

**Yale** SCHOOL OF FORESTRY &  
ENVIRONMENTAL STUDIES

From Science to Implementation:  
Solutions for Addressing Exurban Sprawl  
in the Northern Rockies

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## Introduction

Land use patterns in the Northern Rockies of the United States are shifting dramatically. As population growth in the region outpaces nationwide trends, communities are experiencing a rapid influx of people moving to rural areas and a subsequent conversion of private ranch and agricultural lands to residential development.

Exurban development increases the costs of providing services to our communities and decreases biodiversity and habitat connectivity. As growth and development in these areas continue unabated, communities struggle to maintain their rural character and identity.

While many studies have documented increasing exurban development and shifting land use patterns, these studies have not resulted in widespread implementation of solutions that have effectively curbed the amount of exurban growth and development. To date, traditional community planning efforts aimed at curbing exurban sprawl have faced a lack of permanence or a lack of scalability.

Much of the information regarding community and conservation groups' attempts at reducing sprawl in the Northern Rockies is contained at the local level through individuals' lived experience or local documents. Often, communities are not aware of options available to them or possibilities for financing the solutions.

This paper is intended to summarize the trends and impacts of exurban development in the Northern Rockies. It reviews traditional tools and funding mechanisms that communities are using to curb sprawl. Finally, it explores two examples from across the country that could be applied to the Northern Rockies. It concludes with a discussion about the future direction of solutions to address exurban sprawl, and provides a list of resources for communities and organizations to reference for additional information.

## Background

### What is Exurban Sprawl?

Exurban sprawl is defined as low-density development beyond the urban and suburban fringe. Specifically, exurban development refers to one residential unit per 1.7 to 40 acres (Theobald 2005). According to Theobald's definitions, development occurring on less acreage than 1.7 acres is considered suburban or urban, while development occurring on parcels greater than 40 acres is considered rural. Exurban development is therefore the development occurring in between the suburban and the rural or agricultural areas.

In simple terms, exurban sprawl is unplanned, low-density growth that occurs beyond urban and suburban areas (**Figure 1**).



**Figure 1.** Photograph of exurban development. Wildlife Conservation Society.

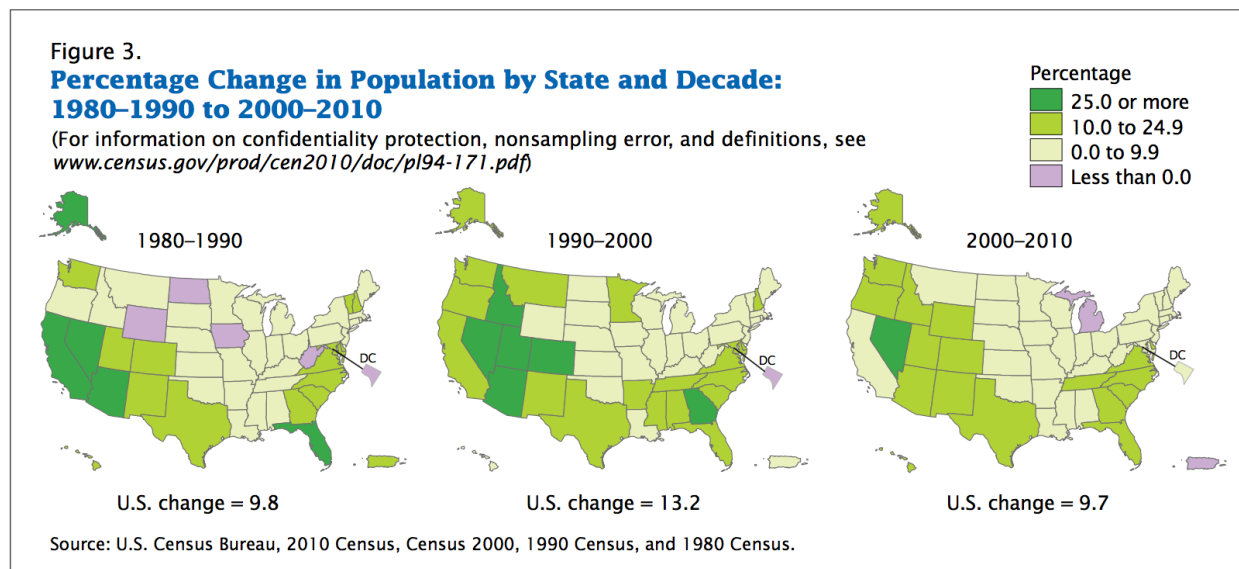
## **Northern Rockies Defined**

For the purposes of this paper, the term ‘Northern Rockies’ will be used to describe the three states Idaho, Montana and Wyoming. This paper is not intended to be applicable to every community in the Northern Rockies; rather, it is focused on the areas facing the most rapid growth and at most risk for development and loss of natural resources.

## **What Are the Trends?**

### **Population Growth Trends: Northern Rockies vs. United States**

Across the United States, population growth averaged 9.7% from 2000 to 2010 (United States Census Bureau 2011). In the Rocky Mountain region, this average ranged from 10 to 24.9%, with a regional average of 19.7% (**Figure 2**).



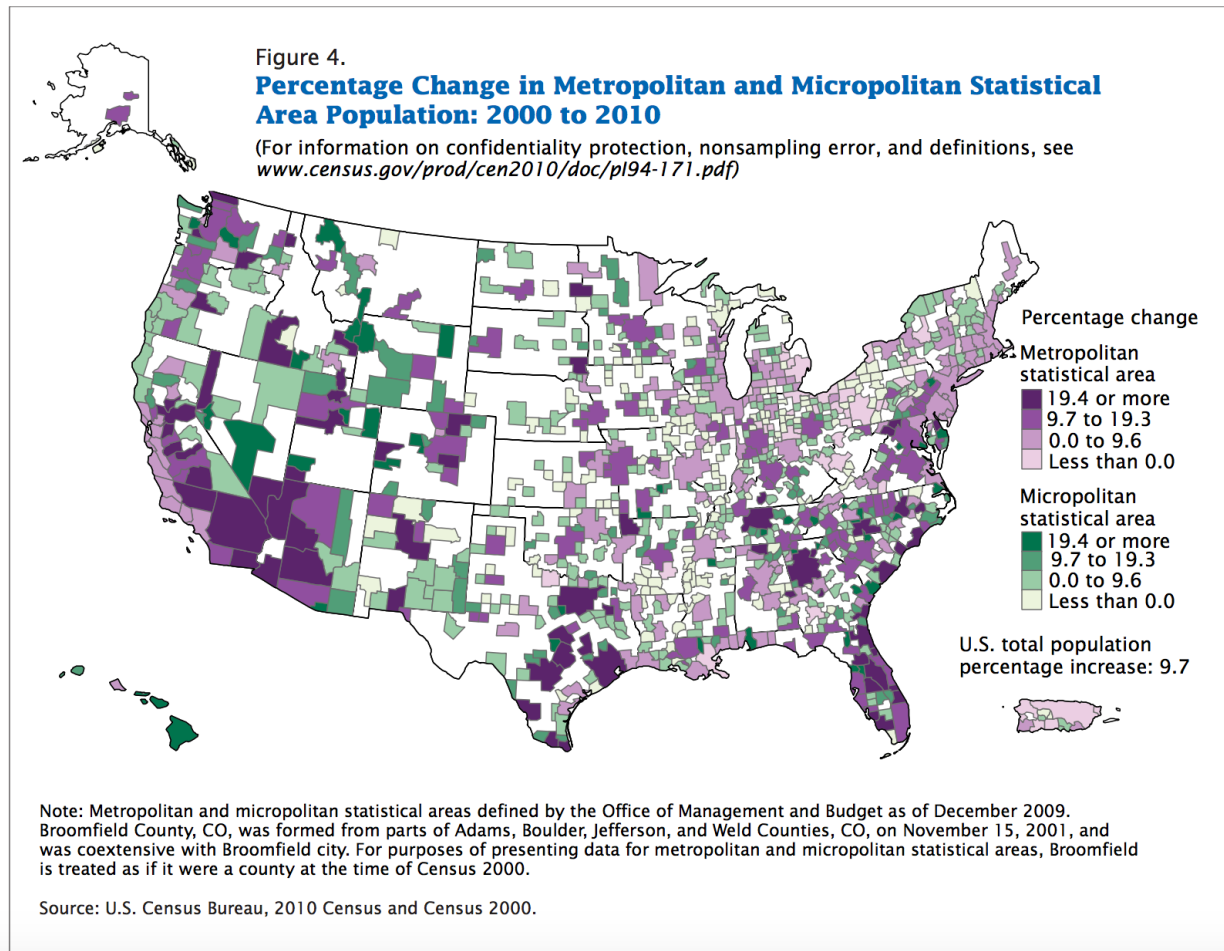
**Figure 2.** Percentage Change in Population by State and Decade: 1980-1990 to 2000-2010. United States Census Bureau. 2011.

Idaho, Montana and Wyoming experienced 21.1%, 9.7%, and 14.1% population growth respectively from 2000 to 2010. Idaho was the 4<sup>th</sup> fastest growing state in the US for the period 2000 to 2010 (United States Census Bureau 2011).

### Where Population Growth is Occurring: Metropolitan vs. Micropolitan Areas

While some metropolitan areas in these states are experiencing growth higher than the national and regional averages, much of the largest population growth in Idaho, Montana and Wyoming is occurring in micropolitan areas with populations between 10,000 and 50,000. Bozeman, Montana; Gillette, Wyoming; Jackson, Wyoming; Kalispell, Montana; Rexburg, Idaho; and Twin Falls, Idaho all significantly outpaced the national growth average for micropolitan areas between 2000 and 2010 (United States Census Bureau 2012).





**Figure 3.** Percentage Change in Metropolitan and Micropolitan Statistical Area Population: 2000 to 2010. United States Census Bureau. 2011.

