CFLR Ecological Indicator Progress Report

Project Name: Shortleaf – Bluestem Community (CFLR18) State: AR

Initial Landscape-scale Desired Conditions for the life of the project as defined by the Collaborative
The “landscape” should be the landscape identified in project proposals or subsequently approved proposal edits. See page three of the original guidance for further information.

Desired Conditions Target for Fire Regime Restoration: 50% change (relative to the desired condition) occurs across 16% of the landscape area by the end of fiscal year 2014.

Please include 1-5 quantifiable desired condition statements upon which the above target is based. These statements should reflect the initial project goals as outlined in project proposals. Further guidance on what should be included in these statements is available in the original Ecological Indicator Guidance on page 4.

Desired Condition: Dense second-growth forests long protected from fire need to be restored to open, species-rich woodlands. The desired condition is mature shortleaf pine and scattered oaks in the overstory and bluestem grasses and other “prairie” species forming the ground layer. (Shortleaf – Bluestem Community Proposal, 2011, Executive Summary)

1. 75%, or 155,000 acres of the red-cockaded woodpecker recovery (R&R) area of the Shortleaf – Bluestem Community project will be in an advanced stage of shortleaf pine – bluestem grass restoration. The advanced stage is roughly equivalent to Fire Regime Condition Class (FRCC) 1. The R&R area is Management Area 22 in the Ouachita National Forest Land Management Plan. Advanced restoration stage is evidenced by open woodland overstory conditions where the density of trees is approximately 60 – 80 square feet of basal area per acre, little woody vegetation in the midstory, and abundant native understory vegetation of grasses and forbs. These conditions can be maintained by periodic thinnings to keep the density of trees regulated and prescribed burning at 3-5 year intervals to control woody vegetation establishment. A projected 20%, or 41,000 acres of the R&R area will be in the intermediate stage of restoration (approximating FRCC 2), defined as areas that have had treatments to reduce large and/or small woody vegetation and possibly one prescribed burn, but not yet having significant frequency of grasses and forbs. The untreated area (FRCC 1) will be approximately 5% of the R&R area, totaling 10,465 acres. (Shortleaf – Bluestem Community CFLRP Proposal, 2011, pages 9-11)

2. 75%, or 52,500 acres of the old growth areas will be in an advanced stage of shortleaf pine – bluestem grass restoration, as described above. Approximately 20% (14,000 acres) will be in the intermediate stage of restoration, and 5%, or 3,879 acres will not have received treatment. (Shortleaf – Bluestem Community CFLRP Proposal, 2011, pages 11)

3. 50% (36,000 acres) of the American burying beetle areas (ABBA) will be in the advanced stage of restoration, 30% (21,500 acres) is estimated to be in the intermediate stage of restoration, and 20% (14,138 acres) will have not had any treatment. (Shortleaf – Bluestem Community CFLRP Proposal, 2011, page 11)

Desired condition targets should be written in the above format. Desired conditions that feed each “desired condition target” may vary widely and may not apply to every project in the landscape. Keep in mind the above “desired conditions targets” and desired conditions are outcomes, not out puts. Each desired condition target should be over the same landscape. For example, if the Fire Regime Restoration desired condition target is over all of the National Forest System lands within the landscape, the other three desired conditions target should be as well. If the Fire Regime Restoration desired condition target is over all ownerships in the landscape, the others should be as well.
Landscape – Level Scoring for Fire Regime Restoration:

- Good = Expected progress is being made towards Desired Conditions across 11%-16% of the CFLR landscape area.
- Fair = Expected progress is being made towards Desired Conditions across 5%-10% of the CFLR landscape area.
- Poor = Expected progress is being made towards Desired Conditions across 5% of the CFLR landscape area.

Desired Conditions Target for Fish and Wildlife Habitat Condition: 16% change (relative to the desired condition) occurs across 5% of the landscape area by the end of fiscal year 2014.

Desired Condition: Older pine trees with open park-like stands maintained by periodic fire and thinning. Relatively open midstory conditions of 50-80 square feet of basal area per acre are ideal for foraging and for cluster sites.

1. Growth of foraging habitat for Red-cockaded Woodpeckers (RCWs) indicates high quality shortleaf pine-bluestem grass habitat. Open midstories and older pine trees also influence the growth of the populations of these birds. A 5% annual increase in active clusters is a goal for the RCW. The estimated number of active foraging habitat acres in 2011, prior to the CFLRP project, was 14,750 acres, supporting 59 active RCW groups in the Arkansas block of Management Area 22, zoned for an emphasis on the recovery of the RCW. As RCW cluster sites increase, the amount of foraging habitat has also increased by 100-200 acres per cluster site.
2. Another block of Management Area 22 is located in Oklahoma on the Ouachita National Forest, but prior to the CFLRP there was no RCW occurrence. Following a 5% per year growth in foraging habitat, active clusters could be used as an ecological monitor.
3. An average baseline of 250 forest acres is needed for each active RCW cluster.
4. Quality of habitat and abundance of the federally-listed Red-cockaded Woodpecker is stable or improved, supporting recovery of the species.

