

ESCALATING FOREST FIRES AND GREECE’S FAILURE TO UPHOLD HUMAN RIGHTS: A MODERN GREEK TRAGEDY

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Abstract

The surge in global temperatures and increasing instances of disastrous wildfires have brought environmental litigation to the forefront. Notably, in Duarte Agostinho v. Portugal, the first case of its kind to be heard by the European Court of Human Rights (ECtHR)—Portuguese youths challenged thirty-three European member nations, including Greece, for having inadequate measures against climate change-induced wildfires. Greece responded stating that “the effects of climate change as recorded so far, do not seem to directly affect human life or human health.” This paper will argue that the ECtHR must hold that states have a human rights obligation to safeguard the natural environment against wildfires, including climate change-induced fires, emphasizing Greece’s unique position due to its landscape and culture. Further, Greece is violating the European Convention on Human Rights (ECHR) by failing to adequately prevent wildfires.

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I. INTRODUCTION

*Environmental Rights are Human Rights.*¹

Catastrophic forest fires have become the archetype of a distinguished modern tragedy across the globe demanding urgent attention.² In 2023 alone, the World witnessed devastating blazes in Maui, Canada, Portugal, Brazil, and Greece.³ In August, Greece battled the largest wildfire recorded in Europe.⁴ The fire, burning for over three weeks in Evros, northern Greece,

1. See LAURA WESTRA, HUMAN RIGHTS: THE COMMONS AND THE COLLECTIVE, 9 (UBC Press ed., 2011) (citing Gabčíkovo-Nagymaros Project (Hung./Slovk.), Judgment, 114 (Sept. 25, 1997) (separate opinion by Weeramantry C.G.), <https://www.icj-cij.org/sites/default/files/case-related/92/092-19970925-JUD-01-03-EN.pdf>).

2. See generally 2023: *A Year of Intense Wildfire Activity*, COPERNICUS ATMOSPHERE MONITORING SERVICE, (Dec. 12, 2023), <https://atmosphere.copernicus.eu/2023-year-intense-global-wildfire-activity>.

3. See *id.*

4. See European Commission, *Wildfires: Biggest RescEU Aerial Firefighting Operation in Greece*, EUROPEAN CIVIL PROTECTION AND HUMANITARIAN AID OPERATIONS, (Aug. 29, 2023),

accounted for more than 81,000 hectares of lost land, including 30% of the protected Dadia Forest, and over twenty reported deaths.⁵ Dadia Forest is home to rich biodiversity and part of “Natura 2000,” the world’s largest network of protected areas.⁶ Meanwhile, approximately 20,000 residents and tourists were evacuated on the island of Rhodes, the highest number of evacuations in Greece’s history, amid ravaging flames.⁷ The Prime Minister (PM) of Greece, Kyriakos Mitsotakis, reported that “there were weeks . . . with more than 500 fires” breaking out across the country.⁸ Thousands of homes were lost along with livelihoods, like beekeeping, honey making, and olive farming.⁹ For example, hundreds of thousands of olive trees, many irreplaceable, were destroyed, including those of the ancient Makri mill, yielding around 1,000 to 3,000 tons of olive oil each season.¹⁰ Forests where people could once enjoy nature were left unrecognizable.¹¹ Campsites such

https://civil-protection-humanitarian-aid.ec.europa.eu/news-stories/news/wildfires-biggest-rescue-aerial-firefighting-operation-greece-2023-08-29_en (stating Evros wildfire largest recorded since inception of European Forest Fire Information System (EFFIS) in 2000).

5. See George Fokianos, *Pyrkagiés: I Elláda tha plirósei ton pio varý logarias mó – Sta 1,66 dis. to kóstos* [Fires: Greece will pay the heaviest bill – At 1.66 billion the cost], OIKONOMIKÓS OIKONOMIKÓS [Economic Postman] (Sept. 4, 2023, 4:00 PM), <https://www.ot.gr/2023/09/04/oikonomia/pyrkagies-i-ellada-tha-plirosei-ton-pio-vary-logariasmo-sta-166-dis-to-kostos/>.

6. *The Natura 2000 Protected Areas Network*, EUROPEAN ENVIRONMENT AGENCY, <https://www.eea.europa.eu/themes/biodiversity/natura-2000/the-natura-2000-protected-areas-network> (last visited Sept. 17, 2024).

7. See *Greece Fires in Maps and Satellite Images Show Extent of Damage*, BBC (July 27, 2023), <https://www.bbc.com/news/world-europe-66295972>.

8. See *Greek Summer Wildfires Will Burn Over 150,000 Hectares: PM* (Aug. 31, 2023), <https://phys.org/news/2023-08-greek-summer-wildfires-hectares-pm.html>.

9. See Charlotte Elton, *Greece Turns to Tech to Tackle Wildfires as Largest Ever Blaze in EU Continues to Burn*, REUTERS, (Sept. 2, 2023, 1:50 PM GMT+2), <https://www.euronews.com/green/2023/09/01/greece-turns-to-tech-to-tackle-wildfires-as-largest-ever-blaze-in-eu-continues-to-burn>; see Gavriil Xanthopoulos & Miltiadis Athanasiou, *The Fires of Mount Hymettus near Athens Greece (1996-2017): History and Fire Behavior Characteristics in ADVANCES IN FOREST FIRE RESEARCH* 2018 661, 661 (2018).

10. See Costas Vasilopoulos, *No Respite in Greece as Wildfires Incinerate Ancient Olive Groves in Makri*, OLIVE OIL TIMES, (Aug. 29, 2023, 3:45 PM UTC), <https://www.oliveoiltimes.com/briefs/no-respite-in-greece-as-wildfires-incinerate-ancient-olive-groves-in-makri/123444>; Lisa Radiosvsky, *Megafire Burns 120,000 Olive Trees in Evros, NE Greece*, GREEK LIQUID GOLD: AUTHENTIC EXTRA VIRGIN OLIVE OIL, (Sept. 14, 2023), <https://www.greekliquidgold.com/index.php/en/news/505-megafire-burns-120-000-olive-trees-in-evros-ne-greece#:~:text=Dimitris%20Adamidis%2C%20owner%20of%20Konos,and%20damaging%20Konos%20Hill%20unimaginably>.

11. See generally Anthony Faiola & Elinda Labropoulou, *How Wildfires are Threatening the Mediterranean Way of Life*, WASHINGTON POST, (Sept. 4, 2023, 5:46 PM EDT), <https://www.washingtonpost.com/world/2023/09/02/greece-fires-2023-rhodes/>.

as that in the village of Saranti burned down, destroying the stomping grounds of fond memories and future enjoyment of the area.¹²

This distressing pattern is evidenced by prior incidents like the fires that ravaged the island of Evia in 2007 where seventy-eight people died, and another fire in 2021.¹³ Further, the infamous 2018 Mati fire tragically claimed the lives of over one-hundred individuals.¹⁴ After the Mati disaster, the then-government ordered for a Commission to investigate and present a report as to why the fires were so devastating and how to prevent such disastrous forest fires and wildfires in the future.¹⁵ That report, named the Goldammer Plan, was presented in February 2019; however, it was never implemented due to a change in government leadership from the SYRIZA party to the New Democracy party.¹⁶ The SYRIZA party accused the New Democracy party, led by Prime Minister Mitsotakis, of failing to protect Greece's citizens and land, showing the need for comprehensive action regarding wildfires.¹⁷

This paper will argue that Greece must finally implement the Goldammer Plan to protect the environment and human rights. Further, the European Court of Human Rights needs to recognize that environmental sustainability and resiliency affects human rights, and Greece's failure to mitigate the risk of forest fires violates the European Convention of Human Rights.

First, this paper will discuss the background of wildfire issues in Greece, starting with Greece's unique disposition regarding its landscape, culture, and history, then how climate change has exacerbated the issue. Second, this paper will exemplify how environmental litigation can be useful in holding states accountable for failure to protect the natural environment and highlight legal theories upon which a duty exists. Finally, this paper will reiterate the

12. Alan Taylor, *Hundreds of Wildfires Rage Across Greece*, THE ATLANTIC, (Aug. 23, 2023), <https://www.theatlantic.com/photo/2023/08/photos-wildfires-greece/675092/>.

13. See Gavriil Xanthopoulos et al., *Not Business as Usual - New Projects, Policies, and Personnel Aim to Prevent Wildfire Disasters*, INT'L ASS'N OF WILDLAND FIRE (2023), <https://www.iawfonline.org/article/situation-report-greece/>.

14. See *id.*

15. Alexandros Dimitrakopoulos et al., *I ékthesi tis Anexártitis Epitropís gia tin análysi ton ypokeímenon aitión kai ti dierévni ton prooptikón diacheírissi ton mellontikón pyrkagión dasón kai ypaíthrou stin Elláda*. [Report of the Independent Committee Tasked to Analyze the Underlying Causes and Explore the Perspectives for the Future Management of Landscape Fires in Greece], THE GLOBAL FIRE MONITORING CENTER, 11 (Jan. 28, 2019) [hereinafter Goldammer Plan].

16. Xanthopoulos et al., *supra* note 13.

17. See Eleni Stergiou, *Fire and Fury in the Parliament with Conspiracy Theories and... Other Mischief*, POL. SECRETARIAT, (Sept. 1, 2023, 7:31 PM), <https://www.in.gr/2023/09/01/politics/politiki-grammateia/pyr-kai-mania-sti-vouli-theories-peri-synomosias-kai-allon-diamonion/>.

proposals from the Goldammer Plan that were never implemented to deal with forest fire prevention and risk management in Greece.

