Southern Willamette Forest Collaborative
Joint Rigdon Collaboration Committee & IDT
Youngs Rock Rigdon Proposed Actions

June 6, 2019 1:00 – 4:00

"Coming together for healthy forests and communities"

Participants: BJ Keele, Lon O., James J., Susan O., Chandra L., Maya G., Jean C., Laurie P, Sarah D., Iely M., Katie F., Trish M., Sarah A-P
Forest Service: Molly J., Jon T., Leslie E., Allison, Lisa K, Matt H., Carrie C., Steven Todd J., Spencer W.

YRR as first NEPA project, timeline - PPT

- Landscape analysis, RCC worked on ZOAs for the area/analysis with Forest Service
- Have scaled the first side of the plan implementation triangle; about to go down scoping side
    - Socializing project to wider public
    - Proposed action and formal scoping process about to start
    - Dec 2019 – EA complete
    - 2020/2021 implementation
    - Fire, floods, furlough, snowstorms have delayed project timeline
- Meetings that have happened since 2016 (mostly field trips); roundtables were committee-only; work sessions were joint
    - 2017 – 5 field trips, 3 learning sessions
    - 2018 – finalizing landscape analysis design and identifying first project, project proposals for YRR, early draft of purpose and need, 3 field trips
    - 2019 – fire history study, Walama Restoration, workshops
- Today: Proposed actions for YRR
    - Previously did landscape ZOAs – think today about whether or not SWFC needs project-level ZOAs (optional process); could also do stand-level/site-specific ZOAs
    - All collaborative input is recommendation-only; way to give collective feedback
- +/- around proposed actions

Thinning, Harvest, Soils, Wildlife

I. Thinning, skips

- The trick was taking landscape-level ZOAs down to stand level/ how to integrate resources together
- 4,500 acres of stands
- All-natural stands in mixed dry conifer
- Focused on leaving pines and cedars, while trying to retain as many hardwoods as possible for flourishment
- Green – average 120 years old in mixed conifer, historically more open and mixed conifer
- Objectives: Historical conditions, resiliency (protecting heritage sites, water); intent is to keep legacy trees.
- Comment: Leave all natural pine, Doug fir and incense cedar older than 150-175, but cut through the Doug fir and incense cedar regardless of diameter. Incense cedar and Doug fir will move back into the stands. Understory burning may mitigate that.

Proposed prescriptions:

- Three types of prescriptions – early seral, late seral connectivity, late seral open forest creation
- Commercial w/ variable spacing and retention of un-thinned areas
- Non-commercial pine release
- Underburning as a stand thinning tool or in conjunction
- Expecting to get 46-65 million board feet out of these treatments; this is a big project (smaller projects typically see 15-20 million)

- About 5 years of timber harvest, but that is dependent on what else is happening in the forest/regional office direction
- Under NW Forest Plan, Willamette Forest Plan, and regional office direction

A. **Managed stands in mixed conifer** and moister forest (Late Seral Connectivity)

Late seral connectivity – 37-80 year old plantations, accelerate the development of later seral forest characteristics. Connecting late seral

Q: Is that part of red tree vole strategy? No, did independent but there might be some good overlap.

- Compare these treatments w/ RTV strategy
- First type of treatment – late seral open forest creation (like Jim's Creek)
    - All of the natural stands mapped in yellow on handouts
    - ~120 years old, thick Doug fir understory – trying to open it up
    - Jim's Creek thinned to ~20 trees per acre
        - More conservative with this treatment, leaving more trees
        - Leaving legacy trees, just thinning out understory (90-150 years old)
    - Late seral connectivity ~500 acres)
        - Looking at where there were patches that could be thinned to open up and move toward late seral connectivity characteristics
        - Creating an opportunity to someday connect patches of late seral (patches are currently mid-seral)
- Thinning can be done by skylining, some trees removed
    - Q: What is skyline logging?
    - Helicopter, ground, skyline are the three types of logging
        - A lot of ground is too steep for ground logging
        - Skyline – machine with tower & dragging (trees are suspended, but they bump along landscape)
        - No new roads; possible temp spurs that have to be de-impacted
        - Have to tie off to tree at the bottom – can be in a riparian area, but the tree cannot be taken if so (this process will kill the tree; riparian trees are left to decompose)
        - Chains attached to cable that stretch out laterally, pull trees into the cable and therefore have some impact
        - Helicopter is lowest impact but most expensive; skylining is ~5% impact rather than the 20-40% impact of ground-based
    - Some options to pad trees for preservation