### Where Residential Development is Occurring: Urban vs. Exurban Areas

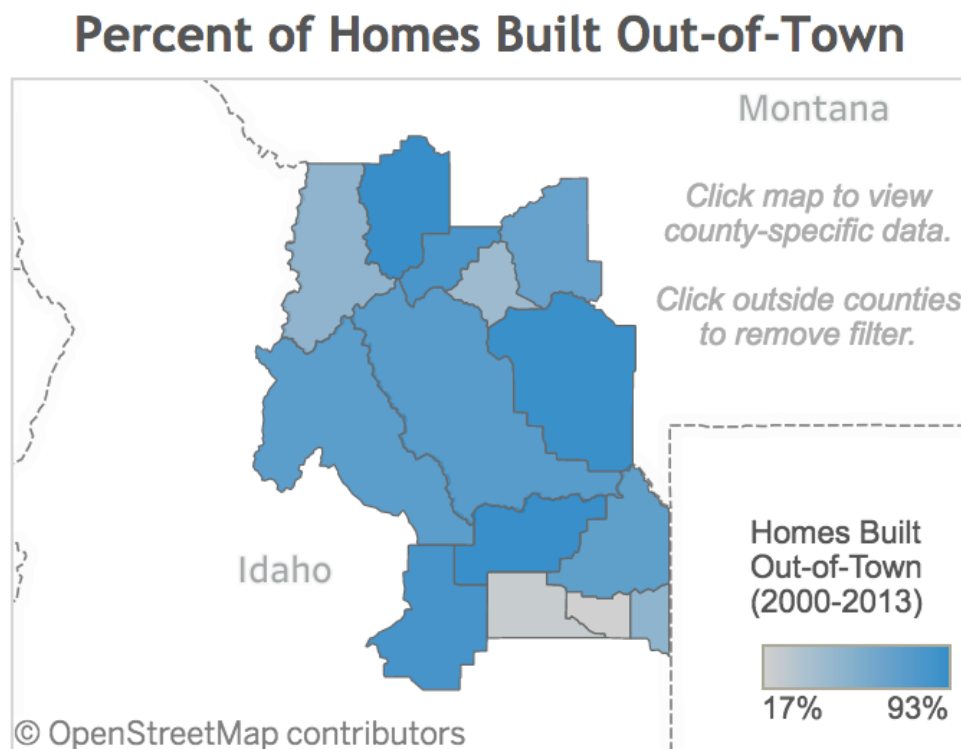
Regarding residential development trends, exurban development is outpacing urban and suburban development across the United States. From 1950 to 2000, the conterminous United States experienced a fivefold increase in the amount of land at exurban densities, from 5% of the country in 1950 to 25% in 2000 (Brown et al. 2005). Low-density, exurban development occupies almost 15 times more area than urban development (Brown et al. 2005). Today, two-thirds of “built-up” development in the mainland United States takes the form of low-density exurban and rural residential development (Theobald 2014).

### Growth in Unincorporated Areas of Counties

By definition, much of the growth in exurban development occurs in unincorporated areas of counties. Unincorporated areas are those that are not governed by municipalities. In Wyoming, municipalities cover less than 0.1% of land area in the state, a mere 77 of the 97,800 square miles in the state (Hamerlinck et. al 2013).

Unincorporated areas are subject to fewer development regulations and restrictions. The Traditional Solutions section of this paper contains more information on the impact of unincorporated areas of counties.

Finally, exurban development is occurring in areas of high ecological importance, often overlapping with unincorporated areas of counties. For example, the High Divide region of the Rocky Mountains in eastern Idaho and western Montana is important habitat and a critical linkage area for a number of species including elk, grizzly bear, wolverine, and pronghorn. A 2015 study by Headwaters Economics found that since 2010, 63% of homes in the High Divide area were built outside of town in unincorporated parts of the counties (Headwaters Economics 2015). Projections for the next 10 years indicate that almost 150 square miles of private land in the High Divide will be converted to exurban development (Headwaters Economics 2015).



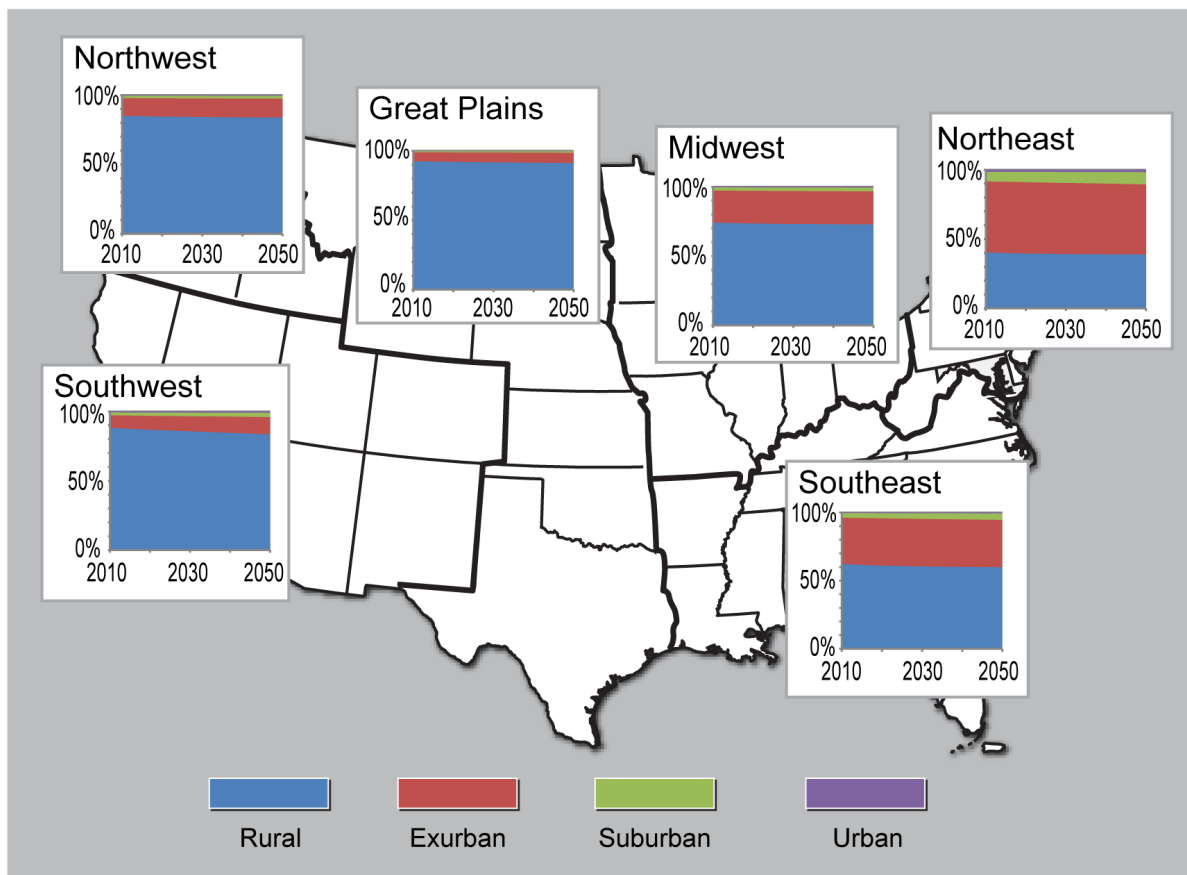
**Figure 4.** Percentage of homes built out-of-town in the High Divide between 2000 and 2013. Headwaters Economics 2015.



## Projections

These growth and development trends are expected to continue in the future. Projections of future land use scenarios indicate that exurban and suburban areas will grow by 15 to 20% nationally between 2000 and 2050 (Brown et. al 2014). These projections estimate that rural and exurban settlement will encompass the majority of settlement in the Northern Rockies.

### Projections of Settlement Densities (2010-2050)



**Figure 5.** Projected percentage increase in each housing-unit density category for 2050 compared to 2010. Brown et. al 2014. Land Use and Land Cover Change. The Third National Climate Assessment.

This combination of increased population growth and residential exurban development in unincorporated areas of counties creates significant problems for communities and for wildlife.

# **How Does Exurban Sprawl Affect Our Communities and Our Wildlife?**

## **Impacts on Communities: Cost of Community Services**

Residential development in rural and exurban areas can incur high costs for the community in which the land is developed. New housing units require public infrastructure and services such as road maintenance, trash collection, and school buses. When land is converted from agricultural production to residential development, the cost of providing new services increases and is shouldered by tax payers.

Residential development in rural and exurban areas costs communities more than leaving the land in agricultural production. Across the United States, the median cost of community services was \$0.37 per dollar collected of tax revenue for lands under agricultural production compared with \$1.16 for residential land uses (American Farmland Trust 2010). Cost analyses in Idaho, Wyoming and Montana reflect the same trend; costs of community services for agricultural land uses range from \$0.23 to \$0.54 per dollar collected of tax revenue compared with \$1.06 to \$1.60 for residential land uses (American Farmland Trust 2010; Coupal et. al 2002). This exurban development is not paying for itself. These are important costs for local officials to consider before approving new development in exurban areas.

## **Impacts of Growth and Development Trends: Development Footprint**

The population growth and residential development trends identified above directly shape land use patterns. Small percentages in population growth result in large increases in developed footprint. According to the Cheyenne Metropolitan Planning Organization, a 2% annual increase in population growth could expand the urbanized area by 125 square miles by 2030 (Hamerlinck et. al 2013). This outsized influence of population growth impacts the amount of land able to be retained for other uses, including wildlife habitat.

## **Impacts on Wildlife**

Idaho, Montana and Wyoming are known for their iconic wildlife. Wildlife drive the tourism, recreation, hunting, and fishing that represent a large part of these states' economies. While there is a significant amount of public land in these states, many wildlife species rely on habitat on private lands as they move or migrate seasonally to find food, to reproduce, or to escape changing weather conditions. Half of the winter habitat for Wyoming's big game species is located on private land (Wyoming Game and Fish Department 2017). How and where land is developed and regulated matters for wildlife.

