



Landscape Restoration Team

Meeting 23

Wednesday, January 9, 2013

Facilitated by:



LR Team Meeting 23 Agenda

Topics

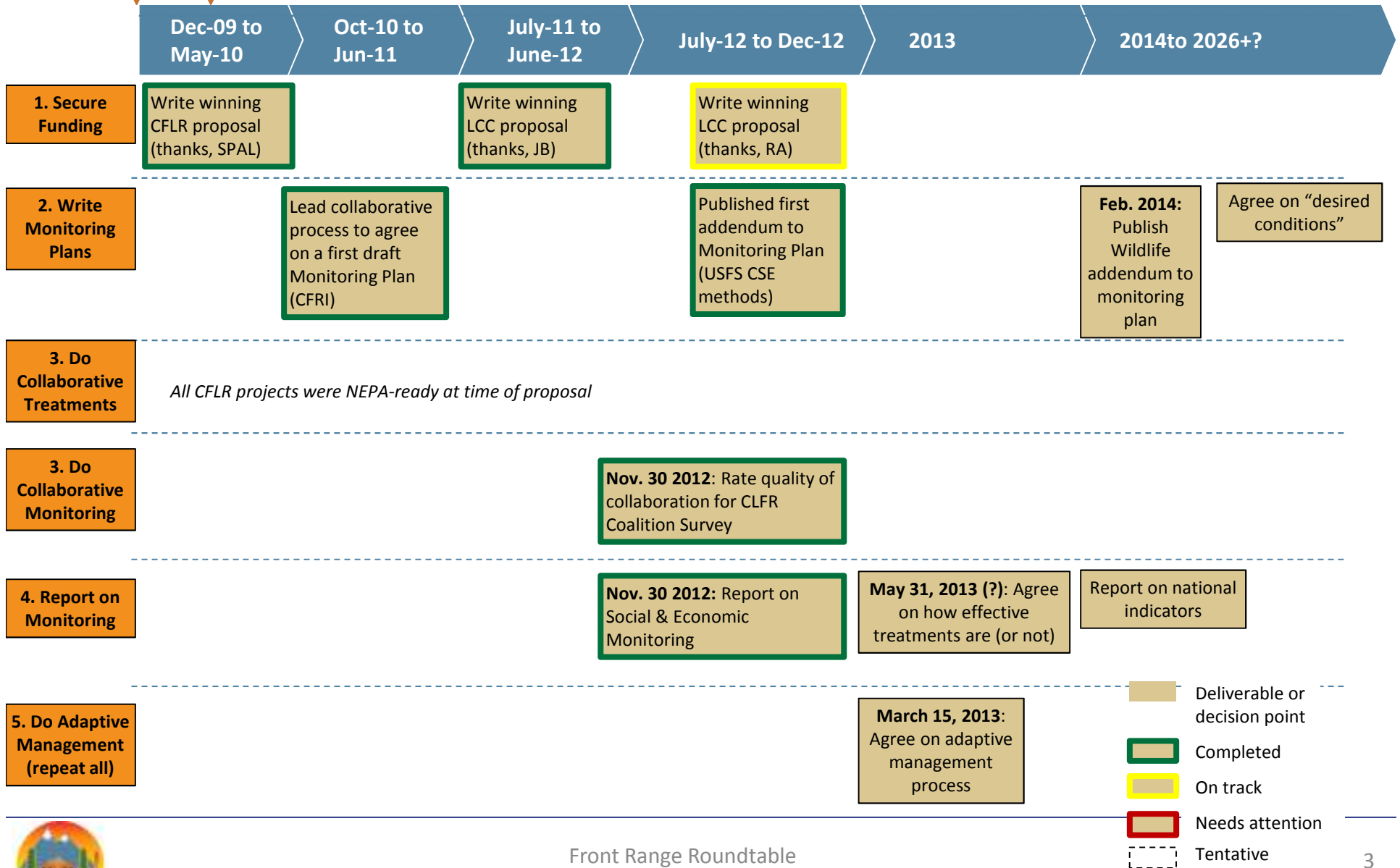
Timing

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|---|---------------|
| 1. Introductions, ice breaker, review of agenda and new organizing documents | 10:00 – 10:15 |
| 2. Revise / approve adaptive management narrative | 10:15 – 11:00 |
| 3. Summarize the results from our Hall and Heil data | 11:00 – 11:20 |
| 4. Review Rob's bibliography on PP restoration, make any final additions before it is posted on website | 11:20 – 11:40 |
| ----- | |
| 5. Lunch | 11:40 – 12:00 |
| ----- | |
| 6. Watch the CFLR webinar on reporting on national indicators | 12:00 – 1:30 |
| 7. Make a plan for how to develop our methods for reporting on national indicators | 1:30 – 2:00 |
| 8. Review proposed goals and work plan from Wildlife Team | 2:00 – 2:30 |
| 9. Update action items in our operations plan, plan new items for 2013 as needed | 2:30 – 2:45 |
| 10. Plan next steps (including agenda for Feb. meeting) | 2:45 – 3:00 |

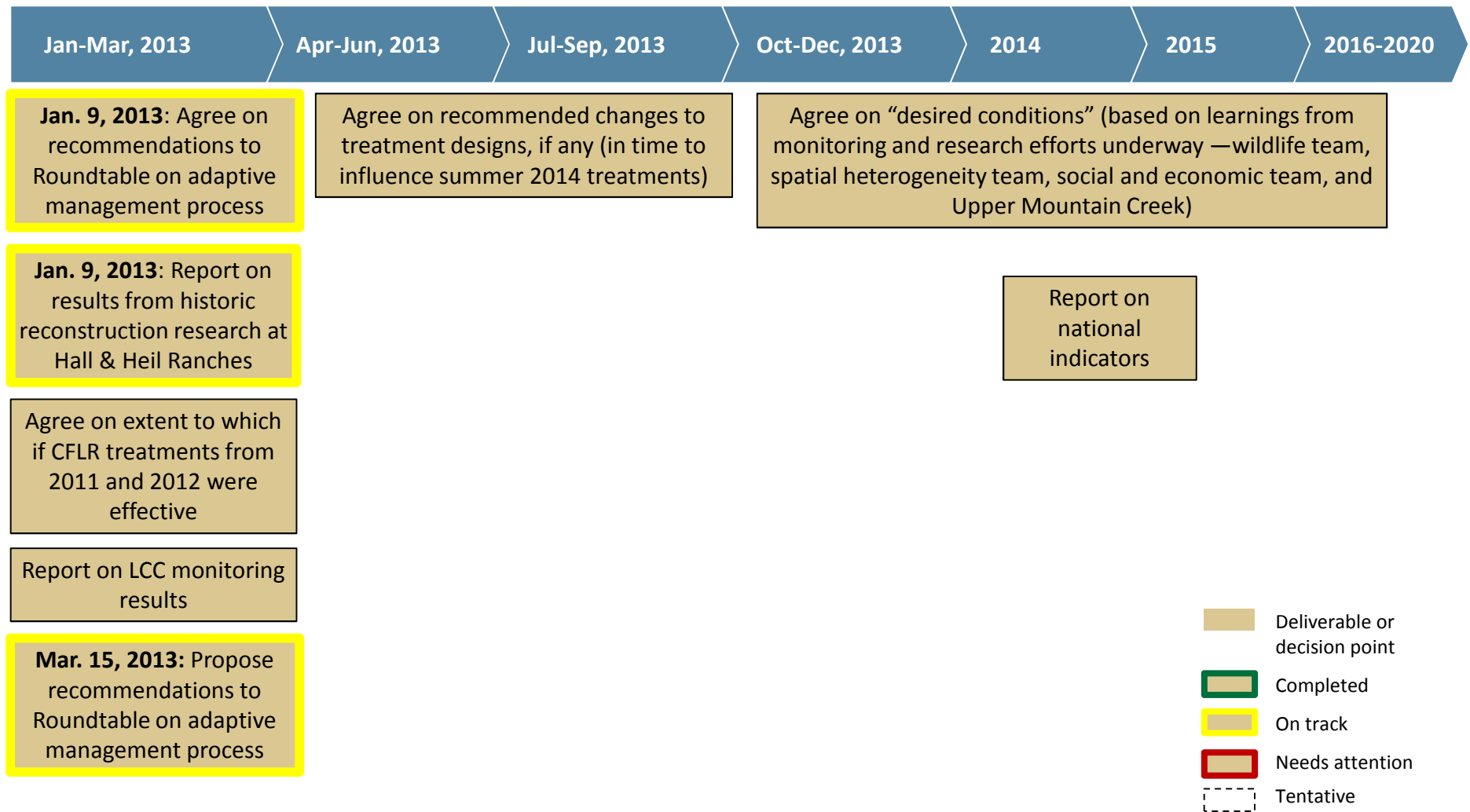


Front Range CFLRP: High Level Work Plan

Dec. 2009: Proposal written
 May 2010: Proposal awarded



Landscape Restoration Team : High Level Work Plan



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A Model for Adaptive Management for the Front Range Collaborative Forest Landscape Restoration

The Front Range Collaborative Forest Landscape Restoration Program has developed an adaptive management (AM) model to incorporate data to be developed by its Multiparty Monitoring Program (Clements and Brown 2011) into future goals and treatment actions (Figure 1). The model starts by using this definition of AM from the National Research Council (2004):

Adaptive management promotes flexible decision making that can be adjusted in the face of uncertainties as outcomes from management actions and other events become better understood. Careful monitoring of these outcomes both advances scientific understanding and helps adjust policies or operations as part of an iterative learning process. Adaptive management also recognizes the importance of natural variability in contributing to ecological resilience and productivity. It is not a 'trial and error' process, but rather emphasizes learning while doing. Adaptive management does not represent an end in itself, but rather a means to more effective decisions and enhanced benefits. Its true measure is in how well it helps meet environmental, social, and economic goals, increases scientific knowledge, and reduces tensions among stakeholders.

