

## TFW Policy Committee Response on Extensive Monitoring

November 21, 2022

In August 2022, RSAG requested clarification on Policy's request for an extensive monitoring proposal for stream temperature and riparian stand conditions. A joint CMER/Policy workshop was held on August 24<sup>th</sup> to discuss RSAG's request. In October 2022 a policy subgroup met to discuss the takeaways from the workshop. Policy recommends a joint meeting between the Policy EM Workgroup and RSAG.

It is difficult to provide a "problem statement" as the study is not directly intended to answer a specific problem but help when developing policy responses to completed CMER studies as well as inform and guide Policy when decided on future studies and priorities.

Non-FFR lands would be federal forest lands, county or state parks, wildlife management or natural resource conservation areas. We recognize many federal forests are at higher elevations than most FFR lands, so these areas may need to be excluded. The purpose to this part of the request is to see if stream temperature is different between managed and unmanaged forest lands. Is there a better way to determine this?

Temperature data collection sites should be well distributed across forested lands and include both mapped Type S/F and Type N waters, but water type is not an important part of the data collection (mapped water types that are modeled can change). What sampling intensity is needed to provide useful information? Is there a strategy for reducing the sample size by looking at a basin scale or sub-basin scale?

What extensive monitoring efforts have taken place that might be useful in developing a baseline for the last 20 years? What existing data can we use? This is just looking for value added opportunities Policy may not have considered.

*Table 2. An interpretation of Policy's questions translated to focused questions that clarify with resource targets and products. Is this what Policy intended for extensive monitoring?*

<b>Policy Question</b>	<b>Source</b>	<b>Focus questions</b>	<b>Target</b>	<b>Products/What it tells us</b>
1) What is the distribution of stream temperature in Type F and N streams across FFR regulated lands, and how is the distribution changing over time as the forest practices prescriptions are implemented?	Field data collection	a) What is the distribution of stream temperature <b>in Type F and N streams</b> across FFR regulated lands?	Temperature criteria	<ul style="list-style-type: none"> <li>•Cum. freq. distribution, •Mean, min. max. metrics</li> <li>•Prop. &amp; duration achieving targets</li> <li>•Baseline for assessing trends</li> <li>•Annual variability/trends of 1a products</li> </ul>
	Field data collection	b) How is the distribution of stream temperatures changing over time?	Temperature criteria	
2) What is the variation in stream temperature distribution on FFR regulated lands compared to non-FFR regulated lands?	Analyses of 1a	c) How does the stream temperature distribution on FFR regulated lands compare to non-FFR regulated lands?	Temperature criteria	<ul style="list-style-type: none"> <li>•Compares 1a product metrics to existing data from other agencies, but must have similar geophysical match among sites. •Relative difference or similarities among different land uses</li> </ul>
3) For Type F and N streams, what is the status of riparian stand condition; e.g. stand structure, large wood present (contributing to pools and stream morphology), and shade.	Remote sensing	a) What is the riparian stand composition (e.g., conifer, deciduous, mixed) and size characteristics (e.g., height, cover, width) along Type F and N streams across FFR regulated lands?	<ul style="list-style-type: none"> <li>•HCP Riparian Strategy</li> <li>•MDT-Indicator of success</li> </ul>	<ul style="list-style-type: none"> <li>•Riparian stand distribution by composition and size categories</li> <li>•Provide spatial context for the overall extent of FFR which states "RMZs are the primary riparian protection measures for typed waters"</li> </ul>
	Analyses of 3a	b) What is the riparian stand potential to provide shade and large wood (LW) ecological functions?	<ul style="list-style-type: none"> <li>•Schedule L-1, Shade performance target</li> <li>•Large Wood HCP Riparian Strategy</li> </ul>	<ul style="list-style-type: none"> <li>•Cum. freq. distribution of shade and large wood supply potential</li> <li>•Prop. achieving shade target</li> <li>•Riparian effective recruit width for large wood supply</li> <li>•Function effectiveness for given riparian stand conditions</li> </ul>
4) What other questions can we answer with this effort?	Analyses of 3a	a) What proportion of riparian stands are on trajectory to reach the Desired Future Condition (DFC) or have reached DFC?	Schedule L-1, Performance target, Type F DFC	Provides a measure for how well we are achieving the goals of FFR.

Analyses of 3a

b) What proportion of streams dominated by hardwoods?

no target

Addresses questions about the extent of hardwood in RMZs and changes in hardwood dominance over time.