

Hospitals & Asylums

Kate Brown, Governor of Oregon v. Jerry Brown, Governor of California HA-5-4-17

In re: Pacific Coast Rainmaking Technology Fund; Certiorari for Hammond and Son

By Anthony J. Sanders

Collective defendant Ashland Parks and Recreation should receive all Lomakatsi Restoration Project non-profit pillaging of the \$6 million grant from Oregon Watershed Enhancement Board (OWEB) drought profits to abolish slash and burn forest labor under Fire 36CFR §261.5, Antarctic Conservation Act of 1978 16USC§2403(b)(1)(B) (prior drought), Slavery Convention of 1926 (forced labor) and Application of the International Convention for the Suppression of the Financing of Terrorism and of the International Convention on the Elimination of All Forms of Racial Discrimination (*Ukraine v. Russian Federation*) International Court of Justice No. 2017/11 9 March 2017.

The City of Ashland is furthermore directed to get the County Commissioners to (1) elect a quorum of city councilwomen, (2) approve a weather modification district to re-invest \$700,000-\$1 million of the \$6 million OWEB grant in a new Pacific Coast Rainmaking Technology Fund to extinguish wildfires on the West Coast, with special elections as soon as possible under ORS §558.440 and (3) pay for the request to the Development Services Department to change the name of Dead Indian Memorial Road, whereas it has been condemned by Native American speakers at the Women's March in 2017 and World Peace and Prayer Day at Howard Prairie Lake, Oregon in 2015 when the name Grateful Dead Memorial Road was suggested, under Jackson County Land Development Ordinance §10.1032.

Lomakatsi is a Hopi term meaning life in balance. The Hopi people established the Hopi Tribal Council on Dec. 19, 1936, with the adoption of the Hopi Constitution and By-Laws in Arizona to provide a way of working together for peace and agreement between the villages, and of preserving the good things of Hopi life, and to provide a way of organizing to deal with modern problems, with the United States government and with the outside world generally. Should the Hopi Tribal Council receive an up to \$750 fine from the Ashland mayor subsidized Lomaktsi Restoration Project to rule on whether or not to file a federal injunction against Oregon's white non-profit slash and burn forest labor corporation's use of the Hopi language?

The vicious cycle of slash and burn forest labor on the West Coast must not be subsidized. Slash must cease to be cut because the litter increases fire hazard. Foresters failing to remove the slash, timber and firewood they litter the forest with may be fined for the fire-hazard under 36CFR§261.5(a). Slash should be left to rot, except by winter campers with a hearth, in late fall to early spring. Fire hazards threatening the canopy and flood hazard obstructions of the watershed should be dismantled and human litter packed out. In no circumstance should open burns of the forest be prescribed, except to actively fight wildfires and possibly with due process in late fall or winter, with extreme prejudice against slash and burn forest labor without forage, grove or trail to prescribe the human disturbance of the forest flora. In the late fall and winter West Coast fire districts may subsidize winter campers in areas with a lot of slash to burn, and in the summer dry season fire districts may subsidize free cooking gas for campers who would otherwise need to conceal their fire-pit from the arson who saw *Brown, Governor of California, et al v. Marciana & Plata et al*. US Supreme Court No. 09–1233 of May 23, 2011.

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Argument 1 Flammulated Owl

Flammulated Owl (*Ótus flamméolus*) is a rare and local small owl from the Pacific Northwest to Southern Arizona. Flammulated Owls are the only small owl with dark eyes. Like the Screech Owl, it occurs in gray and rusty phases, but the facial disk of Flammulated is redder than the rest of its head. Only in southwest Arizona do Whiskered Owls occur. Flammulated Owls prefer pine woods. Call is a single or double low-pitched hoot, repeated for long periods, 40-60 / min. Screech Owl (*Ótus ásia*) is the common small eared owl of towns, orchards and small woodlots. Its plumage is bright rusty, row or

gray; the facial disk is the same color as the head. In the East all other eared owls are distinctly larger. In the West and Southwest, Flammulated and Whiskered Owls are similar. Nests in cavities and occasionally in flicker boxes. Song is a quavering whistle (monotone or descending) or series of short notes. Whiskered Owl (*Otus trichópsis*) are common in Southwest canyons. Can be distinguished from the Screech Owl only at exceedingly close range. Watch for long whiskers and large white spots on scapulars. Generally found in dense oak or oak-pine woods. Distinctive call, 4 to 9 high-pitched boos slowing at the end, is best means of identification (Robbins *et al* '66: 166, 160, 166).

Hammond and son are the notorious jailbirds who need to be released from federal prison on application for certiorari to the United States Supreme Court to do federal arson statute justice. In the national forest, the United States Code is so rude to “settlers” the Code of Federal Regulations is needed to do justice. The \$400,000 federal fine paid by Hammond and son who are serving a three to five years sentences for arson under the terrorism and effective death penalty act is far more than than the up to \$500 fine and up to six months in jail for fire under 36CFR §261.5 by a federal magistrate judge of the protection of the rules and regulations of the National Forests under 16USC§551. Unlike Governor Brown subsidized pillagers the Hammonds ceased their burns prescribed for cattle forage long before being brought in the first instance before a federal magistrate. Now that this case gives due process to sixth amendment concerns regarding the terrorism finance of forest fires on the West Coast it seems safer to release Hammond and son and remit their fines under 18USC§3573. Arson within special maritime and territorial jurisdiction 18USC§81 is too unconstitutionally vague to be used to justify their detention and the thought that Congress must legislate a common law arson statute has only freed the veteran. Burn Ordinance Chapters 477 and 478 Oregon Revised Statute infractions have previously been solicited \$3,000 on state land and \$5,000 on federal lands. Up to \$500 fine under 36CFR §261.5 is all the federal court could ask for from the +/- \$399,500 and remission of fines under 18USC§3573 the is believed to owe the Hammonds for their application for a writ of habeas corpus under 28USC§2243 under the Eighth Amendment ban on cruel and unusual punishment and/or excessive fines.

Due process by a magistrate treats upon Fire 36CFR §261.5 to prohibit the following: (a) Carelessly or negligently throwing or placing any ignited substance or other substance that may cause a fire. (b) Firing any tracer bullet or incendiary ammunition. (c) Causing timber, trees, slash, brush or grass to burn except as authorized by permit. (d) Leaving a fire without completely extinguishing it. (e) Causing and failing to maintain control of a fire that is not a prescribed fire that damages the National Forest System. (f) Building, attending, maintaining, or using a campfire without removing all flammable material from around the campfire adequate to prevent its escape. (g) Negligently failing to maintain control of a prescribed fire on Non-National Forest System lands that damages the National Forest System. Any violation shall be punished by a fine of not more than \$500 or imprisonment for not more than six months or both pursuant to title 16USC§551, unless otherwise provided. Thereafter, for a federal judge to seize 100% of terrorist finance by means of fines against 100% of any civil disobedient forest labor subsidy; Whoever unlawfully cuts, or wantonly injures or destroys any tree growing, standing, or being upon any land of the United States shall be fined under this title or imprisoned not more than one year, or both under 18USC§1853. Whoever, willfully and without authority, sets on fire any timber, underbrush, or grass or other inflammable material upon the public domain...or for the acquisition of which condemnation proceedings have been instituted shall be fined under this title or imprisoned not more than five years, or both. This section shall not apply in the case of a fire set by an allottee in the reasonable exercise of his proprietary rights in the allotment under 18USC§1855.

Governor Kate Brown may pardon David Jon Dickerson. Dickerson fled to California after being the victim of Tazer and run by Ashland Police Officer Matthew Carpenter in early summer 2016. Dickerson

is believed to be detained in Jackson County Jail in Oregon after being arrested by cell-phone GPS by US Marshalls, shortly before the witness got the news at his election day November 8, 2016 trial, and was transferred from Humboldt County Jail in California on November 22, 2016. Dickerson is due \$35 per diem, \$30 a from the Tazer run states of Oregon and California + \$5 witness arresting library. Dickerson was sitting in the park at night with a friend when Officer Matthew Carpenter asked them for ID. When the witness looked up Officer Carpenter had Dickerson in a head lock and was confusingly shouting into his microphone “stop resisting”. Carpenter stepped back and Tazed, Dickerson collapsed onto the concrete. Then, instead of arresting Dickerson and the witness and bringing them to jail where the bruises would be noted and Carpenter would have had yet enough excessively forceful, unnecessary arrest that summer, Carpenter took off running. Later that week the witness was arrested by the extremely tall security guard at the Southern Oregon University Hannon Library. Trial was rescheduled to Election Day November 8, 2016 to review body cam footage that indicates Carpenter “dropped the flashlight” and maybe injured himself putting Dickerson into a headlock, causing Carpenter to step back and discharge his Tazer into Dickerson, and then confusedly flee the scene of the crime. The flashlight the victim was accused of stealing was recovered from the scene of the crime the next day. After at least 10 scared complaints from travellers and cases from several homeless victims in 2016 Carpenter was disciplined for this fourth degree assault by Tazer. His aggression towards the homeless does not seem to be a continuing problem. He has been asked to be put on paid administrative leave until Dickerson is released, at least from the homeless. The unlawful exile, trial, arrest and detention of Dickerson is a *flagrante delicto* and will continue to be a crime in progress until his conviction is overturned. The witness with the election day trial seems to have been stalked to a job he got painting the house of a state representative, only to find out a week later Senator Alan Bates MD, who he had voted for many years, had died of a heart attack. When the witness was dismissed before Dickerson's trial, he suffered four days of nausea and vomiting (N/V).

Oregon must stop attempting to avoid legal process by summoning the person to testify under ORS§162.265(1)(b). The hazards of tampering with a witness, victim or an informant are enumerated under 18USC§1512. The ninth commandment provides you shall not give false testimony against your neighbor (Exodus 20:16)(Deuteronomy 5:20). False declarations before a grand jury or court are a crime under 18USC§1623. Dickerson is due compensation under Article 14 of both the International Convention against Torture, Cruel, Inhuman and Degrading Punishment or Treatment, because he was the unarmed victim of a Tazering in the park in the dark, and the International Covenant on Civil and Political Rights, because he is innocent and his conviction must be overturned and record expunged. Dickerson is due \$150 a 30 day month, about \$750 from the public institution of Southern Oregon University Hannon Library and \$30 a day, \$900 a 30 day month, about \$4,500 from the State of Oregon; the \$35 a day total comes to \$1,050 mo., \$5,250 witness fees, if he is pardoned now, after about 5 months, under ORS §44.415. > \$21 per diem in *Hurtado v. United States* 410 US 578 (1973).

Argument 2 Volunteer Wages of the Rogue River War of Extermination (1855-1856)

The federal government usually runs on a deficit, with some famous exceptions, such as when Andrew Jackson paid off the federal debt in 1835 and more recently when Bill Clinton ran a surplus in 1998-2000. Andrew Jackson explains a lot about Jackson County, Oregon who produces both balanced budgets, the city of Ashland and \$50-\$110 billion federal surplus FY 2018 and the Howard Prairie Lake to host World Peace and Prayer Day June 20-22 with which to change the name of Dead Indian Memorial Road to Grateful Dead Memorial Road under Jackson County Land Development Ordinance §10.1032. In the generations following the War of 1812 the young country grew and changed, and in the process it grew closer to the White House, particularly when Andrew Jackson became President in

1829. Jackson as the first President who did not come from a well-established family in comfortable circumstances. The decisive victory of Andrew Jackson, nicknamed “Old Hickory”, veteran Indian fighter, hero of the Battle of New Orleans and frontier property owner, put into the executive saddle the favorite son of the new and booming West. His beloved wife Rachel died of a heart attack shortly after he was elected, leaving Jackson with four eligible sons. Uncle Jackson was fond of children “always serving children first, saying they had better appetites, less patience and should not be required to wait”. Jackson's followers swept into Washington for the inauguration of the “People's President”. Thousands of people who had not previously set foot inside the White House came to Washington for Jackson's inauguration. After the inauguration some people stood on satin chairs in muddy boots, broke the china and glass. Eager handshakers pressed Jackson against the wall and drove him to spend the night at Gadsby's hotel, then nicknamed the “Wigwam”. Martin van Buren, Jackson's Vice-President and successor, nicknamed the “Little Magician”, lost popularity discontinuing regular receptions. Jackson took full advantage of his popularity and when the nullifiers talked of secession and Jackson issued a formal proclamation of warning the threat of civil war receded. Jackson gave the people a role in the government they had not had before. He openly espoused the spoils system, removing government employees who had been appointed by his predecessors and replacing them with men of his own party, his replacements, sometimes for real cause are estimated at about one in ten. But adoption of the spoils system gave Jackson and later Presidents a new kind of problem – dealing with a great multitude of job-seekers, the White House had become a source of jobs. At Jackson's last levee at the White House in 1837, he accepted the gift of a fourteen hundred pound cheese and invited the public to share it on George Washington's birthday. On the topic of fires Jackson said “Hell itself couldn't warm that corner” (Aikman '66: 12, 41, 13, 39, 42, 43). As President in 1835 “Old Hickory” nearly lost his life near the spot where his statue now stands. He had attended funeral services for a Member of Congress in the House chamber and was about to leave the Rotunda when a man stepped out from the crowd and aimed a pistol point-blank. The gun misfired. He whipped out a second pistol, it too misfired. This was the first attempt to assassinate a U.S. President. The assailant was found insane. Memories of the War of 1812 cling to the slim bronze of Gen. Andrew Jackson in the Capitol Rotunda. It is ironic to recall that the battle was fought before either side knew peace had already been signed (Aikman '63: 76).

