

YALE PROGRAM ON STRATEGIES FOR THE FUTURE OF CONSERVATION

Optimizing Private Land Conservation and Public Land Use Planning/Regulation

Report of the 2010 Berkley Workshop

Held at the Pocantico Conference Center of the Rockefeller Brothes Fund
July 2010

Bradford Gentry, J. Daniel Oppenheimer and Randal A. Strobo



**Yale F&ES Publication Series
Report Number 27**

SERIES EDITOR	Bradford S. Gentry
REPORT TITLE	Optimizing Private Land Conservation and Public Land Use Planning/Regulation
REPORT AUTHORS	Bradford Gentry, J. Daniel Oppenheimer and Randal A. Strobo. Prepared with the assistance of Gina Schrader.
REPORT SPONSOR ACKNOWLEDGEMENT	Yale Program on Strategies for the Future of Conservation The Yale Program on Strategies for the Future of Conservation was started in 2005 with a most generous gift from Forrest Berkley (Yale '76) and Marcie Tyre. Additional support has also been received from the Overhills Foundation. The Yale students, faculty and staff involved in the program are extremely grateful for this support.
DATE OF REPORT	April 2011
PAGE LAYOUT	Dorothy Scott, North Branford, CT
COVER DESIGN	Andrea Porto, Yale Printing and Publishing Services
COVER IMAGE	Courtesy of USDA Natural Resources Conservation Service.
PRINT ON DEMAND	YaleYPPS, 100% recycled paper
DISCLAIMER	The research, opinions and finding contained in this report are those of the authors and do not necessarily reflect the positions of institutions with which they are affiliated.
TO OBTAIN COPIES	A pdf of this report can be downloaded free of charge, and bound copies can be ordered, at the Yale School of Forestry & Environmental Studies Publication Series website: www.yale.edu/environment/publications

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Introduction

The tradition among most private land conservation organizations is to avoid engagement in political processes around land use planning and regulation. Rather, their focus has been on acquiring ownership of priority sites identified by the organization itself.

When money and sites were plentiful, this focus on “bucks and acres” was extremely successful. An area larger than the state of New York is now protected by land trusts across the country. The land trust community has a remarkably bipartisan base of support across many localities.

As money for land conservation has become harder to find and the competition for land across uses has become more intense, however, more questions are being raised about whether and, if so how, the private land conservation community should engage with public land use planning and regulatory processes. How should priority sites for protection be identified – by the land trust alone or in collaboration with local communities? How might the political organizing in support of ballot measures or the adoption of zoning requirements be mutually supportive? Where have local land use regulations been designed in collaboration with or to support private land conservation efforts? How far can regulatory measures go toward permanent land conservation? How should the costs of private land conservation be compared to those of public land use planning/regulation? What capabilities do land trusts need in order to participate in more public processes? How might the private land conservation and public land use planning/regulation communities best leverage each others’ expertise in pursuit of their shared goals?

The purpose of this workshop is to explore these differences in experience and perspective in pursuit of effective new ways forward. The program was developed by:

- Brad Gentry and Rose Harvey at the Yale School of Forestry & Environmental Studies
- Rand Wentworth at the Land Trust Alliance
- John Nolon and Jessica Owley-Lippmann at Pace Law School

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Optimizing Private Land Conservation and Public Land Use Planning/Regulation

Workshop Summary

Bradford S. Gentry

Yale School of Forestry & Environmental Studies

Themes from the discussion

Over the course of the workshop, two broad themes emerged:

- The choice of private or public land conservation is not usually an either/or decision – in fact, there are many situations in which they are mutually reinforcing
- The right balance between the two is driven by mission and context

If a land trust's mission is limited to accepting donated conservation easements, then the scope for its engagement in public land use planning and regulation is quite limited. If, however, a land trust has a broader mission – such as building sustainable, healthy communities over the long term – then it will eventually need to engage in public processes affecting land use.

“Is the mission of land trusts to do transactions or to protect land? If the latter, then we need to be more open-minded about the tools we use.” Rand Wentworth, Land Trust Alliance

Contextual differences stem from both the external and internal circumstances in which a land trust operates. Regional political differences have major impacts – if there are no public land use processes or if they do not function well, it makes little sense for a land trust to participate directly (but they might help catalyze community visioning activities). If they exist and are effective, then many more opportunities for engagement exist. The regional “ecology of organizations” will also shape a land trust's options. If strong land use advocacy groups exist, then the niche for land trusts is smaller. If they do not, then the land trust may well need to offer a regional voice in support of land conservation in order to meet its mission. Finally, the land trust's

existing resources and skill sets will shape the scope and timing of any such engagements. All-volunteer land trusts may want to start by providing information on conservation priorities. Larger, regional land trusts may move to lobbying and litigation as well.

If a land trust chooses to engage in public land use processes – as an increasing number appear to be – then they can do so along a spectrum of possibilities, from information to litigation. For example, a land trust might seek to:

- Build a constituency to support land conservation as part of a healthy, sustainable community – as several workshop participants noted: “Ultimately, it’s all about people”
- Inform the public land use planning process – as land trusts often have better information on priority sites for conservation than most municipal or county planning departments
- Push for zoning rules/incentives that allow/encourage conservation development or create new incentives for land conservation or even prevent development inconsistent with the land trust’s mission
- Engage in the question of “where should development happen” as a way to protect sites where it should not

“How do you keep the countryside open? Send development back into the cities.” Tom Daniels, University of Pennsylvania

Clearly there are risks a land trust should it decide to move from just acquisition to a broader engagement with public land use processes. Over the course of the discussions, however, it seemed that those risks may be smaller or more manageable than is often thought – particularly if one sees the opportunities for action along the spectrum noted above. In fact, the questions appear to be more ones of changes in culture, focus and skill sets: will a land trust’s board let it explore such public engagement or not? Can a land trust focus on both “deals” and “planning/regulation”? What additional skills and resources would be needed to move into this arena? As many land trusts see their acquisition funding decline and as they move from only acquisition to more stewardship of lands, there appears to be a greater willingness to try out public engagement as fits their mission and context.

Why is optimizing private and public land conservation such an important question now? The participants came back time and time again to the fact that now seems like a truly remarkable opportunity to influence public land use planning and regulation given that:

- The economy is being remade, creating many opportunities to change traditional models of development and conservation toward more sustainable, integrated approaches; and

- Land trusts are remarkably well positioned to have a large, positive impact on the future development of their communities given the “civic capital” they have built and are working to maintain over time.

“Land trusts are one of the few types of organizations that can deliver on the ‘poetics of place.’” Laura Hansen, J. M. Kaplan Fund

Identifying priority sites

On the possible intersections between land trust efforts to identify priority sites for conservation and public land use planning, several participants noted that land trusts are often better informed and have more resources on these topics than county or municipal planners. This creates real opportunities for land trusts to contribute their knowledge to local planning efforts over time. Or, if the government is not effectively conducting land use planning, a land trust might choose to build on its civic capital and help catalyze a community or regional visioning process.

“Land trusts have a democratic obligation to lend their voices to public discussions about the use of land in their communities.” Chris Miller, Piedmont Environmental Council

Visualization of land use options and their impacts is key to engaging with the public – words alone are nowhere near as effective. New digital mapping and community participation software is making it much easier to bring possible futures to life – thereby stimulating more meaningful community/public discussion.

“Sustainable development requires communities to decide where they want to develop and where they do not.” John Nolon, Pace Law School

Assembling inventories of community assets – historical, ecological – offer huge opportunities for community engagement, education and articulation of a local land ethic. As Chris Miller from Piedmont Environmental Council put it: “Once citizens started collecting information on historical sites, they found themselves in an irresistible ‘process of discovery.’”

Finally, the increasingly well documented finding that parks and other conserved lands almost always increase the value of surrounding properties and the community in which they are located can be used to help build support for land conservation in these difficult economic times. This is particularly true as the real estate community seeks new models for profitable development.

“The current economic crisis is a remarkable opportunity to influence the future culture of development – away from sprawl and toward attractive, livable cities/villages.” Steve Maun, The Leyland Group

Building political constituencies

The campaigns to pass ballot measures for funding land conservation are seen by many as the “entry portal” for land trusts into local politics. While different coalitions will support funding for voluntary land acquisitions or involuntary regulation of land uses, many aspects of such campaigns are similar, including the:

- Research that needs to be done on voters and their core goals
- Organization that needs to be developed to get the message out to voters
- Opponents of either new public spending or regulation
- Supporters of either new public spending or regulation

“Conservation groups have to win the urban core in order to win ballot measures . . . communities of color regularly vote yes on funding for land conservation.” Hazel Wong, The Nature Conservancy

When land trusts participate in a ballot measure campaign, their cultures often change – making them more willing to engage in other public land use processes. In addition, the polling and message-testing work helps land conservation organizations build a “new lexicon” for connecting land conservation to voters’ most fundamental values.

“When reaching out to new audiences/communities, do not go out to convince them of your agenda, but rather to listen to theirs.” Tony DeFalco, Center for Diversity and the Environment

One of the key questions posed is, having built these broad constituencies of support for conservation, how can they best be maintained once the election is over or the crisis is averted? Doing so may create major opportunities for “mature” land trusts – i.e., those more focused on stewardship of the lands they have acquired than on the acquisition of new properties. If coalitions are built around meeting peoples’ core values over time, then land stewardship in ways that do so will be a key aspect of efforts to keep people engaged in land conservation over the long term.

“Working in built environments allows us to welcome new people into the conversation . . . not just to keep people out. Conservation must be approached from the landscape level and go hand-in-hand with building better communities.” Gene Duvernoy, Cascade Land Conservancy

Promoting conservation through public planning/zoning

Efforts to use zoning incentives or requirements to promote land conservation have shown that it is often difficult to accomplish, but can work well. Often, this is done by using a package of tools, such as: transferable development rights programs, urban growth boundaries and low-density zoning. For example, conservation design uses assessments of community assets to inform planning processes and zoning codes to incentivize conservation subdivisions. Public planning and zoning efforts may also be paired with regional acquisition strategies to protect the priority conservation sites identified. In many cases, the use of public acquisition funding is conditioned on applying it to conservation-worthy properties identified in local land use plans. The overarching goal is to achieve as much legal permanence as possible by combining the strengths of the different approaches.

“Combining money and law can lead to great conservation results.” Kim Elliman, Open Space Institute

As one thinks about land conservation on the regional scale, several other potential areas of work for land trusts arise. These include helping to:

- Identify the areas where development should occur
- Channel development into cities, villages and other population centers
- Build and maintain sustainable rural economies in protected landscapes

Engaging on broader topics such as these will require many land conservation organizations to think and work on a larger scale than they now do, as well as to expand their relationships with new organizations – from developers and environmental justice communities, to economic development agencies. Land trusts will need to be careful that they do not fall prey to mission creep or dilution. They can do so by staying focused on the direct linkage of these broader activities to better conservation, while emphasizing partnerships with other organizations that are better equipped to handle particular tasks.

“Conserved parcels are always at risk from adjacent development. Land owners should protect their investments by supporting more stringent controls on development.” Peter Stein, Lyme Timber

Permanence

One of the more surprising parts of the workshop was the discussion on permanence – as there was much more agreement than many participants had expected. It was quickly conceded that neither private land conservation nor public land use regulation was permanent – both can be changed by governments, both need to adapt to changing climatic and other external circumstances. Rather, both were seen

as ways to preserve options for future generations – for as long as is possible given local circumstances.

“In the land use planning community, permanence is about empowering communities to manage their lands.” David Kooris, Regional Plan Association

From there, the discussion moved to the conclusions that permanence “is all about the people” and that “laws don’t protect land, people do.” The continuing need to organize and sustain coalitions in support of land conservation brought the discussion back to the opportunities that now exist for land trusts to play a major role in this effort. Particularly, as land trusts increase their stewardship activities, new opportunities arise to learn from Native American stewardship traditions, as well as the focus of modern land use planning efforts to empower communities. On-going efforts to inform and provide value to communities through expanded stewardship, educational and engagement programs will be central to permanent land conservation – or at least to maintaining sustainable, resilient communities and land uses.

Costs and timing

Both private land conservation and public land use planning/regulation take money and time. How much of each varies dramatically from case to case, location to location and time to time. As a result, few broadly applicable conclusions on relative costs and timing arose from this session. One exception was the opportunity for land trusts to share information – particularly from their mapping efforts – with cash-strapped county and municipal planning departments.

Rather, the discussion focused on how to choose among the full range of private and public conservation tools that are available. In some instances, the scale of the conservation effort will suggest the tools to be used. For example, the preservation of a single lot to prevent it from being developed lends itself to acquisition tools, while the protection of a large landscape is often best accomplished through a combination of planning, regulatory and acquisition approaches.

In addition, a graduated series of steps were suggested for land trusts to help them think about how best to engage in the public realm:

- Engage and plan first – to know where to focus money and time
- Prioritize acquisitions within the plan – focus first on prime areas threatened by development, then on areas where public access is desired
- Educate the public – to raise awareness of how land conservation helps communities achieve their core values, as well as how to engage in private and/or public conservation efforts
- Provide a forum – in which citizens can share their hopes and fears for their community and relate those concerns to choices on land use

- Build diverse coalitions – to support conserving land, building urban parks/playgrounds, moving development to where it should be occurring in cities and villages and strengthening rural economies
- Support sustainable development in the “right” places – to create opportunities for some developers to support, or at least not to oppose, conservation in other locations

“The two big trends are climate change and the growth of cities – the conservation community needs to engage on both.” John Nolon, Pace Law School

In the end, the discussion echoed that of the first session – land trusts should choose between or combine acquisition and planning/regulation tools as best fits their mission and context.

Risks and opportunities

Several of the most active periods for land conservation in the past have occurred during and just after financial crises – many participants believe that now is such a moment as well. As such, the final session focused on the risks and opportunities facing land trusts as they decide how best to optimize the use of their traditional acquisition tools with the planning and regulatory approaches used by local governments and influenced by a variety of advocacy groups.

Among the risks to land trusts, the following were noted:

- Alienating members and donors who do not believe in public land use planning or regulation
- Alienating landowners who feel threatened by tighter regulations and want a neutral party (outside of local politics and advocacy) to negotiate a confidential conservation transaction
- Putting themselves in harm’s way – politics is often a dirty business posing real risks
- Failing to execute – promising more than they are prepared to deliver or promising political/regulatory outcomes over which they do not have direct control
- Adding new skills around stewardship, cultural competency, planning and regulation – how fast and what impacts on organizational culture? Will land trusts spread themselves too thinly? Can they cover the additional annual costs?
- Knowing when to fight in support of their mission and being willing to do so – not being intimidated
- Becoming irrelevant if they do not engage in public land use planning processes – “if you are not at the table you are on the menu . . .”

“We should move our thinking from permanence to sustainability – of our communities on the world stage.” Gene Duvernoy, Cascade Land Conservancy

The opportunities identified for land trusts included the following:

- Prioritizing – with broader public support – the lands that should be conserved
- Addressing concerns about the “democracy deficit” posed by private land trusts making their own decisions about what is in the best interests of the “public” by contributing to public planning processes and reflecting public priorities in their work
- Developing a new “lexicon” for connecting the benefits of land conservation to a wider range of communities
- Building relationships with new communities, support groups and donors – as well as the next generation of folks who will love land enough to work to protect it
- Raising funding for listening/educational efforts within the communities in which they work
- Diversifying the services they provide, thereby expanding their base of support – to include communities of color and groups with fewer means – while also increasing their organizational sustainability
- Thinking about acquisition and regulation at the same time – how one might support the other as tools for advancing a land trust’s mission in the context in which it works
- Pushing development into the areas in which it should occur, particularly the cities – using parks and greenspace to help make those areas more desirable places to live
- Helping to change the incentives for development at the federal (subsidies/infrastructure) and local (planning/zoning) levels – moving the focus of the conversation from where to preserve to where to develop in a more sustainable manner
- Collaborating with new urbanists and smart growth advocates to help create attractive areas for development in cities and villages
- Creating public-private partnerships to work at landscape scales
- Capturing opportunities to think about and incentivize both development and conservation at the same time so that they will complement (rather than challenge) each other and therefore be easier to implement – such as through conservation design projects

- Looking across political boundaries to help identify where more sustainable development should happen, where land should be conserved and where the two should be combined.
- Focusing on the most efficient ways to promote sustainable land use across a range of uses – thereby creating opportunities to engage with a wider range of interests
- Capturing the opportunities for cross-fertilization of ideas and actions on ways to respond to climate change
- Realizing that not all land trusts will be effective players in public processes – building capacity among the most capable organizations first and expanding out from there over time
- Rethinking permanence – from a static to a dynamic process/set of tools
- Considering the questions: if not land trusts, then who and why? Who will help their towns and cities “see”, plan and shape their future land use, their communities’ future character and sense of place? Why would they stand on the sidelines and not participate in a democratic process that desperately needs participation from all, but particularly those who have such expertise, tools and resources to help inform the process?
- Becoming revered community institutions over the long-term, promoting healthy, resilient, sustainable communities

On balance, while acknowledging that there are real risks, the participants found even more opportunities for land trusts to engage in public land use processes. In fact, one participant suggested that the group “celebrate” the opportunities to be pursued.

