

Massive Taxpayer Savings by implementing Wild Horse Fire Brigade

By: William E. Simpson II – February 5th, 2019

1) Reallocating (re-wilding) native species American wild horses from BLM custody to wildfire fuel abatement roles in select remote wilderness areas provides an instant savings related to housing and feeding horses in the realm of ~\$80-million annually;

2) Based on comparable cost analysis for fuel treatment methodologies (prescribed burns & mowing *where possible and allowed by law*); each wild horse assigned from BLM/USFS holding and into remote forest fuel abatement (wildfire grazing via www.WHFB.us) role provides approximately \$72,000.00 per horse in value over the course of its 20-year life span (average) in the wilderness. This figure is based on each wild horse grazing about 5.5 tons of grass and brush per year in wilderness areas where other treatments and methods are impractical.

3) Studies overwhelmingly prove that the removal of fine fuels from wildfire prone areas changes both the frequency and intensity of wildfire.

a) According to [a study published](#) by the American Association for the Advancement of Science:

"By altering the quantity and distribution of fuel supplies, large herbivores can shape the frequency, intensity, and spatial distribution of fires across a landscape."

b) Another [published study](#) states:

"The removal of large herbivores has adverse effects on landscape structure and ecosystem functioning. In wetter ecosystems, the loss of large herbivores is associated with an increased abundance of woody plants and the development of a closed-canopy vegetation. In drier ecosystems, reductions of large grazers can lead to a high grass biomass, and thus, to an increase in the frequency and intensity of wildfires. Together, with the loss of a prey base for large carnivores, these changes in vegetation structures and fire regimes may trigger cascades of extinctions (Bakker et al., 2016; Estes et al., 2011; Hopcraft, Olf, & Sinclair, 2009; Malhi et al., 2016)."

Furthermore, a recently published economic study of the effects on costs of wildfire when prevention is implemented proves an 88% reduction of suppression costs for wildfire. *The 2018 budget for USFS suppression was nearly \$5-billion, so even an 80% savings on that would be \$4-Billion annually; to wit:*

[Assessing the economic trade-offs between prevention and suppression of forest fires](#)

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"We find that with the application of preventive fuel management, the value of the forest is greater and less variable than in the case where prevention management spending is not applied to the forest. We also find that prevention spending lowers the number of devastating large fire events. The mean value of the forest over a 50-year time horizon in the no prevention management case is \$536M with a standard deviation of \$111.7M. When prevention is determined by the successive application of our optimal control problem, we find that the mean value of the forest over 50 years to be \$671M with a standard deviation of \$34.0M. This result illustrates that there are real economic costs associated with using funding for fuel management to fund immediate fire suppression."

Perhaps, more surprisingly, we find that when optimal prevention management is employed, not only are high suppression costs drastically reduced, total spending on fire management (prevention and fire suppression) is less than the case without prevention management. In the case without prevention management spending, \$236M was spent on average on fire suppression over the course of 50 years. In the case with applying optimal prevention management spending, only \$42M was spent on average on suppression over 50 years and \$65M was spent on prevention management. By comparison, \$40M–\$50M was spent fighting the Las Conchas fire. In our work with unknown fire sequences, we observed an 88% reduction in suppression spending on average with prevention management, and a 55% reduction in spending overall. This result provides hope that a more careful integration of fire prevention into wildfire management plans may actually reduce the cost of these plans."

Synopsis of the Plan:

Natural Wildfire Abatement And Forest Protection Plan

(aka: Wild Horse Fire Brigade - 'WHFB')