The Rogue River War of 1855-1856 was an unambiguous example of a war against Indians that was drummed up to attract public funds, a pork barrel war, successfully promoted by rival politicians who effortlessly thwarted the humane intentions of the new western reservation policy, notwithstanding the vociferous objections of both civil and military officials of the federal government. In June and July of 1854 the federal paymaster was at work in southwestern Oregon and northern California paying the wages of the volunteers involved in the 1853 campaign. The paymaster disbursed a little less than \$70,200 in hard money for wages. Businessmen who supplied the volunteers were paid with War Department funds funneled through the Democratic territorial governor, George Curry, and got about \$151,400, making a total of about \$22,600 or more than \$4.4 million 1990s dollars. Credit for getting the government to pay for the campaign went to another Democrat, delegate Joseph Lane. The idea of fighting Indians for federal money might be the way to compensate for the drought. Even if they weren't paid quickly, they could at least eat on the government's credit. As the pressure for war built up in the Rogue River valley, Indian affairs superintendent Joel Palmer was acquiring Indian land on the coast. But when Palmer was holding talks near the mouth of the Rogue River on August 26 with representatives the Indian people fled when soldiers brought the corpses of two Indians and three whites to the council ground. While Palmer was making treaties in the fall of 1854, a political rivalry was developing that would destroy the peace he hoped to ensure. The rivals were the dominant Democratic party and a new political grouping called the Know-Nothings. A product of the breakdown of the Whig party and a precursor of the Republicans, the Know-Nothings made opposition to foreigners and

Catholics their political focus. In Oregon, the organization became a tool of opponents of the Democratic Party. Asahel Bush wrote in the Statesman, “the Know-Nothings were engaged in the most ridiculous piece of bigotry, intolerance and stupidity grown persons had ever engaged in”. In the words of Tipsu Tyee, Hi u lum; nika wake memeloose mika! You are very drunk or I would kill you! (Schwartz '97: 4, 75, 81, 83, 85, 87, 91-93, 65, 73, 71).

George Manypenny, Indian Affairs Commissioner, set out the principles of the new reservation policy in his 1853 annual report. His plan was to place western Indians in suitable locations, limited in extent and distant as possible from white settlements, and to teach and aid them to devote themselves to the cultivation of the soil and the raising of stock. The theorists who developed the American reservation concept ignored the poor results of these earlier efforts. Joel Palmer agreed with the reservation policy and in a letter dated June 23, 1853 in which he said the “aborigines should be given a home remote from the settlements where they could be guarded from the influence of pestiferous white men. They should have comfortable houses, schools and instruction in farming and Christianity. The making of the treaty was curiously complicated. Two treaties were made. A Treaty of Peace was concluded on September 8 and Treaty for Sale of Land on September 10. Both treaties were translated into both languages. They were ratified by Apserkahar, Toquahear, Anachaharah, John and Lympe. The Indian negotiators were misled. They were under the impression the Table Rock Reservation would belong to them permanently. By the terms of the 1853 treaty the Rogue River valley peoples gave up roughly two thousand square miles in return for \$60,000 of which \$15,000 was to be used to pay war claims by the whites. The war had cost \$250,000, \$7,000 a day and extermination would be too expensive. The remaining \$45,000 would be paid out in installments in the form of “Blankets, Clothing, farming utensils, stock and such other articles as may be deemed most conducive to the interests of said tribes”. The Indians kept a parcel of about one hundred square miles north of the Rogue River with Table Rock at its southeastern corner. It would be considered a reservation until “a suitable selection shall be made by the direction of the President of the United States”. The treaty called for houses to be built for the three principal chiefs and the government was building a house for him on the Table Rock Reservation when the climactic phase of the Rogue River conflict broke out in 1855. Before the war Rogue River peoples numbered around 9,500 in 1851, by the middle of 1857 Indian Service agents counted only 1,943 survivors on the Coast Reservation of whom around 25% had died of disease by 1858 (Schwartz '97: 51, 52, 58, 59, 60, 68).

The free-box has not yet recovered from the invasion of Ashland by U.S. Senator Wyden (D) and the state budget committee legislators who suddenly proclaimed a deficit as justification to pillage all non-profits in the shortest month of 2017 in contravention to Art 33 of the Fourth Geneva Convention that prohibits collective punishment and pillaging. Make sure protect Apple computers from DC surges by using the protector provided by the manufacturer. The Apple computer vulnerability being exploited by feeble congressional attempts to deregulate the Internet is that consumers needs their final app update (FAU) to enable consumers to completely opt out of all updates, just like Microsoft needed to do to recover from Windows 8 in *Government Publishing Office (GPO) v. Microsoft Corporation* HA-27-1-15. The problem that the Republican budget director is having with non-profits is that he is not accountable and therefore prone to lend substance to wild allegations and robbery in broad daylight by bribing the armed forces. Adam Smith's Wealth of Nations is so aware of how worthless the President's services are that he has refused to receive any salary, very similar to the way Congress has voted down a raise since 2009. The problem is that his proposed \$70,000 contribution to Department of Interior historic battlefield restoration does very little to make up for the \$1.3 billion estimated agency budget shortfall, proposed by the madness of a Republican budget director without a split ticket. The lesson of Andrew Jackson is that popularity is essential for success in any business. To balance the budget the Congress must vote to end poverty by 2020 and leave the details to the Administration and the People,

respectively. Ensuring that the President is qualified under applicable laws and regulations continues to burden Hospitals & Asylums with accounting for the incidental expenses of all the federal agencies under 24USC§422(b)(2)(B)(e) and a \$50-\$110 budget surplus underwrites the Social Security Amendments of January 1, 2017 to end poverty by 2020 HA-1-1-17.

Federal support for the administration of the hypocritical fire hazard mitigation burns of Lomakatsi Restoration Project and other state subsidized arsons can be attributed to Representative Walden (R) and Ashland Mayor Stromberg. City slicker Mayor Stromberg's retaliation pegs him as habitual tipi toppler. Mayor Stromberg's machismo, that led to one irregular criminal volunteer, an alcoholic Marine veteran who had served more than a decade in prison for killing an accused rapist, at odds with a newly posted camping prohibition sign by the weigh station and Rome Statute that specifically forbids criminals being used as soldiers, to be slain by stomach cancer presumed to be have been caused by bottled rat poison identified by a slick rectum, is being taken advantage of by Lomakatsi Forest Restoration, who just slew a 67 year old man camped near the Toothpick trail, roughly during the time that Lomakatsi engaged in slashing and burning in that area. Enforcement, forest labor and community justice work release all need to be abolished under the Slavery Convention of 1926.

Ashland City Council's female members and quorum to do business were lost in the Presidential elections of 2016 and a toxic interstate conspiracy with San Bernadino, California. After the 4% population decline in San Francisco during 2008 Presidential elections and outright genocide in California from the Democratic Primaries to after election day on November 8, 2016 Nancy Pelosi cannot be allowed to continue to spy on and torture Democrats as the minority party leader and sometime Speaker of the House, if the Democrats are to win the United States a split ticket in the 2018 congressional elections (Maisel & Bailey '05). Pillaging of the favored son doctrine, that prevents the Vice-President from coming from the same state as the President, weighs heavily upon Nancy Pelosi's district. She is the highest ranking female official ever in the United States, and whereas this is her only socially redeeming quality, it is proposed to limit the initial list of new candidates for House Democratic party leaders to congresswomen who express interest in the pay raise and winning a majority in the 2018 mid-term elections. If the Democratic Party is to win in 2018 the best thing they could do is replace Nancy Pelosi with a Representative who doesn't spy on and torture Democrats. The Jackson County commissioners at any regular meeting of the board of commissioners may call a special election of the electors of the district under ORS §558.440 to get Ashland City Council the independent quorum, women and weather modification district the West Coast needs from OWEB grant recipients, as soon as possible.

Argument 3 Grateful Dead Memorial Road, Trump and *Ascapus truei* Trails

After a short spell of agricultural prosperity the General Allotment Act of 1887 and the Dead Indian Act of 1902, allowed the Indian Service to convert land of deceased Indians into cash, shrinking the national Indian land base from 138 million acres in 1887 to 52 million acre in 1934 (Schwartz '97: 51, 52, 58, 59, 60, 68). Several Native American speakers have condemned Dead Indian Memorial Rd. A Native American speaker at World Peace and Prayer Day, at Howard Prairie Lake, suggested that the name of the Road be change to Grateful Dead Memorial Rd. Local subsidized literature had previously attributed the name of the road to the discovery of Indians who had died on unkown causes in a camp. Both reference to and plagiarism of the Dead Indian Act of 1902 gives all Americans the right to be offended in a court of law. How to change the name of the road in Jackson County, Oregon? The

Jackson County Land Development Ordinance 10.1032 Renaming of Roads provides that requests for changes of road names for County and dedicated public roads shall be submitted to the Development Services Department. The fee shall be transmitted Roads and Parks Department to cover costs incurred by the Roads and Parks Department to determine the cost for construction and installation of directional signs with the new road name under §1032.02. How much would it cost to change the name of Dead Indian Memorial Road to Grateful Dead Memorial Road?

It is much easier to reduce the USDA Sign Installation Guide to National Forest property boundary stakes one inch in diameter. National Forest property boundary stakes are fragile and it is a good idea to tie a shirt around the sign to muffle the noise and prevent the lower rivet from breaking off. A rubber mallet is disarming. Everyone agrees with the cartographic expansion of the national forest in the plateau, but the Friends of the Cascade-Siskiyou cannot be trusted to communicate with the President regarding “the eminent domain of the private road at the end of Emigrant Creek Rd. to connect the Bear Creek Bikepath with Emigrant Lake and Trump Trail to the Pacific Crest Trail”, because they have not publicly apologized for coveting the existing rights of their neighbor's ox (*Bos taurus*) in violation of the 10th commandment. The Interim Director of Ashland Parks and Recreation has the balls to cut down a ponderosa pine with mountain bark beetle infestation in a city park that receives an estimated 1 million visitors a year, and ability to construct trails quickly and safely, and is therefore designated Secretary for national trail planning in the area. For cartographic and poetic purposes the Presidential proclamations pertaining the Cascade-Siskiyou should probably settle on the name of the monument expansion being “Soda Mountain Wilderness National Monument”. The vernal pond of the now federally protected Coastal Trail Frog *Ascaphus truei* marks the trailhead to Fell on Knee and Hitt Road and 100 square miles of wilderness to the Pacific Coast locally called Rogue-River-Siskiyou National Forest. I am thinking to paint a sign to protect vernal pool of Coastal Tailed Frogs (*Ascaphus Truei*) and possibly measure the 1 mile distance to Fell on Knee and 3 miles to Hitt Road in waterproof paint. The Interim Director of Ashland Parks and Recreation would do a better job printing a small waterproof sign to affix to the National Forest Property Boundary stake:

Vernal Pool of the
Coastal Tailed Frog
Ascaphus Truei
Trail
To Fell on Knee +/- 1 mile
To Hitt Rd. +/- 3 miles

In addition to the cooperative agreement and other authorities, the Secretary of the Interior, the Secretary of Agriculture, and the head of any Federal agency administering Federal lands, are authorized to encourage volunteers and volunteer organizations to plan, develop, maintain, and manage, where appropriate, trails throughout the Nation under 16USC§1250(a)(1) Volunteer planning, development, maintenance, and management of trails. Connecting or side trails within park, forest, and other recreation areas administered by the Secretary of the Interior or Secretary of Agriculture may be established, designated, and marked by the appropriate Secretary as components of a national recreation, national scenic or national historic trail. When no Federal land acquisition is involved, connecting or side trails may be located across lands administered by interstate, State, or local governmental agencies with their consent, or, where the appropriate Secretary deems necessary or desirable, on privately owned lands with the consent of the landowner. Applications for approval and designation of connecting and side trails on non-Federal lands shall be submitted to the appropriate Secretary under 16USC§1245. National Forest Boundary behind this sign stakes should be placed at the

Hitt Rd trailhead to better delineate Rogue River-Siskiyou National Forest for Granite St private property owners and map the trails. The Cascade-Siskiyou monument expansion needs a trail from Ashland to Grizzly Peak to the Pacific Crest Trail via the 5 – 6 mile marker on Dead Indian Memorial Rd where non-resident Californians are said to have donated one piece of land that no one can access, the fences must be removed or gates put in for pedestrians to access Grizzly Peak and the Pacific Crest Trail from the County oak car camping grove by the quarry above the tree bridge to Indian Cave.

