Working Forest Fund
Forest Management Program Summary
Updated February 28, 2025

Program Background

The Conservation Fund (TCF) launched the Working Forest Fund (WFF) in 2009 to address a major conservation challenge: the loss of America's last big forests. In a 2003 report, the U.S. Forest Service projected a net loss of 23 million acres of forestland by 2050, a result of conversion to other land uses.[1] The WFF team utilizes a revolving source of conservation capital to acquire large tracts of working forest with high conservation value. These forests are managed sustainably while the team works with conservation partners to permanently protect the land. We accomplish this using innovative financing and patient management in partnership with community stakeholders, private industry, and public agencies, and with financial support from foundations and private philanthropy.

Through the WFF, TCF and its partners have demonstrated that these large tracts of forestland can be managed for sustainable timber production while continuing to provide for ecological resilience and community benefit. Our goal is to protect 5,000,000 acres of high-priority forestland over a 10 to 15-year period, achieving a permanent conservation outcome for each property. The conservation strategy most often includes the conveyance of a working forest conservation easement, and the subsequent sale of the easement-encumbered tract to a private buyer. Alternatively, we may elect to sell the property in fee to a conservation partner or public agency.

The WFF protects working forestland across the United States. Given this geographic diversity, management strategies differ in each region. All properties that are acquired as part of the WFF are managed consistent with TCF's Forest Management Program Guidelines as well as property-specific forest management plans. TCF has elected to certify its portfolio of WFF lands to the Sustainable Forestry Initiative (SFI®) standard. In addition, our lands on the North Coast of California are also certified to the Forest Stewardship Council® (FSC®-C001535) standard. TCF is committed to maintaining our annual independent certification under these systems. The Forest Management Program Guidelines are reviewed every year as part of an annual program review and updated as necessary. Forest management plans are reviewed annually and are updated on a minimum ten-year cycle. The North Coast Policy Digest outlines the policies and procedures that govern TCF's operations specific to the North Coast of California.

Working Forest Fund Policies and Procedures

Program Overview

WFF projects vary widely in their management history prior to TCF acquisition. The current WFF portfolio includes properties located in the southeast, Appalachia, northeast, Lake States region, Pacific Northwest, and North Coast region of California. Most properties acquired have a history of industrial or

[1] Alig, Ralph J.; Plantinga, Andrew J.; Ahn, SoEun; Kline, Jeffrey D. 2003. Land use changes involving forestry in the United States: 1952 to 1997, with projections to 2050. Gen. Tech. Rep. PNW-GTR-587. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 92 p

institutional ownership. Northeastern and Appalachian properties have generally been managed through natural regeneration strategies at varying harvest intensities. Our southeastern properties typically contain a mix of intensively managed pine stands and less intensively managed hardwood stands. Properties in the Lake States region often include stands of naturally regenerated northern hardwood, aspen, and lowland conifer, in addition to more intensively managed stands of red pine. Pacific Northwest properties are often dominated by even-aged blocks of planted Douglas fir. TCF's properties on the North Coast of California are dominated by coast redwood forests with a history of industrial management.

Forest Management Strategy

Property-specific management plans outline detailed management strategies for every WFF project, but the following strategic goals are consistent across all projects:

- Create a sustainable forestry project that is economically self-supporting and contributes to the state and local economy; while respecting all workers, members of the community, and indigenous people
- Perpetuate a healthy and productive forest by maintaining vegetative and structural diversity, supporting ecological resilience, and liming the introduction and spread of invasive and exotic plant species
- Maintain water quality and protect the riparian and aquatic ecosystems supported by healthy, intact forestland
- Provide a sustainable source of forest products as is consistent with the long-term conservation of the property
- Enhance the wildlife habitat value of the forest by providing a range of successional stages across the landscape
- Promote timber harvesting practices that are aesthetically compatible with the local landscape
- Contribute to the local economy through forest jobs, forest products, and compatible outdoor recreation opportunities
- Implement land management strategies that will result in the property being eligible for forest certification by the Sustainable Forestry Initiative (SFI®) and/or the Forest Stewardship Council (FSC®-C001535)

