# COMMUNITY FOREST OWNERSHIP, RIGHTS, AND GOVERNANCE REGIMES IN THE UNITED STATES

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## Introduction

Community forests have been established in many parts of the United States (Baker & Kusel, 2003; McCullough, 1995). They span a broad range of ownership models, tenure regimes, governance approaches, aims, and activities and have evolved over time within local and larger-scale social-ecological contexts and conditions (Christoffersen et al., 2008; Hajjar & Molnar, 2016). In the United States and internationally, community forests typically encompass clearly delineated areas where community members have access to and management responsibilities for natural resources, are engaged in their governance, and receive direct and indirect benefits from their management (Charnley & Poe, 2007; McDermott & Schreckenberg, 2009). The communities associated with community forests frequently are delineated not only by place but also by interest, practice, and a combination of these aspects (Lawrence et al., 2021). Although many countries around the world have specific legal structures for communal forest ownership, the United States is fairly unique in its broad range of community forest titleholders, which include local, state, and federal governments; American Indian Tribes; non-governmental organisations (NGOs); private corporate landowners; and other public and private entities.

Land ownership in the United States typically determines who has legal authority and responsibility for the land and its resources (Demsetz, 1967; Rolph, 1983). Associated governance arrangements determine who may participate in related decision-making processes, and how (Ostrom, 2003; Smith, 2002). Community forests under most ownership models involve a shift from top-down or distanced decision-making by corporate owners or the federal government toward increasing community participation in forest-related decisions, their implementation, and their outcomes (Davis et al., 2020). These shifts can have positive effects on the sustainability of forests and local communities, particularly where communities have clear and secure tenure, access, and rights to participate in forest decision-making and benefits (Ostrom, 2003, 2007; see also Gilmour, 2016; Larson & Soto, 2008; Molnar et al., 2007; Sunderlin et al., 2005). Nevertheless, community forestry initiatives, particularly in the global South, also may involve trade-offs between environmental and socio-economic benefits for local communities (Anderson et al., 2015; Gilmour, 2016; Hajjar et al., 2021).

Understanding how different community forest ownership models and associated property rights and governance regimes shape benefits and potential trade-offs for forests and communities in the United States is important for devising effective policies and practices related to community forestry. In this chapter, we explore the range in community forest ownership in the United States and consider how different ownership models affect community authority and participation in forest decisions and outcomes at the local level. We start with an overview of US forest ownership. Then, we review key bodies of theory on land ownership and property rights, which provide a lens for examining the range in rights and roles of communities under different community forest to explore and compare these variations. Finally, we discuss the implications of different community forests in the United States.

#### Public, tribal, and private forests in the United States

Forests cover 310 million hectares (Mha) of the United States (34 per cent forest cover) (Oswalt et al., 2019).<sup>1</sup> Of forested land, 58 per cent (184 Mha) is privately owned, including about 36 per cent that is owned by individuals, families, and other non-corporate owners (e.g., estates, trusts, NGOs, unincorporated associations, and clubs) (Butler, 2019) (Figure 10.1). Of forested land, 20 per cent is owned by private corporations (e.g., forest industry, timberland investment management organisations [TIMOs], real estate investment trusts [REITs]), and about 2 per cent is within Native American Tribal reservation boundaries (Butler, 2019). Privately owned forests provide most of the timber produced in the United States (Adams et al., 2006) and much of the hunted game, as well as a variety of public goods and services (e.g., water quality, carbon storage, biodiversity, scenic values).

Private forest ownership has shifted in the past few decades, particularly on private corporate-owned lands, as the major vertically integrated forest products companies have converted their ownerships into separate REITs or sold their lands, mostly to TIMOs (Harris et al., 2013; Zhang et al., 2012). Additionally, some family-owned forest land has shifted to corporate ownership as families restructure their ownership to limited liability companies (LLCs) for tax or other purposes (Sass et al., 2021). A small portion of corporate forest land has been purchased for or converted to community forests as these divestitures provide opportunities for local community involvement in timberland ownership, governance, management, and outcomes (Belsky, 2008, 2015).

Approximately 130 Mha of forest (42 per cent of total forest area) are held by federal, state, and local governments in the United States (Butler, 2019). These public forests generally are managed for a broad range of goods and services that may include timber and non-timber products, recreation, wildlife protection, and aesthetic values. Forest ownership differs regionally in the United States, with federal and some corporate lands predominating in the west (Butler, 2019; Hewes et al., 2017) (Figure 10.2). Midwestern states have a diverse mix of public and private lands, including large areas of state and local government-owned forest lands. Forests in the northeast are located mostly on private lands held by family forest owners, in corporate holdings, or on large state-held lands. Forests in the south are comprised of mostly private non-corporate (60 per cent) and corporate (26 per cent) land holdings (Cubbage & McGinley, 2020).



*Figure 10.1* Forest ownership in the United States, 2017 (Source: Butler, 2019). \*Family includes individuals, families, trusts, estates, and family partnerships, \*\*Other private includes conservation and natural resource organisations and unincorporated partnerships and associations.

# **Theoretical framing**

To understand how community forest ownership shapes community input, involvement, responsibilities, and outcomes and vice versa, a theory about common pool resources and associated property rights is particularly useful. This body of work helps in parsing out the types and bundles of rights that may be held and shared by individuals, groups, and others (Schlager & Ostrom, 1992; see also Ostrom, 2003; Ostrom & Hess, 2007). Common pool resources are characterised primarily by two features: (1) it is difficult to exclude people from their use or benefit; and (2) their consumption by one person reduces their availability and benefit to other people (Ostrom, 2003). Examples of common-pool resources include forests, fisheries, and game animals. Common pool resources may be associated with a range of property rights (Ostrom & Hess, 2007; Schlager & Ostrom, 1992).