The Rogue Valley Watershed has featured prominently in prior certiorari to the United States Supreme Court. The actress who played Princess Leah died of a heart attack on an international plane flight for her mother's funeral of the same cause in the United Kingdom, just after the initial release of Star Wars Rogue One, that has been edited to give the plans to the Death Star to Princess Leah at the end. Rogue Valley needs to be judged on the terms of Jackson County and the broken treaties of Andrew Jackson whose popularity was sufficient to oppose secession, balance the federal budget and pay off the national debt, in light of Brexit related terrorism. The Jackson County Sherriff is as African-American as Isaac Lindsday who died the day the popular vote was disposed under 24USC§420(a)(1). Jackson County Land Development Ordinance has been 100% successful at (a) removing snags and other flood obstruction hazards from the Bear Creek Watershed and (b) ultimately prevailing upon Jackson Wellsprings to tear down the cabins that had been condemned since the flood of 1998. The money requests of Forest Service contractors are long forgotten since 2012. Peace House never received the McKinney-Vento Homeless Assistance Grant for an Ashland homeless shelter *Chautauqua Homeless Campaign v. Mt. Ashland Defenders: Ashland Watershed Evaluation of Rogue Valley in Southern Oregon. Hospitals & Asylums HA-20-3-12*. KSKQ should be credited with \$2.4 million from the \$6 million OWEB grant held by Ashland Parks and Recreations for: (1) Ashland homeless shelter, if the city is unable to dedicate a key to a free building, the abandoned Ashland Tiding building, the new \$1.9 million one next-door to the Ashland Food Bank, or another, to the 24/7 KSKQ managed homeless shelter and non-profit space under 24USC§422. (2) Eminent domain for the private road at the end of Emigrant Creek Road to connect the Bear Creek Bikepath and the Pacific Crest Trail to Emigrant Lake, Trump Trail, in one land sale to the Cascade-Siskiyou National Forest and Soda Mountain Wilderness National Monument expansion under 24USC§153. Another \$700,000 proof of financial responsibility and up to \$1 million will be needed to fund any weather modification district created by the special elections under ORS §558.440.

Argument 4 \$750 fine for Fire, Boundary Marker Removal and Cave Obstruction

Ashland Fire District and Parks and Recreations are believed to (a) have removed the timber that had been obstructing the cave below the Queen of Hearts above White Rabbit unlawfully caused by Lomakatsi Restoration Project incidental to a burn in that area in May 2016 and (b) placed a custom made National Forest Property Boundary stake imposing a \$250 fine for Whoever willfully destroys, defaces, changes, or removes to another place any section corner, quarter-section corner, or meander post, on any Government line of survey, or willfully cuts down any witness tree or any tree blazed to mark the line of a Government survey, or willfully defaces, changes, or removes any monument or bench mark of any Government survey, shall be fined under this title or imprisoned not more than six months, or both under 18USC§1858. This sign means everyone, previously denied by the Ashland camping and sleeping (for repeal) prohibitions, has permission to camp and light a campfire in the cave under the protection of the National Forest rules and regulations under 16USC§551. Any person who knowingly destroys, disturbs, defaces, mars, alters, removes or harms any significant cave or alters the free movement of any animal or plant life into or out of any significant cave located on Federal lands, or enters a significant cave with the intention of committing any act described in this paragraph shall be not

more than one year or a fine. In the case of a second or subsequent violation, the punishment shall be not more than 3 years or a fine under the Federal Cave Resources Protection Act of 1988 16 USC§4306(a)(1)(3)(b).

The cave is bigger and dryer than ever. It, and the cave(s) off Hitt Rd. clearly qualify for nomination for significant caves on federal land because the caves provide seasonal or year-long habitat and recreational opportunities for humanity under 36CFR§290.3(c)(1)(5). The defensive language on the custom made sign and lack of any signs pointing to the cave indicate there is concern regarding the confidentiality of cave location information whereby information concerning the specific location of any significant cave may not be made available to the public unless the Secretary or authorized officer, determines that disclosure of such information would further the purposes of this chapter and would not create a substantial risk of harm, theft, or destruction of such cave under 16USC§4304 and 36 CFR§290.4. In light of the *Geomyces destructans* epidemic that wiped out east coast hibernating bat populations it is recommended that the government be allowed to inform the public of the presence of these caves in the Ashland vicinity by word-of-mouth, signs and maps. Making information regarding caves public is a respected final decision of the authorized officer that shall not be subjected to any review or appeal under 36 CFR§290.4(c). Cave confidentiality is moot and this is anathema to courts of law and apparently east coast hibernating bats, and should probably be repealed when the United States has a split-ticket. To better protect the Hitt Rd. cave(s) a National Forest property behind this sign shall be placed at the Hitt Rd. trailhead for the Granite St. residents and cartographic efforts of the Rogue-River Siskiyou National Forest. Bring a trash bag if you don't camp there every night.

The new Gryphon and Jabberwocky Trails and White Rabbit Trail extension to the Todd-Oredson Woods and snag snipping along the Bandersnatch trail went fast. None of these cross-connecting trails make the 3% grade used on the Pacific Crest Trail, but that's great for mountain-biking. The ponderosa pine by the swimming hole I first thought to turn into a picnic table before declaring alive and unusually branchy, has been cut close to the ground to eliminate both mountain bark beetle and fire hazard to the mixed copse. It could be used by the school teachers, who sometimes bring hundreds of children to the swimming hole, to stand on while lecturing. Nonetheless, flat stumps for sitting and slightly taller ones, for supporting picnic table tops, with shorter rounds from sturdy trunks of large trees as stools, are an efficient way for Parks and Recreation to fell the right snag. The Fire District informed the public to prepared for fire season by removing fire hazards from structures. Flammable material should be removed from underneath decks and adjacent to structures. Flammable plants should be at least three feet from walls. Tree branches should be ten feet and woodpiles 30 feet from structures.

Argument 5 \$750 fine for Fire, Boundary Marker Removal and White Ribbon Supremacy

Old trail ribbons were ruled litter and removed behind the National Forest property boundary stake between the city silt dump and the Rogue River-Siskiyou National Forest to better protect the vernal pond of the Coastal Tailed Frog *Ascaphus truei* from development under 24USC§153. Having removed the old ribbons, it was not difficult to identify and remove the white trail ribbons marking an unwise pro-oak, anti-madrone, slash and lightning strike litter operation and non-descriptive dog tag No. 885 that was nailed to a tree. at about the time the \$250 fine national forest boundary stake was buried by the cave. This standoff regarding whoever willfully...removes...any Government line of survey, or willfully cuts down any witness tree or any tree blazed to mark the line of a Government survey, under 18USC§1858. The yogis watching the tadpoles growing up by the National Forest property boundary marker at the Vernal Pool of the Coastal Tailed Frog *Ascaphus truei*, endangered in the Pacific Northwest, weathered the challenge to federal protection, despite the settler camping on the city side of

the boundary, who helped the frogs to overcome their fear of croaking with humans in plain view. A note was served on the tent and rubber mallet placed on the boundary marker stone until the next day when a National Forest property boundary behind this sign stake was hammered in, before the camper left in peace, and the sign remains, without a tag specifically naming the frogs being federally protected. Having already paid a federal magistrate, the removal of Marker 885 justifies another \$750 fine be paid to the Hopi Tribal Council regarding a civil injunction against the 'Lomakatsi' Restoration Project in far off Ashland, Oregon, for three reasons, other than Grateful Dead Memorial Road, or whether or not white ribbon team belongs to Lomakatsi or the City Hall of the strange anti-Zionist as vegetarian as Adolph Hitler, who ran against and lost miserably to the mayor in the election before 2016 reported as a hate group by Southern Poverty Law Center in 2017. Governor Brown's cup runneth over.

First the nail in a tree is known to be a hazardous or injurious device on Federal Lands under 18USC§1864(d)(3) that defines the term “hazardous or injurious device” to mean a device, which when assembled or placed, is capable of causing bodily injury, or damage to property, by the action of any person making contact with such device subsequent to the assembly or placement. Such term includes guns attached to trip wires or other triggering mechanisms, ammunition attached to trip wires or other triggering mechanisms, or explosive devices attached to trip wires or other triggering mechanisms, sharpened stakes, lines or wires, lines or wires with hooks attached, nails placed so that the sharpened ends are positioned in an upright manner, or tree spiking devices including spikes, nails, or other objects hammered, driven, fastened, or otherwise placed into or on any timber, whether or not severed from the stump.

Second, the slash and burn forest management plan to protect the oak is unlawful and unscientific. Residents protect the oak forest on their private land, but oak forests are not federally listed as endangered, except in urban areas under municipal management, like the valley, where slash and burn forestry has been allowed to be construed as development without adequately informing the public of their intentions with public land or in fact being able to justify the fire hazard posed by (1) their intentional trail obstruction with slash and (2) their construction of a fire hazard in furtherance of their scheme to burn out the madrone and expand the oak monopoly of manzanita, madrone and poison oak stumps, in a naturally mixed forest above the pre-historic valley oak forest. In the mixed forests an oak tree spiritually tends to marks prime camping locations but cannot be the only tree without a forest of stumps, slash and white men intent on arsoning a madrone to expand the oak and manzanita, madrone slash and stump grove. The virgin mixed forest above the oak forest above Tapatio restaurant, between Ashland and Talent protects the mountain people against any genuine need to wage war for the oak trees. These days madrone and manzanita berries provide more food than acorns, whose leeching is an art lost to all people but a local with a liver transplant. Whoever unlawfully cuts, or wantonly injures or destroys any tree growing, standing, or being upon any land of the United States which, in pursuance of law, has been reserved or purchased by the United States for any public use, or upon any Indian reservation, or lands belonging to or occupied by any tribe of Indians under the authority of the United States, or any Indian allotment while the title to the same shall be held in trust by the Government, or while the same shall remain inalienable by the allottee without the consent of the United States, shall be fined under this title or imprisoned not more than one year, or both under 18USC1853. These people, probably not White Ribbon team, but other teams in pre-history, did a great job of replanting the denuded hillside with ponderosa pine, but it will 75 years before it looks like a virgin forest, if there is no more human interference.

Third, in regards to heaping the slash, caused by felling a madrone snag, on another madrone, and placing a golf club and other metal objects to “secure a lightning strike ruling in California”, White

Ribbon Team is furthermore subject to up to \$500 fine for Fire under 36CFR §261.5 (a) Carelessly or negligently throwing or placing any ignited substance or other substance that may cause a fire. The slash structure posing a fire hazard to a madrone tree was dismantled and a golf club and other metal objects posing a lightning strike risk were removed. Another, even larger timber and stick structure was dismantled, trash removed and cornea abraded trampling a path to the creek that any forest labor in that area should have done in the first place, to ensure they had removed all the ticks from their body within 24 hours to prevent Lyme disease. Too bad the tipi toppling settlers with the Ashland camping prohibition disturb the Forest Service Law Enforcement whose urine stained copy of a huge book titled Urania and black bear was competitive with work release porto-potty trash and syringe bait-and-switch operations. I don't feed black bears huge bags hanging from trees they climb better than I anymore, I keep my food in a backpack and stand up on two legs and roar if they come for dinner or clutch a metal rod and tell the bear bedtime stories. There is little that frightens a black bear more than to find out Goldilocks ate their porridge.