Clearly, land trusts thinking of moving in this direction will need to do so in a careful and deliberate manner, not promising more than they can deliver. They should also – internally at least – consider their next steps in light of the limits of traditional land trust tools: donations/acquisitions of land that are often not strategic, monitored or enforced and which rarely make a difference on a regional scale.

Embedding the future work of land trusts in a wider, more public context may help address some of these limits. This could start with a common vision for the future, such as:

- Really great, livable US cities
- More compact development outside cities
- Local food, clean water, safe areas to play, good jobs on a landscape scale – from livable cities, to green suburbs, to sustainable working lands, to iconic protected areas

“Land trusts should be advocates for growth in walkable, more dense communities.” Randall Arendt, Natural Lands Trust

Under such a vision, land trusts could:

- Lead with their strengths – their knowledge of the areas in which they work and their commitment to be there for generations to come
- Open dialogues with new communities of interest – planners, regulators, developers, communities with varied socio-economic and ethnic backgrounds – to learn more about their interests and how conserved land might help them achieve their goals
- Look beyond the immediate area of focus to “see” the larger picture and help find the “right” places for development and conservation, sometimes outside the immediate geography or political district of concern
- Contribute their knowledge to public land use planning processes
- Use zoning/regulation to help protect and buffer important sites where those tools fit
- Use acquisitions to conserve priority sites and provide public access
- Use easements to strengthen zoning districts
- Listen and learn from the needs and successes of a wider range of actors

As land trusts move from a focus primarily on acquisitions to one giving more attention to the long-term stewardship of the lands and communities in which they work, expanded engagement in public land use planning and regulatory processes seems inevitable – both to protect the permanence of the acquisitions made, as well as to support the health of communities across wider landscapes and over the longer term.

“No land trust went into business to do deals. They do deals to protect their communities from threat. If other tools work better, we should learn to use them.” Peter Stein, Lyme Timber

Section 1: *Importance of and Barriers to Working Across the Private – Public Divide*

1.1: Background

J. Daniel Oppenheimer
Yale School of Forestry & Environmental Studies

Across the country, many land trusts and other conservation groups are encountering not a dearth of willing land sellers, but a scarcity of funding. While some have found the silver lining of low real estate costs, more have faced an onset of funding shortages stemming from a number of causes and occurring at varying scales. In North Carolina, Phyllis Stiles, the campaign director for a coalition of local land trusts, noted that:

“In spite of the economy we still have way more landowners who want to conserve their land than we can keep up with. There are lower prices but there is much less money out there to do the deal.”¹

While Stiles works exclusively in the Blue Ridge Mountains, her concern is shared across many landscapes and communities. The lack of funding from traditional, public sources has a number of implications for land trusts, including the need to seek funding from nontraditional sources; consider other conservation tools for meeting missions, goals, and objectives; and foster dialogues with new partners.

In addition to concerns about funding, increasing development pressures and population projections create further exigency for a more holistic, public-private approach toward conservation. By 2037, the United States population is projected to reach 400 million people—an addition of 100 million people since 2006 (Theobald Wilkinson, and Comer, 2008). This increase in population will bring with it new demands for housing, road infrastructure, and energy. A collective, coordinated effort in land conservation will require that land trusts and other stakeholders, whether in the public or private sector, look up and see where and how their efforts fit into the whole. This may also require land trusts to step out of their comfort zone to achieve broader objectives.

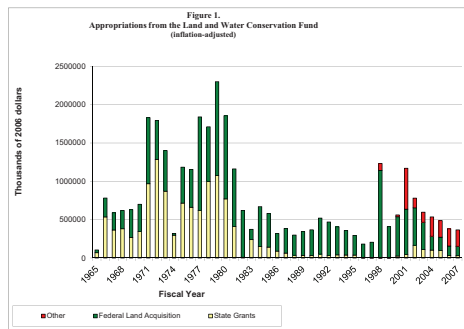
¹ See Bompey, N. “Recession crimps land conservation plans.” *Asheville Citizen Times*, April 30, 2010. Retrieved from <http://www.citizen-times.com/article/20100430/NEWS/304300041>.

IMPORTANCE

Addressing Funding Shortfalls

A number of strategies, each with their own costs, exist to protect open spaces and natural resources. For land trusts, these primarily take the form of fee-simple purchases, rental/leases, and permanent easements. For local governments, these may take the form of zoning and subdivision regulations, as well as neighborhood, city, and regional planning. The effectiveness and efficiency of these strategies will depend on local-scale biological, social, and economic conditions (Casey, McMurray, Kroeger, Michalack, and Manalo, 2008). Initial estimates to secure a national system of habitat conservation areas over a thirty-year horizon have ranged from \$5 – 8 billion a year (Theobald et al., 2008; Shaffer, 2002). A more recent study by Casey et al. (2008) uses a thirty-year horizon and multiple scenarios to estimate the cost projections for preserving unprotected, priority habitats in the United States. In one scenario to protect 12% of the continent, or about 218 million acres, the authors (ibid) estimate the associated costs for several conservation strategies:

- \$135 billion to pay current landowners to manage land for biodiversity values;
- \$219 billion via land rentals/leases; and
- \$927 billion for fee-simple purchases with associated management costs.



Source: Walls, M. 2009. Federal Funding for Conservation and Recreation. Resources for the Future.

While these costs are comparable to other large-scale infrastructure investments (Casey et al., 2008), conservation does not have the public financial backing of highways and other infrastructural investments. Based on compensatory mitigation spending under key federal programs (Austin et al., 2007) and federal and state spending on land conservation between 1992 and 2001, during which over \$30 billion was spent, the US “is running an annual \$5 billion conservation deficit” if it wants to protect a national network of conservation areas (Theobald et al., 2008, p. 3).

The past decade has seen a general decrease in key pots of federal money for local land acquisition. The Land and Water Conservation Fund (LWCF), which was created in 1965 to stimulate a nationwide action program for public outdoor recreation, has provided matching grants to support state and local acquisition and development of recreational sites and facilities. While the fund has authorized \$900 million a year to support land acquisition, appropriations of the LWCF have typically fallen short of the authorized levels. In 2008, approximately \$255 million was appropriated to the fund, of which \$155 million went to acquisition and stateside grant programs (ORRG, 2009). The rest of the funding was diverted to other expenses like the maintenance

needs of the federal land management agencies, endangered species grants, and state and private forestry programs (ORRG, 2009). As of 2009, Strum noted “the difference between the cumulative amount deposited into the fund over the years and what actually has been appropriated for the LWCF state and federal programs, is more than \$16 billion” (as cited in Walls, Darley, and Siikamäki, 2009, p. 63). Many states have abandoned the LWCF program altogether as the decreased level and increased unpredictability of state grants from year to year do not exceed the costs involved in applying for grants (ibid).

Similarly, the Forest Legacy Program, a voluntary program whereby private forested lands or partial interests in these lands are acquired, has experienced a seven-year decline in spending. While both the LWCF and the Forest Legacy Program saw a reversal of declines in 2010, there is still an “extensive and growing backlog of land acquisition needs” on our public lands (FY2011, 2010, p.3). Further, many landowners wishing to see their land protected may wait years with little to no prospect for federal acquisition (Land and Water Conservation Fund, 2010). As acquisitions took the back seat to funding for capital projects, including facilities and landscape restoration (ORRG, 2009), the four federal land management agencies (USDA Forest Service, National Park Service, Bureau of Land Management, and US Fish and Wildlife Service) also experienced gradually declining appropriations between 2001 and 2008 (Walls et al., 2009).

As of 2009, nearly all states were facing deficits and few placed land acquisition on the top of the list for protecting resources. The Center on Budget and Policy Priorities avers that “[a]t least 48 states addressed or are facing shortfalls in their budgets for the new fiscal year totaling \$194 billion or 28 percent of state budgets” (Center on Budget and Policy Priorities, 2010, p. 1). Nearly as many states anticipate deficits for fiscal year 2011, with shortfalls projected to be as much as \$180 billion. While state revenues must grow to keep up with service costs, “overall revenues last year were essentially flat and have weakened dramatically this year” (Center on Budget and Policy Priorities, 2010, p. 3).

In fact, in the second quarter of 2009, state tax collections fell 17%, one of the worst declines in history (Center on Budget and Policy Priorities, 2010). Additionally, declining sales taxes fueled by falls in personal consumption and business purchases, as well as declining income taxes stemming from falls in wages and investment income, have complicated efforts to patch up these shortfalls (ibid).

At the local level, even during economic and financial crisis, communities have continued to support ballot referendums to fund land conservation. While the number of ballot initiatives proposed and the funding noticeably decreased in 2009 from previous years, voters in thirteen states approved conservation finance ballot measures (at nearly a 66% success rate) to generate \$600 million to protect open space (LandVote, 2009). Decreases in ballot supported funding may stem from community members pressuring elected officials to decrease taxes (including for conservation purposes) in the face of larger than anticipated deficits, layoffs, and service cuts. For others, it may be simply that community members no longer have the financial means to run or support campaigns for citizen-initiated ballot measures. Even where such ballot measures are approved, many municipal officials are

increasingly reluctant to borrow and spend the authorized monies in light of decreasing local revenues.

To many conservation practitioners, it seems that public capital has all but disappeared. For land trusts with diminished operating budgets, new methods for garnering financial support and working with new tools/partners are needed. In the absence of public funding, other options for achieving conservation that were previously unused are becoming more and more palatable if not pertinent. Partnerships with public planners, elected officials, and other community organizations with overlapping objectives can take many forms (e.g., advocacy, planning, research, education, and training) and will be essential to expanding and optimizing the conservation toolkit.

Fortunately, even with the recession, there are still opportunities to be sought. Pots of money continue to be available for the ambitious. The Ford Foundation, for example, plans to spend tens of millions of dollars revitalizing urban communities, including through support of innovative land use and community planning strategies.² With banks still facing inventories of bad investments and wary to finance real estate development, an ailing housing market, undervalued land prices, and decreased but still tractable local dollars from ballot initiatives continuing to flow, it is important to consider how land trusts may still carry their overall mission forward in these unique circumstances.

Learning from Experience

A number of land trusts have worked in or begun to enter the arena of land use planning and regulation—and have done so in very different ways. In New York, groups like Scenic Hudson, which has staff members with state and local government backgrounds, skills in geographic information system (GIS) and mapping, and grassroots campaign experience, promote smart growth legislation and help municipalities reduce their carbon footprint. The Piedmont Environmental Council in Virginia engages citizens in public policy campaigns via action alerts, publicly available map resources, and rallies to increase understanding and support for thoughtful land use decisions in towns, cities, and countrysides. Meanwhile, the Land Trust for Tennessee has partnered with the Metropolitan Government of Nashville and Davidson County to conduct an inventory for a county-wide Open Space Plan.

On the West Coast, the Mojave Desert Land Trust collaborates with a range of partners on long-range planning and public-private initiatives. They have worked with the National Park Service to lead capital campaigns to purchase lands adjacent to Joshua Tree National Park; the Department of Defense to conserve land important for military airspace security and wildlife corridors; and local governments on municipal planning, off-highway vehicle use, and plant and wildlife mitigation. As a member of the Morongo Basin Open Space Group, the land trust engages with town, city, and county government on regional land use planning and regulation. Others, like the Pacific Forest Trust in California, have played an important role in developing policy and market frameworks for ecosystem services to foster private conservation and carbon stewardship in forests of California.

² Ford Foundation Website. (n.d.). Metropolitan Opportunity. Retrieved from <http://www.fordfoundation.org/issues/metropolitan-opportunity>; and Spector, M. (2009). "Foundation Backs Foreclosures Project." Wall Street Journal. Retrieved from <http://online.wsj.com/article/SB124113036635174911.html>.

Yet, to date, there has not been a concerted effort to synthesize and learn from the individual experiences of land trusts engaging in land use planning and regulation. The strategies, risks, and benefits are varied, as are the outcomes. These papers and this workshop provide a first step in unraveling some of these experiences.

Figure 2: Some Examples of Opportunities to Work with Local Governments

Providing local and county governments with GIS inventories identifying priority areas for parklands to be incorporated into master plans
Mobilizing community support prior to and during the master planning process
Working with regional planning bodies on protecting linkages and corridors
Supporting the adoption of new zoning provisions (e.g., clusters and park zones) to protect buffer areas

Enhancing Community Relevance

To ensure that land trusts and private land conservation efforts retain public and political support increasingly appears to require land trusts to engage with their communities in new ways. One of these avenues is to engage new partners in inherently public and community-based processes for conservation – such as land use visioning/planning efforts.

Filling Gaps in Regulation

With a population projected to increase by nearly one hundred million people in the next three decades, the United States will incur tremendous growth. The shape of this growth will be directed strategically by cities, counties, and regional councils of government. Several states are projected to lose over 10% of the priority habitat conservation areas identified in their State Wildlife Action Plans in the next 10-30 years due to residential development alone (Theobald et al., 2008). In communities where “zoning” and “planning” are fighting words, or where planning departments are simply understaffed, overwhelmed, or not trained in conservation disciplines, land trusts have the opportunity to bring their staff/supporter resources to help meet conservation goals.

Helping Planners Meet Their Goals

The conventional view that land development always increases local government revenues has been called into question by both academics and planning professionals. A number of studies have quantified the cost of providing and maintaining infrastructure and public services for sprawling developments. The bill for creating more, longer, and paved public roads; installing and maintaining water and sewer lines; providing additional stations for police and fire departments; and adding new facilities and transportation costs for school districts tend to be paid mostly by local governments and their taxpayers. The costs associated with sprawling development

are ultimately subsidized by the whole community and often exceed the tax revenues generated from such land use patterns. The Environment Colorado Research and Policy Center (Coyne, 2003) illustrates the fiscal crises that sprawl may exacerbate for local governments in Colorado with a number of examples:

- Dispersed rural residential development costs county governments and schools \$1.65 in service expenditures for every dollar of tax revenue generated;
- By 2020, sprawling development could cost Denver-area governments \$4 billion more in infrastructure costs than compact smart growth; and
- From 2000-2025, future sprawling development in Delta, Mesa, Montrose, and Ouray Counties would cost taxpayers and local governments \$80 million more than smart growth development.

Across the country, many planners and elected officials are grappling with fiscal crises and coming to terms with what the sustainability of built environments means to them. As they seek to create more livable, high-quality communities, they are beginning to experiment with new and innovative forms of planning and regulation to facilitate, for example, large-scale solar facilities, enhanced transportation oriented developments, wetland migration, and resilient coastlines. Working with organizations such as land trusts that have experience in and passions for conserving riparian areas for clean drinking water, wetlands for storm protection, habitats for resilient ecosystems and an array of other ecosystem services, will be important for developing and applying these new strategies.

Barriers

While engaging in land use planning and regulation activities may give land trusts opportunities to pursue their missions in the face of funding shortages and development pressures, there are a number of barriers to engaging in this arena.

Impacts on Non-Partisan Reputation

One of the greatest concerns of land trusts to working across the public divide is one of reputation. Many land trusts have built their work around not getting involved in local politics. They just buy land; they do not seek to regulate it. The bipartisan nature of many land trust boards is a tribute to the success of such efforts.

More active engagement in political processes is seen as a threat to this tradition. Concerns are raised that efforts to do so will, in fact, make it harder for land trusts to use their traditional techniques of raising money to buy land. As many of the landowners that land trusts work with see regulation as an anathema, they have concerns about being tarred and feathered by their clients, communities, and funders as being in the business of regulation.

Lack of Timely Action through Public Land Use Processes

Over twenty years ago, Foti and Jacobs (1989) pointed out the potential for land trusts

to shape land use planning and policy (e.g., regarding sensitive lands) by collaborating with the public sector. Yet today, few land trusts straddle the spheres of private conservation and public land use planning/regulation—even with their overlapping objectives. Foti and Jacobs (1989, p. 317) describe one of the major reasons for this gap: “[b]y the time a majority of citizens in a locality can be mobilized to action to protect a critical resource, too often much of that resource has been severely degraded or has disappeared.” As private organizations, land trusts can work more quickly than many local governments.