A property right is an enforceable authority to undertake specific actions in a distinct domain (Commons, 1968 cited by Ostrom, 2003). Schlager and Ostrom (1992) identify five property rights most relevant to forests and other common-pool resources. From least to most far-reaching in terms of authority, they include access, withdrawal, management, exclusion, and alienation or sale (Table 10.1). Individuals or collectives may possess all or some of these rights. Rights to land, goods, and services also may be held separately by multiple owners. Private property



#### Percent of Forested Land by Ownership Type

*Figure 10.2* Distribution of forest ownership types in the United States (Hewes et al., 2014) Scale refers to the percentage of forestland held by owner type indicated. Darker shaded states have a higher percentage of forestland in a given ownership type but not necessarily more forest.

Table 10.1	Property rights and	types of rights holders	associated with land ownership

Property rights/rights holder	Owner	Proprietor	Claimant	Authorized user	Entrant/viewer
Access: right to enter a defined physical area and enjoy non- subtractive benefits (e.g., hike, canoe, sit in the sun)	1	1	1	<i>√</i>	1
<b>Withdrawal</b> : right to obtain resource units or products (e.g., catch fish, divert water, harvest timber)	1	1	1	1	
<b>Management</b> : right to regulate internal use patterns and transform the resource	1	1	1		
<b>Exclusion</b> : right to determine who has access and how it may be transferred	1	1			
Alienation/Sale: right to sell or lease rights of exclusion, management, and withdrawal	1				

Sources: Ostrom & Hess, 2007; Schlager & Ostrom, 1992.

entails the full bundle of rights to land, including the right to sell or lease the rights of exclusion, management, and withdrawal (Schlager & Ostrom, 1992).

Incentives to sustain and protect land and resources can differ according to the combination of rights and responsibilities possessed (Ostrom, 2003). Generally, more comprehensive, well-defined, and upheld bundles of rights provide greater incentive for sustainable resource management than less comprehensive, insecure, or disregarded bundles of rights (Araral, 2014; Cox et al., 2010; Ostrom & Hess, 2007). When high levels of responsibility (e.g., best management practices, certification of forest management) are not accompanied by clear and secure tenure or ownership, incentives for sustainability may wane. Temporal factors also affect rights holders' incentives to contribute to sustainability. Longer-term or permanent property rights provide greater incentive than short term or temporary rights, particularly when timber production is a priority, since it generally requires long term management and investment due to relatively long timber harvest cycles (Cubbage et al., 2017). In this chapter, we aim to understand better the interaction between different community forest ownership models and associated bundles of community property rights, and their implications for community engagement in and responsibilities for forest management (input, implementation, investments, outputs) (Figure 10.3).

Holding clear and complete title to land and associated resources is provided and protected by law in the United States. Most privately owned land is held through fee simple ownership (meaning complete and clear title for purchased or otherwise acquired land and associated structures or enhancements). It includes the rights to possess, use, sell, lease, mortgage, subdivide, and devise or bequeath property (Barlowe et al., 2013). These rights are clearly delineated in the US legal framework, as are governments' rights to tax land and its uses, control land use, and take land for public use or interest (i.e., eminent domain). Ultimately, fee simple owners in the United States hold exclusive but not absolute rights, since land ownership rights may be limited and conditioned by societal interests as enforced and upheld by the state (Cubbage et al., 2017).

Land ownership in the United States typically encompasses all aboveground rights, while belowground rights to resources (e.g., minerals, oil, water) may be held separately. Therefore, aboveground rights to own, harvest, use, and protect forestland may be and often are held separately from rights to belowground resources (Cubbage et al., 2017; McGinley & Cubbage, 2020). Although complete ownership of all aboveground forest resources was common for commodity production of timber and other forest products and services through most of the 20th century, forest property rights have been parsed further through the sale and separate ownership of development rights since the late 1990s (McGinley & Cubbage, 2018). These development rights may be conferred through conservation easements or other policy instruments designed



Figure 10.3 Community forest ownership, property rights, and related responsibilities and engagement.

to ensure that land is not converted to developed uses (e.g., residential, commercial, industrial) for a determined length of time or in perpetuity. Conservation easements on forestland may be used to promote, permit, or prohibit extractive uses for commercial and/or non-commercial purposes (e.g., timber, fuelwood, non-timber forest products). They frequently are used in the establishment or acquisition of community forests on private lands in the United States, and their terms and requirements have implications for the forest rights and responsibilities attained by community members, explored further in the examples here.

## Policies, programs, and organisations that support community forests in the United States

There is no federal legislation focused solely on community forests in the United States. However, a few states, including Washington and Oregon, have passed legislation (Oregon) or have budget provisions (Washington) that authorise them to fund land acquisition for establishing community forests. Additionally, a number of tools, including tax incentive programs associated with forests and timberland, community forestry bonds, payments for ecosystem services including carbon offset credits, and conservation easements – mostly at state and local government levels – support community forest acquisition and development.

Communities draw on a variety of federal, state, and private funding sources designed to help protect forest and timberland, water resources, or fish and wildlife habitat (e.g., US Forest Service Forest Legacy Program).<sup>2</sup> Some programs explicitly provide cost-share funding for the acquisition of private forestland to be managed as a community forest. For example, the Farm Bill authorises spending for the US Forest Service (USFS) Community Forest and Open Space Conservation Program, which provides funds and other forms of support for the acquisition and establishment of community forests to local and Tribal governments and non-profit organisations. Funders may stipulate who is eligible for community forest ownership, which in turn may influence community forest characteristics and associated management institutions and governance arrangements.