Exurban development has been shown to decrease biodiversity, cause changes in habitat use, increase habitat fragmentation, and increase human-wildlife conflict. Land conversion can change plant and wildlife diversity and shift species makeup such that exotic species increase with conversion (Hansen et al. 2005). Nonnative species have

been found to increase in abundance along the rural-urban gradient (Hansen et al. 2005).

Studies that measure the proportion of land affected by low-density development indicate that effects of ranchettes extend well beyond the immediate development footprint, as far as 330 meters into undeveloped areas (Odell & Knight 2001). Glennon et al. found that the effects of exurban development on bird species are consistent across distinct ecoregions; bird communities are similarly vulnerable to exurban development despite differences in the landscape. Their research indicates that exurban development favors generalist species and edge specialist species (Glennon et al. 2014). Further research points to changes in wildlife species' movement and habitat use dependent on the level of development in an area. These effects differ by species; increased exurban development has been shown to decrease occupancy levels of elk, bobcats and coyotes (Goad et al. 2014).

Exurban and rural residential development is more likely to occur near existing open space and protected areas (Hansen et al. 2005). However, this increased housing growth around protected areas such as national refuges decreases connectivity and eventually may lead to decreased use of the protected areas themselves (Hamilton et al. 2016).

Housing density has also been studied as an indicator of human-wildlife interactions, with exurban density holding the highest concentration of these interactions (Kretser et al. 2008). As exurban development increases and more people move into previously undeveloped areas, we can expect human-wildlife conflict to continue to increase.

Finally, increasing development in exurban areas changes the rural character of communities in the Northern Rockies. Agriculture, open-space, and wildlife are hallmarks of Northern Rockies landscapes. Aside from a way of life, tourism and recreation economies are dependent on open space and abundant wildlife. With two-thirds of developed land in low-density exurban and rural residential development, policies regarding exurban development have the potential to impact not only biodiversity, but the rural and economic fabric of these communities.

## **Traditional Methods for Reducing Exurban Sprawl**

In the face of rapid population growth, how can communities plan development in ways that simultaneously preserve rural character, open space and wildlife? This section provides a brief overview of traditional methods used to control development and discusses some of the limitations of these methods.

## **Land Use Planning Tools and Mechanisms**

Land use planning is widely considered the most comprehensive method for controlling sprawl, particularly in urban parts of the United States. Land use planning is the process that city and county governments undertake to intentionally determine how land should be used today and in the future. The planning process is intended to identify economic, social, and resource needs and balance competing land uses.

The authority that city and county governments have to engage in land use planning is determined by enabling legislation at the state level. Counties and cities can have no more authority than what the state enabling legislation allows. Land use planning is generally enacted at the municipal and county levels through three mechanisms: a comprehensive plan, zoning ordinances, and subdivision review. State enabling legislation in Idaho, Wyoming and Montana requires cities and counties to create a comprehensive plan. A comprehensive plan is a document that details a community's vision and goals for future growth and development. However, the comprehensive plan is not a regulatory document, so planning departments rely on zoning ordinances and subdivision review processes to ensure adherence to the comprehensive plan. Zoning ordinances organize jurisdictions into designated areas or zones and specify what uses are permitted or restricted in those zones, such as industrial, commercial, residential, and open space designations. Zoning can also create overlay districts – zones designed to protect natural resources or special features such as wetlands or historic districts. Subdivision regulations specify the process for dividing land and designate standards for lot sizes, setbacks, utilities, and streets.

Beyond comprehensive plans and zoning, urban communities in particular are moving towards more innovative planning techniques, such as growth boundaries, “smart growth,” Transfer of Development Rights, and conservation districts or cluster development. Growth boundaries set explicit boundaries for where communities' growth will stop, in order to preserve the rural areas beyond the growth boundary as open space and working landscapes. Oregon is an example of a state that established growth boundaries in order to protect agricultural areas from encroaching development. In the 1970s in Oregon, a coalition of farmers and conservation groups persuaded the state legislature to create a Land Conservation and Development Department with state land use goals that required urban growth boundaries, wise use of urban land, and protection of natural resources (Oregon Metro 2016). Urban growth boundaries control sprawl by developing urban areas inside of the growth ring efficiently.

The concept of “smart growth” has gained popularity in recent years as well. Smart growth development encourages mixed land uses, walkable neighborhoods, diverse transportation options, and compact design (Smart Growth America 2017). This type of planning also encourages development in existing areas rather than undeveloped areas.

Transfer of Development Rights (TDR) is another planning method intended to preserve open space and reduce sprawl. TDR is a market-based mechanism in which an exchange of development rights occurs between two parties. With a TDR, the “sender” (the party with ownership over a sensitive resource or area) voluntarily gives up a portion of their development rights to the “receiver” (person that wants to increase their development rights) in exchange for payment. Sending and receiving areas are predetermined.

Recent academic research in the field of land use and exurban development has examined conservation developments as a tool for reducing sprawl (Reed et al. 2014); (Pejchar et al. 2007). With conservation developments, homes are clustered on smaller lot sizes and the remainder of the property is set aside as open space. Several Rocky Mountain states including Colorado, Wyoming and Montana have adopted conservation development ordinances, with limited effectiveness (Reed et al. 2014). If implemented and monitored correctly, this is a promising mechanism for planned development.

Refer to the Resources section for additional planning resources.

### **Limitations to Land Use Planning Efforts in the Northern Rockies**

If sprawl is a result of unplanned growth and development, intentional community planning would seem a natural solution for halting sprawl. In practice, however, there are a number of factors that limit communities’ ability to implement strong growth control mechanisms. Several of these factors are unique to the Northern Rockies and make controlling exurban sprawl particularly challenging.

Because land use authority is determined at the state level, land use planning controls are not uniform across the United States, and certain states have more rigorous planning requirements than others. Rural areas across the country have been reticent to implement land use planning, believing that government should not control land use or restrict development and private property rights. In the Northern Rockies, states have written narrower land use authority into their enabling legislation.

In Wyoming, counties did not have zoning authority until 1997 and there was no subdivision review required in exurban areas until 2008 (Wyoming Game and Fish Department 2017). This incentivized larger tracts of development that would not be subject to review. Zoning and subdivision control are now allowed, but not required, and are therefore still used sparingly.

Comprehensive plans only serve their purpose in protecting open space, wildlife and rural character if the plans are implemented consistently. Once the community vision has been determined and areas identified as important for protection, those land use designations need to remain upheld through zoning ordinances and the enforcement of subdivision regulations. Competing interests and economic incentives combined with the realities of tight municipal and county budgets can incentivize continued

development. County commissions have limited budgets to accomplish a wide variety of tasks, and development is a method of bringing revenue to the county through property taxes. Perverse incentives also exist to develop in the exurbs where fewer subdivision controls, building codes, and development standards make development cheaper and less administratively burdensome for developers (Wyoming Game and Fish Department 2017). Furthermore, while significant research demonstrates the value of protected areas as a driver for economies, conservation may not prove as immediately economically rewarding as development (Headwaters Economics 2017).

The unincorporated areas of counties face even fewer regulations than incorporated areas. For example, in Wyoming, state law requires that both county and municipal governments develop a comprehensive land use plan. In contrast, unincorporated cities or towns are not required to develop a comprehensive plan (Wyoming Game and Fish Department 2017). Without a comprehensive plan and other development controls, development can occur at a more rapid pace with less coordination.

Unlike many states in the country, Idaho, Wyoming and Montana do not have statewide land use offices or dedicated state funding for cities and counties to implement land use planning (Idaho Land Use Analysis 2010, Hamerlinck et. al 2016). Absence of a statewide office can also reinforce lack of coordination at a regional scale or across between city and county jurisdictions.

Frequent turnover in local government also contributes to a lack of permanence and consistency in land use regulations. In Idaho and Wyoming, county commissioners serve two or four year terms. The comprehensive planning process may occur under the guiding influence of one planner, or a set of county commissioners. If the previous commissioners' land use policies were unpopular, the next set of commissioners may campaign on promises of fewer land use restrictions. Frequent turnover also translates to a lack of institutional knowledge and learning curves for new commissioners.

Availability of resources is critical to the implementation and enforcement of plans and ordinances. Small towns in the Northern Rockies have small planning staffs, if they have staff at all. In Wyoming, only 16 of the 23 counties have planning staff (Hamerlinck et. al 2016). Planning is a long-term effort that requires time and commitment by planning staff, community members, and local officials, and frequently leads to burnout over time.

Out of a desire to preserve rural character in smaller towns, communities often oppose regulations that promote density by building up. In order to keep up with housing demand, communities continue to approve development in the exurbs rather than build up the town centers. Smart growth principles are unpopular in these states and planners often encounter opposition when multi-use developments are proposed in beloved parts of town. Other promising growth management tools such as conservation development and Transfers of Development Rights have been slow to spread in their implementation

and effectiveness. Conservation Developments need careful oversight and monitoring in order to be effective at maintaining biodiversity (Reed et al. 2014). Meanwhile, there has not been enough demand for Transfer of Development Rights to set up the banks necessary to establish the market (Idaho Land Use Analysis 2010).

Finally, local residents often do not know how to engage in the land use planning process. All of these challenges hinder the effectiveness of coordinated planning, and facilitate increased development over conservation. The result, as indicated above, can lead to serious consequences for wildlife and rural character.

## **Conservation Easements**

In response to the limitations of land use planning, conservation organizations have turned to other methods for curbing sprawl; namely through the use of conservation easements. A conservation easement is a voluntary agreement by a private landowner that permanently restricts certain uses of their land in order to protect conservation values. With an easement, the landowner retains ownership of their land. Conservation easements exist in perpetuity. Easements must provide a public benefit such as water quality, wildlife habitat, scenic views, historic preservation, or farm and ranch land preservation. In exchange for the donation of a conservation easement, landowners receive a tax deduction. Conservation easements can serve to significantly lower income and estate taxes.

Refer to the Resources section for more resources related to easements and land trusts.