Many from the private land conservation movement view the process for adopting zoning as a screaming match, one with little benefit and plenty of frustrations. The political turf is one in which they are neither familiar nor comfortable. With land trusts’ historical tendency toward avoiding this arena, there is subsequently a gap in knowledge and experience in how to engage effectively in land use planning and regulation processes—that is, how to capture the attention of planners and elected officials, how to address their concerns and priorities, and how to work with other nontraditional partners with overlapping goals.

Lack of Permanence

Zoning rules change; ownership of conserved lands does not. That calculation informs the belief of many land trusts. Combined with the concerns above, this belief presents a major barrier to land trust engagement in public processes.³

³ Issues of permanence are explored further in Section 5: Land Conservation and Permanence.

Moving Forward

Given the uncertain outcomes and potential to endanger a land trust’s relationship with landowners, why might these conservation organizations considering entering the land use planning and regulation arena?

The public processes provide avenues to increase relevance, to gain expertise and resources via partnerships, and to pursue conservation objectives with a broader, more versatile set of strategies. The first step to moving forward may very well be openly acknowledging that there is a divide—and then to look for scenarios where we can bridge this divide. The spectrum of opportunities and corresponding challenges vary from regional planning processes to adoption of particular zoning ordinances. Understanding the processes involved will be another critical and early step to overcoming the divide. After understanding, land trusts may need to change their expectations to seek, for example, zoning ordinances that do not protect a parcel outright, but preserve the most sensitive portions of that property.

While a number of land trusts are highly experienced and comfortable with Greenprinting and other forms of natural and historic resource inventories relevant to planning, zoning regulations still seem on the distant horizon for most. Highlighting the efforts of those that have taken this step will provide lessons learned, suggestions, concerns, and techniques for others to consider and potentially to apply.

Discussion Questions

- How might land trusts begin to learn from each others' experiences in the planning and regulation processes?
- How have land trusts engaged in zoning and other forms of regulation dealt with issues of reputation?
- What sort of evaluation might a land trust conduct to determine if the planning/regulation arena is right for it?
- How have local government planners and elected officials utilized land trusts? Where have these relationships fostered innovative partnerships and strategies for conservation?

Organizations Doing Interesting Work

Cascade Agenda – Led by the Cascade Land Conservancy, this coalition of nearly 100 businesses, organizations, and government agencies and more than 750 community leaders and passionate citizens from King, Kittitas, Pierce, and Snohomish Counties seeks to conserve land and create livable communities. See <http://cascadeagenda.com/>.

Piedmont Environmental Council of Virginia (PEC) – PEC takes a comprehensive approach to conservation, working with citizens to promote linking land use and transportation planning and to empower them to pursue positive community visions. See <http://www.pecva.org/>.

Scenic Hudson – Working with other land trusts and government agencies, Scenic Hudson is leading a campaign, Saving the Land that Matters Most, to save ridgelines, forest habitats, rivers and farmlands. See <http://www.scenichudson.org/>.

Pacific Forest Trust (PFT) – PFT works with an array of public and private partners to conserve working, forested landscapes. Through the Working Forests, Winning Climate Program, PFT has developed policies and market frameworks to incentivize sustainable forest management. See <http://www.pacificforest.org/>.

Land Trust for Tennessee (LTT) – Partnering with the metropolitan government of Nashville and Davidson County, LTT is conducting an inventory of natural and cultural resources for a long-term open spaces plan to be used and adopted by various government departments and private conservation organizations. See <http://www.landtrusttn.org/>.

Society for the Protection of New Hampshire Land Trusts (Forest Society) – The Forest Society was recognized recently by the Land Trust Alliance for its collaborative and innovative efforts to link forestry and land protection as well as for its efforts to build consensus. See <http://www.forestsociety.org/>.

Mojave Desert Land Trust – The organization works with a range of local, state, and federal public actors as a member of the Morongo Basin Open Space Group and in its own projects like the Quail Mountain Project, in which it has mobilized community support to acquire wildlife habitat adjacent to the Joshua Tree National Park. See <http://www.mojavedesertlandtrust.org/>.

Western Lands and Communities (WLC) – A Joint Venture of the Lincoln Institute of Land Policy and the Sonoran Institute, WLC provides western communities with background research, best practices, and partnerships to foster conservation planning. In the Conservation Priority Setting Program in Morongo Basin, CA, WLC is developing planning tools to meet conservation goals set forth by community members. See <http://www.sonoraninstitute.org/where-we-work/westwide-research-tools/lincoln-sonoran-joint-venture.html%5D>.

Cascadia Conservancy Society (CCS) – CCS assists local governments and communities to prepare for, address, and manage issues of development and climate change. They are recognized as an authoritative vehicle for building and incubating partnerships, as well as for fostering social enterprise activities and collaborative agreements between communities, governments, and other stakeholders. See <http://cascadiaconservancy.homestead.com/>.

Gallatin Valley Land Trust (GVLТ) – With a Board of Directors that includes county planning, state legislative, and campaign experience, GVLТ works through public/private partnerships, to build community by creating multi-purpose trail systems. GVLТ works with the Park County Planning Department and federal agencies to develop tools to preserve open space and promote smart growth. See <http://www.gvlt.org/>.

Lemhi Regional Land Trust – This organization was involved in the creation of the Salmon Valley Stewardship, a coalition of county officials, public land managers, and rural landowners seeking to coordinate citizen involvement, build awareness, and foster partnerships for sustainable land planning and use of natural resources. See <http://www.lemhilandtrust.org/>.

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1.2: Examples, sources of information and other key points from the discussion

Some of the examples, sources of information and key points from the discussion included the following:

- The Columbia River Gorge is a remarkable example of one person pushing for and achieving regulatory protection of an entire landscape.⁴
- The land trust orthodoxy is different – keep your head down and do deals quietly.
- Protecting their traditional donor base – often wealthy landowners from both political parties – has driven the culture of land trusts to avoid engagement in local political processes.
- If a land trust's mission is to protect land, then it should use whatever tools will work.
- Land conservation is only as permanent as its support by the public.
- The key to both conservation through acquisition or through planning/regulation is to build and maintain that public support.
- If land trusts can feed information on priority sites into a comprehensive plan, then that plan can inform both the zoning code, as well as acquisition priorities.

⁴ See <http://www.gorgefriends.org/section.php?id=13>.

- If land trusts stay out of local planning processes, then the most reasonable voices for land conservation will not be reflected in the conversation.
- Land trusts' commitment to permanence makes them particularly useful contributors to local land use discussions.
- Environmental groups have their own ecology across regions – in some, the land use advocacy niches are filled, in others they are not, creating opportunities for land trusts to engage more widely.
- The current financial crisis has created a unique opportunity to connect with developers as they search for new ways to survive in the future. Five percent of developers build 95% of buildings.
- Conservation organizations need to be alert to the practical differences between voluntary purchases of rights in land and involuntary controls on land use – while they often share common goals, they have different practical impacts such as building or dividing constituencies/communities.
- Land use regulation can embody the vision of the community if done well. Private acquisition may not reflect that vision if done on an ad hoc basis, disconnected from public priorities.
- One strategy is to preserve the land of community leaders as a way to engage them in working with local officials to regulate development around their protected lands.

Section 2: *Working with Land Use Planners/Regulators to Identify Priority Sites for Conservation*

2.1: Background

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Many land trusts have their own protocol for identifying priority sites based on each land trust's own individual purpose. However, many times smaller land trusts “protect what they can get” and do not make a concerted effort to identify priority properties for conservation. When those properties are identified, the local government may have a different view of what that land use should be. Local governments and land trusts should work together to identify priority sites for conservation.

Comprehensive Land Use Plans

The comprehensive land use plan of a community is usually the initial blueprint for land use planning in a given area. In most cases, a comprehensive plan is initiated by a local government and can take several years of meetings, research, public input, reports, and resources to develop. The development process has several steps: preplanning, data collection and analysis, identification of issues, strategy formulation, selection of preferred alternatives, draft plan, plan review and approval, plan implementation, and finally, any monitoring, reassessment, and amendments. Comprehensive land use plans can be prepared to address compatibility issues between various uses of land, management and preservation of natural resources, identification and preservation of historically significant lands and structures, and adequate planning for infrastructure needs. However, comprehensive land use plans are also used to address issues related to schools, recreation, housing, demographics (existing and projected), infrastructure, and transportation. In essence, a comprehensive plan is an all-inclusive approach to addressing the issue of a community's future growth (U of I Extension, 2010).

Most states require local governments that want zoning to create comprehensive land use plans. Most states also require zoning regulations to conform to the comprehensive

land use plan. In some states, most decisions made by the local zoning board or planning committee have to be consistent with the comprehensive plan including, among others, site and subdivision approvals, buildings permits, variances, and zoning amendments. Effective comprehensive plans contain long-term environmental goals, intermediate-term conservation objectives tied to each goal, and shorter-term strategies designed to accomplish each objective. Thus, they should encourage the adoption of local laws designed to incentivize and achieve land and resource conservation.

The decentralized nature of land use regulation allows for a variety of approaches to comprehensive planning. Some states require local governments to include references to sensitive environmental areas or to include a conservation element. Some states mandate that the conservation element of local master plans be based on the best available science, while others require that local master plans be subjected to an environmental impact review before they are adopted. Some states have adopted statewide planning principles or goals, which local master plans must reflect with some consistency. Most states do not require the comprehensive plans to be reviewed or updated over any set time period (Nolon, 2003).

The sheer number and variation of different land use regulations across the country is difficult to assemble, summarize, and access. Nevertheless, several organizations have developed impressive databases of information. This information can be used by land trusts and other organizations to develop ideas and plans that can best fit their community. The Land Use Law Center at the Pace University School of Law continues to develop its Gaining Ground Information Database, which features methods used by government to control the use of land in the public interest. It includes a collection of exemplary federal, state, and local ordinances, commentaries, research papers, and research aids. This database can be accessed by the public and is available at <http://www.law.pace.edu/landuse>. The Trust for Public Lands (TPL) continues to develop its Conservation Almanac. The Conservation Almanac is a growing repository of information and data about land conservation in the United States. TPL's Center for Conservation Finance created the almanac for policy makers, the media, foundations, academics, public officials, and conservation leaders.¹ The Institute for Business and Home Safety (IBHS) has also published a survey of state planning and land use regulations in the form of nationwide maps and spreadsheets. Although the IBHS focuses on hazard mitigation, the documents nevertheless provide an easily accessible summary of the states planning and zoning regulations across the country.²

Land trusts and other conservation organizations can influence a community's comprehensive land use plan in a variety of ways at each step of the comprehensive plan process. This is imperative to assume a successful conservation strategy for a community, especially in selecting priority sites for conservation. The earlier an organization can influence land use planning and predetermine priority sites for conservation, the easier an organization can influence the conservation strategies of a community in the future. The comprehensive plan allows a community to set aside land for conservation with the support and force of law.

¹ The Conservation Almanac is open to the public and is available at www.conservationalmanac.org.

² The survey can be accessed at <http://www.disastersafety.org/publications/>.

Selecting Priority Sites

Land Trusts

In order for land trusts to be effective in influencing local government to protect certain property, a land trust should take steps to identify the lands it is most interested in protecting regardless of its size, method of operation, or mission. Land trusts should have a land protection strategy for their region that identifies priority areas for land protection. These priority areas should be the places where the land trust works proactively to accomplish its conservation goals. The priority areas can encompass various ecological or cultural resources and overlap political jurisdictions but should have some cohesive element. A land trust can have several focus areas within its operating territory.

There are several different ways land trusts can identify priority properties. If a land trust focuses on protecting community character, scenic views, or areas generally used or appreciated by the community, the important properties may be obvious. A land trust may be able to set priorities based on its own understanding of the area. However, in situations that are not straightforward, the land trust must take more sophisticated action. The Land Trust Alliance recommends that the land trust identify priority properties based on conducting a resource inventory, establishing resource priorities, identifying properties that meet those priorities, and developing a strategy for protecting them (LTA, 2004). Setting parcel-specific priorities is easier for organizations with small geographic areas or for those that have targeted a particular resource such as a watershed, farmland, or wetlands. For land trusts with large geographic areas and a broader agenda, setting priorities is more complicated.

A resource inventory can be an ambitious undertaking. However, this is one of the best opportunities to work with local governments to determine the priority lands of an area. Land trusts should also determine priority sites by working with the public. Having public support for the conservation of a particular site or type of site can help influence government officials to set the same priorities. Resource inventories include selecting the resources of the greatest interest to a land trust; compiling and updating existing resource data (maps, aerial photos, existing inventories) sometimes with the help of government officials; checking sites on the ground and/or from the air for new data and to confirm the old; and producing updated maps, resource data, and ownership information.

Land trusts should also supplement their in-house knowledge with other knowledgeable sources. Local neighbors, groups, government agencies, and other organizations that share the land trust's interests may be able to suggest sites for protection or give the land trust assistance in setting priorities. Governments and their agencies can be great resources for finding information about the property in a land trust's region.

For example, the New Jersey Highlands Water Protection and Planning Council (Highlands Council) was created and charged with the task of developing a Regional Master Plan to restore and enhance the significant values of the critical resources of the Highlands Region. The Regional Master Plan must determine the amount and

type of human development and activity the ecosystem of the Highlands Region can sustain. The Highlands Council has developed an impressive data gathering and analysis regime that utilizes GIS and other mechanisms to identify priority sites for protection. This data was used to help create and implement three overlay zones within the Highlands area: “protection zones” (extremely limited development), “conservation zones” (non-agricultural development activities will be limited in area and intensity), and “existing community zones” (development limited to levels that are appropriate to maintain the character of established communities). All of this information is publicly available. See <http://www.state.nj.us/njhighlands>.

Land trusts can use government plans and policies to help define their own agenda or use the plans and policies as a starting point. Many land trusts use government policy as a starting point for setting priorities and then further narrow their focus by considering other factors. However, if priorities of the land trust and local government do not match, the land trust can look to find ways to influence the local government to convince government officials otherwise. Furthermore, if government plans and policies do not exist or are inadequate, land trusts may place priority on encouraging and assisting their development or revision.

Local Governments

As stated above, the local government’s selection of priority conservation lands starts with the local comprehensive land use plan. The comprehensive plan is a policy instrument first, and a technical instrument only second. The local government leading the comprehensive plan development should ensure that the plan is general, focuses on physical development, and relates physical design proposals to community goals and social and economic policies. This includes using government and community resources to identify areas in need of protection, areas of critical habitat, parks, and other areas of conservation value. The local government should also identify techniques for protecting those areas such as overlay districts or conservation zones. The comprehensive plan is the basis for the more technical and regulating zoning and land use ordinances. Zoning ordinances provide the more detailed regulations of what actually can be done within a given zone or area. The local government must guarantee that the public is given notice and opportunities to be involved throughout the entire planning process.

Comprehensive Plans and Priority Sites Working Together for Conservation in Virginia

The Virginia legislature has adopted a streamlined process that allows any land (or conservation easement over land) identified by a community’s comprehensive plan to qualify for Virginia’s tax credit for land donated for conservation purposes. This technique allows land trusts and other private land acquisition organizations to influence their local governments to recognize properties of value in their comprehensive plans. If a property is

already defined by a local government as land worth conserving, the property owner that donates the property will then qualify for state tax incentives for conservation purposes. If the property is not previously designated as important to conserve, the property owner will have to demonstrate the conservation value by other means. This incentivizes both local government and conservation organizations to designate property in the comprehensive plan as important conservation property. For more information visit http://dcr.vi.virginia.gov/land_conservation/lpc.shtml.

Figure 1 One of the many maps accessible through the New Jersey Highland Council's website. Visit <http://www.highlands.state.nj.us/>.



The method by which a local government identifies areas for conservation can be found in the comprehensive planning process itself. Before the planning process begins, a project manager and committee should be appointed to coordinate the process. This is usually accomplished by having the county commissioners or city council appoint the committee and assign the task of leading the process to an administrative department head or consultant.

Next, the committee should collect data on existing conditions of the jurisdiction. The data collected relates to each of the elements that will make up the plan. Existing land use plans and ordinances can be used to understand the previous land use dynamics of an area. A classification system identifying the various types of land use can then be developed. These land uses are usually residential, commercial, or industrial. However, additional categories include recreation/open space, agricultural, government, and conservation. These categories then break down into other sub-classifications. For example, the industrial land use category can be divided into heavy industrial classifications or light industrial classifications.

Critical from a conservation standpoint, each parcel of land within the community is then classified and identified on a map with a specific classification. Assuming that the appropriate conservation categories are identified, this is where a land trust's knowledge and expertise can most readily influence the local government's identification of areas in need of protection.

