

## Taylor Park Applied Silviculture for Climate Change Workshop 2022

### Forest Management Goals and Objectives



Taylor Park comprises a large, high-elevation basin in western Colorado. Key ecological, economic, and social values in Taylor Park include forests, water, wildlife, and recreation. The majority of Taylor Park is managed by the Gunnison Ranger District of the Grand Mesa, Uncompahgre, and Gunnison (GMUG) National Forests, with small private inholdings and largely seasonal residences.

Lodgepole pine forests dominate the lower portions of the basin, transitioning to subalpine spruce-fir forest types at higher elevations. These forests have a long history of disturbance from fire, with more recent influences of land management including commercial timber harvest over the last 150 years. In 2018, the GMUG proposed to develop a landscape-scale vegetation management project in Taylor Park that includes a suite of fuel reduction projects, prescribed fire, and timber stand treatments that ranged from dwarf mistletoe sanitization to commercial harvests. The GMUG partnered with Western Colorado University's Center for Public Lands to develop an Adaptive Management Group (AMG) and associated Science Team to incorporate local community values and strengthen the role of science and monitoring in the project (<https://www.centerforpubliclands.org/projects-add/taylor-park>). The AMG represents a broad range of community stakeholders with diverse and sometimes divergent interests. AMG members are however committed to working together and with the GMUG to best support the resilience and long-term persistence of forests in Taylor Park.

Management of forests in Taylor Park necessarily incorporates the wide range of ecological, economic, and social values these landscapes support. Consistent with this range of values, the GMUG has identified a suite of goals and objectives to guide management activities within the Taylor Park Vegetation Management Project. These are described in the Environmental Assessment, which provides the most current and detailed management objectives for this area (all relevant documentation found here <https://www.fs.usda.gov/project/?project=53662>), as follows.

#### ***Goals and objectives from the Taylor Park Environmental Assessment***

- 1) Increase the forest's ability to respond to multiple and interactive forest stressors including climate change, drought, insect attack, or disease
- 2) Treat stands to improve forest health using commercial harvest, non-commercial, and prescribed fire treatments, as appropriate, to the site-specific situation
- 3) Reduce fuels in the wildland-urban interface to allow for the facilitation of natural fire processes on the landscape
- 4) Provide wood products for the local economy, which relies on wood fiber harvested sustainably from public lands

### ***Desired future conditions at the forest landscape level***

Healthy forest landscape consisting of a mosaic of even-aged, two-aged, and uneven-aged stands as appropriate to the site-specific conditions and species composition, and with a balance of stand age classes representing young forest to overmature forest.

In lodgepole pine dominated stands, these conditions would be represented in forests characterized as follows:

- 17 to 44% early-successional state, 31 to 45% early-mid stage, 18 to 43% late-mid-/late stage
- Maintain healthy even-aged, single-storied to two-storied stands
- Regeneration stands to lodgepole pine with a light component of other tree species becoming established in the future
- If planting is necessary, consider a mixture of lodgepole pine, Douglas-fir, ponderosa pine, and limber pine at lower elevations. At higher elevations, consider a mixture of lodgepole pine, Engelmann spruce, and limber pine.
- Dwarf mistletoe ratings should be kept at DMR=0 if possible
- Stand density index should be maintained from 200 to 300

### ***Water quality, soil productivity, wildlife, fish, and rare plants***

The Taylor Park EA spells out a range of specific objectives and design features that sustain other ecological values in the project area. Some key objectives (note this list is not comprehensive) that relate to the ASCC project include the following:

- Maintaining ground cover, long-term stream health, riparian ecosystem condition, soil structure, water budgets, and flow patterns of wetlands.
- Limiting roads and other disturbed sites to the minimum feasible number, width, and total length.
- Constructing roads to minimize sediment discharge, stabilizing and maintaining roads during and after construction, and reclaiming roads, landings, and other disturbed sites.
- Designing treatments to meet objectives and standards of the Southern Rockies Lynx Amendment and forest plan standards and guidelines related to wildlife.
- Seeking opportunities to integrate wildlife habitat management objectives as part of treatment activities.

### ***Storyboard***

The goals and objectives describe above are consistent with stakeholder values as represented by the AMG. To provide further outreach to the AMG and broader public, Pam King (GMUG) has assembled a storyboard that provides additional description of forest management objectives and activities in Taylor Park, including particular upcoming treatments. The storyboard is found here:

<https://storymaps.arcgis.com/stories/10cc2fa68ac24a0d92d71ecba7e87c63>

### ***Summary***

The goals and objectives described above are intended to lead to healthy and resilient forests that support a wide range of ecological, economic, and social values. The objectives explicitly recognize increasing forest vulnerability to climate change and other stressors including insects and disease. They call for treatments that enhance resilience, support natural ecological processes, provide sustainable wood products, and allow for planting by a diverse set of species.