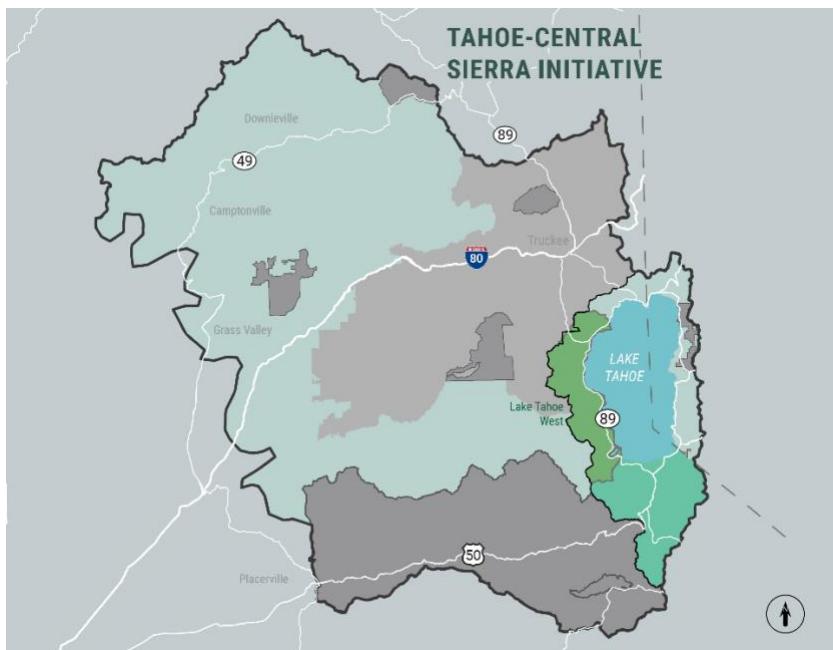


Review of *Waypoints on the Road to Resilience* document

Background

Building upon several large-scale regional efforts and best available science, a partnership of state, federal, environmental, industry, and research representatives have established the Tahoe-Central Sierra Initiative (TCSI) to accelerate regional-scale forest and watershed restoration through ecologically based management actions, while creating the opportunities to support a forest restoration economy and explore innovative process, investment, and governance tools. TCSI, the first pilot project under the [Sierra Nevada Watershed Improvement Program \(WIP\)](#), aims to restore the resilience of 2.4 million acres of Sierra Nevada forests and watersheds. It focuses on developing and demonstrating innovative planning, investment, and management tools across all lands.



The watersheds of the Tahoe-Central Sierra area are crucial for downstream communities, agricultural interests, recreationalists, and the environment. This landscape of the Lake Tahoe Basin and the American, Bear, Truckee, and Yuba watersheds also provides water critical to the Sacramento-San Joaquin Delta, as well as to northern Nevada communities. The forested watersheds here contain large amounts of carbon, produce substantial amounts of wood products and clean energy, provide significant fish and wildlife habitat, and are a recreational playground for millions of visitors year-round. Billions of dollars of goods are transported through this area each year, making the region a critically important part of California's economy.

TCSI's investments are addressing the key barriers to scaling up forest management by increasing capacity and developing more flexible funding and new markets for biomass and wood products. Lessons learned here can be applied across the entire Sierra Nevada and beyond to accelerate the restoration of this spectacular and vital region.

Waypoints Document

Through interviews with scientists and policy practitioners within the TCSI area and analysis of draft TCSI products, including the *Framework for Resilience* (Manley, P., K. Wilson, and N. Povak. 2020), and other complementary tools and resources used in other forested areas, the *Waypoints* document presents actionable considerations for the SNC regarding:

- replicable best practices/lessons learned from TCSI that could be utilized in other regions and by other groups to improve socio-ecological resilience of the 2.4-million-acre TCSI area;
- alignment of the Sierra Nevada Conservancy's (SNC) strengths with community and forest restoration demand to achieve socio-ecological resilience region-wide.

General Conclusions:

