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WATER SUBMISSION 2022 NATURAL RESOURCES COMMISSION.

WATER COST TO COMMUNITY & ENVIRONMENT BY IMMOBILISING THE WORKFORCE.

STOCKMEN & THEIR ANIMALS DOMESTIC MEGA FAUNA HEALTHY SOIL.

WATER WHAT ARE WE SHARING? HOW IS IT PRODUCED?

Water in a dry country is fundamental and timeless requirement. Australia does not manage it well. Does not manage its collection distribution, environmental aspects of vegetation, harvest of recycled water, tropical systems topping up drought losses with cyclonic flooding. Sydney was located on Tank stream 160 hectare catchment filtering through sandstone in 1788. By 1820 the water so polluted and stream bricked in as it remains today. Various governors ineffective in protecting water as nomadic Aboriginal had for many 1000s of years. Today 6-10 tonnes of heavy metals and gun powder tipped into the harbour fisheries every new year. Street washings oil brake fluid, potions and lotions join the mysterious fluids and plastic wrappers channelled into the much loved ecology. The sewage releases get closer to New Zealand by the year. Experts from Sydney now threaten farmers about water quality apparently leading by example! You would not dare draw your drinking water or swim safely, even take fish or oyster from below Sydney Brisbane Canberra Melbourne Adelaide out flows where all the experts live oblivious apparently of down streams ills. Where is the activism here? Demand Brumby shot up stream for providing some resilience to man made inferno, (*Brumby runs in the Snowy either unburnt or mildly burnt yet no grazers no burners claim there is "no evidence grazing reduces blazing"* clinging to beliefs as the Titanic goes down) ecological catastrophe surrounding insufficient grazing, super heated air by pine plantation and overgrowth.

By comparison to parked areas anything goes down stream and does. Double standard on water quality, whose paying, does not go unnoticed. Rural minorities scapegoats for salinity, lack of flows wanting water to generate food export and domestic trade. Agriculture blamed for using 93% of the world's fresh water when farmers feed the masses in fact on water, irrigation and the heavens, export to someone's table. This often quoted misinformation blunt instrument makes many invalid assumptions farmers use the water. Floods in China's agricultural land, like Hawksbury floods ruins more agriculture than produces food and fibre. Are farmers sued for not using it? City waste water releases at the upper end of the Murrumbidgee challenges down stream towns and irrigators to produce drinking water and quality food devoid of oils, toxins, pathogens, pharmaceuticals, salt load.....excessive nutrient forming algal blooms aggressive oxygen use. Was this discussed at the pub among concerned self appointed officials? Many having witnessed these sorts of discussions among the privileged, the scope is usually delusionary myopic reflected in media releases approaching propaganda.

Our university system over powered by the recruiting efforts peddling evangelical beliefs of a Scottish migrant to the Americas looking to create wilderness do nothing management for water engineers to manipulate into destocked debarked expanses to repeatedly incinerate the vegetation key to orographic rainfall snowfall in a timeless manner and on behalf of greater society hoping to be fed, watered, enjoy national biodiversity.... Australia and California bonfires built by experts on no graze no log no cool fire industrial strength fire suppression to be burnt mercilessly, repeatedly, harshly in the last 50- 70 years with very great concerns the land soil, vegetation, biodiversity will **not** recover after large

area intense inferno due to man made fires during drought summer events. Russia began locking up forests (about 25% of global forests) from 1750, latter days soldiers of the USSR were the fire fighters. When the USSR dissolved in the late 1980s army dispersed, fire fighting compromised, large area fire occurred where dense larch forests have been injured beyond regeneration, permafrost melting. Like Australia's 2019-20 water catchment spectacle attracted the attention of an international audience which watched in horror. Australia once considered one of the most climate change, fire aware fire adjusted nation's in the world, open fire safe water sharing vegetation managed by astute selective logging big mob grazing and proactive cool fire detoxifying flammable ground litter in a timely ecologically beneficial way building soil.

Climate change claims post 2020 inferno therefore very secondary, minor to management change which abandoned fuel mitigation in some cases for decades and there waiting for a drought summer ignition! How negligent, naive, national embarrassment. Climate change activists hitching their wagon to cyclones, land slips, volcanic eruptions, bushfire, drought, sun spots, voodoo.... Much more realistic to tackle particulate pollution effects on rain production and human health. Carbon dioxide plant food is the pollution tax not the pollution of consumerism. The most cockeyed notion to justify locking up our watershed to incinerate and deliver water crisis in the non flood years between strong tropical systems when Orographic recycling of local water occurs running down several years until strong tropical rains return to saturate the soils, forests, lake system like 2021-2.

Management change primary over any climate change swings. Particulate pollution belching into rain clouds inhibiting rain formation, top up to polar ice, glaciers, Snowy ice pack... Local effects vs global. Forests locked up well intended but naive, in Australia forests locked up for a shorter duration than Russian slow growing larch forest, are too incinerated beyond regeneration in a very long time. Trees boiled in their own sap across vast forests, soil humus biochar burnt off clay burnt to hydrophobic pottery. Seed wildlife gone. Let's talk water catchment values and yields! Banish exploitive loggers and grazers looking to maintain the megafauna created fire safe water sharing vegetation spacing that evolved in the last 26M year adaptation to dry fire prone Australia in vegetation not fire suppressed by gadgets and city academics. Faster growing hot climate vegetation produces lethal fuel loads faster than Russian larch where soils obliterated, water holding humus biochar reserves vaporised, seed bank, the very biota that makes the humus cooked off in man made fuel loads lovingly well intended accumulated for up to the last 100 years. The soil clay cooked to pottery and permanently hydrophobic. All in the name of environmental good and (soil) conservation, water quality! Consequences far from it! To now plug in stupidity into city carbon trading is knowing criminal.

What about alpine peat bogs 3000-12000 years old burnt off by climate change 1944-2003! Californian forest trees 2400 years old burnt so city water in the bonfire building process avoids the token water treatment expense of removing soot, silt, traces of human or animal waste from sale drinking water. At what cost? The amount of drinking quality water used for drinking or cooking is less than 1% of the 100-900 litres water per capita delivered daily to city houses. The rest washes plastic fashion clothes, BO bodies, motor cars, dishes, splashed on lawns to mow (35+%), cleaning cement paths, gurgled down toilets, poured into salt or chlorine swimming pools, cleaned more than swum in. Often within a few 100m of the ocean. Let's scorn farmers for irrigating rice, pasture (dairy meat) or cotton. Everyone can manage a farm better than the farmer as viewed from a plane or car speeding along adjacent bitumen road. Vegans can run naked and suffer sunburn in an effort to quell national emissions. No tractors trucks no bread or lettuce either. Universities unions are great places to view and critique the farm

forest fishery. After all how much biodiversity water security advancement has been achieved with the declaration confiscation of more and more national park water catchment empire since capture and exclusion of the workforce? High fuel loads incinerated or rabbit plague, which has greatest impact, or millions of kilometres of cement and bitumen roads disturbing regional hydrology and killing off biodiversity.

