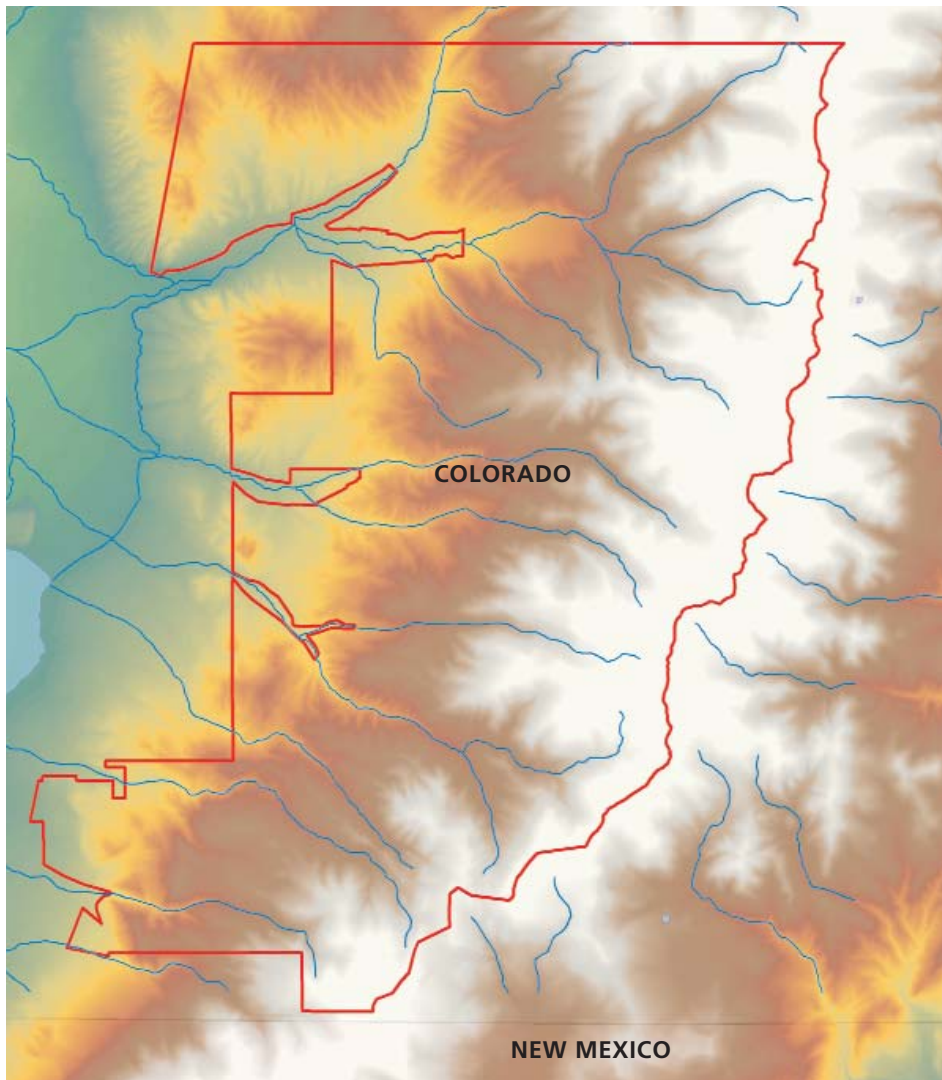
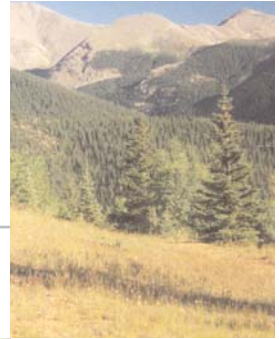


Community Owned Forests: An Example from the Southwest

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Cover Photos

Southwest Mountains: Land Rights Council, San Luis, CO

Map: Forest Guild

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Table of Contents

REPORT SUMMARY	3
INTRODUCTION	4
REVIEW OF COMMUNITY OWNED FORESTS	4
<i>Review of Community Owned Forests in the Rio Grande Basin</i>	<i>5</i>
THE RIO CULEBRA VILLAGES: A CASE STUDY	8
WOOD USAGE AND DEPENDENCE IN THE RIO CULEBRA VILLAGES	8
MANAGEMENT OF LA SIERRA	9
LAND TENURE CHANGES	9
LA SIERRA AS PRIVATE LAND.....	10
REGAINING TRADITIONAL FOREST RIGHTS AND ACCESS.....	10
LA SIERRA – A COMMUNITY FOREST ONCE AGAIN.....	11
LA SIERRA COMMUNITY FOREST PROJECT.....	12
THE FUTURE OF LA SIERRA	12
CONCLUDING REMARKS	14
REFERENCES CITED.....	15
APPENDIX A: TRADITIONAL BUILDING TYPES	18
<i>The Versatility of Wood.....</i>	<i>18</i>
APPENDIX B: THE FOREST LEGACY PROGRAM.....	19
APPENDIX C: VERMONT TOWN FORESTS	21

Report Summary

In southern Colorado there are seven resource dependent communities, collectively known as the Rio Culebra Villages, whose inhabitants are descendents of the Sangre de Cristo Land Grant from Mexico in 1843 (deBuys 1985). Since their settlement of the watershed in the 1850's this community has used forest resources from the nearby Culebra massif, known locally as *La Sierra*. This community has held steadfast traditions of using the wood resources of *La Sierra* for dwelling construction, outbuildings, corrals, heating and cooking.

