

Appendix C1 – Option 1 – Chris Iverson

Proposed Planning Rule 219.13 Ecological Sustainability – Option 1

- Address NFMA “Diversity of Plant and Animal Communities”
- Developed by Forest Service - Ecosystem Management
- 2000 Planning Rule as starting point

Ecological Sustainability - Key Principles

- 2 Fundamental Elements:
 - Increase management flexibility
 - Move “how to” detail to Agency Directives System
- Ecosystem Diversity and Species Diversity
- Hierarchical – sequential approach:
 1. Ecosystem Diversity first (coarse filter)
 2. then Species Diversity (fine filter)

Information and Analysis Option 1

Identify:

- Characteristics of Ecosystem Diversity (composition, structure, processes, status of components)
- Characteristics of Species Diversity (species richness, abundance, distribution and status, “species at risk”)
- Contributions of NFS lands to ecological sustainability relative to larger assessment area

Analyses:

- Proportional to issues, ecological risks, and available information – agency can affect level of needed analysis by proposed action/range of alternatives
- Consider relevant time frames and spatial scales

Plan Decisions – Option 1

“The Responsible Official must provide for the diversity of plant and animal communities and tree species within the plan area consistent with the multiple use objectives of the plan while sustaining the productivity of the land”.

Requirement of NFMA and the MUSY

Plan Decisions - Ecosystem Diversity Option 1

- “Plan decisions should provide measurable progress toward the maintenance or restoration of ecological conditions that will support the diversity of plant and animal communities and tree species and characteristics of ecosystem diversity”.
- 3 possible approaches:
 - 1. Species conservation strategies
 - 2. Emulate effects of natural disturbances
 - 3. Manage within range of natural variability

Plan Decisions - Species Diversity Option 1

- “Plan decisions should provide for ecological conditions that the Responsible Official determines provide a high likelihood of supporting over time the viability of native and desired non-native vertebrates and vascular plants well distributed within their ranges in the plan area”.
- Consider species life history and distribution
- Consider factors under agency authority
- Develop standards for species not addressed under Ecosystem Diversity

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“Diversity of Plant and Animal Communities”

Null Hypothesis = Species Viability

- 1982 Regulations; Current Standard
- Applied on every National Forest
- Is there a ‘better approach’ for Diversity?

Alternative Hypotheses:

- Ha1: Pure Community Approach
- Ha2: Species Diversity/Not Viability

Workshop Challenge.....

IF a Species Diversity Component is Retained...

1. What is the operational standard?
... extirpation, persistence, continued persistence, existence, continued existence, representation, healthy, sustainable, viable...?

Workshop Challenge.....

IF a Species Diversity Component is Retained...

2. What principles describe the Species Diversity objective or desired future condition?

Species Viability: “A species consisting of self-sustaining and interacting populations that are well distributed through the species’ range. Self-sustaining populations are those that are sufficiently abundant and have sufficient diversity to display the array of life history strategies and forms to provide for their long-term persistence and adaptability over multiple generations”.