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Attorneys for Plaintiffs

IN THE CIRCUIT COURT OF THE FIRST CIRCUIT

STATE OF HAWAI'I

NAVAHINE F., a Minor, by and through) CIVIL NO.
her natural guardian; KA'ŌNOHI PG., a) (Environmental Court)
Minor, by and through his natural)
guardian; KAWAHINE'ILIKEA N., a) COMPLAINT FOR DECLARATORY
Minor by and through her natural guardian;) AND INJUNCTIVE RELIEF;
MESINA DR., a Minor, by and through) SUMMONS
her natural guardian; KAWENA F., a)
Minor by and through her natural)
guardians; TYLER L., a Minor, by and)
through her natural guardian; RYLEE K., a)
Minor, by and through her natural)
guardian; KALIKO T., a Minor by and)
through her natural guardian;)
CHARLOTTE M., a Minor, by and)
through her natural guardian; TALIYA N.,)
a Minor by and through her natural)
guardian; KANOA VB., a Minor, by and)
through his natural guardian; KALĀ W.;)
PAHONU C., a Minor by and through his)

natural guardian; and BRIANNA K., a Minor by and through her natural guardian,

V. DEPARTMENT OF TRANSPORTATION, STATE OF HAWAI'I; JADE BUTAY, in his official capacity as Director of the Hawai'i Department of Transportation; GOVERNOR DAVID IGE; and STATE OF HAWAI'I,

Defendants.

COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF

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INTRODUCTION

1. Plaintiffs Navahine F., by and through her natural guardian; Kaʻōnohi P.-G., a Minor, by and through his natural guardian; Kawahineʻilikea N., a Minor by and through her natural guardian; Mesina D.-R., a Minor, by and through her natural guardian; Kawena F., a Minor by and through her natural guardians; Tyler L., a Minor, by and through her natural guardian; Rylee K., a Minor, by and through her natural guardian; Kaliko T., a Minor by and through her natural guardian; Charlotte M., a Minor, by and through her natural guardian; Taliya N., a Minor by and through her natural guardian; Kanoa V.-B., a Minor, by and through his natural guardian; Kalā W.; Pahonu C., a Minor by and through his natural guardian; and Brianna K., a Minor by and through her natural guardian (collectively "Youth Plaintiffs") are children of Hawai'i—keiki o ka 'āina (children of this land)—who are being seriously injured because Defendants establish, maintain, and operate a state transportation system that violates Hawai'i constitutional mandates to protect public trust resources and the environment by reducing greenhouse gas emissions and decarbonizing the transportation sector.

2. Youth Plaintiffs bring this action to resolve the legal controversy of whether the state transportation system is being established, maintained, and operated in a manner that harms their ability to live healthful lives in Hawai'i now and into the future in violation of law, including the constitutional public trust doctrine, Haw. Const. art. XI, § 1, and the constitutional right to a clean and healthful environment, Haw. Const. art. XI, § 9. Specifically, Youth Plaintiffs seek: (1) declarations of law establishing that Defendants' state transportation system—and its resulting greenhouse gas pollution and climate harms—violates Defendants' constitutional duties and Youth Plaintiffs' constitutional rights, and (2) injunctive relief as necessary to rectify Defendants' violations and bring the state transportation system into constitutional compliance based on the best available science.

3. While Hawai'i is a leader in acknowledging the gravity of the dangers of climate change and has enacted various laws aimed at the crisis—including the "Zero Emissions Clean Economy Target" of net-negative carbon emissions by 2045, Hawai'i Revised Statutes ("HRS") § 225P-5 ("Zero Emissions Target")—state per capita greenhouse gas emissions remain higher than 85% of countries on Earth. Hawai'i state government reports project that greenhouse gas emissions will continue to increase in the near-term, and that by 2045, the mandated deadline for the Zero Emissions Target, greenhouse gas emissions will only be 30% lower than 2016 emissions.¹

¹ See Haw. DEP'T OF HEALTH, HAWAI'I GREENHOUSE GAS EMISSIONS REPORT FOR 2017 (Apr. 2021) ("2017 GHG Report").

4. Emissions from the transportation sector, in particular, are a major and increasing contributor to Hawai'i's greenhouse gas emissions, expected to comprise nearly 60% of Hawai'i's total emissions by 2030. Based on the historical, ongoing, and foreseeable trajectory, Defendants are not only failing to reduce greenhouse gas emissions from the state transportation system, but are, indeed, heading in the opposite direction, without any plan or prospect for meeting the Zero Emissions Target or any other meaningful climate mitigation goal based on the best available science. Because of this climate pollution, children in Hawai'i are experiencing grave threats to their ability to live healthful lives in the Islands now and into the future.

5. Defendants are responsible for these high and untenable levels of greenhouse gas emissions because they have engaged in an ongoing pattern and practice of promoting, funding, and implementing transportation projects that lock in and escalate the use of fossil fuels, rather than projects that mitigate and reduce emissions. For example, Defendants, and the Hawai'i Department of Transportation ("HDOT") in particular, have consistently prioritized infrastructure projects such as highway construction and expansion, which increase vehicle miles traveled in single occupancy vehicles, rather than projects that enable multi-modal travel, electrification of transportation, and the use of alternative fuels. HDOT has also not cooperated or coordinated with other agencies tasked with meeting the state's greenhouse gas reduction goals, including accounting for and establishing appropriate baselines, metrics, and milestones for meeting the Zero Emissions Target and other state goals, particularly in the transportation sector. Finally, HDOT has not mitigated greenhouse gas emissions from its own operations and the operation of the transportation system, through carbon sequestration, supply-chain planning, demand-side management, and other feasible measures.

6. In short, Defendants establish, maintain, and operate the state transportation system in a manner that breaches Defendants' mandatory duty under the constitutional public trust doctrine to "conserve and protect Hawai'i's natural beauty and all natural resources," Haw. Const. art. XI, § 1, and infringes upon Youth Plaintiffs' constitutional right to a "clean and healthful environment," *id.* art. XI, § 9, as defined by the Zero Emissions Target and other climate mitigation mandates. These legal violations are ongoing and cause ever-increasing harms to Youth Plaintiffs as Hawai'i's greenhouse gas emissions from the transportation sector escalate, the time to reform the system to protect the public trust and a clean and healthful environment rapidly closes, and the climate crisis worsens and accelerates.

7. Given the urgent nature of the climate crisis, we ask this Court to exercise its jurisdiction to hear and decide the constitutional questions raised by the children in this case, provide declaratory relief giving Defendants clear direction on their constitutional obligations so that they can align the state transportation system with what the best available science and state law require, and provide any necessary injunctive relief, including the appointment of a Special Master, to ensure the necessary work is done promptly and justly. These Youth Plaintiffs are facing a climate emergency, and the fundamental role and function of judicial review in our constitutional democracy could not be more imperative and urgent.

8. Hawai'i's kuleana (responsibility) and commitment to address climate change, coupled with the persistent problem that it remains the most petroleum-dependent state in the nation, underscores that Youth Plaintiffs need the assistance of this Court to ensure Defendants fulfill their constitutional duties to protect public trust natural resources and our citizens' rights to a clean and healthful environment. At this moment of crisis, it will take each of our three branches of government to protect our children from the existential crisis of climate change.

JURISDICTION AND VENUE

9. This Court has jurisdiction over the claims for relief in this action pursuant to HRS §§ 603-21.5(a)(3), -21.9(1), (6); *id.* § 604A-2(a); *id.* §§ 632-1, -3; and article XI, sections 1 and 9 of the Hawai'i Constitution.

10. Venue properly lies in this judicial circuit pursuant to HRS § 603-36(5) because the claims for relief arose in this circuit and because it is the location where the Defendants are domiciled.

PARTIES

Plaintiffs

11. Plaintiff Navahine F. ("Navahine"), by and through her natural guardian, is a 14year-old Native Hawaiian cultural practitioner born and raised in Kāne'ohe, Hawai'i. For over ten generations, Navahine's 'ohana has farmed kalo on their kuleana lands in Hakipu'u. However, climate change is altering the growing season, decreasing crop yields, and threatening Navahine's ability to continue this cultural practice on her 'ohana's kuleana lands in the future. Among other threats, heavy rains, which are becoming more common, flood the ancient 'auwai, destroying crops, and forcing Navahine's 'ohana to spend days of hard labor rebuilding the ditch system. On the other extreme, extended drought periods dry out and damage the 'auwai and contribute to decreasing stream flows, which can harm wetland kalo that is dependent on cool, flowing water. The extreme weather fluctuations also degrade habitat for native stream life and waterbirds that are dependent on this ecosystem for their survival and are part of the landscape of resources that Navahine's 'ohana both relies upon and cares for in perpetuating traditional farming practices. Additionally, rising seas are infiltrating the groundwater table and raising the pH of the soil, which also reduces crop yields; some of the 'ohana's lo'i are located only six inches above sea level, and if urgent reductions in greenhouse gas emissions are not made, these

lands will be underwater within Navahine's lifetime. (Ka Mea Ho'opi'i Navahine F.

("Navahine"), ma o kona luau'i makua, he kanaka Hawai'i mālama 'ike ku'una i piha iā ia he 14 makahiki i hānai 'ia ma Kāne'ohe, Hawai'i. No 'umi hanauna, ua mahi kalo ko Navahine 'ohana ma ko lākou 'āina kuleana ma Hakipu'u. Eia na'e, e loli ana ke kau ho'oulu i ka loli aniau, e emi ana ka loa'a kalo e huki 'ia ana e pilikia ai ka mau 'ana o ka hana ku'una o Navahine ma ka 'āina o kona 'ohana i ka wā e hiki mai ana. 'O kekahi mau pilikia hou a'e, 'o ka wā ua nui, e pi'i a'e ana , e piha ai nā 'auwai kahiko, e luku ana i nā kalo, e pono ai ka pa'u 'ana o ko Navahine 'ohana i ka paepae hou i ke kahua 'auwai no kekahi mau lā. Eia kekahi, 'o ka pi'i 'ana o ka wā malo'o e malo'o hāhā ai a hemahema ka 'auwai, a e emi ana ke kahe 'ana o ka wai e pilikia ana nā lo'i kalo e ulu ai i ke kahe 'ana o ka wai hu'ihu'i. E 'ino'ino ana i ka loli nui o ke 'anilā, ke kaianoho o nā i'a a me nā manu 'õiwi e kauka'i ana i ia kaiaola kahawai e ola ai, a 'o ia mau mea kekahi o nā waiwai e kauka'i a e mālama ai ko Navahine 'ohana no ka ho'omau 'ana i ko lākou hana ku'una. Eia hou, i ka pi'i 'ana o ka 'ilikai e kānono ana ke kai i ka wai honua e pi'i ai ke 'Akika o ka lepo, e emi ai ka loa'a kalo; aia kekahi o nā lo'i 'ohana ma 'eono 'iniha ma luna o ka 'ilikai, a, ke emi nui 'ole iho ka pukana GHG, e pau ana kēia 'āina i ka hālan i ka wai).

12. Navahine and her 'ohana are also caretakers of Mōli'i fishpond, one of Hawai'i's oldest and largest fishponds, which spans over 125 acres. Consistent with traditional practices, the loko i'a is a community resource, providing moi (threadfish), 'ama'ama (mullet), and awa (milkfish) to nearby families, but changing climate patterns are threatening the health of the fishpond. During high tides, fish are able to swim out of the fishpond and invasive jellyfish wash in. During heavy rains, pollutants from nearby cesspools wash into the ocean, contaminating the fish and nearby coastal waters. Although Navahine and her 'ohana are working to address rising sea levels by raising the height of the fishpond wall, changing weather patterns are harming the

fish, limu, and other fishpond resources available to Navahine and her community for cultural, subsistence, and recreational uses. Already, fish may be inedible for months after heavy rain events, and families cannot work in the fishpond without risking infection and illness from the contaminated water. Navahine has also observed the harm that contaminated water causes to culturally significant marine life including green sea turtles and monk seals. Navahine volunteers with Hawai'i Marine Animal Response network to help address these harms, but is concerned about the long-term threats to these critically endangered native species. (He mau kahu 'o Navahine a me kona 'ohana iā Moli'i loko i'a, kekahi o nā loko i'a kahiko a nui o Hawai'i, he 125 'eka kona nui. E like ho'i me nā loina ku'una, he waiwai no ke kaiaulu ka loko i'a, e lako ai i ka moi, 'ama'ama, a me ka 'awa no nā 'ohana o ia wahi, e pilikia ana na'e ka pono o ka loko i'a i ka loli 'ana o ke au aniau. Ma ke kai piha, holo aku nā i'a mai ka loko aku a komo iho ka pololia. I ka wā ua nui, kahe iho ka wai pelapela no nā luawai pelapela i ke kai, e haumia ai nā i'a a me ke kapa kai e pili pū ana. I loko nō o ko Navahine a me kona 'ohana hana e pale ai i ka pi'i 'ana o ka 'ilikai i ka ho'oki'eki'e 'ana i ka pā loko, e pilikia ana ka i'a, limu, a me nā mea waiwai 'ē a'e o ka loko i'a e pono ai 'o Navahine a me kona kaiāulu no nā hana ku'una, ke ola, a me ka ho'onanea 'ana i ka loli 'ana o ke au 'anilā. 'Ānō ho'i, 'a'ole paha kūpono ka 'ai 'ana i nā i'a no kekahi mau mahina ma hope o ka ua nui, a 'a'ole hiki i nā 'ohana ke hana ma loko o ka loko i'a me ka loa'a 'ole paha i ka ma'i i ka wai pelapela. Ua 'ike maoli 'o Navahine i ka pilikia 'ana o nā holoholona 'ōiwi a ko'iko'i e like me ka honu a me ka 'īlioholoikauaua i ka wai pelapela. Kokua 'o Navahine me Hawai'i Marine Animal Response Network e ho'oponopono i ia mau pilikia, ke hopohopo nui na'e 'o ia i ka pilikia mau 'ana o ia mau holoholona 'ōiwi 'anehalapohe i ka wā e hiki loa mai ana).