The key feature of AM is that past management actions affect future management direction. However, our model recognizes that in practice there are two potential levels where future directions may be changed through monitoring of past actions. These two levels include changes made either to generally more short-term management treatments or implementation actions, or to generally more long-term and fundamental issues that define project outcomes or even overall desired conditions. We have broadly outlined these differences based on the following definitions (Moote and Shannon 2011):

Implementation monitoring, also known as compliance monitoring, records actions taken and outputs relative to targets. Implementation monitoring asks, "Did we do what we said we would do?"

Effectiveness monitoring measures changes in specific conditions relative to desired outcomes. Effectiveness monitoring asks, "Did we achieve our desired results?"

In the FR CFLRP AM model, implementation monitoring will be done within individual projects, especially within individual NEPA decisions (right-hand loop in Figure 1). Annual monitoring results will be collected, analyzed, and assessed both by agency personnel and collaborative partners to determine if projects are meeting target metrics or other specific objectives defined mainly through NEPA documents. At the same time, both on an annual basis but especially over multiple years of the project, the collaborative will assess effectiveness of the overall CFLRP effort on landscape ecological restoration goals and desired conditions (left-hand loop of Figure 1). Note, however, that there is no hard-and-fast boundary for when these two AM processes take place; a central hallmark of AM is that constant feedback between past actions and future directions is always taking place. If, at any point in the monitoring process, changes need to be made in central tenets of the project's direction, we should be able to accomplish that within the outlines of this model. This is especially the case as new scientific data or other factors become available and may either tweak individual features of treatment options,

or change fundamentally the goals and desired conditions of the overall project (e.g., as an example of the latter, the effects of global climate change).

Finally, the FR AM model also includes a feedback loop for the multiparty monitoring program. If at any point we find that the monitoring plan is not accomplishing the goals set out for it, the plan can be modified or added to. As an example, external research may affect any component of the overall AM process but especially sensitive to external findings may be specific methods or metrics identified in the monitoring plan.

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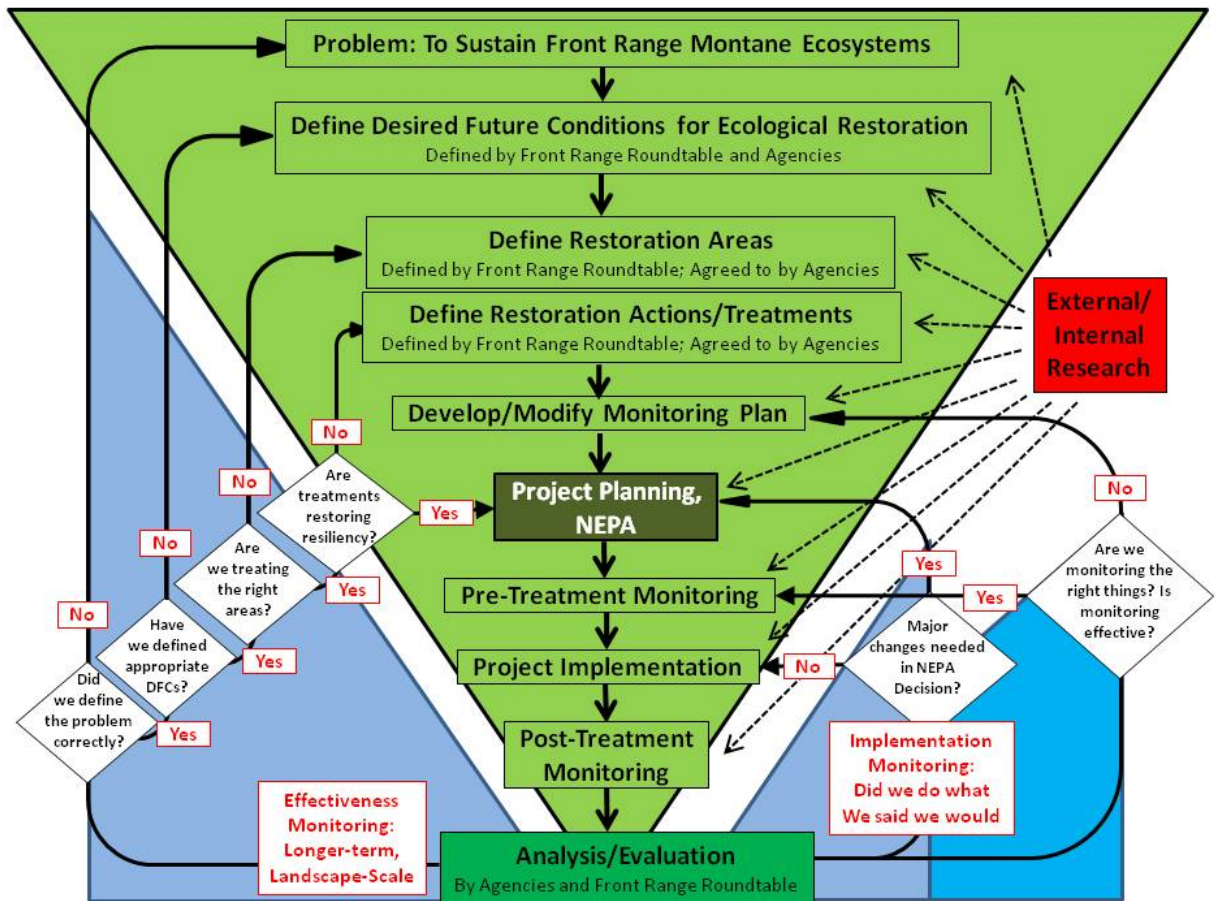


Figure 1. The Front Range Collaborative Forest Landscape Restoration Project Adaptive Management model.

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10. Plan next steps (including agenda for Feb. meeting)	2:45 – 3:00



Guidance: Tracking and Reporting Ecological Outcomes of the Collaborative Forest Landscape Restoration Act

Background

Title IV of the Omnibus Public Land Management Act of 2009, which established the Collaborative Forest Landscape Restoration (CFLR) program, requires a five year report to Congress that assesses whether, and to what extent, the program is fulfilling the purposes of the title. This ecological indicator is one of a suite of indicators developed in order to fulfill this requirement. Each project will report on progress towards meeting these desired conditions in FY2014 in order to feed the five year report to Congress.

Goal

To assess the ecological outcomes of landscapes funded under the Collaborative Forest Restoration Act in a way that is relevant to the individual collaborative groups and their specific desired conditions, while also allowing for national summary to feed the five year report to Congress.

Challenge

The Collaborative Forest Landscape Restoration Act provides support to landscape collaboratives with diverse sets of stakeholders that occur across a number of different ecosystems throughout the United States. This diversity is reflected in the ecological objectives that each CFLR Landscape has chosen to address within their respective proposals. This situation makes it unlikely that any single metric or index value will be sufficient for describing the ecological impacts of the Act. An approach is needed that reflects the values and ecological restoration objectives of each Collaborative while maintaining the ability to provide a national summary of the Act's impacts. In addition, this approach should allow a person with limited resource background to determine how each Collaborative is moving forward in achieving their stated ecological objectives with the benefit of matching, leveraged, and CFLR funds. In other words, this approach should provide a simple and transparent method of accounting for **each collaborative's activities, the objectives for those activities, and the resulting response of the landscape**, throughout the 10 year CFLR funding period and the 15 year monitoring period.

Developing Desired Conditions

All of the Collaborative Forest Landscape Restoration landscapes identified broad ecological goals in their initial proposal. Many if not all of the CFLRP Landscapes and their stakeholders are in the early stages of identifying the quantifiable targets that management must achieve to realize these broad ecological goals. Once the Collaboratives are able to set these targets, the outcome measures described in this document can use national and monitoring data to assess whether management is meeting expectations. These quantifiable targets based on desired conditions should take the following format:

Desired Conditions Target for Fire Regime Restoration: ____ change (relative to the desired condition) occurs across ____% of the landscape area by ____ date.

