Appendix B

Science-based Analysis (Risk/Benefit)

Relationship to the

Watershed Condition Framework

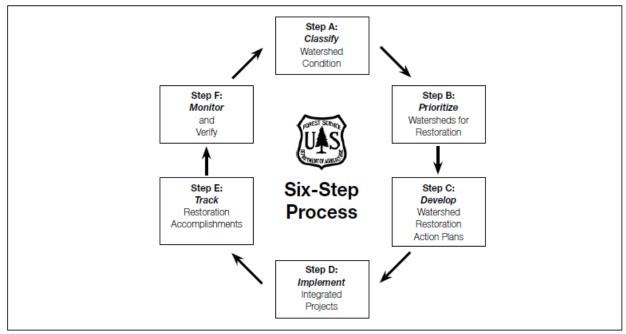
During the recent Travel Management Subpart A (TAP) conference calls with Eastern Region units (scheduled by the Regional Office), several questions were asked about the following statement found in the Travel Management Guidance Document for the science-based analysis:

"Units should consider integration of the steps contained in the Watershed Condition Framework (WCF) with the six TAP steps to eliminate redundancy and ensure an iterative and adaptive approach for both processes."

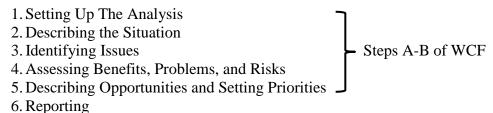
BACKGROUND

The WCF provides a consistent way to evaluate watershed condition at both the National and Forest levels. The scope of the WCF is broad and encompasses multiple resource areas, as does the TAP. The six-step process for WCF is displayed in Figure 1 (FS-977, page 8, May 2011). Eastern Region units have completed Steps A-C and are currently implementing the WCF process at Step D (Figure 1).

Figure 1.—Conceptual diagram of the six-step watershed condition framework process.



Regional guidance for the TAP states that the responsible official should follow the six-step process found in FSH 7709.55, Chapter 20, Travel Analysis. Below displays the relationship between the six-step TAP and related steps of the WCF:



Steps A and B of WCF most closely align with the TAP (see above). The six-step process for Travel Management was not intended to be fully compatible with the six-step process for WCF.

However, there are commonalities. Step A of the WCF requires Eastern Region units to classify watershed condition using the 12-Indicator Model (Figure 2). There are three Condition Classes for watersheds. Prioritization of watersheds is the Step B task of the WCF and is left to the discretion of the units. Blue ovals (Figure 2) identify the WCF indicators that were identified as Issues (Step 3 of the TAP) necessary to determine the risks associated with system roads. Subject matter experts (SMEs) used these indicators to develop the Risk/Benefit questions for the TAP. Remaining WCF indicators were determined to be more appropriate for environmental analysis during a project-level NEPA process. Project-level NEPA proposals would incorporate the results of the TAP as well as project-related activities and issues that are not addressed in the TAP.

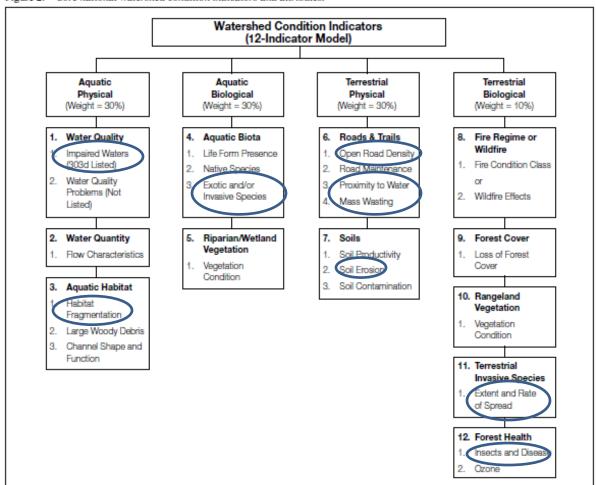


Figure 2.—Core national watershed condition indicators and attributes.

Our Region's science-based analysis TAP integrates diverse information, primarily from Natural Resource Manager (NRM) corporate data, to provide positive, negative, or neutral interpretation of causes or consequences related to the existing road system. Opportunities and

recommendations described in each unit's final Travel Analysis Report should connect findings from the TAP to road-related objectives described in the land management plan. Ultimately, information generated from the TAP will be useful to develop future project-level NEPA proposals. These proposals can address, for example, adjusting road operation strategies, decommissioning existing roads, converting roads to other uses, relocating roads, or adding roads to the current road system.

Table 1. Relationship of the cross-walk between the WCF Indicators and Risk/Benefit Questions (comparing the WCF Technical Guide to the TAP Data Resource Guide).

Watershed Condition Framework		Risk-Benefit Questions and	
Technical Guide		Data Resource Guide	
Aquatic Physical			
1) Water Quality			
1- Impaired Waters-303(d) sediment			
	(Page 14)	WAB2-Risk	(Page 26)
3) Aquatic Habitat			
1- Habitat Fragmentation	(Page 19)	WAB3-Risk	(Pages 26-27)
Aquatic Biological			
4) Aquatic Biota			
3- Aquatic Invasive Species	(Page 21)	IS3-Risk	(Page 16)
Terrestrial Physical			
6) Road and Trails			
1- Open Road Density	(Page 26)	WL1-Risk	(Page 19)
3- Proximity to Water	(Page 26)	WAB1-Risk	(Page 26)
4- Mass Wasting	(Page 26)	SOILS1-Risk	(Page 29)
7) Soils			
2- Soil Erosion	(Page 29)	SOILS2-Risk	(Pages 29-30)
		SOILS3-Risk	(Pages 30-31)
Terrestrial Biological			
11) Invasive Species			
1- Extent and Rate of Spread	(Page 38)	IS1-Risk	(Pages 14-16)
		IS2-Risk	(Pages 14-16)
12) Forest Health			
1- Insects and Disease	(Page 38)	VFS1-Benefit	(Pages 27-28)

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