and/or sellers of fossil fuel products and
4 their derivatives, Defendants had a duty to warn consumers, the public, and Plaintiff of reasonably
5 foreseeable environmental and health risks posed by those products and derivatives.

6 268. Throughout the times at issue, Defendants individually and collectively knew or
7 should have known—based on information passed to them from their internal research divisions
8 and affiliates, trade associations and entities, and/or from the international scientific community—
9 that fossil fuel products, whether used as intended or misused in a foreseeable manner, release
10 greenhouse gases into the atmosphere that inevitably cause *inter alia* global warming, sea level
11 rise, increased intensity and frequency of precipitation events and flooding, increased intensity and
12 frequency of storm surges, more frequent and severe heat waves and extreme temperatures,
13 reduced air quality, and the consequences and injuries associated with those physical and
14 environmental changes, which result in risks to human health and safety, damage to property and
15 infrastructure, and loss of use of public services in Marin.

16 269. Throughout the times at issue and continuing today, Defendants’ fossil fuel
17 products and their derivatives were used, distributed, and sold in a manner in which they were
18 reasonably foreseeably intended to be used, distributed, and sold, including but not limited to being
19 combusted for energy, combusted to power automobiles, refined into petrochemicals, and refined
20 and/or incorporated into petrochemical products including, but not limited to, fuels and plastics.

21 270. Throughout the times at issue and continuing today, fossil fuel products presented
22 and still present a substantial risk of injury to Plaintiff through the climate effects described above,
23 whether used as intended or misused in a reasonably foreseeable manner. They were not
24 reasonably safe at the time they left Defendants’ control because they lacked adequate warnings
25 and instructions. Defendants’ actual and/or constructive knowledge described above also
26 encompassed all of the risks described in this paragraph.

27 271. The fossil fuel products and their derivatives reached consumers substantially
28 unchanged from the condition in which they left the Defendants’ control. Defendants and their

1 affiliates and subsidiaries knew, or should have known, that these fossil fuel products and their
2 derivatives would be used by Plaintiff, its residents, and others within the County's limits, amongst
3 others, in the manner reasonably foreseeably intended.

4 272. Throughout the times at issue, the ordinary consumer would not recognize that the
5 use or foreseeable misuse of fossil fuel products causes global and localized changes in climate,
6 including those effects described herein.

7 273. At the time of manufacture, merchandising, advertising, promotion, or sale,
8 Defendants could have provided warnings or instructions regarding the full and complete risks
9 fossil fuel products and their derivatives posed because they knew, and/or should have known, of
10 the unreasonable risks of harm associated with the use of these products, as described herein.

11 274. Throughout the times at issue, Defendants individually and in concert widely
12 disseminated marketing materials, refuted the generally accepted scientific knowledge at the time
13 concerning climate change, and advanced pseudo-scientific theories of their own, and developed
14 public relations campaigns and materials that prevented reasonable consumers from recognizing
15 or discovering the latent risk that Defendants' fossil fuel products and their derivatives would
16 cause grave climate changes. Defendants also represented, asserted, claimed, and warranted that
17 their fossil fuel products and derivatives were safe for their intended and foreseeable uses.

18 275. Despite the Defendants' superior and unequal knowledge of the risks posed by
19 fossil fuel products and their derivatives, Defendants, and each of them, breached their duty to
20 warn by failing to adequately warn Plaintiff, customers, and the public of the risks of climate
21 change and the other dangers that Defendants knew would inevitably follow from the intended or
22 reasonably foreseeable use of Defendants' fossil fuel products.

23 276. Any warnings the Defendants may have issued as to the risks of their fossil fuel
24 products and their derivatives were rendered ineffective and inadequate by Defendants' false and
25 misleading public relations campaigns and statements about fossil fuel products, and their decades-
26 long efforts to conceal and misrepresent the dangers that follow from the intended or reasonably
27 foreseeable use of such products.

28

1 277. Accordingly, throughout the times at issue, the ordinary consumer would not
2 recognize that the use of fossil fuel products and their derivatives causes global and localized
3 changes in climate, and consequent injuries to Marin and its communities, as described herein.