II. BACKGROUND

A. Greece's Unique Disposition

Greece has a particularly challenging disposition to the increasing occurrence of forest fires because it has over two hundred inhabited islands, many difficult to access from the mainland during an emergency.¹⁸ Further, its woodlands are covered in extremely flammable foliage such as pine needles, pine trees, and other flammable terrain.¹⁹ Additionally, Greece's forests are filled with rich biodiversity, including species not found anywhere else in the world, such as certain types of hawks and vultures.²⁰ Further, many of the world's cultural and archaeological treasures are found in Greek forestland, such as ancient ruins, temples, monasteries, and villages.²¹ For example, ancient Olympia, home to the original Olympic games, is in forestland that was recently threatened by fires.²² Also threatened by wildfires, were the ancient Greek civilization Mycenae, ancient temple of Ammon Zeus and Mt. Athos in Halkidiki, and Acropolis in Athens.²³ As such, protecting Greece's forests are not only an environmental issue, but also a cultural heritage issue.

Another concern is that disastrous forest fires will deter tourists from traveling to Greece during its high season. Tourism is one of Greece's most important industries, so this would have a significant impact on its economy.²⁴ Of the thousands evacuated from Rhodes in 2023, many reported

18. See Gavriil Xanthopoulos et. al., *Innovative Action for Forest Fire Prevention in Kythira Island, Greece, through Mobilization and Cooperation of the Population: Methodology and Challenges*, SUSTAINABILITY, Jan. 6, 2022, at 1, 3.

19. See *id.* at 8.

20. See Matina Stevis-Gridneff, *Tested in Greece's Fires: An Emergency Force for 27 Countries*, N.Y. TIMES, (Aug. 30, 2023), <https://www.nytimes.com/2023/08/30/world/europe/greece-fires-eu-climate.html>.

21. See Peter Schwartzstein, *Greece's Fires Cause Choking Smoke, Threaten Heritage Sites*, NAT'L GEOGRAPHIC, (Aug. 9, 2021), <https://www.nationalgeographic.com/environment/article/greece-fires-cause-choking-smoke-threaten-heritage-sites>.

22. See *id.*

23. See *id.*

24. See *For a Sustainable Tourism Industry*, HELLENIC REPUBLIC, GREECE IN THE USA <https://www.mfa.gr/usa/en/about-greece/tourism/for-sustainable-tourism-industry.html> (last visited Dec. 22, 2023).

terrifying emergency conditions and disorganized orders.²⁵ Though Prime Minister Mitsotakis offered those who had to flee free vacations to Greece in the future, the fear induced by their past experiences might convince them to altogether avoid the region.²⁶

The lack of safe immigration routes for refugees poses a specific threat to a vulnerable group during forest fires. Of the twenty-six reported deaths over the summer of 2023, at least twenty were found to be migrants trapped in the forest.²⁷ Usually the European refugee crisis and horrors migrants face on their journey to a better life are associated with overcrowded boats and the dangerous conditions people endure for their future and their families. However, the dangers of the forests, too, are real and should not be overlooked. Many refugee camps in Greece are near forests.²⁸ Refugees are some of the most vulnerable members of society and are confronted with a specific threat of wildfires in this situation, often on islands, increasing the difficulties of reaching safety.²⁹

In addition, forest fires differ from other kinds of natural disasters because of their ability to affect neighboring countries with smoke, ash, and air pollution.³⁰ In *Trail Smelter*, the Arbitral Tribunal stated: “under the principles of international law . . . no State has the right to use *or permit* the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein.”³¹ This concept is

25. See Stephane Mandard, *The Fires in Rhodes Have Spared Tourism, But Not The Island's Nature*, LE MONDE, (Aug. 7, 2023, 8:07 AM), https://www.lemonde.fr/en/environment/article/2023/08/07/the-fires-in-rhodes-have-spared-tourism-but-not-the-island-s-nature_6082925_114.html; see also Fedja Grulovic, *Rhodes Wildfire Forces Thousands of Evacuations, Tourists Flee*, REUTERS, (July 23, 2023, 4:46 PM), <https://www.reuters.com/world/europe/tourists-flee-greek-island-rhodes-wildfire-thousands-evacuated-2023-07-23/> (“Another holidaymaker, Fay Mortimer from Cheshire in northern England, said the experience had been terrifying.”).

26. See *Greece Offers Free Holiday to Tourists who Fled Rhodes Fires*, NEWS 24, (Aug. 2, 2023), <https://www.news24.com/news24/world/news/greece-offers-free-holiday-to-tourists-who-fled-rhodes-fires-20230802>.

27. See *Greece: Evros Wildfire Dead are Victims of “Two Great Injustices of our Times”*, AMNESTY INT’L, (Aug. 23, 2023), <https://www.amnesty.org/en/latest/news/2023/08/greece-evros-wildfire-dead-are-victims-of-two-great-injustices-of-our-times/>.

28. See Sebastian Skov Andersen & Gabriel Geiger, *Planned Greek Refugee Camp is in ‘High-Risk’ Fire Zone Next to Landfill*, OPEN DEMOCRACY, (Feb. 15, 2022, 12:01 AM), <https://www.opendemocracy.net/en/greek-refugee-camp-lesbos-high-risk-fire-zone-next-to-landfill/>.

29. See *id.*

30. See Gavriil Xanthopoulos, *Who Should be Responsible for Forest Fires?: Lessons From the Greek Experience*, PROC. OF THE SECOND INT’L SYMP. ON FIRE ECON., PLAN., AND POL’Y: A GLOB. VIEW 189, 198 (2008).

31. Michael Eburn, *The International Law of Wildfires*, in RSCH. HANDBOOK ON DISASTERS & INT’L L. 336, 343 (Susan C. Breau & Katja L.H. Samuel eds., Edward Elgar Publishing Limited,

widely known today as the “no-harm” rule of international environmental law.³² The current climate crisis goes beyond borders and requires particular consideration.

B. Exacerbation Due to Climate Change

With over fifty percent of the Greek territory covered by woodlands,³³ a significant increase in wildfires since 2007 has pummeled ten percent of those woodlands.³⁴ The impact of climate change is undeniable. According to a study conducted by the National Observatory of Athens (NOA), climate change is predicted to significantly increase the number of days of heatwaves and decrease the number of days with rainfall annually.³⁵ In particular, a study led by the independent research center Dianeosis estimated an increase in days per year with heatwaves to be anywhere between fifteen to twenty more days, and an increase in the high risk of fire between fifteen percent to seventy percent.³⁶ The NOA has also shown that average temperatures in

2016) (quoting *Trail Smelter Case* (U.S. v. Can.), 3 R.I.A.A. 1905, 1965 (Apr. 1938, Mar. 1941) (emphasis added)).

32. See Laely Nurhidayah, et. al., *The Influence of International Law upon ASEAN Approaches in Addressing Transboundary Haze Pollution in Southeast Asia*, 37 CONTEMP. SE. ASIA 183, 185–186 (2015).

33. See Vardis-Dimitrios Anezakis et. al., AIAI Presentation of *A Hybrid Soft Computing Approach Producing Robust Forest Fire Risk Indices*, Democritus University of Thrace, (Sept. 16–18, 2016), https://www.researchgate.net/publication/319036562_A_Hybrid_Soft_Computing_Approach_Producing_Robust_Forest_Fire_Risk_Indices (Presentation reflects concepts found in the Conference Paper); see also Vardis-Dimitrios Anezakis et. al., *A Hybrid Soft Computing Approach Producing Robust Forest Fire Risk Indices*, in 475 IFIP ADVANCES IN INFORMATION AND COMMUNICATION TECHNOLOGY (IFIPACT) 191–203 (Lazaros Iliadis, Ilias Madlogiannis Eds., 2016 http://dx.doi.org/10.1007/978-3-319-44944-9_17).

34. See AFP, *Experts Blame Poor Government Preparation for Greek Fires’ Devastation*, THE HINDU (Sept. 2, 2023, 2:19 PM), <https://www.thehindu.com/sci-tech/energy-and-environment/experts-blame-poor-government-preparation-for-greek-fires-devastation/article67262974.ece>.

35. See Dimitra Angra & Kalliopi Sapountzaki, *Climate Change Affecting Forest Fire and Flood Risk—Facts, Predictions, and Perceptions in Central and South Greece*, SUSTAINABILITY, Oct. 17, 2022, at 1–2, 5 (citing John E. Walsh et al., *Extreme Weather and Climate Events in Northern Areas: A Review*, EARTH SCI. REVS., Oct. 2020, at 1; *Extreme Weather*, NAT’L CLIMATE ASSESSMENT, [https://nca2014.globalchange.gov/highlights/report-findings/extreme-weather](https://nca2014.globalchange.gov/highlights/report-findings/extreme-weather;); *WWA Analyses of Extreme Weather Event*, WORLD WEATHER ATTRIBUTION, <https://www.worldweatherattribution.org/analyses/>; Virginia H. Dale et al., *The Interplay between Climate Change, Forests, and Disturbances*, 262 SCI. OF TOTAL ENV’T 201 (2000); Martin Hanel et al., *Revisiting the Recent European Droughts from a Long-Term Perspective*, SCI. REPS., June 2018, at 1).