## **Limitations of Conservation Easements**

One of the incentives for giving up development rights via conservation easements is the income tax benefit that a conservation easement donation provides. However, for working landowners whose primary assets are in the form of the land they own as opposed to other income sources, an income tax break provides little benefit. For this reason, working land conservation easements are typically purchased from the landowner, rather than donated. Purchasing easements requires large amounts of money, so land trusts typically rely on matching grants from local or federal funds to obtain land in fee.

Conservation easements are an important land protection tool and have contributed significantly to land and wildlife conservation in the Northern Rockies. However, easements alone will not provide the wide scale of protection needed to solve growth management problems. Furthermore, due to their dependence on willing landowners and the timing of available funding, easements can be hard to plan for.



## Funding Options at the Local Level

How can communities fund or finance growth management solutions and agriculture, open space and wildlife protection at a scale necessary to preserve rural character and wildlife?

Providing dedicated funding for growth management is essential to ensuring the implementation of planning and visioning work. This dedicated funding also counteracts any perverse incentives that may be in place to allow development because of new revenue development will create through property taxes and fees.

### Ballot Initiatives

A ballot initiative is a process wherein registered voters in a community can bring about a public vote to decide on a local issue. Once on the ballot, communities vote to raise public funds through bond initiatives or tax themselves to increase revenue for specific purposes. Ballot initiatives have been critical to increasing funding for conservation work across the country, particularly for open space and working lands conservation. Funding from these initiatives creates a predictable, long-term funding stream. Common ballot initiatives used to raise money for conservation purposes include general obligation bonds, sales tax, property tax, and resort and lodging taxes.

### General Obligation Bonds

*What they are:*

General obligation bonds are bonds issued by local governments and states to raise funds for public works.

*Where they have passed to support conservation work:*

Four counties (Gallatin, Lewis and Clark, Missoula, Ravalli) and five municipalities (Bozeman, Great Falls, Hamilton, Helena, Missoula) in Montana have passed open space bonds totaling over 70 million dollars (LandVote® 2016).

*When to use a bond initiative:*

As referenced in the Traditional Solutions section of this paper, one of the incentives for giving up development rights via conservation easements is the income tax benefit that a conservation easement donation provides. However, for working landowners whose primary assets are in the form of the land they own as opposed to other income sources, an income tax break provides little benefit. For working landowners, selling a conservation easement can provide much needed income. Bond initiatives that raise money to be used to purchase conservation easements help solve this limitation of easements.

## **Sales Taxes**

### *What they are:*

A sales tax is a consumption tax imposed on the sale of goods and services. Local sales tax measures can be added to ballots to direct revenue from sales tax towards particular uses ranging from open space, working lands or habitat protection to homelessness and transportation initiatives.

### *Where they have passed to support conservation work:*

Laramie County and Teton County, Wyoming passed sales tax initiatives in 2003 and 2001, respectively, raising \$3 million (LandVote® 2016). Rural counties in Colorado have also passed sales tax initiatives. Gunnison, Larimer, and Grand Counties raised over \$250 million for open space, farmland, wildlife habitat through sales tax initiatives. In 2010, Larimer County issued an eight year .25% sales tax increase for open space, wildlife habitat, parks and trails. Four years later, that bond was extended to a fifteen year, .25% sales tax extension for acquiring, managing and improving open space, natural areas, parks, habitat and trails (LandVote® 2016). In 1997, Gunnison County approved a 15-year reallocation of 1% sales tax to begin a Gunnison Valley Land Preservation Fund for agricultural preservation, open space and wildlife habitat. In 2012, the 1% sales tax was extended for 20 additional years (LandVote® 2016). In 2016, Grand County approved a ten-year, .3% sales tax increase for open space, farmland and wildlife habitat (LandVote® 2016). The section that follows will describe a sales tax initiative used in Sonoma County, California to fund agriculture preservation and open space.

### *When to use a sales tax:*

Notably, Montana does not have state sales tax, so a sales tax ballot initiative would not be feasible in Montana under the current system.

## **Property Taxes**

### *What they are:*

Like sales tax measures, property tax measures can be added to ballots to direct revenue from property taxes towards particular community uses.

### *Where they have passed to support conservation work:*

Property taxes have been passed in Idaho in Boise (2001 and 2015) and Blaine County in 2008, raising \$23.5 million (LandVote® 2016).

### *When to use a property tax:*

Property taxes can be difficult to pass; it is unpopular to raise property tax when taxes are already high.

## **Resort Taxes, Lodging Taxes & Real Estate Transfer Taxes**

### *What they are:*

Resort taxes are sales taxes used specifically in resort areas (like ski resorts) to fund services provided in the resort area. Lodging taxes are consumer taxes on lodging charges for short-term stays (usually less than 90 consecutive days) at hotels, motels, private campgrounds, RV parks, and similar facilities. Real estate transfer taxes are taxes imposed on the transfer of title of real estate.

### *Where they have passed to support conservation work:*

A resort tax was passed in Whitefish, MT in 2015 that raised \$8 million in funding for watershed protection, wildlife habitat and recreation (LandVote® 2016). Big Sky, Montana passed a 3% resort tax in 1992 to fund tourism development, infrastructure, emergency services, parks and trails, and other services that provide for the public health, safety and welfare within the Big Sky Resort Area District (Big Sky Resort Tax 2017).

Lodging taxes benefitting conservation have been passed in Colorado (Parker, Frisco, Silverthorne, Eagle) (LandVote® 2016).

A real estate transfer tax was passed in Crested Butte, Colorado in 1991. The initiative implemented a 3% tax on property sales, to be used for open space, wildlife and wetlands. The tax raised \$31 million in conservation funds (LandVote® 2016).

### *When to use a resort, lodging or real estate transfer tax:*

Existing state legislation may limit municipal and county fiscal authority over taxes. In Montana, municipal fiscal authority is currently limited to property taxes may be limited by state legislation. Resort taxes are currently limited to four municipalities in Montana (Montana League of Cities and Towns 2017). Lodging taxes may already be allocated towards specific uses; for example, in Montana revenues collected from state lodging facility use taxes are used by the Department of Commerce for tourism promotion, while revenues from state lodging sales taxes are deposited to the General Fund (Montana Department of Revenue 2017). Real estate transfer taxes are currently not provided for in Idaho, Montana and Wyoming.

**For a full list of ballot measures passed in Idaho, Wyoming and Montana, refer to Appendix B.**

The approved fiscal authority of local communities differs by state, as do tax regulations and provisions (e.g. no sales tax in Montana). Furthermore, some of these measures may not make sense for smaller or more rural counties, where the given the size of the community, ballot measures would not raise enough money to acquire or protect significant amounts of land. Finally, the larger the community or the more growth is

impacting services across the community, the harder it can be for conservation to compete with other services such as affordable housing, healthcare, and education.

## **Impact Fees**

Impact fees are fees imposed by local governments on new development projects to pay for all or a portion of the costs of providing public services to the new development. Establishing or increasing impact fees, while unpopular among the real estate and development community, is a potential method of resolving the cost of community services issue listed above.

## **State and Federal Resources**

Other western states have state level funding dedicated for conservation. In Colorado, Great Outdoors Colorado (GOCO) invests a portion of Colorado Lottery proceeds towards parks, trails, wildlife, water and open space protection. Since 1992, the initiative has committed more than \$917 million towards more than 4,800 projects in 64 counties without any tax dollar support (Great Outdoors Colorado 2017). The Oregon Lottery system similarly dedicates 15% of lottery proceeds for parks, wildlife and watersheds (Oregon Lottery 2017).

Federal funding is also available for conservation at the state and local levels. Two of the biggest sources of funding are the Land and Water Conservation Fund (LWCF) and the Natural Resources Conservation Service (NRCS). In 2016, LWCF awarded \$900,000 to Montana in matching grant funding for city parks and conservation easements (Bozeman Daily Chronicle 2016). Over the past five decades, LWCF has awarded \$92 million in Wyoming, \$234 million in Idaho, and \$540 million in Montana (Land and Water Conservation Fund 2017).

NRCS, a unit of the United States Department of Agriculture (USDA) offers easement programs to help state and local communities protect agricultural and working lands. Agricultural Conservation Easement Program (ACEP), created through the 2014 Farm Bill, funds easements for working lands protection projects (Natural Resources Conservation Service 2017).

## **Community Based Programs**

In response to the challenges and limitations identified above, a growing number of communities across the country have developed innovative ways to address components of exurban sprawl outside of traditional land use planning tools. This paper explores two community-based solutions in order to provide context and lessons learned that could prove an interesting model for communities in the Northern Rockies to consider. The content of these spotlights is derived from web-based research and interviews with community members that have a deep history with the initiatives.

## **Community Spotlight: Sonoma County Agricultural Preservation and Open Space District**

The Sonoma County Agricultural Preservation and Open Space District (the District) is a publicly funded entity that operates outside of city and county government jurisdictions. The District was created in response to increasing exurban sprawl and a desire to preserve the rural and agricultural heritage of the area. The District's structure, scale and operations offer an interesting model for the Northern Rockies.

### **Description of Area**

Sonoma County is located just north of San Francisco in California. The County encompasses more than one million acres of land. The majority of the land is privately owned, supporting agricultural, scenic, and residential uses. Agriculture and tourism are two of the major economic drivers in the region. The agriculture industry in Sonoma is comprised of the large, established dairy and livestock industries as well as new, smaller organic farms. Attractive quality of life and job growth drove county population growth of 7.6% between 2000 and 2010 and the population is currently just over half a million people (County of Sonoma 2017).

Between 2000 and 2015, the median household income grew by 16% to \$61,807 (Sonoma County Economic Development Board 2016). In 2015, the county population was 494,431. Educational attainment for residents age 25 and older breaks down as follows: 12% Graduate/Professional degree, 21% Bachelor's degree, 26% Some College, 20% high school diploma (Sonoma County Economic Development Board 2016).

### **Background and Context for the District's Creation**

The Sonoma County Agricultural Preservation and Open Space District was created in 1990.