4 278. Had the Defendants provided adequate warnings and not waged a deceptive
5 campaign against climate science, their fossil fuel products and their derivatives would not have
6 had widespread acceptance in the marketplace, and alternatives to fossil fuel products could have
7 been developed faster, investment in fossil fuel alternatives would be greater, and/or fossil fuel
8 alternatives would be used in greater amounts.

9 279. Moreover, had the Defendants provided adequate warnings about the adverse
10 impacts to public health and the environment that result from the intended and reasonably
11 foreseeable use of fossil fuel products and their derivatives, Plaintiff and its residents would have
12 taken measures to decrease fossil fuel dependency in order to avoid or lessen the climate change-
13 related harms described herein and property damage that would inevitably follow.

14 280. As a result of the Defendants' failure to warn about the unreasonably dangerous
15 conditions of their fossil fuel products and their derivatives, Defendants are strictly liable to
16 Plaintiff.

17 281. Defendants' wrongful conduct was oppressive, malicious, and fraudulent, in that
18 their conduct was willful, intentional, and in conscious disregard for the rights of others.
19 Defendants' conduct was so vile, base, and contemptible that it would be looked down upon and
20 despised by reasonable people, justifying an award of punitive and exemplary damages in an
21 amount subject to proof at trial, and justifying equitable disgorgement of all profits Defendants
22 obtained through their unlawful and outrageous conduct.

23 282. As a direct and proximate result of the defects previously described, fossil fuel
24 products caused Plaintiff to sustain the injuries and damages set forth in this Complaint, including
25 damage to publicly owned infrastructure and real property, and the creation and maintenance of a
26 nuisance that interferes with the rights of the County, its residents, and of the People.

27 283. As a direct and proximate result of Defendants' acts and omissions as alleged
28 herein, Plaintiff has suffered monetary losses and damages in amounts to be proven at trial.

1 284. Defendants’ acts and omissions as alleged herein are indivisible causes of
2 Plaintiff’s injuries as alleged herein.

3 285. Wherefore, Plaintiff prays for relief as set forth below.

4 **FOURTH CAUSE OF ACTION**
5 **(Private Nuisance on behalf of Marin County)**
6 **(Against All Defendants)**

7 286. Plaintiff Marin County incorporates by reference each and every allegation
8 contained in §§ I–V above, as though set forth herein in full.

9 287. Plaintiff owns and manages extensive property within Marin County borders that
10 has been injured and will be injured by rising sea levels.

11 288. Defendants, and each of them, by their acts and omissions, have intentionally and
12 unreasonably created a condition on Plaintiff’s property, and permitted that condition to persist,
13 which constitutes a nuisance by increasing sea level, increasing the frequency and intensity of
14 flooding, increasing the frequency and intensity of extreme heat events (including fire smoke), and
15 increasing the intensity and frequency of storms.

16 289. The condition created by Defendants substantially and negatively affects Plaintiff’s
17 interest in its own coastal real property. In particular, higher sea level, increased storm frequency
18 and intensity, increased frequency and intensity of extreme heat events (including fire smoke), and
19 increased flooding frequency and intensity are:

- 20 a. harmful and dangerous to human health;
21 b. indecent and offensive to the senses of the ordinary person;
22 c. threatening to obstruct the free use of Plaintiff’s property and property
23 owned by Plaintiff’s residents and citizens, so as to interfere with the comfortable enjoyment of
24 life and property; and
25 d. threatening to obstruct the free passage and use of public parks, squares,
26 streets, bodies of water, and/or highways within Marin.

27 290. The condition described above created by Defendants’ conduct substantially
28 interferes with Plaintiff’s use and quiet enjoyment of its coastal properties.

1 291. Plaintiff has not consented to Defendants' conduct in creating the condition that has
2 led to climate change and its associated harms.

3 292. The ordinary person, and the ordinary city, county, or public entity in Plaintiff's
4 position, would be reasonably annoyed and disturbed by Defendants' conduct and the condition
5 created thereby, because, *inter alia*, it infringes on Plaintiff's ability to provide public space and
6 safe property to residents and visitors, and has forced Plaintiff to plan for and provide additional
7 emergency and other public services in response to more frequent and more intense flooding and
8 storm surges on properties owned by Plaintiff.