Other civil society and public sector organisations provide assistance for community forest development. For example, The Trust for Public Land's Community Forest Program helps communities raise funds, conduct research and planning, and acquire and protect land as community forests throughout the country.<sup>3</sup> The Northern Forest Center, based in New England, provides technical expertise to help communities in the region acquire and manage community forest lands.<sup>4</sup> Similarly, the Northwest Community Forest Coalition based in the Pacific Northwest supports the growth of community forestry by providing technical support for acquiring and managing community forests, education about community forests through case examples, and networking among community forest groups for knowledge and resource exchange.<sup>5</sup>

# Examples of US community forest ownership, rights, and governance

There are many options for groups of individuals connected through place, interest, and/or practice to own, manage, and protect local forests in the United States. At one end of the spectrum, these communities may hold temporary access, use, and/or management rights through an organisation or mechanism created for a specific short-term purpose or need. At the other end, communities may possess long-term communally owned and operated forest areas that provide multiple benefits to the community as a whole and across generations. Most community forests in the United States fall somewhere along this spectrum (Belsky, 2008; Urgensen et al., 2017). A key question for community forests in the United States centres on how decision-making

authority and related responsibilities are exercised, shared, and distributed amongst members of the community, or between community members and the forest owner(s) under different ownership models.

Historical examples of community forests in the United States include communally managed forests on Tribal lands throughout North America, on open access and community grant lands in the pre- and early Spanish colonial southwest, and on town and municipal forestlands established starting in the late 1800s, primarily in New England (Baker & Kusel 2003; McCullough, 1995). More recently, community forests owned by community-based organisations; land trusts; private community collectives; local, state, and federal governments; and other groups have emerged. They address, for example, shifts in wood products production and forestland ownership, growing demand for access to recreation opportunities, and pressures for conversion of forestland to non-forest uses (Lyman et al., 2013; Urgensen et al., 2017). Many of these newer community forests, particularly in the Western United States, have been created through collaborative processes driven or supported by communities organised around specific places or interests (Danks, 2009; McDermott, 2009). In the sections to follow, we explore the rights and responsibilities acquired and exercised by local communities in implementing community for-estry under different ownership models throughout the United States.

# Public ownership – local government

Local governments in the United States, such as towns, cities, counties, and municipalities may purchase and/or designate land as a community forest for community benefit. These local government-owned forests are found in many parts of the country, particularly in New England states, which have a long history of local government–owned 'town forests' (McCullough, 1995). Town forests are properties owned by local governments, designated for the benefit of local communities, and important to maintaining open space, recreational opportunities, and working lands conservation, among other uses and values. Certain local government–owned forests exhibit characteristics of a community forest, including high levels of community participation in decision–making, management, and benefit–sharing (Lyman et al., 2013; McCullough, 1995). One example is the city of Arcata's community forest in northern California (see Chapter 13, Wilkinson & Sahara). Here, we focus on the North Falmouth Community Forest in Maine to illustrate this model.

The North Falmouth Community Forest (152 ha) is one of many conservation properties owned by the town of Falmouth in Cumberland County, Maine. This community forest was established in 2007 to preserve open space, watershed protection functions, wildlife populations, and recreational and aesthetic values (Town of Falmouth, 2013). The first parcels of the North Falmouth Community Forest were purchased with the town's open space funds from a private family forest owner. Additional parcels have since been acquired from private landowners with town funding and support from the USFS Community Forest and Open Space Conservation Program. About half of the community forest is protected by a conservation easement held by the Falmouth Land Trust. The easement prohibits forest conversion to residential, commercial, or other development in perpetuity (Falmouth Land Trust, 2020). Management costs for this community forest are covered mostly by town funds but may be offset by timber revenues in years when timber is produced. Harvested wood not suitable for sale as timber is donated to local schools to fuel wood-fired boilers (Town of Falmouth, 2013).

The Falmouth Town Council has decision-making authority for the management, harvest, and use of this community forest. The Open Space Division of the town's Parks and Community Programs Department is responsible for forest management and contracts a

local forester to prepare and execute forest management plans (Town of Falmouth, 2013). Residents may participate in decision-making through advisory committee appointments and public meetings (Town of Falmouth, 2013). The Town of Falmouth Land Management and Acquisition Committee – a seven-member committee of town residents appointed by the Town Council – advises the council on forest policy, practices, and acquisitions. Committee meetings are open to town residents and meeting minutes are made publicly available on the town website. Falmouth residents hold rights to access the forest for non-consumptive uses and mostly use it for recreational hiking and biking. Residents may obtain permits for withdrawals, in line with the forest management plan. These permits are issued and overseen by the Town's Open Space Department.

For most local government-owned community forests, like the North Falmouth Community Forest and the Arcata Community Forest, decision-making authority ultimately resides with the local government, which owns and manages the forest on behalf of the local community. Local government ownership generally supports the rights of local access, participation in decisionmaking, and shared benefits, mostly associated with recreation, open space conservation, and protection of other ecosystem services. Although community members do not hold title or direct decision-making authority over the land and its resources, they may serve on advisory committees, participate in public meetings and other public processes, or hold public office positions themselves. Community members also maintain close influence on decision-makers, particularly since local government office holders are democratically elected by local residents (Lyman et al., 2013).