36. See Marina Rafenberg, *Greece Faces Recurring Fires After Consistent Lack of Prevention*, LE MONDE, (last updated on July 23, 2023, 5:56 PM), https://www.lemonde.fr/en/environment/article/2023/07/20/in-greece-recurring-fires-as-consistent-as-lack-of-prevention_6060966_114.html.

Greece have soared by almost 2 degrees Celsius, or 3.6 degrees Fahrenheit, since 1990.³⁷ Global warming and extreme unpredictable weather conditions gravely worsened the issue of forest fires.³⁸ The United Nations (UN) has stated that warming in the Mediterranean region is occurring at twenty percent faster rates than the global average.³⁹ Dense woodlands of already flammable pine trees become even more flammable following a heatwave, enough to turn a small spark into a massive fire in quick speed.⁴⁰ The head of the Greek Fire Service, Yiorgos Pournaras, revealed in a press briefing that in his “[thirty-two] years of service, [he] never experienced similar extreme conditions” to those of the summer of 2023.⁴¹ Greece sustained the worst fire damage out of all of the European nations in 2023 thus far, at an estimated 1.66 billion euros.⁴²

In 2023, between July 1 and July 25, wildfires in Greece emitted 1 million tons carbon dioxide, constituting over 350,000 acres of land burned.⁴³ A Copernicus Atmosphere Monitoring Service (CAMS) senior scientist confirmed that the fires “affecting Rhodes and Attica in July . . . were the highest estimated wildfire emissions for July in the last two decades.”⁴⁴ Current international environmental agreements, such as the

37. John T. Psaropoulos, *Fires Were Always a Fact of Greek Life, but Now They’re Worse*, AL JAZEERA, (July 19, 2023), <https://www.aljazeera.com/news/2023/7/19/fires-were-always-a-fact-of-greek-life-but-now-theyre-worse>.

38. See *Health in a World of Extreme Heat*, 398 THE LANCET 641 (2021), [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)01860-2/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)01860-2/fulltext).

39. See *Global: Call by Presidents of Five Southern European States to Tackle the Climate Crisis Underscores the Urgent Need to Phase Out Fossil Fuels*, AMNESTY, (Aug. 3, 2023), <https://www.amnesty.org/en/latest/news/2023/08/global-call-by-presidents-of-five-southern-european-states-to-tackle-the-climate-crisis-underscores-the-urgent-need-to-phase-out-fossil-fuels/>; see also *Climate Change in the Mediterranean*, UN Environment Programme/Mediterranean Action Plan, (last visited Nov. 10, 2024), <https://www.unep.org/unepmap/resources/factsheets/climate-change>.

40. See Associated Press, *Fighting Greek Fire*, THE ECONOMIST, (Aug. 29, 2007), <https://www.economist.com/europe/2007/08/29/fighting-greek-fire>.

41. See Costas Vasilopoulos, *No Respite in Greece as Wildfires Incinerate Ancient Olive Groves in Makri*, OLIVE OIL TIMES, (Aug. 29, 2023, 3:45 PM UTC), <https://www.oliveoiltimes.com/briefs/no-respite-in-greece-as-wildfires-incinerate-ancient-olive-groves-in-makri/123444>.

42. See Eleanor Harmsworth, *Wildfires Cost Europe €4.1 Billion as Temperatures Hit Records*, BLOOMBERG, (Sept. 4, 2023, 3:17 AM), <https://www.bloomberg.com/news/articles/2023-09-04/greece-suffers-most-damage-as-wildfires-cost-europe-4-1-billion#xj4y7vzkg>.

43. See Georgina Rannard & Esme Stallard, *The Extreme Summer Weather That Scorched and Soaked the World*, BBC, (Sept. 2, 2023), <https://www.bbc.co.uk/news/resources/idx-8f0357f9-9013-4567-8407-be938c8c70cf>.

44. See *August Wildfires Ravage Northern & Central Greece*, COPERNICUS, ATMOSPHERE MONITORING SERVICE (Aug. 23, 2023), <https://atmosphere.copernicus.eu/august-wildfires-ravage-northern-central-greece>.

Paris Agreement demanding the reduction of carbon dioxide emissions, do not take into consideration ecological disasters such as wildfires and the mass amounts of carbon dioxide emissions they contribute.⁴⁵ However, emissions from deforestation and land use changes also cause global warming.⁴⁶

III. ENVIRONMENTAL LITIGATION AS A TOOL

A. *Precedent*

Litigation in the environmental law sector has been on the rise, paving the way for *Duarte Agostinho and Others*.⁴⁷ In 2018, the International Court of Justice (ICJ) awarded its first ever environmental damages award for Costa Rica in a suit brought against Nicaragua for damage to protected wetlands.⁴⁸ There, the court stated, “damage to the environment, and the consequent impairment or the loss of the ability of the environment to provide goods and services is compensable under international law.”⁴⁹

In 2019, the Supreme Court of the Netherlands upheld the Hague Court of Appeal decision in *Urgenda Foundation v. Netherlands*, holding the Netherlands accountable for acting unlawfully in contradiction of its duty to adequately limit greenhouse gas emissions.⁵⁰ The court relied on principles under the ECHR Articles 2 and 8, the “no harm principle” of international law, the doctrine of hazardous negligence, the principle of fairness, the precautionary principle, and the sustainability principle embodied in the

45. See Alpo Vuorio et al., *Wildfire-Related Catastrophes: The Need for a Modern International Safety Investigation Procedure*, FRONTIERS IN CLIMATE, May 28, 2021, at 2 (citing Joeri Rogeli et al., *Paris Agreement Climate Proposals Need a Boost to Keep Warming Well Below 2 C* 534 NATURE 631 (2016)).

46. See Angra, *supra* note 35, at 1 (first citing *The Causes of Climate Change*, NASA: CLIMATE CHANGE, <https://science.nasa.gov/climate-change/causes/> (last visited Jan. 15, 2025); and then citing JOHN T. HARDY, CLIMATE CHANGE: CAUSES, EFFECTS, AND SOLUTIONS (2003)).

47. See generally *Duarte Agostinho v. Portugal*, App No. 39371/20 (Apr. 9, 2024) <https://hudoc.echr.coe.int/?i=001-233261>.

48. See Marlies Hesselman, *International Environmental Law* (2018), 1 Y.B. OF INT’L DISASTER L. 436, 441–42 (2019) (citing *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v. Nicar.), Judgement, 2018 I.C.J. 1 (Feb. 2)).

49. *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v. Nicar.), Judgement, 2018 I.C.J.1, ¶ 42 (Feb. 2); see also Nilufer Oral, *ICJ Renders First Environmental Compensation Decision: A Summary of the Judgment*, IUCN (Apr. 9, 2018), <https://www.iucn.org/news/world-commission-environmental-law/201804/icj-renders-first-environmental-compensation-decision-summary-judgment>.

50. See HR 20 Dec. 2019, [2015] HAZA 2020, C/09/00456689 m.nt. (*Urgenda Foundation/Netherlands*) (Neth.).

United Nations Framework Convention on Climate Change (UNFCCC) to make its decision.⁵¹

In 2020, the Inter-American Court of Human Rights recognized the right to a healthy environment as a human right, as held in *Indigenous Communities Members of the Lhaka Honhat Ass’n v. Argentina*.⁵² In its opinion, the court used Article 26 to order recovery of adequate natural resources and indigenous culture, recognizing the importance of protecting nature as its connection to “other living organisms, rather than for its ‘usefulness’ or ‘effects’ to human beings.”⁵³

B. *Duarte Agostinho and Others v. Portugal and 32 Others*

For the first time in its history, the ECtHR is set to decide by the beginning of 2024 whether countries’ failure to adequately minimize their carbon emissions through forest fires is a violation of human rights.⁵⁴ For the first time in history, the ECtHR decided on whether countries’ failure to adequately minimize their carbon emissions through forest fires is a violation of human rights. One of the three cases consolidated in the decision was *Duarte Agostinho*, stemming from a heatwave-induced wildfire that occurred in Portugal in 2017, burning a record 500,000 hectares of land and claiming the lives of 120 individuals.⁵⁵ The applicants argued that heat-induced fires and abrupt increases in temperature increase death rates from respiratory diseases and have affected their living conditions.⁵⁶ They claimed that the states are in violation of their rights under Articles 2, 8, and 14 of the Convention of the Protection of Human Rights and Fundamental Freedoms

51. See *id.* at paras. 5.2.4, 5.3.2, 5.7.5 (first citing *Budayeva v. Russia*, App. Nos. 15339/02, 21166/02, 20058/02, 11673/02 and 15343/02, ¶ 147–158 (Mar. 20, 2008), <https://hudoc.echr.coe.int/fre?i=001-85436>; then citing *Brincat v. Malta*, App. Nos. 60908/11, 62110/11, 62129/11, 62338/11; ¶ 102 (July 24, 2014), <https://hudoc.echr.coe.int/?i=001-145790>; and then citing *Fadeyeva v. Russia*, App. No. 55723/00, ¶ 96 (June 9, 2005), <https://hudoc.echr.coe.int/?i=001-69315>).

52. See *Indigenous Cmty. Members of the Lhaka Honhat Ass’n v. Argentina*, Judgment, Inter-Am. Ct. H.R. (ser. C) No. 400 ¶ 202 (Feb. 6, 2020); Maria Antonia Tigre, *Inter-American Court Recognizes the Right to a Healthy Environment of Indigenous Peoples in First Contentious Case*, IUCN, (May 4, 2020), <https://iucn.org/news/world-commission-environmental-law/202005/inter-american-court-recognizes-right-a-healthy-environment-indigenous-peoples-first-contentious-case>.

