

Background Paper Sierra Cascades Dialog #4

Preparing for Forest Planning: Science Synthesis

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Dialog Background Material Contents

1. Background Paper Sierra Cascades Dialog #4 by US Forest Service Region 5 Staff
2. Science Synthesis Prospectus by Pacific Southwest Research Station Core Science Team
3. Letter from Steve Brink and Craig Thomas RE: Implementation Plan for the R5 Ecological Restoration (3/2011) (formerly the Leadership Intent White Paper (5/2010))

Background Paper Sierra Cascades Dialog #4 by US Forest Service Region 5 Staff

The purpose of this document is to outline the planning framework for forest plan revision, the bio-regional assessment, and science synthesis. The Sierra Cascades Dialog on December 15, 2011, will concentrate on the science synthesis, in the context of preparing for forest plan revision.

History

The Forest Service Region 5 has held three Sierra Cascade Dialog Sessions on the following topics:

1. Ecological Restoration & Leadership Intent
2. Values, Attitudes & Beliefs
3. Social & Economic Impacts on Rural Counties

The second dialog on Values, Attitudes and Beliefs considered where participants fell on a values continuum ranging from an anthropogenic point of view (nature exists for people's use) to a biocentric point of view (nature has equal standing with people) as a way to further dialog on why forest management issues can be difficult to resolve. Participants were then placed in groups and asked to explore both their positions (what they wanted) and interests (why they wanted it). Through this interest-based exercise, participants discovered areas of agreement and divergence with some recognizing that they might have more common interests than previously thought.

Gina Bartlett, with the Center for Collaborative Policy, and Deb Whitall, Region 5 Social Scientist, then asked Craig Thomas and Steve Brink to participate in a case study to consider where their interests converged and diverged. Where their interests diverged, they were then asked to explore what it would take to find common ground. As a result of this interaction, Sierra Forest Legacy and the California Forestry Association issued a joint letter to the Regional Forester and Pacific Southwest Research Station Director suggesting possible approaches to increasing the pace and scale of ecological restoration in the Sierra Nevada. From this joint letter, the concept for the science synthesis was created.

Regional Office staff then began meeting with researchers from the Pacific Southwest Research Station, an independent group that conducts research for the Forest Service, to explore moving forward with a series of working papers or general technical reports on focal topics that could contribute significantly to scientific understanding as forest planning moves forward.

Moving Toward Forest Plan Revision

Region 5 is planning to formally initiate plan revision in 2012. A number of preliminary collaborative steps have been taken. These include:

- Sierra Cascade Dialogues (setting the stage for collaboration)
- Conversations with Forest Service Staff and Stakeholders
- The creation of **“Our Forest Place”** (an online wiki tool for housing information)
- Gathering existing information
- And more....assembling a regional core planning team; informing people about strategic plans, plan components and how they work together, and development of a collaborative strategy...with more to come.

The bio-regional assessment of resource trends and conditions is also getting underway. At this point, Forest Service staff is gathering information and requesting additional assessments, research or other information that will help inform the assessment. The science synthesis, as a foundational part of the effort, is also getting underway. Region 5 has decided to move forward with science synthesis in parallel with the bio-regional assessment, since the efforts are complimentary and will help form an accurate assessment of trends and condition and help point the way toward a range of potential solutions.

Forest Plan Revision Strategy

One of the questions that the Forest Service is most often asked is, “how are you going to get this done?” Regional Planning staff has put together a tentative strategy and timeframe.

The tentative strategy for plan revision is:

1. Assess at the bio-regional and local scale – This is a landscape scale, bio-regional approach to assess resource condition and trend and to identify issues that cross administrative boundaries consistent with an all lands approach.
2. Forest staff and interested people will focus on issues/opportunities unique to each administrative unit. This information will help Forest Staff determine their role or niche in the local or regional context.
3. Use a core planning team to do the analysis, writing, Environmental Impact Statements (EIS) and plan development.
4. Forest planner and specialists will work together and support local collaboration. Please note that collaboration and Consultation with Tribes is expected to occur in all phases of the Plan Revision process.
5. Use uniform templates for plans and EIS’s to streamline the NEPA process and maintain consistency between the various plan revisions. (It will be like modular housing w/custom colors.)
6. Use of a centralized process, with local decision-making.