It appears through the history of 500-430M years plant life evolving on land that there were no dryland vegetation adaptations until large animals evolved from 290M years ago. When large animals go extinct, mass extinctions of vegetation occurs through repeated hot fire indicating a fundamental interdependence of plants and animals that has been going on for about 800M years in the ocean and 360M years on land. A fact botanists seem to struggle with. When dinosaur died out 65M years ago repeated fire continued to occur driving mass extinction beyond the asteroid collision event, until large mammals evolved from 60M years ago, to fill the big animal fire fighter niche, creating critically fire safe water sharing open spaced vegetation on largely a needs basis where Antarctic ***Australia did not need big animals until about 26M years ago*** as the land drifted into dry fire prone midlatitudes after breaking away from Antarctica completely by about 45M years ago to head back to the equator. A 510M year circuit of evolution of life on land. Biodiversity expands after each mass extinction event involving big animals, when big animals are restored to the ecology. A recognised process locally, generally internationally. Many prefer to be oblivious of this information.

What does soil, water mean to what water engineers bundle into one heap? Amorphous water catchment concept. Take the incinerated Snowy. 'Soil con' was instrumental in confiscating the region from grazing animals and human proactive cool fire as fire mitigation tools and vegetation management in a fire prone fire interdependent ecology. Forestry school Nancy France peddling no graze no burn no log across the world vilifying grazing logging cool burning as destructive of water catchment rather than in fact, essential process. Abstinence mentality from lack of understanding or application or in fact penny pinching at the ecologies expense and peril.

Wilderness is a state of mind not a fact of history or biology.

Soil con staffers refused to understand the place of measured cool fire, grazing in retaining ecological harmony therefore vilified it as too hard and unacceptable for their exclusive tourist agendas and commercial water, electricity endeavours. Get rid of the community activities as unacceptable short term to indefinite. How can you build a Snowy scheme and cater for stockmen having their most precious runs bulldozed and drowned? Call it wilderness (man made) destocked dehabited dingo infested, do nothing. Cop out. Deny any degrees of, for management outcomes. Totally blinded. Experience zero, accountability zero. Interference in what worked not seen as obstruction or interference in essential processes. Weird! Obliterate rural minorities ecoservices. Dismissed as relevant vested interest as high country farmers bullied out of their run off, irrigators gouged for water out competed by investors remote from water, land or produce food. International water investors in future can potentially dictate Australias farmers capacity to produce or trade locally internationally. Disadvantaged internationally if foreign interests want to hobble us. ***Water should not have been made available to off farm interests or detached from the land.*** It needs to be bought back with the wages, houses property of who ever decided to sell it. As clever and hungry as selling Darwin Port and other national assets and utilities. Somethings should be not negotiable.

Water engineers liked the result of mixed species grazing, cool fire regimes, stately forests well spaced to live with fire and harvest reliable flows of abundant sweet clean water from passing cloud, release surface and ground water shared into a river system engineers could cement up, drown alpine valleys, towns, drought aid fire mitigation and bogs drowned with gay abandon and manipulate water east or west. Locked up to take the risk of drought summer inferno with record man made fuel was the forests of alpine ash snow gum.....evolving for 30+M years under the watch of giant marsupial and unsuppressed fire, and in the last 100000 years human colonised and were capable of not only proactive fire but hunting of the giant animals managing the evolution of vegetation to be critically spaced and structured to survive, thrive after low intensity fire creating soil humus, biochar, soil biota basically unaffected by fire passing over them in aggregated water friendly soils, pumping water into the ground storages and filtering it into streams as run off or spring water resurfacing ground water. Water held in the soil to drought proof fire safe vegetation. Wilted vegetation dense stands competing for water, more flammable the oils, more concentrated and volatile. Bushfire prone!

Australia's vegetation and climate a very different system to what colonisers from Europe Scotland understood as water catchment from forestry school Nancy France conceptualized well meaning or not. Arguably their abandoned debilitated forests junked monocultures denied the work of freely moving deer, bison, horses, ox, mammoth herds to create biodiverse habitat free flowing water from snow melt. Americas, only recently 1900s, beginning to adopt Nancy Frances forestry teachings were not as expert as Australia at the time in multicultural integrated cooperative communities managing fire prone landscapes yet local knowledge scorned bypassed forsaken for North American study tours to adopt dog infested no graze, no burn, increasing layers of industrial strength fire suppression in water catchment thing and effectively creating one bonfire history across vast areas similarly denied essential ecoservices of grazers (loggers) frequent cool fire to avoid maximal fuel, all across Australia.

A wonder only 7.4M hectares (SE, 18+M ha nationally) incinerated in 2019-20 as vast forest now choked with refuse denied wildlife fed to pack dingo, denied drought aid grazing sheep cattle, manic pursuing of free living goats deer horses to add to the species losses mass extinction on ethnic discrimination blindly ignoring ecological contribution or imperative. Do we purge universities as we have Federal Parliament for dual citizenship? All the foreign activists, political lobby, with accents ranting about shape of feet outed, discriminated against for land grab, water grab exclusive tourist destination, scientific opinion of relevance to city needs and financial advantage at the cost of the nation's economy and ecology. Legislative loopholes of tenure and obligation government exempting itself. Dissolution of leasehold obligations to fuel management, aggressive species control of plants animals, obligations to neighbours and community also dissolved for the sake of Wilderness mumbo jumbo and severely edited version of popularised science hired to fit the political administrative agendas diverting various public and national resources in a direction little to do with consultation with the people affected or insightful of the issues involved. What implications vegetation lock up has for biodiversity, soil health, water security, public safety. How valid are the perceptions of caged raised boffins from far off lands? If they have a degree in mistletoe on TSRs grabbed for biodiversity corridors, what relevance has that on high country grazing systems or ecology?

Beliefs of no graze dog packs, no cool burning no logging centralised industrial fire suppression protecting city carbon trading that have been held so dear in the face of much compelling contradictory evidence in dog infested no graze no cool fire no logging thinning back to a fire safe critical spacing to share water and feed biodiversity. A state of critical optimal spacing evolving for the last 26M years of

climate change from Antarctic temperate rainforest, facilitated by mega fauna coevolution with unsuppressed fire, indigenous mega fauna ecoservices through proactive cool fire regimes retaining mega fauna spacing then for much of the last 200 years, integrated multicultural communities adopting dog control, recovery of abundant native grazers helped by introduced mega fauna restoring nutrient cycling, soil biota seed translocation, tramp mow prune pug, habitat creation and maintenance, ripples of disturbance, proactive detox cool burning as required. 1920-60s the no graze, no log, no cool fire foreign fanaticism infiltrating the halls of government, with fire suppression mindlessly installed no smoke nuisance across city sumps, soot removal from commercial water, carbon tax dodge by trading in fire risk.

Country and rural fire brigades sent off to town to be micromanaged into **incident control only** from incident and fuel mitigation in a timely and benign manner. Fuel kept below critical levels to match fire fighting capacity to minimise impact of drought summer ignitions. Centralised rural and country brigades in practice blatantly abandons rural communities to burn, down wind of maximal chaos. Deny rural communities the imperative of keeping fuel and vegetation such it could be protected from incineration mass extinction events, soil erosion water crisis silted up streams and dams. Fire now the new rabbit plague in soil erosion and loss. Managed fire, logging and grazing once was able to promote biodiversity through plant community successions resilient to starvation stagnation incineration. Provide cycles of beneficial fire recovery resilience rehabilitation of vulnerable fire sensitive species. Open free flowing streams as imperative fire safe havens rather than blackburied flammable scrub deserts. Wicks for merciless up hill burns ripping off soil, seed, exploding rocks. The dingo no grazers no burners no loggers just disappear into their anonymous political academic bureaucratic fog! Weekend bushwalking activist associations and talkfests. Wilderness is a man made artifact to justify indolence, indecision, incapacity, land and water grab. Government the water provider monopoly has a conflict of vested interest to also manage the land by penny pinching while the legacy of past management disappears with the passage of time and chronic neglect. Wilderness as functional water supply, public amenity, biodiversity centre viable habitat is unsustainable. Fire suppression deprivation in the absence of fuel vegetation management is blatant bonfire building expanding across the nation.