La Sierra became privatized as a result of the extensive land use changes that occurred in New Mexico and southern Colorado at the turn of the 20th century (deBuys 1985). In the 1960's *La Sierra* was purchased by Jack Taylor, a North Carolinian with a timber background. After purchasing *La Sierra* Taylor fenced the 77,000 acres of the land grant he purchased and eliminated access to *La Sierra* from the Culebra villages (CLGS 2003). Taylor intensively logged many areas which threatened watershed integrity. This act jeopardized water flow in the traditional ditch irrigation system or *acequias*. There were numerous conflicts with Taylor often resulting in violence and property damage to both the Taylor and his ranch and the to the Culebra villages (CLGS 2003).

After years of frustration with Taylor and their lack of access to *La Sierra*, the community filed a lawsuit in the Costilla County District Court in 1981 (Rael v. Taylor) for the purpose of regaining access to *La Sierra*, to return traditional management to the watershed, and to remediate the negative effects of commercial logging on the watershed and to the acequia system. The litigation that began in 1981 continued through the 1990s and there appeared to be little advancement toward regaining the Culebra community's access and rights to *La Sierra*. During this period, the logging of *La Sierra* escalated as Taylor sought to generate revenue to pay for the continued litigation. In the Culebra villages there was overall despair and loss of hope that the community would not regain access to their common forest. Also at this time, trespassing and hunting on *La Sierra* continued as did the protests over the logging.

After 21 years of litigation, the Colorado Supreme Court ruled in favor of the Culebra villages in 2002 and awarded access and resource use rights in 2003. Since 2003, the Culebra villages and the land rights organization they developed have been working with the current owner of *La Sierra* to return to the forest and again use the forest resources according to their traditions. This document explores the practice of community owned forests in North America for comparison and reference to the Southwest with a detailed inquiry of the Culebra villages, the loss of their shared forest, and the eventual recovery of their resource use rights to *La Sierra*.

Introduction

The management of forest lands to benefit nearby communities has been defined as community forestry (Brendler and Carey 1998). Community forestry can occur on public and private land tenures (Duinker et al. 1994). Forest ownership and use in North America has taken several forms since European settlement of the continent. Communal use, management, and ownership of forest lands are one type (McCullough 1995) often referred to as community owned forests. Currently in the United States, there are 3,000 communities in 43 states known to own or manage forest land across 4.5 million acres (Little 2005). Across North America, community owned forests have taken varied forms as distinct as the regions they developed in (Curtis 2006; Duinker et al. 1994; McCullough 2006, 1995; Poole 2006). Of the many examples available across North America, one unique to the Spanish Land Grant communities of the Southwest surrounds a mountain known locally as *La Sierra* in the Sangre de Cristo range in southern Colorado. A specific case study of *La Sierra* will illustrate the fate of the enclave of resource dependent Hispaño villages known collectively as La Culebra, and highlight their historic use of the *La Sierra* watershed and its reemergence in the present day.

Review of Community Owned Forests

The history of forest land in North America reveals that villages, towns and cities have been practicing forest management that predates European settlement and has continued to the present day (Mann 2006; McCullough 2006). These managed forests and woodlands provided prehistoric, historic, and modern communities with natural resource amenities such as wildlife habitat (Mann 2002), non-timber resources (Santistevan 2006), timber resources (Curtis 2006; Ford Reports 2007), watershed protection, revenue for communal services (McCullough 1995), open space (Conservation Fund 2007), and more recently areas for recreation (McCullough 2006; Poole 2006).

In New England, McCullough (2006) divided land tenure of these community forests into several categories including common and public lands, watershed plantations, town forests, forest parks, and conserved forests. Across these categories with the exception of conserved forests, timber and fuelwood uses were primary to the community forest while other values such as recreation, hunting, watershed protection were often secondary benefits. Primary to conserved forests is the restriction of forest conversion through a conservation easement on the deed of ownership. Conserved forests can also be managed as working forests that benefit communities directly or indirectly.

Some of the most progressive community forest projects have been developed in Vermont. The projects involve a coalition of public and private organizations. This concept is best exemplified by the Vermont Town Forest Project, a statewide initiative designed to connect rural forest areas with neighboring areas. Public education and stewardship of existing town forests is a main goal. A variety of interests and attitudes are represented in the long term strategies for managing the forests. Recreation, sustainable timber harvest practices and environmental integrity are key to the common ties and values that form the core of the town forest project. Also, since subdivision and development are rapidly encroaching on the forest lands; community owned forests have been embraced as a strategy to protect forests before sprawl consumes them.

The Northern Forest Alliance (NFA), a non-profit organization, created the Vermont Town Forest Project (VTFP) as a forest preservation effort and to assist the community in fostering

community ties, stewardship of town forests and acquisition of existing and new acreage. Implementation of the project relies on a collaboration of public and private organizations. NFA provides direct technical assistance and resources to participating towns adjacent to the forests. Some of the project opportunities offered by VTFP to other communities as a result of their own program development are described below.