Argument 6 Forest Succession

Plant communities develop through a process called 'succession', which involves change in community composition and structure over time. All communities are subject to natural disturbances of different kinds that can kill existing members of the community and reset successional processes to varying degrees. Fires, insect and disease outbreaks, floods and windstorms all affect plant communities. However, in the boreal forest, fire is the dominant short-term influence, determining the distribution and growth of forest stands. Historic records show that area burn every 50 to 150 years on average, depending on the local site conditions. Few boreal forest stands reach an age of more than 150-200 years. Because of frequent forest fires, the boreal forest is characterized by large areas of even-aged stands, composed mainly of pioneer species established after fire. Very dynamic disturbance regimes and complex succession have resulted in high ecosystem diversity, with a mosaic of habitats, vegetation types and successional stages over the landscape. Many boreal trees are adapted to surviving the effects of fire. Some trees (jack and lodgepole pine and black spruce) keep their cones for several years. The cones, containing viable seeds, are sealed until the cone scales are opened by the heat of fire. The seeds are released after the fire has passed, and they germinate readily on the mineral soil exposed by the fire. Aspen has a different reproductive strategy: although its above-ground parts may be killed by the fire, most roots survive and produce sprouts. Paper birch usually produces suckers from the root collar, resulting in multiple-stemmed clumps. Understory plants can survive as seeds buried in the soil for decades, only to germinate when the overstory is removed. As young forests grow into older ones, they pass through a series of characteristic development stages. Old growth is the final stage of forest development. Some changes that occur as a forest develops related to the replacement of species characteristic of early successional stages by species of later stages. Fast-growing shade-intolerant species such as aspen and pine are replaced with slower-growing but more shade-tolerant species such as white spruce and balsam fir as the canopy of the pioneer forest closes. If left undisturbed, these shade-tolerant species will dominate the forest and the pioneer species will decline in number. The next generation is composed of species that are able to regenerate under dense shade (balsam fir), with the other species occurring in occasional openings created by the death of old trees. However, this relatively stable (climax) community is rarely encountered in the boreal forest because this successional sequence is usually interrupted by fires. There are many characteristics of old forests that are not found in younger forests, especially young forests managed for timber production. Structural attributes characteristic of older forests are a wide range of tree sizes and ages, and a patchy, open canopy punctuated by gaps beneath which the forest understory is especially well-developed. Various combinations of old-growth-like characteristics can certainly be found in some younger forests. This is

especially true for stands regenerating without human interference after natural disturbances, or after logging in the early days of the industry, when harvesting operations were less efficient at removing all of the living trees, snags and logs. Modern forest plantations that are managed intensively for timber production on shorter rotations retain or create old-forest-like characteristics in younger forest, are the at the forefront of applied research in forest ecology and management (Kershner *et al* '95: 14, 15).

Essentially any human disturbance retards the recovery of old growth forest by succession and should not be subsidized as a rule. Some aspects of succession have great significance for people. For example, when European settlers first came to California in large numbers, they found a magnificent forest of sugar pine (*Pinus lambertiana*) along much of the length of the Sierra Nevada. Later, although conservationists tried to preserve some of this forest in national parks and national forests, many of the stands of pines were eventually replaced by other trees, such as white fir (*Abies concolor*) and incense cedar (*Calocedrus decturrens*). The reason is that the sugar pine was a member of a certain stage in succession in the forests of this area, and this stage was maintained by periodic fires. These fires were greatly reduced in number and scope after the influx of Europeans to the area. Without periodic fires of low intensity racing through the groves, a thick growth of brush and smaller trees arose and created conditions so crowded that the sugar pines could not reproduce. Only a system of controlled burning can preserve the remaining groves of sugar pine in their original form. When people alter a landscape, changes are made in the community structure. Given sufficient time, successional processes may gradually restore the original vegetation to the area. For example, in the northern hardwood forests of North America and Eurasia, it is estimated that 60 to 80 years may be required to replace the plant biomass and nutrients removed from the forest by harvesting the trees. In other communities the process may be faster or slower. In any event, it requires a considerable period of time and a source of new seeds for recolonization to be successful. Eventually, succession results in the production of a climax community, which reproduces itself indefinitely unless there are major environmental changes (Raven *et al* '86: 666, 667, 670). Douglas fir (*Pseudotsuga menziesii*) quickly grow to 200 feet tall or more and diameters of 4 to 8 feet on favorable sites. Rocky Mountain Douglas fir seldom exceed 130 feet in height. In 1975 a Douglas fir over 13 feet thick was found it blew over in a hurricane after 800 to 1,000 years. A 170 foot Douglas fir measured 3 ft thick at only 72 years old. Subsidies cultivate Oregon White Oaks (*Quercus garryana*) trees everyone used to live amongst and collect acorns from in the green, lush valley with trails to run on, before the oaks were cut to build the roads, houses and farms of the cities (Arno *et al* '77: 70, 175).

Highly distinctive scrub communities have evolved from mixed deciduous-evergreen forests in areas with Mediterranean climates – areas that are characterized by cool, moist winters and hot, dry summers. Such climates are found along the shores of the Mediterranean Sea, over a large part of California, southern Oregon and northern Baja California, in central Chile, in southwestern Africa and along portions of the coast of southern and southwestern Australia. The plants in these areas – often evergreen or summer-deciduous trees and shrubs – have relatively short growing seasons that are restricted to the cool part of the year, when moisture is relatively abundant. They may lock up nutrients efficiently in their evergreen leaves. In Mediterranean climates, the luxuriant growth of spring is followed by drought and dormancy during the summer. Fire is a prominent ecological factor in Mediterranean-type vegetation. Fire can be a serious problem in such areas as southern California, where dwellings extend far up into the chaparral, evergreen, often spiny shrubs that often form dense thickets. The equivalent vegetation formation around the Mediterranean Sea is called maquis; in Chile, matorral; in South Africa fynbos. Seasonal drought enhances the importance of edaphic (soil-related) and biotic variation, and small differences in precipitation often have profound effects on the vegetation and animal life present in the area. Hence, these areas often have high proportions of extremely local

species of plants and animals, many of them now in great danger of extinction. In their modern form, these areas have already been profoundly changed by people; much of their vegetation occurs now in highly altered condition – for example, with more shrubs and fewer trees, or with more spiny and poisonous plants, than before people occupied those areas with their grazing animals (Raven *et al* '86: 692, 693).

Spatial patterns on landscapes result from complex interactions among physical, biological and social forces. Most landscapes have been influenced by human cultural patterns such as farm fields intermixed with woodlots, town and county parks, and suburbia that surround a town. In turn, the town may have a larger backdrop of managed forests. The resulting landscape is an ever-changing mosaic of little, unaltered patches mixed with heavily manipulated patches of habitat that vary in size, shape, and arrangement. A disturbance is any relatively discrete event that disrupts the structure of a community of plants and animals or disrupts the ecosystem as a whole and thereby changes the availability of resources and thereby restructures the physical environment. Ecosystem altering disturbances range from small grass fires, floods, major storms, earthquakes and tsunamis. The extent of such ecological perturbations as fires, floods, windstorms, insect outbreaks are important processes in shaping a landscape. The connectivity of habitats within a landscape is of prime importance to the persistence of plant and animal species in viable numbers, including healthy populations of predators. These are important in keeping prey species from overexploiting their food sources and consequently degrading the habitat. Whether populations of plants and animals survive in a particular landscape depends on the rate of local extinctions from a patch of habitat and on the rate that an organisms can move among patches of suitable habitat. Species that live in patches of habitat isolated from one another as a result of habitat fragmentation are less likely to persist. Natural disturbances can be long term and chronic, such as huge movements of soil that take place over hundreds of years (termed earth flow), or acute, such as a big, fast-moving fire in a forest. Regardless of the type of disturbance, large, interactive systems perpetually organize themselves to a critical state in which a minor event can start a chain reaction that leads to a systemic, and often dramatic, catastrophe, after which the system will begin organizing toward the next critical state (Maser *et al* '10: 105-111).

Besides the cycles of fire, disturbances come in many scales. Such things as age, disease, injury, and wind also play significant roles in forests. Trees that die from disease and fall often seem to be randomly oriented on a slope, whereas those blown over by wind usually fall in a relatively consistent direction. The fallen trees become mixed with snags that break as they fall and other trees that periodically topple because their roots are weakened by fungal rot. Regardless of how jumbled the fallen trees are initially they eventually become part of the soil from which the forests of today grow. The surface of the floor in an old forest that has not been disturbed by human endeavors is not a smooth slope. The forest floor is roughened by scattered stumps, pieces of collapsed snags, and whole fallen trees, their up-rooted butts, and the pits and mounds left by their uprooting. Living trees make the forest floor uneven by sending roots outward along slopes, often near the surface. And tree trunks distort the surface by sloughing bark and arresting creeping soil at their bases. Large, stable trees lying along a slope help reduce erosion by forming a barrier to creeping and traveling soils that would end up at the bottom of the slope. Traveling soil with its nutrients deposited on the uphill side of fallen trees reduces nutrient loss from the site and forms excellent places for establishment and growth of vegetation, including seedling trees, such as those of western hemlock. The interactions of fallen trees with the soil are mediated by steepness of slope and ruggedness of terrain. A tree fallen on flat ground is much more likely to contact the soil along its entire length than one on steep or rough ground. The proportion of a fallen tree in contact with the soil determines the water-holding capacity of the wood. How a tree lies on the forest floor and the duration of sunlight it receives strongly influence its internal processes and biotic community (Maser *et*

al '10: 148).

The occurrence of drought can have serious consequences on forest vegetation and drought conditions favor large-scale fires and increase incidence of lightning-caused fires. Flooding is a natural disturbance to which species have become well adapted. The magnitude of flooding or period of occurrence may be so long, that the event is destructive. Silt deposited by extreme flooding events can adversely affect the understory vegetation. Ice storms selectively remove overstory species and can cause extensive tree uprooting. Snow avalanches are destructive, stand-leveling disturbance in cold, mountainous regions. Species that bend when small, e.g. lodgepole pine and Englemann spruce, are broken at larger diameter (>6 cm) by avalanches in the southern Canadian Rockies. Other species that remain small, e.g. birch (*Betula glandulosa*) and willow (*Salix glauca*) generally do not break. Severe winter temperatures have been proposed as a factor in the decline of red spruce in the Northeast along and in combination with drought, after low temperature (-40° to -46 C°). Windthrow occurs when tree boles are snapped or the bole is pushed over, resulting in the exposure of much mineral soil adhered to the root system (Leopold et al '97: 72).

Following stand-replacement disturbances, forests change through growth, competition and mortality. The changes follow a similar pattern in many temperate and tropical forests, which many scientists explain in different ways. Stand initiation stage is the time when plants become established after a disturbance, also referred to as the aggradation phase, the stand initiation phase, or the establishment phase in Holarctic forests and the gap phase in Neotropical and Paleotropical rain forests. Stem exclusion stage occurs after several years, new trees do not appear and some of the existing ones die as the forest grows and becomes crowded. The newly formed structure has been referred to as the transition phase, stem exclusion stage or thinning stage in Holarctic forests and the building phase, small sapling phase, or pole phase in Paleotropical or Neotropical rain forests. The understory reinitiation and Old growth stages occur as trees grow taller and variations in tree heights and diameters increase. The new structures have been separated into two phases – the understory reinitiation and old growth stages or the transition and steady state phases. Similar structures are considered the mature phase in tropical rain forests. An old growth structure has been referred to as any forest with a specific set of structures which develop after partial (non-stand replacing) disturbances (Oliver '96: 189, 190).

Each forest type has one or more characteristic developmental sequences, or stages, known collectively as succession. The advance and retreat of glaciers provide an extreme example of successional processes. As a glacier retreats, soil and plants are removed, often leaving only scraped rock and unconsolidated mineral substrate (such as sand and gravel). These materials are low in organic matter and lack structural complexity and stability. Willows and alders might be the first trees to establish on this rugged, difficult terrain. Pioneer plants, such as alders, lupine and ceanothus, contain nitrogen-fixing bacteria in nodules on their roots. These bacteria enrich the soil by removing molecular nitrogen from the air and incorporating it in the soil in soluble forms suitable for plant root uptake. Once the soil has been improved by these pioneers, other plants can become established in their turn. This process continues until a dynamically stable state has been reached in which no further broad-scale species replacements are likely (Berger '08: 20, 21).

