Meeting Notes
November 18, 2021, 1-3:30pm
Zoom Virtual Meeting

Participants:

1. Jon Paul Anderson, High Cascade Inc.
2. Gary Collins, Backcountry Horsemen of Washington
3. Angela Elam, GPNF Deputy Forest Supervisor, USFS
4. Sharon Frazey, Mt. Adams Resource Stewards
5. Jeremy Grose, Green Diamond Lumber Inc.
6. Jessica Hudec, GPNF Western Washington Ecologist, USFS
7. Morris Johnson, Research Fire Ecologist, USFS
8. Kyung Koh, GPNF Rec Program Manager, USFS
9. Jeffrey Mocniak, Melchemy Craft Mead/Cascadia Education Project
10. Ryan Ojerio, Washington Trails Association
11. Josh Petit, SGPC Coordinator
12. Mary Repar, Community Member
13. Whitney Reynier, Klickitat County Program Coordinator
14. Lisa Romano, GPNF Community Engagement Staff, USFS
15. Sean Roome, Cascade Forest Conservancy
16. Andrew Spaeth, WA Department of Natural Resources
17. Emily Stevenson, Skamania County Noxious Weed Control Program
18. Sean Tackley, GPNF South Zone Planning Team Lead, USFS
19. Crystal Tolmie, Friends of the White Salmon
20. Jim White, Underwood Conservation District
21. Sue Wright, Community Member
22. 360-701-2738
23. 360-890-5543

Welcome & Introductions

Purpose: This meeting featured: (a) an update on Upper White monitoring efforts, (b) a USFS update on the GPNF Sustainable Trails Program, (c) a guest lecture on salvage logging, and (d) USFS updates along with monthly Collaborative news.

October Meeting Notes: Approved as written.

- Josh thanked everyone and USFS/DNR for all the planning to make the fieldtrips a success

***Update*: Upper White monitoring activities (*Sharon Frazey - Mt. Adams Resource Stewards*)**

- Upper White Prescribed Fire Monitoring work funded by the DNR All Lands Grant
- Fire Behavior Modeling – completed by the WA DNR Forest Resiliency Division
  - Emily Platt's idea– prescribed fire and the resulting modeling to share the story
  - Shared a map of several fires around Mt. Adams in the recent past
    - Large fires such as Cold Springs 2009, Cascade Creek 2012, Cougar Creek 2015
    - And several small fires
  - Project area - Just below the large wildfires, & Gotchen cabin is just northeast of units
    - First units proposed for Rx fire was unit B (which FS completed jackpot (pile) burning this Fall), and next unit proposed for prescribed fire is Unit E
  - Why conduct monitoring?
    - A goal of the DNR's 20-year Forest Health Plan
    - At a large-scale, monitoring is used to assess progress of plan – to restore forest health and resilience & to reassess strategies over time – what's working and what's not?
  - Treatment level scale - Purpose of monitoring is to see if prescriptions and objectives are being met?
    - In 2019, Sharon started working w/ Jessica Hudec (USFS Ecologist) to develop protocol
    - In the same year, DNR started working on treatment-level effectiveness protocol for the Forest Health Plan
    - Sharon worked with DNR and used the protocol for Upper White
    - Designed the protocol to look at forest structure, composition, function, and fuels – at different levels of complexity depending on project's goals and objectives and the goals and objectives of the monitoring (resources)
  - Upper White Rx Burn Objectives
    - Reduce large and small surface fuels
    - Maintain 75% of 5-23" diameter ponderosa pine, Douglas fir, western larch
    - Maintain 90% of >24" ponderosa pine, Douglas fir, western larch
    - Maintain 50% of >24" grand fir
  - Surveyed 15 Plots in unit B and C in 2020 to acquire baseline data
    - Kate Williams (Fire Ecologist at DNR Forest Resilience Division) helped with piloting the new protocol
    - Forest metrics include photopoints, veg cover, invasives, seedlings, saplings, mature trees and snags
    - Fuel metrics – stand height, canopy fuel base height, canopy cover, down and dead fuels, photoloads, litter and duff
  - Plugged existing conditions into a Fire Behavior Model to see predicted changes from proposed treatments - Would have liked to use post-treatment monitoring data but we haven't had that broadcast burn that would change fuel models yet.
  - Kate and Sharon worked with Ana Barros - Fire Scientist with WA DNR Forest Resiliency Division - to run the model - Ana created a pdf presentation to share with you

