CFLR Ecological Indicator Progress Report

Project Name: **Tapash** **State:** **Washington**

Initial Landscape-scale Desired Conditions for the life of the project as defined by the Collaborative (Fill this in)[1]

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.

The ultimate goal of the Tapash proposal is to increase our combined restoration footprint on the landscape by applying restoration treatments with a corresponding increase in overall forest resiliency and aquatic health on 82,050 acres of NFS lands within the Tapash landscape over the time period 2010-2019. The desired outcome is a landscape that is more resilient to changing climates and disturbances and that responds in a manner that maintains and restores natural processes, patterns, and functions. As well, there is an additional focus to reduce adverse effects on stream flows, sediment regime and flood plain function caused by increased road densities and/or road location.

Assumptions:

- The "Landscape Area" encompasses 400,000 acres of NFS administered lands within the defined Restoration Activity Areas as derived from the Revised Tapash Project Proposal Request (March, 2014). The Landscape Area includes the Rattlesnake Creek-Naches River, Little Naches River, Kachess River-Yakima River, and Taneum Creek-Yakima River watersheds.
- Scoring refers to active treatment only and does not represent the benefits realized on adjacent non-treated areas.
- Because the Tapash proposal finds its' basis in the Okanogan-Wenatchee Forest Restoration Strategy (USFS 2012) and relies on current, best-science relative to treatments and treatment effects; the assumption that our proposed treatments, when implemented as intended, are effective with respect to moving the landscape toward the identified objectives/desired conditions. Therefore, for the purposes of this reply due, this report will utilize acres/miles treated as a surrogate for the specific metrics identified in the Desired Condition Statement/Tapash Monitoring Plan. The monitoring plan will provide the rationale to infer benefits and assess effectiveness for reporting in year 10.

Desired Conditions Target for Fire Regime Restoration: 100% change (relative to the desired condition) occurs across 10.25% of the landscape area by 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.

[1] 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.

Desired Condition Statement: The landscape supports a vegetation structure, composition, and pattern which fall within the combined HRV and FRV of its eco-subregion. There is a corresponding reduction in landscape vulnerability to wildfire such that the current risk of large and uncharacteristic wildfires is minimized concurrent with a reduction in wildfire management costs associated with large and uncharacteristic wildfires.

The desire is to improve the fire regime condition class (FRCC) by reducing landscape departure, thus moving the project landscape towards a more sustainable condition. The desired condition is to treat 20.5% of the project area (82,050 acres) by the end of the 10 year project period (2019). Therefore, the proposal implies a need to treat half this amount, or 10.25% of the landscape area in the first five years, and the remaining 10.25% in the following five years.

Progress toward Desired Condition in Five Years

- Good = Expected progress is being made towards Desired Conditions across 6.8 to 10.25% of the CFLR landscape area (>27,200 acres to 41,025 acres).
- Fair = Expected progress is being made towards Desired Conditions across 3.4 to 6.7% of the CFLR landscape area (>13,600 to 27,200 acres).
- Poor = Expected progress is being made towards Desired Conditions across < 3.4% of the CFLR landscape area (<13,600 acres).

To date 15,492 ac have been treated, representing a 3.9 percent accomplishment. Using the expected progress above, this represents Fair progress toward this goal. This assumes all treatments improved FRCC and all were in mixed conifer types. It includes all treatments in vegetation improvement, fuels, and timber sales.

Desired Conditions Target for Fish and Wildlife Habitat Condition: 100 % change (relative to the desired condition) occurs across 10.25% of the landscape area by 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 5.

Desired Condition Statement: Wildlife habitats are restored to within the natural and future range of variability to contribute to the viability and recovery of key focal species.

- Maintain within-stand spatial patterns, snags, coarse wood, and large/old tree levels as appropriate for the vegetation type.
- Improve habitat quality and effectiveness consistent with ecosystem integrity for big game species (elk and deer).
- Improve habitat quality and effectiveness for species sensitive to disturbance such as wide-ranging carnivores, ungulates, late-successional species and riparian-associated species.
- Improve or maintain critical habitats for federally listed, R6 Sensitive and Survey and Manage wildlife species.
- Restore complex structural components for birds and mammals relative to HRV and FRV estimates according to Plant Association Groups (PAGs).