The data collected depends on the priorities of a comprehensive plan. For example, if housing is a priority, information pertaining to conditions, age, number of units, utilities, and the prevalence of owners/lesers all should be documented. If conservation is a priority, lands with conservation value should be identified by gathering information about agricultural use, forest use, natural habitat and biological diversity, historic preservation, recreation, education, watershed preservation, and preservation of scenic open space within the jurisdiction. The data is then analyzed for trends, concerns, and other considerations.

The data analysis provides the information needed to formulate several land use strategies for the jurisdiction. Upon further deliberation, a preferred set of strategies can be chosen. The draft plan is then written based on those preferred strategies. Another round of deliberation can take place with community comments and responses to those comments. Finally, the plan is ready for final approval and implementation. After implementation, the plan is monitored and reassessed, with the passage of any amendments to make the plan more successful.

Once a local government adopts a comprehensive plan and implements zoning regulations and ordinances, planning boards, boards of adjustment, town and city councils, and other entities granted the authority to regulate land use must then issue decisions based on those planning instruments. When requested, courts will look at the decision of the local government or agency to make sure that it is consistent with the land use regulations. However, in doing so, courts give the local government or agency deference to the decision it makes. In most states, the land use decision will stand as long as it is reasonable and is based on evidence in the record.

Therefore, it is imperative that a jurisdiction has a comprehensive plan and land use regulations that are tailored toward conservation. Otherwise, government land use decisions that may have a negative conservation impact will be very difficult to overturn.

Comprehensive Planning Processes and Land Trust Influence

Land trusts can work with local government officials to help influence the acquisition and protection of priority lands by building support for land conservation protection and becoming more involved with their local governments' land use planning efforts. These efforts will not only help protect land, but will also allow land trusts to become better known within a community and earn residents' respect for the time and energy they contribute to projects widely seen as promoting the public good.

Land trusts can influence the planning process by attending planning meetings, explaining the role conservation can play in a comprehensive plan, offering evidence of how conservation and protection can be best achieved in a given area, and by submitting examples of how different conservation techniques have been successful elsewhere. Land trusts can also conduct planning charrettes, which involve the convening of a group of interested citizens and experts to focus around a specific design problem or proposal.² These contributions can influence land use decisions by engaging in the processes by which land use processes are drafted, adopted, implemented, and amended.

² Planning charrettes are further explored in the earlier section "The Intersections of Political Organizing."

Land trusts can also promote better land use decisions by raising questions that need to be addressed and by supplying information to community leaders and the public. Moreover, local planning efforts often provide land trusts an opportunity to communicate their conservation goals and concerns and to increase the chance that these goals will be integrated into land use plans (Arendt, 1999). Land trusts can be especially valuable where a local government does not have the expertise or resources to make well-informed conservation decisions by offering GIS data and maps, providing reputable science, offering to do different analyses, and offering to raise money for a municipality to hire a planning expert or other planning resources. Municipalities may even consider asking a local land trust to do the lion's share of the plan itself such as the city of Nashville and the Land Trust for Tennessee (<http://www.landtrustn.org/openspace.html>).

Land trusts can also take actions that local governments cannot or are not willing to do. Providing these services will not only garner favor among government officials, but also demonstrate the value in collaborating with land trusts. These services include:

- Providing and emphasizing conservation values that may otherwise fall through the cracks, especially where local governments tend to look at land use planning through a variety of other lens, such as economics, taxes, private property rights, housing, access to infrastructure, and other priorities.
- Providing political coverage to a local government if the government makes a decision based on conservation value. Land trusts can also use its

membership to influence government to make a decision based on conservation.

- Helping with capital campaigns to raise capital for lands that need to be purchased.
- Providing polling or convening meetings to gauge the interest in the purchase of a resource or the implementation of a conservation plan.
- Educating the public about the importance of conservation of priority sites.
- Crossing the political jurisdictions that often fragment and segment local planning efforts and priority land acquisition. For great examples of protecting across jurisdictional borders see the New Jersey Highlands project (<http://www.state.nj.us/njhighlands/>), and the Colombia River Gorge Project (<http://www.gorgefriends.org>).

During the planning process, land trusts and other land conservation organizations can also influence local governments to adopt requirements that promote conservation and land protection such as conservation and environmental overlay zones. However, many comprehensive land use plans across the country have already done so. The following is a sampling of adopted requirements that promote conservation.

- In one of the more well-known comprehensive plan requirements, each of Oregon's cities is required to implement an urban growth boundary (UGB), designating undeveloped land that can accommodate the city's future growth. A UGB in an Oregon city creates an urban growth area that encircles the city, containing land that is not within the city's limits but under county jurisdiction. Planning between local governments is coordinated through urban growth management agreements that clarify which local government will administer land use regulations in the urban growth area, how the area should be zoned until it is urbanized, what standards for public services and facilities should be applied there, and what interim controls should be used to protect the growth area's potential for development. However, this did lead to a referendum that required the government to pay for any regulatory taking, which in turn led to a counter referendum. These topics are discussed more thoroughly in the subsequent section "Land Conservation & Permanence."
- In Nebraska, the City of Lincoln and Lancaster County have adopted a Joint Comprehensive Plan containing an Environmental Resources chapter that requires developers to take into account factors such as topography, climate, soils, watersheds, groundwater, and floodplains in their proposals.
- In Delaware, county comprehensive plans are required to include a conservation element for the conservation, use, and protection of natural resources in the area.

- Local governments in Florida are required to incorporate conservation elements into their comprehensive plans. These elements include the protection of wetlands, estuarine marshes, soils, beaches, shores, flood plains, rivers, bays, lakes, forests, fisheries, and wildlife and marine habitat. Florida also requires extensive citizen and intra-municipal participation in developing a future vision as a required part of local plans.
- Seattle’s Comprehensive Plan identifies environmental stewardship as one of the city’s core values. The plan includes a separate Environmental Element.
- In Jefferson County, Missouri, the comprehensive plan contains a section entitled “Environment and Open Space,” which ensures environmentally sensitive development throughout the county. The environmental goals of the plan are to protect watersheds and water resources from pollution runoff, erosion and flooding, maintain the county’s rural character, and maintain air quality.
- In Kent County, Delaware, the comprehensive plan recommends amending zoning and subdivision laws to protect natural resources and steer growth into development overlay zones (Nolon, 2003).

Incorporating Project Master Plans into Comprehensive Land Use Plans 21st Century Parks in Louisville, Kentucky

Founded in 2005, 21st Century Parks is a Kentucky-based private, non-profit corporation, created to bring a new vision to the preservation and development of new public parklands. In conjunction with the Future Fund, a land trust, the 21st Century Parks Project has acquired over 4500 acres in the greater Louisville, Kentucky area to create a public park system that circumvents the city and will act as a “natural” buffer to further urban growth. Frederick Olmsted has a large legacy in Louisville, where he designed a coordinated park system and parkways to connect that park system in Louisville at the turn of the century. In an effort to expand and update the Olmsted model and reconcile it with current and future land use policies and regulations, 21st Century Parks and the Future Fund are developing innovative methods of conservation planning.

21st Century Parks has recently convinced the Louisville Metro Council to adopt an ordinance that incorporates the 21st Century Park’s Master Plan Executive Summary into the city’s Comprehensive Plan. The Louisville Metro Council has also instructed the Planning Commission to reconcile the newly adopted amendments with the city’s zoning ordinances. By having the master plan adopted, the park and city officials are now able to take a hard look at what happens around the parks from an urban planning and design standpoint. This allows for city planners and park officials to better plan for issues such as transportation to and from the park and development around the park. For more information visit <http://www.21cparks.org/>.

While the comprehensive plan is usually the basis for land use regulation in a community, there are also other planning documents that can be used to influence the identification of priority sites. For example, many communities have disaster mitigation plans that are sanctioned by the Federal Emergency Management Agency (FEMA). Land trusts can make efforts to utilize those plans to acquire and protect lands that are prone to flooding and other natural hazards.

Pros and Cons to Collaboration in Planning Processes

When trying to decide when or how to collaborate with local government, land trust must consider several issues – both positive and negative. The many benefits of land trusts becoming more closely involved with the government planning process include:

- Providing the wholesale action necessary to accomplish large regional projects such as the Highlands project.
- Preserving priority sites through regulation, rather than private acquisition or easement. This can save land trusts a large amount of money and foster beneficial relationships with government officials.
- Raising more public money for land conservation by building local government support for raising funds to acquire identified parcels, providing favorable tax treatments, and obtaining federal or state funding.
- Informing the land trust's priorities by listening to their communities and local governments.

However, there are also some potential risks for land trusts becoming more closely involved with the government planning process. These include:

- Once a land trust becomes a partner in the process, the land trust may have more difficulty advocating against local government on other contentious issues.
- There may be landowner backlash against the land trust if landowners perceive land trusts as being part of the government process.
- Local governments have many priorities and do not plan only for conservation. The goals of a land trust may get lost among the many priorities land use planners must consider when drafting and implementing regulations.
- In big partnerships, land trusts are no longer the sole drivers of the acquisition process.

Land trusts and other conservation organizations should take a hard look at the value of becoming involved with the government planning process, how that involvement matches with the goals and purposes of the land trust, and how the public and local government will perceive the land trust. At the very least, a land trust can provide important information on conservation priorities.

Conclusion

Land trusts need first to identify lands that are a priority for their own organization. In doing so, land trusts should seek out the resources of local governments and agencies, the public, as well as their own board and staff. Land trusts should also weigh the pros and cons of becoming more involved in the various planning processes of a community. More than likely, land trusts have the expertise to not only inform local planning officials, but also influence them to make the right decisions regarding conservation and the protection of priority sites.

Discussion Questions

- How might land trusts benefit from participating in public land use planning to identify priority sites?
- How might land trusts add value to those processes?
- What risks might land trusts face as a result of such engagement?
- What part of the comprehensive planning process is best suited for land trusts to work with local planners to identify priority sites?
- What steps can land trusts take to amend or modify a comprehensive plan to help identify and protect priority land?
- How should land trusts cope with the fragmentation of comprehensive plans and local governments when trying to protect larger landscapes?
- How can land trusts make the priorities of the local government and of themselves consistent with neighboring jurisdictions?

Organizations Doing Interesting Work

Land Use Law Center – Pace University School of Law – Established in 1993, the Land Use Law Center is dedicated to fostering the development of sustainable communities and regions through the promotion of innovative land use strategies and dispute resolution techniques. The Center involves land use and real estate leaders, attorneys, and other professionals in its programs. The Land Use Law Center also continues to develop its Gaining Ground Information Database, compiling innovative land use and planning instruments and regulations across the nation. See <http://www.law.pace.edu/landuse>.

Conservation Almanac – The Trust for Public Lands (TPL) – The Conservation Almanac is a growing repository of information and data about land conservation across the United States. TPL's Center for Conservation Finance created the almanac for policy makers, the media, foundations, academics, public officials, and conservation leaders. It compiles data on each state, identifying conservation strategies utilized in each state. For more information visit <http://www.conservationalmanac.org>.

The Land Trust Alliance – The Land Trust Alliance continues to develop techniques to legitimize land trusts and help land trusts identify where to find information, how to adopt programs for land conservation, how to identify priority sites, and how to work cohesively with local governments. Visit <http://www.landtrustalliance.org>.

New Jersey Highlands Water Protection and Planning Council (Highlands Council) – The Master Plan for the Highlands created by the Highlands Council gives insight how a large state mandated organization works with the public to identify priority areas for conservation. The Highlands Council is very transparent and allows public access to a large amount of data, research, and documents. For more information visit <http://www.state.nj.us/njhighlands>.

21st Century Parks – 21st Century Parks is leading the way for innovative park creation and land preservation in an urban setting. 21st Century has acquired over 4500 acres within an urban area with a population of over one million people. For more information about the strategies, techniques, and innovations utilized by 21st Century visit <http://www.21cparks.org>.

Scenic Hudson – Working with other land trusts and government agencies, Scenic Hudson is leading a campaign to focus on priority sites – Saving the Land that Matters Most. See <http://www.scenichudson.org/>.

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2.2: Examples, sources of information and other key points from the discussion

Some of the examples, sources of information and key points from the discussion included the following:

- Most land trusts like not being controversial – they and most of the land owners with whom they work prefer to get things done quietly.
- Land use planning and regulation offers a spectrum of approaches/tools – land trusts can choose to engage anywhere along that spectrum.

- Sharing information on priority sites with resource-constrained local governments is often an easy place to start.
- Land trusts understand the economics of land use/ownership – a real value in policy discussions.
- Conserved land is a critical part of a sustainable region.
- Land trusts need to do a better job visualizing and communicating the values they are pursuing, while recognizing that visualization can also raise issues (“bulls-eye” concerns).
- Land trusts’ long-term view is a unique asset in discussions about land use.
- Land trusts need to make the case for where development belongs and consider the wide range of regenerative or more sustainable options.
- Many land use plans appear to anticipate more development than is likely to occur in the time frames used.
- A number of opportunities exist for land use planning and regulatory activities to support land conservation, including:
 - Conservation components of comprehensive plans;
 - Conservation-minded zoning requirements;
 - Conservation advisory councils for local governments;
 - Provisions allowing conservation subdivisions;
 - Approvals to develop more densely if pay for mitigation/protection elsewhere;
 - Conservation ballot measures, including priority areas for use of the proceeds.
- If land trusts engage in public processes, they need to be prepared to defend their vision/mission.
- The Piedmont Environmental Council of Virginia (<http://www.pecva.org/anx/index.cfm>) has been using a wide range of tools – from acquisition, through visualization, to advocacy and litigation – to “connect people to the lands, communities and heritage of the Virginia Piedmont since 1972.”
- In many counties in the Western US, “land use planning” is an anathema as a precursor to zoning – talking about regional “visions” is sometimes more acceptable.

Section 3: *Intersections of Political Organizing*

3.1: Background

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Background

“Organizing people is an art: it’s messy and has few hard rules. It is full of different personalities, strong egos, opinions and feelings of ownership and turf.”¹

Above all, political organizing takes leadership to transform a vision into reality. Individuals or organizations leading a political effort, whether to pass a ballot or to change a zoning ordinance, must have strong communication skills, the ability to foster teamwork, and the understanding of local politics and how government works. The approaches, participants, and processes will vary, depending on the goal and nature of the campaign; further, how those at the steering wheel organize these efforts may both build support for future efforts and, in some cases, conflict with future campaigns.

Ballot campaigns to raise funds for land conservation are typically considered quick, messy, one-time efforts. Land trusts need to know the different circumstances defined by state enabling acts to issue bonds and how to get their initiative or referendum on the ballot. This may require a shotgun approach to target the spectrum of interested and affected stakeholders and, potentially, tactful targeting of a city or county board. In the case of referendums where the legislature or local elected county officials have a say in referring measures to the ballot, it is important to recognize that local boards may have frequent turnover, potentially with dynamic changes in sentiments towards conservation and finance.

Campaigns for adopting land use regulations are often longer processes with many meetings that some citizens might not have the time, patience, attention span, or interest to engage in. Participants will encounter lots of give-and-take and will need to employ an especially focused approach, targeting a governor, leader in the state assembly, or local or regional government. These government officials have their own demands and pressures, which need to be understood. The reputational risks of being associated with regulation must also be considered. Some land trusts have partnered or more loosely affiliated themselves with other citizen planning groups that take the spotlight in advocacy and education/outreach work.

¹ Gandy, C. (March 18, 2007). Advocacy for Trails and Greenways: How to build an advocacy organization. Retrieved from <http://www.americantrails.org/resources/advocacy/ADVbuildBikeOrg.html>.

No matter the campaign, organizations leading political efforts must create and clearly articulate their vision, manage the various stages and steps of the overall campaign process, and obtain commitments and support via relationships, partnerships, and coalitions.

Passing Ballot Measures for Funding Conservation

State and local ballot measures have been the bread and butter of recent public funding for conservation. Between 1988 and 2008, 76% of land conservation ballot measures were successful, resulting in passage of 1,595 ballot measures nation-wide (meeting the majority or supermajority vote requirements in their communities) and raising over \$46 billion for local open-space preservation (Press, 2008). While 2009 saw a noticeable decrease in measures proposed and percent passed, The Trust for Public Land's LandVote determined that over \$600 million of conservation funds were approved, suggesting that even in dire times, ballot measures will continue to play an important role in funding local conservation initiatives (TPL, n.d.).