9 293. The seriousness of rising sea levels, increased weather volatility flooding, and
10 extreme heat events (including fire smoke) is extremely grave, and outweighs the social utility of
11 defendants' conduct. The seriousness of the harm to Plaintiff outweighs the benefit of Defendants'
12 and each of their conduct, because:

13 a. the interference with Plaintiff's property is expected to become so regular
14 and severe as to be a permanent inundation;

15 b. the nature of the harm is the destruction of Plaintiff's public and private real
16 and personal property, rather than mere annoyance;

17 c. the interference borne by Plaintiff is the loss of its private and public
18 property and infrastructure, which will actually be borne by Plaintiff's citizens as loss of use of
19 public property and infrastructure and diversion of tax dollars away from other public services to
20 sea level rise;

21 d. Plaintiff's coastal public and private property, which serves myriad uses
22 including industrial, residential, infrastructural, commercial and ecological, is not suitable for
23 regular inundation;

24 e. the burden on Plaintiff to mitigate and prevent the interference with its
25 property is significant and severe, as costs associated with addressing climate change harms caused
26 by Defendants are projected to be in the billions of dollars over the next several decades;

27 f. the social benefit of the purpose of placing fossil fuels into the stream of
28 commerce is overshadowed by the availability of other sources of energy that could have been

1 placed into the stream of commerce that would not have caused climate change; Defendants, and
2 each of them, knew of the external costs of placing their fossil fuel products into the stream of
3 commerce, and rather than striving to mitigate those externalities, Defendants acted affirmatively
4 to obscure those costs from public consciousness;

5 g. the social cost each ton of CO₂ emitted into the atmosphere increases as
6 total global emissions increase, so that unchecked extraction and consumption of fossil fuel
7 products is more harmful and costly than moderated extraction and consumption;

8 h. Defendants' campaign of disinformation regarding global warming and the
9 climatic effects of fossil fuel products prevented customers, consumers, and the general public
10 from taking steps to mitigate the inevitable consequences of fossil fuel consumption, and
11 incorporating those consequences into either short-term decisions or long-term planning; and

12 i. it was practical for Defendants, and each of them, in light of their extensive
13 knowledge of the hazards of placing fossil fuel products into the stream of commerce, to pursue
14 and adopt known, practical, and available technologies, energy sources, and business practices that
15 would have mitigated their greenhouse gas pollution and eased the transition to a lower carbon
16 economy, reduced global CO₂ emissions, and mitigated the harms associated with the use and
17 consumption of such products.

18 294. Defendants' conduct was a direct and proximate cause of Plaintiff's injuries, and a
19 substantial factor in the harms suffered by Plaintiff as described in this Complaint.

20 295. Defendants' acts and omissions as alleged herein are indivisible causes of Plaintiff
21 Marin County's injuries and damage as alleged herein.

22 296. Defendants' wrongful conduct was oppressive, malicious, and fraudulent, in that
23 their conduct was willful, intentional, and in conscious disregard for the rights of others.
24 Defendants' conduct was so vile, base, and contemptible that it would be looked down upon and
25 despised by reasonable people, justifying an award of punitive and exemplary damages in an
26 amount subject to proof at trial, and justifying equitable disgorgement of all profits Defendants
27 obtained through their unlawful and outrageous conduct.

28

1 and dissemination of information regarding the climate impacts of fossil fuel products to users of
2 those products and to the public.

3 304. Defendants had superior knowledge of the risk posed by fossil fuel products at all
4 times relevant to this Complaint.

5 305. Defendants, collectively and individually, had a duty to use due care in developing,
6 testing, inspecting, selling and marketing their fossil fuel products. That duty obligated Defendants
7 collectively and individually to, *inter alia*, prevent defective products from entering the stream of
8 commerce, and prevent reasonably foreseeable harm that could have resulted from the ordinary
9 use or reasonably foreseeable misuse of Defendants' products.