Perschel (2006) reviews several “working forest conservation easements” in the Northeast and notes how easements can be crafted to provide economic growth for local communities, opportunities for recreation and tourism, and protect biodiversity values. Therefore forest conservation, while often retaining private land ownership, still fits within the umbrella of community owned forests. Ford Reports (2007) describe a working forest conservation easement in North Carolina that preserves critical habitat, provides a sustainable supply of timber to local community enterprises, and offers recreational uses. Poole (2006) highlights a similar example from New Hampshire and The Conservation Fund (2007) details yet another example from Minnesota where conserved land is managed for multiple uses of public benefit.

In Canada, Duinker et al. (1994) reviewed community forests and their various forms on both public and private lands in several provinces. British Columbia is one Canadian province with strong government support for community forests, which is often practiced on public land, outlined in the Forest Act of 1996 as amended in 1998 to include community forests (Ministry of Forests 2007a). In Division 7.1 of the Forest Act, the legislation guides management of public forests to benefit resource dependent communities and provides short and long term mechanisms for a variety of defined communities to engage in forest planning, management, and use. The Ministry of Forests (2007b) has assessed their community forest program to encompass 16 communities and First Nations covering over 800,000 acres.

In general across North America, communities tend to be reasserting their management, use, and ownership of forest lands for multiple benefits including economic development, protection from development, and biodiversity preservation. The structure and form of these community forests varies widely depending on land use patterns, political climate, and cultural and regional uniqueness. Several examples from the Southwestern United States reveal the distinct multicultural landscape of the region.

Review of Community Owned Forests in the Rio Grande Basin

The Southwestern United States has prehistoric, historic, and modern examples of community ownership and use of forests. Prehistoric examples focus on watershed scale management primarily for agriculture, medicinal plants, non-timber forest products, and forest products (Santistevan 2006). Historic examples are mostly drawn from Hispanic settlements in the Rio Grande Basin (deBuys 1985), and modern examples often focus on traditional community use of what are now United States Forest Service (USFS) system lands (Atencio 2004).

Hispanic settlement in northern New Mexico flourished in the 18th century as primarily an agrarian society working the land alongside the Native American Puebloan peoples. In northern New Mexico, approximately 44 Land Grants (covering roughly 1.3 million acres or 2000 square miles) were established under the Spanish Crown in the 18th century with an additional 21 Land Grants (covering roughly 400 thousand acres or 625 square miles) in the 19th century (deBuys 1985). In the 19th century under Mexican rule, prior to the Treaty of Guadalupe Hidalgo, there were an additional 12 Land Grants made in northern New Mexico and southern Colorado

covering roughly 4.7 million acres or 7300 square miles (deBuys 1985). In total, Hispanic Land Grants under Spanish and Mexican rule covered roughly 6.4 million acres or 10,000 square miles of northern New Mexico and southern Colorado and included many woodlands and forests.

Under Hispanic land use, forested lands were often common lands or the *ejido* and subject to community use and management. Prior to acquisition by the United States, this use was largely on a subsistence basis (deBuys 1985; Santistevan 2006). The management of these common forest lands tended to be informal but it often limited the extent and type of timber harvest and included prescribed burning. The arrival of the railroad in the 1880's and the market economy brought demands for timber and livestock grazing to the landscape. This fundamental shift in land use coincided with radical changes in land tenure, with extensive areas of community and common lands converted to private and public land tenures. Land use on public lands at the end of the 19th and early 20th centuries were significantly different from those uses associated with Hispanic Land Grants. This was due to management approaches introduced by the United States that used local natural resources as they could best benefit the nation as a whole within the context of the market economy.

Community ownership and use of forests in 20th century northern New Mexico have taken several forms including the management of federal lands for community benefit, the reclamation of ancestral tribal lands, and the recognition of traditional land use and rights by forest dependent Hispanic communities. Two Rio Grande pueblos have petitioned for and have seen large areas of their ancestral tribal lands returned—Taos Pueblo (1970s) and Santa Clara Pueblo (2000s). Further, these pueblos have each pursued a “compact” agreement with the Department of Interior that bypasses the authority of the Bureau of Indian Affairs regarding natural resource management and enables the pueblo governments’ to directly manage their forest resources. Related to this achievement, each of these pueblos have received United States Forest Service Collaborative Forest Restoration Grants in total worth more than 1.8 million dollars to engage in comprehensive forest planning and restoration activities (Bauer 2007; Lefthand 2007).

Several Hispanic Land Grant communities in New Mexico have gained recognition as political subdivisions of the state (NM SB 142, 2004) or recognized in the State Special Statutes (NM Statutes CH. 49). New Mexican Land Grants with these designations generally have an elected board that meets at least once a year and can be considered active Land Grant communities. As an active community, these Land Grants are beginning to manage their range, forest, and watershed resources, often in consultation with the jurisdictional entities that currently still own or manage their adjacent former lands. An example of this is the Nuestra Senoria de Rosario (Truchas) Land Grant that is managing forest resources on their lands and working with the adjacent Santa Fe and Carson National Forests on their former Land Grant lands (Romero 2007).

