Crown Managers Partnership
Hi5 Working Group Meeting
Meeting Minutes; 4/8/20 1-3pm

1. *Attendees:*

- Natalie Poremba
- Bob Keane
- Dawn LaFleur
- Elliot Meyer
- Joe Fortier
- Karl Anderson
- Katie Renwick
- Linh Hoang
- Amy Gannon
- Rob Sissons
- Rachel Darvil
- Stephanie Najda
- Melissa Jenkins
- Jodie Krakowski
- Anne Carlson
- Alison Burton
- Anna Schoettle
- Bill Hodge
- Kim Dohms
- David Walker
- Diana Tomback
- Tony Incashola
- Randy Moody
- John Fothergill
- James Lozeau?

2. *Additional Agenda Items*

- Alert involving transplant use - blister rust found in nurseries
  - It is possibly better to collect seeds in area and then direct seed to avoid planting transplants that have blister rust
  - Action: **David** will send along information to the Hi5 working group about transplants

3. *Whitebark Restoration Strategy Progress/Update (Melissa Jenkins)*

- Final summary report
    - Linh sent out an email with the final summary report - map monsters report is available upon request for those that wish to dive deeper, though it does not have the refinements that Joe (our new analyst) made
- Process
    - Pilot area was 4.7 million acres - Glacier NP, Flathead NF, and CSKT
    - *Step 1 - where is WBP able to exist?*
        - AKA potential range
        - Based on previous mapping efforts - refined with modeling of biophysical conditions (elevation, slope, shape, soil moisture, % slope, aspect)
    - *Step 2: where is the highest Conservation value (CV)?*
        - High Conservation value: Where WBP is currently providing ecosystem services or capable of providing ecosystem services
            - Ecosystem Services = wildlife food source, watershed protection, scenic/rec/education value
            - Areas capable of providing services = where cones are produced, rust resistance, biophysical characteristics are best, persist under future climate, recent burn areas
        - Services were weighed based on importance
            - The units (GP, CSKT, NF) had the option to weight importance differently, and the only area they weighted differently was recreation
            - Biologically important things received a higher weight than human related items (ie. rust resistance has higher weight than recreation)
    - *Step 3. identify and quantify threats/stressors*
        - Current Stressors: Blister rust, pine beetles, succession,
            - Each stressor was broken into 4 classes and a map of existing stressors was created
        - Future stressors: wildfire hazard potential, future Mountain pine beetle, climate change
            - A map of future stressors was created and looked similar to the current stressors map
        - High CV areas have good distribution of stressor levels
    - *Step 4. Skipped*
    - *Step 5. Quantify restoration actions likelihood of success*
        - Restoration Actions: Planting, thinning, daylighting, pruning, Rx Burn, mechanical, cone collection
        - Stressors were divided into a rating of low or high and placed on a table with restoration actions
        - Each restoration action vs stressor was assigned a number
            - Blank = virtually no effect
            - 1 = positive effect (ie. planting or seeding [restoration action] where there was a past fire [stressor])
            - -7 = don't do the action; -7 negates all of the 1 of other actions (ie. if you have high rust hazard [stress], you don't want to plant there [restoration action], even if other conditions are ideal)
        - Then, maps were created with the likelihood of success for each restoration action
    - *Step 6. Identified core areas (20-30%) for restoration focus*
        - Highest conservation values, include all stress levels (low, medium, and **high**)
            - When we originally didn't include high stress areas, some places with recent burns were dropped out, because fire is a stress
        - Core polygons >5 acres
        - Final number of core acres for each pilot area:
            - GP = 112,00 acres
            - CSKT = 28, 00 acres