53. See *Indigenous Cmty. Members of the Lhaka Honhat Ass’n*, Inter-Am. Ct. H.R. (ser. C) No. 400, at ¶¶ 202–03; see also Tigre, *supra* note 52.

54. See generally *Duarte Agostinho v. Portugal*, App. No. 39371/20, ¶ 66 (Apr. 9, 2024) <https://hudoc.echr.coe.int/?i=001-233261>.

55. See *id.* at ¶¶ 12, 14, 16.

56. See *id.* at ¶ 23.

(Convention).⁵⁷ Specifically, Article 2 of the Convention obliges States “to put in place a legislative and administrative framework designed to provide effective deterrence against threats to the right to life.”⁵⁸ Further, Article 8 imposes duty to prevent harm associated with environmental hazards where it “attains a level of severity resulting in significant impairment of the applicant’s ability to enjoy his home, private or family life.”⁵⁹ In its first response, Greece stated that “[t]he effects of climate change, as recorded so far, do not seem to directly affect human life or human health.”⁶⁰

However, Greece fails to acknowledge that the risk of catastrophic wildfires is heightened by the effects of climate change. More specifically, Greece’s current lack of preventative measures, government coordination, and organization directly affects human life, health, and livelihood.

C. Legal Bases for State Obligation

1. Greek Law

“The protection of the natural . . . environment [is] a duty of the [Greek] State and a right of every person,” as written in Article 24 of the Greek Constitution.⁶¹ The Greek Constitution further orders the state “to adopt special preventive or repressive measures for the preservation of the environment in the context of the principle of sustainable development.”⁶² Article 24 of the 2001 constitutional revision notably recognized the environment as a right of every person. The “protection of the natural and

57. See *id.* ¶ 3; see also Ole W. Pedersen, *Climate Change Hearings and the ECtHR Round II*, EJIL: TALK!: BLOG OF THE EUROPEAN J. INT’L L., (Oct. 9, 2023), <https://www.ejiltalk.org/climate-change-hearings-and-the-ecthr-round-ii/>.

58. *Öneryildiz v. Turkey*, App. No. 48939/99, ¶ 89 (Nov. 30, 2004), <https://hudoc.echr.coe.int/eng?i=001-67614>; see Convention for the Protection of Human Rights and Fundamental Freedoms, § 1 art. II, Nov. 4, 1950, E.T.S. No. 5.

59. *Dubetska v. Ukraine*, App. No. 30499/03, ¶ 105 (Feb. 10, 2011), <https://hudoc.echr.coe.int/fre?i=001-103273>; see Convention for the Protection of Human Rights and Fundamental Freedoms, § 1 art. VIII, Nov. 4, 1950, E.T.S. No. 5.

60. Observations of the Greek Government on the Application ¶ 51.5, Duarte Agostino, App No. 39371/20.

61. See 1975 SYNTAGMA [SYN.] [CONSTITUTION] 2 (Greece) (“The protection of the natural and cultural environment constitutes a duty of the State and a right of every person.”); see also Stelios Dritsas, *Cooperation, Perceived Legitimacy and Accountability in Greek Wildfire Management before and after resceEU introduction*. The Case Studies of Kineta, Gerania, and Vilia wildfires 14 (2022) (Master Thesis Project, Wageningen University and Research) (on file with Wageningen University and Research) (“[W]e can state that the protection of the environment and consequently, wildfire management is a constitutional obligation of the state and at the same time a right of the citizen.”).

62. See 1975 SYNTAGMA [SYN.] [CONSTITUTION] 2 (Greece), Art. 24.

cultural environment” as a “duty of the State and a right of every person.”⁶³ On May 26, 2022, the Greek Parliament passed law 4936/2022, titled National Climate Law.⁶⁴ The National Climate Law aids in adapting to the climate crisis, while protecting the environment by establishing “policies to mitigate the effects of climate change[,] and [improving] air quality at local and national level.”⁶⁵

2. European Law

The ECHR obliges states to protect and respect human rights (Article 1), the right to life (Article 2), the right to liberty and security (Article 5), the right to respect for private and family life (Article 8), and the right to live free of discrimination (Article 14).⁶⁶ Article 191 of the Treaty on the Functioning of the European Union lists some of the objectives of the EU’s policy on the environment as “preserving, protecting and improving the quality of the environment, protecting human health . . . [and] combating climate change.”⁶⁷ Further, Greece has a commitment to the EU Green Deal and a new Forest Plan to implement laws and policies that mitigate against forest fires.⁶⁸

3. International Law

The right to a clean, healthy, and sustainable environment has been recognized as a universal human right by the United Nations (UN) Human Rights Council, and by the UN General Assembly in a resolution passed in July 2022.⁶⁹ Article 4 of the Paris Agreement to the United Nations Framework Convention on Climate Change states that parties “shall promote

63. 2001 SYNTAGMA [SYN.] [CONSTITUTION] Art. 24 (Greece).

64. Nomos (2022:4936) Ethnikos Klimatikos Nomos [National Climate Act], Efimeria Tis Kyverniseos [Newspapers of the Government] 2022, A:105 (Greece); *see also* Stephanos Mitsios, *Law 4936 2022: Greek Climate Law*, EY, (Oct. 6, 2022), https://www.ey.com/en_gr/tax/tax-alerts/law-4936-2022-greek-climate-law.

65. Mitsios, *supra* note 64.

66. *See* Convention for the Protection of Human Rights and Fundamental Freedoms, Nov. 4, 1950, as amended by Protocol No. 15, Aug. 1, 2021, E.T.S. No. 5.

67. *See* Consolidated Version of the Treaty on European Union art. 191, Dec. 13, 2007, 2016 O.J. (C 202) [hereinafter TEU].

68. *See* The Green Tank, *Greece on the Road to the EU Green Deal*, THE GREEN TANK (Feb. 22, 2022), <https://thegreentank.gr/en/2022/02/22/greece-eu-green-deal-voice-en/> (describing an article published on this issue).

69. *See generally* G.A. Res. 76/300, The Human Right to a Clean, Healthy, and Sustainable Environment, U.N. Doc. A/RES/76/300 (July 28, 2022); *see also* UN General Assembly Declares Access to Clean and Healthy Environment a Universal Human Right, UNITED NATIONS: UN NEWS, (July 28, 2022), <https://news.un.org/en/story/2022/07/1123482>.

environmental integrity.”⁷⁰ The UNFCCC expressly acknowledges the relationship between human health and the effects of climate change.⁷¹ The UN Committee on Economic, Social and Cultural Rights (CESCR) warned states that the “failure to prevent foreseeable harm to human rights caused by climate change, or a failure to mobilize the maximum available resources in an effort to do so, could constitute a breach” of their duty to safeguard human rights.⁷²

Further, forty-seven members of the UN Economic Commission for Europe are parties to the Aarhus Convention of 1998, which states, “every person has the right to live in an environment adequate to his or her health and well-being.”⁷³ Thus, even if the European Commission itself has not declared an individual right to a safe and healthy environment, it can be implied through the aggregate of other Economic Commission agreements.

In 2021, Greece signed Glasgow’s Leaders’ Declaration on Forests and Land Use to conserve forests and to invest in sustainable forest management, recognizing forests’ many values.⁷⁴ The right to health is also expressly protected in the 2015 Paris Agreement, signed by Greece.⁷⁵ In early 2023, the UN asked the International Court of Justice to weigh in on what obligations countries have in mitigating the effects of climate change, a rare move considering the infrequency of advisory opinions issued.⁷⁶

70. Paris Agreement to the United Nations Framework Convention on Climate Change art. 4, para. 13, Dec. 12, 2015, T.I.A.S. No. 16-1104, [hereinafter The Paris Agreement].

71. See United Nations Framework Convention, *United Nations Convention on Climate Change*, art.1(1), 4(1)(f) (1992), https://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf; see also Margaretha Wewerinke-Singh & Curtis Doebller, *Protecting Human Health from Climate Change: Legal Obligations and Avenues of Redress Under International Law*, INT’L J. ENV’T RSCH. PUB. HEALTH, Apr. 28, 2022, at 1.

72. Statement, United Nations Committee on Economic, Social, and Cultural Rights, Climate Change and the International Covenant on Economic, Social and Cultural Rights, Economic and Social Council, E/C.12/2018/1 (Oct. 31, 2018).

73. UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, June 25, 1998, 2161 U.N.T.S. 447.

74. See Glasgow Leaders’ Declaration on Forests and Land Use, UN Climate Change Conference UK 2021, (Feb. 11, 2021), <https://webarchive.nationalarchives.gov.uk/ukgwa/20230418175226/https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>.

75. See The Paris Agreement, *supra* note 70; see also Wewerinke-Singh, *supra* note 71 (citing The Paris Agreement, *supra* note 70).