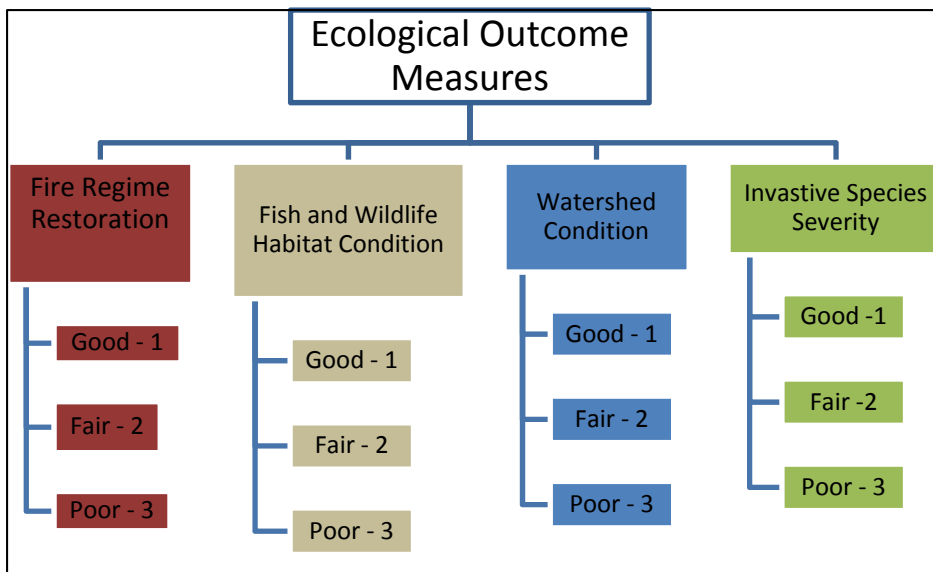
Desired Conditions Target for Fish and Wildlife Habitat Condition: ____ change (relative to the desired condition) occurs across ____% of the landscape area by ____ date.

Desired Conditions Target for Watershed Condition: ____ change (relative to the desired condition) occurs across ____% of the landscape area by ____ date.

Desired Conditions Target for Landscape Scale Invasive Species Severity: ____ (%) of the CFLR landscape area was restored by reducing invasive species severity (preventing, controlling, or eradicating targeted invasive species) to meet desired conditions by ____ date.

Ecological Indicators

Figure 1. Conceptual diagram of the four components of the CFLR Ecological Outcome Measure. Each component is reported individually.



Each project will develop a set of indicators (Figure 1) that are evaluated based on each individual CFLRP Landscape’s progress towards its Desired Conditions (DCs), as reflected by a set of key objectives, within the four ecological categories explicitly identified within the Act. This maintains each Landscape’s ability to be evaluated on the

basis of its own unique objectives while providing a set of metrics that tiers directly to the Act and the proposals that were submitted for funding under the Act. Progress towards each DC will be evaluated based on the standardized scoring system described below. Scores are assigned at the Landscape (defined by the area in the CFLR proposal) and the project (referring to individual management units) level to allow Landscapes to report on both short-term and long-term progress.

Within each outcome measure category, there are likely to be multiple Desired Conditions; these scores can be averaged to provide a summary of a Landscape’s progress within that outcome measure. These scores will be based on a uniform scale with standardized criteria, allowing scores to be averaged across CFLR Landscapes to provide a national summary of progress towards the ecological objectives of the Act. This information, in conjunction with the Collaborative Forest Landscape Restoration Annual Reports,

will provide both the outputs (as summarized by the performance measures) and the outcomes (as summarized by the indicators) for the purpose of national reporting.

Glossary

CFLR Landscape – Includes entire project boundary proposed for funding under the Collaborative Forest Landscape Restoration Act. Sometimes referred to as CFLR Project

Project-level- NEPA planning areas or implementation areas.

For the purpose of this document, **landscape will be used to refer to entire CFLRP boundary areas; project will refer to NEPA planning units.**

Treatment Area – Individual management units with the CFLR Landscape. Where “project-level” monitoring occurs.

Desired Condition – Landscape and resource conditions as defined collaboratively by stakeholders and land managers to achieve and maintain over time for each CFLR Landscape. Desired conditions are outcome-, not output-driven and should encompass 10+-years.

Indicator – an ecological outcome variable that can be assessed through different metrics; e.g. fire regime restoration.

Metric – a quantifiable variable used to assess indicators. Metrics need to be measurable in a repeatable way through time, with defined desired conditions or objectives.

Ecological Outcome Measures 1: Fire Regime Restoration

From the Act: *...a collaborative forest landscape restoration proposal shall-- describe plans to—*

(A) reduce the risk of uncharacteristic wildfire, including through the use of fire for ecological restoration and maintenance and reestablishing natural fire regimes, where appropriate;

Description and Justification

CFLRP Landscapes were funded to implement forest restoration treatments to facilitate the reduction of wildfire management costs, including through reestablishing natural fire regimes, and reducing the risk of uncharacteristic wildfire. In frequent-fire landscapes, restoration treatments may also reduce the risk of high severity fire and comport with goals to reduce risk to communities and high resource values. Desired Conditions under this indicator should identify objectives for restoring fire behavior characteristics and/or forest structure important to fire behavior within the natural range of variability for each landscape.

Guidance on Specifying Desired Conditions for Use in National Reporting

- Objectives within the DC should be quantifiable.
- Desired Conditions related to NRV should identify which components of NRV they are addressing.
- The DC statement should clearly identify the metric that will be used to determine its status (i.e., changes in Fire Regime Condition Class vs. changes in modeled fire behavior).
- At the landscape scale, Desired Conditions should, where appropriate, utilize LANDFIRE data to ensure consistency with other national reporting efforts
- If more specific or other finer resolution (<30m) data is available, landscapes should use those other national or local data sources and cite their source.
- The spatial scale (e.g., treatment, landscape, etc.) of the DC should be explicitly identified.
- The temporal scale (e.g., FY, 3 year, 5 year, etc) of the DC should be explicitly identified.

Scoring for National Reporting

Landscape-scale scoring

Few (if any) CFLR-funded Landscapes propose to achieve landscape scale objectives through the mechanical treatment of every acre within their landscape boundary. Rather, the use of strategically placed restoration treatments should facilitate meeting these broader objectives. Scoring at this level reflects the degree to which individual Landscapes are resulting in Desired Conditions at broader spatial extents.

- Good = Expected progress is being made towards Desired Conditions across ____% of the CFLR Landscape area.
- Fair = Expected progress is being made towards Desired Conditions across ____% of the CFLR Landscape area

- Poor = Expected progress is being made towards Desired Conditions across ____% of the CFLR Landscape area

“Expected progress” will be defined using 3, 5, 7 and 10-year benchmarks for each DC based on a percentage of the 10-year outcome specified in each Landscape’s proposal. To meet national reporting requirements on the Act, the 5, 10 and an additional 15-year reporting outcome are needed.

Project-scale scoring

Each management action funded through CFLR will have its own project-level objectives that are designed to contribute to achieving Desired Conditions at larger scales. Project-scale scoring should reflect how well the results of an individual management activity met the objectives for that activity. As such project-scale scoring is conducted following completed management activities by the multi-party monitoring group at each Landscape.

- Good = 75% or more of implemented treatments result in measurable progress towards individual project-level Desired Conditions.
- Fair = 26% - 74% of implemented treatments result in measurable progress towards individual project-level Desired Conditions.
- Poor = 25% or less of implemented treatments result in in measurable progress towards individual project-level Desired Conditions.

Ecological Outcome Measure 2: Fish and Wildlife Habitat Condition

From the Act: ...a collaborative forest landscape restoration proposal shall-- describe plans to—

(B) improve fish and wildlife habitat, including for endangered, threatened, and sensitive species;

Description and Justification

Alteration of forest structure through restoration treatments is likely to impact wildlife habitat through a variety of complex pathways. At larger scales this is likely to occur through changes in the size and arrangement of the various vegetation communities that comprise habitat for various species. At finer scales this is likely to occur through changes in stand structure, composition, and arrangement of key habitat elements for a particular species. For this indicator, CFLR landscapes are encouraged to focus on habitat for a variety of species; however, in some instances National Forest Land Management Plans, the Endangered Species Act, or Stakeholder consensus may identify a suite of species whose habitat requirements are often of concern when implementing restoration treatments. Desired Conditions within this Indicator should identify the species or suites of species presumed to be associated with the habitat in question, clearly articulate the structural and compositional components of those habitats, and/or identify key elements (e.g., snags, coarse woody debris, large-diameter trees, etc) that should be present within those habitats.

Guidance on Specifying Desired Conditions for Use in National Reporting

- Objectives within the Desired Condition statement should be quantifiable and capable of being evaluated against monitoring data (multiparty or otherwise).

- The spatial scale (e.g., project, landscape, etc.) of the DC should be explicitly identified.
- The temporal scale (e.g., FY, 3 year, 5 year, etc.) of the DC should be explicitly identified.
- At the landscape scale, Desired Conditions for “habitat type” should, where appropriate, utilize LANDFIRE Biophysical Setting (BpS) or USFS Land-type Association (LTA) data to ensure consistency with other national reporting efforts
- If more specific (e.g., remotely sensed information on forest structural attributes) or other finer resolution (<30m) data is available, landscapes should use those other national or local data sources and cite their source.
- Desired Condition statements should identify the habitat predicted to be associated with a specific suite of species for effectiveness monitoring.
- Project-scale Desired Conditions should identify the specific structural (e.g., basal area, canopy cover, etc.), compositional (e.g., proportion of various life forms, diameter distribution, etc.), or key habitat components (e.g., snags, coarse woody debris, large-diameter trees, etc) that management will be affecting and a quantifiable range of desired outcomes.
- Diversity and richness characterizations can be extremely difficult and costly. Desired Conditions related to diversity and richness of either species or habitats should explicitly state the method of assessment (e.g. Shannon-Weaver H' , inverse Simpson's C , Bray-Curtis, Jackknife 2, etc.).