Some Planning Concepts

A plan:

- Is collaboratively developed and is science-based.
- Provides a framework for integrated resource management and for guiding project and activity decision-making.
- Does not authorize projects or activities or commit the Forest Service to take action, or, regulate uses by the public. In other words, no site-specific decisions are expected to be made in a Forest Plan.
- Should not repeat laws, regulations, or program management policies, practices, and procedures that are in the Forest Service Directive System.

Role of Science

Use the best available scientific information to inform the planning process.

Planning Framework

- Assess
- Amend/revise
- Implement
- Monitor
- Breathe
- Repeat

- Adaptive and iterative

Forest Plans

What are the components of a forest plan?

Desired conditions: A description of specific social, economic, and/or ecological characteristics of the plan area, or a portion of the plan area, that are described in terms specific enough to allow progress toward their achievement . Desired Conditions are what drive the plan. All management activities should be aimed at the achievement of the Desired Condition for those resources in the area where the project is located. Desired conditions can be thought of as goals that in part help define a collective vision for the National Forest in the future.

Objectives: An objective is a concise, measurable, and time-specific statement of a desired rate of progress toward a desired condition or conditions and should be based on reasonably foreseeable budgets. Objectives along with the strategies used to accomplish them can be thought of as the tools we will use to reach the desired conditions. Objectives are mileposts along the road toward desired conditions.

Standards: These can be thought of as the rules we will operate within as we develop projects to accomplish objectives and move closer to the realization of desired conditions. These are mandatory constraints on project and activity decision-making.

Guidelines: Describe a constraint on project and activity decision-making that allows for departure from its terms, so long as the intent of the guideline is met. In other words guidelines are mandatory unless they are replaced by something that is equal to or better than the existing guideline.

Suitability of lands: Specific lands within a plan area identified as suitable for various multiple uses or activities based on the desired conditions applicable to those lands. The plan also identifies lands within the plan area as not suitable for uses that are not compatible with desired conditions for those lands. Every plan must identify those lands that are not suitable for timber production (required by NFMA).

Assessment

An assessment is a report that is available to the public, and that identifies and considers relevant existing information contained in governmental or non-governmental assessments, plans, monitoring reports, studies, and other sources of relevant information.

What is the purpose of an assessment?

- ❖ To rapidly evaluate the sustainability of existing ecological, economic, and social conditions and trends within the context of the broader landscape.
- ❖ To gain understanding of these existing ecological, economic, and social conditions and trends in relationship to current land management plans.
- ❖ To consider and evaluate the sustainability of possible future social, economic, and ecological conditions and trends both within the plan area and in the context of the broader landscape.

How is the assessment used?

- ❖ Helps identify the need to change the existing plan.
- ❖ Informs the development of plan components and other plan content.

What are potential topics for an assessment?

*These topics are likely to be looked at from a **Landscape Scale** with Regional Office assistance to local forests and may include but are not limited to:*

- Terrestrial ecosystems, aquatic ecosystems, and watersheds;
- Air, soil, and water resources and quality;
- System drivers, including dominant ecological processes, disturbance regimes, and stressors, such as natural succession, wildland fire, invasive species, and climate change; and the ability of those terrestrial and aquatic ecosystems in the plan area to adapt to change;
- Base line assessment of carbon stocks;

- Threatened, endangered, proposed, candidate species, and potential species of conservation concern present in the plan area;
- Social, cultural, and economic conditions;
- Benefits people obtain from the NFS planning area (ecosystem services);
- Multiple uses and their contributions to local, regional, and national economies;

*These are more likely to be looked at from a **Forest Scale** by Forest Staff.*

- Recreation settings, opportunities and access for a range of uses;
- Renewable and nonrenewable energy and mineral resources;
- Infrastructure, such as recreational facilities and transportation and utility corridors;
- Areas of tribal importance;
- Cultural and historic resources and uses;
- Land status and ownership, use, and access patterns; and
- Existing designated areas located in the plan area including wilderness and wild and scenic rivers and potential need and opportunity for additional designated areas.

Science Synthesis

In the past, determination of how to use science was done on a Forest level and at individual specialists' discretion. The new planning rule will require that science be brought into every aspect of plan development. The science synthesis is expected to provide a scientific context for the decision-making process. The science synthesis should integrate social, economic and ecological plan components. It is expected to forge new ground in Forest Plan Revision work through consideration of large-scale landscapes. The product would be a peer-reviewed white paper.