Even Phil Koperberg retired fire commissioner NSW observed Nov 2019 that fire fighting power has its limits. How many air tankers of pink paint would be required to put out maximal fuel loads across thousands of kilometres of over grown forests, city water catchments locked up to meet our emissions promises made by whom on Australia's behalf? Emissions taken from forestry agriculture few voters damage control, ecology to allow business as usual in town especially for the high fliers gouging more than their fair share of water electricity travel building investments and so on. Taking resources of mums with prams and the elderly resented rudimentary care after selling their lifetimes family home scrapped up from the sorrow of the war years and rabbit plague. How many of the 40t CO₂e per capita do they use to turn on a light or deliver a cabbage compared to globe trotting professors of climate change? Those having the experience to mow the suburban lawn, bring land management skills. Locking up forests to continue business as usual. 2019-20 inferno produced an estimated 940Mt CO₂e blown off 7.4M hectares of locked up wilderness including 65000 hectare of native tree plantation, koala habitat saved! Koala in Grafton, Pilliga, Murray red gum..... Kangaroo island once had committed timber communities thinning weeding refreshing vegetation to fatten koala, removing dog packs, cool burning fire fighting, heavy equipment workforce, laid on with motivational self interest to protect them, the forest the water. Funny ideas and uninformed perceptions undermined all that.

The privileged classes consumption of cement, metals, electricity travel, gadgets export coal and ore. Water high rainfall run to waste, tableland water debilitated destocked abandoned management deprived, pocket delivery savings for the corporate executives doing nothing in the wilderness, food imported as someone else's rainfall and irrigation allocation after foreign investors grab their allocation? Why was Australian water sold off on the international traders market? So someone could dictate our farmers capacity to grow food? More over grown the vegetation locked up for conservation not audited, debilitated wilderness state forests farmland parked, the less water yield, more land grab required to provide water for growing population and water expectations. Perth water for example selectively thinned vegetation and water crisis over! The people of farming forestry or fire fighting experience knew the parked fuel across SE Australia was inevitably going to out gun any fire suppression gadgetry on hand fully reliant on the rapid initial response approach assumed to be successful always! 700+ lightning strikes into piles of tinder a high demand for initial response Melbourne to Brisbane and beyond. Flying embers over 20-40+ km, superheated dry air.... Good luck with that! Likely this challenge of chronically abandoned cluttered vegetation maximal suppressed fuel loads would happen in the worst summer drought conditions. Climate change or stupidity complacency? No one could have predicted it if they were, not listened to. Repeated warnings ignored. As biodiversity starved butchered burnt then this sets up well managed farms forest (fisheries) for another round of land grab to recapture biodiversity and public sympathy. Expand the catchment. Any excuse will do given do nothing management and no obligation.

We could have legislation that could spark this new round land grab with the endangered species industry accounting for species obituary accounting, mass extinction, public donation sympathy mobilised. For 55+M years koala possum and other canopy species have enjoyed safe sailing, until the experts in the last 100 years or less built the bonfire so high and wide that canopy burn is assured by ground fuel levels of 18-23+ tonnes of tinder per hectare. Snowy valued water catchment 1986 skited fine ground fuel of 70 tonnes per hectare candle bark twigs gum leaf locked up to 2003 (add 3+t/ha pa 100+ t/ha by 2020 nice bonfire plus aerial fuel unkempt flammable understorey of regrowth 2003-20 incinerated, killing alpine ash, snow gum forests. Seed struggled back 2003 and gone, 2020 volatile regrowth spectacular burn. Forest dead. Experts said Stockmen "over burnt" to discredit and dislodge them. Yes clearly amateurs compared to expert burners with super natural fuel ready for a drought summer in chaos. Theoreticians. Study tours of Europe America's on the public purse totally irrelevant if not deliberately misleading to justify mismanagement. Head for researching polar bears to come up with a plan to save the koala!!!? Gather research funding off the public for the study tour. Mates in England with a postcard picture of a koala! Nancy France put on as consultants!

Before it was saved and parked, Australia had beautiful water, wildlife populations and diversity in recovery, from dog removal, restored mega fauna activity, vegetation thrift water sharing spacing, mitigated the impact of the fashion fur rabbit plague after massive effort..... This should have spoken for itself! But no, engineers tasked in harvesting run off in cement dams adding turbines to generate electricity to sell to towns as water, electricity have no understanding or training in how water is generated in the landscape. Encourage living aggregated soils to capture and filter slow release runoff. Recharge soil water and underground streams. Feed alpine bogs before experts deny them of their lifeline and burn them off as peat deposits of 3000-12000+ years old. Stockmen and local communities by comparison knew the land from generations of observation and corporate memory. Tended the soil health, litter converted to smoke, potash, biochar, tramped pruned grazed by big animals to ensure

self-limiting cool fire. Tree density logged back to 200 per hectare comfortable mature healthy fire safe forest giants.

Foolishly these practitioners, artisans, people have been disgraced, displaced, publically as the workforce then off fighting Europe's wars, quelling rabbit plague from an estimated 10 billion in 1922 after WWI to 600M before WWII. 10 rabbits to the sheep, 100 to the cow, Australia never has had 1 billion sheep or 100M cattle yet government reports ignore rabbits ever existed and activists undermine sheep cattle as fire fighters vegetation managers food fibre producers meat milk leather wool converted from tinder fire fodder. Nitrogen cycles.

Snowy saved from the worst effects of rabbit over grazing by massive effort by Stockmen paying for control with their wool production. Townie soil con staff manic Muirists misrepresented the over grazing by rabbits, saying it was sheep! Sheep paid research money to academia to develop biological control to help with campaigns of fence trap poison soil stabilisation. Wool built universities research stations for soil con and other institutions. Subsidised academic proliferation. In effect the academia which milk generosity of sheep industry where sheep again paid for soil stabilisation works, imported grass seed, contour banks.....city water electricity tourism ski surf bushwalking rock climbing junkets paid nothing. Denied responsibility. Continue bad press campaign as sheep fed, funded them, clothed them, earned export economy. Fraudulent mythology that contributes still to mismanagement of land and loss of water capture and yield, and biodiversity.

Conservation wilderness guru, John Muir suggested sheep were "*hooved ground locusts threats to wilderness*" when sheep did not yield to his incompetent droving efforts July -Oct 1869 Sierra Nevada and people with a similar insight expertise into zero, adopted the fallacy. Muir had no idea or cared about the ecological significance of native Bighorn sheep (eaten out for rations by the diggers during Californian gold rush 1848-1869) when Muir found fire safe Sequoia forests 2400+ years old, grazed flammable suppressed height and density, dogwood and white fir understory. Civil war 1861-65 obliterated local knowledge, Indian history clearances for the gold rush, he declared of no consequence. The myth enshrined in water catchment policy of engineers internationally tripping from California to Australia installing the Snowy scheme, Sydney water, Melbourne water..... putted over with Landcare, water catchment authorities bulldozing rural lands, DPI etc. Murray Darling Basin Authorities disaffecting rural communities experience and achievement with minimal resources and many demands.

