

## Appendix E - Terminology and Definitions

Our TLIT partnership is dependent on efforts directed towards private landowners. Private Lands as described in this document include but are not restricted to all landowners and managers, to include privately owned and corporate (TIMO/REITs) forest landowners.

TLIT intends to use accepted terminology in this glossary to define all forms of cultural or silvicultural practices. The concept of conserving lands equates to the protection of and application of management strategies on those lands. "Protection" includes easement or fee title acquisition. "Management strategies," includes all short- and long-term management activities undertaken to sustain longleaf ecosystems on significant tracts.

The TLIT Conservation Plan has adopted the Texas Forestry Association (TFA) Messaging Guide, which was derived by its membership from The Dictionary of Forestry (The Society of American Foresters, John A. Helms, Editor, 1998); the United States Environmental Protection Agency (March 1, 2017); and the 2018 Texas Forest Literacy Plan (August 8, 2017). Defining or assessing maintenance and restoration efforts is widely considered to be in the eye of the beholder," so in order to define attributes of longleaf pine stand management and outcomes, we will generally use the following:

### **Longleaf Stand and Forestland Management Goals**

- Restore – Establish, through active management (planting, selective thinning, prescriptions, etc.), a longleaf dominated stand (>50% or greater)..
- Enhance – Apply treatments to an existing longleaf stand that will improve the condition, vigor, and ecological value.
- Conserve – Implement protection and management strategies for those longleaf stands. (including easements, fee title acquisition, or long-term "management agreement strategies," to sustain longleaf ecosystems on significant tracts as working forestlands.

TLIT will develop and evaluate prescriptions for Texas longleaf pine, and cultural techniques outcomes, using America's Longleaf Restoration Initiative Longleaf Partnership Council's "Longleaf Pine Maintenance Condition Class Definitions," developed in 2014.

## TFA Messaging Guide Glossary of Terms

**Active forest management** — attaining desired forest objectives and future conditions using silvicultural operations and forest management practices.

**Best Management Practices** – voluntary conservation practices that protect soil and water resources, two key elements necessary for growing a healthy, sustainable and productive forest (e.g., leaving trees next to a stream or installing a culvert to cross a waterway).

**Carbon absorption (sequestration)** — the incorporation of carbon dioxide into permanent plant tissues and other organisms, soil, and oceans.

**Conservation** – the management of a renewable natural resource with the objective of sustaining its productivity in perpetuity while providing for human use compatible with sustainability of the resource — *note* for a forest this may include managed, periodic cutting and removal of trees followed by regeneration conservation.

**Consumer** – an organism, human or otherwise, that obtains energy by feeding on other organisms and their remains.

**Economic (or financial) return** — income or profit from an investment or the sale of land, timber or other property.

**Ecosystem services** — ecosystem goods and services produce the many life-sustaining benefits we receive from nature: clean air and water, fertile soil for crop production, pollination, and flood control. These ecosystem services are important to environmental and human health and well-being, yet they are limited and often taken for granted.

**Forest** – an ecosystem characterized by tree cover and associated plant and animal communities. (Please note that the word “forest” has many definitions, but because of varying cultural, political and economic perspectives, no definition is universally recognized.)

**Forest management (Forestry)** — the art and science of applying technical forestry principles and practices and business techniques to the management of a forest.

**Forest product** — any item or material derived from forests for commercial use, such as lumber, paper, mushrooms or forage for livestock.

**Renewable resource** — a naturally occurring raw material or form of energy that has the capacity to replenish itself through ecological cycles and sound management practices.

**Secondary forest product** — an item or material produced from a primary forest product such as lumber or paper. Examples might be wooden pallets, cardboard boxes, planed and shaped boards, mushroom soup, and other products.

**Stewardship** – the careful and responsible management of something entrusted to one’s care, e.g., stewardship of natural resources.

**Sustainable forest management** — managing forests to meet the needs of the present without compromising the ability of future generations to meet their needs.

**Timber harvesting** — removal of trees from a forest to satisfy any or all of the expectations or needs of the forest landowner, which may be to generate income, encourage the growth of desirable flora or fauna, or protect the health of the forest ecosystem.

**Timber stand** — a forest stand containing trees of commercial size and quality suitable for sawing into lumber.

**Urban forest** — all the publicly and privately owned trees within a city, town or suburb.

**Woodland** – a plant community in which, in contrast to a typical forest, the trees are a variety of sizes and characteristics, often small and short-stemmed relative to their crown depth, and forming an open canopy with the intervening area being occupied by herbaceous vegetation, commonly grass and forbs.

**Working forest** — a forest, either public or private, that is actively and sustainably managed for the production of forest products, ecosystem services and/or natural beauty while conserving natural resources.

## Forest Literacy Plan Glossary of Terms

**Abiotic** – a nonliving factor or element in the environment (e.g., light, water, heat, rock and gases).

**Active management** — attaining desired forest objectives and future conditions using silvicultural operations and forest management practices.

**Administrative boundary** — the border of a geographic area under the jurisdiction of a governmental, private or managerial entity.

**Aquatic ecosystem** — all living and non-living elements of a water-based environment and the relationship between them.