- *Waypoints* is specific to evaluating what/how SNC could “export” from the TCSI Pillars & Framework processes to other areas/organizations.
- *Waypoints* is not specific regarding recommendations for how to address challenges, such as lack of biomass utilization outlets; nor does it contribute information that would support identification of potential partners or governance entity members for purposes of the CalFRAME project, other than:
 - **possibly SNC, itself**, by virtue of its mission and role in the region as a hub of information and activity to improve environmental, economic, and social well-being and invest in efforts to advance restoration objectives and accomplish socio-ecological resilience throughout the region; or
 - **possibly TCSI**, by virtue of its representation of the TCSI region and goal of developing frameworks and actions to embed socio-ecological resilience in a larger 2.4-million-acre landscape and facilitate forest treatments that could be aided by additional biomass utilization capacity in the region.
- TCSI itself has nested projects that could be sources of regional biomass, including:
 - Caples (Eldorado National Forest , El Dorado Irrigation District, SNC) – focus on prescribed burning and reintroducing a healthy fire regime on 6,800 acres of the Eldorado National Forest;
 - French Meadows (Tahoe National Forest, Placer County Water Agency, Placer County, The Nature Conservancy, SNC, American River Conservancy, UC Merced Sierra Nevada Research Institute) – focus on providing support to USFS – Tahoe National Forest for increased fuels reduction/forest health activities across 22,000 acres, with roughly 5,000 acres of thinning work to reduce fire risk/severity and protect critical resources including Middle Fork American water/hydropower project;
 - Lake Tahoe West (California Tahoe Conservancy, Lake Tahoe Basin Management Unit, Department of Parks & Recreation, Tahoe Regional Planning Agency, Tahoe Fire & Fuels Team, National Forest Foundation) – implementing a 10-year strategy to restore forests, watersheds, recreation, and communities on Lake Tahoe’s western shore;
 - No Yuba Forest Resilience Project/Partnership (Tahoe National Forest, South Yuba River Citizens League, The Nature Conservancy, Yuba Water Agency, Camptonville Community

- Partnership, The Nisenan Tribe, National Forest Foundation, Sierra County, Blue Forest Conservation) – forest restoration work across 275,000 acres, to be funded in part by private capital through a Blue Forest Forest Resilience Bond through Blue Forest Conservation;
- Sagehen Experimental Forest (UC Berkeley, USDA Forest Service Pacific Southwest Research Station, Tahoe National Forest) – management plan/implementation based on GTR 220 principles;
 - South Fork American River Cohesive Strategy-SOFAR (multiple partners including industry, environmental, Resource Conservation District, fire, and homeowners) – initiate National Cohesive Wildland Management Strategy on 410,000 acres in South Fork American watershed on the Eldorado National Forest.

What has changed since *Waypoints* document was published:

Waypoints identified 5 High-Level Findings and 11 Next Steps recommended for SNC action. Information shared at the September 27, 2022, CA Wildfire and Forest Resilience Task Force meeting indicates that the Task Force, with SNC included by association, has taken a number of actions recommended by the *Waypoints* report. These actions, reported at the September 2022 Task Force meeting, are outlined below in *italics* beneath the related Finding and Next Step.

Findings:

1. The SNC is a trusted grant-making and collaborative organization known for its breadth of services and staff expertise.
2. Tracking and reporting progress on achieving the goals of each Pillar is confusing and cumbersome for local partners and agency staff; there is a need for “frameworks, transparent tools, and digital resources” to translate socio-ecological resilience measures and needs between local collaborative decision-making bodies and state policy-makers.
 - ✓ *The CNRA/Wildfire and Forest Resilience Task Force has rolled out a **Regional Resource Kit** built around the TCSI Pillars of Resilience that provides a consistent set of fire-related metrics and associated data, as well as a **digital planning tool (“Planscape,”** created by Google) that collaborative groups can use free of cost to identify goals, plan forest treatment work to achieve those goals, and evaluate and prioritize projects. Once a region has developed its plan – using either its own data/tool or the State data/tool – it is ready to apply for **regional block grants** from the State and federal governments.*
 - *NOTE: use of the State data/tool is not mandatory; a region can use its own data and planning process. But the goal is to have all regions in some way incorporate the metrics from the resource kit and associated Resilience Pillars so that all work – whether resulting from the State’s data/tool or not – can be rolled up and used for consistent tracking and reporting of regional progress.*
3. SNC is uniquely positioned to coordinate with multiple agencies and jurisdictions to distribute resources, report progress, and communicate gaps. In an expanded coordination role, SNC can

increase the efficiency and effectiveness of state and national wildfire response and forest resilience funds.

- ✓ *In addition to the Regional Resource Kit and digital planning tool described above, the SNC reported (through Executive Officer Angela Avery at the Sept. 27th Task Force meeting) that it is convening multiple state agencies with programs that fund work in the Sierra region to pilot the concept of **pooled funding** for larger **block grants** over longer periods of time to support implementation of regional plans and priority projects. The SNC has a commitment of \$10m from CAL FIRE and is working with WCB on a similar request.*
- 4. Due to the heterogeneity of the region, regional leadership, understanding, and “provisioning” (i.e. coordination/distribution of resources and services) is needed to achieve socio-ecological resilience goals, including rural social and cultural well-being, forest resilience, fire-adapted communities, and local and downstream biodiversity, air quality, and water quality.
 - ✓ *SNC is taking that leadership role, including the creation of the state agency pooled funding concept that would allow the SNC to distribute, or “provision,” resources in the Sierra Nevada region to most effectively and efficiently meet needs around forest and community resilience.*
- 5. SNC will need to grow its staff, access to fiscal and data resources, and relationships with local, state, national, and tribal leaders to provide this kind of regional coordination.