13. Sea level rise is also actively washing out burial sites along the coast, exposing and scattering 'iwi kūpuna (ancestral bones) interred in the sands. 'Iwi, cherished in traditional culture as the repository of a person's mana after death, are treated by cultural practitioners with reverence and respect and subject to specific burial protocols. Disinterment of 'iwi by rising sea level inflicts the same emotional harm on Navahine and her 'ohana as the flooding of a cemetery or any other act of desecration against the dead. (E 'a'aiawai ana ka pi'i 'ana o ka 'ilikai i nā hē ma kapa kai, e hu'e a kau li'ili'i ana nā iwi kūpuna i kanu 'ia i ke one. 'O ka iwi, e pūlama 'ia i ka mana'o ku'una i kahi e komo ai ka mana o ke kanaka ke hala iho, a e hō'ihi 'ia e nā kānaka i kanu 'ia me kekahi mau loina kanu kiko'ī. Like ho'i ka 'eha 'ana o ka na'au o Navahine a me kona 'ohana i ka hu'e 'ana o nā iwi i ka pi'i 'ana o ka 'ilikai me ka piha 'ana o kekahi pāilina i ka wai a i 'ole ho'i me kekahi ho'ohaumia 'ana i ka po'e make).

14. Changing weather patterns and sea level rise are also threatening critical infrastructure and property necessary to sustain daily living activities in the rural community of Hakipu'u. Kamehameha Highway, the single roadway in and out of Hakipu'u, is subject to erosion and flooding as a result of changing weather patterns, setting in motion an endless cycle of repairs and traffic congestion. Given the severity of coastal subsidence and the inability of the government to keep up with erosion, Navahine and her community have donated, filled, and placed over 1,000 sandbags along the highway to prevent the road from sliding into the sea. Heavy rains in early 2020 triggered a landslide which slowed traffic for months and also caused extensive water damage to Navahine's family home. Further harm to Navahine's home, kuleana lands, and nearby cultural resources for which Navahine has kuleana (responsibility) are expected to grow as climate change effects intensify, threatening the myriad cultural practices that her 'ohana has passed down to her over the generations. (E pilikia ana ka 'ōnaepuni ko'iko'i

a me ka 'āina e pono ai ka noho pono 'ana o ke kaiāulu o Hakipu'u i ka loli 'ana o ke au 'anilā a me ka pi'i 'ana o ka 'ilikai. 'O Kamehameha Alaloa, ke ala ho'okahi e komo a e puka aku ai mai Hakipu'u, e pilikia ana paha i ka 'a'aiawai a i ka wai hālana ma muli o ka loli 'ana o ke au 'anilā, e pono ai ka ho'oponopono a kīpapa mau 'ana me ka pa'a o ia ala i nā ka'a. Ma muli ho'i o ka hāne'e 'ana o ke kapa kai, a me ka hiki 'ole i ke aupuni ke 'alo i ka 'a'aiawai 'ana, ua pono 'o Navahine a me kona kaiāulu e ho'olako, ho'opihapiha, a e kau i 1,000 'eke one ma ka'e o ke alaloa e kaupale aku i ka hāne'e 'ana o ke ala i ke kai. Ma ka ho'omaka o 2020 i hiolo ai ka mauna i ka ua nui i pa'a ai ke ala i nā ka'a no kekahi mau mahina a i pō'ino ai ka hale 'ohana o Navahine. E pi'i a'e ana nō ka pilikia 'ana o ko Navahine hale, 'āina kuleana, a me nā mea waiwai ku'una e kuleana ai 'o Navahine e mālama i ka ikaika 'ana a'e o nā hopena loli aniau, e pilikia ana nā hana ku'una he lehulehu i ho'oili 'ia e kona 'ohana no nā hanauna he nui wale).

15. Plaintiff **Ka'ōnohi P.-G.** ("Ka'ōnohi"), by and through his natural guardian, is a 15-year-old resident of Puna, Hawai'i. Ka'ōnohi is an avid diver, and enjoys spearfishing and viewing marine life such as fish, dolphins, reef sharks, and coral reefs along the coast of his home island. Among other species, Ka'ōnohi enjoys catching kole, uhu, and fried fish to eat and share with his 'ohana and friends. However, extreme precipitation events are impeding Ka'ōnohi's ability to access Hawai'i's coastal waters for subsistence, recreational, and aesthetic purposes. Storms wash large amounts of sediment into the ocean making it unsafe for Ka'ōnohi to dive because of limited visibility. Additionally, ocean acidification and warming ocean temperatures are reducing fish populations and destroying the coral reefs that Ka'ōnohi has grown up using and enjoying.

16. Sea level rise is also impeding Ka'ōnohi's access to coastal resources, eroding sea cliffs in his neighborhood, and blocking critical transportation corridors. Ka'ōnohi is a

competitive paddler and is unable to launch his canoe in many places along the coastline including Kona, Mahukona, and Honaunau due to eroding beaches and sea level rise. Ka'ōnohi also grew up visiting Lili'uokalani Park, but the bridges into the park are now completely submerged at high tide; many other coastal areas are inaccessible during King Tides including Laehala. The cliffs in Ka'ōnohi's seaside neighborhood are also beginning to erode and collapse because of rising sea levels, posing a risk to community structures, and blocking access to scenic view planes.

17. Ka'ōnohi hopes to become a marine biologist or archaeologist, but worries that these career options may not be available to him in the future because of how climate change is altering the natural environment. As sea levels inundate and destroy important cultural sites in Hawai'i, including at Kawa, Ka'ū where Ka'ōnohi gathers pa'akai (salt), Ka'ōnohi deeply feels the loss of connection to his culture, traditions, and ability to continue telling the stories of his ancestors through the discovery of the items and structures they left behind.

18. Plaintiff **Kawahine'ilikea N.** ("'Ilikea"), by and through her natural guardian, is a 12-year-old life-long resident of Kūmimi, Moloka'i, who traces her 'ohana's genealogy on the island back more than eight generations. 'Ilikea has cultural, recreational, and subsistence interests in ocean-based activities that are threatened by changing environmental patterns. For example, 'Ilikea likes to swim in the ocean close to her home, but extreme precipitation events trigger flash floods, which wash bacteria and pesticide laden sediment into the ocean, muddying the nearshore waters, and posing a health threat to ocean users and marine resources. Similarly, 'Ilikea used to regularly visit Keawanui fishpond to learn about traditional fishing and aquacultural practices; however, due to changes in the ocean environment caused by climate

change, invasive species like jellyfish have inundated the fishpond, making it dangerous to enter the waters.

19. Climate change is also driving a decline in local fish populations that 'Ilikea's 'ohana has relied upon as staple food sources for generations. 'Ilikea is learning to fish using traditional and customary Native Hawaiian throw net techniques, and she often accompanies her dad to look for manini and nenue, which they catch along the shoreline. However, as higher ocean temperatures and ocean acidification cause fish populations to decline, it is harder for 'Ilikea to visually spot the once numerous schools of fish, as necessary when fishing using this technique. If high levels of greenhouse gas emissions continue, fishery productivity in Hawai'i will decline dramatically within 'Ilikea's lifetime, threatening this subsistence food source, and related traditional and customary Native Hawaiian fishing practices.

20. Sea level rise is also threatening critical transportation corridors that 'Ilikea relies on for her daily activities. High tides regularly flood the coastal roadway near 'Ilikea's home, transforming Kamehameha V Highway into a single lane, and backing up traffic as cars wait their turn to traverse the single lane in opposite directions. As sea levels continue to rise, this roadway will become completely inaccessible, cutting 'Ilikea off from places on Moloka'i that her 'ohana has accessed for hundreds of years.

21. Plaintiff **Mesina D.-R.** ("Mesina"), by and through her natural guardian, is a 15year-old resident of Kailua, O'ahu. Growing up in Hawai'i, Mesina has used the beach as a social gathering place where she spends time with family and friends and enjoys Hawai'i's natural beauty. However, the sandy beaches of Lanikai and Kailua where Mesina has spent her youth are disappearing and being replaced with seawalls as sea level rise and erosion eat away at O'ahu's coastlines.

22. Extreme weather events related to the changing climate are jeopardizing the transportation corridors Mesina depends upon for her daily activities. For example, heavy rains in February 2019 triggered a rockslide that blocked the Pali Highway with heavy rocks and fallen debris; the highway was closed for nine months while the hillside was stabilized. Climate change-induced extreme precipitation events have also caused recurrent flooding in and around Mesina's home, which is also the location of the family's yoga business. Following severe flooding in early 2021, Mesina's family was forced to close their yoga studio for a week.

23. Runoff from extreme precipitation also prevents Mesina's from enjoying her favorite sports, such as surfing, swimming, snorkeling, and canoe-paddling, and damages Hawai'i's coral reefs, which are already suffering from climate change-induced disease and bleaching. For example, heavy rains in February 2018 caused a 6.5-million-gallon sewage spill on the Windward side of O'ahu, preventing Mesina from entering the ocean for several days until the concentration of bacteria and other contaminants in the water abated. At Lanikai Beach, where Mesina swims, once vibrant coral reef habitat has died-off, triggering her anxiety that the total loss of corals may happen within her lifetime as the climate crisis worsens. Mesina fears that she may not have a future and questions whether she should have children of her own someday in a world plagued by climate catastrophes.

24. Plaintiff **Kawena F.** ("Kawena"), by and through her natural guardians, is a 9year-old resident of Ka'alaea, O'ahu, and the eldest of her four siblings. Kawena is being homeschooled in the Hawaiian language by her parents, using Hawaiian epistemologies and pedagogies. Learning to speak 'ōlelo Hawai'i roots Kawena to her culture, community, and place, shaping and reaffirming her reciprocal relationship with the natural world around her. (Na Ka Mea Ho'opi'i **Kawena F.** ("Kawena"), ma o kona mau lūau'i mākua, he kama'āina ia o

Ka'alaea, O'ahu, i piha iā ia he 9-makahiki, ka makahiapo o nā keiki 'ehā o kona 'ohana. E a'o 'ia mai ana 'o ia ma ka home, ma o ka 'Ōlelo Hawai'i e kona mau mākua, ma ka 'ike a'o a ki'ina a'o Hawai'i. Ma muli ho'i o ia a'o 'ana i ka 'Ōlelo Hawai'i e pili pa'a loa ai 'o Kawena i kona mo'omeheu, kaiāulu, a i kona wahi, e kino mai ana a e pa'a ai kona pilina me ke ao kūlohelohe e puni ana ona).

25. Kawena's 'ohana grows a variety of Polynesian and other plants for subsistence purposes including sweet potato, ma'o, ha'u'oi, kupukupu, laua'e, ginger, 'ōlena (turmeric), and tī leaf. Kawena's 'ohana currently has three māla kalo with over 100 plants growing, which the family uses to make kalo poke, kūlolo, laulau, and lū'au stew. Maintaining a traditional Hawaiian diet and perpetuating traditional farming practices is important to Kawena and her 'ohana. However, long periods of drought and shifting growing seasons caused by climate change are threatening Kawena's food security and the viability of the 'ohana's kalo farming practices. (Mahi ko Kawena 'ohana i kekahi mau mea kanu a mea kanu Polenekia ho'i no ka mālama ola 'ana e like me ka 'uala, ka ma'o, ka ha'uoi, ke kupukupu, ka laua'e, ka 'awapuhi, ka 'ōlena, a me ka lā'ī. He 'ekolu mau māla kalo o ko Kawena 'ohana me ona mau kalo he 100 e ulu ana, e ho'ohana 'ia ana e ka 'ohana no ka poke kalo, kūlolo, laulau, me ke kū lū'au. He mea nui no Kawena a no kona 'ohana ho'i ka mālama a ho'omau 'ana i nā mea 'ai Hawai'i ku'una a me ona mau loina mahi'ai. Eia na'e, e pilikia a e hemahema ana ko Kawena kahua hānai a me ka mau 'ana o ko kona 'ohana mahi'ai 'ana i ka pi'i 'ana o ka lō'ihi o ka wā malo'o a me ka loli 'ana o ke kau ho'oulu i ka loli aniau).