Administrative Policies and Procedures

Forest Certification

TCF has committed to seeking certification under the Sustainable Forestry Initiative (SFI®) program for all WFF projects. Select properties are dual certified to both the SFI® standard and Forest Stewardship Council® (FSC®-C001535) standard. Copies of these standards are available at www.forests.org and www.FSCus.org respectively. An initial multi-site certification audit was conducted in 2013.

Forest Management Policies and Procedures

Forest Management Planning

The format of each forest management plan varies by region, but all plans contain the elements necessary to describe the current ecological condition of the forest, the desired ecological condition, and the actions required to reach the objectives of TCF and our conservation partners. The following content categories are addressed in each plan:

- Ownership description
- Planning procedures
- Management objectives and conservation strategy
- Ecological context
- Forest inventory procedure and results
- Analysis of forest growth and yield - allowable harvest levels
- Exceptional ecological resources
- Process to identify and protect culturally important sites and resources
- Process to identify and protect Representative Sample Areas (RSA) when applicable
- Wildlife habitat management
- Silvicultural standards and techniques
- Damaging agents and integrated pest management
- Soils and hydrology
- Timber harvesting and efficient fiber usage
- Aesthetic considerations and visual impacts of harvesting
- Indigenous peoples and traditional forest use
- Social and economic impact of active management
- Recreation and public access

Management plans are developed to comply with the requirements of forest certification. Unless otherwise specified, the management plan is written for a 10-year timeframe. An annual WFF Program Review is facilitated by TCF's Forest Operations Managers in the 3rd or 4th quarter of each year. This review includes an analysis of the entire WFF program including the status of management plan development and management plan update needs for each management unit, current compliance with SFI® and FSC®-C001535 standards, and a description of any recorded non-conformances or opportunities for improvement and steps for resolution. An agenda is followed touching on all the major principles from both standards and notes are kept for each internal review by the Forest Operations Manager responsible for the project.

Best Management Practices and Forest Practices Acts

It is the policy of TCF that all forest management activities on WFF properties meet or surpass currently applicable Best Management Practices (BMPs), Acceptable Management Practices (AMPs) and/or Forest Practices Acts (FPAs) as required by each State where forest operations occur. TCF keeps a log of any known BMP violations and remediation techniques employed.

Soil types are identified during harvest planning. Any potential operational limitations or ecological sensitivity associated with each soil type is considered. Soil type spatial data is readily available to forestry personnel during all levels of management planning.

Soil erosion is minimized through silvicultural and seasonal planning, the implementation of state-specific BMPs, and by utilizing the most appropriate harvesting technology and equipment for every harvest.

Water resource protection is ensured through advanced planning of forest operations designed to minimize soil movement, sedimentation, and changes to water temperature. BMPs related to forest

road construction and maintenance, timber harvest, and site preparation for the protection of water quality are followed.

TCF maintains a "Policy to Protect Water Quality and Soil Productivity" which is provided to every logging contractor prior to harvest to clearly communicate acceptable levels of soil impact and remediation steps required if those levels are exceeded.

Determination of Allowable Harvest Schedules

The WFFs Director of Analysis and Carbon Development along with the team's Forest Analysts complete modeling and analysis of forest inventories at the time of property acquisition. This analysis, informed by regional growth rates and the current age structure of the forest, determine sustainable rates of harvest which are articulated in the management plan for each property.

Timber Sale Administration

A harvest plan is developed for all timber sales. Harvest planning documentation includes:

- The location of the harvest unit
- Logging contractor responsible for the harvest
- Current ecological setting
- Considerations for the retention and creation of wildlife habitat components
- Potential locations of Rare, Threatened and Endangered (RTE) species
- The presence of Forests with Exceptional Conservation Value as defined by SFI® or High Conservation Value Forests as defined by FSC®-C001535
- The silviculture prescription
- Logging infrastructure development needs
- Harvest close-out process
- An estimate of volume to be removed, revenue and expense
- A list of potentially impacted stakeholders to contact.

