

Watershed Condition Framework

Conceptual Framework

Sustainable Water Resources
Roundtable

June 17, 2009

Need for Watershed Assessment

- OMB PART determination of "*Results Not Demonstrated*" in FS Watershed Program:
- Program lacks performance-based outcome measures that meaningfully reflect program purpose
 - Inability to track watershed prioritization
 - Failure to identify restoration outcomes
 - Determine if projects improved watersheds

Forest Service Response - WCF

- Comprehensive Assessment to:
 - Classify & assess watershed condition
 - Produce efficiency measures related to WC
 - Products:
 - nationally consistent definitions
 - national map of watershed condition
 - Acres improved to a better condition class / \$M

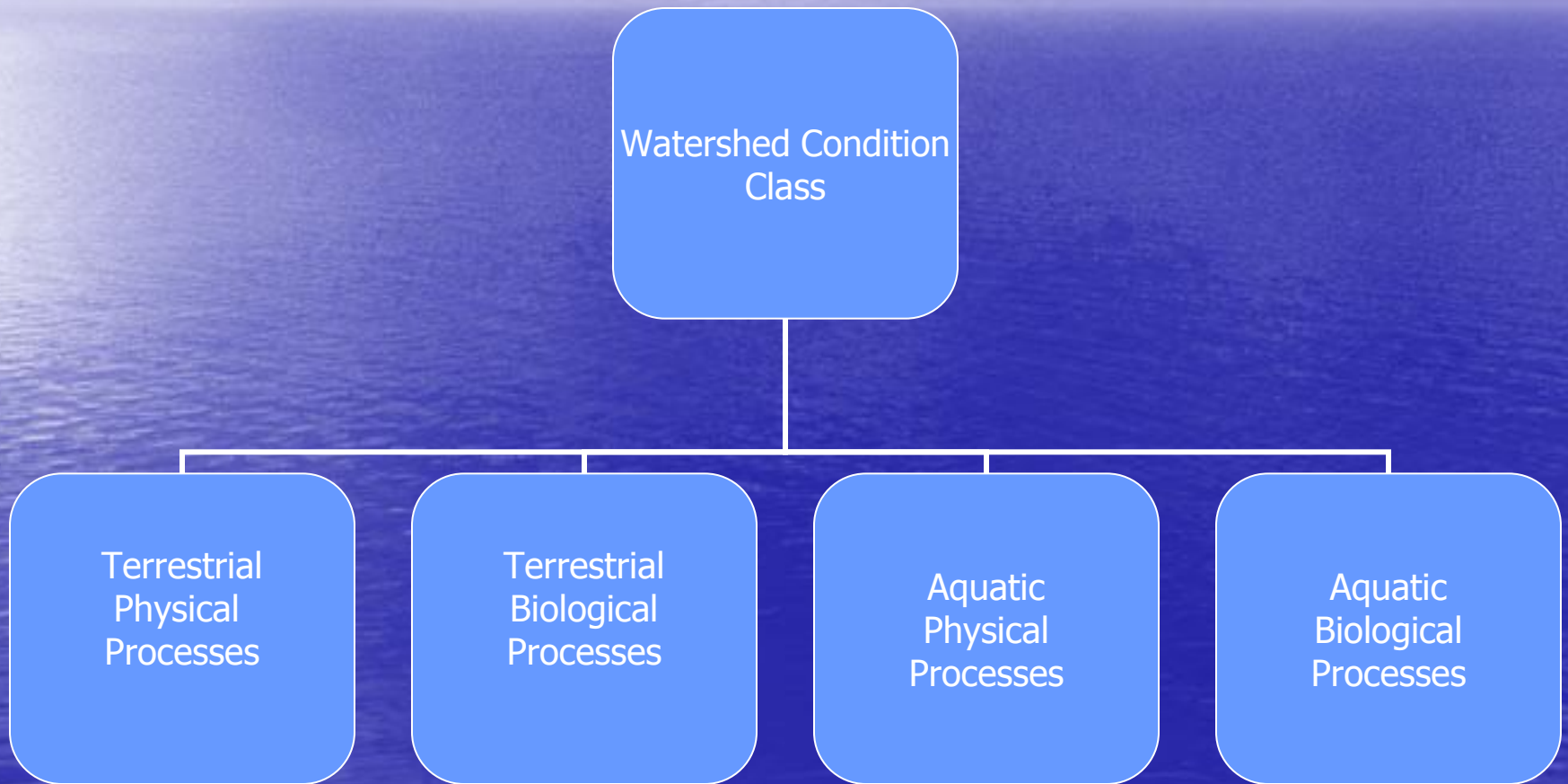
4 Phase Assessment

- Broad-scale national WC assessment (5th HUC)
- Reconnaissance level assessments by NF's (6th HUC)
- Validation and monitoring
- Future approaches for evaluating adjacent private lands

Goals of Watershed Condition Assessment

- Establish a systematic process for determining WC classes.
- Foster multi-scale ecosystem based approaches.
- Strengthen the effectiveness of the FS Watershed Program.
- Improve the internal dialog among disciplines.
- Enable a coordinated and priority-based approach.
- Enhance coordination with external agencies and partners.

WC Assessment Model



Types of Indicators

- Condition indicators - existing, on-the-ground alterations of watershed condition
 - observed or measured conditions
- Risk-based indicators - conditions with the potential to adversely alter watershed condition
 - situations that could *potentially* degrade watershed condition

Watershed Condition Indicators

- Water quality conditions,
- Water flow regime change,
- Riparian vegetation condition,
- Stream and habitat condition,
- Aquatic biota condition,
- Road condition,
- Soil condition,
- Fire regime condition,
- Forest cover condition,
- Rangeland, grasslands, and open area condition,
- Mass Wasting Risk and Severe Erosion Hazard Risk,
- Catastrophic disturbances,
- Risk from insects and disease,
- Risk from terrestrial invasive species,

Calculating WC Class from Indicator Scores

WC Class	Avg Category Rating
I	1.00 to 1.40
II	1.41 to 1.80
III	1.81 to 2.20
IV	2.21 to 2.60
V	2.61 to 3.00



Questions?