B. Early seral creation

- Proposed in stands to provide for early seral habitat
- Create gaps 1-3 acres of lightly thinned or build off of early seral that exists – meadows
- Early seral along edge of private land
- Green = late seral connectivity proposals
- Early seral = today's version of clear cut
    - There will still be trees left
    - Taking 70% of the ground down to 10-20% canopy, ~15% untouched
    - Transitional thinning around riparian reserves
    - Creating more complex structure to protect resources (e.g. hardwoods, rare plants, habitat for wildlife)
    - Much more complicated to plan and implement
    - 500 acres of early seral
- Q: What will the early seral stands look like? 5 or 6 in outlook and have tried different things, will thin for preferred species. Don't want to do the same thing everywhere and will look for what is best in that stand. Silvicultural implementation plan will identify protecting hardwood, maintaining downed wood, etc. Botany and wildlife specialists all weigh in.
- Visit Outlook examples w/ do Rock tour

C. **Natural stands (Late Seral Open Forest Creation)**

- Prescription more conservative because of blowdown in Jim's Creek
- 30 trees per acre and leave anything over 30"
- Looking at the data and thin from below will leave legacy trees
- 3,000 acres in late seral forest creation

II. Soil

- Rigdon landscape different compared to rest of district
- 2120 – layers in the strata, pyroclastics, ash
- Create variable water flow. Some places very stable and old, eroded. Other places unstable. And really old landslides that are moving over time
- Lower impact activities or low risk areas will allow different activities that may be more disruptive
- May allow instability in strategic areas that don't pose a threat.
- Are communicating w/ Seneca about Area F burning
- Stand by stand – avoid all potentially unstable areas
- Looking at each area of instability, size, what might trigger it, assigning risk level based on probability of instability
- In this area, because Forest Service is doing EIS and landsliding is part of landscape, talking about in each area that managing potential landslide. Imprecise science. Have an idea of what is most likely to fail. If it has signs of instability and slow processes what activities can happen – depends on the stand. Getting very specific w/ each unit
- Some risk but avoiding instability in road areas, waterbodies
- Lower risk areas – need soil scientist to look at when activities should happen, see if there are changes in stability
- Project design criteria if they run into instability; different things will get activated based on unpredictable factors like storms
- Areas that are low risk should still be checked prior to taking action
- Skips within stands are designated and mapped
- Q: Integrating sustainable road system? Yes, ended up with planning on decommissioning everything in floodplain area. Left some dispersed sites and 30 decommissioned roads in riparian.
- Design features for wildlife and plants so that if something is discovered, we'll know how to address
    - Small areas can be placed for specific reasons (like creation of a pond for turtles), but area would need to be checked
    - Lots of pond turtles throughout the area; the place where they've been nesting is up a steep slope in a meadow with milkweed
    - 100 ft buffer around the pond turtle pond for nesting, but also creating more of a nearby habitat for the turtles.
- Consideration of things like floodplain restoration plans
- Comment: Stand level ZOAs might be a good consideration
    - Would be good to have maps people could take out and look at areas where actions are proposed
    - Definitions of prescriptions

III. Wildlife

- Looking at each unit for wildlife needs
- For example, putting gaps closer to pond for pond turtles to have nesting habitat
- 30-acre nest patch around breeding areas for wildlife from no touch to clearing gaps
- Spotted owls – part of planning is to not have any take
    - Will not do treatments if there's not enough habitat for owls to survive
    - Some areas are above the habitat owls need
    - Won't be in any of the 100-acre nest patches or in any areas where home range radius is needed
    - Maintain canopy enclosure in some areas for hunting and roosting
    - RA32 – keep some suitable habitat spread throughout range, doesn't need to be within a home range
    - Will do some skips within stands
- Other species like great grey owls, goshawks – 30 acre patches

- RA 32 – not just looking at where spotted owls are – must keep good quality habitat across the landscape.
- Some RA-32 areas are in the stand but will be skipped during prescriptions.
- Model of where good stands exist, and ground truthing done last summer showed 93-95% of stands met the criteria – snags, downed wood
- Q: What about tree voles?
    - Not surveying for them – instead identifying tough areas/high-priority sites, creating connectivity around riparian reserves; three connections between sites/creation of corridors (no treatments in connection corridors)
    - Strategy also aimed at keeping genetic variations

- Consider stand-level ZOAs for early seral habitat, i.e. madrones, oak
- How does RTV strategy align with manage stands connecting later seral stands
- Amount of proposed late seral open forest creating w/in NSO critical habitat
- Maps of proposed action, red tree vole strategy etc.
- Prescription definitions
    - i.e. Leave all oak and pine species of any age, leave remnant Douglas fir and incense cedar and remove the rest.