Succession is the orderly and predictable replacement of plant and animal communities as conditions change over time. Forest succession is fueled by the relative tolerance of trees to competitive conditions. Complements of species are adapted to changing forest environments, but the growth and maintenance of these species lead to further changes. Each succeeding complement tends to persist longer than the species it replaced until the site is occupied by a complement of species that will persist.

Trees that are capable of fulfilling their life cycle- reproduction, establishment, growth and maintenance – in extremely competitive circumstances are said to be tolerant. These species are often found in the understory of older stands where timber has been lightly harvested in the past, or in the overstory as old-growth sentinels – and in the understory – of very mature stands. Only species that are capable of establishing offspring in their own shade will persist when a successional pattern reaches climax. Environmental change in an undisturbed climax association is very slow and mostly associated with replacement of old-growth trees that succumb to a combination of stresses, causing them to relinquish their positions in the canopy usually to offspring (or close relatives). Relative tolerant to low light is a determining factor. Tolerant species are capable of growing in shaded conditions. The more shaded conditions the more tolerant the tree, and the more likely it is to persist in a climax forest (McEvoy '04: 31-33).

An intolerant species, is intolerant of highly competitive and low-light conditions, and are incapable of reproducing, establishing, growing and maintaining themselves under their own canopies. The intolerants, or pioneers, since they are the first species to invade disturbed sites. For example, aspen, reproduces with prolific quantities of light, wind-borne seed that can easily germinate on bare soil, exactly the sort of reproduction strategy one would expect of a species that is incapable of germinating in its own shade. But this same species will also sprout from dormant buds on the root system that are triggered to develop when the trees detects that the top is missing and soils are warmed by sunlight. Clearcutting is the only method that will successfully reproduce aspen. Other examples of intolerant reproduction strategies: The jack pine of northern Michigan is adapted to fire. It produces a cone sealed with pitch that must be softened by light, hot sunlight, or fire. Cones open explosively, ejecting seeds usually onto a recently burned surface where seed will germinate even in extremely harsh conditions. Jack pine is the principal species of one of a few forest types in the United States that are adapted to fire. Also known fire-dependent communities, some other examples are chaparral forest of the western United States and lodgepole pine in the intermountain areas of the West, where aspen is also considered a fire-dependent community. Pin cherry, a noncommercial species of northeastern United States, is attractive to birds and other animals for the pulp of its fruit. When the seed passes, it is capable of living in the soil for periods in excess of 120 years, waiting for a catastrophe to remove the overstory and allow the warmth of sunlight to trigger germination. Although not really considered a fire-dependent community, when pin cherry seed is in the soil, a fire will promote conditions that favor germination.

The Ohia tree, native to the Hawaiian Islands, has a wind-borne seed that germinated on relatively recent, grainy lava flows. It is a very slow-growing tree, which is uncharacteristic of intolerant species as a whole, but it also develops into pure stands with a very dense canopy. Although the Ohia is intolerant of shaded conditions, and thus qualifies as a pioneer species, it also forms a climax type on sites where it grows. This is known as an edaphic climax because soil conditions are the primary controlling factor. Douglas-fir is considered a midtolerant species of the northwestern forest that is adapted to periodic catastrophic fires, which prepared an ideal seed bed for Douglas-fir seed. Once established, it is fairly resistant to fire (except when fire gets into tree crowns), and it is a relatively long-lived species. In the absence of disturbances, Douglas-fir stands are gradually replaced by a more tolerant trees like western hemlock, noble, silver and grand fir, and western red cedar, depending on elevation and latitude. Generally, as succession progresses from pioneer to climax species, ecosystem complexity tends to increase, as does biodiversity and tolerance. With each step in succession, stability tends to increase so that each succeeding change will last longer than the preceding stand, but the ability of the stand to recover from disturbances decreases. For example, if an aspen stand is clearcut or burned or blown down by a hurricane, it comes back as aspen. But if a climax sugar maple forest is

clearcut succession is set back to an earlier stage (McEvoy '04: 33-36).

When a forest-replacing fire occurs, it seldom kills all trees. Various numbers of live trees are left standing as individuals, small island-like clumps, or in "rows" commonly termed "stringers". Most of the trees killed by the flames and heat remain standing as snags through subsequent decades. The burned forest then commences what is called "autogenic" or "self-induced" succession. The stages of autogenic succession are a dynamic web of interrelated events in which no part of the web can exist without most or all of the other parts, because their mutual interrelationships determine the dynamics of the structural whole. Autogenic succession above ground in the Pacific northwestern United States begins with grasses, other herbaceous plants, and various shrubs in a burned area. They gradually alter the characteristics of the soil, such as the pH, until it is no longer optimum for their survival and growth. As the offspring succumb to the changes in the soil and the parent plants age, die, and are not replaced, openings appear in the vegetative cover that allow shrubs to become established in an early shrub state. Alternatively, many fire-adapted shrubs, such as vine maple, may have all their background parts killed by a fire but their roots and stumps survive to send forth new sprouts, establishing a new shrub stage without an initial herbaceous state. It can take decades before the shrubs give way to tree seedlings. In turn, the shrub-seedling stage becomes the sapling stage, then a young-forest stage, a mature-forest stage, and finally an old-growth-forest stage. The six generalized autogenic, successional stages that a western coniferous forest goes through can be characterized: herbaceous ? shrub-seedling ? young-forest ? mature forest ? old-growth forest ? fire or other disturbance, which starts the cycle over (Maser et al '10: 146-148).

When invertebrates, such as earthworms, and small mammals, such as red-backed voles, commence burrowing into the new soil, they not only enrich it nutritionally with their feces and urine but also constantly mix these nutrients in the soil through their burrowing activities. Below-ground autogenic succession after a fire begins with restoration of the nutrient-capturing and nitrogen-fixing soil microorganisms needed to minimize the loss of nutrients through leaching and to replace nitrogen burned off by the fire. Where over-story and understory plants survive a fire, the restoration process is jump-started by the survival of living roots systems below the zone of heat damage; the latter normally occurs near the surface, except where old stumps and their roots burn down into the soil. Many of the mycorrhizae, with their attendant webs of filaments in the soil, can continue to capture nutrients in the soil solution and promote nitrogen fixation by their association with free-living bacteria or, in the case of legumes and nodulated shrubs and trees, by their symbiotic nodule-forming organisms. Not all organisms that survive a fire will persist long thereafter. The increased solar radiation permitted by reduction or loss of the forest canopy arms the soil, which, when coupled with the conversion of organic material to ash, critically alters the temperature, nutrient balance, nutrient storage capacity, and pH of the soil. Many soil organisms that initially survive the fire will be unfit for this changed milieu and perish. Those that can adapt will survive and fill the niches vacated by those that cannot, thereby taking over many functions of the departed. Morels, which commonly fruit in spring as post-fire fungi, are mushrooms characterized by conical caps with large pits separated by ridges. As plants resprout or seedlings become established on burn sites, they begin to rebuild a litter layer and gradually form a partial canopy. The soil spore bank, which likely includes species that are adapted to early successional conditions, provides an inoculum for seedlings and replaces some of the fungi that had occupied the root systems in the pre-fire stand, but which are not adapted to the burned conditions. The developing litter layer produces humus over time and thus modifies the physical and chemical properties of the soil in ways that permit the reentry of mycorrhizal fungi that thrive better with organic matter than without (Maser et al '10: 148, 152).

Mycorrhizal fungi appear to be all, or nearly all, obligate symbionts and thus die without their host. Though fungi may survive, death of the host plant is accompanied by profound changes in the habitat. Heavy shade is replaced by intermittent shade. The fire also burns some or all of the organic matter on the soil, the leaf litter that forms an insulating blanket and barrier to loss of moisture by evaporation. The result of all this is a change in soil temperatures and moisture content over the seasons. In the spring of temperate forest systems, the daytime solar isolation warms the soil of the burned forest earlier in the season than happens under the shade of living trees. At nighttime, in contrast, the soil loses heat faster. In areas of low spring temperatures, it becomes more prone to frost and frost heaving. In summer, the soil becomes progressively warmer, and soil moisture evaporates more rapidly than in spring. In autumn, the soil may remain warmed later during the day, but also be more prone than in summer to frost overnight. Some fungi may adapt to or even thrive in the new conditions, whereas others, adapted to the cooler, moister soils under the forest canopy and litter layer, may fail to adapt and will disappear from the burned system. A new succession begins as soon as new mycorrhizal host seedlings enter the disturbed system, with the early successional fungal species occupying the niches vacated by the fungi that had flourished in the shade of well-established forests with abundant leaf litter. The successful fungi may have survived on roots of stumps as minor components of the preceding forest, but more likely they will form new colonies from spores in the soil. Prescribed burning in California pine forest decreased the ectomycorrhiza biomass by almost 90 percent in the upper organic layer of the soil as compared to unburned sites. In Oregon it was found that an autumn prescribed burn largely removed live root biomass to a depth of 4 inches and significantly reduced species richness for at least two years, whereas a spring burn did not significantly affect either root biomass or species richness. In another Australian study at two-month sampling, nineteen species of truffles and mushrooms were found on unburned sites and only two on the burned sites. The ten unburned plots yielded 341 fruit-bodies, whereas the ten burned plots yielded eight fruit-bodies (Maser et al '10: 137-139).

Argument 7 Fire Extinguishment

Prescribed burning and programmes to reduce fuel buildup are colonial priorities in Australia, Canada, the United States and elsewhere and state funding to burn slash must be prohibited by law to prevent the pillaging of the forest. In the United States, the main agencies involved in fire management (the Forest Service of the United States Department of Agriculture and the National Park Service and Bureau of Land Management of the Department of the Interior) conducted prescribed burning on more than 1 million hectares for fuel load reduction and other objectives. The global fire community met in 2003 at an International Wildland Fire Summit in Sydney, Australia, to agree on principles to adapt international wildland fire management projects and exchanges to local ecological and social conditions (McConnell et al '05: 38, 39). The uncontrolled accumulation of dead wood increases the probability that a forest will burn. Once available, the dead wood, to ignite, needs only one or two very dry, hot years with lightning storms. The ensuing fire kills part of a forest, setting them back to the earliest developmental stage (Maser et al '10: 4). In many forests, huge buildups of fuel necessitate expensive remedial control efforts to reduce fuel loads so that controlled burns can be conducted. In other areas, the excessive removal of brush, downed wood, and snags (standing dead trees) that provided habitat for beneficial insects, birds, and mammals which keep forest diseases and infestations from reaching epidemic proportion. Removal of these forest integuments - often accompanied by the application of chemical herbicides - coupled with the decisions by industrial foresters to replace natural multi-aged, multi-species, multi-layered canopies of trees with single-aged, single-species stands of commercial timber, has left woods susceptible to ruinous plagues of bark beetles, budworms and other vectors (organisms that transmit pathogens) which timber managers typically have responded to with massive applications of pesticides. Over several decades, millions of pounds of toxic chemicals that often endanger both non-

target species and water quality have been sprayed over millions of forest acres. While these treatments temporarily address the symptoms of forest imbalance, they do nothing fundamental to redress it, and so the imbalance generally reappears in another guise, which may be misinterpreted by industrial timber managers as yet another reason for chemical control technology (Berger '08: 21, 22).

Wild forests periodically and naturally have wildfires, one of nature's ways of cleansing the forest of dead and dying material, opening cones and other seed stores to release seed, removing insects and disease, releasing nutrients, and - through the patchy nature of most periodic burns - introducing additional habitat heterogeneity. These fires play an important ecological role in forest ecosystems and succession. Woody debris on the first floor is consumed as flames scorch the ground, preventing fuels from accumulating in sufficient quantities to produce hotter and more damaging blazes. A species' degree of susceptibility to fire influences its place in a forest's pattern of succession and may determine whether it dominates or relinquishes a site to another species. The forces needed to repair the damage done by fire will be set in motion by the fire itself. Ash raises the alkalinity of the soil thereby improving its habitability by nitrogen-fixing bacteria that can restore nitrogen to the ecosystem. Plants that are able to thrive on bare ground, or in disturbed areas, sprout after fires, and begin the forest repair process. These pioneer species generally have rhizobium nodules of nitrogen-fixing bacteria on their roots. The new roots also hold the soil against erosion and break up compaction. Then, as the pioneer plants shed body parts, they begin building a new supply of organic materials in the soil to replace those consumed by the fire. When fire is long delayed, fuel accumulates, so that the inevitable fire will be an inferno. It climbs up tree trunks as if ascending a ladder and burns off tree crowns, killing the trees instead of just singeing the bark. Because of the intense heat, the soil may also be damaged. It may form a crust that resists water, delays forest recovery and leads to erosion (Berger '08: 21).