Dingo naturalised from dumped fishing boat ration dog, to repurposed adorable to exterminate grazers of any ethnic origin or land title in Australia on the water wilderness model. Evangelized by Muir's following. Encouraged to butcher sheep and native wildlife grazers alike. Muir came to Australia in 1903 recruiting bushwalkers among various institutions. University clubs, engineers architects.....little training to do with ecology or land management experience or expertise, holistic approach looking after the interests of the soil, water, vegetation fire risk, the birds lizards recovering native mammal populations, wildflower thrift after ravages of rabbit plague. Rabbits breeding super populations of dogs foxes cats pigs to then move onto native wildlife extermination to a new level of local, general extinction. Create an endangered species industry, species obituary list kept by the dingo hugging no grazers no cool burners no loggers fire suppressionists. Public paid captive breeding programs fenced no graze plots growing flammable tinder monocultures. Local communities fought the wars, fed clothed housed the people built roads railways while creating a park with bounty of water and Australian

biodiversity. Maybe not perfect but work in progress until the bushwalking boffins arrived to confiscate. Take credit kudos, for salvation and take the water. Terra Nullius II!. Circumstances surrounding water.

Bushwalkers discovering what had been achieved campaigned to confiscate it through a misrepresentative public political process lacking in credibility in established fact. Soft title national asset considered fair game. Sacrificed were the workforce and generations of multicultural integrated knowledge and commitment enough to head off to two world wars and defend it! While they were away, a committee of three borrowed stockmens hospitality, huts and horses to hatch a parked exclusion take over on the Muir model. Build the bonfire around their dam impoundments to incinerate Snowy, incinerate Sydney Basin special area! As never before possible. Each warning fire was exceeded by the severity and size of the next. All that resulted is more fire suppression power building the bonfire higher wider. Noone can reason with unreasonable people especially those declaring themselves expert unreasonable people. The 2020 Royal Commission turned into a zoom talk fest. Bushfire which was not a natural disaster but premeditated bonfire rolled in with flood drought cyclone what ever cash cow. Same old show ponies defending their disastrous recommendations based on belief, not robust science. Far from what experience practitioners achieved before salvation using only cost recovery conservation, salvage. Accepted proven best practice.

Bureaucracy fiddled with, diluted by turning an unnatural fire event inevitable, into a "natural disaster" talkfest. Man made fuel loads is not a natural disaster! Bureaucracy blatant vested interest in saving money doing nothing to manage public land, holiday, siphon as much cheap water off as possible for town. Throw in a handful of chlorine all done. Forests parked now for water and carbon tax dodge locked up denied dingo control, denied wildlife ecoservices denied grazing by deer, Brumby, goats, sheep, cattle..... Massacred and vilified by ethnics only more recently arrived than the big animals imported to build a modern nation. Ethnics wanting to undermine the mega fauna and those that manage them are in fact vested in carbon use travel, cement, paper, mowing irrigated lawns, eating irrigated food.... ski holidays bog boffin public paid holidays at the resorts overseeing the incineration of alpine bogs 3000 to 12000 years old and grew better with restoration of water flows and mega fauna nutrient cycles in the last 150 years than in the previous 4000 years. Native mega fauna estimated to have died out pre6000 years ago. Ecological memory of Australia's recent mega fauna coevolution in the last 26M years, very much remains and held by Aboriginal cool fire regimes and unsuppressed natural fire until Europeans arrived and some with funny ideas of no burn, no graze wilderness, fire deprived by air craft, red trucks, people in canary suits armed with zeal and gadgets. Hoping they can influence the fire of hell whipping around vast areas of abandonment. Dingo no graze, no log, no cool burn, fire suppression for decades.

Dingo dumped on the mainland about 3500 to kill off Tiger Devil hen while Aboriginal hunted dogs and cats to protect survival of bettong Bilby bandicoot wallaby kangaroo, native rats and mice, quoll, frog lizards birds from over hunting by exotics more powerful than the tigers devils quolls they dispossessed. All this was declared irrelevant history in water catchment and conservation management! No consequence to water yield and security! Rejected conveniently as irrelevant. Multicultural rural communities committed to maintain open vegetation water sharing fire safe, deter aggressive flammable monocultures destroying biodiversity, retain detoxify cool burns, removal of dogs cats. Add to the list fox rabbit pig various weeds... gather funds to deal with quarantine breaches, invasive species. Like the leasehold land and conservation achievement, we now have people hijacking the funds and the workforce, media misrepresentation and political myth variously reinvented. Redirected. Grab the funds

to reinvent what they consider invasive species. Forget about rabbits carp pigs dogs cats foxes turn the guns on camel water buffalo donkey horses goats deer farmers foresters fishermen. Redefine pests! What they think effects sale water, tourist value and so on. Ownership, control!! Bleed public resources to shoot effective mega fauna fire fighters, soil builders retaining water catchment values of water capture, sharing, retention, slow release.

Aboriginal people, American Indian had customs, spirituality to deal with climate swings, topography.....totem species. How they integrated contributed to the natural flow of environment rather than "got greedy" with how much nature could afford to contribute to the cash economy of colonials of far off towns people wanting more water to waste and electricity to drive their gadgets. Indigenous obligation to support their needs from the ecology a long abandoned concept. In town plonked on the rivers lakes ocean interface high rainfall zone, storm water run to waste flushes cement drains in high rainfall zones hydrology, translocated water irrigated/ rain fed food, tableland water sucked off locked up land and piped to town gurgled exploitively, single use, poured through gadgets toilets, washing machines for dishes, clothing, cars, people locked up in plastic and cotton clothing to breed bad bacterial odours. Daily bathing, cloth changes! Leaky pipes, taps infrastructure considered of little economic or ecological consequence. Water comes cheap at the cost of the environment denied dog removal, blackberry control, scrub control, mixed species grazers any origin or quantity, denied proactive or natural cool fire to detoxify antibiotic gum litter. Locked up to produce compost tea enough to kill off frogs fish aquatic life until the drought summer inferno outpaces the industrial strength gadgetry in supernatural fuel loads accumulated for decades all across the nation living in cloud cuckoo land overseeing doing nothing but wages and conditions. Maintaining a biodiversity obituary list as species starve, are butchered or burned for cheap city water and carbon trading. Lightning ignites fires in bonfire fuel is defined a "natural fire" written off in national emissions. In fact a tax dodge loophole. Unconscionable! Prevention or mitigation by selective logging, mixed grazing or controlled burning townies smoke shy define as human extravagances competing with travel, paper, cement, electricity..... Yes a lot to do with water management in Australia in the big picture. Natural disaster. NO not natural at all!