Two examples of the management of federal forest lands for community benefit are the Stewardship Block Program (Lopez 2007) on the Camino Real District and the Vallecitos Federal Sustained Yield Unit (VSYU) on the El Rito District of the Carson National Forest. Beginning in the 1940s, the VSYU was established to economically benefit nine Hispanic Land Grant communities through forest resource use (Atencio 2004). The VSYU has had many troubles since its establishment and was nearly dismantled in 2005. The threat of the USFS to dismantle the VSYU seems to have had a positive effect in galvanizing support from the nine communities it was originally intended to serve and in 2005, there was renewed activity and interest in community forest management for local benefit as evidenced by the two Collaborative

Forest Restoration Program grants awarded to a local business (Chacon and Sons, Inc.) and a local community advocacy group (Las Comunidades). The successful Stewardship Block Program on the Camino Real District of the Carson National Forest provides community members with access to fuelwood, *vigas*, and *latillas* close to their home on federal land, formerly Land Grant common land, at low cost. In return the land manager, the USFS, achieves a reduced crown fire risk in their fire-adapted forests as well as needed community support.

The story of the Culebra villages of the Sangre de Cristo Land Grant in Southern Colorado is yet another permeation of how a Land Grant community in the Rio Grande Basin has regained access, rights, and a type of ownership to what was formerly their common forest land.

The Rio Culebra Villages: A Case Study

The Culebra villages in southern Colorado are an enclave of communities amidst the historic one million acre Sangre de Cristo Land Grant received from Mexico in 1843, within the larger Rio Grande Basin (deBuys 1985). The Culebra villages are situated near the Colorado/New Mexico state line, 60-miles north of Taos, New Mexico. The prominent feature of the Culebra watershed is the Culebra massif, known to locals as *La Sierra* (the mountain). Rising over 14,000 feet in elevation and encompassing over 77,000 acres, *La Sierra* is the source of three rivers and sixteen tributary streams. Living in seven villages in the basin for the past 150 years, the *pobladores* (settlers) and their heirs continue to depend upon *La Sierra's* waters and other natural resources to exist (CLGS 2003).

Beginning in the 1850s, land grantee Carlos Beaubien encouraged *pobladores* from northern New Mexico to settle the Mexican era land grant via *varas* which are small parcels or long lots of agricultural land. In order to supplement the parcels, Beaubien made provisions in the Grant for settlers to access the uplands of the Sangre de Cristo mountains for securing firewood, timber for construction, pasture for grazing sheep and cattle, and for fishing and hunting. Accessing the mountain for forest resources was critical to the inhabitants of the Culebra villages. The location of the villages at the base of the mountains limits the availability of wood and therefore requires access to the slopes of the Sangre de Cristo Mountains (Figure 1: Map of the Culebra villages). Wood continues to be a critical natural resource for the survival and continuity of the working Rio Culebra cultural landscape.

Wood Usage and Dependence in the Rio Culebra Villages

Since the founding of the Rio Culebra villages in the 1850's, the *pobladores* of San Luis, San Pedro, San Pablo, Los Fuertes, San Francisco, Chama and Viejo San Acacio have held steadfast traditions of using the wood resources of *La Sierra* for dwelling construction (See Appendix A for detailed information regarding wood in Land Grant architecture), outbuildings, corrals, and as fuel for heating and cooking.

The Rio Culebra Basin where the villages are located is currently dominated by a big sagebrush steppe vegetation community and is therefore relatively bare of trees. Most of the trees in the basin are located along riparian corridors or *acequias* (irrigation ditches) which contain softwoods such as cottonwood, willow, and box elder maple that are undesirable for construction and fuelwood use. In order to obtain wood suitable for construction such as *vigas* and *latillas* it is necessary to access the slopes of *La Sierra* which yields a variety of species beginning with pinyon and juniper at the lower elevation, ponderosa pine and mixed conifer stands mid elevation, and eventually spruce-fir forests at the higher elevations.

Traditionally wood was harvested using hand tools. Axes and crosscut saws were used in the early days with the wood being loaded and hauled on horse drawn wagons. Larger pieces of wood such as *vigas* were notched on one end and dragged by horses. Overall the Culebra villages used a limited amount of forest resources on a subsistence basis. For nearly 80 years the settlers hauled firewood, cut logs for *vigas* and *latillas*, fencing and corrals. Landscape evidence from this era shows the impact on the mountain was minimal since most of the wood harvesting was at a small non-commercial scale.

Management of *La Sierra*

Since the occupation of the Sangre de Cristo Land Grant in the mid-1850s the settlers of the Culebra villages accessed *La Sierra* for firewood and domestic construction. Most of the access points correlated to specific sub-watersheds across the Culebra massif where each village used the forest resources of a nearby watershed. For example the northern villages adjacent to the Rio Culebra and El Poso creeks used the forest resources in these drainages while the southern village of San Francisco used the forest resources in the nearby drainages of Alamocito and San Francisco creeks. Individuals, families and local groups utilized *La Sierra* to obtain wood resources beginning in the spring and ending in late fall. The harvested areas were scattered throughout the watersheds with no major wood cutting in any particular timber stand. The villages consumed low quantities of forest resources compared to the volume available on *La Sierra* and the villages operated with a common understanding of acceptable resource use rather than a formal management plan (Valdez 2007).