26. Kawena's personal safety and security are also threatened by climate change. During extreme precipitation events, the only road that leads from Kawena's house to Kamehameha highway floods, trapping Kawena and her 'ohana in their home where they must

wait for the rainwaters to subside before they can exit their property safely. During one recent event, the road alongside the property turned into a free-flowing river. The changing climate poses an ongoing threat to Kawena's personal safety, her family home, and her ability to subsist off and care for Hawai'i's natural environment in the future, as she is learning to do from her parents. (E pilikia ana ko Kawena ola maika'i a me kona noho maluhia 'ana i ka loli aniau. Ma nā wā ua nui, piha ke ala ho'okahi mai ko Kawena hale e hui ana me Kamehameha alaloa i ka wai, e pa'a ai 'o Kawena me kona 'ohana ma ka hale e kali ai a emi iho ka wai hālana i mea e ha'alele palekana ai i ia wahi. Ma ka wā ua nui iho nei, ua lilo ke alanui e pili pū ana i ko lākou 'āina i kahawai. He pu'umake nui ka loli aniau i ko Kawena ola maika'i, i ka hale 'ohana, a i ka mau 'ana o kona mālama ola 'ana ma o ka pilina me ke ao kūlohelohe o Hawai'i i ka wā e hiki mai ana, e like me kāna e a'o ana mai kona mau mākua)

27. Plaintiff **Tyler L.** ("Tyler"), by and through her natural guardian, is a 17-year-old who grew up in Kailua, O'ahu and now resides in Kona, Hawai'i. Tyler is a regenerative farmer committed to local food production, reforestation, and the preservation of Hawai''s genetic plant diversity. Among other native plants, Tyler cultivates māmaki, 'olena, ma'o hau hele, 'a'ali'i, wiliwili, and 'ūlei for personal use and reforestation efforts. She is actively working to reforest native forests to mitigate climate change by curating native seeds; foundational to Hawai'i's food, life, culture, and genetic diversity, and essential to Hawai'i's resilience to changing climate conditions. Tyler is also working to increase soil health to support its carbon sequestration capacity. Tyler understands the importance of using natural sequestration as a means to repair the damage done from the excessive buildup of greenhouse gases in the atmosphere, and considers her work as a regenerative farmer critical to ensuring she can continue to live a healthy life in Hawai'i.

28. Increased temperatures, extreme precipitation events, and extended drought conditions are impeding Tyler's ability to garden, grow, and restore the native plants that she relies upon for food and to nurture her wellbeing and connection to the Hawaiian environment. Hawai'i's highly endemic native plant life is vulnerable to climate shifts, including rapidly changing temperature and precipitation patterns. As native plant ranges shrink, it is becoming increasingly difficult for Tyler to restore and protect the plants she values and cherishes as part of Hawai'i's rich culture and history. Tyler's personal safety is also increasingly at risk during her plant restoration work as climate change causes extreme heat events.

29. Tyler has anxiety about how humanity will feed itself in the future if climate change continues to degrade topsoil, which is used to grow 95% of the world's food. Climate change is degrading topsoil by reducing moisture and irrigation water and this is particularly a concern in a place like Hawai'i where topsoil is not easily regenerated. With less than 60 years of topsoil left at current rates of degradation, Tyler knows that a central piece of her life as a farmer is endangered, and fears that many people will face hunger and starvation in the future.

30. Tyler's childhood has also been marred by the tropical cyclones, including hurricanes, which are becoming more severe, and wreaking ever greater havoc. Each time Tyler and her 'ohana receive a hurricane warning, they spend two days boarding up the windows, filling their bathtub with water, bringing their plants and animals inside, and preparing to seek shelter on higher ground. In July 2020, Tyler saw the eye of Hurricane Douglas 30 miles offshore, the closest a hurricane has come to her home on O'ahu in recorded history. In August 2018, Tyler and her 'ohana took shelter from Hurricane Lane as it produced record-breaking rainfall and caused flash flooding on O'ahu. In addition to fearing for her own safety, Tyler fears

for the future of Hawai'i's endemic species, many of which are highly endangered and at-risk of extinction in the coming years.

31. Plaintiff **Rylee K.** ("Rylee"), by and through her natural guardian, is a 14-year-old life-long resident of Mililani, O'ahu. Rylee and her 'ohana rely on locally grown and harvested poi and luau leaves, limu, and poke as staples in their diet. Climate change is threatening Rylee's food security and significantly reducing the abundance of these traditional food sources. Recurrent flooding on kalo farms has caused crop shortages since 2018, and changing ocean conditions, including acidification and warming, have reduced limu and fish populations. Decreases in streamflow associated with changing weather patterns also threaten the supply of kalo, which requires cool running water to grow and resist disease. As a snorkeler, diver, and swimmer, Rylee has personally observed the reduction in fish populations around O'ahu over the course of her lifetime.

32. Rylee's physical and mental health are also suffering because of climate change. Rylee has Ehlers Danlos Syndrome, which manifests as cold urticaria and cholinergic urticaria, skin conditions which causes an outbreak of hives in reaction to sudden temperature changes. Rylee has experienced these outbreaks more often in recent years with the increase in the number of extremely hot days, and they can be overwhelming, covering her body in hives within minutes. After the hives clear, Rylee is often left with bruises that take several weeks to heal. Rylee keeps Benadryl cream with her at all times to apply in the case of an outbreak and to reduce the intensity of the irritation. Rylee is distressed by the unprecedented changes occurring around her and wonders if she should have her own children if the climate crisis continues to worsen, threatening her and her 'ohana's access to vital food sources, as well as her own physical well-being. 33. Plaintiff **Kaliko T.** ("Kaliko"), by and through her natural guardian, is an 11-yearold who lives in Honokōhau, Maui and attends a Hawaiian immersion school. In September 2018, Kaliko and her 'ohana packed up all their belongings and evacuated to a friend's house as Tropical Storm Olivia became the first tropical cyclone to make landfall in Maui. Intense flooding during the storm, completely destroyed Kaliko's home, lifting the house off its foundation, and washing part of it down Honokōhau Stream, which runs alongside the property. Kaliko and her 'ohana were completely displaced and forced to relocate to a new home and property. As climate change continues to cause more frequent storms and severe weather events, Kaliko and her 'ohana's security and safety remain at risk.

34. Prolonged droughts are also reducing Kaliko's water supply and impeding her 'ohana's ability to grow subsistence crops. Regular water shortages force their water supply to be shut off for days at a time, during which Kaliko bathes in the river and uses small amounts of bottled water to wash their dishes. Although the family's property has the capacity to support nine to thirteen lo'i, they are unable to sustain the plants without access to a reliable water source. Instead, they must grow a dry-land variety of kalo to continue their tradition of making poi.

35. Kaliko is also experiencing climate anxiety, which began at a young age when she would ask her mother if the world would still be here when she grew up. Today, she feels despair growing up not knowing whether she, or her own future children, will be safe in Hawai'i as her community is ravaged by storms and floods caused by climate change.

36. Plaintiff **Charlotte M.** ("Charlotte"), by and through her natural guardian, is a 13year-old resident of Kailua, O'ahu. Charlotte's home is in a low-lying area where extreme precipitation and flooding can isolate her from key transportation corridors that she and her

family rely on for access to school and work. During heavy rain events, which are becoming more frequent and intense as the climate crisis worsens, Charotte's home can be cut-off from other parts of the island due to the accumulated water on the ground, and she and her family are unable to leave or access their neighborhood. More often, Charlotte is unable to ride her bike to leave the neighborhood for activities and to get to her former school.

37. Climate change is also harming Charlotte's ability to access, use and enjoy Hawai'i's natural environment for activities such as surfing, swimming, and snorkeling. These activities are important to Charlotte and her family and are one way that they bond and share time together. Charlotte often paddles with her parents from Lanikai Beach out to Popoi'a Island (Flat Island) and other Kailua Bay surf breaks. However, extreme precipitation events have led to repeat sewage overflows on the Windward side that can cause gastroesophageal illness and severe skin infections, including antibiotic-resistant staph. Each brown water event prevents Charlotte and her 'ohana from accessing and enjoying the ocean for up to a week.

38. Anthropogenic climate change is also causing the beaches and reefs Charlotte regularly visits for recreation, education, and personal well-being to disappear. Sea level rise has contributed to shrinking beaches; 58% of the Lanikai shoreline, Charlotte's favorite local beach, no longer has any beach at high tide. Warming ocean temperatures and sewage runoff have degraded and destroyed reefs and corals on O'ahu where Charlotte snorkels. The destruction of coral reefs makes the coastline where Charlotte lives more vulnerable to storms and further coastal erosion and inundation, thereby putting her home in harm's way.

39. In the summer of 2020, Charlotte was on Hawai'i Island when an unprecedented 62-square-mile wildfire, fueled by drought conditions, approached the area where she and her family were staying near Waikoloa Village. Charlotte's family was forced to shelter in place and

close all the doors and windows to reduce their exposure to particulate matter in the air. Watching ash fall from the darkening sky around her, Charlotte was worried the fire would trap her family and block their escape routes. This terrifying experience has fueled Charlotte's fear and anxiety about how climate change will continue to alter, affect, and ultimately degrade the landscape of her home.

40. Plaintiff **Taliya N.** ("Taliya"), by and through her natural guardian, is a 14-yearold Native Hawaiian who lives in Kamuela, Hawai'i. Taliya's family home is off the grid, not connected to the County of Hawai'i public water system, and relies on an individual rainwater catchment system to meet their daily water needs. In the fall of 2021, as the result of the ongoing drought affecting Hawai'i Island, Taliya experienced water insecurity for the first time during the winter. To conserve their limited water supply, Taliya took short showers, flushed the toilet using buckets from water collected in town, and rationed laundry until it finally rained in January 2022. Climate change has caused average precipitation to decrease in Hawai'i over the last century, especially in higher-elevation interior areas such as Kamuela. Severe droughts are becoming more common in Hawai'i, causing water shortages in areas dependent on rainfall for freshwater. These climate changes pose an ongoing threat to Taliya's water security.

41. Climate change is also increasing the occurrence of extreme precipitation, and other natural disasters; flash floods prevent Taliya from traveling or attending school up to six times a year. Extreme precipitation events can also destabilize the 200-foot-tall Eucalyptus trees that grow near her home; individual Eucalyptus trees often fall down during storm events, blocking the road, and posing an ongoing threat to Taliya's safety. In two separate incidents large branches feel on two of the family's vehicles causing substantial damage. In August 2021, climate change-induced drought precipitated a large wildfire that burned over 62 square miles,

displacing many animals, including pigs, sheep, and goats. These displaced animals retreated to roadways, creating unsafe conditions and property damage, including to one of Taliya's family's vehicles.

42. The beaches that Taliya visits are shrinking, and high tide events prevent her from accessing and enjoying these natural resources. Taliya is a volleyball player and enjoys playing at Hāpuna Beach. She has observed loss of sand and usable recreation area as high tide events increase; during high surf, Hāpuna Beach is inaccessible to the public. Extreme precipitation also causes runoff that can lead to staph and other skin infections. Taliya also regularly swims, snorkels, and boogie boards at places like Spencer Beach, Kealakekua (Captain Cook) Bay, Waialea Beach, Hāpuna Beach, and Kauna'oa (Mauna Kea) Beach. However, after heavy rainfall events she cannot safely participate in these activities for days at a time. Overall, climate change is threatening Taliya's relationship to natural and cultural resources, and disrupting the continuity required for her continued health and well-being.

43. Plaintiff **Kanoa V.-B.** ("Kanoa"), by and through his natural guardian, is a 17year-old resident of Kailua, O'ahu. The roads around Kanoa's home regularly flood during extreme precipitation events, and as these events become more frequent and severe, he is at risk of losing access into and out of his home. Kanoa swims, snorkels, and paddles in the ocean at Kailua Beach and Castles Beach but sea level rise and coastal erosion threaten the sandy beaches he has grown up using and enjoying for recreation, athletics, and spending time with friends.

44. The coral reefs around O'ahu where Kanoa snorkels and swims have also been degraded by ocean acidification and warming ocean temperatures that cause coral bleaching. Kanoa does not snorkel in Kailua Bay because extensive damage to the coral reef ecosystem there has left many corals dead, and surviving corals sparse. Instead, Kanoa must drive to

Shark's Cove and Hanauma Bay to view more intact coral reefs—yet even these areas are under threat from climate change. When Kanoa was 10 years old, high sea surface temperature bleached half of the corals at Hanauma Bay, and nearly 10% died as a result. Kanoa feels that as the climate crisis worsens, he will no longer be able to view vibrant coral reefs on his home island, or to enjoy the beaches of his youth.

45. Kanoa also regularly visits and volunteers at Kawainui Marsh to view native Hawaiian birds, including 'alae 'ula, 'alae ke'oke'o, 'a'eo, and koloa maoli. Climate change is shrinking the ranges of these native coastal birds, which may lose their remaining habitat due to sea level rise by 2100. Kanoa feels a strong connection to the natural world and enjoys being able to hike in areas surrounded by native flora and fauna. He fears for his future on O'ahu as the places and native species he treasures most are being destroyed by climate change, with many others projected to disappear within his lifetime.

46. Plaintiff **Kalā W.** ("Kalā") is an 18-year-old born and raised in Hawai'i, with roots on both the islands of Kaua'i and O'ahu. Kalā has dedicated much of her young life to protecting the natural resources of Hawai'i, including advocating for rules implementing the Hā'ena Community-Based Subsistence Fishing Area ("CBFA"). The Hā'ena CBFA was created to manage the Hā'ena fishery for subsistence purposes using traditional and customary placebased knowledge of the area's natural resources. Among other efforts, Kalā founded E Alu Pū Youth Council to educate young people on conservation and approaching fishery management with an indigenous mindset, and to empower them to represent the Youth Council in the larger community. Kalā plans to return to Kaua'i in the future after finishing college to continue her 'āina-based advocacy, but worries about the long-term health of Hawai'i's natural resources.