Aquatics, Recreation, Roads

Aquatics

Proposed Action:

- Rerouting trails for aquatic benefit, positioning the trail outside of the floodplain.
- Planning for at-risk areas of floods, placing new trails and campsites in a sustainable way that mitigates decimation from natural events.
- 700 acres of floodplain, floodplain augmentation and implementation
    - Can see on LIDAR the multiple channels that existed historically
    - Activate channels, use whole floodplain, get water out of confined channel, increase function and complexity
- Q: Did the storms do much to the channels you surveyed?
    - There's been a lot of movement
    - Coal Creek changed a lot
    - Places with more wood had a beneficial change whereas other areas had more incision
- Larger scale project identifying priorities; haven't gotten into details in specific areas
- Q: Outside of Coal Creek, these are mostly main stem? Stage 0?
    - This is Stage 0, much more significant areas
    - For this project priority is greatest bang for buck
    - Disturbed, heavily altered areas
    - Stage 0 strategy can be modified
    - Promote lateral connectivity
    - Measuring results in Staley Creek
    - Improve habitat for all aquatic/riparian-dependent organisms, esp. bull trout, spring chinook
    - Potential for broader range of habitat, diversity
    - 700 acres is an ArcGIS exercise – could be many more of those
    - $13k/acre
    - Each floodplain area will be a discrete project
        - Lots of field trips
        - Grants/matching funds
        - At least a decade
        - Stewardship $$ is super critical
            - Important for initial lift

    - Some of the floodplain includes old growth
- Q: What about beavers in the area?
    - Much of the likely historic/future suitable habitat is greatly reduced due to return interval
    - Increase opportunity immediately from distribution
    - Creating slow habitat which is functional habitat
    - We don't have to create beaver habitat; the Willamette *is* beaver habitat when restored to proper functioning
    - Comment: have it spelled out in EIS; it'll be a hot topic
- Q: Were rivers and creeks cleaned out 50 years ago? Yes primarily.
- Would like to move trails out of valley bottom – when rerouting, will do it at the benefit of the resource.
    - Coal Creek is the example – don't do cheapest easy route, looking for new feature to enhance user experience.

<u>Recreation</u>

Proposed Action:

- Sustainably manage trail system
- Avoiding erosion into the creek
- low maintenance, thinking about what can last into the future without having to put a lot of resources into it
- Campsites that may cause water quality issues. Tried to identify hydrologic concerns/impact from floodplain restoration
- Identified some sites in the floodplain that could cause damage.
- Some dispersed campsites will bbe affected
- Rerouting of trails and installation of bridges to help rehab the floodplain.
    - Three bridges would be included in reroute, a couple lost to the floodplain.
    - Will be working on a map of dispersed sites and which will e would be removed
- Would like to keep the trail close to the river if possible.
- Would like to see the potential reroutes of trails
    - Will work on a map of the reroutes for the trails
- Each floodplain area proposed takes 1-2 years of planning, capacity, etc.
    - Associated trail reroutes will happen at that project time and at that time would address that as part of proposed action re-rerouting
- Q: Can keep trail as close as possible to river? Yes, it is a priority where possible, but there might be spots where it is not sustainable.
- Rec will identify areas that trail needs to move, possibly have discussion as collaborative about the trail/ floodplain issue
  *Tucker will send map of trail

<u>Roads</u>

Proposed Action:

- 160 miles for reconstruct & maintain
- 12 miles decommissioned and 60 stored
- Facilitate management objectives
    - Assessed risk/benefit values
    - Future need for harvest and aquatic risk were two biggest factors, followed by recreation
    - Developing access
- Decommissioning = ripping out the road (not just putting a gate up) – a lot of that is just calling it what it is on the ground and taking it off of the map with the stroke of a pen; some require tearing out culverts and grade
- Always nice to have turnarounds on partially decommissioned roads
- Existing footprint
- Potential rock quarry development
    - Potentially two rockpits - 1 rock source at Youngs creek
- Proposing rerouting the Coal Creek road out of the floodplain area
- Q: decommissioning – try to incorporate recreation – laying back slopes but leave as trail if sustainable
- Q: OHA & Rocky Mt. Elk – meadows at least 2 miles of roads? Will closures enhance meadow linkage?

    - Incidentally, not necessarily intentionally. Closing is considered creating wildlife habitat.
- Interpretive signage?