California State Law requires local governments to adopt a local General Plan (California's equivalent of a Comprehensive Plan) that includes at minimum seven elements: Land Use, Transportation, Housing, Conservation, Noise, Open Space and Safety (California Government Code Section 65302). In 1989, Sonoma County completed a new General Plan that targeted the creation of designated green space to act as community separators. The goal was to keep the cities in the county from growing together into one big "megapolis" (Andrea Mackenzie, interview, April 13, 2017). Community members wanted to preserve agricultural land and protect the greenbelt between the cities amidst increasing sprawl and growth.

By 1989, real estate speculation was increasing on the land outside of cities. Developers were waiting for annexation of lands by the adjacent cities to decrease the cost of providing water and sewage services to new housing units. Annexation is the process by which cities bring land under their jurisdiction. By purchasing adjacent land

outright for recreation or by protecting the resources through easements, the District could stop the speculation on the lands adjoining the city.

The Sonoma County General Plan designated areas that would preserve scenic values, open space, and agricultural land use. When the General Plan was adopted, it called for the formation of the Open Space District to implement the open space elements of the Plan. In 1990, the county put two measures on the ballot: one to form the district, and the other to fund the District (refer to the Funding section of this paper for more information on ballot initiatives).

### **About the District & How it is Structured**

The District was designed to function as a publicly funded land trust with a broad expenditure plan. Initially, the District focused its work on agricultural conservation easements and greenbelts. The District engaged willing landowners through easements that paid property owners to voluntarily forgo their development rights. In this way, the District operates outside of the land use planning process and avoids using eminent domain. Agricultural easements serve to protect agricultural land and jobs, and to assist farmers with the generational transfer of their operations. Protecting these lands also protected the greenbelts around the cities. Though not mandated by state legislation, all cities within Sonoma County have adopted urban growth boundaries to focus on infill development rather than sprawl.

The District uses a variety of land acquisition strategies to accomplish their work. Land intended for recreation purposes is purchased ‘in fee,’ meaning that it is owned outright by the District, whereas land for open space or habitat protection is obtained through easements where the landowner retains ownership of the land. When engaging in conservation easement transactions, the District works with the landowner to allow access to their property for six tours per year, to enable the public to experience the land their tax dollars helped protect. Visits to properties that grow local food or host dairy operations serve as educational tools and connect the community to local food sources.

Like most nonprofit land trusts, the District has a stewardship department that monitors its conservation easements and maintains long-term relationships with landowners. The District is also self-insured to protect itself from easement violations. The costs associated with long-term stewardship are built into an endowment.

The District’s board is a dependent board, meaning that the Board of Supervisors for the County serves as the Board of Directors for the District. The five board members are ultimately responsible for all decisions related to the Expenditure Plan, oversight of District operations, and long-term stewardship of District-owned land and easements. The Board of Supervisors is not a regulatory body, and maintains no police power. The District also has an advisory board comprised of 14 members from the agriculture, environment, real estate, and business communities, and a youth member.

The District was not created to be a land holding entity, so many of the properties and easements the District acquired have been turned over to City, County and State Parks Departments.

### **Strategy for Determining Which Areas to Protect**

The District completed an acquisition plan in 2006 and a strategic plan in 2008 to identify important places to protect and determine how to protect them. The initial conservation planning documents utilized ecoregional planning for wildlife habitat, natural resources, and water resources. The process assessed the productivity of local farmland and greenbelts where the cities would be growing, and utilized conservation GIS and decision support tools to determine important areas to protect before engaging in voluntary transactions with landowners. During this process, the District worked with technical advisors (scientists, academics, and conservation organizations) and researched existing studies. This information was synthesized into a graphically-rich document that was presented to the community.

Today, the District is working on a Sonoma County Vital Lands Initiative that will set the direction for the District for the next 15 years. The District is engaged in a variety of outreach methods to solicit public input in this process: they are holding community meetings to get community members' ideas for what they would like to see on the land; conducting polling; holding targeted meetings with major stakeholder groups, natural resources organizations, recreational trail user groups and thought leaders; and gathering data.

### **Evaluation & Monitoring**

The decision support tool that the District built to identify where to work does not support monitoring – monitoring takes place at a more local scale. To monitor the effectiveness of their work, the District uses regional programs like the Conservation Lands Network (CLN). The CLN is a biodiversity mapping tool from the Bay Area Open Space Council that tells decision makers what percentage of species' habitat or biodiversity goals are achieved through conservation of specific parcels of land (Bay Area Open Space Council 2017).

The District is also currently developing a study to determine the economic value of land conservation in Sonoma County. The study identifies the ecosystem service benefits of land conservation in quantifiable terms (e.g. the value of pollination and flood control) that illustrate to the community the importance of the conservation work.

### **Partnerships**

Over time, the District has built a strong mutually beneficial partnership with the Sonoma Land Trust. The Land Trust helps the District raise funding from private sources to leverage the sales tax money, while the District's mission extends beyond conservation easements to include greenbelts, recreation, urban open space, and other



natural resource protection. The District has also transferred easement properties to the Sonoma Land Trust. In addition to the Land Trust, the District also works with state wildlife agencies to help set priorities for where to conserve.

## **Funding**

Other than Boulder, Colorado, Sonoma County was the first open space district in the nation to be funded by a sales tax. The District was initially funded through a one-quarter percent sales tax. The sales tax required a 2/3 vote and passed in 1990.

The District was initially approved for a 25-year funding stream, but in 2006 the District went back to voters early to renew the sales tax. That ballot measure passed with 77% of the vote, extending the quarter-cent sales tax through 2031. Funding from the sales tax amounted to \$17-20 million per year for purchase of easements and land. In the second funding measure, the District worked to build in a provision that 10% of the money could be used for costs associated with maintenance and operation of the District.

In contrast to a parcel tax, the sales tax allows visitors and tourists to share some of the tax burden. Use of the sales tax structure to fund the District was also out of necessity; by 1990 in Sonoma County, it was hard for new initiatives to compete for a portion of the property tax.

In addition to funding open space and agricultural preservation work, the District sets aside money in an endowment so that when the sales tax measure sunsets they can still continue stewardship and easement monitoring and maintain the District's easements in perpetuity.

As indicated in the Partnerships section above, the District also partners with outside groups like The Sonoma Land Trust to leverage funding dollars for conservation.

## **Successes**

The Sonoma County Agricultural Preservation and Open Space District has protected over 100,000 acres of land since its creation. One third of that land is protected through agricultural conservation easements in the dairy belt, thereby supporting local economies. By 2001, the District helped to protect over a quarter of the upper Dry Creek watershed that supplies drinking water to over 600,000 people in three counties (Sonoma County Agricultural Preservation and Open Space District 2017).

The District began operating small farm leases on some of its easement properties in 1998, supporting new generations of farmers that otherwise would not be able to afford land to farm. The District also provides increased access to recreation and has created new regional parks & open space reserves in addition to adding trail connections to existing local and state parks. In 2016, the District worked with government agencies, nonprofits, The Trust for Public Land, and the Kashia Pomo Tribe to acquire a 688-acre

Reserve that is owned by the Tribe with a public-access trail. The District provides matching grant funding to cities within the County, and has helped attract money from federal and state sources for conservation in the community from federal and state sources.

The ballot initiative that renewed funding for the District in 2006 passed with a very high approval rate. The District has the support of the community and has become an integral part of the community fabric over time. Furthermore, the protection of open space in the county has resulted in increased land value, which has resulted in increased support for the District from real estate community.

### **Challenges**

Like any publicly funded entity, the District does not have as much money as it needs to accomplish all of its goals. The work therefore requires balancing competing priorities like protecting agricultural land versus protecting land for recreation uses.

### **Application to the Northern Rockies**

There are notable differences between Sonoma County and counties in the Northern Rockies. Sonoma County has a higher population than agricultural counties in Idaho, Montana and Wyoming. Whereas many of the counties in the Northern Rockies contain just one municipality, Sonoma County contains nine cities. Median household income is also higher than many rural parts of Idaho, Montana and Wyoming. Higher population and household income translate to higher spending, resulting in increased funding streams for the District's conservation work. There is also significantly less public land in Sonoma County than in many counties in the Northern Rockies.

Despite these differences, the Sonoma County Agricultural Preservation and Open Space District offers lessons for the Northern Rockies. The District was created out of pressure of exurban sprawl and a threat to rural character. Like many counties in the Northern Rockies, Sonoma County depends on open space, agriculture, and tourism for a thriving economy. The District has been successful in protecting and enhancing those facets of the community through conservation of open space and agricultural lands.

The special district structure creates a unique opportunity to work at a coordinated regional scale. Because the District operates outside of the traditional county and city government structure, they are able to make decisions about land use that would ordinarily be highly political without the same risk that county commissioners face. Long-term, dedicated funding streams provide the District with reliable financial resources that help ensure the General Plan is implemented and avoid some of the competing interests and economic incentives county governments face. And, because the District operates through the use of easements as opposed to zoning or regulations, they avoid tensions with private property rights.

The Sonoma County Agricultural Preservation and Open Space District serves as an interesting case study for how communities can respond to growth and development pressures outside of a traditional government or land trust structure. In the process, the District has protected open space, agricultural land, and natural resources and contributed to a thriving tourism and recreation economy.

## **Community Spotlight: Adirondacks Common Ground Alliance**

The Adirondacks Common Ground Alliance (CGA) is a consortium of private individuals, organizations, and public officials who are working together to create and maintain a common vision in the Adirondack Mountains of New York. Although the CGA was not created solely in response to exurban sprawl, it offers an interesting example of how a region facing similar resource use and jurisdictional tensions as the Northern Rockies has come together to find common ground.

### **Description of Area**

The Adirondack Park lies in the North Country of upstate New York in the Adirondack Mountains. At approximately 6 million acres of land, the Park is the largest publicly protected area in the contiguous United States (Adirondack Park Agency 2017). Uniquely, the park is made up of over 2.6 million acres of public land owned by the state of New York, with the remaining land in the Park under private ownership. 11% of the private land, or 681,000 acres, is under conservation or working forest easements. The Park receives around 9 million visitors a year.