Progress toward Desired Condition in Five Years

- Good = Expected progress is being made towards Desired Conditions across 6.8 to 10.25% of the CFLR landscape area (>27,200 acres to 41,025 acres).
- Fair = Expected progress is being made towards Desired Conditions across 3.4 to 6.7% of the CFLR landscape area (>13,600 to 27,200 acres).
- Poor = Expected progress is being made towards Desired Conditions across 3.4% of the CFLR landscape area (<13,600 acres).

Although the outcome of our restoration treatments on wildlife and fish habitat was identified as a key component of the project as discussed in the proposal, we did not provide specific numerical outputs to measure percent of the desired condition. In this case we will assume that meeting the fire regime restoration goals will also meet the wildlife habitat objectives. Therefore, relative to the expected progress rating scale above, we also report Fair progress toward this objective - with 3.9 percent of the landscape treated to date. Improvement in the conditions of roads, reported under the watershed condition indicator, will be used to address fish habitat condition.

Desired Conditions Target for Watershed Condition: 45% change (relative to the desired condition) occurs across 100% of the landscape area by 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 7.

Desired Condition Statement: Contribute toward the restoration of the natural flow of water off the forested landscape in terms of quality, timing, and volume during and following the period of the proposal.

The desire is to implement restoration treatments on 590 miles of roads and trails to reduce adverse effects on stream flows, sediment regime, flood plain function, and fisheries caused by increased road densities, road location and passage barriers. The Original project proposal stated 45% of this goal, or 267 miles, would be accomplished in the first five years.

Progress toward Desired Condition in Five Years

- Good = Expected progress is being made towards Desired Conditions on >30 to 40% or more of the roads improvement goal (>179 miles to 267 miles).
- Fair = Expected progress is being made towards Desired Conditions on 15 to 30% of the roads improvement goal (89 miles to 179 miles).
- Poor = Expected progress is being made towards Desired Conditions on < 15% of the roads improvement goal (<89 miles).

We have treated 821.6 miles of road and removed one fish passage barrier in the first five years of the project. When measured against the Original proposal, we have treated 138% of expected. However, 817 of the 821 miles were maintenance related treatments such as blading and improved water drainage to reduce sediment delivery; and therefore, meet the watershed and fish habitat objectives to a lesser degree than does road relocation and road decommissioning. Therefore, we report Fair progress toward this goal, with >89 miles of road restoration treatments implemented resulting in an improvement to watershed condition and fisheries habitat.

Desired Conditions Target for Landscape Scale Invasive Species Severity: 5% of the CFLR landscape area was restored by reducing invasive species severity (preventing, controlling, or eradicating targeted invasive species) to meet desired conditions by 2014.

1. 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 8.

Desired Condition Statement: Vegetative conditions are restored such that plant communities are vigorous and resistant to the establishment and spread of invasive species.

- Species that do not currently occur on the landscape do not become established; and there is an overall reduction in the abundance and spatial extent of invasive species currently known to occur on the landscape.
- A minimum of 10 percent of each restoration activity area is treated to control invasive species prior to, and during project implementation.

Expected Progress toward Desired Condition in Five Years.

- Good = Expected progress is being made towards Desired Conditions across >6.7 to 10% or more of the CFLR landscape area (>13,333 acres to 20,000 acres).
- Fair = Expected progress is being made towards Desired Conditions across >3.3 to 6.7%% of the CFLR landscape area (>6,667 acres to 13,333 acres).
- Poor = Expected progress is being made towards Desired Conditions across < 3.3% of the CFLR landscape area (<6,667 acres).

Although the outcome of our restoration treatments on invasive species was identified as a key component of the project as discussed in the proposal, we did not provide specific numerical outputs to measure percent of the desired condition. Yet, with respect to invasive species treatment, in a typical restoration project there is a desire to treat 10% of the landscape being analyzed. Therefore, it is desired that 10% of the landscape area will be treated (40,000 acres) over the period 2010-2019. It is therefore implied that 20,000 acres (50%) would be treated by 2014. To date, we have treated 3,965 acres of invasive species infestation within the landscape area. Based on the expected progress rating above, this would represent Poor progress toward the goal at five years.