Land Tenure Changes

The mechanism used by the Mexican government to grant the Sangre de Cristo parcel in 1843 was similar to that previously used by Spain. This mechanism was able to either recognize an existing community, as was the case with the Rio Grande pueblos, or be used to foster Spanish or Mexican settlement of an area previously uninhabited by these peoples such as the communities of Truchas or Las Trampas. The Sangre de Cristo Grant is an example where the Mexican government granted an area of land with specific rights attached. The first two grantees died in the Mexican-American War leading the Mexican government to grant the land to Beaubien with the understanding that Beaubien would gather *pobladores* to work the land and settle the Grant. The *pobladores* were in turn promised eventual ownership of their homesteads and irrigated lands or *vara* strips, paired with continued access and rights to the common forest lands (CLGS 2003).

As documented by the Colorado Supreme Court (2003), the *pobladores* of the Rio Culebra villages settled in the watershed in the 1850s with the expectation that they would eventually gain ownership of their homestead and irrigated lands and retain indefinite access to *La Sierra's* game, fish, range and timber resources. After the regional turmoil of the Mexican-American War ended with the Treaty of Guadalupe Hidalgo in 1848, Mexico ceded all of New Mexico and southern Colorado to the United States. The United States agreed to honor the existing property rights of the territories and the United States Congress confirmed Beaubien's ownership of the Sangre de Cristo grant in 1860 (Colorado Supreme Court 2003). The Rio Culebra villages were settled in the 1850s and most of the *pobladores* received the deeds to their *vara* strips in 1863 from Beaubien. Also in 1863, Beaubien authored a document granting the *pobladores* rights of access and use to the common land of the grant. Beaubien died in 1864 and his interest in the Sangre de Cristo grant was sold by his heirs to William Gilpin, then governor of Colorado. Gilpin agreed to honor Beaubien's release of deeds to the settlers and their granted rights of access and use of *La Sierra*. Gilpin's heirs retained ownership of *La Sierra* while continuing to honor the Culebra communities rights to *La Sierra* until 1960 when they sold 77,000 acres of *La Sierra* with the attached rights of the Culebra communities intact (Colorado Supreme Court 2003). From 1864 to 1960, the use of *La Sierra* as common forest land for the Culebra villages remained intact.

***La Sierra* as Private Land**

In 1960 *La Sierra* was purchased by Jack Taylor, a North Carolinian with a timber background who was likely unfamiliar with and appeared not to recognize the unique form of community forest that was *La Sierra*. After purchasing *La Sierra* from Gilpin's heirs, Taylor fenced the 77,000 acres of the land grant he purchased and effectively eliminated access to *La Sierra* from the Culebra villages (CLGS 2003). This action was contradictory to the language in Taylor's deed and as soon as 1965 (Taylor v. Jaquez) and again in 1967 (Sanchez v. Taylor) Taylor filed successful actions in U.S. District Court for the District of Colorado and in the Tenth Circuit Court of Appeals to affirm that the landowners of the Culebra villages did *not* have rights to *La Sierra*. It remains unclear why the rulings in the 1960s ignored the historic right of access and use of *La Sierra*, honored by Gilpin and his heirs, as well as the language in Taylor's deed which affirmed this.

Upon purchasing *La Sierra*, Taylor began managing the property for commercial timber using practices common of the time period. He intensively logged many areas which threatened the integrity of the larger watershed as a whole. This act jeopardized water quality and quantity in the traditional ditch irrigation systems or *acequias*. The *acequia* system common throughout New Mexico and southern Colorado is an integral part of a community often with its own elected official or *mayor dormo* to oversee its use and maintenance. There were numerous conflicts with Taylor over his intense logging of *La Sierra* and the denied access to *La Sierra* from the Culebra community that often resulted in violence and property damage to both Taylor and the Culebra community (CLGS 2003).

Regaining Traditional Forest Rights and Access

After years of frustration with Taylor and their lack of access to *La Sierra*, the community filed a lawsuit in the Costilla County District Court in 1981 (Rael v. Taylor) for the purpose of regaining access to the mountain, to return traditional management to the watershed, and to remediate the negative effects of commercial logging on the watershed and to the *acequia* system. The litigation that began in 1981 continued through the 1990s and there appeared to be little advancement toward regaining the Culebra community's access and rights to *La Sierra*. The Culebra community formed the Land Rights Council at this time to assist with the ongoing litigation. During this period, the logging of *La Sierra* escalated as Taylor sought to generate revenue to pay for the continued litigation. In the Culebra villages there was overall despair and loss of hope that the community would not regain access to their common forest. Also at this time, trespassing and hunting on *La Sierra* continued as did the protests over the logging.