Public land in the Park is managed by the State Department of Environmental Conservation, and private land uses within the Park have been regulated by the Adirondack Park Agency since 1972. This includes required reviews for new residential developments. Notably, when the Park acquires private forest tracts and makes them public, New York State continues to pay the taxes on the land as if it were still private.

The North Country has a distinctly rural character. Community members have worked to balance rural livelihoods with preserving the wild character and its land and wildlife. Historically a booming center for the timber industry, the central economies sustaining the region today are robust service and tourism industries and a growing small-farm agriculture sector. Around 130,000 people live year-round in the Park, although the population of the greater North Country region is over 400,000. While the region surrounding the Park is primarily rural, the Park sits within a day's drive of 90 million people.

### **Background and Context for Why Created**

In the early 2000s, community members, nonprofit organizations, and local industries were clashing over management of the park and the use of the resources within. Issues included whether to designate the park strictly a wilderness area for wildlife habitat, how much timber logging would continue to be permitted, and what recreation uses could be

permitted. Fighting among stakeholder groups was causing the entire region to be written off at the state government level because the parties could not agree on common interest or goals. This had the effect of decreasing funding and support for the region. Community leaders in the Park realized they would need to speak with one voice in order to be heard by state officials. They created the Common Ground Alliance (CGA) in order to establish issues they could agree upon, find common ground, and develop a unified voice for the region.

### **About the Initiative and How it is Structured**

The Adirondacks Common Ground Alliance is “a diverse network of dedicated people who focus on addressing issues that affect the whole Adirondack Park: its communities, institutions, people and environment” (Adirondack North Country Association 2017). Its members include businesses, park officials, conservation organizations, and community members. The Common Ground Alliance is made up of members from a variety of sectors including business, health, education, and conservation. The Alliance serves a convening role, rather than an implementing role. There is a core team of ten members that helps drive the larger Alliance, but the core team relies on the people of the park to do the work. The work of the Alliance is not driven by government or conservation groups.

### **Strategy for Determining What Areas to Protect**

At its creation, the Alliance worked with two experienced consultants to complete scenario based planning for the region. The consultants were members of the community who offered their services to the Alliance for free.

Over the course of a year, the consultants organized meetings throughout the park region. At each meeting, around 30 community members were invited to day-and-a-half long meetings. During the meeting, community members were assigned to a scenario that the consultants had created, ranging from a national park with no community access to a scenario with all private land. Community members were asked to read through the scenario and were required to mentally place themselves in that scenario to develop an outline of what would have to happen on the ground to achieve that end state. This participatory process was then replicated around the park. After all of the meetings were held, members were surveyed to indicate what scenario they could live with. Overwhelmingly, the majority of people wanted the middle of the road “sustainability” scenario. Refer to the ADK Futures website listed in Resources for more information on the scenario development process.

Out of this process, the community created a document dubbed “the Blueprint for the Blue Line” to articulate the common ground issues as well as agreed upon solutions. Every year, the Alliance holds a Common Ground Alliance Forum in the summer to convene CGA members. At the forum, hundreds of CGA members get together to discuss the blueprint, review current issues, and provide updates.

The Blueprint for the Blue Line is updated periodically. When planning the yearly forum, the core team sends a survey to Alliance members asking them to rank the topics they want to discuss at the Forum. Once at the Forum, CGA members participate in small breakout sessions facilitated by core team members to identify two or three key issues members would like to see change at a policy level. Those issues are then incorporated into the blueprint.

### **Evaluation & Monitoring**

The Common Ground Alliance does not have a formal monitoring and evaluation process. However, members provide updates on their work at the yearly forums. These updates are integrated into the scenarios as ‘evidence’ of different scenario framework events happening or not. The endstates, events, and evidence help build an understanding of progress towards the vision and will all be available via a custom software tool in the future (ADK Futures 2017).

### **Funding**

The Common Ground Alliance is not a funded effort. The CGA’s fiscal sponsor, the Adirondacks North Country Association, provides all logistics for the summer meeting as well as administrative support.

### **Successes**

The Common Ground Alliance serves as an example of an entirely community-driven initiative. The CGA attributes its success to the fact that the community members were the ones developing the scenarios and identifying which to proceed with, which built strong commitment to achieving that reality.

The Common Ground Alliance has strengthened relationships across the region, and has been successful in creating “one voice” for the region at the capital in Albany. The Alliance now serves as the first point of contact if government officials or businesses are interested in trying to accomplish something in the region. The CGA has built credibility within the community and has developed a reputation for an ability to work through obstacles.

In addition to improving relations and creating a common voice, several million dollars in smart growth grants have been awarded to communities in the Adirondack Park in recent years for projects promoting sustainable development. The communities attributed this increased funding to the success of the Common Ground Alliance.

### **Application to the Northern Rockies**

Population density is much higher in the Northeast, which has forced communities to face realities of growth and development earlier than in the Northern Rockies. While restrictions on land use already existed in the Adirondack Park region, the community was not satisfied with the regulations. The community came together to understand how

to make restrictions work more effectively, and decide together how they wanted to see the regulatory framework applied in the future. Because the Adirondack Park Agency already plays a major role in regulation, the initial efforts of the Common Ground Alliance were less about efforts to reduce sprawl, although exurban sprawl is an important target for conservation organizations in the community.

Like the Northern Rockies, the Adirondacks is a largely rural community with a mix of agriculture, tourism, local rural residents and amenity private landowners. Both communities face millions of visitors to nearby parks each year; in fact, the Adirondack Park receives more annual visitors than Yellowstone and Grand Teton National Parks combined (National Parks Service Visitor Use Statistics 2017). Amidst similar challenges over land management and resource use, the community has developed a common vision and is largely working together to influence policy and decision making around resource use in the Park.

## **Lessons Learned: Sonoma County and Adirondacks Common Ground Alliance**

Conversations with current and former General Managers of the Sonoma County District and with members of the Adirondacks Common Ground Alliance revealed important lessons learned from each effort. These lessons learned are captured in **Appendix C** at the end of this document.

## **Discussion and Recommendations**

Exurban sprawl is an important topic that requires more dedicated research and resources. The work presented here is not intended to be a comprehensive assessment or evaluation of the solutions for reducing exurban sprawl. A focused study with a larger number of case studies is needed to empirically assess the outcomes of community efforts towards reducing sprawl. However, this review indicates the need for a new model beyond traditional approaches and demonstrates the potential of community-based solutions.

### **Collective Vision & Scenario Planning**

In the Adirondack Park and Sonoma County, the communities engaged in a process to develop a collective vision for the region. Developing this common vision is a critical precursor to any coordinated effort to reduce exurban sprawl. Without a common vision, differing or competing objectives among land uses limits the effectiveness of planning efforts. Scenario planning is one way to enable communities to envision possible outcomes from different land use decisions. This work is often facilitated through consulting firms and nonprofit organizations that overlay regional projections such as expected population growth with natural resource and habitat projections to create different outcomes ranging from a 'no-action' scenario to outcomes based on various levels of protections.

The Sonoma County and Adirondacks case studies highlight the importance of finding messages that resonate with the community and engaging community members early in the visioning process to develop more buy-in. Both communities have been successful at attracting funding and support by communicating the importance of environmental protections to the community in regards to health, water quality, and water supply. These case studies also demonstrate the importance of engaging and building strong relationships with broad community sectors including health, business, agriculture, and economic development.

### **Need for Statewide Land Use Reform and Stronger Subdivision Controls**

Ultimately, strong community identity and common vision alone are not enough to protect resources. Some sort of funding or regulatory mechanism needs to exist to provide communities with the power to implement their shared vision and offer a counterweight to any perverse incentives towards development.

The Sonoma County Agricultural Preservation and Open Space District and the Adirondack Common Ground Alliance were both backed by regulatory frameworks at the state level that simultaneously sparked and enabled this growth planning. However, it is important to note that special districts like Sonoma County do not resolve how development takes shape on the ground. Subdivision controls are still needed to ensure that the development that does take place occurs wisely and with minimal impact. Comprehensively addressing exurban sprawl in the Northern Rockies would likely require land use reform at the state level in the long run.

While comprehensive statewide land use reform is unlikely in Idaho, Montana and Wyoming in the short term, enabling legislation should be reviewed in each state to determine the regulations regarding the formation of special districts. Upon initial review, it appears that in Montana, Title 7 Chapter 12 Part 21 of the Montana Code authorizes the creation of special improvement districts to acquire and improve land to be designated as public parks or open-space (Montana Code Annotated 2015). The authorizing legislation regarding the permitted creation of special districts in Idaho, Wyoming, and Montana should be further reviewed. Forming special districts similar to the Sonoma County Agricultural Preservation and Open Space District could provide counties with long-term, dedicated funding to protect resources in a coordinated fashion at scale.

### **Finding the Funding Mechanisms That Work for the Size of the Community**

Finding funding sources for open space, agricultural preservation, and conservation can prove challenging. As communities grow and require new infrastructure, competing against schools, healthcare, and other services for a portion of property tax or bond initiatives for conservation can become more difficult. Furthermore, many rural parts of Idaho, Montana and Wyoming are likely too small to generate enough revenue through ballot initiatives to substantially fund land acquisition work.



However, several of the micro and metropolitan communities in these states are growing rapidly enough to consider leveraging public financing opportunities. For smaller communities, the funding options outlined in above could prove important for the future. Given differences in state authorizing legislation and the unique characteristics of each municipality and county in the Northern Rockies, communities will need to determine what funding sources make sense for their community.

### **Coordination of Scale**

While it is important for the future growth vision to reflect the values and character of the individual community, these growth plans need to be coordinated at a regional, statewide, and even multi-state scale, particularly where habitat connectivity is concerned. Districts like the Sonoma County District are one way to achieve greater regional coordination. Communities can also work with statewide agencies such as State Departments of Wildlife or regional and statewide conservation nonprofits to increase coordination of habitat and open space protection.

### **Opportunity**

The Adirondacks and Sonoma County are two examples of communities that saw threats to rural character and community identity with increasing development and decided to act before it was too late. Other communities like Boulder, Colorado have taken the same approach. For many of these communities, setting aside land for scenic value, open space and recreation have resulted in increased property values and economic growth.