Public ownership of community forests at local and higher levels of government involves a system of rules and regulations that ultimately determine community access and use (Urgenson et al., 2017). When community forests include conservation easements, future land-use decisions typically are limited. Similarly, when these forests are certified as sustainably managed or when they sell verified carbon offset credits, some decision-making authority is ultimately shared with certificate holders, at least as long as the certificate is valid or remains in effect. Forests without easements or other permanent protection status may be subject to sale or development, particularly at local government levels if crises arise or budgets fall short, or where local interests, involvement, and awareness are low or decline. However, local government–owned community forests often benefit from some level of fiscal support for forest acquisition and management made available through annual budgets, tax revenues, or municipal bonds. This contrasts with most privately held community forests, which must generate enough revenue or acquire enough external support to cover the costs of acquisition, management, and maintenance.

# Public ownership - state government

State government-owned community forests in the United States are unique to the state of Washington. In 2011, Washington created the Community Forest Trust Program aimed at empowering communities to acquire and manage forests that support local economies and public recreation through a partnership with the state's Department of Natural Resources (WSDNR, 2020). Community forests acquired through this program are held by the state in a non-fiduciary trust on behalf of the local community. They are different from other state trust lands, whose primary focus is revenue generation, in that community forests are intended to generate multiple benefits, including but not necessarily primarily focused on revenues (WSDNR & WDFW, 2015; WSDNR, 2017). Nonetheless, the program stipulates that community forests must generate income 'at levels that are, at a minimum, high enough to

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reimburse the Department for management costs and provide for some reinvestment into the forest's management objectives' (WSDNR, 2020). State-owned community forests are managed by the Washington State Department of Natural Resources (WSDNR) in collaboration with the Washington Department of Fish and Wildlife (WDFW) and a local advisory committee appointed by the state legislature. The advisory committees are comprised of individuals representing the public and private sectors who advise the state on forest issues, needs, and goals and collaborate in forest planning and management with WSDNR and WDFW (WSDNR, 2020).

As of 2020, two state-owned community forests (Teanaway; Klickitat Canyon) had been established in Washington. The Teanaway Community Forest (20,332 ha) was the first and illustrates this model. Its primary objectives are protecting the headwaters of the Yakima River Basin, maintaining working forest and grazing lands, providing recreational opportunities, conserving and restoring fish and wildlife habitat, and supporting community partnerships and collaboration (WSDNR, 2020). A proposal to purchase the land from American Forest Holdings LLC (a private corporate owner) was negotiated and secured through a collaborative effort led by Forterra, a state-level non-governmental conservation organisation, in partnership with the local community. The project was presented to and approved by the state legislature for acquisition through the Community Forest Trust Program in 2013. A 20-person community-based advisory committee, including stakeholders representing local government, civil society organisations, interest groups, the private sector, neighbouring landowners, and the Confederated Tribes and Bands of the Yakama Nation, was appointed by the state legislature to advise and collaborate with the WSDNR and WDFW in the planning and management of the Teanaway Community Forest (WSDNR & WDFW, 2015; WSDNR, 2020). Additional opportunities for input include regularly held public meetings, hosted site visits and reviews, and other activities sponsored by WSDNR, WDFW, and the community forest advisory committee (WSDNR, 2020).

For Washington's state-owned community forests, decision-making authority ultimately resides with the state legislature. Management authorities largely are held by the WSDNR in collaboration with WDFW, other state agencies, and state-appointed community-based advisory committees. As with local government–owned community forests, this ownership model supports community members' rights of local access, participation in decision-making, and shared benefits. Because ultimate decision authority lies with the state rather than local government, decision processes may be more removed from and less accessible to local communities, contexts, and conditions. Although state-owned community forests are designated for local community use and benefit, they ultimately are accountable to a wider range and scale of interests and stakeholders that extend beyond the local level. Also, community forests established under Washington's Community Forest Trust Program must generate at least enough revenue to offset any state-incurred management costs, unlike many local government–owned forests. As outlined in the program directives, failure to generate sufficient revenues could lead to reassignment or divestiture by the state, and also may occur if, for example, the WSDNR and local advisory committee fail to reach a consensus on forest planning or proposed projects (WSDNR, 2020).

# Public ownership – federal government

Over the past several decades, both governmental and non-governmental community-based organisations have increasingly collaborated and partnered with the federal government on federal forest management in the United States (Butler, 2013; Davis et al., 2020; Koontz et al., 2004). These efforts typically focus on enhancing local participation in the governance of federal lands and increasing local benefits from federal land management. In some places, community-based organisations play a central role in implementing on-the-ground federal forest manage-

ment activities by providing resources and capacity that federal agencies lack, contributing to both forest restoration and local job creation (Abrams et al., 2015). Some collaborative efforts on federal lands might be characterised as community forests or community-based forest management initiatives, including the Weaverville Community Forest in California (Chapter 12, Frost & Sheen, 2022).

The Weaverville Community Forest (6,055 ha) encompasses 405 hectares of land administered by the Bureau of Land Management (BLM) and an adjacent 5,665 hectares of the Shasta-Trinity National Forest administered by the USFS. Both agencies have established stewardship agreements with the Trinity County Resource Conservation District (TCRCD) to assist in the management and oversight of these lands. The TCRCD is a local government organisation focused on natural resource conservation and management that serves as a bridge between the local community and federal agencies. A Community Forest Steering Committee comprised of diverse stakeholder groups and members of the public advises the TCRCD, BLM, and USFS on management priorities and related activities (O'Sullivan, 2011;TCRCD, 2020).

Stewardship agreements between federal land management agencies and local partners are authorised under Section 323 of Public Law 108-7, which gives BLM and USFS permanent authorities to enter into stewardship contracts or agreements to exchange goods and/or funds for services to achieve land management goals that meet local and rural community needs.