Silviculture Strategy

The silvicultural strategy for each property varies based on ecological characteristics including species composition and age structure, property-specific conservation and restoration goals, and financial targets and constraints. The WFF aims to employ the most appropriate silviculture, as supported by the best available science, to reach the management objectives identified for each property. In many instances silvicultural options are limited due to past land-use, previous timber harvesting, insect and disease impact, and other natural disturbance agents.

The most appropriate silvicultural systems are defined in the management plan for each property, and both stand tending and regeneration strategies vary by region. In the northeast, Lakes States region, and Appalachia, the WFF generally relies on natural regeneration through the utilization of both even-aged and uneven-aged silvicultural systems. Exceptions may include the reestablishment of red pine in the Lake States and shortleaf pine in Appalachia where planting is the more appropriate strategy. Similarly, in the Pacific Northwest both variable density thinning coupled with variable retention natural regeneration strategies are employed, as are even-aged strategies which rely on planting. In the southeast, planted pine stands are most often regenerated through artificial means as well. The

management of mixedwood stands and natural hardwood stands in the southeast generally utilize natural regeneration methods.

Harvesting Equipment

TCF engages loggers who utilize a variety of harvesting technology. In the southeast the most common harvesting configuration includes a wheeled, fixed-head feller-buncher coupled with a grapple skidder. Most often trees are harvested "whole tree" and transported to the landing for processing. Non-merchantable material may be chipped, scattered through the cutting areas, or piled, depending on the regeneration strategy and erosion control needs. In the northeast and Lake States region trees may be harvested with tracked feller bunchers, tracked or wheeled cut-to-length processors, or manually by chainsaw. Harvested trees may be transported whole tree, tree length, or log length to the landing by grapple skidder, cable skidder, or forwarder for further processing. Often non-merchantable material is distributed throughout the cutting area or on the surface of skid trails to minimize erosion and soil impact. In the Pacific Northwest, harvesting systems utilizing tracked feller-bunchers coupled with grapple skidders is the most utilized. Each configuration has advantages and disadvantages, and each is best suited to certain site conditions and treatment activities. Flexibility in equipment choice is important to ensure that management objectives are met.

In deciding what harvesting equipment to use for forest management activities, TCF will consider the following variables:

- Limitations based on topography and soil type
- Ease of access to the harvest area and location/condition of in-woods access roads
- Access within the harvest area and presence of established skid trails and landings
- Size and physical characteristics of trees to be harvested
- Forest product mix from trees to be harvested and their value relative to harvest and transportation costs
- Seasonality of harvest and site sensitivity
- Operator skill and experience
- Silvicultural objectives desired post-harvest condition

Adjacent Landscape Evaluation

The characteristics of the surrounding landscape and adjacent lands are considered when developing harvest plans. In addition, the broader ecological context of the property is described in the 10-year management plan. The surrounding landscape, adjoining properties, and aesthetic considerations are all described in harvest planning documentation to ensure that the proposed activity is congruent with the land-use of surrounding ownerships and regional land-use expectations.

Monitoring

Each project is monitored during harvest and through close-out by TCF's forestry consultant. The consultant will routinely inspect and record findings and ensure prompt rectification of any issues of concern. Active logging jobs are visited at least once per week following initial verification of satisfactory performance. After harvests are completed, they are inspected at least once per year for the next two years, and findings are included in annual reports.