Waypoints Next Steps:

1. Create a regional hub of agencies, departments, tribes, and other partners to increase coordination and funding efficiency, reduce redundancies in grant programs, and increase transparency for local partners.
 - ✓ *SNC is exploring a state agency pooled funding concept that would allow the SNC to distribute resources in the Sierra Nevada region from multiple agencies, reducing redundancy and increasing transparency and process efficiencies for local partners.*
2. Generate a Sierra-wide resource assessment, using methods employed by TCSI, to understand the current state of resilience in the region.
 - ✓ *The Task Force’s Science Advisory Panel worked with SNC, CA Natural Resources Agency, USDA Forest Service Pacific Southwest Research Station, CAL FIRE-FRAP, Strategic Growth Council, and other partners to create the first of four regional profiles being rolled out across the state with a common planning framework (using TCSI Resilience Pillars and metrics), spatial data, and an assessment of current conditions for key resources using metrics vetted by federal, state, and academic scientists. The regional profiles and associated Regional Resource Kit and Planscape tools are intended for use*

by local partners/collaboratives to accelerate forest and wildfire resilience work on the ground.

3. Map the collaborative decision-making presence, capacity, and effectiveness in each SNC sub-region.
4. Use accessible decision-making frameworks for socio-ecological resilience funding to align separate funding sources to TCSI Resilience Pillars.
 - ✓ *The pooled funding concept being explored by the SNC would do this, especially if funding decisions are made based on the planning conducted using the State-suggested TCSI Pillars and metrics.*
5. Communicate progress towards pillar goals with one voice in a dashboard, story maps and other visualized outputs.
 - ✓ *By providing common data and metrics, whether incorporated into the State's free planning tool (Planscape) or other tools used by partners/collaboratives in the region, SNC and the State are creating a mechanism to track and report progress consistently across the region.*
6. Pilot metrics and elements for a subset of Pillars to allow for sufficient project monitoring and reporting.
 - ✓ *The Regional Resource Kits, with their State data and tools and ability to tailor metrics to local needs and priorities, are geared toward helping partners/collaboratives have enough but not too much data for use in accelerating work and facilitating easier monitoring and reporting.*
7. Create coherent budget requests for additional personnel, data, tools and other resources to support a resilience hub and the membership required to maintain such a hub.
 - ✓ *The resilience hub concept appears to be embodied in the Regional Resource Kits and pooled funding efforts being rolled out by the Task Force. More action may come on this recommendation in the future.*
8. Conduct meaningful consultations with tribes and tribal members to ensure authentic inclusion of tribal knowledge and needs in collaborative decision-making processes.
9. Work through the re-envisioned Wildfire and Forest Resilience Task Force to align regionally specific actions to state-wide goals and share best practices that emerge at the local level.

- ✓ *The Regional Resource Kits, including regional assessments, State-provided data, and free planning tool, is geared specifically toward aligning regionally specific priorities and actions with statewide goals. The Task Force shares lessons learned and best practices as part of its regular meeting agendas, including, for example, presentations on planning processes used by the North Yuba Forest Partnership and others at the September 2, 2022, Task Force meeting.*
10. Focus a pilot for sub-regional socio-ecological resilience work in regions with limited collaborative decision-making capacity and high wildfire risk, forest restoration demand, and/or social and cultural well-being demand.
 11. Adopt a common lexicon region-wide for reporting progress on the road to resilience to the legislative and executive branches.
 - ✓ *The Regional Resource Kits, including a resilience framework based on the TCSI Resilience Pillars and evaluation and reporting based on common metrics, addresses this goal.*

Other *Waypoints* considerations

- *Waypoints* in essence recommended that SNC leverage its triple-bottom-line mission (economic, social, and environmental well-being) and role in the region as a solution-oriented leader and liaison with multiple State and federal agencies to convene a “regional resilience hub” to improve coordination, reduce redundancies, and increase transparency. While the recommendation was more specific to funding, the same could be said for other regional needs, such as **biomass aggregation**, to advance restoration objectives and increase the pace and scale of ecological forest treatment.
- The TCSI process, methods, and Resilience Pillars have been adopted (with slight modifications) by the State Task Force as a standardized (yet customizable to local priorities) approach to evaluating existing conditions and planning/identifying projects/tracking/monitoring results leading toward improved forest resilience. **Is the TCSI group, itself, a potential candidate to operate or at least participate in a biomass aggregation hub**, given its focus on developing frameworks and actions to embed socio-ecological resilience within its 2.4 million-acre area of interest?
- The State-presented pillars and metrics include biomass as the primary focus under Economic Diversity. The Sierra Nevada Regional Resource Kit includes data and mapping around availability of small-diameter biomass material, as well as the cost of moving that material from the forest to processing facilities. The Kit concludes that the **Central Sierra appears to have the most favorable combination of supply and cost factors**. Raw data and evaluative maps are available on the Task Force website.

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