47. In April 2018, North Shore communities on Kaua'i received nearly 50 inches of rain within 24 hours, producing some of the most extreme flooding conditions in Hawai'i's recorded history. This climate change-induced "rain bomb" destroyed homes, flooded lo'i farmed for local, subsistence use, and cut off road-based access into and out of Kalā's community for several weeks. After the flood, Kalā helped remove debris to restore Limahuli stream—the main water source for her community. During hurricane warnings in 2017 and 2019, Kalā missed school boarding up her family's home and preparing for potential flooding and isolation similar to that experienced following the 2018 storm.

48. Kalā is an avid surfer and has seen how increased beach erosion smothers coral reefs, harms local fish populations, and alters surf breaks on both Kaua'i at the Bowl off Hanalei Bay and O'ahu at Queen's Beach. Sea level rise has inundated roadways Kalā and her 'ohana relied on, including Kamehameha Highway, preventing her from accessing certain parts of the island. Rising temperatures have also reduced the abundance of limu in Hā'ena, Kaua'i, which she learned to gather from her elders. The lack of limu also harms the fish populations that depend on it, and has cascading negative impacts in the local coastal ecosystems Kalā cherishes.

49. Plaintiff **Pahonu C.** ("Pahonu"), by and through his natural guardian, is a 16year-old resident of Waimānalo, Oah'u. Pahonu lives on Hawaiian Homestead lands and attends Kailua High School, receiving instruction exclusively in 'ōlelo Hawai'i. Pahonu is named after the first fishpond built on Oah'u, Pāhonu loko i'a, and has been working since 2018 to restore the rock wall around this valuable cultural and subsistence resource, and protect it from rising sea levels. Rising temperatures and increasing droughts from climate change will reduce the abundance of fish Pahonu and his community can depend on in the fishpond.

50. Sea level rise and coastal erosion have already destroyed recreational resources at nearby Kaiona Park. Pahonu and his family used to launch their boat from a ramp at the park, but the ramp is now partially submerged and completely unusable from the stress of the changing environment. Much of the sandy beach in the park where Pahonu used to recreate and take photos with his family has also disappeared. Pahonu fears that his younger siblings will not know the joy he felt frequenting these once expansive sandy beaches, lost within Pahonu's short lifetime, or be able to enjoy other natural and cultural resources that are threatened by climate change.

51. Plaintiff **Brianna K.** ("Kū"), by and through her natural guardian, is a 14-year-old Native Hawaiian cultural practitioner from West Maui. Kū and her 'ohana are kuleana land holders in Kaulu Valley, and they depend upon water from Kanahā Stream for their daily activities. Due to climate change, the water level in the stream is inconsistent; during low-flow periods the water pressure drops, interfering with Kū and her 'ohana's ability to use water for daily activities, including cooking, cleaning, and working in their kalo lo'i.

52. Kū's 'ohana also operates a commercial farm in Kaulu Valley, which is their primary source of income. The farm produces a wide range of crops for personal consumption and sale, including 'uala, kalo, and 'ulu. However, warmer temperatures and longer summers have made farming more difficult. For example, invasive pests that thrive in warmer temperatures cause significant damage to crops. Extreme weather events have also affected the farm and Kū's larger community. In 2018, the 'ohana lost their greenhouse, their crops, and large fruit-bearing trees to Hurricane Lane. The hurricane also triggered wildfires that destroyed homes and other structures in Kū's community. Heavy rains regularly cause flooding, which blocks the road to the farm, and washes out crops. During a 2020 storm, homes and other

property in Kū's community, and of close family friends in nearby Honokōhau valley, were washed out into the ocean.

53. Kū frequents the beach multiple times a week at Na Pili Bay, Honokōhau (DC Flemmings), and Lahaina, where she swims and fishes. Kū is unable to fish as she used to because coral bleaching is destroying fish habitat along the shoreline. Kū's kūpuna tell her stories about how large the beach was before she was born. Hearing these stories, Kū worries that if sea level rise continues, the beach will soon be completely eroded, and everything that is along the shoreline will be lost, including parks, homes, and other infrastructure.

54. To protect themselves and mitigate harm to Hawai'i's environment, natural resources, and endangered species and ecosystems, the Youth Plaintiffs have dedicated significant amounts of their time educating others about climate change, and advocating for policies that reduce greenhouse gas emissions. However, every attempt the Youth Plaintiffs have made to safeguard their rights has failed because Defendants view their transportation system as compliant with their legal obligations. In the absence of declaratory and injunctive relief from this Court, Defendants will continue to establish, maintain, and operate a state transportation system that generates ever increasing greenhouse gas emissions, violating the Youth Plaintiffs' rights to a clean and healthful environment, and endangering public trust resources that depend upon a stable climate system.

55. The individual harms to the Youth Plaintiffs' property, health, and safety, and cultural, recreational, aesthetic, and subsistence interests, as described above, are caused by the ongoing climate crisis, and exacerbated by Defendant's role in the climate crisis. Youth Plaintiffs are injured by each passing year that Defendants continue their conduct that results in greenhouse gas emissions, thereby endangering the Youth Plaintiffs' opportunity to live safe and

healthy lives, enjoy the activities and access to places they have grown up enjoying, and perpetuate and pass on cultural traditions that rely upon healthy, functioning ecosystems. The loss of the ability to protect their lives, health, and safety also causes concrete psychological, emotional, and mental health injury to each of the Youth Plaintiffs. As climate change worsens, the Youth Plaintiffs will be forever foreclosed from obtaining redress for their injuries. Accordingly, the Youth Plaintiffs bring this lawsuit to obtain relief for their injuries while there is still time to do so.

Defendants

56. Defendant **HDOT** has jurisdiction and authority to "establish, maintain, and operate transportation facilities of the State, including highways, airports, harbors, and such other transportation facilities and activities as may be authorized by law." HRS § 26-19.

57. Among other duties, HDOT is responsible for establishing, maintaining, and operating the state highway system, *id.* §§ 264-41, -42, -43; "commercial harbors, commercial harbor and waterfront improvements, ports, docks, . . . and landings belonging to or controlled by the State," *id.* § 266-2(a)(1); and "airports, air navigation facilities, buildings, and other facilities to provide for the servicing of aircraft," *id.* § 261-4 (collectively the "state transportation system"). To comply with the Federal Highway Act, HDOT is designated as the state highway department, *see id.* § 264-22, and is responsible for designating highways that are eligible for federal-aid funds, and securing such federal-aid funds as necessary and feasible. *See id.* §§ 264-23, -28, -29. HDOT may also accept and expend federal funds for airport and harbor construction and maintenance. *See id.* §§ 261-8; 266-19.

58. Defendant **Jade Butay** is sued in his official capacity as Director of HDOT. Defendant Butay has the ultimate responsibility to ensure the state transportation system complies with applicable laws. *See* HRS § 26-19.

59. Defendant **Governor David Ige** ("Governor Ige") is sued in his official capacity. The executive power of the State is vested in the Governor, and the Governor supervises each principal department of the State, including HDOT. Haw. Const. art. V, §§ 1, 6. The Governor appoints the Director of HDOT (with the advance and consent of the Senate), *id.* art. V, § 6, sets biennium budgets that fund transportation and climate change initiatives, *id.* art. VII, § 8, and is "responsible for the faithful execution of the laws," *id.* art. V, § 5.

60. Defendant **State of Hawai'i**, acting through the agencies of the executive branch, is bound by the Hawai'i Constitution, including the constitutional public trust doctrine and Youth Plaintiffs' constitutional rights to a clean and healthy environment, as defined by an extensive and growing body laws, including but not limited to Hawai'i's Zero Emissions Target.

61. Defendants HDOT, Jade Butay, Governor Ige, and the State of Hawai'i have public trust duties to protect and conserve all natural resources, including the climate system and all other natural resources affected by climate change, for present and future generations. Haw. Const. art. XI, § 1.

62. Youth Plaintiffs' constitutional right to "a clean and healthful environment" may be enforced against "any party, public or private," including Defendants HDOT, Jade Butay, Governor Ige, and State of Hawai'i. *Id.* art. XI, § 9.

63. Defendants HDOT, Jade Butay, Governor Ige, and State of Hawai'i are responsible for achieving Hawai'i's Zero Emissions Target, HRS § 225P-5, and are mandated to "expand strategies and mechanisms to reduce greenhouse gas emissions through the reduction of

energy use, adoption of renewable energy, and control of air pollution among all agencies, departments, industries, and sectors, *including transportation*[,]... utiliz[ing] the best available science, technologies, and policies to reduce greenhouse gas emissions," 2018 Haw. Sess. Laws Act 15, § 4 (emphasis added).

LEGAL FRAMEWORK

A. <u>Defendants' Constitutional Public Trust Duties to Protect the Climate System and All Natural Resources.</u>

64. Article XI, section 1 of the Hawai'i Constitution requires Defendants "[f]or the benefit of present and future generations," to "conserve and protect Hawai'i's natural beauty and all natural resources." Article XI, section 1 further declares that "[a]ll public natural resources are held in trust by the State for the benefit of the people." This mandate adopts "the public trust doctrine as a fundamental principle of constitutional law in Hawai'i." *In re Waiāhole Ditch Combined Contested Case Hr*'g, 94 Hawai'i 97, 132, 9 P.3d 409, 444 (2000) ("*Waiāhole*").

65. Hawai'i's constitutional public trust doctrine applies to "*all natural resources*, including land, water, air, minerals and energy sources." Haw. Const. art. XI, § 1 (emphasis added).

66. The climate system is a highly complex system consisting of five major components: the atmosphere, the hydrosphere, the cryosphere, the lithosphere and the biosphere, and the interactions between them. The climate system itself is a "natural resource" protected by Hawai'i's public trust doctrine because it comprehensively encompasses and inextricably interrelates with all other natural resources, including but not limited to land, water, and air. The constitutional public trust's protection of "all natural resources" expressly or impliedly includes the climate system, or necessarily must extend to the climate system based on present "changing needs and circumstances." *Waiāhole*, 94 Hawai'i at 135, 9 P.3d at 447.

67. In addition to altering the climate system as a whole, climate pollution—and the resulting earth energy imbalance—directly and pervasively affect all other natural resources protected by the constitutional public trust doctrine, including but not limited to land, water, and air. The Hawai'i Supreme Court has specifically recognized the "public trust considerations . . . related to protection of air and other trust resources affected by climate change." *In re Maui Elec. Co.*, 150 Hawai'i 528, 538, 506 P.3d 192, 202 (2022) ("MECO").

68. "The State's constitutional public trust obligations exist independent of any statutory mandate and must be fulfilled regardless of whether they coincide with any other legal duty." *Ching v. Case*, 145 Hawai'i 148, 178, 449 P.3d 1146, 1176 (2019).

69. The "basic premise" of the public trust is "that the state has certain powers and duties which it cannot legislatively abdicate." *Waiāhole*, 94 Hawai'i at 130-31, 9 P.3d at 442-43. Thus, agency statutory duties "do not override the public trust doctrine," rather, "the doctrine continues to inform the [statute]'s interpretation, define its permissible 'outer limits,' and justify its existence." *Id.* at 133, 9 P.3d at 445. "The public trust doctrine at all times forms the outer boundaries of permissible government action with respect to public trust resources." *Id.* at 132, 9 P.3d at 444 (citation omitted).

70. The public trust places upon state agencies "a fiduciary duty analogous to the common law duty of a trustee." *Ching*, 145 Hawai'i at 170, 449 P.3d at 1168. "The most basic aspect of the State's trust duties is the obligation to protect and maintain the trust property and regulate its use," which includes an "obligation to reasonably monitor trust property to ensure it is not harmed." *Id.* at 170, 177, 449 P.3d at 1168, 1175 (quotation marks omitted). "As trustee, the State must take an active role in preserving trust property and may not passively allow it to fall into ruin." *Id.* at 177, 449 P.3d at 1175.

71. Under the public trust, the State and agencies such as HDOT "must take the initiative in considering, protecting, and advancing public rights in the resource at every stage of the planning and decisionmaking process." *Waiāhole*, 94 Hawai'i at 143, 9 P.3d at 455.

72. "The trust also requires planning and decisionmaking from a global, long-term perspective." *Id*.

73. The State and its agencies must "consider the cumulative impact" of their actions on public trust resources and "implement reasonable measures to mitigate this impact, including the use of alternative[s]." *Id*.

74. The public trust requires the State and its agencies to "demonstrate affirmatively" that their actions "will *not* affect a protected [trust] use, in other words, the absence of evidence that the proposed use would affect a protected use is insufficient." *Kauai Springs, Inc. v. Planning Comm'n*, 133 Hawai'i 141, 173, 324 P.3d 951, 983 (2014) (quotation marks and brackets omitted).

75. The public trust also "restates" and incorporates the precautionary principle, i.e., "where there are present or potential threats of serious damage, lack of full scientific certainty should not be a basis for postponing effective measures to prevent environmental degradation." *Waiāhole*, 94 Hawai'i at 154, 155, 9 P.3d at 466, 467. "In addition, where uncertainty exists, a trustee's duty to protect the resource mitigates in favor of choosing presumptions that also protect the resource." *Id*.

76. "Just as private trustees are judicially accountable to their beneficiaries for dispositions of the res, so the legislative and executive branches are judicially accountable for the dispositions of the public trust. The beneficiaries of the public trust are not just present generations but those to come. The check and balance of judicial review provides a level of

protection against improvident dissipation of an irreplaceable res." *Id.* at 143, 9 P.3d at 455 (quotation marks and citations omitted).