Scoring for National Reporting

Landscape-scale scoring

- Good = Expected progress is being made towards Desired Conditions across ____% of the CFLR landscape area.
- Fair = Expected progress is being made towards Desired Conditions across ____% of the CFLR landscape area
- Poor = Expected progress is being made towards Desired Conditions across ____% of the CFLR landscape area

“Expected progress” will be defined using 3, 5, 7 and 10-year benchmarks for each DC based on a percentage of the 10-year outcome specified in each Landscape’s proposal. To meet national reporting requirements on the Act, the 5, 10 and an additional 15-year reporting outcome are needed.

Project-scale scoring

- Good = 75% or more of implemented treatments result in measurable progress towards individual project-level Desired Conditions
- Fair = 26%-74% of implemented treatments result in measurable progress towards individual project-level Desired Conditions
- Poor = 25% or less of implemented treatments result in in measurable progress towards individual project-level Desired Conditions

Ecological Outcome Measure 3: Watershed Condition

From the Act: ...a collaborative forest landscape restoration proposal shall-- describe plans to—

(C) maintain or improve water quality and watershed function;

Description and Justification

This indicator will rely on the Watershed Classification and Assessment Tracking Tool (WCATT) to provide information on watershed response to forest restoration treatments. WCATT is an existing database that has already assigned a watershed condition score for **every** 6th Order HUC (subwatershed) containing more than minor amounts of NFS lands within CFLR Landscape Areas. Desired Conditions should be stated as an overall WCATT score. Any reassessment of the WCATT scores must follow Watershed Condition Framework protocols, as outlined in the [Watershed Condition Framework](#) and the accompanying [Watershed Condition Classification Technical Guide](#). It should be noted that the Act requires “plans to maintain or improve water quality and watershed function”. Only in cases where a Landscape’s proposal did not address water quality or watershed function should Landscapes fail to address this indicator.

Guidance on Specifying Desired Conditions for use in National Reporting

- Desired Conditions should explicitly identify the relevant watershed and its relative priority.
- DC should clearly identify which watersheds will be improved and which will be maintained in their current state.
- The DC statement should be expressed in terms of overall impact on WCATT score. The DC statement may also use specific indicators within the WCATT where appropriate; project groups should clearly identify the indicator that will be used to determine its status (i.e., the WCATT score AND number of roads remove, etc.)
- The spatial scale (e.g., treatment, subwatershed, watershed etc.) of the DC should be explicitly identified.
- The temporal scale (e.g., FY, 3 year, 5 year, etc.) of the DC should be explicitly identified.

Scoring for National Reporting

Landscape-scale scoring

- Good = Expected progress is being made towards Desired Conditions across____% of the subwatersheds within the CFLR landscape area.
- Fair = Expected progress is being made towards Desired Conditions across____% of the subwatersheds within the CFLR landscape area.
- Poor = Expected progress is being made towards Desired Conditions across____% of the subwatersheds within the CFLR landscape area.

“Expected progress” will be defined using 3-, 5-, and 7-year benchmarks for each DC based on a percentage of the 10-year outcome specified in each Landscape’s proposal.

Project-scale scoring

- Good = 75% or more of watersheds treated within a year maintain or show improvement in WCATT score
- Fair = 26%-74% of watersheds treated within a year maintain or show improvement in WCATT score
- Poor = 25% or less of watersheds treated within a year maintain or show improvement in WCATT score

Ecological Outcome Measure 4: Invasive Species

From the Act: *...a collaborative forest landscape restoration proposal shall-- describe plans to— (D) prevent, remediate, or control invasions of exotic species*

Description and Justification

The presence of invasive species on the landscape poses a serious risk to native ecosystems. If left untreated, invasive species can alter hydrological systems, degrade habitat, overtake native groundcover, and alter fire behavior and severity ultimately leading to an undesired ecological trajectory. In addition, forest management activities may create site disturbances through the use of mechanical devices and may unintentionally provide pathways and vectors for the introduction and spread of invasive species within the CFLR area. Accounting for both management actions taken on existing infestations as well as new infestations that emerge during the life of the proposed landscape restoration treatments will be critical to assessing whether a landscape has met its objectives with respect to invasive species. Invasive species activities within the CFLR area may include surveys, inventories, and treatments against targeted invasive species, supporting prevention, early detection & rapid response.

Guidance on Specifying Desired Conditions for use in National Reporting

Desired Conditions under this indicator should be directly associated with the restoration outcome for the [unit's or forest's] invasive species program, and may address either the invasive species infestation itself or improving the resilience of the site against new invasions (e.g., increases in native understory species cover or biodiversity). On a landscape-scale (within the broader CFLR area) the number of acres restored against invasive species are those where the targeted invasive species was prevented, controlled, or eradicated for the period of the CFLR landscape restoration and should be based upon annual evaluations of treatment efficacy over the life of the CFLR implementation. This same concept holds true at a smaller, project-level scale for individual treatments within the CFLR area.

For Existing or Known Infestations Within the Landscape

- Utilize species-specific or site-specific risk assessments and a structured decision making approach to set treatment priorities and desired conditions within the Landscape Area.
- The Desired Conditions statement should articulate the restoration outcome (percentage of the area to be restored) and clearly define the actions which will be taken to achieve that outcome.

- The temporal and spatial aspects of the desired restoration outcome should be articulated in the Desired Conditions statement.
- Plan for the number of acres to be restored in the Landscape Area and estimate the desired average treatment efficacy level for activities against existing targeted invasive species infestations in the Landscape Area. Include the estimated number of acres to be restored and the desired average treatment efficacy level in the Desired Conditions statement.
- For national reporting, record all survey, inventory, and treatment data in the national NFS databases of record (NRM-TESP-IS and NRM-FACTS) using the NRM Invasive Species Integrated User Interface. Forests should ensure that all invasive species management data collected by Landscape cooperators are properly recorded in the national databases. Follow all national NFS invasive species program record keeping and reporting protocols and requirements (See [Http://fsweb.wo.fed.us/invasivespecies/](http://fsweb.wo.fed.us/invasivespecies/)).
- Overall restoration performance will be summarized in PAS for all invasive species treatment activities conducted within the Landscape Area. These results can be used to evaluate the overall “Good, Fair, Poor” measures of success for the CFLR. Focus evaluations only within the Landscape Area using data associated with the specific treatment areas.

Early Detection and Rapid Response (Infestations Previously Undetected)

- Whenever possible, utilize existing surveys and inventories of invasive species infestations within the Landscape Area to focus detection activities more efficiently. Assume that some infestations were missed by previous surveys and plan accordingly.
- EDRR activities should focus on new or small infestations across the Landscape Area, or may focus on monitoring high-risk pathways and vectors (construction areas, campgrounds, roads, fuels reduction areas, staging areas, sources of materials, etc.) which may introduce new invaders.
- Utilize species-specific or site-specific risk assessments and a structured decision making approach to set rapid response (treatment) priorities and desired conditions within the Landscape Area.
- For proposed EDRR activities the Desired Conditions statement should include the spatial and temporal aspects of the Landscape.
- With respect to “rapid response”, the Desired Condition statement should specify a planned treatment efficacy level of 100% (eradication) for the targeted infestations within the Landscape Area over the life of the Landscape; articulating that annual follow-up monitoring will be conducted to ensure this level is met by the end of the Landscape period.

Scoring for National Reporting

Overall restoration performance will be summarized in PAS for all invasive species treatment activities conducted within the Landscape Area. These results can be used to evaluate the overall “Good, Fair, Poor” measures of success for the CFLR Landscape Area. Focus evaluations only within the Landscape

Area using data associated with the specific treatment areas. ***A high level of restoration outcome performance (%) will result in a low “severity” level.***

Landscape-scale Scoring

Target for Landscape Scale Invasive Species Severity: ____ (%) of the CFLR landscape area was restored by reducing invasive species severity (preventing, controlling, or eradicating targeted invasive species) to meet desired conditions by ____ date.

- Good (Low Severity) – Treatment activities conducted to meet the Invasive species Desired Conditions result in an **average** restoration performance outcome of 90% – 100% across all invasive species treatment activities within the CFLR Landscape Area over the life of the CFLR Landscape. The **actual** number of acres restored is at least 90% of the **planned** number of acres restored across the entire CFLR Landscape Area.
- Fair (Medium Severity) – Landscape activities conducted to meet the Desired Conditions result in an **average** restoration performance outcome of 70% – 89% across all invasive species treatment activities within the CFLR Landscape Area over the life of the CFLR Landscape. The **actual** number of acres restored is 70%-89% of the **planned** number of acres restored across the entire CFLR Landscape Area.
- Poor (High Severity) – Landscape activities conducted to meet the Desired Conditions result in an **average** restoration performance outcome of 0% – 69% across all invasive species treatment activities within the CFLR Landscape Area over the life of the CFLR Landscape. The **actual** number of acres restored is less than 70% of the **planned** number of acres restored across the entire CFLR Landscape Area.

Project-scale Scoring

Target for Project Scale Invasive Species Severity: ____ (%) of the Treatment Area was restored by reducing invasive species severity (preventing, controlling, or eradicating targeted invasive species) to meet desired conditions of the project by ____ date.