Fisheries too are expendable infinite demands for 'little me.' Save water treatment obligations for removal of soot silt traces of human or animal waste by destock dehabit industrial strength fire suppression, even sell smoke to the carbon traders. Corporate savings and profits government a conflict of interest monopoly water provider and land manager. Water treatment savings carbon dodge all at the cost of the environment. Native species that were abundant in biodiversity centres once provided sympathetic cool burning and mixed species grazing to provide nutrient turnover and other ecoservices. Engineered wilderness piles up vegetation and refuse beyond levels nature would ever allow to keep town air only choking in oil fumes and coal ash. Indigenous fire, natural fire inconvenience of smoke intermittently, banished as unacceptable pollution. What cost long or short term? All the while urban and industrial gas and particulate pollution puffing into the rain clouds inhibiting rain production by continuous sources of particulates too many, too few, wrong sort, wrong time. Enhances flammability of over grown forests, out competing vegetation for less water. Hardly climate change global but local incompetence.

Australia used to be world leaders in understanding how rain occurred and even trigger in cloud (rainmaking) since the 1940s. Boffins wanting open cut mines, more paper mills, coal fired smelters and electricity generation put an end to that in the early 1980s. Wanted to bury all the coal and oil sales in

our forests as gas off sets in the form of refuse and scrub overgrowth so the cities in the high rainfall zones could have clean air and water it was said. At what long term cost?

Sydney burnt in 1994, 2020, Canberra 2003, 2020, Melbourne 1983, 2003, 2006, 2009, Adelaide variously locally and Murray basin. The SE of Australia the most stressed and manipulated misunderstood part of Australia however the green creep, land grab along the great dividing range is going on a pace with the no burners no grazers land grabbing across the road map under the pretext of "environmental good" confiscating sale water and green electricity water wheels taking their own imperatives as commercial stand alone. Blend in with windmills solar paddocks and urban sprawl, migrant intake subdivision demand more water, more electricity, cement, paper, metals, trade Does anyone really care about the implications. Quick finance, long term, unsustainable policies.

Farmers displaced off the high rainfall zones sent inland to buy irrigation water to provide the nation's food. Crops perish from lack of rain or irrigation yet mobile livestock industries and food denied proven effective ecoservices to tramp, mow travel routes and public what is now hijacked as "water catchment" kept fire safe water sharing soil protected and healthy before salvation. Irrigation water purchase, competing with investors from North America and elsewhere???? Blatant gouge. Some water reform package!!! Water economy detached from the land and local food production for local consumption or export trade???? Who thought of that? Environmental lobby from their positions of politics, academia, bureaucracy selling off national sovereignty to maintain high wages and standards of living for the self service pretty people? Blame and marginalise rural minorities working as farmers, foresters, fishermen for the over stressed environment denied their knowledgeable committed ecoservices to maintain fire risk mitigation, remove rabbits from destroying wildflowers native grasses, cultivating scrub monocultures, competing for water, ground reserves or run off to streams.

The balance of fire safe water sharing vegetation worked out for millions of years, expendable?

This balance known best by farmers Stockmen foresters fishermen fire fighters Bushmen generational multicultural land managers, dismissed and squandered. Knowledge and insight being swamped by blow in academia looking for a career, theoreticians seeing knowledge as their exclusive Provence. Boffins liking the result but scorning the methods used of cost recovery conservation as part of the media beat up land grab displacement and dispossession process to get their city water, cheap largely public subsidised holidays at the resorts, city carbon off sets, academic research junkets, smoke free air from ecoservices city needs exempt and so on.

While livestock are denied drought aid grazing fire mitigation in city water empires because they produce methane from digesting grass, scrub prunings, on the national ledger when the bonfire goes off the methane, carbon monoxide, carbon dioxide, cyanide.... in smoke from incinerating billions of plants animals, living soil is exempt as "*natural*" when in fact it is as man made as anything by deprivation and manipulation. Bureaucratic loophole as manipulation as is the so called selected scientific justification for negligence, indolence, incompetence. An insult to the credibility, independence of the scientific process.

Theoreticians, displacing rural experience so they can become the unchallenged experts distancing themselves from the incineration of our nation's watershed and everything that makes it. Accountability to the nation, zero, for bad advice buried in history, private collections of publically funded investigations and paperwork. Blatant manipulations for short term gain. Kangaroo, koala, wombat,

insects, fungi.....wrapped up as biodiversity richness and all its ecological contributions, apparently fully expendable. Repeatedly expendable. Colonials told early settlers to clear or face more destitution, export timber, plants, animal furs.....what has survived colonial exploitation is largely due to diligence and commitment of multicultural integrated local knowledge. National pride apparently set to be broken down by park wilderness water catchment confiscation of leasehold travelling stock routes for city water, wreckreation, biodiversity corridors, carbon trading, job swap, other excuse. Knowledge, conservation not the exclusive possession of blow in boffin bushwalkers. These are national assets poorly provided for by indolent well meaning evangelical townies doing nothing in a thing called water catchment wilderness conservation area covered in bike tracks, erosion gullies among the piles of tinder waiting for a drought summer lightning storm. Parked to exclude the workers grazing, weeding, cool burning to produce biochar, protect the humus water holding capacity soil aggregation in living soils spared inferno sending top soil forests into the Pacific ocean to grow algae! Choke the whales saved from providing fat burning lights before electricity was generated from burning coal and mineral oil. Pumping water up hill around in circles for hydro electricity powered by water generated on the Brumby runs grazed green fire safe mega fauna lawns climate change adapted to be even resilient to soil cons bonfire fuel loads water catchment management to zero. Water off farms where farmers are not allowed water storages to drought proof their land. Run off confiscated by government decree for their sales. Government owns water vegetation now on freehold land not compensated for water carbon wildlife perpetuation competition. Desk jockeys on the coastal strip dictate how *they* want to live. No agricultural subsidy in free trade Australia except what farmers are forced to subsidise the urban majority in many and increasing number of ways.

Grazed green cool burnt alpine ash forests collecting fog condensation from passing cloud to feed the river headwaters. Enough water to fill the trees needs and water to spare to find its way into the streams even in drought years, the humus biochar in soils topped up with fog capture even at reduced rainfall. Fish frogs used to thrive coevolving with activities of mega fauna, dinosaur, giant mammals, birds, reptile. Processes in place long before primates emerged from the trees and became tree hugging bushwalking bureaucrats piping water to town to water lawns to mow. Gurgle through gadgets. Adopting some form of science (precautionary principle, skewed data sets at best, select believers) used as convenient sole adjudicator that has conveniently forgotten, dismissed much other information and knowledge as relevant in water security. Information authenticated by persistent performance.

The select science of water provision in Australia and study tour destinations for the important consultants has proven long term to fail catastrophically over vast areas. Gatherings at the pub to swop policies ideas over mind deforming substances have repeatedly failed the national interest. Plots to exterminate Brumby that resist no graze dingo proliferation policies, according to the American model of top predator mediated grazer extermination. Botany blindness. How much ground cover and what sort is necessary? Ground cover alive, fire safe, biodiverse verses dead toxic flammable in engineered watershed. Mechanical means of mass extinction. Ecological collapse when the inferno viewed by the world is the international celebration of policy failure. National grief and embarrassment for our generational rural communities knowing it a needless avoidable catastrophe had the practitioner not been dispossessed by career theoreticians then out to procure cheap water, electricity, research at the tourist resorts.....public paid trips back to the old country.