77. The courts of Hawai'i hold "the ultimate authority to interpret and defend the public trust in Hawai'i." *Id*.

B. Youth Plaintiffs' Constitutional Rights to a Clean and Healthful Environment.

78. Article XI, section 9 of the Hawai'i Constitution establishes that "[e]ach person has the right to a clean and healthful environment, as defined by laws relating to environmental quality, including control of pollution and conservation, protection and enhancement of natural resources."

79. Article XI, section 9 is self-executing. *County of Hawai 'i v. Ala Loop Homeowners*, 123 Hawai 'i 391, 413, 235 P.3d 1103, 1125 (2010).

80. Article XI, section 9 has "both a substantive and a procedural component. First, it recognizes a substantive right 'to a clean and healthful environment,' with the content of that right to be established not by judicial decisions but rather 'as defined by laws relating to environmental quality.' Second, it provides for the enforcement of that right by 'any person' against 'any party, public or private, through appropriate legal proceedings, subject to reasonable limitations and regulation as provided by law.'" *Id.* at 409, 235 P.3d at 1121 (quoting Haw. Const. art. XI, § 9).

81. The Hawai'i Supreme Court recently reaffirmed that "[i]n Hawai'i, a person enjoys a substantive right to 'a clean and healthful environment." *MECO*, 150 Hawai'i at 538 n.15, 506 P.3d at 202 n.15. "Though this right is constitutionally vested, its parameters are defined by 'laws relating to environmental quality." *Id.* (quoting Haw. Const. art. XI, §9).

82. The Hawai'i Supreme Court confirmed that statutes related to "moving [the State] away from fossil fuel-generated power and curbing climate change" are "laws relating to

environmental quality." *Id.* at 538 nn.14 & 15, 506 P.3d at 202 nn.14 & 15. Thus, the constitutional right to "a clean and healthful environment" as defined by such statutes "*subsumes a right to a life-sustaining climate system*." *Id.* at 538 n.15, 506 P.3d at 202 n.15 (emphasis added). "The need to mitigate the catastrophic effects of anthropogenic climate change underlies [the statute]; it in turn shapes and defines the right to a clean and healthful environment." *Id.*

83. The substantive right to a clean and healthful environment under article XI, section 9 "is a legitimate entitlement stemming from and shaped by independent sources of state law, and is thus a property interest protected by due process." *In re Maui Elec. Co.*, 141 Hawai'i 249, 261, 408 P.3d 1, 13 (2017).

84. In the context of this legal action, Youth Plaintiffs' right to a clean and healthful environment is defined by an extensive and growing body of laws, including mandates requiring Defendants to "decarboniz[e] the transportation sector," HRS § 225P-7, with the overarching goal of achieving the statewide Zero Emissions Target "as quickly as practicable, but no later than 2045." *Id.* § 225P-5; *see also id.* § 264-143(a)(9). These laws, further set forth in the following subpart C, all directly relate to "environmental quality"; they all recognize and embody the "need to mitigate the catastrophic effects of anthropogenic climate change" and "to curb greenhouse gas emissions"; and they all affirm and reinforce the constitutional "right to a life-sustaining climate system." *MECO*, 150 Hawai'i at 538 n.15, 506 P.3d at 202 n.15.

C. <u>Defendants' Statutory Authorities and Duties to Reduce Greenhouse Gas</u> <u>Emissions from the State Transportation System.</u>

85. In furtherance of its authorities and duties to establish, maintain, and operate the state transportation system under HRS section 26-19 and chapters 261, 264 and 266, HDOT must prepare a statewide transportation plan for the state highway system, airports, harbors and water-borne transit, surface mass transit systems, and major county roads. *See* HRS § 279A-2(a). The

statewide transportation plan must detail "transportation needs for a six-year period and a schedule of priorities for the construction, modification, and maintenance of various segments of the statewide plan that involve either state-operated systems or county-operated systems that may require state financial assistance for a twenty-year period." *Id.* § 279A-2(b)(1). HDOT must update this information annually. *Id.* § 279A-2(c).

86. The statewide transportation plan must comply with the Hawai'i State Planning Act, HRS chapter 226, which establishes the following climate and greenhouse gas reduction mandates for transportation and energy facilities:

- "[i]ncrease[] energy security and self-sufficiency through the reduction and ultimate elimination of Hawai'i's dependence on imported fuels for . . . ground transportation," *id.* § 226-18(a)(2);
- "[e]ncourage safe and convenient use of low-cost, energy-efficient, non-polluting means of transportation," *id.* § 226-17(b)(11);
- "[e]ncourage diversification of transportation modes and infrastructure to promote alternate fuels and energy efficiency," *id.* § 226-17(b)(13);
- "[p]romote alternate fuels and transportation energy efficiency," *id.* § 226-18(b)(7);
 and
- "achieve ... [a] desired physical environment, characterized by ... stable natural systems," *id.* § 226-4(2).

87. In planning for ground transportation facilities, HDOT is specifically charged with developing and implementing a plan that establishes:

(1) "A contiguous network of motor vehicle highways" in which "priority and preference for access shall be given to public mass transportation"; (2) "A contiguous network of bicycle and electric bicycle highways or pathways," which "shall be separated and protected from vehicular traffic"; and

(3) "A contiguous network of pedestrian highways or pathways," which "shall be protected from vehicular and bicycle traffic."

HRS § 264-142(a).

88. Additionally, in "planning, designing, and implementing" ground transportation infrastructure projects, HDOT "shall endeavor to" meet the following goals:

- "Reduce carbon emissions and greenhouse gasses to meet state renewable portfolio standards established in [HRS §] 269-92 and [a] zero emissions clean economy by 2045 pursuant to [HRS §] 225P-5";
- "Reduce vehicle miles traveled";
- "Decrease the percentage of single occupancy vehicles in the State's mode share";
- "Assess and maximize total throughput of people across all modes of transportation";
- "Achieve any goals described in the complete streets policy";² and
- "Reduce urban temperatures by incorporating tree canopy and foliage over hardened surfaces."

Id. § 264-143(a).

89. To facilitate the electrification of ground transportation, HDOT must "[p]romote efficient operation of vehicles, including efficient planning of charging system locations and efficient utilization of renewable energy for charging [EVs]." *Id.* § 196-9(c)(6).

² State law mandates that HDOT "adopt a complete streets policy that seeks to reasonably accommodate convenient access and mobility for all users of the public highways . . . including pedestrians, bicyclists, transit users, motorists, and persons of all ages and abilities," subject to limited exceptions. HRS § 264-20.5(a).

90. The Zero Emissions Target requires the State, including HDOT, to "sequester more atmospheric carbon and greenhouse gases than emitted within the state *as quickly as practicable*, but no later than 2045." *Id.* § 225P-5(a) (emphasis added). "After January 1, 2020, agency plans, decisions, and strategies shall give consideration to the impact of those plans, decisions, and strategies on the State's ability to achieve the goals in this section." *Id.* § 225P-5(b). The purpose of the Zero Emissions Target is to "address the effects of climate change to protect the State's economy, environment, health, and way of life." *Id.* § 225P-1.

91. In adopting the Zero Emissions Target, the Legislature explicitly mandated that the "[t]he State shall expand strategies and mechanisms to reduce greenhouse gas emissions through the reduction of energy use, adoption of renewable energy, and control of air pollution among all agencies, departments, industries, and sectors, *including transportation*." 2018 Haw. Sess. Laws Act 15, § 4 (emphasis added). "Such strategies and mechanisms shall utilize the best available science, technologies, and policies to reduce greenhouse gas emissions." *Id*.

92. In 2021, the Legislature declared a "climate emergency" and called on "entities statewide . . . to pursue [the following] climate mitigation and adaptation efforts and mobilize at the necessary scale and speed": (1) "[a] statewide commitment to a just transition toward a decarbonized economy"; and (2) "[f]acilitation of investments in beneficial projects and infrastructure" such as electric vehicles ("EVs"), clean fleet transitions, energy efficiency, and reforestation. S. Con. Res. 44, 31st Leg. (2021).

93. Also in 2021, the Legislature enacted a statewide goal to "reduce emissions that cause climate change and build energy efficiencies across all sectors, including *decarbonizing the transportation sector*." 2021 Haw. Sess. Laws Act 74, § 2; HRS § 225P-7 (emphasis added).

BACKGROUND FACTS

A. <u>Greenhouse Gas Emissions Are Causing an Escalating Climate Emergency for</u> <u>Hawai'i and the Earth.</u>

94. As the Hawai'i Supreme Court recently recognized, "*There is scientific*

consensus: anthropogenic global warming threatens the world's climate system. It raises the seas; it sickens the planet. It harms present and future generations." *MECO*, 150 Hawai'i at 538 n.15, 506 P.3d at 202 n.15 (emphasis added).

95. The Hawai'i Supreme Court further recognized that "Hawai'i's space on Earth makes us vulnerable to the ecological damage caused by an unhealthy climate system" and cited the Hawai'i Legislature's declaration of a "climate emergency." *Id.*

96. Likewise, over the last 15 years, the Hawai'i Legislature has repeatedly and consistently found:

- "The scientific evidence is now compelling that recent climate change is caused at least in part by human activities, especially the burning of fossil fuels, which has driven atmospheric carbon dioxide concentrations to their highest levels in four hundred twenty thousand years. . . . [C]limate change poses a serious threat to the economic well-being, public health, natural resources, and the environment of Hawai'i." 2007 Haw. Sess. Laws Act 234, § 1(a).
- "[T]he mass consumption of fossil fuels, driven by our dependence on food and energy imports, contributes to climate change and the deterioration of the environment," 2010 Haw. Sess. Laws Act 73, § 1.
- "[C]limate change is the paramount challenge of this century, posing both an urgent and long-term threat to the State's economy, sustainability, security, and way of life."
 2014 Haw. Sess. Laws Act 83, § 1.

- "[N]ot only is climate change real, but it is the overriding challenge of the 21st century
 Climate change poses immediate and long-term threats to the State's economy, sustainability, security, and way of life." 2017 Haw. Sess. Laws Act 32, § 1.
- "[C]limate change is real and poses a serious threat to the State's economy, sustainability, and natural resources." 2018 Haw. Sess. Laws Act 15, § 1.

And in 2021, the Legislature "acknowledged [that] an existential climate emergency threatens humanity and the natural world, declare[d] a climate emergency, and request[ed] statewide collaboration toward an immediate just transition and emergency mobilization effort to restore a safe climate." S. Con. Res. 44, 31st Leg. (2021).

97. According to current data, 2020 tied with 2016 as the warmest year ever recorded. The 2020 global temperature was +1.3°C (~2.3°F) warmer than the best estimate of preindustrial temperatures. The past seven years were the warmest seven years ever, and the ten warmest years all occurred after 2009, reflecting a long-term warming trend.

98. Hawai'i is warming at a rate that is four-and-a-half times greater than before 1959. Eight of the ten warmest years on record in the State occurred after 2000 (in order: 2015, 2019, 2020, 2018, 2004, 2016, 2017, 2005). Since 1970, every decade has been warmer than the last, with the 2010s being on average 1.22°C (2.20°F) warmer than the pre-industrial era. The five-year period from 2016 to 2020 was 1.52°C (2.74°F) warmer than the pre-industrial period.

99. Climate change is a response to energy imbalances in the climate system. Because of a buildup of greenhouse gases in Earth's atmosphere, more solar energy is retained in the atmosphere, and less energy is released back into space. This excess accumulation of greenhouse gases in our atmosphere results in an energy imbalance and, thus, an accumulation of heat in our

climate system, and the most practical way to monitor climate change is to assess the accumulation of heat in the climate system.

100. Between 2005 and 2019, Earth's energy imbalance doubled, representing an unprecedented and rapid warming of our planet. This energy increase is equivalent to the energy burned from 139 billion flights from Los Angeles International Airport to Daniel K. Inouye International Airport.

101. Restoring Earth's energy imbalance is key to solving the climate crisis. The only way to do this is to swiftly reduce greenhouse gas emissions by eliminating fossil fuel combustion, and protecting and enhancing carbon sinks to sequester more carbon.

102. The best available science today prescribes that global atmospheric CO₂ concentrations must be restored to less than 350 parts per million ("ppm") by 2100 (with further reductions thereafter) in order to stabilize Earth's energy balance and restore the climate system on which the continued existence and quality of life in Hawai'i and Youth Plaintiffs' own lives depend. A global emission reduction and sequestration pathway back to 350 ppm by 2100 would stabilize long-term global heating at no more than 1°C above pre-industrial temperatures, with a short-term peak of approximately 1.3°C as a global average. No one, including the International Panel on Climate Change ("IPCC"), has published any scientific evidence to counter the finding that < 350 ppm is the maximum safe concentration of CO₂.

103. The global annual average atmospheric CO_2 concentration for 2021 was 416.45 ppm. The fluctuations of CO_2 levels moves in parallel with global temperature and sea level rise, as shown in Figure 1 (below). Given how increases in CO_2 drive atmospheric and ocean warming, which in turn cause ocean expansion and polar ice melt, leading to sea level rise, the results are dire for humanity at current CO_2 levels and even worse as more CO_2 is put into the

system. The last time CO₂ levels were over 400 ppm, global sea level was approximately 70-90 feet higher than today.