In an effort to alleviate the escalation of hostilities, the Colorado Department of Natural Resources began to assist the Culebra community in fundraising to purchase outright *La Sierra*. A land grant commission was appointed by Governor Roy Romer in 1993. Partners towards this goal included Colorado, the US Forest Service, The Conservation Fund, local governments and community based organizations such as the Land Rights Council and the Costilla County Conservancy District. Despite the partnerships and resources available, the plans to purchase *La Sierra* were not favored by many community members who felt the common forest land should not transition into public land and potentially loss its common use and access for the heirs of the *pobladores* of the Sangre de Cristo grant. As part of these dealings, the Land Rights Council was pressured to drop the law suit as a condition of a potential purchase of *La Sierra*. Community members also felt that their use and access rights would become secondary or a novelty if the purchase of *La Sierra* were managed by state or federal entities. By the end of the

1990s, the push to purchase *La Sierra* from Taylor deteriorated over the market value of the property and disagreement among the partners to open *La Sierra* to the public for recreation. During this time Taylor had sold *La Sierra* in 1997 to Lou Pai of Enron notoriety.

This case continued through the system in several forms until it reached the Colorado Supreme Court in 2002. The Colorado Supreme Court upheld the lower courts finding that Mexican Law did not apply since the *pobladores* settled the grant in the 1850s, after the Treaty of Guadalupe Hidalgo of 1848 ceded Mexican Territory to the United States. The court did however rule in favor of the Culebra villages primarily based on evidence from Gilpin era documents as well as other relevant evidence. Key evidence cited by the Colorado Supreme Court (2003) for their ruling from a translation of a Beaubien era document reads:

“According to the corresponding rule, all the inhabitants will have enjoyment of benefits of pastures, water, firewood and timber, always taking care that one does not injure another.”

Thus in 2003, the descendent of the *pobladores* of the Culebra villages of the Sangre de Cristo Mexican Land Grant were denied hunting, fishing, and recreation rights but awarded access and rights to *La Sierra* for grazing, firewood and timber. Following the Colorado Supreme Court ruling, Pai sold *La Sierra* in 2004.

***La Sierra* – A Community Forest Once Again**

Despite the nearly half a century gap in time from when the Gilpin heirs sold *La Sierra* to Taylor, there is still a desire and need from the Culebra community to resume their wood gathering and sustainable timber practices. The recognition of grazing and wood use rights to the heirs of the Sangre de Cristo Land Grant by the Colorado Supreme Court (2003) grants permission for certified property owners to resume the continuity of resource use on *La Sierra*.

La Sierra Community Forest Project

Following the Colorado Supreme Court ruling and court order in 2003, the Culebra villages continued to work together within the framework of the organization they formed to reclaim access and use of *La Sierra*, the Land Rights Council. Even though the Culebra communities access and use rights to *La Sierra* have been granted by court order, there remain two pressing issues: how the Culebra communities collectively manage their resource use of *La Sierra*, and if the communities should pursue a strategy of ownership of *La Sierra*.

Under the direction of the Land Rights Council the Culebra villages embarked on the development of a sustainable forest management plan for *La Sierra*. Funded by the Wyss Foundation in 2004, the Land Rights Council is completing a plan with the assistance of the Forest Guild (www.forestguild.org, based in Santa Fe, New Mexico). The Forest Guild is providing technical assistance to the Land Rights Council in forest management and planning. The unique combination of historic common use on what is currently private property creates an opportunity for collaboration between the Culebra community and the private land owner of *La Sierra* in a management plan that will meet the communities needs while protecting the integrity of the watershed and forests for the landowner and future generations.

The Future of *La Sierra*

The leadership role of the Land Rights Council is essential to bring together the technical resources and funding entities necessary to complete the planning process and assist in the formation of a community coalition to implement the sustainable forest management plan. The sustainable forest management plan will include community collaboration and a geospatial analysis of forest condition, resources, and access. The sustainable forest management plan will provide the Culebra community and the owner of *La Sierra* with a cohesive vision and management guidelines to pursue.

The implementation of the plan will need to involve *vara* strip owners, current property owners, the broader community, and include community monitoring, education, and outreach components. Despite the success of the Culebra community in the courtroom there remain the unresolved issues of uncertified descendents of the *pobladores* who do not have access and use rights to *La Sierra*, and the restriction of recreation, hunting, and fishing access and use. These issues may be broached in the sustainable forest management plan in an agreement between the Culebra community and the owner of *La Sierra*.

If the Culebra communities pursue ownership of *La Sierra*, they will need to strategically assess the costs and benefits of such a course. A major hurdle in pursuing this course would be amassing community, political, and financial support for such an action. An obvious benefit would be community control of use, access and management to *La Sierra*. This would allow the community to extend access and use beyond the scope of court ruling to include hunting, fishing, and recreation to all heirs of the *pobladores*. Some existing potential partners to assist in this effort who are already engaged in *La Sierra* and who have existing forest and land interests in the San Luis Valley are the Nature Conservancy, Great Outdoors Colorado, and Costilla County. Potential negative consequences for pursuing this course, as mentioned by community members in the 1980s and 1990s, might be the opening of *La Sierra* to recreation by the general public. Additionally, although there exists potential for conflict between resource use between the Culebra community and conservation and recreation interests, numerous examples of community

owned forests and its multitude of forms from across North America (Conservation Fund 2007; Curtis 2006; Duinker et al. 1994; Ford Reports 2007; McCullough 2006; Poole 2006) have learned to avoid this common pitfall through collaborative processes and meaningful science-based land management.