10 306. Defendants, and each of them, breached their duty of due care by engaging in a
11 campaign of disinformation regarding global warming and the climatic effects of fossil fuel
12 products that prevented customers and the general public from taking steps to mitigate the
13 inevitable consequences of fossil fuel consumption, and incorporating those consequences into
14 either short-term decisions or long-term planning. This includes when they advertised, promoted,
15 and/or sold fossil fuel products and their derivatives, while failing to include warnings of the risk
16 of harm associated with fossil fuel products and their derivatives, in a manner that they knew or
17 should have known would result in injury to human health and safety, damage to Plaintiff's
18 property and infrastructure, loss of use of Plaintiff's services, and other damages to the Plaintiff.

19 307. Any warnings provided by Defendants were rendered ineffective by the years-long
20 deceptive marketing practices and public relations campaigns, which promulgated false and
21 misleading statements, casted doubt on the consensus of climate scientists, and advanced pseudo-
22 scientific theories.

23 308. Defendants' individual and collective acts and omissions were actual, substantial
24 causes of climate change and its consequences, including Plaintiff's injuries and damages set forth
25 herein.

26 309. Defendants' individual and collective acts and omissions were proximate causes of
27 climate change and its consequences, including Plaintiff's injuries and damages set forth herein.
28 No other act, omission, or natural phenomenon intervened in the chain of causation between

1 Defendants' conduct and Plaintiff's injuries and damages, or superseded Defendants' breach of
2 their duties' substantiality in causing Plaintiff's injuries and damages.

3 310. As a direct and proximate result of Defendants' and each of their acts and
4 omissions, Plaintiff sustained injuries and damages as set forth herein.

5 311. Defendants' acts and omissions as alleged herein are indivisible causes of
6 Plaintiff's injuries and damage as alleged herein.

7 312. A reasonably careful company would not engage in a decades-long deceptive
8 marketing and public relations campaign to promulgate such false and misleading statements,
9 would not manufacture, distribute, sell, or promote fossil fuel products and their derivatives
10 without warning, would warn of these products' hazardous properties, and/or would take steps to
11 enhance the safety and/or reduce the risk of the products.

12 313. Defendants' wrongful conduct was oppressive, malicious, and fraudulent, in that
13 their conduct was willful, intentional, and in conscious disregard for the rights of others.
14 Defendants' conduct was so vile, base, and contemptible that it would be looked down upon and
15 despised by reasonable people, justifying an award of punitive and exemplary damages in an
16 amount subject to proof at trial, and justifying equitable disgorgement of all profits Defendants
17 obtained through their unlawful and outrageous conduct.

18 314. Defendants are jointly and severally liable to the Plaintiff for causing a private
19 nuisance.

20 315. Wherefore, Plaintiff prays for relief as set forth below.

21 **SIXTH CAUSE OF ACTION**

22 **(Negligence - Failure to Warn on Behalf of Marin County)**

23 **(Against All Defendants)**

24 316. Plaintiff incorporates by reference each and every allegation in §§ I-V contained
25 above, as though set forth herein in full.

26 317. At all relevant times, Defendants and their affiliates and subsidiaries were engaged
27 in the business of manufacturing, advertising, promoting, and/or selling fossil fuel products and
28 their derivatives.

1 318. Defendants, individually and in concert with each other, heavily marketed,
2 promoted, and advertised fossil fuel products and their derivatives, which were sold or used by
3 their respective affiliates and subsidiaries. Defendants received direct financial benefit from their
4 affiliates' and subsidiaries' sales of fossil fuel products. Defendants' role as promoter and marketer
5 was integral to their respective businesses and a necessary factor in bringing fossil fuel products
6 and their derivatives to the consumer market, such that Defendants had control over, and a
7 substantial ability to influence, the manufacturing and distribution processes of their affiliates and
8 subsidiaries.

9 319. As manufacturers, advertisers, promoters, and/or sellers of fossil fuel products and
10 their derivatives, Defendants had a duty to warn consumers, the public, and Plaintiff of reasonably
11 foreseeable environmental and health risks posed by those products and derivatives.