These contracts and agreements typically are established for a period of ten years and can be renewed with the same parties at the end of an agreement period. Both the BLM agreement established in 2005 and the USFS agreement established in 2008 with TCRCD to manage the Weaverville Community Forest have since been renewed for an additional ten-year period (TCRCD, 2020). Stewardship contracting authorities were amended in 2018 extending the maximum contract or agreement duration to 20 years where federal lands exhibit specified fire regime characteristics.

Stewardship contracts and agreements are used across many federal lands administered by BLM and USFS, some of which demonstrate some characteristics of community forests, but the Weaverville Community Forest is the only area officially referred to as a 'community forest' of which we are aware. As with other types of government-owned community forests, this model supports community members' rights of local access, participation in decision-making, and shared benefits, particularly through participation and collaboration with TCRCD. However, because decision authority resides with the federal government, ultimate decision authority may be even more removed from and less accessible to local communities, contexts, and conditions than local or state government-held community forests. In addition, community rights of access, use, and management are governed by an extensive legal framework for federal land management, and specific rights conveyed by the stewardship contracts or agreements are good only as long as the instrument is in place. Currently, there is no indication that existing stewardship agreements with TCRCD would be terminated, creating a relatively high level of perceived tenure security of the Weaverville Community Forest among local community members, lending itself to continued investment through local participation and support (see e.g., Agrawal, 2001; Ostrom, 2003).

## Private ownership – non-profit, community-based organisation

Some communities establish or work through an existing non-profit community-based organisation to acquire, own, and manage community forests. The Mt. Adams Community Forest (407 ha) is an example of a community-based organisation–owned community forest located in Glenwood, Washington. The forest is owned by the Mt. Adams Resource Stewards (MARS) – a community-based non-profit organisation established in 2004 to address forest fragmentation and frequent ownership changes of private industrial forestland through local forest stewardship (MARS, 2020). The parcels comprising this community forest were purchased by MARS from a private timber company through a combination of community-raised funds and grants, including support from the USFS Community Forest Program. The Mt. Adams Community Forest is managed for multiple objectives, including forest health and restoration, wood and non-wood products, recreation, and other goods and services. The forest generates revenue from regular timber harvests, which averaged over US\$200,000 annually from 2014 to 2017 (Ganguly et al., 2018).

Decision authority for the Mt. Adams Community Forest resides with the MARS Board of Directors, consisting of members of the community's public and private sectors elected by organisation members. MARS staff carry out management activities, including timber harvests, fire management, and recreation development, often with paid and volunteer support from members of the local community (MARS, 2020). A community-level advisory committee provides input and guidance to the Board on forest policy, planning, practices, and investments, including reinvestment of profits from timber production into planning, and development of forest goods and services (e.g., recreation). Opportunities for broader community input on forest decisions and their implementation are promoted through regularly held public listening sessions, forest tours, and other activities organised by MARS (Ganguly et al., 2018; MARS, 2020).

Local community members' rights to access the forest for recreation and other non-consumptive uses are provided by the Mt. Adams Community Forest as established in its bylaws and rules. Although this community forest is privately held, these broader community rights are likely to be guaranteed for at least as long as the forest maintains its status as a community forest. In addition, financial support from the USFS Community Forest Program provides incentive to maintain the forest as an accessible community resource while providing a strong disincentive against land use change or sale.

#### Private ownership – non-profit, land trust

Land trusts have had a prominent role in the promotion and development of community forests in the United States for several decades (Saxton, 2012). In this context, land trusts are non-profit organisations that purchase land or its development rights (e.g., through conservation easements) primarily for the purpose of protecting, conserving, or stewarding natural areas or working lands and limiting land conversion to developed uses (e.g., residential, commercial, industrial). Land trusts also provide extensive administrative and financial support to local communities and other partners for the acquisition and management of community forest lands. Per a 2015 census, land trusts have helped protect 53 Mha of land in the United States (Lyssen, 2016).

The Downeast Lakes Community Forest (22,532 ha) in Maine is owned by the Downeast Lakes Land Trust (DLLT), a non-profit organisation 'committed to the long-term economic and environmental well-being of the Downeast Lakes region through the conservation and exemplary management of its woods and waters' (DLLT, 2020). Starting with the purchase of 10,959 ha of productive timber land from Wagner Timber Management in 2005, as of 2021 it totalled 22,532 ha across multiple tracts of forested land. Management objectives include the production of 'high quality high value timber', along with the protection of wildlife habitat, provision of recreation opportunities, and preservation of open space (DLLT, 2020). Acquisitions have been supported by donations, public fundraising, and grants, including a grant from the USFS Community Forest and Open Space Conservation Program. The forest also includes

multiple conservation easements on different tracts (DLLT, 2020). This community forest has been certified to Forest Stewardship Council standards since 2007 and has had Climate Action Reserve verified carbon stores for the carbon offset market since 2012 (DLLT, 2020; NEPcon, 2020; Smartwood, 2007). The sale of carbon offsets has helped finance forest expansion and provides 'additional long-term protection for the property ... and environmental benefits from increased timber stocking' (DLLT, 2020).

Ultimate decision authority for this community forest is held by the DLLT, as landowner, and its 10-member Board of Directors is comprised of local community members from the public and private sectors. Easement holders also have some authority over the rights of exclusion and sale of tracts for which they hold individual easements. Management responsibilities fall to DLLT staff, including a Managing Forester, supported by contracted service providers and community volunteers (DLLT, 2020). Community members have opportunities to participate in management through multiple community-level advisory committees that contribute to the planning and management of the forest, including committees dedicated to forest resources, trails, fish and wildlife, education, and governance. Non-consumptive uses of the forest are open to the general public. Local community members can request withdrawal rights through permits for timber, firewood, gravel, Christmas trees, and other goods subject to policies and procedures approved by the Board of Directors. Forest certification and sale of carbon offsets mean that some authority over management and withdrawal rights is shared with the associated entities.