- Keep trail close to River
- Interpretive signs and education for floodplain work

Meadows, Heritage, Fuels

Meadows

- Surveys – demarcate (called special habitats i.e. nonforested habitats)
- Only 4 meadows that standalone, but otherwise all part of treatment stands
- Weed treatments – manually and chemically treat invasive and not negatively impact pollinators and maybe some planting of milkweed and other nectar plants
- Most meadows have some component of cheat grass
- Map of proposed meadow treatments – light green color
- Meadows were all identified prior to project surveys;
    - proposed actions are things like cutting small trees and piling or scattering them, underburning
- Meadows 1, 2, and 4 are similar to Jim's Creek - drier meadows with Doug fir and incense cedar encroaching; take out some trees and leave more space for wildlife and botanical species
- Meadow 3 is by Warner Mountain Lookout – bare grass meadow
    - Other areas with huckleberries with true firs encroaching
    - Fire protection for lookout
    - Increase diversity
- Have discovered more meadows in last two summers (all other colors)
    - Proposing thinning, understory burning
    - "special habitats" – get a polygon, get recorded
    - Went through stand by stand as IDT and created proposed actions
- Found milkweed and monarchs in a string of meadows – will do treatments in and around
- Special interest area demarcated in forest plan
    - Dead Horse set aside for Heritage – need to write a SIA plan.
    - Meadow downslope from Young Rock Trail Different NEPA decision related to Walama surveys
- Other meadows with prior NEPA work 10+ years in greater Rigdon area such as Big Pine opening – trees cut, prescribed burn
- Monarch Meadows is 2656
- Long list of special habitats on Rigdon Area Meadows map – lots of different kinds found throughout the area
    - Don't log through those to avoid disturbance
    - Might do treatments around them to enhance
    - Include things like ponds, dry/wet, rock outcropppings
    - Might be able to plant milkweed in some of those areas – doesn't need to go under NEPA but will be included
- A lot of encroachment going on around meadows
- Preference on planting is to make space for existing plants, don't want to introduce invasives; if given space, they'll move out to where they like to grow
- Comment: Meadows identified have soil conditions that aren't super conducive to tree establishment, but what is called a meadow is really a tiny part of what were historically very large open areas, especially in ridge areas
    - Doug fir is young, no course woody debris to indicate historic presence of trees
    - Ridge starting with M2 is where we've been working where trees will be commercially harvested, reconnecting meadows
    - Comment: Experience with meadow restoration projects esp. in S. Oregon – always regret not taking more trees
        - Hard and expensive if not doing commercially
    - Take advantage of opportunity to remove trees where possible

    - Early seral areas to restore meadows/habitat creation
- Q: Jim's Creek site has a lot of cheat grass, lots of the meadows do – curious how do you think about how much debris/downed logs to leave?
    - Not supposed to put piles in the meadows
    - Need to get some crews out this year before burning to scatter the piles – don't want concentrated piles on sensitive, thin soils
    - Meadows have expanded greatly – piles may have been outside of the meadows pre-expansion
    - Dogtail, cheat grass in almost all meadows
        - How often do we burn it? Do we just get cheat grass back? Implementation-basis management, part of proposed action for these meadows

<u>Heritage</u>

- Supports the project's overall design and purpose and need
- **Archeological record is validating project** – this is the main message of the project
- Tribes – want to see more Jim's Creek Projects for harvests and edibles
- Restoration and resiliency
- Q: tribes involved from a co-created space
- Cultural resource - Residual artifacts
- Heritage – that and also protecting traditions and lifeways
- Important corridor prior to eruption of Mt Mazama
- Meeting ground of Molala and Kalapooia, Umpqua, Yoncallas, and Klamath
    - Would burn every September
    - Fire used to drive game into pits, keep areas open to maintain savannas and upland prairies
    - Berries
    - Dominant land type patch from crest to crest maintained for thousands of years
    - Fire maintained crops and wildlife populations, observed in 1908 by John Minto
- March 1852 created road from Eastern Oregon – free emigrant road, meek cutoff reached in 1845
- Fort Boise connected to western valley
    - 250 wagons passed through, establishing Pleasant Hill, Dexter, etc.
- Military road through the Cascades ~ 10 years later, created with help of Siletz; also a cattle road
- Botany restoration is tied to heritage
    - Prescribed burning in Jim's Creek pilot project allowed for the regrowth of some of the edible plants.
- This summer and last found culturally modified trees and rock features
    - Concentrations near Jim's Creek
    - A lot followed ridgelines, areas with wide open view sheds; likely formerly wide-open land types such as savannas
    - 53-60 culturally modified trees PP
    - 94 rock features – mostly trail markers or giving thanks to landscape – Modoc and Molala – synonymous in formats and structures
    - wide viewsheds and ridges travel corridors and prayer
    - deflated rock cairns/"Prayer monuments" still present
    - Findings validate purpose and need, prehistoric land use
    - Cultural – Residual and material – artifacts, features, sites
    - Heritage – values; water, upland meadows, camas, huckleberries; markers of lifeways
- Protecting existing historic trails – Young's Rock Rigdon, Bristrow, Echo Creek, all indigenous trails
- Found that some stone tool materials in 1980s and 90s, 40% of obsidian comes from east (silver creek, Christmas) – Klamath and Paiute
    - Mahogany obsidian (Piute Klamath training corridor)
- Q: What are the protective measures federally?
    - Must protect archeology sites, including a buffer.
    - Report the sites to higher levels for national registry.
    - 50 years or older are eligible for protection.
    - Proposing to treat the area so it doesn't succumb to natural uncontrolled events.