Landscape – Level Scoring for Fire Regime Restoration:

- Good = Expected progress is being made towards Desired Conditions across 11% of the CFLR landscape area.
- Fair = Expected progress is being made towards Desired Conditions across 5% of the CFLR landscape area.
- Poor = Expected progress is being made towards Desired Conditions across 5% of the CFLR landscape area.
Scoring for National Reporting

Landscape-scale scoring

Few (if any) CFLR-funded Landscapes propose to meet every proposed desired condition on every acre or achieve landscape scale objectives through the mechanical treatment of every acre within their landscape boundary. Rather, multiple projects with multiple objectives (fire risk reduction, wildlife habitat improvement, stream restoration, etc) should facilitate meeting these broader objectives. Scoring at this level reflects the degree to which individual Landscapes are moving towards Desired Conditions at broader spatial extent. Landscape-scale scoring is conducted by the multi-party monitoring group at each Landscape.

- Good = Expected progress is being made towards Desired Conditions across 11% of the CFLR landscape area.
- Fair = Expected progress is being made towards Desired Conditions across 5% of the CFLR landscape area.
- Poor = Expected progress is being made towards Desired Conditions across 5% of the CFLR landscape area.

“Expected progress” will be defined using 5 year benchmarks for FY2010 projects and 3 benchmarks for FY2012 for each DC based on a percentage of the lifetime outcome specified in each Landscape’s proposal.

Current Project-scale Evaluation (Based on the Collaborative’s landscape scale monitoring)

<table>
<thead>
<tr>
<th>Ecological Indicators</th>
<th>Datasets and/or databases of records used</th>
<th>Good, Fair, Poor and (%) landscape across which progress is being made towards desired conditions</th>
<th>Are you achieving your CFLRP objectives? (Y/N)</th>
<th>If NO, briefly explain...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Regime Restoration</td>
<td>FACTS, GIS</td>
<td>Good (13.8%)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Fish and Wildlife Habitat Condition</td>
<td>Breeding Records</td>
<td>Good (28%)</td>
<td>Yes</td>
<td></td>
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<tr>
<td>Watershed Condition</td>
<td></td>
<td></td>
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<tr>
<td>Invasive Species</td>
<td></td>
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**Narrative (optional):** Achievement of an advanced stage of restoration in the shortleaf pine – bluestem grass community takes several treatments. Given observations to date, local managers feel the first treatment, usually a timber sale thinning that reduces overstory stem density and allows some sunlight to reach the forest floor, brings the area into an intermediate stage of restoration. The remaining treatments include a midstory reduction of woody stems, allowing more light to penetrate to the forest floor, followed by three prescribed burns on a 3-5 year interval that reduces fuel and continues to top-kill woody vegetation. Only after a timber sale, midstory reduction treatment and 2-3 prescribed burns can local managers consider the area fully restored. In general, an area grades into FRCC 2 during one or more of the initial treatments (timber sale, midstory reduction, prescribed burns #1 and #2) during intermediate stage of restoration, and then this area will transition into FRCC 1 after two or three prescribed burns, depending on the season, intensity, and coverage.
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 project. Individual projects may not meet every desired condition of the CFLRP project. 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 objectives.
- **Fair** = 26% - 74% of implemented treatments result in measurable progress towards individual project-level objectives.
- **Poor** = 25% or less of implemented treatments result in measurable progress towards individual project-level objectives.

### Current Project-scale Evaluation (Based on and aggregation of the Collaborative’s project level monitoring)

<table>
<thead>
<tr>
<th>Ecological Indicators</th>
<th>Datasets and/or databases of records used</th>
<th>Project Level (Good, Fair, Poor and (%)) treatments resulting in measurable progress as defined above</th>
<th>Are you achieving your CFLRP objectives? (Y/N)</th>
<th>If NO, briefly explain...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Regime Restoration</td>
<td>Inspection reports, post-burn evaluations</td>
<td>Good (85%)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Fish and Wildlife Habitat Condition</td>
<td>Breeding records</td>
<td>Good (100%)</td>
<td>Yes</td>
<td></td>
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<tr>
<td>Watershed Condition</td>
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</table>

**Narrative (optional):**

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2 An individual activity might not need to lead to a fully restored acre (for example), but if it sets the landscape up for the next treatment it may still get a good rating. For example if a successful thinning doesn’t restore a fire regime, but it sets up landscape for subsequent burns that might, it could still receive a “good” rating.