76. Obligations of States in Respect of Climate Change, 2023 I.C.J. 77, 276 (Mar. 29) (request for advisory opinion).

D. Although Some Argue Against Standing and Causation, That Argument is Not Sound Because of Precedent and the “Loss of Chance” Theory

The main counterarguments brought by Greece in the case of *Duarte Agostinho*, and other entities in similar disputes related to climate change-induced environmental disasters, include justiciability and causation issues. However, this paper aims to take a different approach than the applicants in *Duarte Agostinho* in the hopes of overcoming these counterarguments. Unlike argued in *Duarte Agostinho*, the focus should be on fire prevention, environmental preservation, and forest resilience, rather than the controlling of carbon emissions and the failure to adhere to policies that limit global warming to 1.5 degrees Celsius in accordance with the Paris Agreement.⁷⁷

1. Standing Can Be Found Based on Precedent

To succeed in a legal claim, one must first be able to meet standing requirements, which in the ECtHR context means falling under Article 34 of the Convention: “claiming to be the victim of a violation.”⁷⁸ The issue regarding standing that often arises in climate change cases is that because climate change is harmful to humanity at large, it is too generalized a grievance to support standing.⁷⁹ For instance, in the case of *Cordella and Others v. Italy*, the ECtHR held that a victim who is personally affected by the complaint is one in a situation of “high environmental risk.”⁸⁰ Additionally, *Massachusetts v. EPA* paved the way for the 2015 Paris accord, now recognized as a landmark environmental case decided by the United States Supreme Court in 2007.⁸¹ In *Massachusetts*, the court held that

77. The Paris Agreement, *supra* note 70.

78. Antoine De Spiegeleir and Anais Brucher, *Climate Docket and the Future in the Case Law of the European Court of Human Rights*, COLUM: CLIMATE LAW (Mar. 20, 2023), <https://blogs.law.columbia.edu/climatechange/2023/03/20/climate-docket-and-the-future-in-the-case-law-of-the-european-court-of-human-rights/>; see European Convention for the Protection of Human Rights and Fundamental Freedoms art. 34, Nov. 4, 1950, C.E.T.S. No. 194.

79. See Marisa Martin & James Landman, *Standing: Who Can Sue to Protect the Environment?*, INSIGHTS L. SOC’Y, Oct. 9, 2020, https://www.americanbar.org/groups/public_education/publications/insights-on-law-and-society/volume-19/insights-vol--19---issue-1/standing--who-can-sue-to-protect-the-environment-/.

80. See *Cordella v. Italy*, 54414/13, 54264/15. (Jan. 24, 2019), <https://hudoc.echr.coe.int/eng?i=001-189645>; see also Evelyne Schmid, *Victim Status before the ECtHR in Cases of Alleged Omissions: The Swiss Climate Case*, EJIL: TALK!: BLOG OF THE EUROPEAN J. OF INT’L L. (Apr. 30, 2022), <https://www.ejiltalk.org/victim-status-before-the-ecthr-in-cases-of-alleged-omissions-the-swiss-climate-case/>.

81. See Liz Mineo, *How and Why the Supreme Court Made Climate-Change History*, HARV. GAZETTE, (Apr. 22, 2020), <https://news.harvard.edu/gazette/story/2020/04/massachusetts-v-epa->

greenhouse gases were commodities that the executive branch could regulate under the Commerce Clause, and that Massachusetts' injury was imminent and actual to support standing.⁸² Likewise, the ECtHR should use this reasoning to support standing and set a precedent in *Duarte Agostinho*. A new level of urgency may be implicated by "[v]iewing environmental decisions as directly implicating human rights."⁸³

2. Causation Can Be Found Based on "Loss-of-Chance"

Causation is often the cited argument for states and big corporations when confronted with issues involving the failure to mitigate against forest fire-induced environmental harm.⁸⁴ In *Duarte Agostinho*, Greece stated that, "there is no causal link" because "Greece has not breached any national, EU or international commitment on greenhouse gas emissions."⁸⁵ However, how climate change and the failure to decrease fire risks and hazards caused by increasing global temperatures are linked can be found in the lost chance theory rooted in tort law.⁸⁶ For example, in the case of *Guerra v. Italy*, the ECtHR held that Italian authorities had not taken proper actions to reduce risks of chemical pollution and the state failed to provide adequate information to those affected.⁸⁷ This legal principle can be a tool to hold states accountable by framing the injury as the lost chance of the enjoyment

opened-the-door-to-environmental-lawsuits/; see generally *Massachusetts v. EPA*, 549 U.S. 497 (2007).

82. Martin, *supra* note 79.

83. See Rebecca Bratspies, *Do We Need a Human Right to a Healthy Environment?*, 13 SANTA CLARA J. INT'L L., 31, 36 (2015).

84. See *Calancea c. République De Moldova* [*Calancea v. Republic of Moldova*], App. No. 23225/05, (June 2, 2018), <https://hudoc.echr.coe.int/eng?i=001-181419>; *Mastelica v. Serbia*, App. No. 14901/15 (Nov. 17, 2020), <https://hudoc.echr.coe.int/?i=001-206841> (finding no causal link between the illnesses and the high-voltage power line); see also *Tatar v. Romania*, App. No. 67021/01, ¶10, 12 (July 5, 2007), <https://hudoc.echr.coe.int/eng?i=001-83052> (Decision as to the Admissibility of the Application) (recognizing Serbian government's position that "there could be no causal link existed between the . . . applicant's [asthma] and the use of sodium cyanide during the technological process").

85. *Agostinho v Portugal*, App. No. 39371/20 (Nov. 13, 2020), <https://hudoc.echr.coe.int/eng?i=002-13724>.

86. See MARK WILDE, *CIVIL LIABILITY FOR ENVIRONMENTAL DAMAGE: COMPARATIVE ANALYSIS OF LAW AND POLICY IN EUROPE AND THE US* 95–96 (Kurt Deketelaere ed., Kluwer Law International 2d ed. 2013) ("The lost chance approach reformulates the claim in terms of the extent to which the defendant reduced the plaintiff's prospects of avoiding the harm A failure to reduce risk clearly equates with increasing a risk").

87. See *Guerra v. Italy*, App. No. 14967/89, (Feb. 19, 1998), <https://hudoc.echr.coe.int/en?i=001-62696>; see also Janina Ciechanowicz-McLean & Maciej Nyka, *Human Rights and the Environment*, 3 PRZEGŁAD PRAWA OCHRONY ŚRODOWISKA, 90–1 (2012).

of life and the environment. Failure to mitigate wildfire risks increases the risk of loss.

The UN International Strategy for Disaster Reduction (UNISDR) defined “wildfire risk” as “the likelihood of a fire occurring, the associated fire behavior, and the impacts of the fire.”⁸⁸ The “majority of forest fires around the world occur due to anthropogenic causes,” however, heat or ignition alone is not the sole source of large forest fires.⁸⁹ There needs to be community-focused efforts for public awareness, getting people to make their homes and land more risk averse to fires.⁹⁰

IV. THE GOLDAMMER PLAN OFFERS SOLUTIONS

After analyzing what went wrong during the Mati disaster of 2018, experts drafted solutions within the Goldammer Plan, which was presented to the Greek government.⁹¹ The Goldammer Plan’s key findings were that: (1) Greece lacks organized cooperation between the Fire Brigade and forest services; (2) Greece needs to shift the focus from firefighting and suppression to fire prevention; (3) the current lack of a national land registry system enables corruption; (4) the failure to enforce illegal building in the forests is a fatal mistake; and (5) forests are more vulnerable due to abandonment of the countryside for city-living.⁹² Though Greece tends to point the blame on climate change or arsonists, going so far as to declare a war against climate change after the fires of 2023,⁹³ Greece’s government and people have the biggest impact on preventing rampant forest fires.⁹⁴

A. *Lack of Cooperation and Organization Between Agencies*

In 1998, the responsibility of the fire prevention and firefighting mechanism of Greece transferred to the Fire Brigade, a highly criticized move that many scholars and experts believe Greece was not prepared to

88. See Angra, *supra* note 35, at 4.

89. See *id.* at 5.

90. Xanthopoulos, *supra* note 18.

91. Goldammer Plan, *supra* note 15.

92. *Id.*

93. Charlotte Elton, *The Greek Prime Minister has Pledged to Fight a ‘Climate War’ After Floods and Wildfires Devastated the Country*, EURONEWS, (Sept. 18, 2023, 6:04 PM), <https://www.euronews.com/green/2023/09/18/greek-pm-says-country-is-fighting-a-war-on-climate-change-after-summer-of-fires-and-floods>.

94. See generally Cristina Aponte et al., *Forest Fires and Climate Change: Causes, Consequences and Management Options*, 29 INT’L J. WILDLAND FIRE i, i (2016).

make.⁹⁵ Since then, there has been a lack of coordination due to “[seventeen] authorities from six ministries” having to cooperatively work together in managing wildfire disasters.⁹⁶ The firefighting service lacks in communication and cooperation with both the forest services, and experts to know which areas are more susceptible to fires and understand the landscape.⁹⁷ The Goldammer Plan suggested the formation of a new coordinating body, the Landscape Fire Management Agency (ODIPY). FN95A. ODIPY would provide unified planning in addressing wildfire prevention, “with the mission of developing a national, interagency fire management plan.”⁹⁸ The battle against forest fires in Greece is in dire need of better planning and organization, along with better cooperation between forest specialists and the fire services; two problems ODIPY has the potential to solve.⁹⁹

In the case of *A.D. v. Greece*, involving the living conditions a pregnant woman faced while lodging at the Samos Reception and Identification Center (RIC), the European Court of Human Rights noted the “most alarming finding [as] the lack of control by the authorities over a large part of the informal camp outside the RIC where security incidents were frequently noted, such as . . . arson for reasons of trespassing of forest land.”¹⁰⁰

B. Lack of Preventative Measures

The Goldammer Plan highlighted the need for a shift in focus from fire suppression to prevention through several methods: (a) creating “fire-smart” landscapes, (b) institutionalizing prescribed burning, and (c) increasing public awareness and deterrence for arsonists.¹⁰¹

95. See Gavriil Xanthopoulos et al., *Firefighting Approaches and Extreme Wildfires*, in *EXTREME WILDFIRE EVENTS AND DISASTERS: ROOT CAUSES AND NEW MANAGEMENT STRATEGIES* 117, 123 (Fantina Tedim et al. eds., 2020) (stating that after transition agency received increased funding but lacked knowledge and experience, this created a costly expenditure to provide adequate fire-fighting resources).