# Private ownership – for-profit firm (e.g., limited liability corporation)

Community members may opt to join together to form a for-profit firm, such as a subchapter C corporation (C-Corp) or LLC to purchase, manage, and protect forest land.<sup>6</sup> There are many examples of forestry co-operatives (formalised legal entities with individual land ownerships committed to a collaborative business model) and other types of forest landowner collectives in the United States. These generally do not involve group ownership or group-level decision authority over all forest resources within the co-operative. Instead, these organisations typically maintain individual property ownership and decision-making among group members, which may be shaped but not necessarily dictated by collective goals and objectives (Groot et al., 2015).

The Little Hogback Community Forest (47 ha) is an example of a for-profit, private firm founded by a small group of community members in Monkton, Vermont, with administrative and financial support from the Vermont Land Trust, Vermont Family Forests, Ford Foundation, and other organisations (Saxton, 2012;VFF, 2018). In 2007, an LLC comprised of 16 shareholders was formed to purchase 47 hectares of productive forest from a private timber company. Half of the 16 shares are subsidised for purchase by low-income individuals or families for whom forest ownership otherwise may not be financially feasible. The other half are available to any interested investor in the local community. Vermont Family Forests retains the right in perpetuity to repurchase any corporate share that a member may choose to sell (VFF, 2018). Additionally, the Vermont Land Trust holds a conservation easement on the entire forest, which helped lower the initial costs of acquisition for shareholders and to protect the land from future residential or commercial development.

Together, the Little Hogback Community Forest shareholders have ultimate decision authority for the forest, its uses, and benefits, though land use change to residential, commercial, or other developed uses is restricted by Vermont Land Trust's conservation easement. Shareholders maintain the rights to harvest timber and firewood, hunt, and recreate on the land and share in forest revenues when timber is sold. The local community and public at large are permitted access to the forest for recreational uses and engage in the forest through multiple volunteer opportunities. Additionally, firewood harvested from the forest is regularly donated to local wood banks (Lyman, 2008). Decisions about the forest are made by consensus amongst the shareholders. Forest management must follow a plan jointly developed and approved by the Little Hogback LLC, Vermont Family Forests, and the Vermont Land Trust, as dictated in the forest's bylaws, but decision processes generally are not open to the larger local community or general public (Lyman, 2008;VFF, 2018).

# Tribal ownership

Tribes in North America have a long history of communal forest management that predates the arrival of Europeans and subsequent colonisation (Lucero & Tamez, 2017; Mausel et al., 2017; Trosper, 2007; Trosper et al., 2012). Dispossession of land and the termination of American Indian Tribes during the US settler-colonial period and westward expansion eliminated or greatly altered Tribes' ancestral connections to forests and other natural resources. Later instances of Tribal recognition, land repatriation, and designation of reservation lands held in trust for Tribes by the federal government led to some restoration of, or new association with, these resources. But Tribes have ancestral ties to specific landscapes, portions of which may not have been incorporated within designated reservation lands.

Today, Tribal trust lands encompass 7.3 Mha of forest across 305 reservations (Gordon et al., 2013). Historically, forests located on Tribal trust lands were managed by the Bureau of Indian Affairs (BIA), which interpreted its trust responsibilities as maximising sustainable timber harvest revenues (Catton, 2016; Newell et al., 1986). Over time, Tribes assumed greater participation in forest management on reservations, supported in part by the Indian Self-Determination and Education Act of 1975. As Tribes have established or strengthened their Tribal natural resource agencies, many have taken over responsibility for forest management from BIA (Catton, 2016). In addition, collaborative management and shared stewardship of federally designated lands, sometimes including transfer of ownership, are increasingly being considered as ways to restore Tribes' access to and authority over their ancestral lands. For example, the Klamath Tribes of the Pacific Northwest entered into a Master Stewardship Agreement with USFS in 2011 to share forest decision and management responsibilities for parts of the Fremont-Winema National Forest on their ancestral lands (Chiu, 2008; Hatcher et al., 2017).

Current land ownership and management arrangements on Tribal lands are varied and complex, with a trend toward increasing Tribal control of forests on and off trust lands (Dockry & Hoagland, 2017; Lucero & Tamez, 2017; Trosper et al., 2012). For example, the Menominee Tribe has long practised communal management of its ancestral and reservation forest lands. In 1908, the Tribe established the Menominee Tribal Enterprises to manage more than 90,000 ha of forest covering 95 per cent of their reservation lands (Menominee Tribal Enterprises, 2020). Menominee Tribal Enterprises is a for-profit private entity that aims to sustain Tribal access to game, fish, and medicinal plants while providing jobs and income from timber production and investments in Tribal infrastructure and other goods and services from timber revenues (Menominee Tribal Enterprises, 2020; Pecore, 1992; Trosper, 2007).

The Tribal legislature maintains ultimate decision authority over the Menominee forest and elects a Board of Directors comprised of Tribal members to preside over the forestry organisation (Tribal Government of Menominee Indian Tribe of Wisconsin, 1999). Menominee Tribal Enterprises coordinates with BIA and Wisconsin Department of Natural Resources in forest planning and management, with broad participation by Tribal members (Menominee Tribal Enterprises, 2020). The organisation directly employs nearly 300 Tribal members (full-time equivalents annually). Distribution and reinvestment of net profits are determined by the Tribal

legislature, with 'equitable shares' retained for reinvestment in the forestry business and 'utilized for tribal operations, distributed to tribal members, or divided and used for both purposes' (Tribal Government of Menominee Indian Tribe of Wisconsin, 1999).