Figure 1: Carbon Dioxide, Temperature and Sea-Level Rise (Sources: Data from various sources including Nat'l Aeronautics & Space Admin., Goddard Inst. for Space Studies; Nat'l Oceanic & Atmospheric Admin.; University of Colorado Sea Level Rise Research Group)

104. While Hawai'i on its own cannot achieve what scientists prescribe is needed to restore the entirety of Earth's energy imbalance (the most critical metric defining the scope of continued global warming and climate change) the Legislature has long recognized that Hawai'i must "continue the State's tradition of environmental leadership by placing Hawai'i among the nation's leaders in efforts to effect a climate change policy . . . [, which] will serve as an example to other states, the federal government, and other countries to protect our fragile global environment." 2007 Haw. Sess. Laws Act 234, § 1(a). *See also* 2018 Haw. Sess. Laws Act. 15, § 1 (finding that "Hawai'i is committed to mitigating climate change" and is "the first state in the nation to send a clear message to the world that our citizens are determined to secure their energy future and climate health").

105. Indeed, scientists agree that every tonne of CO_2 emissions adds to global warming and greenhouse gas emissions must be kept as low as possible. In short, every additional ton of CO_2 emitted into the atmosphere makes the climate change problem worse and places the environmental, economic, and existential burdens of climate change on these Youth Plaintiffs and future generations.

106. To restore global atmospheric carbon dioxide concentrations to less than 350 ppm by 2100, stabilize Earth's energy balance and achieve the Zero Emissions Target, the best available science requires that the State *both* (1) reduce gross CO₂ emissions 90 to100% from 1990 levels by 2045, *and* (2) sequester excess CO₂ already in the atmosphere by maximizing carbon sequestration capacity.

107. Emissions reductions and sequestration must be accounted and inventoried *separately* so that appropriate standards can be developed for each, consistent with what best available science dictates is needed to stabilize the climate system.

108. Upon information and belief, Defendants have made no findings or recommendations as to the amounts of greenhouse gas emission reductions and carbon sequestration that are actually required to achieve Hawai'i's Zero Emissions Target, both in general and specifically with respect to the state transportation system, which is essential to ensuring that Hawai'i is aligning its climate change mitigation policies with what is scientifically necessary to achieve the target.

B. <u>Current Levels of Emissions and Heating Directly Harm Youth Plaintiffs and the</u> <u>Public Trust.</u>

109. Fifteen years ago, the Legislature found that "climate change poses a serious threat to the economic well-being, public health, natural resources, and the environment of Hawai'i." 2007 Haw. Sess. Laws Act 234, § 1(a). Eight years ago, the Legislature further found that "beach erosion, drought, and rising temperature are already having measurable impacts on Hawaii and are expected to accelerate in the years to come." 2014 Haw. Sess. Laws Act 83, § 1. Earlier this year, the Hawai'i Supreme Court recognized that global warming "harms present and future generations," and that Hawai'i is specifically "vulnerable to the ecological damage caused by an unhealthy climate system." *MECO*, 150 Hawai'i at 538 n. 15, 506 P.3d at 202 n.15. The climate changes from the unprecedented level of warming disproportionately harm children and youth. Specifically, climate change harms children's health both directly and indirectly, as illustrated in Figure 2 (below).

Climate Change Risks to a Child Born Today

Climate change poses risks to children throughout their development. Here are a few examples.



SOURCE: Lancet

PAUL HORN / InsideClimate News

Figure 2: Climate Change Risks to Youth from Prenatal through Adolescence. (Source: Anthony J. McMichael, *Globalization, Climate Change, and Human Health*, 368 New Eng. J. Med. 1335, 1339 (2013)).

110. In December 2015, in response to House Concurrent Resolution No. 108 (2015),

the Hawai'i Climate Change & Health Working Group issued a report to the 28th Legislature,

concluding that "[t]he range of health issues that may increase or be intensified by climate

change includes: airborne allergens, potential morbidity and mortality due to wildfires, temperature extremes, and precipitation extremes, as well as diseases carried by vectors, food and waterborne disease, along with water and food security issues." The Working Group also found that "[c]limate change is projected to increase and exacerbate already-existing public health problems, such as acute and chronic diseases, stress and mental health issues, dengue, other vector and waterborne diseases."

111. As youth and children, Youth Plaintiffs are inordinately injured by the psychological (cognitive, emotional, social, and functional) effects of the climate crisis, harming their psychological health and wellbeing. Experiencing and expecting dangerous climate harms can be traumatic, with lasting consequences for mental health, especially for developing youth. Psychological health harms related to climate change include elevated levels of anxiety, depression, post-traumatic stress disorder, increased incidences of suicide, substance abuse, social disruptions like increased violence, and a distressing sense of loss.

112. Under current greenhouse gas emission rates, children born in 2020 are expected to face a two to seven-fold increase in overall extreme climate events, such as heat waves, wildfires, crop failures, droughts, and floods, when compared to people born in 1960. An adult born in 1960 will likely experience between two and six extreme heatwaves in their lifetime, whereas a child born in 2020 will likely experience between 21 and 39 extreme heatwaves in their lifetime, a number which will increase the more greenhouse gases are released into the atmosphere. The lifetime exposure disparities between youth, including the Youth Plaintiffs, and present generations of adults, are similar across other climate harms.

113. Climate change induced ocean warming has already reached dire levels. In 2020, the oceans absorbed 20 sextillion joules of heat due to climate change and warmed to record

levels. This quantity of warming, 20,000,000,000,000,000,000,000 joules, is equivalent to the amount of energy from 10 Hiroshima atomic bombs being released *every second* for one year.

114. Climate-change induced ocean warming has resulted in statewide coral bleaching events, reducing marine habitat and the coastal protection ecosystem services coral reefs provide by dissipating wave energy, valued at more than \$860 million a year. Bleaching events also reduce marine habitat for reef fish which Youth Plaintiffs rely on for cultural, environmental, educational, subsistence, and scientific purposes. A 2011 report by the National Oceanic and Atmospheric Administration ("NOAA") valued Hawai'i's coral reefs at more than \$33 billion a year, accounting for tourism, fishing, cultural benefits, and other factors.

115. A 2020 report by the State Office of Planning documents that between 2014 and 2019, Hawai'i experienced three unprecedented large-scale coral bleaching events. Sixty percent of coral reefs on the west side of Hawai'i Island experienced bleaching; 50% of the corals in the region perished; and some reef areas suffered a 90% mortality rate. According to the 2018 national climate assessment, all of Hawai'i's nearshore coral reefs are expected to experience annual bleaching events by 2050 under current emission levels. The IPCC has indicated that at 1.5°C of warming, 70 to 90% of the world's coral reefs will be lost; at 2°C, they are likely to disappear entirely. In other words, unless greenhouse gas emissions are significantly reduced in line with best available science and the State's Zero Emissions Target, Hawai'i's coral reefs will largely disappear within the lifetime of the Youth Plaintiffs.

116. Climate-change induced oceanic warming also increases the risk that Hawai'i will experience more frequent extreme weather events, such as hurricanes and flooding. In 2015, a record-breaking 15 named storms neared Hawai'i's shorelines, and three Category 4 hurricanes were simultaneously active in the Central Pacific. In April 2018, a storm on Kaua'i dropped

nearly 50 inches of rain in one day, destroying over 30% of homes in the rural Wainiha area and up to 63% of occupied homes in Hanalei, and setting a new U.S. record for 24-hour rainfall. Also in 2018, Hurricane Lane dumped over four feet of rain on parts of eastern Hawai'i after undergoing "rapid intensification," a modern phenomenon fueled by warming ocean waters. Torrential downpours and destructive flash floods in March and December 2021 also damaged and destroyed dozens of homes and forced the closure of many roads across the state. Scientists agree that such storms are a result of warming associated with climate change, and children are increasingly vulnerable to these storms. At the same time, a long-term decrease in annual rainfall threatens the Youth Plaintiffs with lower stream flows, slower aquifer recharge, and more wildfires. During 2010, 40% of the island chain experienced severe, extreme, or exceptional drought conditions, and many of these areas remain under drought conditions today.

117. As the Legislature has found, sea level rise, caused by the melting of glaciers and ice sheets as well as the thermal expansion of the ocean, will cause "displacement of businesses and residences and the inundation of Hawai'i's freshwater aquifers," 2007 Haw. Sess. Laws Act 234, § 1(a), and "increase coastal flooding and erosion, damaging coastal ecosystems and infrastructure and affecting agriculture, tourism, military bases, and other industries," 2014 Haw. Sess. Laws Act 83, § 1.

118. Between 1990 and 2018, sea levels in Hawai'i rose up to 10 inches, and sea levels in Hawai'i are rising faster and higher than the global average. The Hawai'i Climate Change Mitigation and Adaptation Commission has projected 3.2 feet of sea level rise by the end of the century. This estimate is conservative and much lower than NOAA's 2022 sea level rise projections that include the acceleration of ice melt from Greenland and Antarctica ice sheets and suggest a range between 2.2 and 4.2 m (7 and 13.8 feet) global mean sea level rise by 2100, and

lower still than the 9th Circuit Court of Appeals' acknowledgement that "extreme heat is melting polar ice caps and may cause sea levels to rise 15 to 30 feet by 2100." *Juliana v. United States*, 947 F.3d 1159, 1166 (9th Cir. 2020).

119. Even using a low sea level rise estimate of 3.2 feet, which should not be relied upon for planning purposes under the precautionary principle, the Hawai'i Climate Change and Mitigation Commission estimates that 38 miles of major roads, 6,500 structures, and 25,800 acres of land across the state will be inundated, with the potential to displace 20,000 people. The loss of privately owned land and property alone would result in a loss of \$19 billion, placing a tremendous economic burden on Hawai'i's children and future generations. Sea level rise would also expose public infrastructure such as the Daniel K. Inouye International Airport and Honolulu Harbor to chronic flooding, which puts the island's primary transportation arteries for people and goods at risk.

120. Shoreline public infrastructure and private properties have already suffered damage from climate-change induced sea level rise, coastal erosion, and periodic flooding. Many single-family residences, including the homes of Charlotte, Kanoa, Navahine, and Pahonu, are located in coastal areas vulnerable to climate change-induced and -enhanced destruction. In some locations, the private insurance industry is beginning to exclude flooding and water damage from applicable insurance policies, or charge a very high premium for coverage. Three of six Hawaiian Home Lands on O'ahu, including Waimānalo where Pahonu lives, are estimated to have the greatest potential for residents to be displaced by tsunamis, waves, and sea level rise; Hawaiian Home Land communities on other islands also lie within coastal areas that face the greatest threat from climate change.

121. Many of the highways and transportation routes critical to accessing parts of Hawai'i are experiencing severe flooding due to climate change. As sea level rise and extreme weather events intensify, some of Hawai'i's vulnerable coastal highways will need to be relocated, or entire communities will be cut off from public transportation corridors. Kalā already experienced the hardships of limited transportation access after the 2018 rain bomb on Kaua'i devastated the North Shore communities of Wainiha, Waipā, and Hanalei, cutting off land-based access to the rest of the island for weeks. At just 3.2 feet of sea level rise, 15% of all coastal roads will be threatened with constant erosion and flooding, if not underwater completely. The State's Deputy Director for Highways, Ed Sniffen, has estimated that it would cost around \$15 billion to protect all of Hawai'i's threatened highways from sea level rise.

122. The Legislature has also found that "[c]limate change will have detrimental effects on some of Hawai'i's largest industries, including tourism, agriculture, recreational, commercial fishing, and forestry. It will also increase the strain on electricity supplies necessary to meet the demand for air conditioning during the hottest times of the year." 2007 Haw. Sess. Laws Act 234, § 1(a). Hawai'i beaches, one of the state's most valuable economic and ecological assets, are already disappearing; a 2020 report by the State Office of Planning recognized that seventy percent (70%) of beaches studied on Kaua'i, O'ahu, and Maui showed a long-term trend of chronic erosion, with a follow-up study showing 92-96% of Hawai'i's beaches will be completely eroded between 2050 and 2100.

123. Rising temperatures and changing weather patterns also "threaten biodiversity," 2018 Haw. Sess. Laws Act 15, § 1, and "increase the risk of extinctions." 2014 Haw. Sess. Laws Act 83, § 1. Dramatic population declines have already been observed for the Haleakalā silversword, native forest birds, and other imperiled species uniquely adapted to Hawai'i's

historic environment. In 2018, Hurricane Walaka wiped out East Island in Papahānaumokuākea Marine National Monument, an important habitat for the 'īlioholoikauaua or Hawaiian monk seal (*Neomonachus schauinslandi*) and honu or green sea turtle (*Chelonia mydas*), and portions of nearby Tern Island. Coastal erosion and changing weather patterns also threaten sites and practices of cultural and historical significance. With only 3.2 feet of sea level rise, the State anticipates the inundation of 550 cultural sites, threatening the traditional lifestyles and culture of Native Hawaiians.

124. The decline and disappearance of Hawai'i's natural and cultural heritage has profound mental and spiritual effects on Youth Plaintiffs, particularly Native Hawaiian youth who wish to pass on cultural traditions in the future. As recognized by the Legislature, "[t]hreats to the traditional lifestyles of indigenous communities" caused by climate change include "destruction of coastal artifacts and structures and reduced availability of traditional food sources and subsistence fisheries, which will make it difficult for Pacific Island communities to sustain their connection with a defined place and their unique set of customs, beliefs, and languages." 2014 Haw. Sess. Laws Act 83, § 1.

C. <u>Greenhouse Gas Emissions from the Transportation System are Increasing, Rather</u> than Decreasing toward the Zero Emissions Target.