96. See Johann Georg Goldammer et al., *A Year After Greece's Wildfire Disaster*, 14 *CRISIS RESPONSE J.* 26, 27 (2019).

97. See *id.*

98. See Goldammer Plan, *supra* note 15, at 87.

99. See Goldammer et al., *supra* note 96, at 28.

100. See AFP, *supra* note 34.

101. *A.D. v. Croatia*, App. No. 55363/19, ¶¶ 1, 19 (Apr. 4, 2023), <https://hudoc.echr.coe.int/?i=001-223931>.

1. Fire-Smart Territories

Creating fire-smart landscapes is key in building sustainable fuel management in forests.¹⁰² The European Commission has identified territory resilience as a key target in mitigating climate change.¹⁰³ The buildup of biomass in the forests—due to lack of forest management, institutionalized and organized fire prescribing methods, and landscaping strategies—enhanced the risk of disastrous wildfires.¹⁰⁴ One noticeable deficiency is the lack of fire risk management culture in Greece focused on tackling the issue of surface fuel buildup in the forests.¹⁰⁵ As such, the European Commission has proposed a Nature Restoration Law to mitigate the effects of climate change and prevent the spread of forest fires,¹⁰⁶ which comes as a part of its new forest strategy for 2023.¹⁰⁷

2. Prescribed Burning

Prescribed burning (also known as “controlled burning,” “backfire,” or “anti-pyr”) was legalized in Greece as recently as 2022, only for suppression uses in firefighting, rather than prevention.¹⁰⁸ In other words, prescribed burning is not currently allowed under Greek legislation as a surface fuel reduction tool.¹⁰⁹ However, the use of fire to fight fire should not be restricted to limited conditions pertaining only to the scene of an active fire.¹¹⁰ The use of thinning and pruning, combined with prescribed fire, as opposed to no

102. See Goldammer Plan, *supra* note 15, at 87.

103. See Davide Ascoli et al., *Fire-Smart Solution for Sustainable Wildfire Risk Prevention: Bottom-Up Initiatives Meet Top-Down Policies Under EU Green Deal*, INT’L J. DISASTER RISK REDUCTION, Apr. 28, 2023, at 2.

104. See Xanthopoulos et al., *supra* note 13.

105. See Francisco Moreira et al., *Wildfire Management in Mediterranean-Type Regions: Paradigm Change Needed*, 15 ENV’T RSCH. LETTERS, Jan. 7, 2020, at 3, <https://doi.org/10.1088/1748-9326/ab541e>.

106. See Palaiologos Palaiologou et al., *Socio-Ecological Perceptions of Wildfire Management and Effects in Greece*, FIRE, Apr. 2, 2021, at 3.

107. See Regulation (EU) 2024/1991, of the European Parliament and of the Council of 24 June 2024 on Nature Restoration and Amending Regulation (EU) 2022/869, 2024 OJ, art. 15 § (3)(t); see also European Commission Press Release IP/23/5662, Commission Welcomes Agreement Between European Parliament and Council on Nature Restoration Law (Nov. 9, 2023).

108. See Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: New EU Forest Strategy for 2030, at 18, COM (2021) 572 final (July 16, 2021).

109. See Xanthopoulos et al., *supra* note 13.

110. See *Greece: Wildfires*. CLIMATECHANGEPOST, (last visited Nov. 11, 2024), <https://www.climatechangepost.com/countries/greece/wildfires/>.

treatment, has been shown to provide heightened resilience to wildfires.¹¹¹ Great social desire for prescribed burning methods exists, as evidenced by a survey conducted in Crete.¹¹² Additionally, a two-year pilot project experiment began on the island of Chios in 2021 to provide evidence of the benefits of the use of “backfire” as a fuel management tool.¹¹³ Fire prevention research on Kythira island is also underway, after the island experienced catastrophic fires in 2017 that raged for nearly three weeks.¹¹⁴ Greece’s World Wide Fund for Nature Coordinator of actions for forest fires, Elias Tziritis, said that the group presented draft legislation on prescribed burning to the government for consideration.¹¹⁵ The group’s findings included the fact that prescribed burning actually aided in the preservation of biodiversity, contrary to many critics of the method’s concerns.¹¹⁶ These efforts are being made to increase the resiliency of forests to forest fires.¹¹⁷

3. Community Awareness and Deterrence

Prevention is not just preventative activities, but rather “the continuous, repetitive, and mandatory forest and fuel management . . . arson policing, and forest criminality prosecution.”¹¹⁸ Greater public awareness and effort is needed to prevent fires and deter arsonists. The Minister of Climate Crisis

111. See Maria Liliopoulou, *Photiés: Ti inai i métodos «antipír» pou vrisketai pia sti pharétra ton pirovestón - Póte tha borí na epharmózetai* [Fires: What is the “anti-fire” method that is now in the quiver of firefighters - When can it be applied], *ETHNOS* (Greece) (June 25, 2022; 11:16 AM), <https://www.ethnos.gr/greece/article/213582/fotiestieinaihmethodosantipyropybrisketaipiasthfaretratonyprosbestonpotethamporeinaefarmozetai>.

112. See Rodd Kelsey, *Wildfires and Forest Resilience: the Case for Ecological Forestry in the Sierra Nevada* (Mar. 2019) (unpublished report of The Nature Conservancy Sacramento, California), https://www.scienceforconservation.org/assets/downloads/WildfireForestResilience_2019_Kelsey_2.pdf; see also *Let’s Fight Fire with Fire*, THE NATURE CONSERVANCY (July 15, 2022), <https://www.nature.org/en-us/about-us/where-we-work/united-states/california/stories-in-california/californias-wildfire-future/> (showing photographic evidence of the various levels of forestland resiliency when treated differently).

113. See Haleema Misal, et al., *Assessing Public Preferences For a Wildfire Mitigation Policy in Crete, Greece*, *FOREST POLICY AND ECONOMICS*, (Aug. 2023), <https://doi.org/10.1016/j.forpol.2023.102976>.

114. See Xanthopoulos et al., *supra* note 13.

115. See *Controlled Burning in Greece Can Help Avoid Wildfires: WWF*, NEOS KOSMOS, (July 5, 2023, 2:04 PM), <https://neoskosmos.com/en/2023/07/05/news/greece/controlled-burning-in-greece-can-help-avoid-wildfires-wwf/#:~:text=Greece's%20World%20Wildlife%20Fund%20branch,wildfires%20fuelled%20by%20climate%20change.>

116. See *id.*

117. See Xanthopoulos et al., *supra* note 13.

118. Andreas Y. Troumbis et al., *Probabilistic Wildfire Risk Assessment and Modernization Transitions: The Case of Greece*, *FIRE*, Apr. 14, 2023, at 16, <https://doi.org/10.3390/fire6040158>.

and Civil Protection, Vassilis Kikilias, stated that most forest fires and wildfires in Greece every year are caused by the “human hand,” either by negligence or arson.¹¹⁹ Of the negligent causes, most involved “heat-inducing or agricultural outdoor work.”¹²⁰ As such, people with homes in the forest should make sure to maintain the land and take precautions to avoid sparks igniting from negligence or recklessness.

Though Greece purported to have arrested roughly one hundred individuals after the 2023 fires in Evros region and others in Rhodes, the number of people actually charged with arson is slim.¹²¹ Nineteen thousand seven hundred and twelve people have been prosecuted since 2000 for arson, but only 564 convicted—a staggering 2.8%.¹²² Starting in 2024, Greece will increase its punishment and enforcement thereof for arson and seek to reduce the widespread feeling of impunity among Greek society.¹²³ The proportion

119. See Leslie Eastman, *Authorities Arrest 79 Suspected Arsonists for Igniting Wildfires in Greece*, LEGAL INSURRECTION, (Aug. 28, 2023, 11:00 AM), <https://legalinsurrection.com/2023/08/seventy-nine-suspected-arsonists-arrested-for-igniting-wildfires-in-greece/>.

120. See *id.*

121. See *Over 100 Arrested for Starting Rhodes Wildfires*, KATHIMERINI GREECE NEWSROOM (Aug. 4, 2023), <https://knews.kathimerini.com.cy/en/news/over-100-arrested-for-starting-rhodes-wildfires/> (“More than 100 people have been arrested for starting fires in 2023, with [only] 10 cases including arson with intent”); see also Yannis Elafros & Ioanna Mandrou, *Pirkayies: Vrachikiklómata, keravni kai amélia* [Fires: Short circuits, lightning and negligence], Kathimerini (July 24, 2023, 3:19 PM), <https://www.kathimerini.gr/society/562533769/pyrkagies-vrachikyklomata-keraynoi-kai-ameleia/> (“19,712 prosecutions for arson, only 564 convictions” and “In particular, the conviction rate for those prosecuted for arson is even lower at 2.6%!”); see also Ioanna Mandrou, *Arson and Punishment*, EKATHIMERINI (July 25, 2023), <https://www.ekathimerini.com/opinion/1216217/arson-and-punishment/> (“Who knows the elderly gentleman who, five years ago, lit a fire to burn yard waste in Penteli while winds of 9 Beaufort were blowing, inadvertently causing the tragedy in Mati that left 104 people dead and scores suffering from burns? For the record, the man in question is a defendant in the trial over the East Attica blaze and has not once set foot in court, has never apologized to the victims and has not spent a single day in prison”); see also Shola Lawal, *While Greece Burned, Politicians Blamed Migrants*, Coda (Sept. 14, 2023), <https://www.codastory.com/disinformation/disinformation-greece-wildfires-migrants/> (“The Greek police arrested the man who made the video, and he is currently awaiting trial. The police also arrested the migrants the man claimed he had caught attempting to start fires. They were later released without charges.”).