Private land trusts can and do play a number of roles in these efforts, from designing to promoting open space ballot measures. The Trust for Public Land (TPL), for example, drafts bond measures, conducts polling and research to demonstrate where ballots will likely succeed, shares those results with commissioners and planners to secure their support, and recruits strong local partners (TPL, 2005). In Gallatin, Montana, for example, TPL helped pass a bond to support buying



Source: Montana Department of Justice and Gallatin County Open Land Board.

conservation easements on ranch lands. Gallatin County, a strongly Republican ranching community in southwestern Montana, became the first county in the state to adopt funding for land conservation. The momentum supporting this prototype rippled to several other local governments, including Missoula County, where residents approved a \$10 million open space bond in 2006 by a 70% majority (ibid). Another outgrowth of the citizen support garnered from this ballot campaign was the creation of a specialty "Open Land" license plate that generated more than \$400,000 for the Gallatin County's Open Space Program (Gallatin County, 2008; personal communication with Ernest Cook, Senior Vice President, TPL).

Research by several organizations and academics suggest several steps to passing successful ballots (Newsome and Gentry, 2009). These include:

- **Listening:** understanding the values and demands of voters
- **Engaging communities and people of color:** a number of recent studies indicate that these often overlooked community members support conservation initiatives, in many cases more than white community members

- **Once the ballot is passed, ensuring that the benefits of funding are equitably shared:** this will be important for ensuring the continued support of coalitions of different groups

The Conservation Campaign, a non-profit national organization that focuses solely on political action to gain public funding for conservation funding provides a number of publicly accessible resources on its website. One such interactive and detailed resource, the Campaign Toolkit,³ outlines the steps for a successful campaign, including:

- **Laying the Groundwork:** Understanding the political landscape includes identifying voters' concerns, potential allies, and opponents. It also should include meeting with public officials prior to launching a campaign to hear their political concerns and to build strategies that meet these concerns (but that do not become partisan or support a particular candidate)
- **Building the Coalition:** Creating a campaign committee with clear and specific delegations; reaching out to both the obvious and non-traditional partners (e.g., real estate groups, senior citizens, police and firefighters, hunters and fishermen, farmers and ranchers, ethnic groups, churches, educational organizations, tourism boards, and groups advocating civil rights or affordable housing); and recruiting volunteers and supporters
- **Getting the Message Out:** Creating a simple, clear and consistent message that is "heard, believed, remembered and repeated" and, used in direct mailings, grassroots efforts, and other forms of outreach

³ See the Conservation Campaign Toolkit at <http://www.conservationcampaign.org/wizard/index.cfm?ID=125>.

To take on this type of work, a land trust needs to be highly skilled in organizing people, identifying potential opponents and proponents, getting supporters to the polls, and educating people. Additionally, there are lots of mindless tasks such as reviewing voting patterns and party affiliation lists that will take time and resources away from other endeavors.

Adopting Land Use Requirements

While assuring passage of a ballot measure requires getting supportive members of the community to the voting booth, the adoption of a new zoning ordinance, subdivision rule, or land use plan entails its own opportunities and challenges. Many complications stem from the huge, regional differences across the US in attitudes toward and processes for adopting zoning requirements.

In addition, many land trusts view the process for adopting zoning requirements as a contentious, time-consuming, and often ineffective process dominated by politics, special interests, and entrenched power structures. Common criticisms of the zoning process, as described by Fleischmann (1989) include the following: (1) elected officials are simply trying to appease as many constituents as will secure their reelection; (2) elected officials make decisions in order to avoid public protest; (3) that elected officials tend to favor development for the perceived fiscal benefits that will be

brought to their city or county; (4) minorities and poor residents are excluded; and (5) real estate markets are disrupted and property rights restricted.

These and other conventional views of local regulatory processes, however, are not fully supported empirically. With regard to the view that the zoning process is a highly charged political process, Fleischmann (1989) indicated that citizen-raised objections actually made up the minority of applications filed and few proposals had significant numbers of opponents. Additionally, elected officials reversed less than 15% of staff recommendations (*ibid*).

In a standard process for adopting land use regulations, there are usually three different arenas for public input: public hearings, public comment periods, and citizen-based commissions. The first two may be viewed as one-way forms of communication, during which the public expresses its views to an agency or elected officials. Little to no dialogue or learning takes place during these processes. In the third case, leading citizens representing different views are appointed to make either decisions or recommendations to elected officials.

- **Public Hearings:** Public hearings are required by state laws to precede a vote on an ordinance or plan by a planning commission or governing body. Planning commissions—comprised of laypeople appointed by elected officials, review zoning proposals—hold public meetings, and make recommendations to elected bodies (e.g., a board of county commissioners or a city council). The elected body then has the authority to amend zoning ordinances or other land use regulations.

These hearings are preceded by a public notice, which typically is published in local newspapers, posted in government agendas, and mailed to affected parties approximately two weeks in advance. Hearings are often formal, with a presentation of a proposal by its proponent or sponsor, followed by comments from members of the public in attendance. Since many hearings occur late in the planning process, these and other stakeholders tend to be disinclined to consider alternatives deeply because public officials are exhausted and applicants have already invested a great amount of time in the process. Thus the hearing is an ineffective arena for public engagement. Other venues, like neighborhood and community-wide meetings, stakeholder group meetings with planners, and focus groups may provide additional arenas for engagement (Innes and Booher, 2000; Kelly, 2010).

- **Public Comment Period:** In addition to submitting comments in hearings, the public may also submit written comments to planning boards prior to these public meetings. Local procedures may require that comments be submitted at least a week before meetings and that duplicate copies be provided. These materials will then become part of the official record and retained by the planning board or commission.
- **Citizen-based Commission:** Citizen advisory committees and broad collaborative groups are often convened by local governments to represent a

variety of views and to make policy recommendations. Recommendations from these groups have varied success in terms of application. Factors like access to funding, technical assistance, staff support, timing, and the prior existence of networks of people and organizations focused on a particular issue may be crucial to being taken seriously (Koontz, 2005).

The literature tends to support the importance of professional planners' advice, the desire to avoid citizen harm or conflict, and local context as three key factors influencing local officials' land use decision making. Local context variables like population growth, demographic characteristics, economic base, political pressure, and commitment of local officials have also been found to play a role (Koontz, 2005; Fleischmann, 1989; Burby and May, 1997; Last, 1997; Fleischmann and Pierannunzi, 1990).

In this business-as-usual model for engaging the public, public hearings are typically attended by avid proponents and opponents of a measure, comments may be limited to two to three minutes—with uncertainty as to if and how planners and elected officials use that input in making decisions—and no real dialogue occurs (Innes and Booher, 2000). However, many local governments have adopted more open, interactive, and collaborative approaches to planning.

One of these collaborative methods is the planning charrette. In this creative process, a group of interested citizens and experts is convened to focus around a specific design problem or proposal. Developers, planners, attorneys, other experts, and citizens work for several days or weeks through the public process to create a collaborative vision. This vision may alleviate fears and concerns because participants are offered a better sense of what they are working towards, and it has proven to be a persuasive process for energizing and motivating people (Lennertz, 2003; Kelly, 2010).

Charrettes may start as a prototype or pilot project and, in some cases, have given cities the courage or support to replicate such collaborative efforts or to build upon these visions. In the city of North Augusta, South Carolina, for example, the Leyland Alliance worked with the city and a stakeholder group to help the local government meet its goal of connecting the city to the Savannah River. After the success of the first charrette, which led to the conversion of old rail lines to hiking trails and connected hikers, walkers, and bike riders to the riverfront, the city had the confidence and momentum to take on other efforts, including the construction of a new, transformative city hall building that overlooks and celebrates the riverfront.

Land trusts have played varying roles in charrettes. The Lopez Community Land Trust, which works with the citizen groups and county, state, and local jurisdictions on charrette prototypes in Washington, has convened participants on topics ranging from affordable housing to food issues, bringing people of specialized areas together to create community visions and outline next planning and implementation steps for the collaborative vision. Others like the Grafton Land Trust in Massachusetts have played a more participatory role in charrettes to create visions for the historic mill village of Farnumsville and the Blackstone River.

While conventional views of zoning may, in some cases, amplify the actual

polemics of public processes for land use regulation, the process is no doubt a political one. According to Duane (2007), who looked at integrating science into land use plans, successful ingredients to engage in this arena include:

- Using a rhetorical framing strategy that emphasizes broadly-supported anthropocentric goals, rather than narrower biocentric goals;
- Distributing relatively weak science or spatial detail on where biologically important resources exist until broad political support for the program has been achieved;
- Integrating leadership by political actors with very different political philosophies and constituencies, rather than from a single perspective;
- Looking for a sophisticated development community with large players who are experienced with working in complicated regulatory environments;
- Identifying strict state and federal regulatory regimes that could constrain development unless a comprehensive strategy was developed; and
- Taking steps to abate organized opposition by commodity extraction or other intensive land use industries.

Potential Intersections

The campaign processes for ballot measures and zoning requirements share many of the same features, in terms of the type of leadership needed, stages of polling and community engagement, and so on. Yet, while many land trusts have engaged and have great experience and insight in campaigns for ballot measures, very few have done so with zoning. By recognizing the overlaps and places of synergy, the land trust community can begin to consider whether and how to utilize additional public processes and conservation tools.

Leadership and Stages of Political Organizing

A team should do much of the political organizing work, meaning that leaders will need to be able to create effective partnerships within and between organizations. The National Trails Training Partnership provides a number of highly relevant resources for land trusts and other conservation groups seeking to engage in political organizing. One of these resources—a collaborative effort between urban planners, a design firm, greenway and trails groups, and the Virginia Department of Conservation and Recreation—outlines the following steps that leaders should consider:

- Conducting meetings, making public presentations, and distributing news releases and media advisories (i.e., a database of media outlets and contacts) about the vision/effort;
- Recruiting *and* holding on to public support;

- Eliciting and being sensitive to public support;
- Conducting interviews (by phone, appointment, or canvassing) with community members and elected officials;
- Distributing questionnaires (by mail or local newspaper) for input and to raise awareness; and
- Implementing marketing strategies to establish identity (through a logo and slogan), to gain exposure, and to create name recognition with a spokesperson or good writer (e.g., a volunteer college student from a media or communications department).

Efforts from mobilizing for a ballot might help in future efforts in a number of ways. For example, mailings to constituents about a proposed ballot might identify donors and supporters for future efforts.

Community Engagement

Willingness to Pay Additional Taxes for Conservation, by Ethnicity

Annual Amount	ALL VOTERS	Whites	Latinos	African Americans	All Voters of Colors
\$100	59%	58%	66%	68%	67%
\$75	62%	61%	66%	69%	68%
\$50	67%	66%	77%	74%	74%
\$25	72%	69%	80%	85%	82%
\$10	76%	73%	87%	90%	86%

Source: National Survey of 800 voters (178 of whom identified themselves as people of color) conducted on behalf of The Nature Conservancy in September 2009 by David Metz, Fairbank, Maslin, Maullin, Metz & Associates and Lori Weigel, Public Opinion Strategies.

conservation and cluster developments; however, communities of color have largely been overlooked. By 2050, the number of people of color in the US is projected to more than double, becoming the majority of the population at nearly 220 million (Bonta and Jordan 2007). A sustainable movement, one that is relevant to the public and political conscious, will need to be relevant to a wider audience. This will require understanding a range of new communities and finding effective ways to engage with them.

Moving in these new directions will be easier for some organizations than others. There are, however, a number of resources available for guiding organizations to build meaningful public participation and support. The Center for Diversity and Environment, which provides services for environmental leaders and organizations to strategically diversify their operations, offers a number of resources on engaging people of color and building community. One such resource, by Bonta and Jordan (2007), suggests several best management practices, including:

- Collaborating with groups that already effectively work with communities of color, including organizations of color, such as Latino Issues Forum, youth-

Gaining public support may require not only new skills and sources of funding, but new partners. Conservation, as expressed in a ballot or proposed regulation, must appeal to and benefit a broad community. The conservation movement must also reach out to those it historically has not. We have begun to see, for example, partnerships with developers via

serving organizations, urban parks and recreation departments, and schools. These tend to have proven track records, respect, and trust in their local communities. Partnerships with such organizations should be based on equity of power, resources, and sharing of benefits over the longer term;

- Working with foundations and conservation groups with shared interest to diversify by sharing information, lessons learned, and efforts;
- Expanding partnerships with labor, civil rights and faith movements; and
- Engaging young people by connecting them both to nature and leadership opportunities.

Several land trusts have worked with communities of color and other nontraditional partners on such initiatives. In its efforts to become a welcoming organization that reflects the diversity of Massachusetts, The Trustees of Reservations (Trustees) has taken steps “to enhance conservation awareness across all communities and prepare the next generation for environmental stewardship” (The Trustees of Reservations, 2007). Trustees’ 2007 Strategic Plan includes some of the steps they have outlined to engage with broader audiences: creating a Diversity Council, developing an organizational culture that recognizes the value of diversity, applying communication tools to attract and engage a wider constituency, collaborating with new partners, and reaching out to minority populations to learn more from and adapt to their knowledge and values.

In California, the Big Sur Land Trust (BSLT) has committed to “engaging with community members whose interests may have been ignored or not served by the land conservation movement” (BSLT, n.d.) By addressing community concerns like economic vitality, food protection, and affordable housing, BSLT strives not only to preserve land and waterways, but the very vitality of communities. Whether engaging with broad-based organizations to develop urban parks and recreational opportunities or providing donations following severe wildfires to support evacuated residents, BSLT has taken steps on several fronts to work with new partners and in collaborative processes to create healthy and thriving communities.

These and other experiences suggest that engaging new partners in campaigns requires time and openness to the goals of potential new partners.

Potential Conflict and Benefit

While campaigns may support each other, they may also lead to a number of frustrations and conflicts with other efforts. Some of these potential areas of conflict include:

- A short-term focus on raising money without a long-term commitment to the partners and community will defeat efforts to build sustainable coalitions;
- Failing to meet commitments over time will lead to suspicion and skepticism; and
- Choosing distracted or less adept partners may cause frustrations for other partners.



Source: Moore, Christopher W. (2003). *The Mediation Process: Practical Strategies for Resolving Conflict*. John Wiley & Sons, Incorporated.

Spangler (2003) notes that keeping a coalition together may require catering to some sides more than others, reconciling different tactics (conciliatory versus confrontational), and carefully defining relationships, distributions of power in decision making, and acknowledgement for contributions.

Joining or forming a coalition, Spangler (2003) continues, is both a rational and an emotional decision. Should a land trust determine that a coalition will provide the effective means to pursue its goals and objectives, and that working with other organizations will not be overly complex

and troublesome, the land trust may enjoy a number of benefits, including:

- Exposure and access to more expertise and resources (technical, financial, and personnel);
- Opportunities for new leadership to emerge;
- Greater relevance and heightened public profile; and
- Strength in numbers and interests that will be difficult for opponents to dismiss.

If bond measures can be designed to benefit several groups, or various stakeholders can identify overlaps in interests that might be pursued in the regulatory process, these groups can band together to make sure that implementation does not get bogged down, that benefits are distributed in a timely and equitable manner, and that sustainable partnerships are formed to aid in future efforts. Similar opportunities appear to be available for efforts to design and adopt laws incentivizing or requiring more sustainable land use.

Campaigns as Engines for Change Over Time

Campaigns, especially for ballots, tend to be unstable, ephemeral organisms. Staff members are hired and volunteers recruited for five months, coalitions are formed, a bill is passed, and the coalition disintegrates. For example, the Pima County government in Arizona was propelled by Endangered Species Act provisions to develop a Multispecies Conservation Plan. The local National Rifle Association chapter, developers and homebuilders, the Sierra Club, and many others joined together to urge their respective cohorts to vote in favor of a \$174 million open-space bond package. However, groups from this coalition tended to go their separate ways after the bond was passed.

Within the private land conservation sector, while the broad base of support for ballot measures may help in future conservation campaigns, there are few obvious examples of sustainable coalitions, whereby partnerships were created to pass bonds

but were then kept intact to support other campaigns. A series of recent ballot measures supporting an array of subjects including urban parks, wildlife areas, air quality, beach cleanups, and water quality have brought a number of non-profit groups and the Latino community in Los Angeles together. Similarly, New York State has passed a number of bond acts bringing together a range of stakeholders. But case studies, lessons learned, theoretical underpinnings, and techniques for maintaining such coalitions over time appear to be lacking.

However, a number of land trusts are beginning to engage in campaigns and their communities in new, innovative ways. In doing so, they confront a number of challenges, including being associated with politics, government, and regulation. This requires stepping out of the comfort zone and tinkering with the anathema of the landowners they work with: regulation. In 2004, 97 of the 100 fastest growing counties in the US voted for President Bush (personal communication with Ernest Cook, Senior Vice President, TPL). Land trusts entering this political arena will have to recognize, understand, and be adept at addressing Republican mindsets. For conservation funding ballot referenda, this may be comparatively easy. This conservation tool may be described as a free-market, landowner friendly solution that will not deprive owners of property rights or decrease property values. Support for new land use regulations poses higher hurdles. As such, while both types of campaigns tend to engage similar organizations and individuals, as well as tactics like polling and public surveys, campaigns for ballot measures to provide conservation funding and those to adopt new zoning/land use requirements tend to be considered different beasts.