However, we have also treated 15,492 acres, or 3.9 percent of the landscape, for fire regime restoration to date. In this case, we will assume that over time these treatments are also meeting vegetation goals that result in overall forest resiliency, and therefore; vigorous, weed resistant plant communities. We will also assume all Best Management Practices and mitigations are being implemented as proposed and existing infestations continue to be treated. Consequently, when giving consideration to the overall progress toward reducing invasive species severity via both prevention and control we are reporting Fair progress toward this goal.

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.

Current Landscape-scale Evaluation (Based on the Collaborative's landscape scale monitoring)

Ecological Indicators	Datasets and/or databases of records used	Good, Fair, Poor and (%) landscape across which progress is being made towards desired conditions	Are you achieving your CFLRP objectives? (Y/N)	If NO, briefly explain…
Fire Regime Restoration	PAS/FACTS Haugo et al. 2014	Fair	Y	
Fish and Wildlife Habitat Condition	PAS/WIT/Workplan Haugo t al. 2014	Fair	Y	
Watershed Condition	PAS/Workplan/WIT Multi-Party Monitoring	Fair	Y/N	Although effective, the scale of implementation is relatively small and the distribution spread out so that we are not capitalizing on our efforts. Could improve in both areas.
Invasive Species	PAS/FACTS/NRIS Annual monitoring	Fair	Y/N	Although treatments are generally effective, the scale of treatment is very small. Due to the need to "catch-up" on our invasive species management we need to significantly increase the scale of our treatments.

Narrative (optional):

Refer to the narrative portion included with in the write-up for each ecological indicator.

Project-scale scoring[2]

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 in measurable progress towards individual ***project-level*** objectives.

[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 recieve a "good" rating.

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

Ecological Indicators	Datasets and/or databases of records used	Project Level Good, Fair, Poor and (%) treatments resulting in measurable progress as defined above	Are you achieving your CFLRP objectives? (Y/N)	If NO, briefly explain…
Fire Regime Restoration	FACTS	Good (75%)	Y	
Fish and Wildlife Habitat Condition	WFRP WIT Sediment Monitoring Fish Surveys LWD Surveys CWD Surveys Local Research (Lorenz)	Good (75%)	Y	
Watershed Condition	Workplan Sediment Monitoring	Good (75%)	**Y**	
Invasive Species	FACTS Field Monitoring	Good (75%)	**Y**	

Narrative (optional):

Fire Regime: We assumed all treatments were effective at meeting the stated objectives. This approach is reasonable in that the correct potential vegetation types and seral stages were targeted for treatment, based on FRCC assessment. The issue is the scale of the accomplishment across the landscape, not ineffectiveness of the treatments. We are encouraged; however, that in FY14 the area treated for restoration of fire regime was 7 times that of the FY13 treated area, and the timber sales treated area in FY14 was 1.7 times the area treated in FY13.

Fish and Wildlife:

On the basis of the current literature and local monitoring of the effect of these treatments in other areas with similar conditions, we assumed all treatments were effective at meeting the stated objectives. In the future, with implementation of the multi-party monitoring plan, we expect to report on the outcomes of specific treatments on specific wildlife habitat components. There is also a clear need to further develop specific objectives related to fish habitat improvement. Many of these elements are included within the multiparty monitoring plan and are included under watershed

Watershed: There is a significant need to focus on road treatments that actively improve fish habitat and water quality, rather than maintenance. To that end, we are in the process of preparing a road improvement package that emphasizes road stabilization, road relocation and road decommissioning for the improvement of water quality and fish habitat. We anticipate this package being awarded in February-March 2015.

Invasives: Invasive treatments need to increase. We anticipate this increase subsequent to completion of the Okanogan Wenatchee Invasive Species EIS and ROD which will provide for a greater treatment area and improved treatment tools. Partnerships and grant opportunities will be essential in increasing the acres that we will be able to treat, as declining budgets have been one of the constraints to treatment implementation.