- Good (Low Severity) = Treatment activities conducted to meet the Desired Conditions result in a restoration performance outcome of 90% – 100% across the treatment area for the life of the project. The actual number of acres restored is at least 90% of the planned number of acres restored across the entire treatment area.
- Fair (Medium Severity) = Treatment activities conducted to meet the Desired Conditions result in a restoration performance outcome of 70% – 89% across the treatment area for the life of the project. The actual number of acres restored is 70%-89% of the planned number of acres restored across the entire treatment area.

- Poor (High Severity) = Treatment activities conducted to meet the Desired Conditions result in a restoration performance outcome of 0% – 69% across the treatment area for the life of the project. The actual number of acres restored is less than 70% of the planned number of acres restored across the entire treatment area.

National Indicators: Invasive species

1. **Desired condition:** Prevent / minimize the spread of invasive species from treatment actions (where areas are invaded, not spread them; where not invaded, not introduce them)
2. **Species:** List from the monitoring plan (12)? Forest service invasive species list?
3. **Monitoring method:**
 1. Pre-treatment: CSE + qualitative assessment compared with invasive species maps from planning;
 2. Post-treatment: CSE + qualitative review by invasive species experts
4. **Variables:**
 1. CSE plots: post-treatment area of invaded species vs. pre-treatment area
 2. Treatments sites that are not CSE plots: post-treatment presence / absence of species on a site
5. **Analysis:**
 1. Assess the vectors that brought the weeds in to the treatment areas that were invaded (e.g., possible vectors: not washing equipment)
 2. Correlation between bare soil immediately post treatment and infestation
 3. Did the forest treat the invasive species?
6. **Questions / Next steps:**
 1. Does the CSE need to be changed?
 2. For CSE, reduce list of 12 species to 10? For expert review; expand to include entire noxious weed list?
7. **Indicator statement:** ____ (%) of the CFLR landscape area was restored by reducing invasive species severity (**preventing**, controlling, or eradicating targeted invasive species) to meet desired conditions by ____ date.
[current invasion is essentially zero %; landscape is ~3 m acres, projects are ~30k acres]
 1. Landscape scale score: Target = NA
 2. Project scale score: Target = 100% (0 additional infestation) by 2025



National Indicators: Fire Regime

1. Desired condition:

1. Landscape desired conditions:
 1. Mixed severity fires that trends towards surface fires
 2. Reduce crown fire potential at 90th percentile weather (as modeled in fire behavior models)
 3. Decreased litter and duff
 4. Decreased or similar coarse woody debris
 5. (Fire Regime Condition Class 1)?
2. Project scale desired conditions: Move percent of forests modeling at active crown fire potential from 0.5% to 0.1%; passive crown fire potential from 33.7% to 6%; surface fire potential from 62.6% to 90.7%, and no fire potential stays the same at 3.2%

2. Monitoring method:

1. Landscape modeling: Landsum
2. Project scale modeling: FVS

3. Variables:

1. CSE plots: overstory trends?
2. Treatments sites that are not CSE plots:

4. Analysis:

5. Questions / Next steps:

6. Indicator statement: _____ change (relative to the desired condition) occurs across _____% of the landscape area by _____ date.

1. Landscape scale score: Target =

LR Team Meeting 23 Agenda

Topics	Timing
1. Introductions, ice breaker, review of agenda and new organizing documents	10:00 – 10:15
2. Revise / approve adaptive management narrative	10:15 – 11:00
3. Summarize the results from our Hall and Heil data	11:00 – 11:20
4. Review Rob's bibliography on PP restoration, make any final additions before it is posted on website	11:20 – 11:40

5. Lunch	11:40 – 12:00

6. Watch the CFLR webinar on reporting on national indicators	12:00 – 1:30
7. Make a plan for how to develop our methods for reporting on national indicators	1:30 – 2:00
8. Review proposed goals and work plan from Wildlife Team	2:00 – 2:30
9. Update action items in our operations plan, plan new items for 2013 as needed	2:30 – 2:45
10. Plan next steps (including agenda for Feb. meeting)	2:45 – 3:00



Roundtable Wildlife Team—Contacts

Full Name	Organization	Division	Title	Address	City	State	Postal Code	Work Phone	Cell Phone	Email1	Membership type	Attended 11/13/12 Meeting	Attended 12/18/12 Meeting
Gali Beh	Beh Management Consulting, Inc.		Front Range Roundtable Facilitator	637-B South Broadway, #134	Boulder	CO	80305	303-499-1576	303-514-2375	gali@behconsulting.com	Facilitator	Yes	Yes
Jenny Briggs	US Geological Survey	Rocky Mountain Geographical Science Center	Research Ecologist	DFC Building 810	Lakewood	CO	80225	303-202-4078	303-518-0925	jbriggs@usgs.gov	Core	Yes	Yes
Casey Cooley	Colorado Division of Parks and Wildlife		Montane/Forest Habitat Coordinator	4255 Sinton Road	Colorado Springs	CO	80907	719-227-5227	719-660-1427	Casey.Cooley@state.co.us	Core	Yes	Yes
Lynne Deibel	US Forest Service, ARP	Arapaho and Roosevelt National Forests and Pawnee National Grassland	Forest Wildlife Biologist	2150 Centre Avenue, Building E	Fort Collins	CO	80526	970-295-6638	970-420-1670	lcdeibel@fs.fed.us	Co-Leader	Yes	Yes
Jonas Feinstein	Natural Resources Conservation Service		State Forester	DFC Building 56	Lakewood	CO	80225	720-544-2839	970-218-8364	jonas.feinstein@nrcs.usda.gov	Advisor	Yes	No
Paula Fornwalt	USFS Rocky Mountain Research Station	Rocky Mountain Research Station	Research Ecologist	240 West Prospect Road	Fort Collins	CO	80526	970-498-2581	970-420-8276	pforfwalt@fs.fed.us	Advisor	Yes	No
Steve Germaine	US Geological Survey	Fort Collins Science Center	USGS Ecologist	2150 Centre Ave, Bldg C	Fort Collins	CO	80525	970-226-9107		germaines@usgs.gov		Yes	No
Hal Gibbs	US Forest Service, ARP	Arapaho and Roosevelt National Forests and Pawnee National Grassland	Ecosystems Group Leader	2150 Centre Avenue, Building E	Fort Collins	CO	80526	970-295-6630	970-222-2288	hdgibbs@fs.fed.us	Core	Yes	No
Terra Lenihan	Beh Management Consulting, Inc.		Front Range Roundtable Coordinator	637-B South Broadway, #134	Boulder	CO	80305	303-499-1576	303-709-4774	terra@behconsulting.com	Note taker / Coordinator	No	Yes
Liba Pejchar	Colorado State University	Fish, Wildlife, and Conservation Biology Dept.	Assistant Professor							liba.pejchar@colostate.edu	Advisor	No	No
Felix Quesada	US Forest Service, PSICC	Pikes Peak Ranger District	Wildlife Biologist	601 S. Weber Street	Colorado Springs	CO	80903	719-477-4207		fquesada@fs.fed.us	Core	Yes	Yes
Claudia Regan	US Forest Service-Region 2	Region 2	Regional Vegetation Ecologist	740 Simms	Golden	CO	80401	303-275-5004	970-290-9895	cregan@fs.fed.us	Core	Yes	Phone
Richard (Rick) Truex	US Forest Service	Region 2	Regional Wildlife Ecologist	740 Simms	Golden	CO	80401	303-275-5022	720-425-2998	rtruex@fs.fed.us	Co-Leader	Yes	Yes
Janelle Valladares	US Forest Service, PSICC	Pike & San Isabel National Forests, Cimarron & Comanche National Grasslands		2840 Kachina Drive	Pueblo	CO	81008	719-663-1618		jvalladares@fs.fed.us	Core	Yes	No
Mike Welker	US Forest Service	Pike-San Isabel National Forests						719-553-1515		mwelker@fs.fed.us	Core	Yes	No

Front Range Roundtable

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Roundtable Wildlife Team—Project Outline