Discussion Questions

- Why are conservation groups becoming more active in campaigning for passage of ballot measures, but not for new zoning requirements?
- What sort of messages can land trusts use to make conservation-based regulation/incentives palatable to hesitant landowners?
- How can land trusts make sure that facts (e.g., the negative net fiscal impact of most development) are included in public discussions?
- Where and how might land trusts help local governments create a credible process that citizens will engage in? How might they translate their credibility and harness the community's values in the land into this process?
- While land trusts have been successful in getting bonds passed, there is some pressure in states like New Jersey to reduce taxes, including for open spaces preservation. How can land trusts respond?
- How might one create coalitions that are not ephemeral and that might develop into more sustainable advocates for better land use over time?

Organizations Doing Interesting Work

The New Jersey Keep it Green Campaign – The organization ran a successful campaign in 2009 that led to the passage of a \$400 million bond to preserve clean drinking water, wildlife habitat, working farms, and natural areas. See <http://www.njkeepitgreen.org/>.

The National Trails Training Partnership (NTTP) – NTTP provides a robust library of campaigning resources and training tools for conservation groups. See <http://www.americantrails.org/>.

The Conservation Campaign – The Conservation Campaign provides leadership, expertise, and resources to mobilize public support to win ballot measures and legislation that create more public funds to protect land and water resources. See <http://www.conservationcampaign.org/>.

Trust for Public Land LandVote (TPL) – TPL provides a database and mapping systems as well as other publications on conservation ballot measures. See http://www.tpl.org/tier3_cd.cfm?content_item_id=12010&folder_id=2386/.

Leyland Alliance (LA) – A development company that creates a sense of place and community through principles of traditional neighborhood design, LA has convened hundreds of stakeholders in waterfront development planning charrettes in South Carolina and New York. See <http://www.leylandalliance.com/>.

Lopez Community Land Trust – Based in Washington, this community land trust convenes public charrettes on several topics. See <http://www.lopezclt.org/>.

Grafton Land Trust (GLT) – GLT works with federal, state, and local government on a range of projects, including charrettes, and has brought together five town boards and the Blackstone River Valley National Heritage Corridor in a partnership to preserve the 100-acre Hennessy Farm through an innovative limited development plan. See <http://www.graftonland.org/>.

Center for Diversity and the Environment – Offers resources and guidance to develop leaders, diversify institutions, and build community. See <http://www.environmentaldiversity.org/>.

Big Sur Land Trust – The organization has engaged Latino and broader community on several initiatives. See <http://www.bigsurlandtrust.org/>.

Trustees of Reservations – To engage broader audiences, the organization has crossed language barriers and taken a number of other steps. See <http://www.thetrustees.org/>.

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3.2: Examples, sources of information and other key points from the discussion

Some of the examples, sources of information and key points from the discussion included the following:

- While political organizing to fundraise for voluntary purchases of land or to impose involuntary restrictions on land use leads to different outcomes, both activities also have much in common. For example, both:
 - Are political processes aimed at influencing the actions of voters and/or elected officials;
 - Build from deep understandings of local land use and other priorities;
 - Call upon specialized legal knowledge;
 - Require extensive reporting on lobbying activities and associated expenses;
 - Can be quite polarizing, by pushing a number of local hot buttons – increased taxes, government ownership or regulatory controls;

- Attract similar opponents, particularly those who gain financially from development;
- Attract similar supporters, particularly those who gain financially from land conservation – very hard to engage average people who just like open space, but have more pressing issues on their minds.
- The Hudson River Park (<http://www.hudsonriverpark.org/index.asp>) is an example of a 30-year effort to combine public and private resources in a mix of land uses along the Western side of Manhattan.
 - Political organizing was key to both building consensus on a vision and a constituency to support its implementation.
 - By focusing on areas of common/overlapping interests, winning coalitions for funding and regulatory efforts were built.
 - Different coalition partners had different resources and skills – and they were applied in a coordinated manner to great effect.
- Fifty years of ballot measures for conservation funding in New Jersey have underscored the importance of regional planning for where and how the money should best be spent.
- Chester County, PA adopted a bond measure to fund open space acquisition, but required interested towns to prepare an open space plan first and then to direct the funds to identified priority sites.
- Land trusts face a continuing need to find and build from shared interests with urban communities, particularly those of color and those with fewer means such as access to clean air, water and local food, prevention of childhood obesity, as well as opportunities to make a good living.
- Access to local food is becoming a powerful argument in support of farmland preservation, broadening the discussion beyond “just protecting rich people’s horse farms.”
- Going through a political campaign to raise funding for voluntary land acquisition in regions (such as the West) that traditionally oppose public land use planning processes may open the door to broader discussions of the most effective ways to apply the proceeds.
- The Santee River in South Carolina is an example of a case where the owners of lands protected by conservation easements banded together to lobby for tighter regulatory controls on further development in the region.
- At a minimum, land trusts need to understand the basics of the local zoning code and any proposed changes in order to avoid paying too much for the lands they acquire.

- The “New Urbanist” model (see <http://www.cnu.org/>) starts by inventorying the physical/natural assets of a community and protecting as many of the public assets as possible as a way to increase the attractiveness of the surrounding development. Such an approach is being pursued in Ticonderoga, New York, as part of an effort to spark economic development by reopening the town’s physical connection to Lake Champlain.
- Vermont’s efforts to combine affordable housing and land conservation offer valuable lessons on the opportunity to build sustainable villages in a rural economy.
- Thought should be given to the growing opportunities to swap lands of equivalent economic and ecological/social value over time as part of the response to changing local circumstances (climate, economics, other).
- If political coalitions come together to address a crisis, how can they best be kept together once the crisis has passed? Does this create opportunities for the educational and stewardship activities of more “mature” land trusts to have a wider impact?

Section 4: Efforts to Build Conservation Incentives and Requirements into Zoning Codes

4.1: Background

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There are many techniques used to build incentives or requirements into zoning codes and other planning policies to promote land conservation. The decentralized nature of local governments and planning organizations allows for the experimentation of different techniques on a large scale. Given time, the best strategies will emerge in different places and times, while the conservation community and local governments learn how these different techniques work under different circumstances. Private land acquisition organizations and governments should not be afraid to collaborate and innovate to find approaches to encouraging land conservation.

Traditional land use requirements begin with a local government's police power to influence how a landscape is organized. Starting in the 1920's, zoning was quite rigid. As landscapes, developers, and communities became more complex; there was a need to make zoning regulations more flexible. Today, sustainable development, conservation, preservation, and other environmental concerns are coming to the forefront of land use planning. Many governments are utilizing traditional land use techniques while complimenting those techniques with new, innovative tools to plan their communities more sustainably.

Traditional Land Use Techniques

The 1922 Standard State Zoning Enabling Act was created by the U.S. Department of Commerce. This Act provided the models for the state laws that delegate land use planning authority to local municipalities and which were adopted by most of the 50 states. These state laws added to the already delegated and inherent police powers of local governments to protect the public health, safety, welfare, and morals. Included in those model state laws were the powers that local governments were given by their states to adopt comprehensive plans, zoning laws, and subdivision and site plan regulations (Nolon, 2003).

Comprehensive Land Use Plans

Most states require local governments to create comprehensive land use plans. Planning and zoning regulations must conform to those comprehensive plans. Comprehensive land use plans include long-term environmental goals, intermediate-term conservation objectives tied to each goal, and shorter-term strategies designed to accomplish each objective. States have used a variety of approaches to ensure that the localities under their jurisdiction develop comprehensive plans that take steps towards land conservation.¹

¹ Comprehensive land use plans are further explored in Section 2: Working with Land Use Planners/Regulators to Identify Priority Sites for Conservation.

Zoning

Today, the variation in zoning ordinances is staggering, with many municipalities having developed innovative ordinances to protect land within their jurisdictions. Zoning use districts and their development specifications can be used to provide communities with a method of conserving natural resources and the environment. Successful strategies range from placing environmentally sensitive land into zoning districts that only allow very limited development, to incorporating property development standards through a variety of conservation measures such as maximum unit density, lot coverage, building height, minimum lot size, setback requirements, building spacing, and requirements for open space. Local governments have also adopted explicit conservation policies in their zoning ordinances. Zoning techniques are also used to protect open space and the natural resources and environmental functions associated with those spaces. Zoning can achieve environmental objectives by requiring compliance with performance objectives that limit adverse environmental effects such as erosion, ground water contamination, and wetland removal. Zoning standards can also specify that environmental functions in zoning districts be drawn to conform to watershed boundaries or include large parcels rich in natural resources be minimally impacted by land development (Nolon, 2003).

Zoning ordinances that achieve locally appropriate uses of the land are not likely to be invalidated by a court. This includes protecting land for conservation purposes as long as the local government can show that they have a rational basis for such a determination. For example, an ordinance drafted for the preservation of open space has been found to be a legitimate land use objective; however, some state courts have held that the preservation of open space for purely aesthetic reasons is not a valid exercise of a local government's police powers.²

² See *Scheerr v. Township of Evesham*, 184 N.J. Super. 11, 445 A.2d 46 (Law Div. 1982); and *Corrigan v. City of Scottsdale*, 149 Ariz. 553, 720 P.2d 528 (Ct. App. 1985).

Approvals, Conditions, and Reviews

Another traditional power granted to local governments is the review of land use projects for the development of private property. Commonly, permits are issued, with or without conditions, or are denied for failure to comply with local regulations. Most applications will not be approved unless they are in compliance with local zoning regulations, the comprehensive plan and other local standards.

Local governments are also authorized to promulgate and enforce subdivision and site plan regulations. Here, local planning and zoning boards can impose conditions on approvals of site plans to mitigate adverse impacts on the environment.

The subdivision of land involves the legal division of a parcel into a number of lots for the purpose of development and sale. Subdivision regulations can assure that new development is cost-effective, properly designed, and has a positive impact on the community and the environment. Many states include substantial environmental standards in their subdivision regulations (Nolon, 2003).

Examples of Incorporating Conservation Provisions into Zoning Laws

- Manhattan, Kansas, zoning ordinance includes a reference to the conservation of natural resources, including open space preservation, in its statement of purpose (City of Manhattan, Kansas, Zoning Ordinance § 2-101).
- The city of Knoxville, Tennessee, established an Open Space Preservation District to provide areas in which the principal use of the land is devoted to open space and/or the preservation and protection of park and recreation lands, wilderness areas, beach and shoreline areas, scenic routes, wild and scenic rivers, historical and archaeological sites, watersheds and water supply areas, and wildlife and their habitats (Knoxville, Tennessee, Zoning Regulations Article IV, § 1a).
- The Fiscal Court in the town of Marion, Kentucky, enacted an ordinance that prevented farmers from keeping hogs anywhere within the city limits at any time from April 1 through September 30 to mitigate noxious odors, ground water contamination, and other environmental impacts (Marion, Kentucky, Zoning Ordinance § 90-24).
- Grandview, Missouri, has created a conservancy district within its zoning ordinance to preserve in perpetuity marshes, wetlands, open space, slopes, and other areas of high aesthetic and ecological value (Grandview, Missouri, Zoning Code Chapter 31). See Nolan (2003).

Emerging Techniques for Including Conservation in Land Use Controls

The inflexibility of traditional Euclidean zoning³ led planners and regulators to pursue more flexible avenues of land use regulation. While the basic structure of Euclidean zoning remains, planners have instituted alternative ways of controlling the land uses in their communities that correspond to changing views on the environment, community growth, economics, and preservation. Considering the vast and varying amount of comprehensive plans, zoning ordinances, protocols for planning, enforcement and approvals, and other methods of land regulation across the country, local governments were bound to develop a myriad of techniques through regulation to promote land conservation within their communities. The

³ Euclidean zoning can be characterized by the isolation of land uses into specified geographic districts and dimensional standards. Euclidean zoning is often criticized for its inflexibility and out-of-date theories and strategies.

following will provide examples of the more prominent of those conservation techniques.

Urban Growth Boundaries

Urban growth boundaries (UGBs) typically create an urban growth area that encircles the city, containing land that is not within the city's limits but under county jurisdiction. They are long-term boundaries used as a pro-active growth management tool that seeks to contain, control, direct or phase growth to promote more compact, contiguous urban development. Their boundaries aim to protect farmlands, watersheds, wildlife habitats and other resource lands from sprawl by controlling limited urban expansion onto farm and forestlands (Jaffe, 2005). UGBs help to preserve land and resources outside the designated growth districts from random or leapfrog development prevalent in many metropolitan areas (Nolan, 2003).

The Portland Oregon UGB

One of the most notorious examples of a UGB can be found in Portland, Oregon. Oregon's strict UGB has generated high demand for inner city and downtown redevelopment (Paddock, 2008). By maximizing the use of land parcels within the UGB, the boundary has prevented the razing and subsequent development of huge forests and farms at the city's edge. By also maximizing the efficient use of vacant and already-developed land, the UGB has increased the amount of housing inside the growth area and catalyzed the revitalization of Portland's downtown (Mandelker, 1999). Yet, Portland's UGB is not without its detractors. The impacts of Portland's UGB on increased housing costs, increased automobile use, and increased suburban development has been hotly debated (Jun, 2004).

The area within a UGB is known as the "growth area." Here, development at higher densities is encouraged, and infrastructure, such as roads, water systems, and sewer systems, is provided for or planned. UGBs motivate the development and redevelopment of land and buildings within the growth area, keeping the urban center vibrant and reducing sprawl. This allows for more sustainable, efficient growth and the preservation of lands outside of the growth area. However, when implementing UGBs, local governments should implement a strategy with surrounding jurisdictions to avoid similar spillover problems and plan for sustainable development within the growth area.⁴

⁴ The Greenbelt Alliance provides an in depth overview of UGBs. Visit <http://www.greenbelt.org/resources/reports/index.html>.

The Lexington, Kentucky UGB – The First, but Flawed

One of the nation's oldest UGBs can be found in Lexington, Kentucky, where it was implemented in 1957. As the UGB began to impact the supply of land that could be developed in Lexington, growth and development began to move outside the sphere of influence of the UGB. Hence, the areas outside of Lexington's UGB sphere of influence (beyond Fayette County wherein Lexington is located) experienced a spillover effect. Developers and homebuyers seeking lower prices and lower densities migrated to the surrounding counties without the same strict growth controls. Lexington failed to appropriately plan the development within the UGB causing uneven growth, poor transportation corridors, and poor municipal services access (Jaffe, 2005).

Transfer of Development Rights

Where authorized by state law to do so, localities can provide for the transfer of the right to develop property under current zoning provisions from one part of the community to another. Transfer of Development Rights (TDR) is a market-based land use tool that permits the transfer of development potential from areas identified for preservation to areas that are more appropriate to accommodate increased growth (NJHC, 2008). TDR programs can be very complicated and often require a significant public-private collaboration to work effectively (Nolon, 2003).

There are three basic elements of a TDR program: the sending zone, the receiving zone, and the TDR credits. The sending zones are the areas identified for preservation from which development potential is transferred or sent out. Receiving zones should be identified as having the infrastructure capacity, ecological integrity, and real estate market to support increased development and its attenuating growth impacts. The TDR credits are a legal representation of the development rights in the sending and receiving zones. A TDR program must also have a process for recording, transferring, and tracking TDR credits from a parcel in a sending zone to their use in a receiving zone. Once a property's development rights are severed, the parcel is encumbered with either a deed restriction or conservation easement limiting its future use to its current use in perpetuity (NJHC, 2008).

Landowners in the sending zones receive compensation for the transferable development rights of their property that have been restricted in support of preservation. Payment for this lost development potential comes from purchasers who buy TDR credits representing the lost development potential of parcels in the sending zones. The TDR credits then entitle the purchaser to build in a receiving zone at a density greater than permitted in the existing zoning. A TDR credit can never be used again once it has been redeemed.

The TDR credits can be traded in a free market, but many TDR programs utilize a TDR credit bank to support program administration (Nolon, 2003). The bank can serve as a clearinghouse for information regarding the program and can administer

the recording, transferring, and tracking of TDR credits. The bank may also assist sellers and purchasers of TDR credits by serving as a buyer or seller of last resort of TDR credits or by guaranteeing loans utilizing the TDR credits as collateral. TDR credit banks may also only facilitate the transaction between buyers and sellers. Most importantly, the existence of a TDR credit bank establishes a degree of credibility for a TDR program especially where the bank is able to purchase and sell credits (NJHC, 2008).