- Objective was to model fire behavior looking at:
    - Effect of prescribed fire & fuels reduction using these Indicators:
        - Rate of spread - speed; how fast the head of the fire moves
        - Flame length - intensity (how hot)
        - Fire size
- Modeling area was the TL & GL Priority Areas from the DNR 20- Year Forest Health Strategic Plan
    - Added areas together and look at exposure; ignitions that create fire that comes into area - the FireShed
- Proposed units
    - 2,067acres, 6 units total including fuel break along the 82
    - Treated area is Less than 1% - 0.12% of the modeling area (fire shed)
    - Note there are other fuels reduction (e.g., thinning stands) in the same area – not part of this modeling exercise.
- Assumptions
- Since we didn't have post fire data we had to make some assumptions here
    - canopy same; fuel models CHANGE b/c treating understory
- Images of Fuel Models before and after the fire
    - The data is from LandFire (landscape scale database) with our monitoring data input into the monitored units
    - Baseline fuels - a lot of understory
    - Post-treatment – fuels in units are now more similar to Cougar Creek Fire
- Graph shows that when change the fuel models from timber understory to timber litter - flame length reduced – at different wind speeds
    - Changing fuel models also changes the rate of spread at different wind speeds
- Static runs – Calculate rate of spread and flame length independently from other pixels
    - Assumptions – weather
        - Used data from Buck Creek RAWS (remote automated weather stations)
        - The probability of the weather (wind speed, wind direction, fuel moisture) was randomly generated from 30 years of data.
    - Maps show the rate of spread - predominantly low, stays low
    - Flame length baseline is below 2ft, post-treatment it is reduced to below 0.5ft like Cougar Fire
- Fire size – growing fires
    - Assumptions
        - Ignitions – looked at 1,000 seasons of ignitions with data associated with each one – wind direction, speed, and fuel moisture
        - Fire perimeters – each ignition is grown independently - There are between 1-12 fires per season, mean of 3
- EXAMPLE 1
    - Modeled fire started on July 19th, windspeed=6mph, wind direction – NW, ignition location - same
        - Baseline – before-treatment fire grew to 6,418ac -> post-treatment 30ac

        - Stopped fire in its tracks
- EXAMPLE 2
    - Same ignition location; similar day (few days later), fuel moisture (little higher 5 pts higher – from 68 to 73), and windspeed (2mph faster), wind came from the north
    - Fire size before treatment 41,483ac -> after 39,614ac
    - Treatment helped: Did not burn units; but only decreased size by 1,869ac
- Effect of treatments depended on wind direction and location of ignition
- Summary
    - Treatments correspond to 0.12% of the landscape
    - Average of 3 fires per season
    - Fire-treatment intersections happened on 22/1000 fire seasons
        - 2% of the time came into contact with treated units
    - When intersections occur, fire size is reduced on the treated landscape
    - Fire size reduction ranged from 0%-99% between baseline and post-treatment
    - On average total area burned on treated landscape was reduced by 6%
- Even though treated only small part of the modeled landscape (0.12%), are seeing a positive impact
- Did not consider other treated areas such as commercial thinning, fuels reduction on other lands (only these specific treatment units)
- Model does not consider suppression efforts – treatments would provide anchor point
- Hopefully we'll be able to do post treatment monitoring to make sure we do bring our fuels into condition we plan to
- Q&A
- Question on 'so what'?
    - Treatments are working, but may need to do additional modeling to identify most strategic areas to complete future fuels reduction projects

***Update*: GPNF Sustainable Trails Program (*Kyung Koh - GPNF Rec Program Manager, USFS*)**

- National Strategy for Sustainable Trails System
- Shifting to new model – emphasis on shared stewardship – collective community
- 10-year Challenge 2020-2030
    - Launching and learning – commit, understand, learn
    - Goal: Regional Alignment and Support – modernize trail network to provide experience that meets need of generations to sustain or enhance ecological, social and economic conditions
- Partner interest & engagement
    - Need to look for new trail system opportunities
    - Prioritize together
- Sustainable Trail Assessment Tool (STAT)
    - Region: 24,000 miles; GP 1,475 miles of trails – 6th highest in region??
    - Motorized and wilderness

    - Miles Maintained – 50% by partners
    - Sustainability model – society, economy, environment
    - Assessing trail sustainability – resource sustainability, social value, maintenance sustainability
    - 1 - Resource sustainability
        - High rating - optimal – trail well located and designed, protects natural and cultural resource
    - 2a - Social value – significance and expectations
        - Optimal trail offers unique qualities and experience and ranks high in user experience values
    - 2b - Social value – design alignment
        - Trail provides desired visitor experience for the managed uses and trail class of this trail
    - 3 – Maintenance sustainability – rate the ability to maintain
        - Optimal trail maintenance needs are met consistently for this trail
- Next steps – sustainable trail planning effort – hope for strong partner help
- Q&A
    - How did you define economically viable for this?
        - Looked at the maintenance sustainability
        - There are indirect benefits from recreation and trail maintenance in the community
    - How to look at informal trails?
        - Trails that are not officially sanctioned could be part of forest wide trail planning
    - What will you do with trails on low end of spectrum?
        - This is what we will look at in planning process

***Guest presentation*: Post-fire salvage logging (*Dr. Morris Johnson - Research Fire Ecologist, USFS*)**

- Understanding Post-Wildfire Management Effects on Stand Structure and Woody Fuel Loadings: After the Fire, What's Next?
- "Mix of perspectives on how to manage post-wildfire landscapes" – August Complex 2020, Ranch 2018 – Mendocino NF
    - Two sides - opponents and proponents
        - Passive management – oppose salvage logging
        - Active management – support salvage logging
- Tradeoffs - ecosystem, management objectives
    - Used FVS – Forest veg simulator to model vegetation
        - No action – increase fuel loadings
        - Thin dbh <20.9in – moderate fuels
        - Thin 4-12 TPA – lower fuels
- Reburn window – for no action, there is an increased projection in wildfires
    - Cascading effects of fire behavior – outside of management objectives