Monitoring for each property occurs through frequent and informal examinations as well as formal, annual inspections. Frequent informal monitoring of the resources associated with each property occurs on a regular basis, with foresters and contractors driving roads, assessing erosion control problems, invasive species, trespass, and potential threats to water quality. Formal monitoring is conducted by TCF's consultant and/or TCF staff annually. The annual monitoring includes a thorough review of road conditions and maintenance needs, invasive species concerns, condition of identified Forests with Exceptional Conservation Value or High Conservation Value Forests, condition of identified Representative Sample Areas where applicable, and monitoring of current and past harvest areas.

Post-harvest monitoring is conducted to assess regeneration considerations and success, soil conditions, and the effectiveness of the silviculture employed. A discussion of monitoring results and follow up actions needed is included in the annual management review of each project.

Habitat Conservation

Goals of wildlife habitat maintenance, habitat improvement, and biodiversity conservation are integrated into management activities. State Wildlife Action Plans are referenced during management planning to understand how TCF may contribute to achieving the goals of those plans. Management activities are designed to:

- Perpetuate a healthy and productive forest by maintaining vegetative and structural diversity, supporting ecological resilience, and limiting the introduction and spread of invasive and exotic plant species
- Enhance the wildlife habitat value of the forest by providing a range of successional stages across the landscape.

TCF approaches wildlife and biodiversity conservation at both the stand and landscape level. The suitability of an area for a given species of wildlife is a function of the presence of essential habitat resources including food, water, and cover. Forestland is inherently dynamic and disturbances over time cause changes in vegetation composition, structure, and distribution. This process of change, referred to as succession, is what provides a variety of habitat components varying in spatial arrangement, size and development stage. TCF recognizes that the presence and distribution of habitat components can be positively influenced by forest management activities.

Management plans incorporate NatureServe's ecological systems definitions in conjunction with forest cover type data to fully describe the natural processes which perpetuate each forest type. A full understanding of these processes is necessary to move management units towards a particular habitat goal. In general, intermediate thinning treatments (both pre-commercial and commercial) may be utilized to increase vertical structure and allocate site resources and growing space to targeted species. Regeneration treatments (particularly even-aged systems) allow managers to increase horizontal structure and create or maintain early succession habitat and soft edge where appropriate. In the southeast and Lake States region, prescribed fire may be utilized as a silvicultural technique to alter forest structure, increase ground cover species diversity, and forage value for a range of wildlife species.

The development and maintenance of forest infrastructure (roads, skid trails, landings, fire breaks, etc.) often results in the need to revegetate disturbed areas with temporary herbaceous ground cover while perennial species reoccupy the site. Native, non-invasive, wildlife-friendly species are directly seeded for

this purpose. In addition, long-term wildlife food plots are maintained by hunting licensees on some TCF properties.

TCF recognizes that Streamside Management Zones (SMZs) are essential to protect riparian habitat, where species diversity is often high and unique from more common upland communities. Riparian areas are often highly productive and by definition are in close proximity to reliable sources of water for wildlife species. They are frequently used as travel corridors by wildlife, and may offer unique feeding, nesting, and cover resources. By adhering to state BMPs, and through proper harvest planning which identifies and marks in the field appropriately sized SMZs, TCF effectively protects ecologically important riparian habitat. Buffers beyond those prescribed in state BMPs may be used to emphasize landscape features to benefit wildlife travel corridors, as appropriate.

TCF's indicators for wildlife biodiversity include the production of early and mid-successional habitats, along with the maintenance of late-successional stands where appropriate. Maintaining these habitats is consistent with TCF's overall land management objectives and they are preferred by important game and non-game species. The identification and conservation of unique habitats also contributes to habitat diversity and the conservation of biological diversity.

The goal of providing habitat diversity at the landscape level is further achieved by adhering to clearcut size and adjacency restrictions as determined by certification standards, designation and conservation of ecologically unique habitats, retention of unique cover types during harvest scheduling, and through the retention of stand-level habitat components during harvest set-up and administration.