Both sending zones and receiving zones should be identified at the outset of a TDR program. These zones should also be incorporated into the overall zoning scheme as either specific zone districts or overlay zones (see Overlay Districts below). Sending zones are easily identifiable because communities usually know what resources are in need of protection. However, identification of receiving zones is more difficult for two reasons: (1) determining whether a potential receiving zone has the ecological integrity and infrastructure capacity to accept increased development requires a lot of research and work and (2) there is often the political challenge of overcoming reluctance to accept additional growth. Through careful planning and public input, however, these challenges may be overcome (NJHC, 2008).

New Jersey Highlands Council and TDR

Through passage of the Highlands Act in 2004, the New Jersey Highlands Water Protection and Planning Council (Highlands Council) was created and charged with the task of developing a Regional Master Plan to restore and enhance the significant values of the critical resources of the Highlands Region. The Highlands Council is an independent agency of the State of New Jersey. A major purpose of the Regional Master Plan is to determine the amount and type of human development and activity the ecosystem of the Highlands Region can sustain. The Highlands Council continues to undertake an impressive data gathering and analysis regime utilizing GIS and other mechanisms to identify priority sites for protection with the intention of establishing and maintaining a successful TDR program – an essential part of their overall protection scheme. However, because of political outcry and prior experiences with unwanted growth in the mandatory receiving zones of the Pinelands TDR program, the New Jersey legislature decided to make the implementation of receiving zones in the Highlands region voluntary. As a result, the Highlands TDR program is not as effective as it could be, and unless more receiving zones are established, the market will be saturated with TDR credits but have no buyers. A solution may be to require municipalities that are unopposed to more density and that receive water from the Highlands watershed to establish a receiving zone within their boundaries as a condition for a continuing water supply. For more information visit <http://www.highlands.state.nj.us/>.

Another difficult aspect of designing a TDR program is determining how to define and value the development rights that are severed from the land and eligible to be transferred. Usually, a formula is used to quantify and define the development rights based on such factors as the lot area, floor area, floor area ratios, density, height limitations, or any other criteria that effectively quantify an appropriate value. The formula chosen converts development rights into specific development credits (Nolon, 2003).

The first TDR program was implemented in New York City in 1968. As of 2007, there were at least 181 TDR programs in 33 states that have preserved at least 300,000 acres of farmland, natural areas, and open space (Pruetz and Pruetz, 2007). Two-thirds of the 181 TDR programs are designed primarily for environmental protection. TDR programs emphasize farmland preservation for 20% of the 181 TDR programs. More than half of this 20% are located in Maryland and southeastern Pennsylvania. This is likely due to the high productivity of farms in this region and the desire of its farmers to stay in agriculture, particularly the Amish and Mennonite farmers in Chester and Lancaster counties in Pennsylvania (Pruetz and Pruetz, 2007). TDR programs are also being utilized to promote historical preservation, community revitalization, and economic development. TDR programs continue to be established for a number of conservation purposes including maintaining agricultural viability, protecting ecologically important lands, maintaining ecosystem health, and protecting high water quality.

Several factors have been identified for the successful implementation of a TDR program, including:

- The TDR program's consistency with the comprehensive plan of the area;
- The suitability (or lack of) for development of properties in sending zones due to a remote location, limited infrastructure, poor soils, steep slopes, and other physical constraints;
- Successful outreach and education of receiving zone landowners regarding the TDR program's purpose of implementing, rather than circumventing, community land use plans and requirements; and
- The provision for enticing incentives for buyers and sellers of TDR credits beyond residential density bonuses, such as streamlined application process, the adoption of low baseline densities, balancing the affordability of TDR credits with appropriate compensation to the sellers, the flexibility and diversity of options of a TDR program, and the willingness to adjust the TDR program if needed (Pruetz and Pruetz, 2007).

TDR programs are most effective in communities that face strong development pressure, where officials believe it would be difficult to successfully implement traditional zoning restrictions to achieve preservation goals, or where financial resources are not available for municipalities to buy land or development rights on their own. TDR programs also require sophisticated administration, structure, and funding. TDR should be a compliment to an already strong zoning program, not a substitute for traditional zoning (Hanly-Ford, 2010).

Land trusts have experience with the purchase of development rights, as conservation easements have been a major tool in the land trusts' conservation arsenal for some time. Thus, land trusts should make a great partner with local governments to facilitate and administer TDR programs. In addition, land trusts may also contribute by educating the public to simplify the complexities of a TDR program and by marketing the program to landowners and developers. If land trusts are involved, an unambiguous agreement or contract between the local government and the land trust is crucial.

Lancaster County Farm Trust – Municipal Partner in TDR

The Lancaster County Farm Trust (LCFT) has developed the organizational capacity to assist Lancaster municipalities with a variety of their planning programs, including TDR programs. The Trust has successfully developed cooperative relationships with several townships and has had the opportunity to assist in establishing TDR programs and prioritizing areas for preservation. This includes the promoting and executing of TDR programs in Warwick, West Lampeter, and West Hempfield Townships. The Trust has also participated in creating The Lancaster County TDR Practitioner's Handbook. With a solid understanding of the nuts and bolts behind TDR programs, Trust staff will introduce the TDR handbook to municipal employees and officials and will support development of this preservation and growth management tool. As of 2008, the LCFT has preserved over 20,000 acres and 1000 farms in Lancaster County. The TDR Handbook can be downloaded at http://www.co.lancaster.pa.us/toolbox/lib/toolbox/tools/tdr_handbook.pdf. For additional information visit <http://www.lancasterfarmlandtrust.org>.

Still, TDR programs have not been as successful as hoped. There has been difficulty establishing market value for the development rights of property in the sending zones, a lack of acceptable incentives to satisfy landowners and developers, vigorous political opposition to expanded growth in receiving zones, a need to establish more TDR credit banks, lack of resources and inadequate administration, and frustration with the overall complexity of a TDR program. Land trusts and government regulators should to address these difficulties, limit the constraints, and expand the opportunities to make TDR programs more successful and widespread.

Conservation Development

Conservation developments are projects that combine land development, land conservation, and revenue generation while providing protection of conservation resources. Although conservation development is more of a tool for developers to design developments for conservation, it is not necessarily mandated through regulation. Nevertheless, conservation development has been found to increase

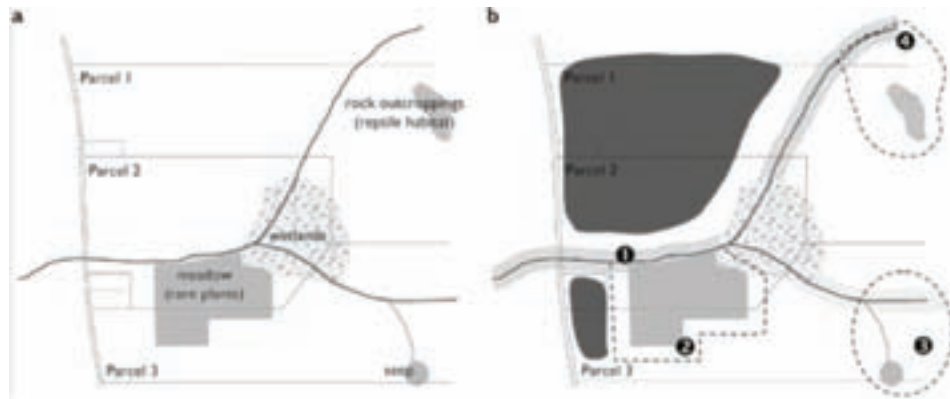
conservation value as compared to traditional subdivision development. Moreover, in order to allow for conservation development, zoning ordinances, and other land use regulations often have to be amended. Conservation development may be another important tool for land trusts, regulators, and developers to explore in order to preserve conservation values in a property slated for development.

Conservation development uses a process of ecologically based planning and design to assess a site's natural resources and environmental context, and then to use this knowledge to conserve portions of the site with high resource value while designing a development that minimizes environmental impacts on the remainder (Milder, Lassoie, and Bedford, 2008). Conservation developments are one response to the lack of public funding to support private land conservation initiatives. Conservation developments are mostly a tool of the private sector; however, it is essential that local governments incorporate more conservation-oriented design standards into the local land-use ordinances and subdivision regulations to assure that the majority of new developments are able to contain a substantial percentage of protected open space.

There are several different types of conservation developments that vary in scale, development density, context, and expected conservation benefits. The four prominent types are conservation buyer projects, conservation and limited development projects, conservation subdivisions, and conservation-oriented planned development projects. Conservation buyer projects contain a small amount of development – most often a single house for the landowner. This technique is predominantly used by land trusts as a cost-effective land protection strategy. Conservation and limited development projects (CLDPs) are usually initiated by land trusts, landowners, and/or developers and use limited development as a means to finance land conservation or to create a project with both profit and conservation goals. Conservation subdivisions, usually initiated by for-profit developers, can be defined as cluster developments (see below) or open-space residential developments and are built at or near the full density allowable by zoning, but housing is clustered onto smaller lots to protect a portion of the site for conservation purposes. Conservation-oriented planned developments, also conducted by for-profit developers, typically occupy large sites of 500–1500 hectares and include a mix of development types and large protected areas (Milder et al, 2008).

A study by Milder et al. (2008) illustrated that CLDPs are an effective yet low-cost conservation strategy that can be used by land trusts, landowners, and conservation-minded developers. The CLDPs evaluated were protecting threatened conservation resources, including rare biodiversity and ecosystem functions, and resulted in significantly more conservation benefits than their respective baseline land-use scenarios.

Milder et al. (2008) indicated that the conservation subdivisions evaluated provided significantly less conservation benefit than the CLDPs. Though conservation subdivisions have a more conservation-friendly layout than conventional developments, they are not as effective as CLDPs for conservation purposes.



This figure, taken from Milder (2007), demonstrates the various uses of CDLP. As Milder explains “(a) Land parcels are artificial demarcations that rarely coincide with the distribution of natural resources. Thus, the conventional conservation approach of protecting individual parcels often fails to safeguard the full extent of critical resources while expending scarce funds to protect land of lower conservation value. (b) In conservation development, valuable resource areas with patchy distribution—such as streams and their riparian zones (1), a meadow containing rare plant species and a surrounding buffer (2), a seep and up-gradient areas that directly feed it (3), and a complementary set of reptile habitats (4) can be protected while making less valuable areas (shown in dark gray) available for development. Development of the lower-value portion of each site finances protection of the higher-value areas, resulting in a cost-effective approach to natural resource conservation.”

Certain conservation developments can also generate additional profits compared to conventional developments. From a developer’s standpoint, conservation subdivisions can provide higher profits than conventional subdivisions. Lots in conservation subdivisions often carry a price premium, are less expensive to build, and sell more quickly than lots in conventional subdivisions. However, this does not account for the benefits and costs to society that result from the use of conservation subdivisions (Mohamedurban, 2006). These include higher housing costs, impacts on sustainability, the development of lands that perhaps should be left for protection, and sprawl.

Build Out Analyses

One of the greatest difficulties in enacting effective zoning is the lack of political will to adopt zoning that increases density in planned growth areas to accommodate development and reduce densities in planned protection areas to discourage development. A build-out analysis is an important first step in evaluating a community’s zoning. By preparing maps showing potential future development under the existing conventional zoning, a build out analysis can visually represent to community members what their community will look like in the near future. Build-out analyses are conducted to estimate how much new development could occur and where it could occur under the current zoning. They can also help prevent overzoning by tying the amount of land planned for growth and development to future growth projections. A build-out analysis can be an effective wake-up call to a community that is growing faster than it desires (Daniels and Bowers, 1997).

Build Out Analysis of the Barnegat Bay Watershed

As part of the Barnegat Bay National Estuary Program's management plan, the Center for Remote Sensing and Spatial Analysis (CRSSA) completed a build-out analysis of the watershed in New Jersey. The build-out analysis created a model of the watershed when all land available for development is developed at the highest intensities possible. This type of analysis was useful in long-term planning efforts as a way to understand the potential impacts of future growth in the area. The build-out model estimated that the number of dwelling units and population could increase 30 to 34% and impervious surface cover could increase up to 50% in the baseline scenario. This indicated that comprehensive watershed scale planning is needed to address future development impacts in the area. For the complete analysis visit <http://www.crssa.rutgers.edu/projects/runj/buildout.html>.

Incentive Zoning

Local governments are often delegated by state statutes the power to secure open space, recreational, and other natural resource benefits for the community. This can be done by imposing conditions on development projects that require developers to dedicate land to the community for public use or contribute cash in lieu of land dedication. Some states allow local governments to award bonus density to developers in exchange for their agreement to preserve natural resources or provide recreational facilities. This is known as incentive zoning, wherein the local government will incentivize developers to make a conservation contribution to the community in exchange for bonus density or some other incentive. The success of incentive zoning is usually predicated on whether the incentives are mandatory or not (Clark, 2007).

Related to incentive zoning are impact fees, where a local government requires a developer to pay a fee in order to help provide for sewage, roads, and other infrastructure access to the new development. However, impact fees are often too insignificant to be effective conservation tools.

Incentivizing for the Environment

Local governments can provide zoning incentives to developers in exchange for the provision of amenities such as recreation and open space benefits. In Lancaster County, Nebraska, a zoning ordinance allows development under an approach called the Community Unit Plan (Lancaster County, Nebraska, Code § 14.003). The Community Unit Plan includes development bonuses for developments that preserve the rural character of the site, a natural habitat, a natural environmental feature and existing drainage courses. The Community Unit Plan also allows developers to receive density bonuses of up to 20% for conserving energy, protecting environmentally sensitive areas, and for maintaining agricultural lands (Nolon, 2003).

Cluster Development and Planned Unit Developments

Cluster and planned units developments emerged around the 1950's in response to the trend towards large-scale development projects (Nolan, 2003). In direct response to the rigidity of traditional Euclidean zoning, these techniques allow developers and planners to provide for flexibility in building and site design while allowing large developments to proceed.

Under cluster development, the local government permits a land developer to vary the traditional dimensional requirements of a zoning ordinance. For instance, a developer can develop with a higher density than usually allowed, leaving undeveloped property to provide open space or serve the recreational needs of the residents of the development. When properly implemented, this technique is popular because it will both reduce the amount of land required for the infrastructure of the development, such as roads and utilities, and will increase the amount of open space (Reichle, 2009).

Local governments have also implemented planned development units (PUDs). PUDs allow developers to apply for a special permit to create a higher density, mixed use development in areas that are usually zoned for only one use, giving the developer more design flexibility. This helps create more cost-effective, efficient, and conservation-friendly development.

Cluster Developments and Conservation Easements

In Johnson County, Iowa, the zoning ordinance provides for clustered subdivisions using conservation easements that provide permanent protection of the preserved environmental resources (Johnson County, Iowa, Code § 05-16-02.). This provision is intended to allow development that will meet future growth projections while preserving and protecting agriculturally, environmentally, and historically significant features, and other open areas of Johnson County. The ordinance mandates the maintenance of conservation easements and includes a process for acquiring a density bonus as long as no less than 50% of the parcel is designated open space or limited use agriculture. Easement and site plan requirements consider topography, drainage, topographical features, areas for mitigation and preservation, existing zoning and land use, and approximate density of residential uses (Nolan, 2003).

Overlay Districts

Overlay districts are mapped areas that are superimposed on existing zoning districts. These overlay districts impose additional regulations on the underlying zoning districts while the regulations of the underlying district remain in place. Overlay districts can be designed to protect specific resources such as habitats, ridgelines, trees, historic or scenic districts, or even night skies. They can also be designed to protect environmentally significant or vulnerable areas. Overlay districts can also

counter the fragmenting effects of traditional zoning by crossing district boundaries and can be used to direct development to appropriate areas of a community. A great tool for local natural resource protection, overlay zones can be utilized as only one layer of protection or in tandem with other overlay zones to protect vulnerable or valuable lands. For example, DeKalb, Georgia, has included in its zoning ordinance an Environmental Overlay Zone that allows the zoning commission to identify and protect environmentally sensitive areas. The overlay preserves viewsheds, limits impervious surfaces, and provides for increased density of development in exchange for environmental benefits to the town (Nolon, 2003).

The Conservation Area Overlay District – A Model Ordinance

The Conservation Area Overlay District (CAOD) was developed by the Metropolitan Conservation Alliance of the Wildlife Conservation Society. The CAOD is an overlay district that crosses political boundaries and includes performance standards to protect the diversity of habitats and species. The purpose of the CAOD is to preserve ecological communities, environmentally sensitive areas, and native vegetation; and to protect scenic and historical resources. One of the most innovative features of the CAOD is that it can extend across municipal boundaries to follow the natural contours of ecosystems rather than political contours. The CAOD also protects open space, water resources, slopes, and ridges (Nolan, 2003). For more information visit <http://www.ecostudies.org/mca.html>.