122. See Elafros & Mandrou, *supra* note 121.

123. See *Roundup: Greece Boosts Wildfire Prevention Measures Ahead of “Tough” Summer*, Xinhua, (June 5, 2024, 3:56 PM), <https://english.news.cn/europe/20240605/091f8c76d0984847807ece8ecca50a6/c.html> (“Those starting fires negligently during gardening or work face stricter penalties and fines, Kikilias said recently. From the start of this year, over 300 individuals have been arrested for negligent arson, and perpetrators face up to 10 years in prison and fines of up to 200,000 euros, the official said.”); see also *Heftier Penalties and Jail for Wildfires in Greece, Even by Negligence*, KEEP TALKING GREECE, (Aug. 3, 2023), <https://www.keeptalkinggreece.com/2023/08/03/wildfires-penalties-jail-greece/> (“The Justice Ministry is in the process of revising the fundamental provisions of the Criminal Code, based on which we will seek to significantly reduce

of environmental crime prosecution in Greece represented the lowest figures from all of the European Member states.¹²⁴ Presently, Greece has announced it is planning to increase the fines on arson and do a better job of enforcing them.¹²⁵

C. Government Corruption

At ninety-seven percent, Greece has the highest rating of the public perceiving widespread government corruption in the EU, adding complexity to the situation.¹²⁶ Coincidentally, a study conducted at the Athens University of Economics and Business found “striking evidence that around Greek parliamentary elections wildfires and tax evasion increase dramatically.”¹²⁷ Lawsuits filed against several government heads, such as the governor of Attica and the head of the civil protection agency, indicate that responsible government bodies should be criminally convicted.¹²⁸ The Supreme Court of Greece prosecutors submitted requests asking the government to look into a possible criminal organization responsible for starting the fires.¹²⁹ Supreme

the prevailing sense of impunity in Greek society. What do I mean by that? That prison sentences will have to be served.”).

124. See Secretary-General of the European Commission Martine Deprez, Director, *Commission Staff Working Document Impact Assessment Report Accompanying the Document Proposal for a Directive of The European Parliament and of the Council on the Protection of the Environment Through Criminal Law and Replacing Directive 2008/99/EC*, at 121, delivered to Jeppe Tranholm-Mikkelsen, Secretary-General of the Council of the European Union, SWD (2021) 465 final (Dec. 15, 2021).

125. See *Photiēs: Próstima mékhri kai 30.000 evró yia tous empristés* [Prices: Fines of up to 30,000 Euros for Arsonists], IN NEWSPAPER (Aug. 1, 2023, 10:00 AM), <https://www.in.gr/2023/08/01/greece/foties-prostima-mexri-kai-30-000-eyro-gia-tous-empristes/> [hereinafter Fines of up to 30,000 Euros for Arsonists].

126. See Eur. Comm’n, *Citizens’ Attitudes Towards Corruption in the EU in 2023*, at 18 (July 2023), <https://europa.eu/eurobarometer/api/deliverable/download/file?deliverableId=91794> (stating 97% of Greeks consider corruption to be widespread in Greece).

127. Spyros Skouras & Nicos Christodoulakis, *Electoral Misgovernance Cycles: Evidence from Wildfires and Tax Evasion in Greece*, 159 PUB. CHOICE 533, 534 (2014).

128. Helena Smith, *Families of Wildfire Victims File Suit Against Greek Authorities*, THE GUARDIAN, (Aug. 1, 2018, 12:30 PM), <https://www.theguardian.com/world/2018/aug/01/greek-wildfire-victims-families-file-suit-against-authorities#:~:text=The%20first%20lawsuit%20was%20filed,outlining%20financial%20relief%20for%20victims.>

129. See *Fotiá ston Évro: Diplí parémvasi tou Areíou Págou gia to peristatikó ratsistikís vias kai tis fotiēs stin Alexandróupoli* [Fire in Evros: Double Intervention of the Supreme Court for the Incident of Racist Violence and the Fires in Alexandroupolis], ETHNOS (Aug. 23, 2023, 11:21 AM),

Court Prosecutor Georgia Adeilini requested the prosecutor from Alexandroupoli to specifically investigate the 2023 fires in the Evros region and the claims of racism against migrants.¹³⁰

On the other hand, many Greeks believe that the current New Democracy government is behind the fires in order to create wind turbines as an alternate natural power source.¹³¹ In 2021, Environment and Energy Minister Kostas Skrekas demanded that the Energy Regulatory Authority revoke a permit granted for the development of thirteen wind turbines in the fire-stricken northern Evia.¹³² Further, another permit was approved in 2023 to a Greek petroleum refiner, Motor Oil Hellas, for six more wind farms on burned land in Evia, contrary to Prime Minister Mitsotakis' assurances of reforestation.¹³³

Former environmental inspector Margarita Karavasili said that, while in charge of urban development in Mati twenty-five years ago, there was a lot of pressure to exempt certain parts of the region from the woodland categorization.¹³⁴ In 2014, Greece amended its 1978 laws protecting the forest, despite much controversy and dispute by environmental groups, with laws 4280/2014 and 4315/2014.¹³⁵ These laws permitted more private

11:36 AM), <https://www.ekathimerini.com/news/1218348/supreme-court-prosecutor-orders-dual-investigation-into-arson-and-racist-violence-incidents/>.

130. See Nektaria Stamouli, *Anger Rises in Greece as Fires Destroy Homes Near Athens*, POLITICO, (Aug. 24, 2023, 10:40 AM), <https://www.politico.eu/article/greece-athens-fires-destroy-homes/>.

131. See *Oi empristés gia ti Néa Dimokratía einai mochlós anáptyxis-Állaxe to 2019 to Nómo gia na tous prostatévei* [Arsonists for the New Democracy are a Driver of Development-Change the Law in 2019 to Protect Them], HORA TOU ACHORITOU (July 25, 2023), <https://choratouaxoritou.gr/?p=283587&cn-reloaded=1>.

132. See Athens Bureau, *Minister Skrekas: Wind Turbine Permits in Northern Evia Need to be Revoked*, GREEK CITY TIMES, (Sept. 28, 2021), <https://greekcitytimes.com/2021/09/28/minister-skrekas-wind-turbines-evia/>.

133. See *Greek Oil Company Gets Permit for Wind Energy Project on Evia*, THE NAT'L HERALD, (Apr. 24, 2023), <https://www.thenationalherald.com/greek-oil-company-gets-permit-for-wind-energy-project-on-evia/#%3A~%3Atext%3DATHENS>.

134. See John Vassilopoulos, *Death Toll Rises from Greek Forest Fires*, WORLD SOCIALIST WEB SITE (Aug. 23, 2018), <https://www.wsws.org/en/articles/2018/08/23/fire-a23.html>.

135. See WWF GREECE, ENVIRONMENTAL LAW IN GREECE 11TH ANNUAL REVIEW: FOCUS ON NATURE AND BIODIVERSITY (2015) ("The draft bill was eventually voted as law 4280/2014, on August 5th. However, following the harsh reaction of various organisations, including WWF Greece and MPs, a roll call vote was requested for article 36 of the draft bill, related to the interventions allowed in forests and forest lands" and "[t]wo recently voted laws (law 4280/2014 and law 4315/2014) amend forestry law 998/79, validating and supplementing a series of scattered legislation provisions that had been approved as part of legislation irrelevant to the environment, such as for example the recent law on tourist investments and the special plan for tourism.").

ownership and development on forest land, leading to lax regulation of previously protected public forest land.¹³⁶

Adding to the complexity of the issue is the lack of a complete national land registry system, or Cadastre,¹³⁷ which makes it easier to encroach forest lands, especially near bigger cities, like the suburbs around Athens.¹³⁸ Because Greece does not currently have a completed national land registry, publicly-designated land categorized as forests is targeted by developers or the government.¹³⁹ Greece was the first country in Europe to “transition from a person-based to a property-based system by means of re-registration of already registered property rights based on citizens’ declarations of rights and not on information kept in the Land Registry.”¹⁴⁰ This reliance on citizens’ property declarations and ignorance of the previous land registry created many complications in its administration.¹⁴¹

Further, the funds allocated to prevention, reforestation, and state aid are not reliably used by the government to accomplish their purported goals. In 2014, the EU began investigations into a state aid case regarding the case of *Soya Hellas SA*.¹⁴² The investigation culminated in a decision that the state aid provided by Greece was “illegal and incompatible with the EU internal market rules.”¹⁴³ According to Ms. Ferreira on behalf of the European Commission, of the 1.2 billion euros from the European Regional

136. See Elisabeth Eleftheriades et al., *Forest Maps The Latest Episode*, SEE LEGAL, <https://seelegal.org/news/forest-maps-the-latest-episode/#> (last visited Nov. 11, 2024) (stating that Forest Law 998/1979 was amended through Law 4280/2014).