- Morris participates directly in ID teams on various forests
  - Post fire management monitoring coordinator
  - Since controversial – set up experimental design and use this as learning opportunity to inform the debate (i.e., salvage scenario versus no-salvage scenario)
- Purpose and need – address science and controversy
  - A few of the fires monitoring: King fire, Walker fire, Plaskett-Keller August complex, August fire
- Within polygons to treat implement randomized block design
    - Surveyed Browns transects for down, woody fuels and line intercepts for vegetation
- Few of the different treatements: target residual basal area, target residual salvage, partial salvage, full salvage, control
    - 24 fixed area plots, 15 subplots
    - Used paired design when not able to use randomized block design
- No-action plots – may be due to timeframe NEPA process, different ownerships, market value loss, fuel succession trajectories
    - No action is fuel model – get actual data in few years
- Q&A
- Question on managing – will research be used in changing policy of suppression – for example to let fires burn when not dangering humans or wildlife?
    - This work is for informational purposes only (not related to policy)
- Question on no-action
    - Here the no-action alternative is no post fire logging
    - Actions depends on what management objectives are
- Question on Westside monitoring
    - Archer Creek and Beech Cr Fires were located on West Side
- Question on monitoring for wildlife habitat
    - Have to do lots of extrapolation for wildlife habitat
    - In one study, set up surveys for snag decomposition to look at wildlife habitat
- DNR mentioned that the # acres burned in WA state have increased dramatically. Is anyone trying to quantify area burned & salvage logged across ownerships? And that there is an interesting evolution in the conversation – scientists increasingly suggest additional fuels reduction might be important for land to accept fire in future – shift from managemet to ecological need.
    - Not aware of anyone tracking acres burned and salvage logging
- Clarification on site selection for studies
    - Only studying areas that the trees are 100% dead – don't look at other severities
    - Too controversial in other areas

***Update*: FS Updates (*Sean Tackley - USFS*)**

- Hiring Fire Management Officer, Engine Captain, facilities
- Dave Olson is retiring at the end of December
  - Sam Grimm is filling that position temporarily
- Lisa Romano – GPNF Community Engagement (behind Tracy Calizon)
- Recreation

- Transitioning firewood to free use permit starting on 1/1/22
- Timber sales
    - Drift Sale - Swift
    - Mann – Coyote EA
- Met this year's timber target - 54 MMBF
- Delayed or no openings of snow parks if state can't find plow contractor
- Restoration planning – on hold
- Planning on Little White – how to engage with Collaborative
- Infrastructure bill benefit for forest restoration in future

Questions/Discussion

- Question on climate change and carbon sequestration
    - Angie Elam:
        - Trees serve as carbon sequestration devices
        - When look at forest, it is not binary
        - Look at forest health
            - analysis areas, objectives for veg treatments
            - sustaining healthy forest, old plantations – overgrown, overstocked
        - Objectives – diversity and restoration
        - Entire branch of FS, 1500 people, are doing work to study carbon and climate change hub, research station in Seattle
        - Lots of nuanced answers
    - Jessica:
        - We are thinking about above and below ground carbon
        - Working on new guidance to incorporate climate change in future documents
        - Do have carbon white paper for GP – completed last July – will share
        - Many-faceted, looking at wood products, doing best to take everything into account
        - Wide variety of findings
    - Sue – There is a GTR on climate change adaptation in SW Washington
    - Andrew
        - Mary brings up question concerns that DNR is hearing a lot from the public
        - UW is doing literature review on this topic
        - CO2 ignitions from Wildfire – 2nd single largest source, behind transportation in past year
        - Need to adapt ecosystems for climate change
        - Will see transfer from snow dominated to rain dominated systems
        - Management is a large part of this – look to drought tolerant, fire tolerant species, prescribed fire, etc.
    - SGPC had several speakers on Carbon. Look on website for notes, recordings.

***Update*: SGPC Monthly News (*Josh Petit - SGPC*)**

- Met with FS staff on retained receipts – funding available – update with more info.
- Will see several guest speakers coming up related to salvage
- Will have a preliminary survey on salvage areas where we need education
- Rec subcommittee – working on OHV access on South GP – Cougar Area Trail Seekers – meeting in next two weeks

Next Meeting Info & Closing

- December meeting (12/16 from 1-3:30pm) – will be presentation focused, so will be on Zoom
    - Somer Meade (Forest Youth Success)
    - Salvage and pollinator impacts (Dr. Laura Burkle from University of Montana)
    - PODS (Potential Operational Delineations) update from DNR
- January meeting will hopefully be back in-person
- Q&A
    - Will there be Carbon credits on GP in the future?
        - Angie/Jessica: Way too preliminary to have evaluation for that right now
        - Lot of research to be done on this
        - Federal lands are not eligible to participate in carbon markets based on current regs
        - Andrew: Generally, in the PNW timber value far exceeds carbon value

- HAPPY THANKSGIVING!!