At the end of the day government staff preaches sustainability, soil conservation, water restraint, but is a lousy role model to lead by example. Chosen academic advice from the bushwalking University clubs

benefiting from water at the cost of our Australian native biodiversity centres, displacement mindlessly of rural minorities that should have been judged by peers in land management not the recruited, evangelical believers in foreign irrelevant dogma. Bland binary thinking in grazing logging cool burning. All bad any degrees of application rather than total abstinence! No sex no alcohol mentality unless you are me! Like the Victorian government justifying the termination of livestock grazing trials in the Wonnangatta valley recommended after the 2003 holocaust, *"the science has all been done"* first example globally to close the books on scientific enquiry! Minister for environment background in child care! Another opinionated MP on banning high country grazing, was asking what a steer was! Their advisors claiming Brumby *"bellowed"* and ate Murray crayfish found half eaten on the Brumby pads. Very convincing evidence. If it was left to these informed leaders and their advisors likely, humanity would still be living in caves with bat colonies.

Craig Knowles Murray Basin reform excluded high country catchment assessment! Why?

People observing the Craig Knowles restructure of the MDB water were amazed that the high country where 30-50% of the Murray Murrumbidgee water generated, was dismissed as *"protected"* even after the 1.87M hectare 2003 inferno ripped through ACT, NSW, Vic alpine ash forests snow gum, burnt killed even alpine peat bogs 3000- 12000+ years old, over springs yielding underground water slow release into river headwaters. About 2M hectare of MDB 109M Ha produces most of the run off. Up to 2300mm pa water some as snow melt resurfacing through the alpine bogs springs peat.

Snowy used to make on average annually, 13100 giga litres of run off to the impoundments to shunt around Murray, Murrumbidgee, Tumut and Snowy River systems. Hydroelectricity and sale water ACT, NSW, Vic, SA. This post 2003 to 2011 run off yield at least shrunk to 9600 GL likely drought bushfire injury quite related, in the space of half a page of a report by experts even with the help of ground shot cloud seeding, thought as much inhibitory to snow production as stimulatory. No one listened or considered as the Titanic was declared invincible, right! Shot with silver iodide into passing cloud apparently too little too late for the clouds passing over otherwise fire killed alpine ash forests of the Tumut Cotter rivers, Pilot, Mt Beauty etc. The fall off just happened to be the 3000GL reform restructure 2012 tropical low, flood year plan. "Environmental flows" planned released mechanically, adding to flood levels of that year showing no discession. Toxic gum leaf litter accumulating for years denied, detoxifying cool fire, tramp from cattle horses sheep on the flood plain, then flood washed all toxic gum litter into the river system inundated to produce a record 'black water fish kill' ancient Murray cod etc. killed on the heels of the 2003 soot load algal bloom fish kill. Good luck with drinking quality water down stream. Compost tea. Cold water releases from various dams, Talbingo, Blowering, Burrenjack, Hume Weir..... either shock the fish with low to no oxygen, cold water or hot water heated by the dry riverbed sand on the tide of water release killing fish, polluting water. Impact on fisheries far greater than any extreme historical commercial fishing exploits always recalled, not so the rabbit plague over grazing soil loss vegetation disruption only opposed by sheep and wool industry funded controls.

High country communities farmer's farm forests are bullied out of their rainfall deteriorated terms of farm dams and storages. Drought aid to maintain flocks and herds breeding stock to meet continuity of affordable food for all Australians not just those highly paying themselves to afford meat milk water exorbitant electricity transport costs. Irrigation of fodder crops. State forest and private pine plantations can deep rip contours in, 1300-2000 trees to the hectare, park can have 7000+ stems per

hectare regrowth devoid of water regulatory capacity for 40 years after a burn in regeneration if it can occur fire one. Streams pumped dry with evapotranspiration of fire regeneration if it can occur. Fire killed vegetation likely the region turned into a cold desert and sharing water becomes academic fully. Had Craig Knowles investigated the implications of the 2003 holocaust, then there was up to 17 years to thin and address fuel loads for ACT NSW Vic that burned mercilessly in 2019-20. Canberra Sydney Adelaide water. Coastal towns floods in the Blue Mountains Hawkesbury due to extreme ground cover removal from Gospers Shoalhaven fires. How many \$Bs in fire and subsequent flood damage. Early estimates bushfire \$100+B, \$2+B smoke inhalation health impact pre covid 19 compromises, endangered species recovery if possible, soil loss by the many millions of years, infrastructure never replaced.... Sydney floods \$2+B. Unmitigated risk. Build up the walls of Warragamba dam? Bushfire took out 90% of Warragamba foreshores. 80% of Sydney water for 4+M people. Denuded 2019-20, record rain in May 2021 drowned entire communities. Farms, suburbs, villages. Washed millions of tonnes of debris out to sea. Ruined more houses and homes. Caged raised boffins have the temerity to claim they saved our nations public land, water supply, biodiversity. Far from it. Nothing could be done because nothing was done to mitigated against climate change that comes after hot vast burns or repeated events in fire deformed regrowth if full obliteration was not achieved in 'fire one' after chronic lock down, lock up deprivation for decades. Experts claimed they will restore the promised land. Hollow promises. Farmers forced excluded from grazing public forests the travelling stock routes they paid up keep for since at least 1835. Sheep cattle flocks herds sold off females for premature slaughter to steal carbon to cover extravagances and overshot estimates in transport and electricity mainly. Airconditioning poorly designed cement boxes sprawled over restructured dairy farms in the Sydney basin. Smooth letterhead change and amalgamation with blow in water catchment authorities no one was correctly consulted about 2013. Grazing put off the agenda by stealth, not science, as vegetation management strategy, water catchment fire security.

This 2020 inferno followed by record Sydney floods a repeat of the scenario of the Gippsland flood destruction of the lakes fisheries after the 2006 fires and floods of 2007 in Victoria.

The Craig Knowles process restructuring MDB water post 2003 was inadequate for the MDB and the nation brewing more catchment inferno in 2019-20. Almost 20 years notice to address lethal fuel loads and address water catchment lunacy and greed about abandoning vegetation management because water engineers are reluctant to cool burn, graze, remove dogs, recover wildlife because that might require a modest obligation to treat water for drinking and sell water for non human consumption to water gardens, flush toilets, wash clothes, people, cars, dishes.....city water management moved on little from Romans using lead pipes. Castles defaecating in the mote.

Bega valleys Brogo dam for example built by and for dairy farmers now displaced for lifestylers subdivisions. Ocean view sprawl. We either don't provide milk, spend a fortune on sick people and or send the dairy farms inland onto irrigated pasture. Deny them water for pasture. Vilify cows burping. Stolen calves (provided alternate diet of milk by product) so children can have milk products and healthy bones and teeth. Dairy farmers scorned on behalf of children elderly that need milk in their diet. Feedlot cows denied opportunity to manage vegetation fire safe water sharing on public forests, water catchment, public thoroughfare, rural lands..... Prepare for low intensity burns or augment time between burn offs. Smoke free hazard reduction and ecological creation of habitat. Do something to reverse species decline from when local communities were disgraced and displaced by blow in boffins that have little or no need to be informed. Vilify the workforce from official ranks is a great war game,

especially when short on delivery of progress and advance on rural minoritiin es achievements. Basically rhetoric and ruin.