Team Roundtable Wildlife Team	Mission TBD	Deliverables A final report building from existing CFLR monitoring plan and including: <ol style="list-style-type: none"> 1. Overview of field protocols, sampling approaches, and potential analytical approaches 2. Options: balancing rigorous monitoring of 1° species and casual monitoring of 2° species 3. Wildlife Team’s recommendations: based on funding, rigor, public interest
Timeline Team Launched Nov. 13, 2012; will complete work by February of 2014.	Goals <ol style="list-style-type: none"> 1. Identify primary and secondary species for monitoring that meet CFLRP and FS needs 2. Develop hypothesized species response (\approx population trends) for each 1° and 2° species 3. Explicitly integrate spatial and temporal scales in species selection and sampling approach 4. Establish range of monitoring options that encompass cost and rigor spectrums as needed 5. Identify field sampling protocols for selected species 6. Describe potential analytical methods 7. Identify opportunities for collaborating entities to contribute to monitoring implementation 	
Scope <ol style="list-style-type: none"> 1. Focus: past efforts have focused on vegetation structure and assumptions that if we do good things for structure, the wildlife will benefit. This effort will focus on the need for wildlife monitoring, informed by but not dependent upon desired conditions for vegetation 2. Species: Open to including any species; will consult list of species from 2011 CFLR Monitoring Plan but we will not be limited by the past plan 3. Scale: Will include both landscape scale and site scale considerations in recommending monitoring methods and estimating expected outcomes; we will need to define “landscape” as well, possibly by species (will refer to language developed by other related efforts to define restoration and desired conditions) – Rick to edit 4. Methods: Will consider the best, most effective, and efficient monitoring methods; will not be constrained by the USFS’s Common Stand Exam or currently available funding 		
Why this / why now? <ol style="list-style-type: none"> 1. In the past, CFLR monitoring has focused on vegetation structure with the assumption that if we do what is right for the forest, then we’re doing what is right for the wildlife. We need to test this assumption to see if it is true. Monitoring wildlife is the only way to know if this assumption is correct. Sometimes there are struggles between fuels reduction for fire risk mitigation and restoration for habitats for species. The impact of this struggle is that sometimes forest planners want to pick up every piece of litter and duff to reduce fire risk but this does not restore wildlife habitats. Downed woody debris plays an important role for wildlife habitat restoration. Treatments may increase forage for elk but they may reduce forage for songbirds, so we need to decide for which species we’re restoring habitats and what impacts we expect forest restoration to have on them. 2. Wildlife monitoring has historically been de-prioritized in USFS budgets. It’s costly and difficult. There is not as much public demand for this as for other resource objectives. Statutes are not clear on what is required to monitor populations in a rigorous manner. It will be a cultural shift for the USFS to start focusing on wildlife monitoring as well as vegetation monitoring. Few groups have spent time thinking these issues through. The USFS has always reacted to legal suits rather than be proactive to do the hard thinking on if and how to do wildlife monitoring. 3. The roundtable wants to monitor wildlife use pre- and post-treatment to learn if what we’re doing has any beneficial or detrimental effects to wildlife. A team of representative stakeholders is needed to arrive at the compromises necessary to do wildlife monitoring effectively and cost-efficiently. 		



Roundtable Wildlife Team—High Level Work Plan

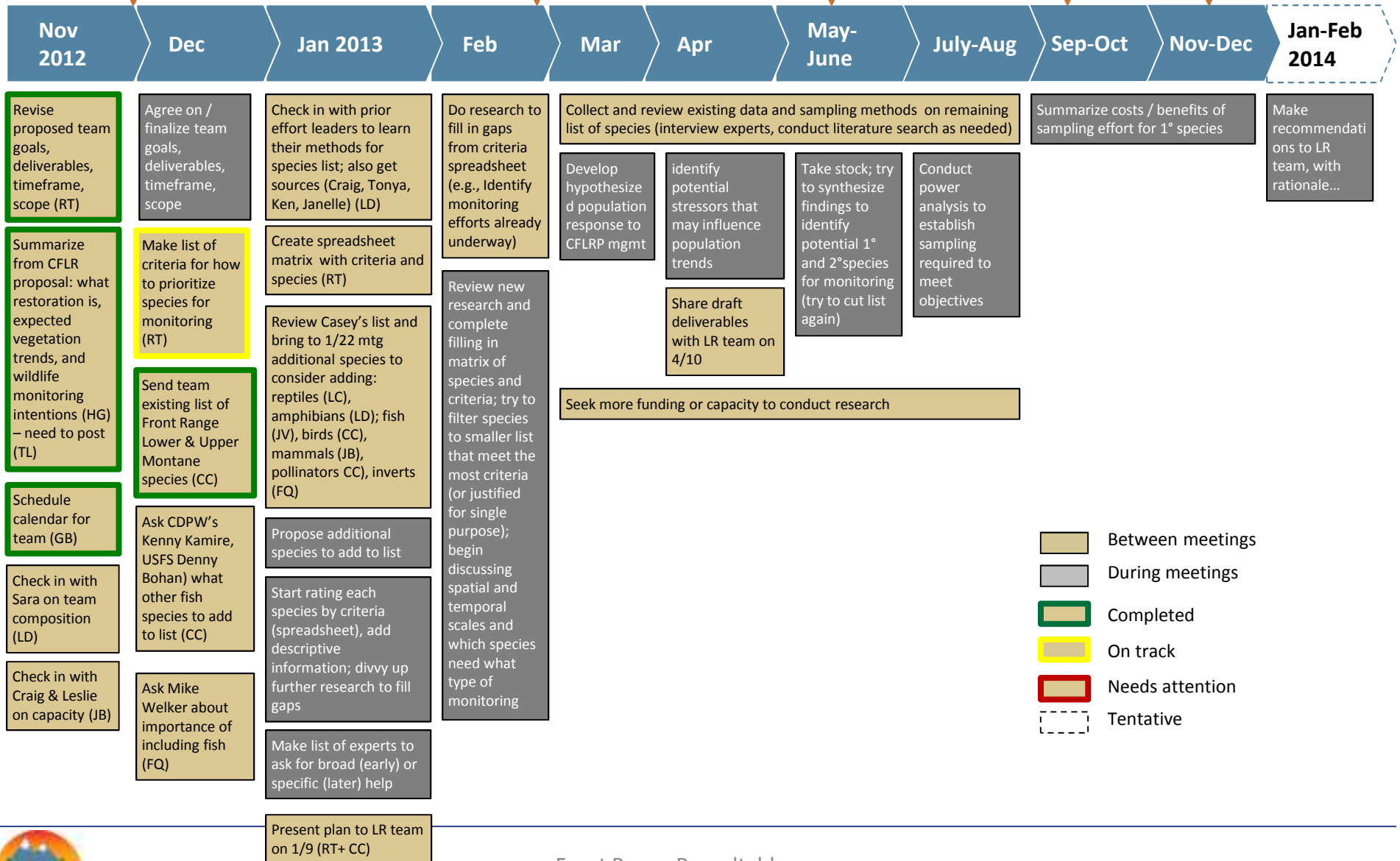
Roundtable Quarterly meeting: 11/30/12

Roundtable Quarterly meeting: 3/15/13

Roundtable Quarterly meeting: 5/31/13

Roundtable Quarterly meeting: 9/13/13

Roundtable Quarterly meeting: 11/22/13



LR Team Meeting 23 Agenda

Topics	Timing
1. Introductions, ice breaker, review of agenda and new organizing documents	10:00 – 10:15
2. Revise / approve adaptive management narrative	10:15 – 11:00
3. Summarize the results from our Hall and Heil data	11:00 – 11:20
4. Review Rob's bibliography on PP restoration, make any final additions before it is posted on website	11:20 – 11:40

5. Lunch	11:40 – 12:00

6. Watch the CFLR webinar on reporting on national indicators	12:00 – 1:30
7. Make a plan for how to develop our methods for reporting on national indicators	1:30 – 2:00
8. Review proposed goals and work plan from Wildlife Team	2:00 – 2:30
9. Update action items in our operations plan, plan new items for 2013 as needed	2:30 – 2:45
10. Plan next steps, review Calendar (including agenda for Feb. meeting)	2:45 – 3:00



2012 Operations Plan

STRATEGY ELEMENT	PROGRAM ELEMENT	WORK STREAM	LEAD RESPONSIBILITY	TEAM MEMBERS	DEADLINE	COMMENTS (E.G., ROLES, GOALS, METRICS, MAIN ACTIVITIES)	ACTUAL PROJECT STATUS
Goal 1: CFLR Monitoring	1b. Compile, analyze, and interpret data	Report to LR team on 2012 results at LR meeting in early 2013	Ben Wudtke		1/31/2012		Upcoming
Goal 1: CFLR Monitoring	1b. Compile, analyze, and interpret data	Analyze data with SM team members on LCC study	Ben Wudtke	Jenny B, Paula	11/30/2012	Ben analyzed overstory tree data from USFS, presented to SM team in Spring; next is for Jenny & Paula to combine understory and wildlife use data with Ben's dataset to find correlations; may make most sense to wait for after-treatment 2012 data; current field season and fire work taking priority; 9/12: need to schedule and hold one big data comparison meeting with all parties; Jenny will check in with Ben (he still needs USFS data)	In progress
Goal 3: Monitoring Plan Revision	3g. Decide what to keep/cut from 2011 monitoring plan	Revisit outline with team at August meeting to decide if/how team will really take on revising monitoring plan (including pulling together all parts)	Gali Beh		9/30/2012	Would need estimated 10 hrs/wk for 6 weeks to lead overall plan revision	In progress
Goal 1: CFLR Monitoring	1e. Monitoring management	Recruit new team members: Counties	Gali Beh		11/14/2012		Ready to start
Goal 5: GIS Information Sharing		Find someone to help move CFLR GIS data (and corresponding map) to USGS	Hal Gibbs		10/31/2012	8/8: Mark Martin to check with Hal on progress	Ready to start
Goal 1: CFLR Monitoring	1e. Monitoring management	Resolve BAF consistency issue with sub team	Hal Gibbs	Jeff, Dave Haddis, Jenny, Paula, Peter	11/14/2012		Ready to start
Goal 1: CFLR Monitoring	1c. Socio-economic data	Get more specific on recommendations for 2012 - decide which CFRI recommendations to implement; enter into new agreement for more S&E monitoring; find out what help Kawa	Hal Gibbs		3/31/2013		Ready to start
Goal 1: CFLR Monitoring	1e. Monitoring management	Report on national indicators for first five years of CFLR (due 2014)	Hal Gibbs		6/30/2014		Upcoming
Goal 1: CFLR Monitoring	1e. Monitoring management	convene subteam to work on JFS grant opportunity	Jenny Briggs	Jonas, Paula, Yvette, Peter, Claudia, Hal,	11/16/2012		In progress
Goal 1: CFLR Monitoring	1b. Compile, analyze, and interpret data	Summarize data from LCC summer study with USFS data included in it	Jenny Briggs	Paula, Jenny, Jonas, Craig	12/31/2012	Currently entering data (2/3- done); need to touch base with Ben to get copy of USFS data; Ben, Rob, Paula and Jenny discussed integration of data sets; present to SM team in September; (8/8): Jenny to present results on 8/23; 9/12: finished analyzing 2011 data; got 2012 data, currently analyzing; in December and beyond LCC data will be integrated with USFS data	In progress