The importance of fire varies greatly by region and forest type. Depending on severity, fire can selectively remove fire-sensitive species, e.g. American beech and balsam fir, or can eliminate all vegetation. Thick-bark conifer species, e.g., eastern white pine, pitch pine (*Pinus rigis*, longleaf pine (*Pinus palustris*) and ponderosa pine (*Pinus ponderosa*) can often survive moderate burns. Catastrophic fires appear to be important stand initiators in forests dominated by pine (*Pinus* spp.) and other evergreen tree and shrub species. The northern hardwood and spruce-fir forest types appear fairly resistant to fire, with natural fire return interval of around 1000 years or more. Fire became a more important factor in the Northeast following logging in the region in the late 1800s and early 1900s and subsequent transportation of logs by locomotives. Low intensity fires in interior Pacific Northwest coniferous forests combined with logging practices, have led to overstocking of stands and change in stand composition towards dominance by Douglas-fir (*Pseudotsuga menziesii*) and grand fir (*Abies grandis*). Concomitantly, western pine beetle (*Dendroctonus brevicomis*) and mountain pine beetle (*Dendroctonus ponderosae*) outbreaks have become much more severe, as has damage by root pathogens and dwarf mistletoe (Leopold et al '97: , 70).

Fire exists in almost every part of the world and is the most common disturbance of vegetation (Harris & Ashton '97: 83). Between 300 and 400 million hectares burn annually worldwide, much of it in Africa. The Global Fire Monitoring center (GFM) and the Global Observation of Forest Cover Fire Implementation Team have called for international joint efforts to launch an operational space-borne fire monitoring system that will allow real-time and complete coverage of wildland fire events and fire impact around the world. The total global area burned in 2002 and 2003 – of which about half was in Africa – appears to be comparable to long term averages, in the annual range of 300 to 400 million hectares per year. According to daily updates of GFMC, wildland fires continue to claim lives, destroy valuable private and public property and emit compounds that affect the composition and functioning of

the atmosphere. Wildland fires and land-use fires consume an estimated average of more than 9 billion tonnes of vegetative biomass globally each year. On average, nearly 100,000 wildfires burn approximately 7 million acres of land each year. Most of the past century's wildfire activity has been seasonal in nature. However, recent years have proven otherwise, and we have experienced fire activity in every month of the calendar year. Firefighters are successful in extinguishing 97% of these 100,000 fires and containing them to less than 10 acres in size. No other country comes close to this benchmark of success. Costs average about \$4.7 billion per year for federal (USDA, DOI, DOD and other federal agencies), state and local governments for suppression of these wildland fires that escape initial action. In the 1960s the U.S. lost on average about 209 structures per year, each subsequent decade shows growing numbers in this escalating trend and between 2000 to 2010 38,601 structures burned. There are 56,000 wildland firefighters within the federal and state government; this includes all employees utilized for firefighting, even if it is not their primary job. In the Fire Service, there are about 1.1 million structural firefighters, roughly 825,000 volunteer and 275,000-paid career. It is estimated that about 100,000 are involved with wildland firefighting to some degree or another. It is interesting to see that there are estimated to be about 18,590 contract wildland firefighters, helping to fill the gap in personnel needs in very active fire seasons. Between 2001-2012, over 200 on-duty Wildfire Fighter fatalities occurred. That comes to about 20 deaths per 100,000 workers, or 20 deaths per year. The 2013 fire season has been one of the most catastrophic seasons on record; as of July 1, at least 24 workers have died while performing wildland fire related duties. Nineteen of these deaths occurred during the recent Yarnell Hill fire in Arizona (Bailey '13). Common hazards faced on the fire line can include burnovers/entrapments, heat-related illnesses and injuries, smoke inhalation, vehicle-related injuries (including aircraft), slips, trips, and falls. Wildland firefighters must also be aware of increased risks of heat-related illness and rhabdomyolysis resulting from the breakdown of damaged muscle tissue and can cause permanent disability or death.

During 2002-2003, unprecedented high temperatures and drought in several regions broke records dating back 150 years. Extreme conditions resulted in severe fires in Australia (around Canberra), Canada (British Columbia), Italy, Portugal and the United States (California) causing the loss of more than 100 lives. 2 million hectares have been burnt on average for the past eight years in the United States. In Portugal fire area quadrupled compared with average years, and in France the area more than doubled the average. In South Africa, large stores of industrial roundwood burned in 2003, while in the Russian Federation, 24 million hectares of coniferous forests and other lands were affected by wildfires in the same year. In tropical Asia and Latin America, land-use fires and associated smoke pollution continued to affect public health and safety. Human casualties caused by mudslides occurring after fires or flash floods and public health affected by extreme wildland fire smoke pollution. Forest health is also affected by wildfires, which are often associated with insect infestation, for example of Siberian moth (*Dendrolimus superans sibiricus*) in Mongolia and the Russian Federation and Southern pine beetle (*Dendroctonus frontalis*) in most Central American countries (McConnel et al '05: x, 36, 37).

Satellite photos revealed more than 72,000 fires burning in the Amazon just in the first half of August 1995. As much as six million square kilometers (2.3 million square miles) were covered with smoke at one time, in Bolivia, Paraguay and Uruguay. In 2002, more than 9,100 square miles of the Brazilian Amazon were destroyed. Current estimated annual rates of deforestation are 9,700 to 11,600 square miles per year. In 2002 the state of Amapa, Brazil created the Tumucumaque Mountains National Park, the world's largest tropical forest park. In tropical areas, few forests can recover from large-scale logging and burning. Tropical rainforest soils tend to be infertile, despite the profusion of vegetation. Most of the nutrients are found in the standing vegetation, from which they circulate rather rapidly to the soil and back to the forest trees and other vegetation. Irreversible soil changes ensue within a few

years of exposing many tropical forest soils to the hot sun and torrential rains. Rather than experience gradual decline, species-rich tropical forests are reduced to virtual wastelands through logging within a few years time. The ratio of deforestation to reforestation in the tropics is something like ten acres to one. A "green seal" label of the Forest Stewardship Council means that timber has been produced in environmentally responsible ways. More than half of the deforestation in the tropics is done by "displaced landless peasants". The value of sustainable products exported by indigenous communities, such as ecotourism, medicinal plants, spices, scents, nuts, latex (for rubber) and fruits, can, in theory, produce more revenues than either one-time removal of timber or marginal cattle grazing (Berger '08: 218-220).

In 2000 the nation experienced its most severe fire season in decades when some 8.4 million acres burned in 122,000 fires. In 2001, however, only 3.6 million acres burned - far below the national average for the previous eighty years (about fourteen million acres). The size of the acreage burned in 2000, while unusually large relative to the average acreage burned during the previous decade (3.8 million acres), was less than the average annual acreages burned in the four decades from 1919-1959 (24.4 million acres). Similarly, while the 6.9 million acres that burned in 2002 was substantially above the annual average during the preceding ten years (4.2 million acres), it was not unusual: fire seasons in which acreages similar to the 2002 total also burned had occurred as recently as 1996 (6.7 million acres) and 1988 (7.4 million acres). The number of fires in 2002 was less than the average number of fires occurring in every decade from the 1920s through the 1990s. These averages ranged from a low average rate of 97,599 fires per year from 1899-1929, to a high average rate of 163,329 fires per year from 1980-1989. During the 1990s, fewer acres burned annually on average than during the 1920s-1960s, and again through the 1980s (Berger '08: 91, 92).

Fire, nature's primary disturbance regime, was historically common in forests and woodlands, most frequently as low-intensity fires, with occasional large fires of high intensity. Fire patterns represent the natural conditions that created the forests. As such, they are a healthy part of the landscape-scale diversity when viewed over time. Unlike forest fires of a century ago, those of today are increasingly and more frequently destructive both to forests and private property. Such fires are promoted by (1) the long history of fire suppression, (2) the buildup of dead wood that accompanied fire suppression, (3) the unabated growth of shade-tolerant understory trees that accompany fire suppression, and (4) the continuing trend toward homogeneous monocultures of young trees with highly flammable, packed crowns close to the ground. The energy acquired by forests from the sun is dissipated gradually through decomposition or rapidly through fire. In most areas, fires burn frequently enough – without human intervention – to control the amount of energy stored in the accumulating woody debris. Once the stored energy is released, the forest is protected for decades, even centuries, from a fire large enough to begin the forest cycle anew. Such fires may have burned for weeks in decades past, but as general low intensities because of the limited amount of fuel. These were forest maintenance fires, which protected the forest, rather than stand-replacing conflagrations. Over time, however, a forest eventually builds up enough dead wood on the ground to fuel a major fire. Once available, the fuel needs only one or two very dry, hot years with lightning storms to ignite such a conflagration, which alters the forest's existing composition and structure and sets it back in succession to an earlier stage, such as grasses and herbs. From this early state, a new forest evolves toward the old-growth stage, again accumulating stores energy in dead wood, again organizing itself toward the next critical state. Following fire, a forest, through resilience – the ability of the system to retain the integrity of its basic relationships – ay eventually approximate what it had once been (Maser et al '10: 110, 111).

Fire is a physical process through which nature influences the configuration of forests in the western

United States. Since the advent of fire suppression, both the number of trees and the amount of woody fuels per acre or hectare has generally increased. Habitat has also shifted from open, savannah-like conditions to dense forest. The extent of quaking aspen, which often resprouts from roots following fire, has decreased. Moreover, there has been a corresponding increase in shade-tolerant species of trees under closed canopies. And, some of these shade-tolerant trees have grown into the forest canopy to form “fire ladders” that enable fire near the ground to burn upward into the tops of large trees. Many plants have special adaptations to fire, even physiological requirements for fire. As pines age, for example, they develop thick bark, which insulates their living stem tissue from intense heat; further, as bark reaches a certain temperature, bubbles of resin within it explode, casting tiny, smoldering pieces away from the trunk, an effective mechanism for reducing a dangerous buildup of heat. Many species of eucalypts have epicormic strands under their bark that produce sprouts along the stem and limbs after fire defoliates the tree. The influence of fire on a particular ecosystem is strongly historical. Unusually long periods without fire may lead to the establishment of fire-susceptible species. The simultaneous occurrence of such fire-free periods and wetter climatic conditions may also be extremely important to such species as ponderosa pine, which have episodic patterns of regeneration as opposed to Douglas-fir whose regeneration patterns are generally more continual. Although climatic change accounts in part for increased numbers of large “wildfires”, changes in forest structure and composition are likely to be just as significant (Maser et al 2010: 111).

Intensive study of historical fires has failed to document any cases wherein fire killed a forest by burning through treetops in the ponderosa pine forests of the American Southwest prior to 1900. In contrast, numerous fires since 1950 exceeding 5,000 acres (2,025 hectares) have burned forests more intensively than earlier fires. The intensity of these fires is attributed to the amount of woody fuels on the forest floor, especially fine woody fuels, and to dense stands of young trees within the forest – both of which have come about since 1900. The fire patterns, on the ground and in the air, show that fires are “opportunistic” in their burning and so leave a mosaic of habitats. This mosaic is created because a given fire may burn intensely in one area, coolly in another, moderately in still another, all of which depends on what kind of fuels it encounters; how large they are; how dry they are; and how they are arranged. By “arranged” is meant whether they are dead wood lying horizontally on the ground, flammable snags, extending above the canopy of young trees with their closely packed crowns; or small, live trees that form fire ladders of explosive fuel as they reach into the crowns of the large, old trees under which they grow (Maser et al 2010: 111, 113, 114).