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- America is faced with a growing serious problem related to catastrophic wildfire, not the least of which includes loss of life, property, forests and timber, grazing lands and related costs of insured and uninsured losses now growing into the *hundreds of \$-billions annually*. Compounding these losses is the massive impact to public health posed by harmful wildfire smoke that is just now being realized by the EPA and CDC.
- The documented depletion of millions of deer in the western states over the past five decades has seriously damaged the delicate balance of the forest and grassland ecosystems. This is addition to the long-term loss of approximately 300-million large-bodied herbivores on the N. American landscape over the past 300-years, which had been controlling wildfire fuels for millennia. Today's substitute livestock grazing across the landscape is currently largely inadequate to make-up for this depleted natural herbivory. In many cases, we have unknowingly allocated the wrong species of herbivores into the wrong areas on the landscape.
- Today, Oregon & California deer populations have been decimated. The CA deer population alone has dropped by approximately 2-million deer over the past five decades [1]. The loss of these critically important native species grazers, also known as 'large-bodied' herbivores, has resulted in extreme excesses in the amount of annual grass and brush left un-grazed across the landscape during longer and hotter summer fire seasons. *Regardless of ignition sources, the grass and brush fuel is what can and must be controlled, and is according to CAL-FIRE wildfire forensics, the key fuel that kindles and carries the fire to other fuels.*
- This is particularly important in regard to the relatively recent evolution of catastrophic wildfire on the landscape. Wildfire is made catastrophic because of the abnormal heat generated due to excessive amounts of fast-burning fuel that projects tremendous heat energy into the landscape and all other available fuels. Rapid-burning grass and brush fuels are known as fire accelerants that in many catastrophic wildfires are also the primary fueling agents.
- When the landscape (forests & grasslands) burns catastrophically, immense quantities of greenhouse gases (including some hydrocarbon toxins) are emitted into our atmosphere. A mixed herbivory, which includes wild horses and burros located in the most difficult and remote wilderness areas, maintains carbon sequestration in the soil-plant cycle via their consumption of these fuels and recycling into soils, thus benefiting our atmosphere by reducing the hundreds of millions of tons of greenhouse gases emitted from burning the same vegetative materials in a catastrophic manner.
- These mega-hot wildfires are extremely harmful to watersheds, at a time when more fresh water is needed for agriculture as well as for fisheries and wildlife that also depend on quality watersheds. And as we see from empirical evidence, when winter rains comes, the train-wreck continues with catastrophic mudslides and flooding due to loss of plants that stabilize soils and help direct the absorption of precipitation into the groundwater systems (aquifer replenishment).

- Concurrently, the growing competition for industrial and livestock uses of public lands has generated serious socioeconomic issues for all stakeholders. Consumerism as a part of the American lifestyle will continue to drive demand for more gas, oil, mineral and livestock products, placing even more pressure on land use demands. The rancor from disputes is already at an all-time high and a sustainable cost-effective compromise for wild equids is urgently required.
- Interestingly, a cost-effective plan (www.WHFB.us) that addresses the disputes between the majority of stakeholders around the issue of livestock grazing and wild horses and burros on public lands also helps to mitigate \$-billions in losses due to catastrophic wildfire via fuel abatement grazing in remote wilderness areas, many of which are now known as 'firesheds' due to the regularity of wildfire in such remote areas.
- The solution known as *Wild Horse Fire Brigade* relocates wild horses and burros away from areas of competition with livestock enterprises and back into their evolutionary roles of reducing grass and brush fuel loading in remote wilderness areas that are prone to catastrophic wildfire. This ends the 'range war' and eliminates the needs for brutal roundups and artificial intervention into wild horse and burro ecology using chemicals such as PZP.
- It is in these remote wilderness areas that fire suppression costs are the highest as a result of the necessity of aerial suppression efforts that can reach \$1 million/hour.
- Even though such remote wilderness areas in the West have both abundant vegetation and water, they are not suited to livestock production due to remote rugged terrain, difficult access and abundant apex predators, all of which significantly reduce profitability. These conditions are nevertheless ideal for wild horses and burros that evolved on the American landscape in these ecosystems where the evolutionary process of *natural selection* controls equid populations and enhances equid genetics.
- Rewilding native species wild horses and burros to re-balance wilderness ecosystems is the paradigm shift needed to correctly manage wilderness landscapes of the 21st century and eliminate unnecessary conflict on multiple-use public land areas.
- One of the most innovative and exciting visions in the realm of rewilding as a landscape management tool is the Plan known as *Wild Horse Fire Brigade*. (www.WHFB.us)

[1] The 2-million deer depleted from the landscape in California had a grazing capacity of approximately 2.6-million tons annually, at an average of 7-lbs/day/deer. Just to replace this lost herbivory, it would require approx. 472,000 wild horses (based on av. grazing of 5.5 tons annually/horse). This demonstrates that due to limited inventory, wild horses can only be allocated into the most difficult and remote wilderness terrain, where wildfires result in costly losses and massive production of greenhouse gases.

More data and statistics here: <http://www.myoutdoorbuddy.com/articles/141895/wildfire,-forest-and-wildlife-management:-stupid-is-as-stupid-does.php>