AGENDA

- Update
  - Working Group's Effort Thus Far
- Requests for Committee Action
  - Affirm Principles
  - Create Work Plan Going Forward

Adaptive Framework and Assessment Working Group

Update

- Principles
- Search for Best Practices – Assessments
- Search for Best Practices – Adaptive Management

Adaptive Framework and Assessment Working Group

Requests for Committee Action

- Affirm the Principles
- Create Work Plan Going Forward

Discussion

Adaptive Framework and Assessment Working Group

USFS Planning Rule Advisory Committee
Adaptive Framework and Assessment Working Group
September 2012 – February 2013

I. Scope of Work for the Working Group

- Statement of Principles – high-level statement of the essential characteristics of a successful adaptive framework and of a successful assessment process
- Assessment Examples – description of existing, successful examples of assessments from forest plans
- Assessment Best Practices – Description of an assessment effort that is likely to be successful
- Adaptive Framework Examples – description of existing, successful examples of adaptive systems either from forest plans or from adaptive management systems in other land management agencies
- Adaptive Framework Best Practices – Description of an adaptive framework that advances the principles and is likely to be successful

II. Principles for a successful assessment process

The assessment sets the stage for the rest of the forest planning process; therefore, it is essential to get the assessment process right. The principles for a successful assessment are:

- *Timeliness* – It is important that the Forest Service identify the specific attributes and variables that are essential to the plan – those that the Service will measure and monitor – and move efficiently to generate information related to these attributes and variables

- *Inclusion* – From the beginning, the Service must engage the local community and the broader array of stakeholders in selecting the important attributes and participating in the assessment process; the assessment should take into account multiple viewpoints and values; it should be performed in the context of the greater landscape in an all-lands approach

- *Transparency and Accessibility* – The assessment process should be an open process with assumptions, hypotheses and analytical methods – what will be done and why – presented explicitly. The purpose of the assessment and how it will be used in decision making must be stated expressly.

- *The Responsible Pursuit of Scientific Information*

    - Scientific Integrity and Quality – The assessment should bring the best available information to bear; the Service should take an evidence-based approach to evaluating the science, borrowing from medicine and other sciences, and scrutinizing information for robustness; the process should distinguish between fact and opinion, between knowledge and conjecture; suppositions have to be validated and evidence peer reviewed; the Service must employ the scientific method and make hypotheses explicit

    - Relevant – The information the Service collects for an assessment has to be related to the values that the community holds and the attributes and variables that are central to the plan

- Proactive – The service must be active in seeking out relevant information, reaching out to government and non-government stakeholders for information and actively encourage state agencies, and other agencies, to file for cooperating agency status so that their expertise can be incorporated early in the process; the Service must reach out to potential partners and seek out the first-hand information others hold

- Open to Scrutiny – The service must present the scientific literature and the central information for review by the academic community and advocacy groups on all sides for review and evaluation

Principles for a successful the adaptive framework

- *Open to change* – Forest planning processes should anticipate that new information will drive changes to the plan and should readily integrate new information

- *No preconceived outcomes* – The planning process should require that the Service and all of the stakeholders challenge the prevailing assumptions and conventional wisdom, allowing scientific investigation to trump opinion, conjecture and agency assumptions

- *Begin with the end in mind* – The planning process should produce a compelling statement of desired conditions and the plan's actions and activities should advance the forest toward the desired conditions

- *Vigilance* – In the planning process, the Service should advance a hypothesis (the expected response to a specific activity), test it, monitor the results carefully and change the plan's strategies accordingly

- *Acknowledge uncertainty* – The plan should identify areas of uncertainty and the Service should work systematically to investigate these areas

- *Accountability* – The Service has to take responsibility for the plan's strategies and whether they produced the desired condition

- *Capacity* – Through its own resources and through partnerships, the Service must establish institutional accountability for adaptive management, demonstrating a willingness to lean into the problems rather than running from them

III. The Search for Best Practices and Successful Examples

Examples – Assessment

Southern Forest Futures Project – Dave Wear, Forest Service

- 5-year Science-Based Futures Analysis – the ultimate goal is to translate science findings into useable information for planning, management, and policy making
- Phase I – region-wide technical report with 17 chapters exploring forecasts and meta-issues and summary report with a compact synthesis of findings and implications
- Phase II – sub-regional management implication reports – forthcoming – translation of findings for 5 sub-regions in the South – two are out for peer review
- Defining the questions using public dialogue is critical
- Key processes operate at multiple scales, requiring a multi-layered approach – Continental ---- regional --- sub-regional --- forest
- Forecasting highlights the moving target for management – *'Skate to where the puck will be', Wayne Gretsky*
- Regional assessment puts the local into broader landscape context – Especially critical in the East where private lands dominate

Framework for Ecological Sustainability on National Forest Lands and National Grasslands in the Southwestern Region and the Kaibab Forest Assessment – Matt Turner, Forest Service

- Kaibab Assessment – terrestrial, aquatic, air and fire
- Conducted under previous planning rule, some similarities, some differences
- Began with HRV, existing conditions, and future trends if management unchanged
- Modeling produced a set of key findings – identified where ecological changes are warranted
- All six forests have developed the same kind of documents and conducted the same kind of analysis – ecological and socioeconomic – each had focus groups aimed at issues of most interest to the public
- Used peer-reviewed scientific methods and models rather than having the reports peer reviewed – and used existing information wherever possible
- Both a regional and forest-level effort

Example – Adaptive Management

Sierra Nevada Adaptive Management Project – Patricia Flebbe, Forest Service

- The Basic Question, driven by a Forest Plan component – Are the potential short-term negative effects of treatments (particularly to owls and fisher) counterbalanced by the potential long-term ecosystem-level benefits of reductions in tree densities and catastrophic fires?
- Six university-based science teams working from 2007-2014
- Analytical framework for the six teams – common study design, different scales for each
- Looking for Immediate (1-3 year) results and long-term (30-year) results
  Focal species – owl and fisher – large home ranges – both have been involved in regulating timber harvesting
- Integration – hypotheses of positive and negative impacts of treatments

IV. Conclusions From the Examples

Conclusion – We aren't likely to find a set of ideal examples and will derive more benefit from working with the early adopters rather than continuing to look for best practices elsewhere

Assessment

1. Scale – Based on our research, stepping down from regional assessments to individual forest assessments and plans will add value to those plans, for example, by establishing a regional social and ecological context. We look forward to observing how the regional assessments will be applied and integrated into individual forest plans

2. Best Available Scientific Information – It is important to value good science while accepting what's available (and acknowledging where uncertainties lie) and moving forward efficiently

Adaptive Management

1. There are too few adaptive management efforts that are realizing the full circle – assess, plan, implement, monitor, evaluate, reassess.

2. True adaptive management requires commitment (e.g. resources and capacity) over a long period of time.

3. We have to help move the planning processes to completion so that the forests move out of planning and into adaptive management.

4. We briefly discussed the respective roles of forest plan monitoring, forest research, and adaptive management and the potential for overlap among these three.

V. Work Plan – Draft

1. Directives – using our principles as initial criteria, reviewing sections relevant to assessments and to the adaptive framework and developing draft recommendations for the full committee's consideration

2. Examining and reporting back to the full committee on the work of the early adopters as a way of improving assessments and advancing adaptive management