There is very great irony that John Muirs home country of Scotland proclaimed it's first national park in 1998. A covet over farmland biodiverse, spectacular. Recently there is a push to resume a large slice of land for rewilding Scotland, said *exploited for 1000s of years of sheep and cattle grazing!* A recent land grab, hosts to 4000+ species that have apparently been exploited for 1000+ years since the ice sheets retreated. Grazed yet biodiverse contradictory to theory???! Well well perhaps the theory wrong, belief misguided. Is the agenda about saving native species, native lands or job creation land grab for academia tree changes with a tourist bent? Made such a mess of urban landscapes and society they move out. The antigraze, over clearing, stance we fear is just a displacement crank to undermine farmers of their land and food production from land stewardship. Cut and paste report, same old misleading clichés, and socialist left slogans dreamed up at a university union gathering of the city centric indulging all sorts of substances. Do not understand what effort it takes to retain a serine landscape for one year muchless insight commitment for 1000s. War famine, invasion, emigration to deal with in addition to. The affluent privileged class has little else to do but lather criticism when observers are waiting for major achievements and improvements after vast public subsidy in resources provided over cost recovery land management. Will replanting trees provide a major advance? Meet the propaganda projections! Utopia restored. Public buy them a farm to lay claim they saved it!

Snowy post WWII was a beautiful landscape host to ancient live snow gums, stately alpine ash forests dripping fog into river headwaters. Wildlife brought back from the brink and rarity to abundance almost nuisance levels. Big herds of kangaroo, numerous wallaby wombat possum bandicoot bush rats and mice everywhere raiding stockmens kit. frogs fish were all varieties, well distributed, well fed and abundant enough to go around the minnow, trout, populations. Insects were everywhere feasting on wildflowers as herbs, shrubs, trees. Bees of international and local origins were as common as beetles and butterflies. Aquatic insect. Birds, lizards, abundant variety local, generally distributed. There is no doubt introduced big animal migrations were welcomed back by soil, forests, bogs, wildlife, water quality and abundance. The war on rabbit plague scourge all but won. Very damaging to soil, forests scrub growth bulging dog cat fox pig populations to impact wildlife unless the relentless war never laid to rest removing dogs cats foxes pigs blackberry briar dominant flammable scrub.

Every man woman child irrespective of race or origin, worked to make Snowy a thing of beauty and abundance. So attractive that when bushwalking boffins saw what had been achieved they had to take it all for the sake of a bad press campaign when the soldiers, sailors, airmen that were going to return, did. War weary was the time the rogues swooped to pluck Snowy for their own. Every newspaper article government report, so called scientific missive, TV program, 6 year old school reader smeared our Stockmen and women. Then and now. Extraordinary bigots. The water quality yield reliability has depreciated significantly. Recovered wildlife populations have been deliberately abandoned to breed the naturalised water catchment dingo packs. Hunting with foxes pigs benefiting from their own activities and each other at the expense of native species. Cats make their own arrangements at the expense of frogs lizards insect birds. Pigs eat wildflower roots corms of orchids worms lizards ats mice dog fox kills, fruit..... Echidna platypus..... Water catchment dog packs are intended to control pigs rabbits compete with foxes and cats to manage the wilderness at what cost non target massacres. Dogs kill and feed breed foxes and pigs in reality. Public funded wildlife breeding programs have resulted as much from water catchment dogs as the ancient extractive prerabbit fur industry pre gold rush 1860s

when the rabbit mysteriously found its freedom across Australia, when fur species were near done in North America.

People finding themselves neighbouring national park state forest government managed land are used to relinquish their water run to the streams without interception by government decree, so the government or corporates can sell it. Farmers are not encouraged to use streams like a battery where run off can be retrieved for strategic irrigation on a needs basis. Farms yielding 1000+mm rain have to buy their own water back if allowed at all. Up to 10ML per hectare annually depending on soil retention evapotranspiration etc. The average suburban block family of four on the coast quarter acre uses about 15+ML annually storm water run to waste, tableland domestic water plus irrigated rain fed food. There is more water mixed up in the production and running of gadgets cars fridges washers clothing..... One and a half hectares of farm land to run a family of 4 on a quarter acre. High country farmers subsidise government sale water to the tune of Illinois of dollars. Now 10+% of that water held by foreign investors. We feel seriously duped!

Water investors from North America apparently have greater access to our water than Australian farmers with interests in producing food fibre product for our people or renewable export earning. Such is the attitude of government political thinking, academic advice, bureaucracy made wildly comfortable and complacent selling sovereignty. Resentful and dismissive of the concept of being public servants facilitators of national interests. The domineering attitude is one of controlling the resented envied rural minority. Water distribution availability and where it comes from just one subject.

In summary the Craig Knowles process has been deeply flawed. How much water we are talking about pre or post inferno 2003-20. Does the watershed belong to the nation of select self appointed members of the society. Skiers, bushwalkers, cloud seeders academy of science, dingo huggers oblivious of the impact these exotic predators are having on the wildlife ecoservices, seed fungi distribution and so on. Soil aeration water capture..... Farmers wildlife and domestic animals raided as if we need the entertainment of a Roman or Greek colosseum. Water sellers cavalier about the impacts. Farmers can fight the region's fires for free and give up their water run off for someone else here or overseas. City waste water diluted under salt loads pathogens moral water quality standards by things such as environmental flows. Towns folk can use water with gay abandon, once. *Drinking quality water* (less than 1% drunk or cooked with) delivered at unacceptable ecological and social cost to be frittered away through leaky gadgets, taps pipes toilets garden irrigators, washers of clothes dishes people cars,a luxury we can no longer afford at the current cost of unstoppable inferno. Mass extinction events increasingly impacting on public safety, food water security. Building the bonfire dog infested lands ,no graze, no cool burns, no selective logging strategic thinning, industrial strength fire suppression for city smoke manipulations is unacceptable.

<https://www.theguardian.com/australia-news/2022/jan/19/government-paying-eight-times-over-market-price-for-murray-darling-water-buyback-environment-groups-claim>

<https://canberraweekly.com.au/expert-wants-better-controls-for-new-queanbeyan-sewage-plant/>

In the swill we have poor water management driving Brumby massacres where Brumby runs grazed sufficiently produce fire safe live protective biodiverse aprons for streams and bogs, Snowy 2 to plonk their Whirrbines for low carbon peak electricity. Brumby occupy about 70000 hectares of Kosciuszko maintaining fire safe megafauna lawns collecting summer storm rain and winter snow across the

headwaters of the Cotter, Murrumbidgee, Tumut, Murray River systems. 2300+mm water harvest was average when there were live open forests to attract passing moist air to unload some of their water before heading off into the Pacific. Optimal vegetation balance for run off and ground water recharge sharing. As salvation soil conservation policies embedded, water supply reliability deteriorated, irrigators supplies dwindled Murray reformed, Canberra took more water to dilute their polluted waste water, irrigators restructured to dryland perish blocks, publically scorned for irrigating pasture or rice, cotton where once wool was produced sustainably for decades. High country farms sold out for pine plantations where water catchment dog packs had exterminated their sheep and harassed their cattle. Business confidence of the rural sector scuttled variously. Scuttled too has been best practice land management to deliver water to the streams and reservoirs. Farmers funded their own management of weeds pest animals on travel routes which serviced food and water security. Managed the public forests grazed logged cool burnt aggressive understorey suppressed, biodiversity encouraged.