### **Affordability**

While open space and recreation opportunities can increase tourism, it can also lead to rising property values and increases in ‘amenity migration’ as more people want to live in these communities. This can create affordability issues for long-time residents who cannot afford increases in property taxes, or for low-income populations who cannot afford to rent or buy housing as values increase. How to maintain affordable housing in these areas is an important topic for further research and discussion. Impact fees and inclusionary housing regulations offer potential areas for further research.

### **Empowering Communities**

Many citizens do not know the regulations that govern land and resource use in their states and local communities, or the resources available to them regarding how to engage in land use planning and growth management decisions. Individuals may also lack understanding of how to finance open space protection or how to create common vision and goals for future growth as a community. Further work to educate and empower communities to intervene in this process is necessary and encouraged.

## Conclusion

Population growth in the Northern Rockies is increasing, particularly in exurban areas. Current unplanned growth is creating issues for people, wildlife, and the natural resources upon which they depend. Traditional land use planning tools have proven limited in their effectiveness. However, the examples and discussion presented here offer a vision for how communities can respond to increasing development and make a positive impact on how future growth will affect the landscape, wildlife, and community heritage that sustains them.

## References

- ADK Futures. 2017. Implementation Status. Available from <https://adkfutures.org/implementation-status-2/>. Accessed May 2017.
- Adirondack North Country Association. 2017. Common Ground Alliance Forum. Available from <https://adirondack.org/CGA>. Accessed May 2017.
- Adirondack Park Agency. 2017. About the Adirondack Park. Available from [https://www.apa.ny.gov/About\\_Park/index.html](https://www.apa.ny.gov/About_Park/index.html). Accessed May 2017.
- American Farmland Trust. 2010. Fact Sheet: Cost of Community Services. Available from <https://www.farmlandinfo.org/cost-community-services-studies>. Accessed May 2017.
- Bay Area Open Space Council. 2017. Conservation Lands Network. Available from <http://www.bayarealands.org/>. Accessed May 2017.
- Big Sky Resort Tax. 2017. Resort Tax. Available from <http://www.resorttax.org/index.php>. Accessed May 2017.
- Bozeman Daily Chronicle. 2016. Montana to get \$900,000 in LWCF money. Available from [http://www.bozemandailychronicle.com/news/environment/montana-to-get-in-lwcf-money/article\\_80e78ded-cb42-5875-b206-10306b1130a0.html](http://www.bozemandailychronicle.com/news/environment/montana-to-get-in-lwcf-money/article_80e78ded-cb42-5875-b206-10306b1130a0.html). Accessed May 2017.
- Brown DG, Johnson KM, Loveland TR, Theobald DM. 2005. Rural Land Use Trends in the Conterminous United States, 1950-2000. *Ecological Applications* **15**:1851–1863.
- Brown, D. G., C. Polsky, P. Bolstad, S. D. Brody, D. Hulse, R. Kroh, T. R. Loveland, and A. Thomson, 2014: Ch. 13: Land Use and Land Cover Change. *Climate Change Impacts in the United States: The Third National Climate Assessment*, J. M. Melillo, Terese (T.C.) Richmond, and G. W. Yohe, Eds., U.S. Global Change Research

Program, 318-332.

California Government Code Section 65302.

Coupal, R., D.T. Taylor, and D. McLeod. 2002. The Cost of Community Services for Rural Residential Development in Wyoming. Laramie, Wyoming: Ruckelshaus Institute of Environment and Natural Resources.

County of Sonoma. 2017. Population growth. Available from <http://sonomacounty.ca.gov/CAO/Public-Reports/About-Sonoma-County/Population-Growth/>. Accessed May 2017.

Glennon MJ, Kretser HE, Hilty JA. 2014. Identifying Common Patterns in Diverse Systems: Effects of Exurban Development on Birds of the Adirondack Park and the Greater Yellowstone Ecosystem, USA. *Environmental Management* **55**:453–466.

Great Outdoors Colorado. 2017. About Us. Available from <http://www.goco.org/about-us>. Accessed May 2017.

Goad EH, Pejchar L, Reed SE, Knight RL. 2014. Habitat use by mammals varies along an exurban development gradient in northern Colorado. *Biological Conservation* **176**:172–182.

Hamerlinck JD, and Gribb WJ. 2016. Local Government Land-Use Planning in Wyoming: Purpose, Process, and Benefits. Wyoming Open Spaces Initiative. University of Wyoming.

Hamerlinck JD, Lieske SN, Gribb WJ. 2013. Understanding Wyoming's Land Resources: Land-Use Patterns and Development Trends. Wyoming Open Spaces Initiative. University of Wyoming.

Hamilton CM, Baumann M, Pidgeon AM, Helmers DP, Thogmartin WE, Heglund PJ, Radeloff VC. 2016. Past and predicted future effects of housing growth on open space conservation opportunity areas and habitat connectivity around National Wildlife Refuges. *Landscape Ecology* **31**:2175–2186.

Hansen AJ, Knight RL, Marzluff JM, Powell S, Gude PH, Jones K. 2005. Effects of Exurban Development on Biodiversity: Patterns, Mechanisms, and Research Needs. *Ecological Applications* **15**:1893–1905.

Headwaters Economics. 2015. Home Construction in the High Divide. Available from <https://headwaterseconomics.org/economic-development/local-studies/high-divide/>. Accessed May 2017.

Headwaters Economics. 2017. Federal Lands in the West: Liability or Asset? Available from <https://headwaterseconomics.org/public-lands/federal-lands-performance/>. Accessed May 2017.

Idaho Land Use Analysis. 2010. Boise State University, University of Idaho, Idaho Smart Growth, the Idaho District Council of the Urban Land Institute, and the Idaho chapter of the American Planning Association.

Kretser HE, Sullivan PJ, Knuth BA. 2008. Housing density as an indicator of spatial patterns of reported human-wildlife interactions in Northern New York. *Landscape and Urban Planning* **84**:282–292.

Land and Water Conservation Fund. 2017. Land and Water Conservation Fund in Your State: Montana. Available from <http://www.lwcfcoalition.org/montana.html>. Accessed May 2017.

LandVote®. 2016. The Trust for Public Land.

Montana Code Annotated 2015. 7-12-4102.

Montana League of Cities and Towns. 2017. Resolution #2016-17 Local Option Tax. Available from <http://www.mtleague.org/resolution-2016-17-local-option-tax/>. Accessed May 2017.

Montana Department of Revenue. 2017. Lodging Facility Use and Sales Taxes. Available from [https://revenue.mt.gov/home/businesses/misctaxes\\_fees#Lodging%20Facility%20Use%20and%20Sales%20Taxes](https://revenue.mt.gov/home/businesses/misctaxes_fees#Lodging%20Facility%20Use%20and%20Sales%20Taxes). Accessed May 2017.

National Parks Service Visitor Use Statistics. 2017. Park Reports. Available from <https://irma.nps.gov/Stats/Reports/Park/GRTE>. Accessed May 2017.

Natural Resources Conservation Service. 2017. Easements. Available from <https://www.nrcs.usda.gov/wps/portal/nrcs/main/mt/programs/easements/>. Accessed May 2017.

Odell E and Knight RL. 2001. Songbird and Medium-Sized Mammal Communities Associated with Exurban Development in Pitkin County, Colorado. *Conservation Biology* **15**:1143–1150.

Oregon Lottery. 2017. About Us. Available from <https://www.oregonlottery.org/about/oregon-lottery-information/how-lottery-funds-are-allocated>. Accessed May 2017.

- Oregon Metro. 2016. Urban Growth Boundary. Available from <http://www.oregonmetro.gov/>. Accessed May 2017.
- Pejchar L, Morgan PM, Caldwell MR, Palmer C, Daily GC. 2007. Evaluating the potential for conservation development: Biophysical, economic, and institutional perspectives. *Conservation Biology* **21**:69–78.
- Reed SE, Hilty JA, Theobald DM. 2014. Guidelines and Incentives for Conservation Development in Local Land-Use Regulations. *Conservation Biology* **28**:258–268.
- Sonoma County Agricultural Preservation and Open Space District. 2017. History and Achievements. Available from <http://www.sonomaopenspace.org/who-we-are/history-and-achievements/>. Accessed May 2017.
- Sonoma County Economic Development Board. 2016. 2016 Sonoma County Local Economic Profile.
- Smart Growth America. 2017. What is Smart Growth? Available from <https://smartgrowthamerica.org/our-vision/what-is-smart-growth/>. Accessed May 2017.
- Theobald DM. 2005. Landscape patterns of exurban growth in the USA from 1980 to 2020. *Ecology and Society* **10**.
- Theobald DM. 2014. Development and Applications of a Comprehensive Land Use Classification and Map for the US. *PLoS one* **9**:e94628.
- United States Census Bureau. 2012. Patterns of Metropolitan and Micropolitan Population Change: 2000 to 2010. Available from <https://www.census.gov/library/publications/2012/dec/c2010sr-01.html>. Accessed May 2017.
- United States Census Bureau. 2011. Population Distribution and Change: 2000 to 2010. Available from <https://www.census.gov/prod/cen2010/briefs/c2010br-01.pdf>. Accessed May 2017.
- Wyoming Game and Fish Department. 2017. Leading Wildlife Conservation Challenges: Rural Subdivision and Development. Wyoming State Wildlife Action Plan.