The Farm Bill-funded Forest Legacy Program (see Appendix B) is another opportunity for the Culebra community and owner of *La Sierra* to conserve the working cultural landscape. This is a voluntary and incentive based program for non-industrial private forest land preservation. Since the establishment of the program over 960,000 acres have been preserved with conservation easements and fee-simple purchases by states, municipalities, and land trusts. Throughout these transactions, the state and local entities often cover roughly twenty-five percent of the land transaction costs, while the Forest Legacy Program often provides roughly seventy-five percent of the funds needed (USDA 2003). The Forest Legacy Program may be a realistic funding mechanism to protect *La Sierra* from development, further expand the Culebra community's access and rights to *La Sierra*, provide for a management structure that addresses community concerns regarding recreation, establish a framework for a working forest landscape (Perschel 2006), serve to pull together the variety of partners and interests, and provide up seventy-five percent of the funds needed to either purchase a conservation easement or fee-simple transaction.

Concluding Remarks

Across North America, community owned forests are diverse in their structure and extent, often heavily influenced by regional history and culture. New England community forests draw from the history of the town forest movement and are seen to have directly influenced community owned forests in the Midwest and Great Lake regions. Southwestern community forests are intimately connected to the traditions of Native American pueblos and tribes and to those of the Spanish and Mexican Land Grant communities. The impetus and support for community forests in British Columbia, Canada, which also occur on public lands, are derived from progressive government legislation. Common to all community forests on non-federal lands in the United States is the need to protect these working forests from land development that inhibits and undermines the working rural landscape envisioned by communities.

The *La Sierra* example from the Rio Grande Basin in the Southwestern United States has several unique characteristics. The achievement of the Culebra community in regaining access and use rights to private property through the Colorado Supreme Court is a unique occurrence in rural North America. In the four years since the affirmation of access and rights by the Colorado Supreme Court, the Culebra community, working with partners in the San Luis Valley and the Forest Guild, have made progress towards a sustainable forest management plan and begun to collect fuelwood from *La Sierra* in a strategic fashion. The Culebra community desires to expand access to the heirs of all the *pobladores* and use to include rights to fish, game, and recreation. Gaining complete ownership of *La Sierra* would enable the Culebra communities to completely reinstitute their traditional relationship to their common forest land. To this end, the Culebra community faces several challenges most prominent being the large financial cost of ownership. The Forest Legacy Program is one mechanism available to the Culebra community enabling the purchase of a conservation easement or a fee-simple purchase.

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Appendix A: Traditional Building Types

La Sierra supports a variety of wood species. When the settlers first arrived in the Rio Culebra the first priority was to build shelters. The quickest shelters to erect were the Chozas or tipi-like structures often used by sheepherders. Modeled after Native American Wickiups of the Great Basin and Southwest the Choza was a tipi-like structure consisting of wood poles arranged in a circle leaning towards a central point. The frame was then covered with horizontal twigs, grass and willows. The door was typically closed by a heavy blanket.

The next evolution in rapid dwelling construction introduced *Jacales* also known as Palisade construction or vertical pole structures and *fuertes* or horizontal log construction. These building traditions appear to have been derived from Mexico rather than from the eastern or western United States (Gritzner 1977). Juniper species (*Juniperous sp.*) were the material of choice for wood construction and readily available at the lower elevations of the region. Other woods used for *Jacal* construction were cottonwood usually occurring along waterways. Wood construction offered quick solutions to shelter and often became a permanent part of the evolving house plan. In many instances one can find *jacal*, *fuerte*, and *adobe* construction, all interwoven into a linear or “L”-shaped house plan. Even though adobe was the preferred material the investment of labor and materials in wood buildings remained a permanent part of the Hispano homestead.

Other wooden structures in a typical homestead were *dispensas* or storage sheds, granaries, barns, corrals, animal sheds (*gallineros*, *tapeista*) and small scale elements such as well houses cellars (*soteranos*). An interesting non-domestic or commercial wood structure was the *molino* or gristmill. The *molino* built of horizontal logs was placed over a flowing waterway or stream where a horizontal wooden paddle wheel or turbine intercepted the flowing water creating a circular motion connected to a vertical wooden shaft that turned basalt stones grinding wheat for flour.

The Versatility of Wood

Dwelling construction and associated structures connected with agricultural traditions have dominated the majority of wood usage as far as construction in the Rio Culebra villages. Other applications include heating and cooking which is still widely used by the majority of families residing in all of the local communities. Furniture, household goods, doors and even early agricultural implements were also constructed by the settlers. Beside functional needs wood was used in a creative venue in the form of carved *bultos* or *santos* as well as *reredos*.

Appendix B: The Forest Legacy Program

The Forest Legacy Program (FLP) is a federally funded, non-industrial private forest (NIPF) land preservation initiative that is rooted in the Cooperative Forestry Assistance Act (CFAA) of 1978. The CFAA acknowledged that the majority of forested lands are in private ownership and charged the federal government, the Forest Service (USFS) in particular, with fostering stewardship of these lands in partnership with states, local municipalities, and individuals (USDA et al. 2003)¹. The CFAA recognized that private forests were part of working forest communities which provided forest product commodities. NIPFs also provide non-economic goods and services such as terrestrial and aquatic habitat, clean air and water, soil conservation, carbon sequestration, recreation opportunities, and the protection of cultural resources (Best and Wayburn 2001; Sample and Cheng 2004). The CFAA acknowledged that private forest land owners are facing pressures to convert their forests into non-forest uses. However, it was not until twelve years after the passage of this act that the federal government sought to include the preservation of these lands in their management policies, effectively missing a critical period in land preservation.