Tribes also purchase, own, and manage forestland outside their reservations for community use and benefit. For example, in Washington, the Kalispel Tribe established the Indian Creek Community Forest (1,238 ha) to protect and restore riparian and wetland zones on private land bordering their reservation. This community forest forms part of a network of Tribe-owned lands outside the reservation totalling more than 2,000 ha, purchased by the Kalispel from private owners to expand land access and harvest sites for Tribal members. The Indian Creek Community Forest is managed by the Kalispel Natural Resources Department (KNRD) for the benefit of Tribal members and the local community, including open space conservation and watershed protection. A local advisory council that includes Tribal and other public and private sector actors was created to advise the Tribal Council and KNRD on management priorities and projects (KNRD, 2019). Meetings are open to the public.

These examples of Tribal community forests demonstrate the range in forest ownership and associated property rights and responsibilities possessed by Tribes in the United States (see also Chapter 13, Wilkinson & Sahara). Whether located on Tribal trust lands, federally administered lands, or private lands purchased by Tribes outside their reservations, these community forests generally occur within clearly delineated areas where Tribal members have access to forest resources, are engaged in their governance, and receive direct and indirect benefits from their management.

### Discussion

Community forests in the United States have been established on local, state, and federal government lands held in trust for and managed by or for local communities; on forestlands owned by community-based organisations that are managed with community input and involvement; and on forests owned outright by Tribes or private firms comprised of local community members. Some community forests involve significant input and investment by a wide range of community members, like many community-based organisation-owned community forests. Others may be managed by a more limited number of actors on behalf of a local community, including some community forests owned and managed by local or state governments or land trusts. Some have existed in one form or another since long before the concept of 'community forest' was widely adopted, including many Tribal forests. Others have been established more recently to protect forestland from conversion to residential or other developed uses, and to designate it for local community benefit in perpetuity, including community forests with a conservation easement. Still others are established for a limited, but potentially renewable, period of time for community use and benefit, like those established through stewardship contracting on federal lands. Most community forests reflect a balance between desired community rights to local forests and community capacity to assume the responsibilities and authority associated with forest ownership. These range from financial and technical investments, to input and involvement in decision-making and implementation, to outputs and outcomes of management plans.

Figure 10.4 displays the range in property rights and responsibilities acquired by communities through different models of community forest ownership in the United States. The figure is useful for understanding better the spectrum of community rights and responsibilities associated with community forestry under different ownership models. It also suggests questions regarding the outcomes, durability, and evolution of different community forest ownership and governance approaches for future research. Kathleen A. McGinley et al.



*Figure 10.4* Community rights and responsibilities under different community forest ownership models in the United States. Circle shade and hatching corresponds to the community forest ownership type and example. Circle size corresponds to extent of community engagement in the rights and responsibilities associated with different ownership types. Community forests are classified based on the expanding bundle of property rights attained by the community on the horizontal axis, and the hierarchical range of community engagement in the forest on the vertical axis.

Community forests under private ownership may be held by for-profit and non-profit entities. The former are not very common in the United States. Under this ownership model, illustrated by the Little Hogback Community Forest, owners possess the full bundle of property rights associated with land ownership. They are also accountable for a broad range of responsibilities (including financial), forest-related decisions, their implementation, and their outcomes. This private community forest ownership model provides community members with a means of direct ownership in and benefit from local forests, including profit sharing from timber sales. It also can generate multiple benefits for the larger local community, including preservation of open space and access to recreation, but limits forest decision-making and benefit sharing to owners' private interests, with fewer opportunities for public input and participation than other ownership models explored in this chapter.

Tribes that own private forestlands outside their reservation boundaries or actively manage forestland on their reservations also possess the full or near complete bundle of property rights and ultimate authority for forest inputs, processes, and outcomes. These community forests are managed to meet Tribal needs and interests and offer multiple ways for Tribal members to

participate in decision making and implementation. Forest revenues may be distributed among Tribal members, invested in Tribal community infrastructure and services, or reinvested in Tribal forest operations. Tribal community forests also generate benefits that extend beyond community forest boundaries, but may not provide extensive opportunities for public input or participation in decision-making.

Other models of privately owned community forests include those owned by land trusts and other non-profit community-based organisations. This model offers local community members a fairly broad range of opportunities to provide input and engage in forest planning and decision-making through the creation of non-profit community-based organisations, membership on the Board of Directors or other advisory committees, and participation in public meetings and volunteer opportunities. Community-based organisations largely are comprised of local community members who aim to represent and serve local interests. Ultimate authority over forest inputs, processes, and outcomes, including benefit sharing, is held by the organisation as landowner. Local benefits provided by these community forest ownership models include open space preservation, recreation opportunities, and forest products production and supply for local industries. Revenues generated from forest production and other means typically are invested back into the forest and its management or expansion, but also may be invested in the local community. Ultimately, the local community as a whole possesses a comparatively smaller bundle of property rights under this model, but also fewer responsibilities than Tribal members in Tribally owned or managed forests and shareholders or owners invested in a private firm-owned community forest.

Publicly owned community forests have been created by local, state, and federal governments in many parts of the United States. Local community members or organisations often are key partners in the establishment and management of these forests, though the government maintains ultimate authority over decision-making about the forest and its uses. Publicly owned community forests provide multiple benefits for local communities, with some generating revenues that are reinvested in the forest or other public goods or services. They also offer many opportunities for community input and involvement in decisions through public meetings, accessible information, and opportunities to serve on advisory committees and in other capacities. Community engagement in these participatory processes varied across the examples examined here. Given their local nature and domain, local government–owned community forests may provide more accessible opportunities for community members to engage in management decisions and shared benefits than state or federal government–owned community forests. Nevertheless, the examples of state and federally owned community forests described in this chapter involve fairly extensive, though not necessarily expeditious or conflict-free, community engagement processes.