A large forest fire burned in the Klamath-Siskiyou region of the southwestern corner of Oregon in the summer of 2002. Named the “Biscuit Fire” it began on July 28 with a lightning strike, and by August 10 was the largest fire on record in Oregon in more than a century. With a crew of 6,607 people and a cost of \$167 million the Biscuit Fire burned over a half-million acres, it was equivalent to the cost of about eight national forests. Satellite images revealed that about 20 percent (100,000 acres or 40,500 hectares) of the area within the fire’s perimeter had not been burned, and more than 40 percent (200,000 acres or 80,100 hectares) had burned at low intensity, leaving live, green trees while clearing out the understory of areas overgrown with vegetation due to decades without fire. About 60 percent of the landscape within the fire perimeter experienced little or no mortality of the overstory trees. Of the remaining 40 percent of the burn (about 200,000 acres or 81,000 hectares), about 24 percent (120,000 acres or 48,600 hectares) burned with moderate intensity, clearing the ground of dense understory vegetation; it is thought to have killed most, but not all, of the overstory trees without consuming the needles, which had turned brown. Although it was one of the largest fires in modern Oregon history, the Biscuit Fire burned only 16 percent of its area (about 80,000 acres or 32,400 hectares) intensely enough to leave behind little more than ashes, charcoal, and dead trees. This pattern is characteristic of most

wildfires. With respect to global warming, large wildfires increased suddenly and dramatically in the mid-1980s, with a greater frequency of large, longer-burning fires that occurred earlier (Maser et al 10: 114-120).

Smokey Bear has convinced the public that forest fire is terrible and wasteful. The new message must be that fires set by careless people can be needlessly destructive, but fires, under specific conditions, can be simultaneously beneficial and necessary to the long-term ecological health of forests. The use of fire formed the basis of many Aboriginal skills and was used among other purposes, to (1) assist in moving the landscape; (2) drive animals into the open for hunting; (3) encourage the growth of green shoots of fresh grass, (4) sharpen and harden digging sticks; (5) manufacture bark canoes; (6) send smoke signals on the plains; (7) illuminate their camp at night; (8) repel mosquitoes; and (9) keep warm. A 1910 article in *Sunset Magazine* recommended to the fledgling Forest Service that it use the indigenous method of setting “cool fires” in the spring and autumn to keep the forests open, consume accumulated fuel and in so doing protect the forest from catastrophic fire. Ironically, that recommendation came the same year that, in the space of two days fires raced across 3 million acres (1,210,000 hectares) in Idaho and Montana and killed eighty-five firefighters in what is called the “Big Blowup”. It would be ten years after the Big Blowup before many fires in western forests and grasslands were effectively controlled. For decades thereafter, the U.S. Forest Service was dedicated to putting all fires out. By 1926, the objective was to control all fires before they grew to 10 acres in size. A decade later the policy was to stop all fires by 10 am on the second day (Maser et al '10: 142, 125, 120, 131).

Argument 8 Pacific Coast Rainmaking Technology Fund

The purpose of Oregon Revised Statute (ORS) §558.010 is to promote to California the public health, safety and welfare by providing for the licensing, regulation and control of interference by artificial means with the natural precipitation of rain, snow, hail, moisture or water in any form contained in the atmosphere under the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques of 1977. Any person desiring to artificially modify the weather shall file with the State Department of Agriculture an application for a license under ORS §558.040 proof of \$700,000 financial responsibility for injury or death caused to self, others and the environmental victims of flood and mudslide victims under ORS §558.050 & .054. Airports are independent of state regulation in regards to weather modification under ORS §558.066. Weather modification districts...may enter into cooperative agreements with each other providing for the joint use or control of facilities for weather modification under ORS §558.325 with responsibility for the Contents of Hearing Notice under ORS §558.080. Locally, OWEB has an environmentally responsible reputation for dumping the organic silt from the city drinking water reservoir in the lot behind the no dumping sign, using their gated access road that often runs with 100 feet of their effluent creek that waters Lithia Park, but does not harm the city drinking water and respects the national forest boundary marker and trailhead at the vernal pool of the Coastal Tailed Frog *Ascaphus truei* threatened in the Pacific Northwest, although the \$6 million burn grant for Lomakatsi must be saved from arson by Ashland Parks and Recreations and Ashland has a balanced budget. A weather modification district shall obtain not later than the 60th day after the date of the election forming such district and before beginning any weather modification activities liability insurance coverage of not less than \$500,000 bodily injury and \$500,000 property damage, to reimburse persons for damages arising from weather modification activities under ORS §558.320. The Jackson County commissioners at any regular meeting of the board of commissioners may call a special election of the electors of the district under ORS §558.440 to get Ashland City Council the quorum and weather modification district the West Coast needs from OWEB grant recipients, as soon as possible.

Chico Sky Watch A GeoEngineering & Aerosol Spraying Awareness and Action Group lists a number of weather modification patents since Robert K. Jones filed US Patent No. 3,429,507 Rainmaker from Walnut Creek, California on July 26, 1966. Other weather modification patents must be scrutinized for benevolence. Herbert Uram filed Method and System For Hurricane Control Patent Publication No. 2002 0008155 January 24, 2002. Philip W. Kithil filed Oceanic Layers Modification Methods, Apparatus, Systems and Applications US Patent No. 20080175728 A1 on July 24, 2008. Furthermore, in 2012 A.S. Trust & Holdings was awarded a U.S. patent for the formula of a blend of pure hydrocarbons that has been designated R441A by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). R441A has been certified by independent testing laboratory Intertek as having a very low Global Warming Potential (GWP) as well as a zero Ozone Depletion Potential (ODP). To use the latest in hydrocarbon fueled oceanic heating and cooling pumps to protect the Coastal states against harmful weather conditions such as drought, forest fire and hurricane the United States National Oceanic and Atmospheric Administration (NOAA) must not only monitor the artificial changes to sea surface temperatures caused mostly by subversive arrays of hydrocarbon heating and cooling pumps but license the deployment of oceanic heating and cooling pumps (A.S. Trust Holdings '12). Legitimate use of the Pacific Coast Rainmaking Technology fund by the States of California, Oregon and Washington, would be limited to making clouds with a mobile array of maybe 100 hydrocarbon heating and cooling pumps in the coastal waters, to be seeded to extinguishing wildfires (Jones '66). To make clouds on the West Coast a line of submersible oceanic heating and cooling pumps (ASH Trust Holding), would be supplemented by contrail producing jet planes flying parallel to the Coast and another line of heating pumps would be placed out to sea to blow the clouds in the direction of the forest fire to be extinguished (Jones '66). The Atlantic Coast and Caribbean requires a much larger array of cooling pumps to be deployed so that they can be remotely turned on to reduce sea surface temperature below 80 degrees Fahrenheit, only to dissipate hurricanes (Uram '02)(Kithil '08). The NOAA SST Anomaly Chart for March 30, 2017 reveals that the cooling from the breaking off of a large piece of Antarctic ice is dissipating in the Northern Pacific and Atlantic. The artificial warming in the Pacific has gone south to Hawaii and Columbia in the Pacific so the Santa Anna winds are often replaced by a strange southerly. The Atlantic exhibits heating from the Potomac that may be thermal water pollution of equal rudeness with the open burns or an array of heating pumps dangerously blowing wind toward Canada and the hurricane prone Caribbean, whose Antarctic chill may or may not be protected by cooling pumps chilling the water.

Contrails are condensation trails that happen when hot engine exhaust momentarily condenses ice crystals into pencil-thin vapor trails that quickly vanish like the wave behind a boat, like breath on a cold day. Contrails are formed when hot humid air from the engines mixes with the colder surrounding air. The rate at which contrails dissipate is entirely dependent on weather conditions and altitude. If the atmosphere is near saturation, the contrail may exist for some time. Conversely, if the atmosphere is dry, the contrail will dissipate quickly. Chemtrails, is a conspiracy theory regarding contrails that linger for hours and will spread out to form large areas of “cloud” cover. Chemtrials have returned positive for aluminum, barium, bacteria, virus, human blood, and molds. Testing of chemical or biological agents on human subjects is prohibited under 50USC(32)§1520a. Chemicals used in rainmaking are experimental and the public must be informed what agent is used in their area. Cloud seeding could be better regulated to ensure non-toxic commercial grade product use is publicly disclosed. Cloud seeding, a form of weather modification, is the attempt to change the amount or type of precipitation that falls from clouds, by dispersing substances into the air that serve as cloud condensation or ice nuclei, which alter the microphysical processes within the cloud. The most common chemicals used for cloud seeding include silver iodide and dry ice (frozen carbon dioxide). The expansion of liquid propane into a gas has

also been used and can produce ice crystals at higher temperatures than silver iodide. The use of hygroscopic materials, such as salt, is increasing in popularity because of some promising research results. Seeding of clouds requires that they contain super-cooled liquid water—that is, liquid water colder than zero degrees Celsius. Introduction of a substance such as silver iodide, which has a crystalline structure similar to that of ice, will induce freezing nucleation. Dry ice or propane expansion cools the air to such an extent that ice crystals can nucleate spontaneously from the vapor phase. Seeding of warm-season or tropical cumulonimbus (convective) clouds seeks to exploit the latent heat released by freezing. This strategy of "dynamic" seeding assumes that the additional latent heat adds buoyancy, strengthens updrafts, ensures more low-level convergence, and ultimately causes rapid growth of properly selected clouds. Cloud seeding chemicals may be dispersed by aircraft (as in the second figure) or by dispersion devices located on the ground (generators, as in first figure, or canisters fired from anti-aircraft guns or rockets). For release by aircraft, silver iodide flares are ignited and dispersed as an aircraft flies through the inflow of a cloud. When released by devices on the ground, the fine particles are carried downwind and upwards by air currents after release (Jones '66).

Vincent Schaefer (1906–1993) discovered the principle of cloud seeding using dry ice in July 1946. Within the month, Schaefer's colleague, the noted atmospheric scientist Dr. Bernard Vonnegut (brother of novelist Kurt Vonnegut) is credited with discovering another method for "seeding" supercooled cloud water using silver iodide. The first attempt to modify natural clouds in the field through "cloud seeding" began during a flight that began in upstate New York on 13 November 1946. Schaefer was able to cause snow to fall near Mount Greylock in western Massachusetts, after he dumped six pounds of dry ice into the target cloud from a plane after a 60 mile easterly chase from the Schenectady County Airport. From March 1967 until July 1972, the U.S. military's Operation Popeye cloud-seeded silver iodide to extend the monsoon season over North Vietnam, specifically the Ho Chi Minh Trail. The operation resulted in the targeted areas seeing an extension of the monsoon period an average of 30 to 45 days. The 54th Weather Reconnaissance Squadron carried out the operation to "make mud, not war". In 1969 at the Woodstock Festival, various people claimed to have witnessed clouds being seeded by the U.S. military. This was said to be the cause of the rain which lasted throughout most of the festival. An attempt by the United States military to modify hurricanes in the Atlantic basin using cloud seeding in the 1960s was called Project Stormfury was discontinued. The U.S. Bureau of Reclamation of the Department of Interior sponsored several cloud seeding research projects under the umbrella of Project Skywater from 1964 to 1988, and NOAA conducted the Atmospheric Modification Program from 1979 to 1993. The sponsored projects were carried out in several states and two countries (Thailand and Morocco), studying both winter and summer cloud seeding. Reclamation sponsored a small cooperative research program with six Western states called the Weather Damage Modification Program, from 2002–2006.

About 24 countries currently practice weather modification operationally. The largest cloud seeding system in the world is that of the People's Republic of China, which believes that it increases the amount of rain over several increasingly arid regions, including its capital city, Beijing, by firing silver iodide rockets into the sky where rain is desired. There is even political strife caused by neighboring regions which accuse each other of "stealing rain" using cloud seeding. In Australia, CSIRO conducted major trials between 1947 and the early 1960s: in the Snowy Mountains, on the Cape York Peninsula in Queensland, in the New England district of New South Wales, and in the Warragamba catchment area west of Sydney. Only the trial conducted in the Snowy Mountains produced statistically significant rainfall increases over the entire experiment. In Tasmania seeding resulted in increased rainfall by 30% in autumn and seeding has continued ever since. Russian military pilots seeded clouds over Belarus after the Chernobyl disaster to remove radioactive particles from clouds heading toward Moscow. The Russian Airforce tried seeding clouds with bags of cement on June 17, 2008, one of the bags did not

pulverize and went through the roof of a house. In October 2009, the Mayor of Moscow promised a "winter without snow" for the city after revealing efforts by the Russian Air Force to seed the clouds upwind from Moscow throughout the winter. In India, Cloud seeding operations were conducted during the years 2003 and 2004 through U.S. based Weather Modification Inc. in state of Maharashtra. In 2008, there are plans for 12 districts of state of Andhra Pradesh.