125. After decades of legislative direction to address climate change, Hawai'i's per capita greenhouse gas emissions remain higher than 85% of the countries on earth, with emissions from the transportation sector constituting an ever-growing share of total emissions as other sectors of the economy pivot away from fossil fuels.

126. In enacting policies aimed at removing greenhouse gas emissions from the transportation sector in 2021, the Legislature found that "the use of fossil fuels is the State's

primary contributor to greenhouse gas emissions," and "[t]he transportation sector accounts for the use of over two-thirds of the oil imported to the State." 2021 Haw. Sess. Laws Act 74, § 1.

127. Overall, statewide greenhouse gas emissions were only 5% lower in 2017 than in 1990. The Department of Health's 2017 Hawai'i Greenhouse Gas Emissions Report ("2017 GHG Report") shows that statewide emissions decreased from 25.94 million metric tons of carbon equivalent gases (MMT CO₂eq.) in 1990 to 24.66 MMT CO₂eq in 2017, a decrease of only 1.28 MMT CO₂eq over 27 years. In order to meet the Zero Emissions Target, Hawai'i will need to reduce its emissions by up to 0.88 MMT CO₂eq *annually*, 19 times faster than it reduced emissions between 1990 and 2017.

128. Even more dire for the Youth Plaintiffs, total transportation sector emissions in Hawai'i *increased* between 1990 and 2020, despite improvements in tailpipe emissions efficiency and other innovations driven by changes in federal policies and regulations.





129. As stated in the 2017 GHG Report, "[t]ransportation emissions—which increased between 1990 and 2007, decreased between 2007 and 2010, and then increased again between 2010 and 2017—accounted for the largest share of Energy sector emissions in almost all inventory years."



Figure 4: Total Annual CO₂ Emissions Compared to Transportation CO₂ Emissions. (Source: Data from U.S. Energy Information Administration ("U.S. EIA"))

130. Transportation sector carbon dioxide emissions have continued to rise an average of 0.07 MMT CO₂ each year. Transportation is increasing as the dominant source of carbon dioxide emissions in Hawai'i, from approximately 49% of total carbon dioxide emissions in 2008 to approximately 59% in 2018 (a growth rate of approximately 1% each year), as shown in Figure 4 (above). Consequently, the transportation sector is now the dominant source of all greenhouse gas emissions in the State, as shown in Figure 5 (below).



Figure 5: Share of Total Greenhouse Gas Emissions by Source (2017). (Source: 2017 GHG Report at 18 (Figure 3-2))

131. Current levels of fossil fuel consumption, fuel imports, and greenhouse gas emissions all indicate that the State is failing to achieve its clean transportation goals. Petroleum use in the transportation sector *increased* between1990 and 2020, as illustrated in Figure 6 (below).



Figure 6: Petroleum Use in Hawai'i, 1990-2020. (Source: data from U.S. EIA)

132. Greenhouse gas emissions from the transportation sector will continue to increase under Defendants' existing transportation policies and practices. According to the 2017 GHG Report, transportation emissions, largely from the burning of petroleum, are projected to increase 41% between 2020 and 2030, from 6.49 to 9.15 MMT CO₂eq. annually, contrary to the projected decrease of emissions in other sectors.



Figure 7: Projected Statewide CO_{2eq} Emissions Through 2030 (All Sectors vs. Transportation). (Source: Data from 2017 GHG Report Tables 2-1 and 7-2)

133. The projected long-term increase in transportation emissions is largely driven by domestic ground and air transportation emissions, which together account for roughly 85% of transportation emissions.



Figure 8: Share of Transportation Emissions by End-Use (2017). (Source: 2017 GHG Report at 25 (Figure 3-6))

134. According to the 2017 GHG Report, aviation emissions in 2017 were 4.10 CO₂eq. accounting for 17% of overall emissions, and 46% of transportation emissions. However, other studies estimate that when accounting for flights both into and out of Hawai'i, emissions are closer to 18 MMT CO₂eq, indicating that the State may be significantly undercounting emissions from aviation, and thus the transportation sector as a whole.

135. Hawai'i's transportation emissions are driven by continued reliance on fossil fuels. Petroleum use in *both* ground transportation and air transportation currently exceeds petroleum use in the electric power sector, as shown in the following chart:



Figure 9: Percent of Total Petroleum Use in Hawai'i by Sector (2018). (Source: Hawai'i State Energy Office, Hawai'i's Energy Facts and Figures 4 (Figure 8) (2020))

D. <u>HDOT Is Exacerbating, Rather Than Mitigating, Greenhouse Gas Emissions.</u>

136. HDOT establishes, maintains, and operates eleven commercial service airports,

four general aviation airports, ten commercial harbors, and thousands of miles of paved roadways. As described above, HDOT's statutory duties include but are not limited to: planning and authorizing construction and maintenance projects, including deciding whether to add new vehicle lanes to the State's highways; managing and operating HDOT's facilities, including the availability of EV charging and alternative fuels infrastructure; partnering with counties and metropolitan planning organizations on ground transportation planning, funding, and project development, including directing federal funds for multimodal programs such as the Transportation Alternatives Program; and managing other federal and state funding sources that determine the shape and scope of the state transportation system.

137. HDOT has systematically failed to exercise its statutory and constitutional authority and duty to implement Hawai'i's climate change mitigation goals and to plan for and ensure construction and operation of a multimodal, electrified transportation system that reduces

vehicle miles traveled and greenhouse gas emissions, and helps to eliminate Hawai'i's dependence on imported fossil fuels.

138. As a result of HDOT's conduct, emissions from Hawai'i's transportation sector rose from 8.70 MMT CO₂eq. in 2010 to 8.98 MMT CO₂eq. in 2017. The State's 2017 GHG Report projects emissions will further increase to 9.15 MMT CO₂eq. by 2030—in the exact opposite direction as the Zero Emissions Target and constitutional climate imperatives mandate.



Hawai'i Transportation Emissions & Projections

Figure 10: Baseline Greenhouse Gas Emissions (CO_{2eq}) and Projections. (Source: Data from 2017 GHG Report)

139. Since at least 2008, multiple state entities, including HDOT, have opined on the necessary strategies and goals for the State to reduce greenhouse gas emissions from the transportation sector. In various reports, plans, and policy declarations during this period, the state entities have identified greenhouse gas reduction targets for the transportation sector, as

well as key strategies that are uniformly recognized as necessary to enable and achieve such reductions. These strategies include but are not limited to:

(1) reducing vehicle miles traveled;

(2) rapidly electrifying the ground transportation sector and increasing the use of alternative fuels in the air and marine transportation sectors; and

(3) expanding multimodal transportation options.

140. Since 2008, none of the stated targets, either for overall reductions of greenhouse gas emissions from the transportation sector, or for the various key strategies for enabling and achieving these reductions, have been met. As a result, Hawai'i has lost 14 years of time and opportunity to reduce greenhouse gas emissions from the transportation sector and is now farther away than ever before from the necessary decarbonization end goals for the state transportation system.

141. In 2008, Hawai'i launched the Hawai'i Clean Energy Initiative ("HCEI") in partnership with the U.S. Department of Energy, to support the State's goal of meeting 70% of Hawai'i's energy needs using clean, renewable energy sources by 2030, including in the transportation sector. In 2011, the HCEI published a roadmap identifying strategies to reduce transportation-related emissions 70% by 2030, including:

• Reduce ground transportation vehicle miles traveled 4% below 2011 levels by 2020;

• Bring 40,000 EVs on the road by 2020; and

• Reduce ground transportation petroleum consumption 70% by 2030.

142. Based on information and belief, and as further discussed below, none of these strategies have been met or are on track to being met.

143. In 2011, HDOT published the 2011 Hawai'i State Transportation Plan ("2011 HSTP"), which is HDOT's most recent update of the planning document that is required by law to set forth comprehensive goals and objectives for the state's air, land, and marine transportation sectors. *See* HRS § 279A-2. The 2011 HSTP included among its goals to "[s]upport the State's goal of 70% clean energy" and "[c]reate and manage an integrated multimodal transportation system" by, among other measures: "[e]xpand[ing] the use of alternative fuels and EVs"; "provid[ing] electric recharging at transportation facilities"; and "formulat[ing] a program of multi-modal and inter-modal projects, including bicycle and walking options.

144. Based on information and belief, and as further discussed below, none of these strategies have been met or are on track to being met.

145. In 2015, the Hawai'i Department of Business, Economic Development and Tourism ("DBEDT") commissioned the Hawai'i Clean Energy Initiative Transportation Energy Analysis ("2015 HCEI Analysis"), which found that progress towards the goals set in 2011 had fallen short.

146. The 2015 HCEI Analysis recommended that the State institute measures to reduce the use of petroleum in the transportation sector by 62 to 72 million gallons per year by 2030, including:

- Reduce vehicle miles traveled;
- Promote car sharing programs;
- Expand EV charging infrastructure;
- Reduce the use of airplane fuel while planes idle at the gate by providing plug-in infrastructure at airports; and
- Expand infrastructure for deployment of alternative fuels at ports and harbors.

147. Based on information and belief, and as further discussed below, none of these measures have been implemented in a manner to achieve the 2030 goal for reducing the use of petroleum in the transportation sector.

148. The Hawai'i State Energy Office ("HSEO"), an attached agency within DBEDT charged by statute with promoting "energy efficiency, renewable energy, and clean transportation to help achieve a resilient clean energy economy," HRS § 196-71, has emphasized that "Hawai'i's transformation to a clean energy economy requires the integration of transportation." In 2018, HSEO published a State Energy Plan setting forth the following objectives to measure progress towards Hawai'i's clean transportation goals:

- A reduction in annual vehicle miles traveled;
- An increase in the use of EVs and installation of supporting charging stations;
- A decrease in fossil fuel consumption; and
- A decrease in fossil fuel imports.

149. Based on information and belief, and as further discussed below, none of these objectives have been achieved in a manner consistent with the Zero Emissions Target.

150. In 2018, the Hawai'i Climate Change Mitigation and Adaptation Commission "recognized that ground transportation contributes significantly to Hawai'i's share of greenhouse gas emissions" and recommended the State adopt "mechanisms to reduce overall vehicle miles traveled as well as converting all remaining vehicle-based ground transportation to renewable, zero-emission fuels and technologies."

151. Based on information and belief, and as described below, none of these mechanisms have been adopted in a manner consistent with the Zero Emissions Target.

152. In 2021, the Legislature enacted at least two bills emphasizing the urgent need to reduce greenhouse gas emissions from the state transportation system, and directing HDOT to take specific greenhouse gas reduction measures.

153. The first measure, Act 74, required that HDOT accelerate adoption of EVs by state agencies, which currently comprise less than 1.3% of total vehicles on roads in the state. In adopting this measure, the Legislature recognized that "the use of fossil fuels is the State's primary contributor to greenhouse gas emissions," and "[t]he transportation sector accounts for the use of over two-thirds of the oil imported to the State." 2021 Haw. Sess. Laws Act 74, § 1.

154. The Legislature also found that "[EVs] will play an integral role in Hawai'i's clean energy future and in meeting the goals set for the State in reducing its greenhouse gas emissions, particularly as electrical generation in Hawai'i transitions more completely to renewable energy sources." *Id*.

155. The second measure, Act 131, required that HDOT update its planning and project implementation processes to better achieve various existing transportation goals, including meeting the Zero Emissions Target. In adopting this measure, the Legislature found that "[m]odernizing ground transportation to support the switch to [EVs] will not only reduce long-term costs for local commuters, but will also help meet Hawai'i's goals to eliminate fossil fuels in ground transportation and sequester more greenhouse gases than the State emits by 2045."

156. The Legislature further emphasized that "[m]erely adding lanes to reduce traffic does *not* address Hawai'i's most pressing traffic, safety, health, and other issues. In fact, it can often *make them worse*." 2021 Haw. Sess. Laws Act 131, § 1 (emphasis added). As the Legislature found:

Studies show that the traffic *benefits of spending tens of millions of dollars adding lanes to accommodate more cars are often eliminated in just a few years by additional cars* incentivized to fill that space. Those funds could have had a *more significant and longer-lasting benefit if they were expended to address other issues, such as expanding options* for people to commute by public transportation, biking, or walking, especially for those in low-income communities.

Id. (emphasis added).

157. Consistent with these legislative findings, Act 131 requires that HDOT improve its planning process and "modernize Hawai'i's ground transportation infrastructure" by considering many of the same goals identified over the last 14 years, when making project planning and funding decisions, i.e.:

- Reducing vehicle miles traveled;
- Decreasing the percentage of single occupancy vehicles in the State's mode share;
- Complying with the Hawai'i Complete Streets policy; and
- Reducing greenhouse gas emissions as necessary to meet the Zero Emissions Target.

Id., § 2.

158. Upon information and belief, HDOT has consistently failed to meet the goals and implement the strategies and measures detailed above and has instead continued its pattern and practice of establishing, maintaining, and operating traditional infrastructure projects such as highway construction and expansion, which increase vehicle miles traveled in single occupancy vehicles and support and promote the use of fossil fuels in the marine, air, and ground transportation sectors.

159. As further detailed below, HDOT's pattern and practice of not cooperating and coordinating with other agencies to implement Hawai'i's climate change mitigation goals, lack of coherent and consistent planning to ensure Hawai'i's transportation system meets the State's climate change mitigation needs, failure to implement plans and policies designed to reduce

transportation emissions, custom of authorizing transportation projects that result in high levels of greenhouse emissions, and consistent lack of planning, budgeting, and funding to support vehicle electrification, multimodal travel, and the use of alternative fuels, has led to an increase in petroleum use and vehicle miles traveled between 2007 and 2017, as shown in the graphs below.