**Best Management Practices** – voluntary conservation practices that protect soil and water resources, two key elements necessary for growing a healthy, sustainable and productive forest (e.g., leaving trees next to a stream or installing a culvert to cross a waterway).

**Biome** – a major ecological community type characterized by a distinctive type of vegetation (e.g., tropical rain forest, grassland or desert).

**Biotic** – an environmental factor related to or produced by living organisms.

**Boreal forest** — the northernmost broad band of mixed coniferous and deciduous trees that stretches across northern North America, Europe and Asia.

**Carbon sequestration** — the incorporation of carbon dioxide into permanent plant tissues and other organisms, soil and oceans.

**Consumer** – an organism, human or otherwise, that obtains energy by feeding on other organisms and their remains.

**Crown** – the part of a tree or woody plant bearing live branches or foliage.

**Decomposer** – a plant or organism that feeds on dead material and causes its mechanical or chemical breakdown.

**Ecological service** — a function of forests and other healthy ecosystems that benefits living organisms, such as purifying air and water, maintaining biodiversity, decomposing wastes, generating soil and pollinating plants.

**Economic (or financial) return** — income or profit from an investment or the sale of land, timber or other property.

**Ecoregion** – an area of land or water that contains a geographically distinct collection of natural communities. Ecoregions differ from one another based on climate, soil, geology, topography, flora, and fauna.

**Ecosystem** – the interacting system of a biological community and its nonliving environment.

**Ecosystem services** — the benefits people obtain from ecosystems; potential direct and indirect services include clean water or air, wildlife or plant diversity, wood products and carbon storage.

**Energy flow** — the one-way passage or transfer of energy through an ecosystem according to the laws of thermodynamics.

**Forest** – a plant community in which the dominant vegetation is trees and woody plants, includes rural and urban areas.

**Forest management** — the art and science of applying technical forestry principles and practices and business techniques to the management of a forest.

**Forest product** — any item or material derived from forests for commercial use, such as lumber, paper, mushrooms or forage for livestock.

**Forest Sector** – economic segment of income that includes all of the output from industry production, jobs, etc.

**Habitat** – an area that provides an animal or plant with adequate food, water, shelter and living space in a suitable arrangement.

**Harvest** – see Timber harvest.

**Invasive species** — a plant, animal or other organism that is typically non-native to a particular ecosystem and whose introduction causes or is likely to cause harm to the economy, environment, or human health.

**Natural boundaries** — borders of an area that follow natural geographic features, such as a river or ridge.

**Passive management** — a non-management practice through which a forest is allowed to develop and grow without human intervention and letting nature take its course.

**Perennial plant** — a plant that lives for several years and, when mature, usually produces seeds each year.

**Photosynthesis** – the process by which green plants manufacture simple sugars and oxygen in the presence of sunlight, carbon dioxide and water.

**Prescribed fire** — the controlled use of fire to achieve landowners' management objectives.

**Producer** – (1) an organism that synthesizes organic compounds from inorganic substances via photosynthesis (by green plants) or chemosynthesis (by anaerobic bacteria); (2) any individual or firm engaged in using raw materials and converting them into various products.

**Renewable resource** — a naturally occurring raw material or form of energy that has the capacity to replenish itself through ecological cycles and sound management practices.

**Silviculture** – the science, art and practice of cultivating forest crops based on the study of the life history and general characteristics of forest trees.

**Stem** – the principal axis of a plant from which buds and shoots develop.

**Stewardship** – the careful and responsible management of something entrusted to one's care, e.g., stewardship of natural resources.

**Succession** – the gradual replacement of one plant community by another.

**Sustainable forest management** — managing forests to meet the needs of the present without compromising the ability of future generations to meet their needs.

**Temperate forest** — a forest with moderate year-round temperatures and distinct seasons, and characterized by both conifers and broadleaf evergreens.

**Terrestrial ecosystem** — all living and non-living elements of a land-based environment, and the relationship between them.

**Timber** – a forest stand containing trees of commercial size and quality suitable for sawing into lumber.

**Timber harvest** — removal of trees from a forest to satisfy any or all of the expectations or needs of the forest landowner, which may be to generate income, encourage the growth of desirable flora or fauna, or protect the health of the forest ecosystem.

**Tropical forest** — a forest that grows in tropical climates with high year-round temperatures and generally high annual rainfall.

**Urban forest** — all the publicly and privately owned trees within a city, town or suburb.

**Urban heat island** — any urban area that is warmer than nearby rural areas.

**Watershed** – a region or land drained by a single stream, river or drainage network.

**Wilderness** – (1) a natural environment that has not been significantly modified by human activities; (2) land designated by the US Congress for preservation and protection in its natural condition.

**Wildfire** – any fire other than a controlled or prescribed burn occurring on wild land.

**Working forest** — a forest, either public or private, that is actively and sustainably managed for the production of forest products, ecosystem services and/or natural beauty while conserving natural resources.

**Woodland** – a plant community in which, in contrast to a typical forest, the trees are a variety of sizes and characteristics, often small and short-stemmed relative to their crown depth, and forming an open canopy with the intervening area being occupied by herbaceous vegetation, commonly grass and forbs. A woodland may also be a subset of forest land where the designated forest type is derived from species that are not usually converted into industrial wood products.