These management approaches need be addressed in the context of water management and allocation from the artificial snow making on the ski fields waste water treatment of the resorts flying under the radar of effluent release quality, the cop out of environmental flows avoiding Canberra Queanbeyan waste water treatment costs up stream treatment obligations to enable essential ecological processes at rational levels. Current commercial plans for another 14000 beds in Kosciuszko sell off of ski resorts to international globe trotting resort interests not without stress on water quality and demand. On the way down to water use in the suburbs, street washings storm water quality leaf dog cat dung sewage leaks suburban impoundments confiscating run off, subdivision interceptions, dumping poor-quality city waste water into reservoirs to grow algae. Farmers bullied out of water to drought proof production domestic export food security.

Domestic water drinking quality when 99% need only be reasonable quality to water lawns to mow, bathe, flush toilets, wash clothes, city extravagances plonked high rainfall zone storm water run to waste lock up Tablelands denied fire control, irrigated rain fed food shipped in from afar. Time for a reality check. Convert irrigation channels to pipes what will this do to ground water reserves, rain recycling locally?

This climate change to tropical systems strong enough to take advantage of the Covid slow down in travel and industry. Waterbirds can muster, come off the rice paddies and return to the Barmah, Macquarie marshes, lake Gregory Argyle Menindee, Cubbie station dams to breed again. Pulled off the rare breeds list. Farmers pulled off the villain list. Fish can also spawn, frogs grow out tadpole in Brumby pugs. Grassland grazed green put back on the legitimate land use for healthy water supply. If high country farmers yield 90+% of their rain to streams perhaps they qualify to take back a portion of that water at a later date on a needs basis rather than have too many evaporative basins going dry in dryer years.

Institutions we pay tax, R&D levies to subsidise academic careers, need be encouraged to return to applying themselves to water management from water shed to ocean fisheries. Farmers have paid taxes R&D for decades been the butt of public scorn derision and have had to set about their own research into soil organic matter research for example winding humus biochar biota back into soils to capture and keep water, nutrient on site. Keep the people fed avoid chemical fertilizer soil sterilants, pesticides herbicides, go back to managed vegetation biodiverse cover cropping, big animal activity restored to the cropping system removed by the petrochemical companies war effort. Human population explosion 1B

1800s, 2B 1930s, 3B 1960, 4B 1974, 5B 1987, 6B 1999, 7B 2011, 47+% urban globally, 90% urban in Australia. Farmers trying the feed water clothe house employ the masses innovate automate do more with less water and land resources as urban sprawl covers better soils competes for water cemented over and decommissioned. Vegan political lobby undermines current production methods better than they can contribute viable alternatives to what gives them anxiety. Evangelical belief is not sufficient to feed children the elderly. Manage flammable vegetation with grazing mobs producing renewable meat milk wool protecting biodiversity water catchment as they do in a megafauna created Australian ecology of 26M marsupial, dinosaur at least 140My to 65My and mammal like reptile say 290-145Mya. Fisheries poultry production of eggs needing food often not the desired quality for people. Livestock are our waste food resource. Canneries are shut down to process harvest seconds or gluts. Bird damaged fruit and grain and so on. Farmers produce surplus as food security insurance against famine and natural catastrophe. Water storage and access is also a contingency. Some years you need it some not. Catering for climate demands is difficult for water users and providers. What is the average year average demand? This very vague however **land management to optimise our water supply is a constant.**

Water catchment authorities in the opinion of many have a long way to go to repair the consequences of wilderness. Easier to neglect than repair. These matters need to be addressed before your plan can be assessed in the immediate or future. Craig Knowles MDB reform deceitful not assessing the catchment headwaters for the implications of the 2003 inferno and now the 2006, 2009, 2020 fires in NSW, ACT, Vic and likely implications for SA & Qld.

As mentioned the environmental outcomes have not been addressed as the watershed repeatedly incinerated. Future fires stoked by abandoned regrowth. All you can do is send out vigilante groups to massacre free living horses goats deer and dog packs to exterminate wildlife on the rabbits that have done quite well pre and post fires as have pigs foxes cats. Down river the community too has been banished from ecoservices cool burns grazing logging, firewood collection. Social outcomes feeble as rural communities disempowered from securing their high country, reservoir, lake and river systems. Economic uncertainty a consequence in dramatically changing circumstances and avoidable chaos. If the water plan objectives are to disenfranchise rural communities then it has been successful. If rural industry incorporating grazing cool fire forest product salvage as fire mitigation as declared exploitive by uninformed bureaucracy then it has been successful. If remote experts have declared post fire water resources the new norm then this return of wet years has been inappropriate as storm water are released to flush the salt from the rivers and leave dams under storage capacity by environmental flow undertakings.

The water sharing plan needs a complete overhaul to include the dry year implications of the now repeatedly burnt high country Brisbane and beyond to Adelaide. The matter to be completely free of the usual bog boffins interferences whose bad advice has led to manmade inferno. Dog removal, grazing mobs returned to gentle back the fire affected regrowth to stable open forests attractive to any biodiversity that has been left us. Vegetation management methods known to work put back on the table. Pine plantation needs a very new look in terms of water interception and fire risk to communities down wind of the inferno. Destruction of soils by vegetation over growth. Destruction of rainfall patterns. Creek flows from choking and shading. Town water domestic and industrial usage needs scrutiny. Drinkable water is 99% over kill when just 1% or less is drunk or cooked with. Mixing stormwater and sewage is perhaps a luxury no longer affordable if our forests burnt down to deliver. The Kyoto off set by piling up fuel is not acceptable justification to reinforce water catchment treatment

avoidance. It is time the farming community acknowledged high country subsidised without compensation down stream. That's tolerable without foreign investors hedging on our capacity to farm. Flogging off our water as bad as auctioning Darwin harbour. Selling off housing to foreign investors while the homeless rate in Australia expands. Shortages of meat fruit vegetables milk is not acceptable from shortage of water, or labour. So called industry reform.

The process of combining the farmer funded RLPB/LHPA system with water catchment authority has been a public relations failure. Proven so with interpretation. Water catchment has taken control of our travelling stock routes, seed orchards and more conservation achievement where our grazing leases have been taken for park wilderness water catchment conservation entity without compensation or acknowledgement. Few people 4.4M 1930 fought the world wars rabbit plague economic depression to achieve very significant damage control, kept the people, fed watered housed clothed employed came out the other end with 13000 kilometres of public pest fence and a recovered wildlife on the high country SE Australia contributing to water catchment values. 13100 giga litres average until soil cons bonfire 2003 back to 9600 giga litres and unknown long-term impact of 2020, 7.4+M hectares burnt. Some of 2003 1.87M hectare repeated fire deformed and more ***forest killed showing no sign of regeneration. Soil gone.***

I and others I have consulted with, thank you for your consideration of a greater scope of your water review and what bought it about. Sheep cattle horses should be returned strategically to the burnt mountains to wind nutrient and life back into the soil. Capitalise on any seed produced from grasses herbs that have been put in safe keeping by the ants. The future bleak for alpine ash snow gum regeneration. Birds, mammal, lizards, biota suffered massive losses. The creeks dead in many places buried by flammable scrub and blackbury. Vastness of impact will extend recovery time. Rural communities grieve for the avoidable loss and water boffins need take significant responsibility. The populist concept of destock dehabit to recover is contradictory to what is known to work. People are bringing life back to gravel quarries and bare dirt with migratory mobs. Goats rediscovered to achieve fire control!

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