12 320. Throughout the times at issue, Defendants individually and collectively knew or
13 should have known—based on information passed to them from their internal research divisions
14 and affiliates, trade associations and entities, and/or from the international scientific community—
15 that fossil fuel products, whether used as intended or misused in a foreseeable manner, release
16 greenhouse gases into the atmosphere, causing global warming, sea level rise, increased intensity
17 and frequency of precipitation events and flooding, increased intensity and frequency of
18 storm surges, more frequent and severe heat waves and extreme temperatures, reduced air quality,
19 and the consequences and injuries associated with those physical and environmental changes,
20 which result in risks to human health and safety, damage to property and infrastructure, and loss
21 of use of public services in Marin.

22 321. Defendants knew or should have known, based on information passed to them from
23 their internal research divisions and affiliates, their trade organizations, and/or from the
24 international scientific community, that the climate effects described above rendered their fossil
25 fuel products dangerous, or likely to be dangerous, when used as intended or misused in a
26 reasonably foreseeable manner.

27 322. Throughout the times at issue and continuing today, Defendants' fossil fuel
28 products and their derivatives were used, distributed, and sold in a manner in which they were

1 reasonably foreseeably intended to be used, distributed, and sold, including but not limited to being
2 combusted for energy, combusted to power automobiles, refined into petrochemicals, and refined
3 and/or incorporated into petrochemical products including, but not limited to, fuels and plastics.

4 323. Defendants and their affiliates and subsidiaries knew, or should have known, that
5 these fossil fuel products and their derivatives would be used by the County, its residents, and
6 others within the County's limits, amongst others, in the manner reasonably foreseeably intended.

7 324. Throughout the times at issue and continuing today, fossil fuel products presented
8 and still present a substantial risk of injury to Plaintiff through the climate effects described above,
9 whether used as intended or misused in a reasonably foreseeable manner. They were not
10 reasonably safe at the time they left Defendants' control because they lacked adequate warnings
11 and instructions. Defendants' actual and/or constructive knowledge described above also
12 encompassed all of the risks described in this paragraph. The fossil fuel products and their
13 derivatives reached consumers substantially unchanged from the condition in which they left the
14 Defendants' control. Defendants and their affiliates and subsidiaries knew, or should have known,
15 that these fossil fuel products and their derivatives would be used by Plaintiff, its residents, and
16 others within the Marin County's limits, amongst others, in the manner reasonably foreseeably
17 intended.

18 325. At the time of manufacture, merchandising, advertising, promotion, or sale,
19 Defendants could have provided warnings or instructions regarding the full and complete risks
20 fossil fuel products and their derivatives posed because they knew, and/or should have known, of
21 the unreasonable risks of harm associated with the use of these products, as described herein.

22 326. Throughout the times at issue, Defendants individually and in concert widely
23 disseminated marketing materials, refuted the scientific knowledge generally accepted at the time
24 concerning climate change, and advanced pseudo-scientific theories of their own, and developed
25 public relations campaigns and materials that prevented reasonable consumers from recognizing
26 or discovering the latent risk that Defendants' fossil fuel products and their derivatives would
27 cause grave climate changes. Defendants also represented, asserted, claimed, and warranted that
28 their fossil fuel products and derivatives were safe for their intended and foreseeable uses.

1 327. Despite the Defendants' superior and unequal knowledge of the risks posed by
2 fossil fuel products and their derivatives, Defendants, and each of them, breached their duty to
3 warn by failing to adequately warn Plaintiffs, customers, and the public of the risks of climate
4 change and other dangers that Defendants knew would inevitably follow from the intended or
5 reasonably foreseeable use of Defendants' fossil fuel products.

6 328. Any warnings the Defendants may have issued as to the risks of their fossil fuel
7 products and their derivatives were rendered ineffective and inadequate by Defendants' false and
8 misleading public relations campaigns and statements about fossil fuel products, and their decades-
9 long efforts to conceal and misrepresent the dangers that follow from the intended or reasonably
10 foreseeable use of such products.

11 329. Accordingly, throughout the times at issue, the ordinary consumer would not
12 recognize that the use of fossil fuel products and their derivatives causes global and localized
13 changes in climate, and consequent injuries to Plaintiff and its communities, as described herein.