- Q: How do you protect that so people don't just take artifacts?
    - FOIA exempt, can't share information
    - Federal crime to take
    - A lot of the artifacts are hard to find
    - People have been prosecuted
    - Don't expose those areas
        - Knowledge of where sites are informs protection (Avoid and protect)
    - Volcanics (obsidians, etc) can withstand low-intensity burnings
        - More difficult to protect things like cabins, don't have too many of those in this area
- Q: How do you diagnose rock features
    - It's a problem
    - Have been studying since 2001 w/ geoarchaeologist
        - Also into soils
        - Stacked rock cairns pointing to peaks
        - VQs – natives stacked as rituals
        - Did thesis on mapping which had not taken place previously
        - Lots of different types – combing data
        - Rock stacks of two or more are predominant
            - Easier to identify in more arid areas, but there are so many rock outcroppings here
            - Moss and lichen can develop over just a couple of years
            - Set of criteria include sites nearby, access routes
            - 1-2 specific types in the area
        - Not cairns – stacks
- Q: What about floodplains? Recreating floodplains that have been lost?
    - Wagon road goes through some
        - Fluctuates
        - Monitoring – archaeologist will be on site, cataloging

<u>Fuels</u>

- Fuels – Up to 4K arcres
- Roadside treatments for holding and access
- Reduce fuel loading – underburning, handpiling and different harvesting techniques
- Underburning – where high probability of success
- Where units dropped for resource concerns looking at where roadside understory fuels treatments are possible
- 3 Beargrass meadow by Warner lookout – goals to burn to create diversity and provide structural protection for lookout
- Outer edges have opportunity for huckleberry enhancement
- Priorities: Supporting other departments in achieving goals and objectives with use of underburning; fuels management of activity and natural hazardous fuels; strategizing areas where suppression forces can hold and access wildfire in a safe manner
- Roadside corridors ~10 miles will do roadside treatments – non-commercial thinning
    - Opportunities to hold fire, get away from fire in a safe manner
- Management of fuels – managing natural fuels as well as activity fuels; harvesting treatments of dead, downed surface floor fuels; natural fuels accumulate and without natural disturbance, loads build up
    - Have identified areas with highest chance of succeeding with reintroducing fire on the landscape
- Supporting silvicultural prescriptions, getting different kinds of vegetative management structures and getting disturbance in to dry pine/mesic areas; maintenance requires fire; help wildlife and botany meet their objectives
- Supporting heritage on some of the cultural botanicals (huckleberries) that rely on some type of disturbance
- Looking into the future and strategizing on well thought-out proposals that can also work with suppression efforts for future large fires.
- Daylighting roads for wildfire management, especially on ridges and valley bottoms.
- Getting fire back into to reduce many of the natural fuels that have accumulated over the last 20 years.

- Q: Do you anticipate being able to manage all the burning that is proposed?
    - FS must project into the future in a way that's realistic and manageable.
- Q: $400-700/acre to do a controlled burn – would it be better to let fires burn as they come?
    - Have to do both. If we started just letting fires burn, you would lose very important features. Would like that as an end result, but it's going to take time to get there
    - Prices are based off of activity fuel burning; takes a lot of manpower, small acreages
    - Bigger we get, less complexity, price gradually reduces
    - Time to start pouring money into the landscape

- Prioritizing fire in restoration efforts
    - Funding
    - Education

- Aquatics:
    - Interpretive signs and education for floodplain work
- Human Uses i.e. recreation:
    - road closures
    - trail reroutes (Middle Fork trail distance from river)
- Fire:
    - Prioritize fire in restoration work
- Vegetation:
    - How red tree vole reserves and corridors overlap with manage stands and later seral stands
    - Amount of proposed late seral open forest within NSO critical habitat
    - Stand-level prescriptions for mixed conifer: leave all oak and pine species of any age, leave remnant Douglas fir and incense cedar
    - Stand-level prescriptions for early seral habitat: leave madrones, oak