Figure 11: Change in Vehicle Miles Traveled



Figure 12: Ground Transportation Petroleum Consumption

Source: John Larsen et al., Rhodium Group, *Transcending Oil: Hawai'i's Path to a Clean* Energy Economy 15, 17 (Figures 2.6 & 2.11) (Apr. 2018)

160. Among other conduct contributing to an increase in vehicle miles traveled,

vehicle lanes in Hawai'i have been added at a rate of 31 new miles each year since 2000, as illustrated in Figure 13 (below). Adding new lanes does not alleviate traffic or reduce greenhouse gas emissions from transportation. Rather, it proportionally increases vehicle miles traveled, increasing vehicle emissions and exacerbating climate change. If this trend continues, an additional 20.25 MMT CO_{2eq} will be added to the atmosphere between 2021 and 2050, moving Hawai'i even further away from achieving the Zero Emissions Target.



Figure 13. Total Lane Miles Added (Blue) and Total Vehicle Miles Traveled (Red) since 1990.

161. Because of the direct correlation between highway miles, vehicles miles traveled, and greenhouse gases, the additional 980 miles of lane constructed between 1991 and 2017 have contributed an additional 32.8 billion VMT and 13 MMT of CO₂eq. to Hawai'i's greenhouse gas emissions load.

162. Upon information and belief, HDOT does not have any plans or benchmarks in place to measure progress towards limiting new highway construction, or otherwise reducing statewide vehicle miles traveled, as required to meet the Zero Emissions Target.

163. HDOT has also not reduced barriers to EV adoption and electrification of transportation as necessary to achieve the Zero Emissions Target. For example, because of the 10- to 15-year lifespan of passenger vehicles, EVs should make up 95 percent of all new vehicle sales by 2030, for EVs to comprise 100 percent of on-road vehicles by 2045. However, as of December 2020, there were only 13,423 EVs registered in the State: approximately 1.3 percent

of the total 1,054,355 passenger vehicles on the road, and far short of the 2011 HCEI goal to have 40,000 EVs on the road by 2020.

164. Increasing the number of EVs on the road requires a major and unprecedented expansion of EV charging infrastructure. The HSEO recently recognized that "the lack of planning and deployment of infrastructure charging will become a constraint on rapid conversion" to zero emission vehicles in Hawai'i. In particular, lack of public charging infrastructure can disincentivize EV adoption by both individual consumers and fleet operators who may lack access to private charging stations in their home or workplace.

165. Upon information and belief, HDOT does not have any plans in place to ensure the state transportation system has the public charging infrastructure in place to accommodate wide-spread electrification of transportation, including the infrastructure necessary to charge heavy duty vehicles, marine vessels, and aircraft that use the state's airport and harbors. In fact, Hawai'i currently has the second lowest number of charging ports per EV in the country.

166. HDOT has also not built the infrastructure necessary to support multimodal travel and reduce barriers to public transit, walking, and cycling that exist across the state. Among other acts and omissions, HDOT has not funded and implemented the Statewide Pedestrian Master Plan, prepared in 2013. Likewise, HDOT has not made any significant progress towards implementing the Statewide Bike Plan Hawai'i, prepared in 2003.

167. In planning for and budgeting for construction and maintenance projects, HDOT regularly fails to set forth any findings related to the practicability and feasibility of including projects features and infrastructure that support walking, biking, and interconnection with public transit, as required by the Hawai'i Complete Streets Policy. HDOT also regularly fails to solicit input from the public in order to better serve the diversified transportation needs and interests of

individual communities. As a result, HDOT continues to plan and budget for traditional road maintenance and new road construction projects—such as roads with wide lanes, roads without sidewalks or crosswalks, roadways that fail to realize carbon sequestration potential, and roads with poor local street connectivity—that increase vehicle miles traveled and perpetuate the use of fossil fueled vehicles.

168. Upon information and belief, to the extent HDOT does plan and budget for multimodal transportation options (such as pedestrian and bikeway features) in its regular highway construction and maintenance projects, these features are often eliminated during the construction phase.

169. HDOT also has not collaborated and coordinated with other governmental entities charged with achieving the Zero Emissions Target. Among other acts and omissions, HDOT has not convened the Sustainable Transportation Forum since February 15, 2018. The purpose of the forum was to help "identify a framework for the State to achieve the 2045 goal of 100% clean energy and the counties to achieve their 2045 goal of 100% clean ground transportation."

170. Upon information and belief, this statewide framework for advancing clean ground transportation options and reducing greenhouse gas emission from the transportation sector does not exist, and HDOT does not have any plans to reconvene the Sustainable Transportation Forum, or any other forum for developing plans, benchmarks, and actions for reducing ground transportation emissions and meeting the Zero Emissions Target.

171. In response to a public records request, HDOT identified only five "highway plans and actions" it has taken since 2011 to address greenhouse gas emissions: (1) implementing an internet broadband pilot program to increase opportunities for rural commuters to work from home; (2) administering the federally funded Transportation Alternatives Program

which to date has awarded \$5 million (approximately 0.0036% of HDOT's Total 2021 operating budget) for third-party, multimodal projects; (3) securing a vendor to assist state and county agencies with procuring and ordering EVs; (4) adopting SmartTRAC, a program that assesses how well transportation projects address state priorities relative to the requested funding; and (5) conducting a 2019 test of a sustainable concrete mix designed to reduce the carbon footprint of road construction. These five actions are wholly inadequate to reduce emissions from the ground transportation sector and meet the Zero Emissions Target.

172. Upon information and belief, Defendants have not made any progress toward expanding the use of alternative fuels in the air and marine transportation sectors, or reducing the use of fossil fuels at airports and harbors. In fact, in response to a request for public records, HDOT claimed that the agency is not required to address greenhouse gas emissions from commercial harbor users and did not identify any other plans or actions designed to address greenhouse gas emissions from commercial harbors under its control. As described above, HDOT has ample authority for expanding alternative fuels infrastructure at airports and harbors under its control, including electrification options, which would significantly reduce greenhouse gas emissions from the marine and air transportation sectors.

173. Upon information and belief, HDOT does not have any plans in place to improve the efficiency of transportation system operations and to reduce greenhouse gas emissions from material production, construction, and maintenance of the transportation system, nor has HDOT pursued such a planning process.

174. Upon information and belief, HDOT does not have any plan in place to protect, maintain, and increase greenhouse gas sequestration that is taking place on property it controls. Among other acts and omissions, HDOT does not have any plans in place to replace urban trees

on state property it controls that have come to the end of their natural lifespan, even though there is a large potential for greenhouse gas storage and sequestration available in urban forests and green spaces. According to the 2017 GHG Report, urban trees make up 23% of total greenhouse gas sinks in Hawai'i, and thus plans and actions to maintain this sequestration capacity is essential to achieving the Zero Emissions Target.

175. Based on Hawai'i's current and projected greenhouse gas emissions and the deficiencies described herein, the state transportation system, as planned, budgeted, implemented, and constructed results in greenhouse gas emissions that are contrary to achieving the Zero Emissions Target, and in violation of Defendants' duties and Youth Plaintiffs' rights under the Hawai'i Constitution.

176. A clear declaration from this Court that HDOT is violating its constitutional obligations and Youth Plaintiffs' rights is timely because HDOT is currently in the process of updating the 2011 HSTP, which will govern transportation projects for the next 10 years.

177. Furthermore, the Infrastructure Investment and Jobs Act, H.R.3684, recently passed by the United States Congress and signed by President Biden, channels over 1.746 billion dollars in federal funds to HDOT for transportation related projects.

178. Without an order from this Court, HDOT will continue its long-running pattern and practice of establishing, maintaining, and operating the state transportation system in violation of state climate change mitigation goals and needs, increasing rather than reducing and eliminating fossil fuel reliance and greenhouse gas emissions, failing to coordinate with other relevant transportation entities to plan and implement greenhouse gas reduction measures, and spending state and federal funds to build additional highway miles and traditional infrastructure projects that increase greenhouse gas emissions, thereby reducing the funds that are available to

transform the state transportation system into a modern, electrified, multimodal system as necessary to meet the Zero Emissions Target and protect the public trust and Youth Plaintiffs' constitutional rights.

FIRST CLAIM FOR RELIEF

(Breach of Article XI, Section 1 Against All Defendants)

179. Youth Plaintiffs reallege and incorporate by reference the allegations in the proceeding paragraphs.

180. Defendants have breached their duties as trustees under article XI, section 1 of the Hawai'i Constitution to preserve, protect, and maintain public trust resources for present and future generations, by establishing, maintaining, and operating a state transportation system that results in high levels of greenhouse gas emissions and exacerbates Earth's energy imbalance, resulting in grave and existential harms to public trust resources, including the climate system and all other natural resources affected by climate change.

181. Defendants have long been aware that Hawai'i's public trust resources are being threatened and harmed by the emission of climate-change inducing greenhouse gases, and that mitigating, avoiding, and reversing that harm requires swift and **I** decarbonization of the state transportation system. Nonetheless, Defendants have not developed and implemented any affirmative findings or plans addressing these harms of the state transportation system to public trust resources, and alternative options to mitigate and avoid this harm by reducing transportation for their practices.

182. Contrary to the best available science and the imperatives of the constitutional public trust, Defendants continue to establish, maintain, and operate traditional infrastructure

projects that preserve and promote the use of fossil fuels in the air, marine, and ground transportation sectors.

183. Defendants have not planned, funded, or implemented necessary, recognized, and environmentally and economically beneficial alternatives for reducing transportation related greenhouse gas emissions, including but not limited to measures to reduce vehicle miles traveled, electrify transportation and transportation facilities, increase the use of alternative fuels in the ground, air, and marine transportation sectors, and expand multimodal transportation options such as public transit, pedestrian pathways, and bikeways.

184. An actual controversy exists between Youth Plaintiffs and Defendants concerning Defendants' establishment, maintenance, and operation of a transportation system that violates its constitutional public trust obligations.

SECOND CLAIM FOR RELIEF

(Breach of Article XI, Section 9 Against All Defendants)

185. Youth Plaintiffs reallege and incorporate by reference the allegations in the preceding paragraphs.

186. The right to a clean and healthful environment is a substantive right guaranteed by the Hawai'i Constitution and is defined by laws relating to environmental quality, including an extensive and growing body of laws seeking to reduce Hawai'i's greenhouse gas emissions and curb the catastrophic effects of anthropogenic climate change. These laws require the use of best available science and collectively define and establish a constitutional right to a life-sustaining climate system.

187. Defendants have impaired and infringed upon Youth Plaintiffs' right to a clean and healthful environment, including the right to a life-sustaining climate system, by establishing, maintaining, and operating a transportation system that results in high levels of

greenhouse gas pollution and exacerbates Earth's energy imbalance at odds with the Zero Emissions Target, HRS § 225P-5, and other laws mandating HDOT to reduce greenhouse gas pollution from transportation and decarbonize the transportation sector. *See, e.g., id.* § 225P-7; *id.* §§ 226-4, -17, -18; *id.* §§ 264-142, -143; *id.* § 196-9(c)(6), (10).

188. An actual controversy exists between Youth Plaintiffs and Defendants concerning Defendants' constitutional obligation not to impair Youth Plaintiffs' right to a clean and healthful environment.

REQUEST FOR RELIEF

Wherefore, Plaintiffs ask for the following relief:

A. For a declaratory order that:

1. Defendants have a constitutional public trust obligation under article XI, section 1 of the Hawai'i Constitution to protect and conserve the climate system and atmosphere, and all natural resources affected by climate change, for the benefit of present and future generations; and

2. Defendants have violated article XI, section 1 of the Hawai'i Constitution by establishing, maintaining, and operating a state transportation system that fails to preserve, protect, and maintain Hawai'i's public trust resources;

3. The right to a clean and healthful environment under article XI, section 9 of the Hawai'i Constitution encompasses the right to a life-sustaining climate system;

4. Defendants have violated article XI, section 9 of the Hawai'i Constitution by establishing, maintaining, and operating a state transportation system that infringes upon Youth Plaintiffs' constitutional rights to life-sustaining climate system, as defined by the extensive and growing body of laws mandating Defendants to reduce greenhouse gas pollution from transportation and decarbonize the transportation sector, including but not limited to the Zero Emission Target based on best available science;

B. For appropriate and necessary injunctive relief, including but not limited to:

5. Ordering Defendants to cease establishing, maintaining, and operating the state transportation system in a manner that breaches Defendants' mandatory duty under the constitutional public trust doctrine, fails to align with the Zero Emissions Target and other climate mitigation mandates, and infringes upon Youth Plaintiffs' constitutional right to a clean and healthful environment;

6. Compelling Defendants to take concrete action steps under prescribed deadlines to conform the state transportation system with Defendants' constitutional duties and Youth Plaintiffs' constitutional rights; and

7. Exercising continuing jurisdiction and oversight as necessary, including the appointment of a special master to oversee and report to the Court on Defendants' compliance and progress.

C. And:

8. For Plaintiffs' fees and costs as authorized by law and/or equity;

9. For such other and further relief as the Court may deem just and proper.

DATED: Honolulu, Hawai'i, June 1, 2022.

Respectfully submitted,

<u>/s/ Leināʻala L. Ley</u> ISAAC H. MORIWAKE LEINĀʻALA L. LEY EARTHJUSTICE

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