

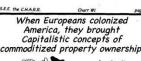


Global warming creates vicious feedback loops. Dying forests and soil microbes release stored CO2, soil microbes release stored CO2, normally sequestered for centuries. Worse, they diminish being Carbon Sinks that remove CO2 from the atmosphere. Also, forests decline functioning for flood control, transpiration-moisture rainfall, and nutrient creation and recycling



In the past, wildfires were frequent, stochastic, widely distributed, mostly low intensity, and of less severity. Historically, wildfires burned more than 20 million acres each year. than 20 million acres each year.
low wildfires rarely burn more than 5
million acres per year.
Native Americans understood fire's
ecological role and yearly torched
thousands of acres.







including exclusionary adverse possession.

They viewed wildfire as trespass and resources.

The Media traffics in our primal fascination and fear of fire. Devoted to sensationalism. consumerism, and authoritarianism, Media adopted

the meme of wildfire as
enemy. They promote the Eurocentric vision of complete
dominion over the land and a



This vision puts lives, communities, and ecosystems at greater risk. It promotes subsidizing fire suppression, timber extraction, road-building, and urban sprawl into wildlands. As safety, ethics and ecological denialism, it contributes to increasing wildfire severity.



Wildfires must be put into rspective. The problem remains the increasing percentage of severely burned areas.



Wildfires stimulate forest Wildtires stimulate torest growth by generating clearings for young plants. They provide immediate nutrient release from forest debris. They project distant fertilization, through mineral-rich carbon-compound particulates in smoke.



Wildfires enhance many ecosystem functions and services that humans depend on. Wildfires can augment vildlife and habitats. They increase species diversity and patchiness. They maintain seral clines, such as pines, and they replace stands of over-mature climax species with



Over time, wildfires can decrease CO2 emissions compared to relentless microbial decomposition. Wildfires hold vast amounts of carbon on site through heat and pyrolysis that renders materials resistant to CO2 emission by microbe rot.



Solutions to increasing wildfire severity should focus on priorities that improve safety, ethics, and ecology. Safety must be the first priority for firefighters, communities, and ecosystems.



Safety for wildland firefighters means never putting them in harm's way when low fuel moisture and advancing winds signal danger. Safety also means using proven methods to make communities more fire-permeable and ecosystems more fire-hardy.



Prescribed fire makes ommunities and ecosystems safe A creative and experienced burning boss can craft a safe fire-permeable landscape near communities and reduce fuel abundance and distribution. Remote lightning-ignited fires can safely restore fire-hardy ecosystems when properly managed and aud



Because local conditions, resources, constituents, and insurance policies vary, appropriately safe responses must be regional dependent.

ife fire suppression may only be appropriate near communities ritical habitats that are not ye fire-permeable. Otherwise, fire managers should safely monitor, shepherd, and augment wildfire.



Ethics reform also answers wildfire severity. Media must reframe their reportin away from sensationalism Instead, media should focus on



thical lapses make taxpayer money the most abundant wildfire fuel The more money we spend on fire uppression, the bigger fires become The media should do what they do best: follow the money.

Ethical abuses in decision-making and execution of road-building and timber-extraction, often subsidized timber-extraction, orten subsidized by taxpayers, leave our wildlands more prone to severe fire. Less than optimal solutions may indicate cronyism and agency capture. Some logging and mechanically thinning projects absorb too many resources and money and cannot treat enough acreage to be a solution. acreage to be a solution.



Media unethically equates prescribed fires' inconvenient smoke with mega-fires' persistent smoke. They also ignore the greater health risk from vehicle traffic's chronic fumes. Media rarely report how rescribed fires diminish mega-fires or when burning-out operations or when burning-out operations cause rapid increase of burned acres. Instead, they focus on potential for accidental "escaped fires" while not relating how controlled burns' accident rate record remains better than other construction activities

construction activities

Media has been slow to knowledge how the "Fireacknowledge how the "Fire-Industrial Complex" influences government scientists, land management decisions, and public and private ethics. The government's blank check of unlimited wildfire protection incentivizes urban sprawl into wildlands and distorts the



Ecological solutions to the problem of increased wildfire everity remain the best way to enhance ethics and safety Healthy, safe, and fire-hardy ecosystems display abundant plant and wildlife diversity, sustainable nutrient cycling, and ecological services such as flood



Esciblification of the control of the control of the carbon on site. While carbon can leave a site by timber harvest or wildfire combustion, microbes discharge most CO<sub>2</sub>. Land managers can initiate controlled burns during inversions rain or high humidity to can initiate controlled burns during inversions, rain, or high humidity to maximize pyrolysis and carbonization of woody materials to make them unavailable to microbial decomposition controlled burns controlled.

decomposition. Controlled burns can maintain fire-permeable sites that favor low intensity wildfires.



Ecological management favors resilience, diversity, and improves soil and plant carbon sequestration. Managers can reseed with fire-hardy plant species or even augment airdropped fire retardant with nutrients or fungal spores that favor carbon sequestration.



Fire managers should develop an elite corps of ecologically shrewd Fire Rangers.



by

burns.

Compiled by FUSEE (Firefighters United for Safety, Ethics, and Ecology)

S.E.E. the C.H.A.R.R.

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