

NOTES25: SOFAR Landscape Vision Committee

June 11, 2019

Meeting in Brief

Becky Estes will put together a science talk on seral conditions for the full collaborative in November or January.

The Committee will work with TCSI via Pat Manley and Rod Kelsey at The Nature Conservancy to provide feedback on indicators for TCSI's current conditions "snapshot" assessment and input on modeling scenarios. The TCSI snapshot assessment can be used to demonstrate project benefits. The forthcoming TCSI modeling work could be used to determine desired conditions to develop new projects. SOFAR will invite Rod to present the assessment at the November meeting.

Action Items

Gina to check-in with the Steering Committee and the full collaborative to confirm content of seral stage science talk.

Pat Manley will explore with Rod Kelsey on expanding the TCSI modeling boundary to include the whole SOFAR project area.

Pat will share the list of TCSI indicators

Pat will talk to Rod @ TNC to see if SOFAR could be the area where TCSI explores the application and software development to think about on-the-ground usability.

CBI to send out doodle with potential dates for Red Fir Site Visit (August 15, 16, 22, 23, 26, 27, 29, 30)

[Link to All Meeting Materials](#)

Seral Stage Conditions – Science Talk

Becky Estes spoke about research on Lake Tahoe West conducted to understand what seral stages should be on the landscape, with the goal to identify what needs to be done to get lands to the historic range of variability. That work is now being applied to and supplemented with lidar data to develop a landscape restoration plan for the North Yuba watershed.

The group would like Becky to put together a talk for the full collaborative that addresses:

- What are seral stages and how understanding could advance SOFAR?
- What is the historic range of variability? How might this be different from the future range of variability?
- How do disturbances affect the seral stages?

Other related topics, potentially for additional future science talks:

- How do we manage age classes (e.g. how many 24-inch trees do we need to get one 36-inch tree)?

- How do you grow a stand into its desired conditions?
- What about species variability?

Action Items

Gina B. will check-in with the Steering Committee and the full collaborative to confirm content of seral stage science talk.

Tahoe-Central Sierra Initiative (TCSI) Assessment

Pat Manley, Pacific Southwest Research Station, provided an overview of TCSI work. TCSI is conducting an assessment of 2.4 million acres that includes most of SOFAR. This assessment is trying to provide a snapshot of current conditions (similar to Lake Tahoe West) across resources of interest and is trying to conduct vegetation growth modeling.

Step 1: Assessment

Wildlife: 14 focal species identified via forest plans. Under Proposition 68, funding is available to think about designing for wildlife (a Regional Conservation Investment Strategy or RCIS) and then receiving mitigation credits for maintaining biodiversity.

Vertebrates: 6 functional groups.

Fire: running a model to look at risk (i.e. how much disturbance can a stand handle).

Economic: timber product assessment.

Vegetation: seral stages.

Water Analysis: water yield by forest structure should factor in the Blodgett (demonstration forest) study that looked at water yield.

Forest Structure: developing tools to talk about forest structure and growth.

Measures of Heterogeneity: What forest function comes from what stand structure? TCSI is trying to understand how to structure forests to reach desired outcomes around water, fire, and ecosystems. Scientists and land managers are unclear about how much is needed and where. Historically, disturbance events determined structure. Now, as land managers are controlling disturbance more, society needs to determine how much disturbance is helpful and where it might occur.

In the future, the values (the “why do you want this”) are really important because values will drive structure (i.e. the structure that supports water or supports wildlife or supports forest product are all different).

Historic Range of Variability

Air Quality: may pursue smoke modeling; study team can make recommendations to pursue other studies.

The scientists are thinking about how to present the science to support application on the landscape. TCSI is trying to build capacity and translate “up and down” from small to large landscapes and back and forth.

Step 2: Modeling Different Scenarios

TCSI will start the forest growth modeling in November and December 2019. TCSI is integrating urban and population growth as part of the forest growth model (removing some forested lands to accommodate growth). They are also developing 3-4 climate scenarios.

SOFAR could help contribute to scenario development. TCSI is working with software developers to conduct sensing conversations and develop products to support project design and prioritization.

Modeling snags for the Pacific fisher is difficult. The assessment will probably focus on zones: defensible space and higher elevation. Snags in defense zones would be less dense because of other values (protecting homes, etc.). However, the larger scale modeling will look for major events – tree mortality, fire. Research can address snags and some of the benefits at the stand scale.

Schedule

- Methods (available now) and results (Sept-Oct) for the current snapshot
- Methods and results for the modeling (first half of 2020)

Resources

[TCSI website](#)

[Proposition 68](#)

- Resource Conservation Assessments (RCA)
- Regional Conservation Investment Strategies (RCIS)
- Mitigation Credit Agreements (MCA)

Action Items / Next Steps

1. Pat will share the list of TCSI indicators
2. Pat Manley and Rod Kelsey @ TNC will explore expanding the boundary to include the whole SOFAR project area
3. The Committee will review the current TCSI indicators and consider at next meeting whether these meet SOFAR needs.
4. Rod will present on the methods and results of the TCSI assessment at November SOFAR meeting (at the full collaborative first, and Landscape Vision second)

Developing SOFAR Baseline Conditions

The group has talked about developing baseline conditions to demonstrate the project benefits. Demonstrating the baseline would help make project applicants more competitive..

Mark raised a concern that the Resource Conservation Districts (RCDs) don't have a consistent way of describing current conditions, or of communicating what desired conditions should be (i.e. desired conditions for the wildland edge is very different from desired conditions for forested lands). Developing a consistent message about the desired conditions outside of forested lands would help RCDs and other project sponsors working in the community. The desired condition may not be to take it back to a natural condition but instead a condition that protects developed lands.

The TCSI assessment will document the current conditions, and measures of heterogeneity that project designers can use to figure what tree to cut or burn to achieve a given objective (i.e. necessary forest structure to support water, wildlife). In this way, the TCSI assessment could help with project planning. But, there may be areas where land managers cannot realize the desired condition because of specific location and current circumstances or constraints.

Action Items

Pat Manley will talk to Rod to see if SOFAR could be the area where TCSI explores the application and software development to think about on-the-ground usability.

Field Trip Day for Red Fir

Action Items

CBI to send out doodle with potential dates (August 15, 16, 22, 23, 26, 27, 29, 30)

Background Work

1. Meeting notes @ <http://sofarcohesivestrategy.org/meetings/>
2. Link to [Project Priorities Development List](#) (on Google Drive)
3. Link [Desired Conditions Zone Table](#) (on Google Drive)