**NCFC Stakeholder meeting – Longevity of fuel treatments**

May16th, 2024

Meeting held online, hosted by Corrina Marshall of NCFC

Participants: Gretchen Reuning LCD, Ben Pfohl (?), Dan Bowker (CPRW), Jackie Barry (Boulder Watershed Coalition), Maelly Oropeza (?), Scott Heffernan, Scott Ritter (CFRI), S. Golden (?), Will Owsley (NRCS).

Corrina: Do want fire on the landscapes. Removal of surface fuels and some woody biomass to create a more natural landscape pattern?

Ben Pfohl – uniform thinning, not trying to achieve uniform spacing. Fire behavior outcomes are dependent and specific on what the treatments are for. Forests to be living and functioning after treatment. Strategically place fuel breaks. Fire behavior outcomes, reduced torching and crown fires. Buy-in from landowners considering forest health.

Scott asked Ben, is there a flame length threshold that can be estimated/modeled.

Need to consider landowner/manager cooperation and willingness to make maintenance treatments. Mechanical re-treatments can get us to, or maintain, desirable outcomes.

Don’t let perfect be the enemy of the good, mechanical treatments can get us most of the way there versus prescribed fire.

Dan Bowker – unless follow with fire after thinning, effectiveness is challenging to achieve. Mega fires burn through everything, unless already burned. In terms of maintenance treatments, is burning in May and October, actually getting the fuels that we need to control. Are we measuring sediment output from areas? Are we saving big trees? Working with the public is very important.

Gretchen – science shows the most effective treatment is mech followed by fire. Gap is how are we defining mechanical thinning.

Operation limitations – pushing for more effective treatments. Tree mortality may be targeted based on… scale is important, restrictions, land owner buy-in. Pile burning is hard enough, broadcast burning is even higher.

Funding sources currently don’t allow any delays of treatment in the case of clear climate drivers affecting treatment outcomes e.g. at tail end of drought.

Slope and accessibility are big dictators on where can be treated, physically capable of being treated. Helicopter thinning is a thing. Helicopter is ~$6-8k per acre for thinning. Got helicopter thinning and mulching can get down to $2100/acre when economies of scale are high.

Dan Bowker – work on 3-5 year project horizon, aiming for too far into the future is difficult.

Question 4: What metrics can we produce that would be useful to managers.

Scott Golden: Boulder OMP – getting surface fuel data already when doing inventory. Could prioritize treatments a little better, 30 m is upper limit for spatial resolution for a surface fuels dataset.

OMP has pretreatment and then post-treatment surface fuels.

Tools: OMP is using FVS to forecast out 10-20 years into the future.

Gretchen: managers have a “sense” for what is an effective versus an ineffective treatment.

Useful would be a tool that could be shared with landowners that shows well the effectiveness of treatments. Education is important for landowners. Graphical scientific-based document.

TLOM? Tool (Rscript) that Scott Ritter has developed about risk reduction, doesn’t include longevity aspects. Incorporate risk reduction goals with fuel treatment effects, but not longevity.

SURFACE FUELS GRAZING???

City of Boulder is considering grazing as a potential fuel reduction treatments. June 15th to Sept 15th is usual grazing permits with USFS. Cattle are random in grazing patterns, sheep are a little more consistent in grazing patterns. June 15th to Sept 15th doesn’t vary.

GTR 373 – should we keep fine fuels on the landscape in case we want to burn

Hoof impacts beats down duff, and physically affect fuels.

Jackie Barry - Boulder Watershed Collective – trying to get a goat grazing outfit up on Gold Hill to graze ~10 acres, possibly putting goats out in June.

John Hen – CSU – looking at variability in grassland fuels, will look at treatment strategies (mowing, grazing, Rx fires). Boulder County.

Not only funding timing limitations but also contractor availability and the need to keep contractor’s capacity. If we stopped work due to drought for 2+ years, I think we’d have serious enough contractor decay that we’d have a hard time starting back up at appropriate pace/scale when conditions “improve.”

Improving communication between science and managers?

Dan Bowker thinks communication is good but, sometimes science focuses on ideal treatments. When given an unideal situation, what can be the best treatment to make.

GRETCHEN - NRCS is a good resource for developing grazing plans that align with these types of goals! I also have a board member who is extremely passionate about this topic, if you ever want to chat with him, Dave!

A tool that identifies area of highest priority. Quantifiable metrics are most important, rather than qualitative yes/no.

Practitioners have a good idea of where work is needed, but a map of what treatment is needed is really important. Meeting constituent needs.

Parker Titus – Nature Conservancy – work with the fire fighting operations incident management.

**Daniel Godwin from Ops subcommittee.**

A list of markers and circumstances for treatment effectiveness and planning.