        - NF = 266,000 acres
    - **Note:** We prioritized based on where it's best for species to grow; we didn't limit core areas by land management designation (ie. wilderness areas)
- *Step 7. 10-20 yr plan*
    - 7a. Identify treatment focus areas
        - Chose north fork as example area
        - Red polygons are treatment focus areas - they were decided by the following:
            - contiguous CV (ie. places with lots of continuity were selected over long, thin ridgeline areas)
            - Ability to support populations (250 acres with 50 wbp per acre) ; populations must be within 12 km of each other (Clark's nutcracker seed spreading - a median distance)
            - Action: **Melissa and Diana** will meet to discuss seed dispersal
        - Next, we overlaid the planting and seeding layer and adjusted the red polygons
        - Included areas outside Flathead NF boundary
    - 7b identify individual treatments
        - Past treatments were added to the map
        - Treatments with high likelihood of success
        - Planned treatment
            - Incorporating proposed treatments into the plan (NEPA)
    - 7c prioritize and schedule treatments
        - Considered the following: Recent burns. Previous planting, stands near population requirements, plus trees in >50th percentile, genetically diverse areas
        - *Additional considerations:* populations are well distributed, each treatment type has mix of priority levels, each treatment has a mix of difficulty/cost (don't do all easy stuff first), limit to maximum unit workforce capability

Created Draft Data Dictionary

- Originally wanted to create an arcgis data form for all agencies that could be kept in a single, unified database - was too large a task to take on, so we created a data dictionary instead
- The data dictionary is a form that outlines a consistent way to collect data! That way we can all share/communicate findings fluidly

Next steps

- Complete 10-20 yr plan for pilots
- Finalize common data dictionary
- EXPAND PILOT PROCESS!!

Question & Answer

- Most of the crown has high levels of blister rust - in deciding where has low rust risk, how'd you decide?
    - Used a wetness index ; higher wetness = higher hazard
    - Map monsters document explains this further
    - If you expand to other regions, you'd want to adjust high and low hazard cut offs
- How are genetically diverse areas defined?
    - Mary Francis Mahalovich defined them - she based it off cones collected for rust screening
        - Action: **Diana** will ask Mary Francis about the genetic element
        - It's important to get a working definition of this before expanding to the entire CCE
    - For evolutionary potential, you need 1,000 unique individuals
        - Need to combine planting with natural cone producing trees to foster genetic diversity
- Are you taking seed from areas with high levels of resistance?

    - Aspirational is to have seed orchards in place and get seed from seed orchards, but in the meantime, we are collecting from trees that have been screened and only collecting from trees in upper 25th percentile
- It would be great to have an appendix that explains reasoning for decisions

4. *Next Steps – Expanding the Pilot project to the greater CCE and to limber pine (Linh Hoang)*

- **See attached workplan and attached member/expectations sheet**
- Who wants to/should be involved as we expand to the greater CCE?
    - Katie Ireland - suggested by Anne Carlson; will assist in writing grants; motivated to work on funding solutions
    - without a lead for this team, we are going to struggle; Perhaps we find funding for someone to lead the team - not sure what the cost of that might be
    - BC participation: large and diverse crowd on BC monthly calls; Action: **randy** will start advertising for folks to join the Hi5 team
- In May 2020, we will assemble a meeting to get the expansion started

5. *CMP Hi5 Working Group 5th Annual Meeting (Natalie)*

- Sept 14, 2020 from 10am to 4pm at Hilton Inn in Missoula, MT
- it is an add on event for the Whitebark Pine Ecosystem Foundation's meeting
- They are still accepting abstracts, but registration is closed currently. They are monitoring the Covid situation and are continuing planning, but they may be forced to postpone
    - If they cancel, we will likely cancel as well
- the room is covered, but food and AV are not ; Assuming 70 people cost is around $2,500
    - Action: **Natalie** will reach out to Amy from the DNRC about sponsorship
    - Ally burton from Teck: her organization is canceling events and travel for September, but she can support financially if needed either a virtual event or a future event

6. *Updates from Working Group Members (Dawn)*

- *David Walker* -mast year; found no seed cones at highest elevations
    - Dianna has collected viable seeds just below treeline; takes over 2 years to create a cone ; Action: **David** will email Diana for more information