2012 Operations Plan

STRATEGY ELEMENT	PROGRAM ELEMENT	WORK STREAM	LEAD RESPONSIBILITY	TEAM MEMBERS	DEADLINE	COMMENTS (E.G., ROLES, GOALS, METRICS, MAIN ACTIVITIES)	ACTUAL PROJECT STATUS
Goal 3: Monitoring Plan Revision		Assess cost of adding Tier 2 variables to required monitoring (not all, but consistent with LCC monitoring)	Jenny Briggs	Jenny, Craig, Hal, Jeff, Paige, Jonas, Tony	12/31/2012	Needs to be done before new contracts are put in place; 9/12: have LCC #'s USFS has #'s, Ed Berry on Pike has #'s, need to integrate	Upcoming
Goal 1: CFLR Monitoring	1d. Landscape scale monitoring	Further develop the Jonas Trsects method	Jonas Feinstein		6/30/2013	11/14: create histograms of sizes of openings and call Bill Baker for help on spatial statistics, consider effect of random, longer, and more frequent transects, also consider measuring openings perpendicular to transects; share where plots are with Kristen	Ready to start
Goal 1: CFLR Monitoring	1c. Socio-economic data	Upwards reporting on collaboration for national CFLR program - developing a case study	Kathie Mattor		12/31/2012	Use NFF framework; 8/8: attend NFF webinar and let SM team know what our requirements are	Upcoming
Goal 3: Monitoring Plan Revision	3b. Description of 2012	Write section on SE methods for 2012 plan	Kathie Mattor		12/31/2012	Will be part of SE report, will pull into monitoring plan when finished	Upcoming
Goal 3: Monitoring Plan Revision	3d. Develop desired conditions and monitoring	Form wildlife planning group and discuss goals, meeting plan and steps toward developing desired conditions and monitoring plan by late November	Lynne Deibel	Co-lead: Lynne Deibel, Casey, Hal, Felix Quesada, Rick	12/31/2012	Hal to ask Lynne Deibel, Casey to look into possible additions from CDPW; Anyone know possible team members from academic community? Tony: Liba Goldstein (liba.pejchar@colostate.edu<mailto:liba.pejchar@colostate.edu>), Asst. Prof. in the Fish, Wildlife, and Conservation Biology dept.; Will schedule	In progress
Goal 6: Research Sharing		TNC to post volunteer request for about 10 hours of data entry on ScienceBase; engage volunteer	Paige Lewis		8/31/2012	When bibliography info is finalized; Craig has agreed to help train volunteer and Kendall as backup support (others?); Craig will also need to facilitate ScienceBase access to volunteer and others on the team; need description of volunteer position from Craig/Laura	Upcoming
Goal 3: Monitoring Plan Revision	3e. Develop desired conditions and monitoring	Form understory vegetation planning group and discuss goals, meeting plan and steps toward developing desired conditions and monitoring plan by late	Paula Fornwalt	Casey, Greg, Yvette, Hal, Steve Olson, Ed Biery (Pike), Tom	12/31/2012	Sara to ask Sheila Lamb, Paula to ask Steve Popovich, Paige to contact Colorado Natural Heritage Program; about evaluating whether treatments are successful; Paula spoke with Steve Olsen, botanist on Pike, agreed can't do much during field season but would be nice to see plants before dead, will	In progress
Goal 1: CFLR Monitoring	1f. Understory team	Schedule next meeting of understory team for Jan 2013	Paula Fornwalt		1/31/2013		Ready to start
Goal 1: CFLR Monitoring	1e. Monitoring management	Recruit new team members: NPS	Peter Brown		11/14/2012		Ready to start
Goal 1: CFLR Monitoring	1a. Reconstructing historic regimes	Be liaison to team on reconstructions of pre-1860 stands to add to other research	Peter Brown	Laurie	12/31/2012	8/8: Peter says paper almost ready to go out for peer review; hoping to have data for Pike by Oct 22/23 meeting for Monument Creek Collaboration, will have Heil and Hall data sets complete by Dec. 1, then rest will be done over wintertime; need to meet with SM team in Spring 2013 to decide how to incorporate into implementation planning	In progress
Goal 2: Adaptive Management	2a. Process documentation	Finalize adaptive management process; present to Roundtable; write report that interprets the framework; send narrative to team for feedback; Produce	Peter Brown	Greg Aplet	12/31/2012	8/8: already started, will send to SM team for review; 9/12: will send to Greg for review by 9/20; Presentation scheduled for 05/04/12 RT mtg.; 9/12: will present narrative to LR team on 10/10 then to the Roundtable at Dec. Q4-12 meeting	In progress

STRATEGY ELEMENT	PROGRAM ELEMENT	WORK STREAM	LEAD RESPONSIBILITY	TEAM MEMBERS	DEADLINE	COMMENTS (E.G., ROLES, GOALS, METRICS, MAIN ACTIVITIES)	ACTUAL PROJECT STATUS
Goal 1: CFLR Monitoring	1a. Reconstructing historic regimes	Conduct and report to team on data analysis resulting from plots established in summer of 2012	Peter Brown	Paula	3/31/2013		In progress
Goal 6: Research Sharing		Send restoration guidelines lit review bibliography to Laurie H.; Laurie to review and send to other key reviewers for input	Rob Addington	Laurie	9/30/2012	8/8: Peter thinks this happened, folks have been adding to the list, mtg scheduled for 9/7 to flesh out outline; 9/12: Next steps - Rob to circle back with Laurie re: updates to bibliography; 10/10: Laurie has reviewed, Rob should send to Gali to send to team	In progress
Goal 1: CFLR Monitoring	1b. Compile, analyze, and interpret data	Verify with CSE practitioners that the data accessed is complete, correct, etc. (next step: Schedule meeting with Tony and ARP folks to finish transferring ARP CFLR monitoring data to CFRI for	Rob Addington	Jeff U, Hal, Ben	12/31/2012	Ed Berry (PSI), Adam Messing (AR), 2011 data is complete, questions by Ben W re: AR CSE data; communicating on data input, verifying some data; Hal talked to Dick E about it; should get the last of data to Ben 6/27/12; The meeting with Hal is to get updated CSE data from the ARNF. The Pile CSE validation is complete and done. The lead for this is Ben Wudtke and Hal.	In progress
Goal 1: CFLR Monitoring	1b. Compile, analyze, and interpret data	Produce a final 2011 Monitoring Results report	Rob Addington	Jenny B	12/31/2012	Waiting on final data from USFS	Upcoming
Goal 1: CFLR Monitoring	1e. Monitoring management	Recruit new team members: USFWS	Sara Mayben		11/14/2012		Ready to start
Goal 6: Research Sharing		Create job description for data entry volunteer work on ScienceBase	TBD	Craig H, Paige	7/31/2012	8/8: Peter to ask Laurie for status update	Ready to start

STRATEGY ELEMENT	PROGRAM ELEMENT	WORK STREAM	LEAD RESPONSIBILITY	TEAM MEMBERS	DEADLINE	COMMENTS (E.G., ROLES, GOALS, METRICS, MAIN ACTIVITIES)	ACTUAL PROJECT STATUS
Goal 6: Research Sharing		Enter existing research into ScienceBase and share with team	TBD	TNC intern, TNC supervisor (Paige?) Laurie, Craig	9/30/2012		Upcoming
Goal 6: Research Sharing		Review data entered, share with team; invite additional data input from SM Team	TBD		10/30/2012	Laurie presented thoughts at April 11 meeting, needs feedback from team	In progress
Goal 6: Research Sharing		Make list of all sites where research has been conducted in the Front Range	TBD	Craig H, Mike Babler, Peter B, Jenny B	10/31/2012	Look in IMPD for most of the data; need to schedule call with subteam to plan this workstream; can SRFNS staff help on this?; 8/8: Peter thinks this is in progress, emails have been sent to request information; Peter & Laurie have been looking at available data to compile	In progress
Goal 5: GIS Information Sharing		Create data request to researchers, include data requirements document	TBD	Craig H, Mike Babler, Peter B, Jenny B	12/31/2012	8/8: not started yet (Laurie busy this summer on stand reconstruction project)	Upcoming
Goal 1: CFLR Monitoring	1c. Socio-economic data	Explore with CFLR monitoring group and managers what social information or public engagement needs are most	Tony Cheng		11/30/2012	Tony wants to meet with RT Executive Team; Invite Sara McCaffrey; ET mtg needs to be rescheduled for July (June mtg overlaps with Hayman Symposium); need to define who this data is for; have good information but	Upcoming
Goal 3: Monitoring Plan Revision	3h. Describe methods to monitor for	Meet with group to discuss and develop methods for monitoring spatial heterogeneity at the stand and	Yvette Dickenson	Kristen Pelz, Rob Addington, Jonas F, Greg A, Craig,	9/30/2012	Yvette incorporated landscape scale issue into the heterogeneity work; held first meeting; plan to reconvene after summer; Yvette's group focusing on potential for using remote sensing technology to measure heterogeneity of	In progress
Goal 1: CFLR Monitoring	1d. Landscape scale monitoring	Discuss with SM team at August whether to organize a subteam to put more thinking into this question and	Yvette Dickenson	Greg, Claudia, Craig, Peter, Jonas, Casey,	11/30/2012	Need to schedule first call/meeting; need to bring in learnings from other CFLR projects. Related to wildlife monitoring subteam and understory subteam.; 8/8: need to put this as agenda item on Sept 12 SM team meeting;	Completed
Goal 1: CFLR Monitoring	1d. Landscape scale monitoring	Investigate landscape scale fire behavior, try ARCFuels to run CSE data	Yvette Dickenson	Megan Matonis	12/31/2012	Ben reviewed ARCVIEW pubs; don't have data yet to try any runs (currently making list of needed data); cautioned against relying on any one model like ARCFuels; Megan is examining landscape fuel/fire models for the Uncompahgre Plateau CFLR and will apply this to the Front Range; 8/8: Megan will start focusing on this next semester	In progress