The examples of community forest ownership models examined in this chapter have a broad range of objectives and desired outcomes that directly and indirectly benefit local communities. These include open space conservation, recreation, watershed and wildlife habitat protection, timber and non-timber forest products production, and support of local wood-products industries. Many of these community forests include revenue generation (e.g., from timber, non-timber forest products, carbon sequestration) as an objective. However, only for-profit private or Tribally owned community forests directly distribute a portion of their earnings or dividends amongst community members. Government and non-profit organisation–owned community forests that generate net profits typically reinvest at least a portion in the community forest to offset management costs, in addition to investments in the development or expansion of forest, or investments in other community goods and services.

Acquisition and operational funding are key considerations for community forests. Publicly owned community forests typically benefit from some base level of staffing and funding through regularly appropriated or specially designated government funds, resulting in fewer direct responsibilities for local community members, particularly in terms of direct investments, implementation, and outcomes. For most of the ownership models and examples in this chapter, some level of external financial support is critical, both in the acquisition phase and throughout forest planning and management, especially where restoration is a key (and often costly) objective, and income generation is limited. Some financial support comes through grants like those offered through the USFS Community Forest and Open Space Conservation Program or conservation easements, both of which can help offset the costs of forest acquisition and result in some level of shared decision authority over current and future forest uses. The goals and guidelines of these programs and policy instruments may shape who participates in community forest development, where community forests are established, who is included (and excluded) from the 'community', and, ultimately, the goods and services that are available at the local level.

## Conclusions

Community forests in the United States are diverse and involve a wide range of public and private ownership models adapted to their local contexts, aims, and capacities. They may encompass small areas, like the 47 ha Little Hogback Community Forest owned and operated by 16 local shareholders in Monkton, Vermont, or they may stretch across large expanses of forestland, like the 90,000 ha Menominee Forest managed by a private Tribal entity on the Menominee Tribe's reservation trust lands in Wisconsin. Some community forests in the United States have long been established, like some town forests in New England. Others have been more recently created, like most land trust-owned community forests, emerging from collaborative efforts, contested policy arenas, and social and political movements driven by local stakeholders seeking greater access to and benefits from local forest resources. Community forests may comprise a modest share of the total forest area in the United States, but they are increasing in number and extent as local communities pursue greater access to, benefits from, and retention of local forestlands.

The community forests examined in this chapter all involve clearly delineated areas where local community members have access to forest resources, are engaged in their governance, and receive multiple direct and indirect benefits, albeit to varying degrees. Community forest ownership determines who has ultimate decision authority over rights of forest access, with-drawal, management, exclusion, and sale, and influences how forest rights, responsibilities, and benefits are shared amongst different stakeholders. It may be that the larger or more complete the bundle of forest rights possessed by a local community, the more sustainable, enduring, and equitable the resource management system will be (Ostrom, 1990; see also Agrawal, 2001; Coleman & Liebertz, 2014; Gibson et al., 2005), but this bears further study in the context of different community forest ownerships and associated governance approaches in the United States.

For many communities, the investment, capacity, and other responsibilities required for outright ownership may be out of reach or may not be sought. When high levels of investment in local forests are not feasible for local communities, other private (e.g., land trust) or public (e.g., local government) community forest ownership models may provide a more viable means for keeping forests as forests and for increasing opportunities for local involvement and investment in their management. This is particularly so where community forests are established on former private industrial timberlands or on federal forest lands that were previously tightly controlled.

Shifts to community forestry from other types of forest management and ownership regimes generally involve greater benefits to local communities as a whole, but these shifts do not guarantee an equitable distribution of benefits or increased benefits to poor or marginalised community members. How community engagement and benefit sharing and rights and governance regimes vary across different community forest ownerships in the United States, and how they evolve over time, should be further studied.

Our focus on community rights, responsibilities, and engagement under different community forest ownership models contributes to a better understanding of the comparative costs, benefits, and potential trade-offs for local communities, their partners, and policymakers in establishing community forests. This approach also is helpful for those seeking to understand and assess the community forest ownership options and associated rights and responsibilities that are available and evolving in the United States, and for devising effective policies and practices related to community forestry and forest sustainability. Community forests provide multiple means for sharing and increasing local forest tenure, governance, and benefits, and may provide a broad array of goods and services for local communities, particularly when they are established on former corporate-owned lands or to protect forests prone to development pressures. Examining the social and ecological outcomes and long-term sustainability of different community forest ownership models, and their implications for community rights and governance, is an important topic for further study that we hope will benefit from the analytical lens developed and applied in this chapter.

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#### Notes

- 1 Following the United Nations definition, forests reported here include land that has at least 10 per cent crown cover by live tally trees of any size or has had at least 10 per cent canopy cover of live tally species in the past, and is at least 0.4 hectare in size and 37 metres wide (Oswalt et al., 2019).
- 2 https://www.fs.usda.gov/managing-land/private-land/forest-legacy
- 3 https://www.tpl.org/our-work/community-forests
- 4 https://northernforest.org/programs/community-forests/overview
- 5 https://nwcommunityforests.org/
- 6 Under United States federal income tax law, a C corporation refers to any corporation that is taxed separately from its owners, and a limited liability company refers to business for which the owner(s) is/ are not personally liable for the company's debts or liabilities.

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