The Food, Agriculture, Conservation and Trade Act of 1990, also known as the 1990 Farm Bill, amended the CFAA to protect ecologically significant privately owned forest land from conversion into non-forest use through the establishment of the FLP (USFS et al. 2003). The 1990 Farm Bill also encouraged sustainable forestry practices through the creation of the Forest Stewardship Program. The Forest Stewardship Program, besides being a prerequisite for eligibility into the FLP, involves a planning process that provides federal cost sharing, financial planning, technical assistance, and habitat conservation for NIPF owners (Best and Wayburn 2001). Through this bill, the United States Department of Agriculture (USDA), the umbrella department of the USFS, entered into the land preservation fray. The land preservation movement is still wrestling with conflicting approaches to land preservation. The concept of landscape / region wide land preservation strategies eludes many of the smaller players in the land preservation movement. This leads to fragmented and piecemeal preservation which often is responding to crisis situations (LTA 2004). Being minimally funded, with an average of only \$4 million per year between 1990 and 1995, the FLP contributed to this scattered approach and did not seek out partnerships nationwide². In 1996, the FLP was amended to disperse most of its funds to qualified state programs and to seek partnerships with localities and non-governmental organizations (NGO). States, localities and NGOs have, since 1996, leveraged at least twenty-five percent of the funds for land and easement acquisition for the FLP (Best and Wayburn 2001; USDA 2003).

The Forest Legacy Program is a voluntary and incentive based program for NIPF preservation. Since the establishment of the FLP, 960,000 acres have been preserved with conservation easements and fee-simple purchases in partnership with states, municipalities, and land trusts. Throughout these transactions, the state and local entities have had to cover only twenty-five

¹ Interestingly, non-industrial private forestlands account for forty-nine percent of the nation's timber production. Since thirteen percent of the nation's forests are owned by forest products industries, a disproportionate amount of harvesting occurs on US Forest Service lands and forest products industry lands, as opposed to non-industrial private forests (Sample and Cheng 2004).

² The early years of the FLP were somewhat of a testing period for the program, and eastern Northern Forest was an initial experimental area along with Washington State (Giammusso 2002).

percent of the land transaction costs, while the FLP provided up to seventy-five percent of the funds needed (USDA 2003). From 1992 to 2004, roughly \$359 million has been appropriated to the Forest Legacy Program which generates a federal cost of \$372 per acre preserved (USDA 2004)³.

³ This per acre average price assumes that no funding for FLP occurred in FY 1990 and 1991 and that the FLP always provided seventy-five percent of the funds. Judging by how under funded the FLP was in the early 1990's, and an average cost per acre to preserve NIPF of \$200 to \$600 per acre, the FLP is extremely cost effective land preservation. When ecological and economic benefits are weighed in, forestland preservation is an important component to the land preservation movement since large amounts of land can be preserved at a low cost.

Appendix C: Vermont Town Forests

Some of the most progressive community forest projects have been developed in Vermont. The projects involve a coalition of public and private organizations. The Vermont Town Forest project is a statewide initiative designed to connect rural forest areas with neighboring areas. Education and stewardship of existing town forests is a main goal. A variety of interests and attitudes are represented in the long term strategies for managing the forests. Recreation, sustainable timbering practices and environmental integrity are key to the common ties and values that form the core of the town forest project. Subdivision and development are rapidly encroaching on the forest lands, therefore it critical that sprawl be controlled before it engulfs the diminishing forests.

The Northern Forest Alliance (NFA), a non-profit organization, created the Vermont Town Forest Project (VTFP) as a forest preservation effort and to assist the community in fostering community ties, stewardship of town forests and acquisition of existing and new acreage. Implementation of the project relies on a collaboration of public and private organizations. NFA provides direct technical assistance and resources to participating towns adjacent to the forests. Some of the project opportunities offered by VTFP to other communities as a result of their own program development are the following:

- Development of an oral history for the town forest.
- Development of new town forest-based educational programs.
- Enhanced dialogue around forest resource issues in the town.
- Technical assistance and education in understanding other conservation tools for the town forest, including planning and monitoring.
- Participation in statewide dialogue and forums on town forest activities and management.
- Access to new stewardship models for the town forest.
- Technical assistance and funding for management of the town forest
- Training for a citizen-led forest health monitoring project using the town forest.
- Technical assistance in designing town forest acquisition projects.
- Assistance in identifying funding strategies for town forest acquisition projects.

A few of the older towns in Vermont have been able to save their forests from development pressures under the guidance of the VTFP. A good number of the towns now have a town forest and have gone beyond to purchase additional forest lands. Overall the coalition of organizations and partnerships has gained support form conservation foundations, state legislative bodies. Future funding efforts will be to tap into federal funds via the 1990 Farm Bill that is currently pending reauthorization.