STRATEGY ELEMENT	PROGRAM ELEMENT	WORK STREAM	LEAD RESPONSIBILITY	TEAM MEMBERS	DEADLINE	COMMENTS (E.G., ROLES, GOALS, METRICS, MAIN ACTIVITIES)	ACTUAL PROJECT STATUS
Goal 3: Monitoring Plan Revision	3h. Describe methods to monitor for spatial heterogeneity	Draft description of methods for monitoring spatial heterogeneity to include in revised monitoring plan for 2013; present to SM Team	Yvette Dickenson		12/31/2012		Upcoming
Goal 1: CFLR Monitoring	1d. Landscape scale monitoring	Organize meeting for subteam to be held by end of January 2013	Yvette Dickenson	Greg, Claudia, Craig, Peter, Jonas, Casey, Mike Babler, Jenny, Megan Matonis, Tony; Paula, Dick, Mike Battaglia	1/31/2013	Next steps: i. Identify places that represent desired conditions so they can be quantified for spatial heterogeneity, to begin to develop ranges of desired metrics for these values. ii. Define "patch" at a landscape scale (already defined at a stand scale).	Ready to start
Goal 1: CFLR Monitoring	1d. Landscape scale monitoring	Present next level results on spatial heterogeneity at Sept. 2013 LR meeting	Yvette Dickenson	Greg, Claudia, Craig, Peter, Jonas, Casey, Mike Babler, Jenny, Megan	9/30/2013		Ready to start

Insert additional rows above this line as needed

LR Team Meeting 23 Agenda

Topics	Timing
1. Introductions, ice breaker, review of agenda and new organizing documents	10:00 – 10:15
2. Revise / approve adaptive management narrative	10:15 – 11:00
3. Summarize the results from our Hall and Heil data	11:00 – 11:20
4. Review Rob's bibliography on PP restoration, make any final additions before it is posted on website	11:20 – 11:40

5. Lunch	11:40 – 12:00

6. Watch the CFLR webinar on reporting on national indicators	12:00 – 1:30
7. Make a plan for how to develop our methods for reporting on national indicators	1:30 – 2:00
8. Review proposed goals and work plan from Wildlife Team	2:00 – 2:30
9. Update action items in our operations plan, plan new items for 2013 as needed	2:30 – 2:45
10. Plan next steps, review Calendar (including agenda for Feb. meeting)	2:45 – 3:00



Front Range Roundtable, LR & Wildlife Team Calendar

Team	Event	Location	Location / Call Details	Date	Time
LR	Meeting 27	in person	JeffCo Taj Mahal, 100 Jefferson County Pkwy, Golden, CO 80419, Kittridge/Pleasantview rooms (1563/64)	Wednesday, January 9, 2013	10 am-3 pm
Wildlife	Meeting 4	in person	USFS Regional Office, 740 Simms St. Golden	Tuesday, January 22, 2013	10 am -3 pm
LR	Meeting 28	in person	JeffCo Taj Mahal, 100 Jefferson County Pkwy, Golden, CO 80419, Kittridge/Pleasantview rooms (1563/64)	Wednesday, February 13, 2013	10 am-3 pm
Wildlife	Meeting 5	in person	USFS Regional Office, 740 Simms St. Golden	Thursday, February 21, 2013	10 am -3 pm
LR	Meeting 29	in person	JeffCo Taj Mahal, 100 Jefferson County Pkwy, Golden, CO 80419, Kittridge/Pleasantview rooms (1563/64)	Wednesday, March 1, 2013	10 am-3 pm
RT	Q1 RT Meeting	in person	JeffCo Taj Mahal, 100 Jefferson County Pkwy, Golden, CO 80419, Kittridge/Pleasantview rooms (1563/64)	Friday, March 15, 2013	9:30 – 3:30
Wildlife	Meeting 6	in person	USFS Regional Office, 740 Simms St. Golden	Tuesday, March 19, 2013	10 am -3 pm
LR	Meeting 30	in person	JeffCo Taj Mahal, 100 Jefferson County Pkwy, Golden, CO 80419, Kittridge/Pleasantview rooms (1563/64)	Wednesday, April 10, 2013	10 am-3 pm
Wildlife	Meeting 7	in person	USFS Regional Office, 740 Simms St. Golden	Tuesday, April 23, 2013	10 am -3 pm
LR	Meeting 31	in person	JeffCo Taj Mahal, 100 Jefferson County Pkwy, Golden, CO 80419, Kittridge/Pleasantview rooms (1563/64)	Wednesday, May 8, 2013	10 am-3 pm
Wildlife	Meeting 8	in person	USFS Regional Office, 740 Simms St. Golden	Tuesday, May 21, 2013	10 am -3 pm
RT	Q2 RT Meeting	in person	Boulder County Clerk & Recorder, 1750 33rd Street, Boulder, CO 80301	Friday, May 31, 2013	9:30 – 3:30
LR	Meeting 32	in person	JeffCo Taj Mahal, 100 Jefferson County Pkwy, Golden, CO 80419, Kittridge/Pleasantview rooms (1563/64)	Wednesday, June 12, 2013	10 am-3 pm
Wildlife	Meeting 9	in person	USFS Regional Office, 740 Simms St. Golden	Tuesday, June 18, 2013	10 am -3 pm



Front Range Roundtable, LR & Wildlife Team Calendar, continued

Team	Event	Location	Location / Call Details	Date	Time
LR	LR Mtg 33	in person	JeffCo Taj Mahal, 100 Jefferson County Pkwy, Golden, CO 80419, Kittridge/Pleasantview rooms (1563/64)	Wednesday, July 10, 2013	10 am-3 pm
Wildlife	Monthly Meeting	in person	USFS Regional Office, 740 Simms St. Golden	Tuesday, July 23, 2013	10 am-3 pm
LR	LR Mtg 34	in person	JeffCo Taj Mahal, 100 Jefferson County Pkwy, Golden, CO 80419, Kittridge/Pleasantview rooms (1563/64)	Wednesday, August 14, 2013	10 am-3 pm
Wildlife	Monthly Meeting	in person	USFS Regional Office, 740 Simms St. Golden	Tuesday, August 20, 2013	10 am-3 pm
LR	LR Mtg 35	in person	JeffCo Taj Mahal, 100 Jefferson County Pkwy, Golden, CO 80419, Kittridge/Pleasantview rooms (1563/64)	Wednesday, September 11, 2013	10 am-3 pm
RT	Q3 RT Meeting	in person	TBD – Field Trip	Friday, September 13, 2013	9:30 – 3:30
Wildlife	Monthly Meeting	in person	USFS Regional Office, 740 Simms St. Golden	Tuesday, September 17, 2013	10 am-3 pm
LR	LR Mtg 36	in person	JeffCo Taj Mahal, 100 Jefferson County Pkwy, Golden, CO 80419, Kittridge/Pleasantview rooms (1563/64)	Wednesday, October 9, 2013	10 am-3 pm
Wildlife	Monthly Meeting	in person	USFS Regional Office, 740 Simms St. Golden	Tuesday, October 22, 2013	10 am-3 pm
LR	LR Mtg 37	in person	JeffCo Taj Mahal, 100 Jefferson County Pkwy, Golden, CO 80419, Kittridge/Pleasantview rooms (1563/64)	Wednesday, November 13, 2013	10 am-3 pm
Wildlife	Monthly Meeting	in person	USFS Regional Office, 740 Simms St. Golden	Tuesday, November 19, 2013	10 am-3 pm
RT	Q4 RT Meeting	in person	Colorado Springs	Friday, November 22, 2013	9:30 – 3:30
LR	LR Mtg 38	in person	JeffCo Taj Mahal, 100 Jefferson County Pkwy, Golden, CO 80419, Kittridge/Pleasantview rooms (1563/64)	Wednesday, December 11, 2013	10 am-3 pm
Wildlife	Monthly Meeting	in person	USFS Regional Office, 740 Simms St. Golden	Tuesday, December 17, 2013	10 am-3 pm