## Appendix A

### Resources

#### Additional Websites and Organizations for Reference

##### Land Use Planning

- General
  - American Planning Association:  
<https://www.planning.org/divisions/planningandlaw/propertytopics.htm#Tax>
  - Pace Law: Land Use Law Center:  
<https://appsrv.pace.edu/gainingground/>
- West & Rocky Mountain Region
  - Rocky Mountain Land Use Institute:  
<http://www.law.du.edu/index.php/rmlui>
  - City of Boulder's Residential Growth Management System:  
[https://www.municode.com/library/co/boulder/codes/municipal\\_code?nodeId=TIT9LAUSCO\\_CH14REGRMASY](https://www.municode.com/library/co/boulder/codes/municipal_code?nodeId=TIT9LAUSCO_CH14REGRMASY)
  - The Western Planner:  
<https://www.westernplanner.org/organization/>
  - Comprehensive Review of Oregon's Land Use Planning History: <https://www.westernplanner.org/land-use-articles/2016/10/29/40-years-on-the-oregon-land-use-trail>
- Montana
  - Montana Smart Growth Coalition:  
<http://meic.org/issues/montana-landscapes/subdivisions-and-planning/montana-smart-growth-coalition/>
  - Montana Fish, Wildlife & Parks Recommendations for Subdivision Development in Montana:  
<http://fwp.mt.gov/fishAndWildlife/livingWithWildlife/buildingWithWildlife/subdivisionRecommendations/documents.html>
  - Bitterrooters for Planning:  
<http://www.bitterrooters4planning.com/>
- Wyoming
  - Overview of Wyoming Land-Use Planning Laws and County Regulations:  
<http://www.uwyo.edu/toolkit/overview-regulations/>

- Wyoming Open Spaces Initiative:  
<http://www.uwyo.edu/haub/ruckelshaus-institute/initiatives/open-spaces/index.html>
- Wyoming's State of the Space:  
<https://www.uwyo.edu/haub/files/docs/ruckelshaus/open-spaces/2009-state-of-the-space.pdf>

## Conservation Easements & Land Trusts

- National:
  - The Land Trust Alliance:  
<https://www.landtrustalliance.org/what-you-can-do/conserving-your-land/questions>
- Regional:
  - Land Trusts Operating in Idaho:  
[http://findalandtrust.org/states/idaho16/land\\_trusts#statewide](http://findalandtrust.org/states/idaho16/land_trusts#statewide)
  - Land Trusts Operating in Montana:  
[http://findalandtrust.org/states/montana30/land\\_trusts#statewide](http://findalandtrust.org/states/montana30/land_trusts#statewide)
  - Land Trusts Operating in Wyoming:  
[http://findalandtrust.org/states/wyoming56/land\\_trusts#statewide](http://findalandtrust.org/states/wyoming56/land_trusts#statewide)
  - Idaho Coalition of Land Trusts:  
<http://www.idaholandtrusts.org/>
  - Montana Association of Land Trusts:  
<http://www.montanalandtrusts.org/>
  - The Heart of the Rockies Initiative:  
<http://heart-of-rockies.org/>

## Conservation Finance, Ballot Initiatives, Etc.

- TPL LandVote Database:  
landvote.org
- Conservation Finance Network:  
<http://www.conservationfinancenetwork.org/>
- Idaho Boise Foothills Campaign:  
<http://www.blackhillsradio.com/saving/foothills/campaign.html>
- Example of an interesting use of property tax funds for conservation in Washington State:  
<https://www.co.pierce.wa.us/1477/Conservation-Futures-Program>



## Adirondacks Common Ground Alliance

- ADK Futures:  
<https://adkfutures.org/>
- Adirondacks North Country Association:  
<https://adirondack.org/CGA>
- About the Adirondack Park:  
[https://www.apa.ny.gov/About\\_Park/index.html](https://www.apa.ny.gov/About_Park/index.html)

## Appendix B

### Conservation Ballot Initiatives Passed in Idaho, Montana and Wyoming

| State | Jurisdiction Name      | Jurisdiction | Date    | Description   | Finance Mechanism | "Other"    | Purpose  | Conservation Funds Approved |
|-------|------------------------|--------------|---------|---|-------------------|------------|--|-----------------------------|
| ID    | Boise                  | Municipal    | 5/22/01 | Foothills Levy; Property tax increase for preserving land in the Boise foothills as open space and natural areas  | Property tax      |            | Open space   | \$10,000,000                |
| ID    | Blaine County          | County       | 11/4/08 | 2-year, .0014 mill property tax increase for open space preservation  | Property tax      |            | Open space, farmland, watershed protection                                       | \$3,500,000                 |
| ID    | Boise                  | Municipal    | 11/3/15 | 2-year, property tax levy for the protection of habitat, water quality and natural areas  | Property tax      |            | Open space, wildlife habitat, watershed protection                               | \$10,000,000                |
| MT    | Gallatin County        | County       | 11/7/00 | Bond issue to purchase land and conservation easements  | Bond              |            | open space, ranch land, farmland   | \$10,000,000                |
| MT    | Great Falls            | Municipal    | 11/4/03 | Bond for soccer fields  | Bond              |            | Recreation   | \$2,500,000                 |
| MT    | Helena                 | Municipal    | 11/5/96 | Open Space Bond, Bond for Parks, Recreation, Open Space, Trails   | Bond              |            | open space, parks, recreation, trails  | \$4,150,000                 |
| MT    | Gallatin County        | County       | 11/2/04 | Bond for open space   | Bond              |            | Open space   | \$10,000,000                |
| MT    | Missoula               | Municipal    | 11/7/95 | Bond issue for open space acquisition   | Bond              |            | Open space, recreation   | \$5,000,000                 |
| MT    | Missoula County        | County       | 11/7/06 | Bond for the preservation of open space   | Bond              |            | Open space   | \$10,000,000                |
| MT    | Ravalli County         | County       | 11/7/06 | Bond to purchase farmland and open space  | Bond              |            | Open space, farmland   | \$10,000,000                |
| MT    | Lewis and Clark County | County       | 11/4/08 | Bond for the preservation of open space and farmland  | Bond              |            | Farmland, open space, wildlife habitat, watershed protection, forest, recreation | \$10,000,000                |
| MT    | Bozeman                | Municipal    | 11/6/12 | Bond for open space, parks and trails   | Bond              |            | Open space, parks, trails, recreation  | \$7,500,000                 |
| MT    | Whitefish              | Municipal    | 4/28/15 | 10-year, 1 percent resort tax increase to purchase conservation easement in and around Haskill Basin  | Other             | Resort tax | Watershed protection, wildlife habitat, recreation                               | \$8,000,000                 |
| MT    | Hamilton               | Municipal    | 3/21/17 | Bond for parkland acquisition   | Bond              |            | Parks, recreation  | \$1,350,000                 |
| WY    | Teton County           | County       | 5/8/01  | Special Purpose Sales Tax; Portion of a 1% specific-purpose excise tax increase for land acquisition and development of a natural park and playing fields | Sales tax         |            | parks, recreation  | \$2,000,000                 |
| WY    | Laramie County         | County       | 11/4/03 | Proposition 3, Portion of 1% sales tax increase for Greater Cheyenne Greenway   | Sales tax         |            | greenways  | \$1,000,000                 |

## Appendix C

### Lessons Learned: Sonoma County Agricultural Preservation and Open Space District and Adirondacks Common Ground Alliance

Interviews with current and former General Managers of the Sonoma County Agricultural Preservation and Open Space District as well as a member of the Adirondacks Common Ground Alliance core team revealed lessons learned from their decade-long engagement with these initiatives. These lessons are recorded here.

*The importance of working with all different user groups.* The Sonoma County District worked to build a coalition with strong business and agriculture support. 'Build it with them - don't think you can do it on your own.'

*The importance of community support.* Ballot measures that require at least a 2/3 vote to pass will not pass unless the community believes in your vision. You need to engage those that think the initiative is a waste of taxpayer money – build relationships with those people, build on connections in common, connect with people that do not understand your organization well. Understand the issues that are important to them and what they care about. Rather than 'winning people over,' it is important to gain trust and build relationships.

*The importance of starting education campaigns early.* The Sonoma County District former General Manager emphasized starting education campaigns and polling two years ahead of the measure and recommended having a highly visible conservation plan that is appealing to the public. She also recommended traveling around the District with that conservation plan building support.

*Importance of maintaining connection to constituents over time.* By the time the Sonoma County District was returning for reauthorization, an entirely new demographic and population lived in the County. The District had to make their case to this new audience. The interview emphasized the importance of being seen as part of the fabric of the community and what makes the community remain economically healthy

*The importance of communicating ecosystems services.* The District has worked over time to communicate the value of open space and healthy landscapes to public health, water, transportation. Embedding the message that open space is a form of infrastructure and is as important as roads and schools and bridges proved invaluable for the District.

*The importance of relationships with local officials.* Interviewees emphasized building the political constituency with county commissioners and local city council members. They recommended finding several representatives that agree with your mission and hold events in their communities.

*The importance of money for maintenance and operations.* The Sonoma County District did not include a provision to allow money to be used for maintenance and operations in the first sales tax, and made sure to do so in the second provision.

*The importance of communicating costs.* The Sonoma County District pointed to neighboring Districts in California that have excelled at passing financing districts and communicating to residents within that district the importance of financing mechanisms to maintaining mountain ranges, creeks, valleys and open space. These Districts do polling to determine which areas are more inclined to pass taxes and stack financing mechanisms across areas in the District to cover costs.

*The importance of language.* In the initial meetings at the creation of the Common Ground Alliance, many of the initial barriers and issues were a matter of agreeing on language and subtext. The CGA wrote down what those issues were and tried to agree upon the language.

*The importance of clear roles and expectations.* Having clear bylaws and early definition of roles and expectations for both the CGA core team and the broader alliance would have been helpful.

*The importance of starting with low-hanging fruit.* CGA members emphasized beginning with issues that everyone in the group is concerned about, and starting there.

*The importance of listening.* Core team members emphasized the importance of putting aside how strongly your individual organization cares about an issue when working to find common ground.

*The importance of having ambassadors from all sectors.* The interviews emphasized finding reasons why local government or recreational organizations or business community members would be willing to come to the table with you to talk about better options for development. You may not get exactly where you want to be with it, but if you're further along than the original proposed development, that's more of a win. Coming to agreement together also makes the job of local officials easier.

*The importance of members that can be dedicated to policy.* The Common Ground Alliance appointed someone on the core team to be dedicated to the Albany political scene. They chose someone retired that was not associated with a single organization and had time and capacity to engage.

*The importance of trust.* This work is all about trust and conflict resolution.