On August 28, 2005, the day before Hurricane Katrina struck New Orleans on August 29, 2005, a parked railroad tanker car owned by Westlake Chemical Corp leaked styrene into the air; more than 800 people in Cincinnati's East End had to be evacuated for over two days and received a class action settlement for the cost of forced relocation. The venting occurred because of an increase in pressure inside the tank. Styrene has a boiling point of 145 degrees Celsius and exists as a liquid under standard conditions. The vapour pressure is small at 5 hPa = 5 mbar at standard conditions. The flash point is at 31 degrees Celsius and a mixture with air is ignitable within 1 to 9 Vol %. The increase in pressure was due to heat generated within the tank which was attributed to polymerization of the styrene monomer within the tank. Normally, a chemical inhibitor such as 15 parts per million of 4-tertiary-butyl-catechol (TBC) is added to the tank during transport to prevent polymerization, but this lasts only three months and the tanker was idle for 9 months. This inhibitor scavenges rust and other impurities within the tank that can act to initiate polymerization. Oxygen (about 10 ppm) is also required to be dissolved in the styrene monomer for the TBC to do its job. The TBC concentration decreases with time as it scavenges impurities; 15 ppm concentration would probably be mostly used up in possibly 3 months (even less time if ambient temperatures are warmer). Without the inhibitor, the styrene monomer can polymerize with oxygen to form a styrene-oxygen copolymer or benzaldehyde and/or formaldehyde and polymerize with the release of heat. The heat further accelerates the polymerization releasing more heat. While any hydrocarbon may be used to cause heating and cooling of bodies of water using modern heat pump technology, its dual use in fracking, drilling with expansive Styrofoam that further cracks the earth, styrene can cause earthquakes, and requires extra consideration in a national hazardous substance report on all hydrocarbons that could be diverted into oceanic heating and cooling under 42USC(103)I§9605. Other chemicals that can undergo self-polymerization releasing heat are: Hydrogen cyanide, UN1051, Vinyl acetate, UN1301, Fural or furfuraldehydes, UN1199, Propyleneimine, UN1921, and Ethyleneimine, UN1185, Ethylene oxide, UN1040, and Butadienes, UN1010 (Aristatek '08).

Heat pumps need a source of heat to transfer from, either the outside air, the ground, or a large body of water. Systems that transfer heat from the ground or water are called "geothermal heat pumps" and systems that transfer from the outside air are called "air-source heat pumps". The vast majority of heat pumps installed today are air-source, as geothermal heat pumps require deep drilling, large land lots, or permitted access to a body of water. Hydrocarbon refrigerants include a number of products including R290 (propane), R600a (isobutane), R1150 (ethene/ethylene), R1270 (propene/propylene), R170 (ethane) and various blends of these products. Hydrocarbon refrigerants have a wide range of applications. This includes commercial refrigeration, chill cabinets and vending machines, cold storage and food processing, industrial refrigeration, transport refrigeration, small air conditioning systems, large air conditioning and chiller systems, heat pumps and water heaters. Hydrocarbon refrigerants have some different chemical properties than fluorocarbon refrigerants; the primary difference are their classification as extremely flammable. A.S. Trust & Holdings has been awarded a U.S. patent for the formula of a blend of pure hydrocarbons that has been designated R441A by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). R441A has been certified by independent testing laboratory Intertek (an) as having a very low Global Warming Potential (GWP) as well as a zero Ozone Depletion Potential (ODP). Illicitly placed in the ocean in large quantities these industrial hydrocarbon fueled heating and cooling units do pose a serious threat to global warming. The

new cooling function also presents an opportunity to prevent global warming and potentially dissipate hurricanes by cooling the water below 80°F ('14).

Heavy cutting in mountainous areas caused flooding downstream in a province of northern China bordering with Russia. A torrential rain in 1998 that would have been buffered by undisturbed forests quickly exceeded the capacity of rivers, causing widespread flooding of croplands. Millions died that year of famine in a tragedy that was unreported to the western world, triggered by poor forestry and bad agricultural practices. After the devastating floods of 1998, forestry officials in China were demoted from the ministry level to that of an agency, and the People's Republic of China – placed a moratorium on harvesting in natural forests (McEvoy '04: 144). Officials have recovered the remains of at least 27 people from the Oso, Washington mudslide, that destroyed 31 houses. After more than a week of intensive searching by as many as 500 rescuers and workers, a "significantly" smaller contingent has been tasked with continuing to scour the disaster area, where some debris was piled 60 to 75 feet high. Much of the pile is 15 to 25 feet deep, officials said, presenting a challenge to search dogs whose sense of smell might only detect scents up to 10 feet below the ground. Some of the dogs have indicated that there might be human remains in areas where there is still standing water, leading rescuers to attempt to pump out those areas. Eight or nine large logging machines were being used to clear rubble so people could search for buried bodies. Daniel Miller, a geologist and author of a 1999 study for the U.S. Army Corps of Engineers warned of the potential for a large catastrophic failure in the vicinity of the collapsed hillside, said “additional slides in the area were likely. It would be okay to do something like a park, but there should not be houses down there”.

Some landslides move slowly and cause damage gradually, whereas others move so rapidly that they can destroy property and take lives suddenly and unexpectedly. Debris flows, sometimes referred to as mudslides, mudflows, lahars, or debris avalanches, are common types of fast-moving landslides. These flows generally occur during periods of intense rainfall or rapid snowmelt. They usually start on steep hillsides as shallow landslides that liquefy and accelerate to speeds that are typically about 10 mph, but can exceed 35 mph. The consistency of debris flows ranges from watery mud to thick, rocky mud that can carry large items such as boulders, trees, and cars. Fast-moving flows of mud and rock, called debris flows or mudslides, are among the most numerous and dangerous types of landslides in the world. They are particularly dangerous to life and property because of their high speeds and the sheer destructive force of their flow. These flows are capable of destroying homes, washing out roads and bridges, sweeping away vehicles, knocking down trees, and obstructing streams and roadways with thick deposits of mud and rocks. Debris flows are typically associated with periods of heavy rainfall or rapid snowmelt and tend to worsen the effects of flooding that often accompanies these events. Finally, in areas that have been logged or burned by forest and brush fires, a lower threshold of precipitation may initiate debris flows.

Highly destructive debris flows occur in many areas across the United States. Hilly areas subject to prolonged, intense rainfall are particularly susceptible. Areas throughout southern California are frequently beset by debris-flow problems, and public agencies have expended vast resources on massive debris-protection systems for more than 65 years. The San Francisco Bay region also has experienced damaging debris-flow episodes throughout this century. El Niño, the ocean-warming phenomenon that can produce heavier-than-usual rainfall in certain areas of the United States, was associated with countless debris flows in Utah, when El Niño's increased rainfall effects were felt during the early 1980's. Hilly areas of Hawaii experience much destruction from debris flows, as do areas of extreme northern California, Idaho, Oregon, and Washington. The mountains of Colorado and the Sierra Nevada of California have also experienced debris flows in areas receiving high rates of rainfall, rapid snowmelt,

or a combination of these. Debris flows are not limited to areas of the Western United States. Many debris flow disasters have also occurred in hilly and mountainous regions of the Central and Eastern United States, particularly in the Appalachian Mountains. Thousands of debris flows in several eastern States were caused by heavy rainfall from hurricane Camille as it moved inland from the Atlantic Ocean in 1969. During an intense storm on June 27, 1995 in Madison County, Virginia, 30 inches of rain fell in 16 hours. Hundreds of debris flows occurred in the mountainous areas of the county amid widespread flooding. The combined flood and debris-flow devastation prompted a Federal disaster declaration for the county (Highland *et al* '97).

Debris flows start on steep slopes—slopes steep enough to make walking difficult. Once started, however, debris flows can travel even over gently sloping ground. The most hazardous areas are canyon bottoms, stream channels, areas near the outlets of canyons, and slopes excavated for buildings and roads. Wildfires can also lead to destructive debris-flow activity. In July 1994, a severe wildfire swept Storm King Mountain west of Glenwood Springs, Colorado, denuding the slopes of vegetation. Heavy rains on the mountain in September resulted in numerous debris flows, one of which blocked Interstate 70 and threatened to dam the Colorado River. Among the most destructive types of debris flows are those that accompany volcanic eruptions. A spectacular example in the United States was a massive debris flow resulting from the 1980 eruptions of Mount St. Helens, Washington. Areas near the bases of many volcanoes in the Cascade Mountain Range of California, Oregon, and Washington are at risk from the same types of flows during future volcanic eruptions. In areas with vulnerable populations, such as the valleys near Mt. Rainier in Washington, scientists are producing hazard maps that delineate debris-flow dangers. Buildings should be located away from steep slopes, streams and rivers, intermittent-stream channels, and the mouths of mountain channels (Highland *et al* '97). Camp on grade A flat farmland in small trees during the winter storms.

The UN Framework Convention on Climate Change (UNFCCC) was signed June 3 to 14, 1992. Since 2000 the growth rate of the world's CO₂ emissions almost trebled to 3 per cent a year and President Bush. refused to sign Kyoto Protocol of 16 February 2005. Emission growth was slowed by the recession that arrived in late 2008, and in some countries reversed, growth in annual carbon emissions, but the volume of greenhouse gases in the atmosphere continues to rise. The Trump administration has broken the Obama administration Paris Agreement regarding rich country emission cuts of 25-40 per cent below 1990 levels by 2020, for the world is to aim for 450 ppm (Hamilton '10: 4, 23, 25, 27). This case of Governor Brown's open burns melting the Antarctic icecaps, a second time, exhibits both the fire hazard caused by slash and burn forest labor and submersible oceanic hydrocarbon heating and cooling pumps as the lead human causes of global warming omitted by the hot air in the Framework Convention of Climate Change and Kyoto Protocol that ignore the Law of the Sea of 1982 and Fire.

Wildfires in California have been growing more dangerous and costly. U.S. taxpayers are paying about \$3 billion a year to fight wildfires, triple what it cost in the 1990s, and big fires can lead to billions of dollars in property losses. After more than five years of drought in California, water year 2017 has seen above-average precipitation and snowpack. The United States Geologic Service (USGS) reports that California's three primary sources of water: surface water (> average), snowpack (160% of average), and groundwater (slower to recover). On April 1, the California Department of Water Resources conducts its annual snowpack measurement. The Social Security Actuary is similarly afflicted with an April Fool's day deadline for the annual report of the Old Age Survivor and Disability Insurance (OASDI) Trust Fund is non-respondent and definitely can't be emailed without feeding the neighborhood black bears to Lithia Park, more of an attempted theft than murder, but not a welcome dinner guest anywhere near the backpack or metal rod enforced tent. It's difficult for such a fool regarding the right

DI tax rate (2.4% 2017 and 2.2% 2018 and for the intermediate projection), that they rely on the temporary 2.37% DI tax rate (2016-18) of the Bipartisan Budget Act of 2015 without a split-ticket, the Actuary should not be voluntarily or involuntarily leaking un-responded to actuarial correspondence. Furthermore, Apache Open Office table, hyperlink, photo and gray square disabilities are incidental to a connect to the Internet App Store pop-up that causes damages when the Apple computer off. Federal accounting and higher level word processing cannot be done until the virus is removed – Arcohol and Sierra Mac OS Apps removed and Open Office macro security reset to medium. After correcting the CCleaner settings to clean Apps there is now only a connect to the internet pop-up that is considered benign and might be removed for a \$25 computer consultation. I almost want to go through the hassle to return my Apple computer. Apple would not be vulnerable to this attack, that probably originated from the year subscription to Microsoft Office, if Apple made it possible to completely block out and not receive updates. The free Hollywood movie download industry has already been secured against stalking by the library incidental to the feeble attempts of Congress to deregulate the Internet without the split-ticket needed to impeach the President's *flagrante delicto* (Maisel & Buckley '05). “West Coast Code” (computer code), is more malleable, more subtle, more effective in many contexts, and less easily noted, changed, or challenged than the “East Coast Code” (ordinary law and regulation) (Deibert et al '08: 78). To do the California Democratic Primary genocide justice, mitigate fire hazard, conserve Antarctic ice and avoid more triple digit heat days, Ashland is directed to get the County Commissioners to host special non-partisan elections for independent candidates and scientists to respectively (1) elect a quorum of city councilwomen and (2) approve a weather modification district to re-invest \$700,000-\$1 million of the \$6 million OWEB grant, collectively defended against slash and burn forest labor by Ashland Parks and Recreation and Fire District, in a new Pacific Coast Rainmaking Technology Fund to extinguish all wildfires on the West Coast, under ORS §558.440.

Certificate of Service

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