Den trees, cavity trees, and snags are identified and retained during harvest operations where it is operationally feasible and safe for the logger. The method for identifying these retained elements is described in the harvest planning documentation. Safety for employees and contractors is TCF's primary consideration when deciding on leaving snag trees within management units.

Potential locations of rare, threatened, or endangered (RTE) species as well as known exemplary natural communities are identified within the management plan for each property. Spatial data of these locations, when available, is retained by the Forest Operations Manager and TCF's forestry consultant and referenced during the planning of management activities. TCF consults personnel from state natural heritage programs and wildlife management agencies when specific questions arise regarding the protection and management of these unique species and forest types.

Fire Management

TCF may use prescribed fire to reduce fuel loads and minimize wildfire risk, as a site preparation tool to facilitate planting, as a method of ecological restoration for fire-adapted natural communities, and as a wildlife habitat management tool. The forest management plan provides details regarding the use of prescribed fire where appropriate. All prescribed burns comply with applicable state laws and are conducted by qualified professionals. In most instances prescribed fire projects are accomplished in collaboration with state forestry and wildlife agency personnel and specialist contractors. This ensures an adequate level of burn planning and efficient mobilization of qualified personnel and fire control equipment.

Herbicide Use

TCF continually strives to accomplish silvicultural objectives using the minimum amount of herbicide possible and using the narrowest spectrum herbicide available, while meeting operational objectives. Herbicides are applied by subcontractors based on site-specific conditions including competing species, soil type and application timing. A written prescription is developed prior to application that includes objectives, rates and methods of applications. All chemical use is tracked on a treatment-by-treatment basis.

TCF's forestry consultants in consultation with the Forest Operations Manager identifies areas where herbicide application is the most ecologically and financially appropriate course of action. The Forest Operations Manager approves contracts for chemical application based on the silvicultural needs of the site. Chemical use is planned so as not to exceed levels necessary to achieve specific management objectives. TCF only contracts with licensed and certified chemical application contractors.

Invasive Species Control

TCF's forestry consultants monitor the presence and spread of invasive and exotic plant species during regular management activities (forest inventory, infrastructure monitoring, harvest block reconnaissance). Where effective and ecologically appropriate, herbicides may be applied to reduce the density of invasive species and slow their spread. TCF works collaboratively with other conservation organizations to monitor insect infestations and treat invasive plants.

Insect and Disease Control

Forest health is monitored by TCF's forestry consultants and specific strategies are implemented to enhance forest health where necessary. Integrated pest management (IPM) is used to reduce chemical control methods. As a cultural control, appropriate silviculture is employed to maintain vigorous stands and to promote landscape scale species diversity. As a physical control, stands are proactively harvested where the spread of an insect pest (e.g. southern pine beetle) or disease may be mitigated through strategic tree removal. Forestry personnel stay informed of current and emerging forest health threats through continuing education. Federal and state forestry agencies often complete aerial reconnaissance when the threat of certain insects warrants such an approach. Stands susceptible to insect and disease infestations are identified and harvested prior to infestation. When insects, disease or weather-related events damage stands, they are promptly salvaged to ensure forest health, whenever possible

Community Engagement / Social Benefit / Economic Benefit

TCF endeavors to have a positive impact in all the local communities in which we work. This effort is driven by our dual mission of conservation and economic development. We consider social benefits to be an integral part of our management planning. Social impact considerations are made in the creation of forest management plans. Social impacts include, but are not limited to, recreational access, local and regional economic impact of working forestland, and the use of local goods and services.

Cultural Resources

TCF recognizes the importance of identifying and protecting significant cultural resources on land we steward. TCF directs its consultants to identify the presence of significant cultural sites including those of significance to any adjacent indigenous community within the boundaries of its properties. If any of these sites are found, the consultant will contact the appropriate state or federal agency.

For each WFF property, WFF staff or the forestry consultant will conduct a review of federally recognized indigenous peoples located in the vicinity of the property. TCF attempts to contact those indigenous groups and invite their consultation on management and operations planning on the property.