14 330. Had the Defendants provided adequate warnings and not waged a deceptive
15 campaign against climate science, their fossil fuel products and their derivatives would not have
16 had widespread acceptance in the marketplace, and alternatives to fossil fuel products could have
17 been developed faster, investment in fossil fuel alternatives would be greater, and/or fossil fuel
18 alternatives would be used in greater amounts.

19 331. Moreover, had the Defendants provided adequate warnings about the adverse
20 impacts to public health and the environment that result from the intended and reasonably
21 foreseeable use of fossil fuel products and their derivatives, Plaintiff and its residents would have
22 taken measures to decrease fossil fuel dependency to avoid or lessen the climate change-related
23 harms described herein and property damage that would inevitably follow.

24 332. As a result of the Defendants' failure to warn about the unreasonably dangerous
25 conditions of their fossil fuel products and their derivatives, Defendants are liable to Plaintiff.

26 333. Defendants further breached their duty of care by making untruthful, deceptive,
27 and/or misleading environmental marketing claims, explicit and implied, in violation of Cal. Bus.
28

1 & Prof. Code § 17580.5. By violating the greenwashing statute, Defendants are presumed to have
2 breached their duty per se under Evidence Code § 669.

3 a. Defendants violated § 17580.5 with such conduct including deceptively
4 marketing fossil fuel products claimed to be “low carbon,” “emissions-reducing,” “clean” and/or
5 “green,” or otherwise environmentally beneficial or benign when in reality those products
6 contribute to climate change and are harmful to the health of the planet and its people; and
7 deceptively marketing their companies and their products as contributing to solutions to climate
8 change when in reality their investments in clean energy and alternative fuels pale in comparison
9 to their investments in expanding fossil fuel production.

10 b. This conduct was the proximate cause of Plaintiff’s climate related injuries.

11 c. Plaintiff’s injuries resulted from an occurrence of the nature which the
12 greenwashing statute was designed to prevent.

13 d. Plaintiff is among the class of persons for whose protection the
14 greenwashing statute was adopted.

15 334. Defendants’ wrongful conduct was oppressive, malicious, and fraudulent, in that
16 their conduct was willful, intentional, and in conscious disregard for the rights of others.
17 Defendants’ conduct was so vile, base, and contemptible that it would be looked down upon and
18 despised by reasonable people, justifying an award of punitive and exemplary damages in an
19 amount subject to proof at trial, and justifying equitable disgorgement of all profits Defendants
20 obtained through their unlawful and outrageous conduct.

21 335. As a direct and proximate result of the defects previously described, fossil fuel
22 products caused Plaintiff to sustain the injuries and damages set forth in this Complaint, including
23 damage to publicly owned infrastructure and real property, and the creation and maintenance of a
24 nuisance that interferes with the rights of the County, its residents, and of the People.

25 336. Defendants’ acts and omissions as alleged herein are indivisible causes of
26 Plaintiff’s injuries as alleged herein.

27 337. As a direct and proximate result of Defendants’ acts and omissions as alleged
28 herein, Plaintiff has suffered monetary losses and damages in amounts to be proven at trial.

1 338. Wherefore, Plaintiff prays for relief as set forth below.

2 **SEVENTH CAUSE OF ACTION**

3 **(Trespass on Behalf of Marin County)**

4 **(Against All Defendants)**

5 339. Plaintiff incorporates by reference each and every allegation contained above, as
6 though set forth herein in full.

7 340. Plaintiff Marin County owns, leases, occupies, and/or controls real property within
8 Plaintiff’s county boundaries and within communities located within the County.

9 341. Defendants, and each of them, have intentionally, recklessly, or negligently caused
10 ocean waters, storm surges, flood waters, extreme precipitation, and airborne pollutants including
11 smog and wildfire smoke to enter Plaintiff Marin County’s property, by advertising, promoting,
12 marketing, and/or selling fossil fuel products in a manner which, knowing those products in their
13 normal operation and use or foreseeable misuse would cause global and local sea levels to rise,
14 cause flooding to become more frequent and more intense, and cause storm surges to become more
15 frequent and more intense.