The Science Synthesis will not be an exhaustive document that covers everything. The science synthesis concept is more than a summary of the best available science. The science synthesis *will integrate scientific information across disciplines, as threads are woven into a cloth*, to inform and provide a set of tangible options for land managers and stakeholders. In this way, scientific information reveals *characteristics* of a functioning ecological, social and economic system within the *context* of a larger landscape, just as an intricate tapestry reflects a variety of patterns, textures and colors.

Equally important to what is known is what is unknown. The Science Synthesis will highlight what is currently known and unknown, identifying areas of uncertainty. In so doing, it will provide a framework for testing assumptions at appropriate landscape

levels. Based on test outcomes, plans can be updated with new insights for what to do if original predictions prove to be false.

Together, through the Sierra Cascade Dialog and other venues, the Forest Service and stakeholders will engage in the science synthesis process to create a more integrated, adaptive approach to land management.

How can the science synthesis fit into the revision process?

In the past, the use of science has been the responsibility of Forest Supervisors and left to the discretion of resource specialists on their staff. A science synthesis is expected to give the agency a more informed scientific foundation going into the plan process and to allow for the more effective use of science in all phases of the revision efforts. For example, science synthesis is expected to:

1. More effectively assess ecological, social and economic trends and conditions and to facilitate the identification of the “need for change” from current plan direction.
2. Help define the desired conditions, standards, and other forest plan components by giving decision-makers the scientific context to work from.
3. To identify the appropriate landscape scale for management, and providing consistency across units.
4. Highlight monitoring needs at the appropriate scale
5. Establish monitoring programs focused on plan performance, with adaptable monitoring strategies and potential for experimentation.
6. Identify gaps in knowledge and uncertainties that may exist.

Collaboration

Key to developing assessments, scientific syntheses, and Forest Plan revisions are the following collaborative goals:

- Improve transparency in planning.
- Enhance opportunities to participate in the planning process.
- Advance science and new ideas that seek to balance social and economic well-being within the limits of healthy ecosystems across the Sierra Nevada bioregion.
- Collaboratively identify desired and existing social, economic, and ecological conditions.
- Streamline planning processes and increase efficiency through regional, national forest, and community-level participation.
- Develop learning approaches that foster adaptive capacity.
- Create innovative alternatives that are beneficial to communities and require less external resources to reach desired conditions.

To achieve these goals, Regional Office staff, local forest staff, collaborative specialists and stakeholders will develop an overall collaborative strategy for the bioregion. It will build on the many efforts underway and also propose a model for collaborative forest plan revision. Some elements of the strategy are outlined below.

- **Sierra Cascades Dialog**

- These public meetings are designed to encourage conversation about topics selected by the Sierra Cascade Dialog Steering Committee. Tentative dates for 2012 Dialogs are March 15th, May 10th, September 27th, and November 29th. Future topics include: Collaborative Planning in Forest Plan Revision, Adaptive Management, “All Lands” Approach to Fire Protection and Ecological Restoration, Effective Monitoring, Changing Climate, and more...

- **Focused Workshops**

- Another element could be a workshop series to concentrate on the focal topics in the science synthesis.
- “Value Mapping” and “Value Suitability Analysis” workshops seek to validate public values and inform planning through mapping compatibility of interests and existing land allocations, and identification of desired conditions on the landscape.

- **Our Forest Place**

- A web-based, wiki-style platform where the assessment can be developed collaboratively with stakeholders and Forest Service moderators.

Preliminary Timeline

Calendar Year	2011	2012				2013				2014				2015				2016- beyond
Quarter	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Science Synthesis (SS)																		
Refining questions and focal areas	X																	
Finalize questions		X																
Working paper																		
Peer-reviewed paper																		
Assessment																		
Initiate Bioregional & Forest (Notice of Intent)			o															
Develop standard "template"																		
Collect Social/Econ Data																		
Coordinate w/Science Synthesis (SS), ID gaps																		
Integration: Science Synthesis & Assessment																		
Integrate SS into Bioregional Assessment																		
Integrate SS, Bioregional Assessment into Forest Assessment																		
Forest Plan Revision (18 month process/plan)																		
Stakeholder Engagement																		