137. See George Mourafetis & Chrysos Potsiou, *IT Services and Crowdsourcing in Support of the Hellenic Cadastre: Advanced Citizen Participation and Crowdsourcing in the Official Property Registration Process*, INT’L J. GEO-INFO., Mar. 25, 2020, <https://www.mdpi.com/2220-9964/9/4/190>, at 1.

138. See Ioannis Glinavos, *Greek Fires: the Predatory Political Economy Behind a Recurring Human Disaster*, THE CONVERSATION (July 27, 2018, 6:08 AM), <https://theconversation.com/greek-fires-the-predatory-political-economy-behind-a-recurring-human-disaster-100500> (suggesting that people take advantage of Greece’s outdated zoning laws to illegally build homes outside the city under the guise that the illegally built family homes were constructed by the “poor living on the city fringes”).

139. David Patrikarakos, *Conspiracy Theories Rise from the Ashes of Greece’s Fires*, FOREIGN POL’Y MAG. (Aug. 21, 2021, 6:00 AM), <https://foreignpolicy.com/2021/08/21/greece-heat-fires-climate-change-conspiracy-theories/>.

140. Ioanna Tzinieri, *The Present Landscape of Land Registration in Greece*, EUR. LAND REGISTRY ASS’N, Jan. 1, 2015, <https://www.elra.eu/the-present-landscape-of-land-registration-in-greece/>, at 4.

141. See *id.* at 5.

142. See Sarantis Michalopoulos, *Commission Urges Greece to Recover Illegal State Aid for 2007 Wildfires*, EURACTIV (Apr. 17, 2023, 7:16 AM), <https://www.euractiv.com/section/politics/news/commission-urges-greece-to-recover-illegal-state-aid-for-2007-wildfires/>.

143. *Id.*

Development Fund and Cohesion Fund earmarked for climate change adaptation measures, prevention, and risk management, 336 million euros are particularly earmarked for fire risk management and prevention.¹⁴⁴

D. *Illegal Construction in the Forests*

Building without a permit is not enforced or fined as heavily in Greece than in Western Europe. Under Greek law, Greece is obligated to destroy illegal developments if notice is ignored after a certain amount of time.¹⁴⁵ Currently, Greece must destroy around 3,000 illegal constructions in forests and around 700 on the coast.¹⁴⁶ Greece's lackadaisical attitude towards enforcing against the illegal construction of houses in its forests created a humanitarian crisis, now Greece must show zero tolerance for such buildings to prevent the risk posed to public safety.¹⁴⁷

The Mati fire was one example of how illegal construction can amplify a wildfire's destruction. First, much of the construction's wiring was faulty and electricity was not done professionally, causing sparks to ignite near homes.¹⁴⁸ Second, there was a failure to ensure safe evacuation routes, demonstrated by lack of land use planning and zoning regulations, and lack of their enforcement.¹⁴⁹ Because of the disorganization of roads, one woman lost her child and husband in the Mati fire.¹⁵⁰ The government's mishandling

144. See Answer Given by Ms. Ferreira on Behalf of the European Commission, Answer to Parliamentary Question E-000986/2023(ASW), EUR. PARLIAMENT (May 24, 2023), https://www.europarl.europa.eu/doceo/document/E-9-2023-000986-ASW_EN.html.

145. See Gov't Issues Decree for Demolition of Illegal Construction, EKATHIMERINI.COM (Aug. 11, 2018, 4:23 PM), <https://www.ekathimerini.com/news/231648/gov-t-issues-decree-for-demolition-of-illegal-construction/>.

146. See Sara Malm & Reuters, *Families of Teacher, 70, and His 73-Year-Old Neighbour Killed in the Athens Wild Fires Days After Celebrating His Daughter's Wedding sue Greek Authorities over Their Deaths*, DAILY MAIL, (Aug. 1, 2018, 12:20 PM), <https://www.dailymail.co.uk/news/article-6014639/Greek-fire-victims-sue-authorities-deaths-Mati.html>.

147. See also Gov't Issues Decree for Demolition of Illegal Construction, *supra* note 145.

148. See Renee Maltezou & Yannis Soulitois, *Faulty Power Cable May Have Caused Greece's Worst Wildfire This Year, Sources Say*, REUTERS, (Aug. 15, 2024, 5:33 AM), <https://www.aol.com/news/faulty-power-cable-may-caused-123332728.html>; see also Dimarchos Pentélis ston Realfm 97.8: *H fotia xekinise apó éna komméno kalódio tis DEI* [Mayor Pentelis on Realfm 97.8: The fire started from a cut PPC cable], ENIKOS, (July 26, 2018), <https://www.enikos.gr/society/dimarxos-pentelis-ston-realfm-978-h-fotia-xekinise-apo-ena-kommen/1177763/>.

149. See Bill Kouras, *Woman Who Lost Family to Deadly Wildfires Sues Greek Officials*, GREEK CITY TIMES, (Aug. 20, 2018), <https://greekcitytimes.com/2018/08/20/woman-who-lost-family-to-deadly-wildfires-sues-greek-officials/>.

150. See *id.*

of the 2018 Mati fire resulted in lawsuits from families who lost loved ones in the blaze, largely placing the blame on illegal construction.¹⁵¹

E. Rural Abandonment

Greece's rural population as a percentage of its total population went from forty-four percent in 1960 to twenty-two percent in 2016.¹⁵² The consequences of rural depopulation include the increase in forest surface fuels and highlights the need for holistic approaches to wildfire prevention. In the past, activities such as agricultural cultivations and extensive livestock grazing helped limit the amount of fuel buildup in the forests from dead leaves and trees.¹⁵³ Finding ways to motivate people to return to, or at least not abandon, the countryside lifestyle is one way to protect the environment against fires.¹⁵⁴ Animal grazing is an effective method in combating fire risk, as Imperial College researcher Oliver Perkins explained: “[i]n fire-prone regions of Spain, goat farmers are paid, not to produce food but to reduce fire risk by grazing flammable vegetation.”¹⁵⁵ Incentivizing agroforestry such as animal grazing necessitates its revival in society.¹⁵⁶ Examples include implementing a shepherding law for pastures to use shepherds as “operators in fire prevention and control.”¹⁵⁷ In this way, “agroforestry landscapes” create a “fire paradox”; allowing smaller, controlled fires can help prevent future megafires.¹⁵⁸

151. *See id.*

152. *See* Gavriil Xanthopoulos & Nikola Nikolov, *Wildfires and Fire Management in the Eastern Mediterranean Southeastern Europe, and Middle East Regions*, 77 FIRE MGMT. TODAY 29, 30 (2019).

153. *See* Gavriil Xanthopoulos, *Fires and Agroforestry Landscapes*, in REVIVING AGROFORESTRY LANDSCAPES IN THE ERA OF CLIMATE CHANGE: FOR PEOPLE, NATURE AND LOC. ECON. 192, 194 (Rigas Tsiakiris et al. eds., 2023), https://repositorytheophrastus.ekt.gr/theophrastus/bitstream/20.500.12038/278/1/Xanthopoulos%20Fires%20and%20agroforestry%20landscapes%20_ENOP_Reviving%20Agroforestry_%ce%95%ce%9d_2023.pdf.

154. *See id.* at 198.

155. Maanya Sachdeva, *Are Greece Wildfires Caused by Climate Change?*, INDEPENDENT (July 26, 2023, 8:00 AM BST), <https://www.independent.co.uk/climate-change/news/wildfires-in-greece-arson-rhodes-b2381937.html>.

156. Xanthopoulos, *supra* note 30 at 191.

157. *See* Fantina Tedim et al., *A Wildfire Risk Management Concept Based on a Social-Ecological Approach in the European Union: Fire Smart Territory*, 18 INT'L J. DISASTER RISK REDUCTION 138, 145 (2016).

158. *See* Xanthopoulos, *supra* note 30, at 193.

V. CONCLUSION

Greece's response to escalating forest fires necessitates a comprehensive approach that aligns with human rights and environmental accountability. The failure to implement the Goldammer Plan, despite its clear and actionable recommendations, reflects a critical lapse in governmental responsibility. If Greece does not act immediately to implement policies and strategies for mitigating against wildfires, it is violating the European Convention on Human Rights by risking the loss of more innocent lives, protected forestland, and the last green areas left near major cities, such as Mount Parnitha near Athens.¹⁵⁹

The acknowledgment of the interdependence of environmental protection and human rights is essential, urging the European Court of Human Rights to intervene and set a precedent for a rights-based approach to environmental disasters such as wildfires. Greece's legal obligations, both under national and international frameworks, require a reevaluation of its strategies for forest fire prevention. Only through a concerted effort that recognizes the intricate link between environmental and human rights can Greece hope to mitigate the impacts of escalating forest fires so that generations can continue to behold the beauty in and around Greece's forests.

159. See Elena Becatoros, *More Than 600 Firefighters Backed by Water-Dropping Aircraft Struggle to Control Wildfires in Greece*, ASSOCIATED PRESS, (Aug. 27, 2023, 9:02 AM PDT), <https://apnews.com/article/greece-wildfires-evros-alexandroupolis-athens-parnitha-87ba978808ca9d836b733df6b5713083>.