16 342. Plaintiff Marin County did not give permission for Defendants, or any of them, to
17 cause ocean water to enter its property.

18 343. Plaintiff Marin County has been and continues to be actually injured and continues
19 to suffer damages as a result of Defendants and each of their having caused ocean water to enter
20 their real property, by *inter alia* permanently submerging real property owned by Plaintiff, causing
21 flooding which have invaded and threatens to invade real property owned by Plaintiff and rendered
22 it unusable, and causing storm surges and heightened waves which have invaded and threatened
23 to invade real Property owned by Plaintiff and rendered it unusable.

24 344. Defendants’ and each Defendant’s conduct, including their decades-long campaign
25 of deception, which had the purpose and effect of inflating and sustaining the market for fossil
26 fuels, drove up greenhouse gas emissions, accelerated global warming, delayed the energy
27 economy’s transition to a lower-carbon future, and brought about devastating climate change
28

1 impacts to Marin, was a substantial factor in causing the injuries and damages to Plaintiff's public
2 and private real property.

3 345. Defendants' acts and omissions as alleged herein are indivisible causes of Plaintiff
4 Marin County's injuries and damage as alleged herein.

5 346. Defendants' wrongful conduct was oppressive, malicious, and fraudulent, in that
6 their conduct was willful, intentional, and in conscious disregard for the rights of others.
7 Defendants' conduct was so vile, base, and contemptible that it would be looked down upon and
8 despised by reasonable people, justifying an award of punitive and exemplary damages in an
9 amount subject to proof at trial, and justifying equitable disgorgement of all profits Defendants
10 obtained through their unlawful and outrageous conduct.

11 347. Defendants are jointly and severally liable to the Plaintiff for causing trespass.

12 348. Wherefore, Plaintiff prays for relief as set forth below.

13 **VII. PRAYER FOR RELIEF**

- 14 1. Compensatory damages in an amount according to proof;
 - 15 2. Equitable relief to abate the nuisances complained of herein;
 - 16 3. Reasonable attorneys' fees pursuant to California Code of Civil Procedure 1021.5
17 or otherwise;
 - 18 4. Punitive damages;
 - 19 5. Disgorgement of profits;
 - 20 6. Finding Defendants jointly and severally liable for causing, creating, assisting in
21 the creation, of, contributing to, and/or maintaining a public nuisance;
 - 22 7. Ordering an abatement fund remedy to be paid for by Defendants to provide for
23 infrastructure and other support necessary for the People to abate the nuisances complained of
24 herein;
 - 25 8. Pre- and post-judgment interest as permitted by law;
 - 26 9. Costs of suit and expenses; and
 - 27 10. For such and other relief as the court may deem proper.
- 28

1 **VIII. JURY DEMAND**

2 Plaintiff Marin County demands a jury trial on all issues so triable.

3
4 Dated: June 10, 2024

**OFFICE OF THE COUNTY COUNSEL
COUNTY OF MARIN**

5
6
7 By: /s/ Brian E. Washington
8 BRIAN E. WASHINGTON, County Counsel
9 CAROLYN ORTLER TSAI, Deputy County
10 Counsel

SHER EDLING LLP

11 /s/ Katie H. Jones
12 VICTOR M. SHER
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17 YUMEHICO HOSHIJIMA
18 MIRANDA C. HOLETON
19 GRACE KOSTER

20 *Attorneys for The County of Marin, individually
21 and on behalf of the People of the State of
22 California*

1 **PROOF OF SERVICE**

2 I am employed in the County of San Francisco, State of California. I am over the age of
3 eighteen (18) years and not a party to the action. My business address is 100 Montgomery St., Ste.
4 1410, San Francisco, CA 94104. I am readily familiar with Sher Edling LLP’s practice for
5 collection and processing of documents for mailing.

6 On June 10, 2024, I served copies of the following document:

7 **FIRST AMENDED COMPLAINT**

8 upon the counsel listed below via File&ServeXpress as follows:

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12 I declare under penalty of perjury that the foregoing is true and correct. Executed in San
13 Francisco, CA on June 10, 2024.

15 /s/ Oni Strawn
16 Oni Strawn