Conclusion

This is by no means an exhaustive list of the many ways to build incentives and restrictions into zoning regulations. New techniques are always being developed, as are refinements to older techniques. Private land acquisition organizations, community members, and local governments must continue to work together to innovate and determine which techniques work best for their communities. Finding ways to incorporate conservation into land use regulation is imperative to the protection of lands in every community.

Natural Lands Trust – Influencing Government Land Use Regulation

Natural Lands Trust has been working to protect over 38,000 acres in eastern Pennsylvania and southern New Jersey since 1953. Natural Lands Trust has also developed a variety of ways to influence and inform government regulators on how to take a more proactive approach to managing growth by providing mapping, open space plans, zoning ordinance revisions, and other techniques that promote conservation. Among those techniques is a program called “Growing Greener.” Growing Greener is a collaborative program of the Pennsylvania Department of Conservation and Natural Resources, the Pennsylvania Governor’s Center for Local Government Services, and Natural Lands Trust. Participating municipalities learn how to make changes to land-use instruments such as regulations and comprehensive plans in order to protect land through their municipal land development process. For more information visit <http://www.natlands.org>.

Discussion Questions

- What role does the land conservation community play in regards to land use regulation? Are they where they want to be; do they need to be more involved; less involved?
- How can land trusts and other private land acquisitions organizations prioritize which land use regulatory techniques are most suitable for their community?
- What are the different ways land trusts can collaborate with government officials and smart growth advocates to pass land use regulations that promote conservation?
- Since some of the techniques are quite complicated, how can land conservation organizations harness the resources and expertise of the government and others to help implement these techniques? How have land trusts in Lancaster County, Pennsylvania managed to implement and manage a TDR program in that area? Why are there so few others?
- What other innovative techniques are out there? What can the land conservation do to help develop new techniques?
- Should land trusts be putting forth people to sit on planning boards or commissions?

Organizations Doing Interesting Work

Land Use Law Center – Pace University School of Law – Established in 1993, the Land Use Law Center is dedicated to fostering the development of sustainable communities and regions through the promotion of innovative land use strategies and dispute

resolution techniques. The Center involves land use and real estate leaders, attorneys, and other professionals in its programs. The Land Use Law Center continues to develop its Gaining Ground Information Database, compiling innovative land use and planning instruments and regulations across the nation. See <http://www.law.pace.edu/landuse>.

Natural Lands Trust (NLT) – The NLT continues to develop ways in which land trusts can interact and influence local government to incentivize conservation. Through their Growing Greener program, NLT provides model ordinances, policies, and plans to make conservation a priority for government planners. For more information visit <http://www.natlands.org>.

Metropolitan Conservation Alliance (MCA) – The MCA is a program developed by the Cary Institute for Ecosystem Studies. The MCA develops innovative conservation tools that respond to the needs of communities and decision-makers as they strive to integrate biodiversity information into the land-use planning process. Published in the MCA Technical Paper Series, these tools are developed in collaboration with land-use attorneys, biologists, developers, municipal officials, agency personnel, and university researchers. The MCA develops partnerships with local land trusts, watershed organizations, conservation districts, and others. For more information visit <http://www.ecostudies.org/mca.html>.

Lancaster County Farm Trust (LCFT) – LCFT is a successful land trust in Pennsylvania that has developed sophisticated programs to foster conservation programs in Lancaster County, Pennsylvania. LCFT works closely with conservation organizations and local governments and advises each of the different techniques and strategies for conservation including TDR. For more information visit <http://www.lancasterfarmlandtrust.org>.

New Jersey Highlands Water Protection and Planning Council (Highlands Council) – The Master Plan for the Highlands created by the Highlands Council gives insight how a large state mandated organization works with the public to identify priority areas for conservation. The Highlands Council is very transparent and allows public access to a large amount of data, research, and documents. For more information visit <http://www.state.nj.us/njhighlands>.

Piedmont Environmental Council (PEC) – The PEC safeguards landscapes, communities and the heritage of the Virginia Piedmont by involving citizens in public policy and land conservation. The PEC focuses on a variety of conservation issues including clean air and water, conserving land, energy solutions, historic and scenic landscapes, thriving communities, transportation solutions, wildlife habitat, and working farms and forestland. For more information visit <http://www.pcv.org>.

Rutgers University Grant F. Walton Center for Remote Sensing and Spatial Analysis (CRSSA) – CRSSA's research and development program focuses on advancing the application of various geo-spatial technologies including remote sensing, geographic information systems (GIS) and global positioning systems (GPS). CRSSA also develops spatial-statistical analysis/modeling techniques to the environmental, agricultural and natural resource sciences and management including build out analyses to monitor the relationship between growth and natural resources. For more information visit <http://www.crssa.rutgers.edu>.

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4.2: Examples, sources of information and other key points from the discussion

Some of the examples, sources of information and key points from the discussion included the following:

- Zoning is a tool for implementing comprehensive plans.
 - But it is often skewed toward development in the hunt for a bigger, local real estate tax base.
 - Zoning alone is not well suited for protecting natural resource values as it needs to maintain reasonable economic opportunities for land owners in order to pass constitutional muster.
 - There is a need for comprehensive plans that incorporate a big vision of bringing back cities, stopping sprawl and encouraging smart growth.
 - Zoning controls can be paired with land acquisition to make conservation efforts more durable – even (particularly?) in quite restrictive zones.
- A number of lessons have been learned about using zoning codes to support land conservation, including the following:
 - The premier tools used to date (transferable development rights, urban growth boundaries and very low density zoning) take a long time to put in place and are not widely used.
 - Transferable development rights (TDR) work best across large geographic areas that include receiving zones with high demand for development.
 - Urban growth boundaries are more difficult to put in place than TDR programs, but have worked well in locations such as Lexington, KY and Lancaster, PA. Approximately 150 such boundaries exist in the US today.
 - Agricultural and forest zones using large minimum lot size zoning (25 acres or more) have been successfully used in areas such as Baltimore County, MD, but found mainly on the West Coast and the rural Midwest.
- Conservation design – including community assessments, comprehensive planning, conservation zoning and conservation subdivision design – have been used in many communities both to preserve land and channel development in a more sustainable manner. Additional information on this approach can be found at www.landchoices.org and www.greenerprospects.com. The Natural Lands Trust has also worked on a number of such projects (see <http://www.natlands.org/categories/subcategory.asp?fldSubCategoryId=26>).
- Greenway exactions from developers have been successful in Cary, NC, as part of the effort to implement a regional greenway plan and allow developers to charge more for homes along the greenway.

- Conservation or cluster zoning can work well in suburban areas, but not as well in working landscapes given the risk of “cluster sprawl.”
- In York, ME, the zoning ordinance calls for the land trust to work with the Planning Board and developers to include conservation areas in site designs.
- Easements from mitigation activities appear to be creating some waves in the land trust community – leading some organizations to complain that if they accept such easements they are viewed as “second class citizens” given the relative newness of the tool and the worry that the land trust is picking up the enforcement tab from developers and regulatory agencies.
- A huge number of easements are generated by municipal officials across the country – no one knows if they are being monitored or enforced or even if the resources exist to do so. This poses major risks for the future.
- With the current administration in DC there exists an opportunity to try and redirect the federal incentives/subsidies affecting development from encouraging sprawl to encouraging the redevelopment of US cities. For example, the Department of Transportation is only allowed to support highways, not roads in cities.
- The efforts to build “green infrastructure” in cities (such as for stormwater management) are creating new opportunities to blend conservation and more sustainable/resilient development.
- Conservation groups can help reduce development pressure on rural areas by joining the coalitions seeking to build and restore livable cities – thereby also adding a positive argument to their repertoire . . . not just “don’t build there”, but also “do build here”.
- Public access can be a decider between private and public tools – acquisition yes, regulation no.
- Land trusts started as a response to poor local zoning. If they seek to enter this arena, they should start with the tools that are likely to succeed in their context and build from there.

Section 5: *Land Conservation and Permanence*

5.1: Background

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Time complicates virtually everything, particularly environmental issues. The passage of time makes it difficult to analyze and judge the causes and nature of environmental damage (Thompson, 2004). Permanence is among those environmental issues. The permanence or “perpetuity” of land preservation across different conservation strategies has become increasingly controversial in recent years.

Most conservationists agree that permanence is essential to a successful land conservation strategy. However, how that permanence is achieved is still up for debate. This background paper will analyze several different land conservation strategies as they relate to permanence with a special focus on two of those strategies—private land acquisition and public land use regulation; it also addresses eminent domain or “takings” issues, which are essential to the debate. Conservationists must find ways to reconcile and combine public and private approaches to help achieve permanence and ensure that a particular conservation strategy or combination thereof is successful far into the future.

The Permanence of Private Land Acquisition

Land trusts and other private land acquisition organizations highlight the ability of fee ownership and conservation easements to protect land in perpetuity.

Fee simple ownership by a land trust or government agency dedicated to the management and protection of open space is typically the most “permanent” form of protection. That being said, land trusts and government agencies (in spite of constitutional and legislative protections) have been known to trade, or to sell lands that others thought would be conserved forever, not even to mention the other issue of insufficient management.

Conservation easements are permanent by design, and many statutes that facilitate their creation actually require that they be perpetual (Harding, 2009). While permanent protection of land is an important, substantive feature of conservation in general, the instigation of the statutory perpetuity requirement can be traced to tax

incentives legislated by federal and state legislatures, as well as land trusts' traditional appeal to charitable donors.

For the donation of a conservation easement to be tax deductible, the Internal Revenue Service (IRS) requires that the easement must be "in perpetuity." Securing and maintaining conservation easements in perpetuity are the most critical and complicated challenges and opportunities for the private land conservation community (LTA, 2007). The perpetuity requirement traces back to the policy concern that donations not in perpetuity would be difficult to value. Federal and state regulators were also wary that this tax deduction might be used to allow a public subsidy for property held in a long-term investment for development. The involvement of the IRS and the use of a charitable donation to receive a tax deduction render a traditional private transaction into one with public implications. Hence, the advent of a perpetual conservation easement not only holds important ecological and financial benefits, but also holds important private and public policy implications.

Perpetual restrictions on land are not unique to the conservation easement context. Perpetual restrictions have been placed on the development and use of land in the charitable context for centuries. This includes the donation of property to government entities and charitable organizations to be used for specified charitable purposes in perpetuity as hospitals, libraries, public parks, and nature preserves, all of which limit the use of the land for economic development or other purposes (McLaughlin and Machlis, 2008).

Like the above charitable donations, conservation easements are legally binding documents that can be enforced by a court of law. When a land trust accepts a perpetual conservation easement, the land trust promises the easement grantor, land trust members, funding sources, and the public that the land trust will uphold the easement in perpetuity. As a charitable organization chartered under state law and as a federally tax-exempt nonprofit entity, a land trust has legal and ethical responsibilities to ensure perpetual protection of its easements and lands donated for conservation purposes (LTA, 2007).

Ironically, proponents of conservation easements also argue that one benefit of conservation easements is that they preserve the ability to make choices about property under easement in the future. This is an efficiency argument that suggests reversing the impacts of development is much more difficult than reversing the impacts of conservation. This is evident because mistakes in the conservation of a parcel are less socially, economically, and ecologically costly than mistakes in the development of a parcel. In essence, the conservation of the land may make it more susceptible in the future to change because it has yet to be permanently altered by development. Development limits what can be changed. This produces an underlying conundrum for land trusts. While conservation easements essentially help keep conservation options alive, they can also potentially keep development options alive as well. This may inappropriately lock up lands that, from a broader view of the public interest, ought to be set aside for future development or, at least, should be considered for future development through a public planning process (Echeverria and Pidot, 2009).

Opponents of conservation easements as a means to permanent land conservation offer further reasons why conservation easements may not be the most permanent of instruments. For instance, there are substantial questions as to whether easement restrictions can be effectively enforced over the long term, especially with the transfer of the property under easement to a landowner that may not have the same values as the previous landowner. Also, the ecological changes of a parcel or landscape may not be accounted for in a conservation easement especially when dynamic changes are inherent in natural systems. In addition, there is scientific consensus that climate change may produce sizeable shifts in ecological conditions across a landscape having a dramatic impact on areas such as coastal watersheds and other riparian zones, as well the habitat of many endangered species. The predictability of the conservation value of a certain property will be in jeopardy, leading to situations where conformance to a conservation easement may be impossible (Echeverria and Pidot, 2009).

The Rolling Easement

An innovative take on the traditional form of an easement is the rolling easement. Rolling easements have been enacted in a few jurisdictions to balance wetlands preservation with private property rights. As the sea advances, the easement automatically rolls landward, thus permitting the creation of new wetlands and preserving public access to the shore. The owner of the underlying fee can develop and use the land as long as the land is above sea level. This allows the owner to plan for the future based upon sea level rise projections. Innovative easement designs like this demonstrate the flexibility of these instruments and their ability to adapt to future environmental changes (Sussman et al., 2010).

Owners of the underlying fee interest may also be able to modify or extinguish conservation easements in the future through legal action with or without the cooperation of the easement holder. This can be done by arguing that a change in circumstances makes the purposes of the easement impossible or impracticable to accomplish or that the easement is too vague, ambiguous, or impossible to enforce.

If a conservation easement is deemed to be no longer useful, it “might legally die of neglect” (Thompson, 2004, p. 611). This could happen in at least two ways: first, through a failure to formally re-record the conservation easement under a particular state’s marketable title acts; or second, through estoppel¹ after repeated violations of the easement’s restrictions by the owner of the property under easement (Bray, 2010).

However, a well-drafted easement may be able to reconcile these potential impediments by being able to adapt to future contingencies. The challenge for each land trust is to develop criteria for amendments to conservation easements to address unexpected or evolutionary changes in a manner that honors its legal and ethical obligations and maintains public confidence in the integrity of the organization and its conservation easements (LTA, 2007). Conservation easements must be careful not

¹ Estoppel is a legal doctrine that means a person is prevented from denying or asserting a position contrary of that which has been established as the truth by his or her previous actions.

to “pigeonhole” too narrowly the conservation purposes of a landscape that may be subject to change in the future.

Preparing Conservation Easements for Future Exigencies

An amendment provision in a conservation easement affirmatively declares the land trust’s powers to modify easement terms and the restrictions or requirements that apply. The LTA recommends that conservation easement holders should include an amendment clause to allow amendments consistent with the easement’s overall purposes, subject to all applicable laws, and that the amendments meet the following to muster legal scrutiny:

- Clearly serve the public interest and be consistent with the land trust’s mission.
- Comply with all applicable federal, state and local laws.
- Not jeopardize the land trust’s tax-exempt status or status as a charitable organization under federal or state law.
- Not result in private inurement or confer impermissible private benefit.
- Be consistent with the conservation purpose(s) and intent of the easement.
- Be consistent with the documented intent of the donor, grantor and any direct funding source.

Another potential problem with conservation easements is recalcitrant landowners. As the conservation easements become older, the more detached the landowner or easement holder will be to that specific transaction, and the harder the enforcement of those easements will be. The novelty of conservation easements makes it hard to know how future actors might attempt to undo them, much less whether they will fail or succeed in their attempts (Bray, 2010). The need to establish and formalize standards and procedures to ensure that conservation easements do not outlive their usefulness is imperative to the perpetuity of the conservation easements.

Yet, even if conservation easements are indeed permanent, the permanent hold on the development of a particular property may not be in the best interest of a community. Obverse to the efficiency argument above is that not every development will permanently or inappropriately impact a resource or property. Ecological restoration has improved the likelihood of natural landscape restoration of previously developed land. This can range from the conversion of a waterfront highway to a public park, to the re-establishment of a natural forest system on abandoned mining sites. Likewise, lands on the edge of a growth area that are currently suited for conservation may not be so in the future. Land on the growth zone edges may not be needed for development at the time of protection, but, as developed areas grow outward, the need increases. Otherwise, unless appropriate zoning is in place, the result will be leapfrog or spot zoning, wherein the continuity of

developed and protected land will be interrupted, nullifying much of the conservation importance of a parcel.

To help ensure the permanence of conservation easements, the easements should be drafted so that land can be freed from obsolete restrictions. However, any provision that renders the conservation easement too easy to undo or relax should conservation values change may also make it less effective for its stated purposes (Bray, 2010). For conservation easements to be effective, the current generation must find a workable way to dictate conservation policy into the indefinite future. This will require conservation easements to be flexible, while also maintaining their conservation purposes into the future.

Formulating strategies for the future also relates to situations where land trusts use public money to purchase property. Often times, the use of public money to buy property requires the property to have restrictions on the development of that property into the future. These restrictions need to also be mindful of future changes.

Finally, governments may also acquire both the underlying fee and a conservation easement through eminent domain to convert the protected land to some other, more valuable, public use. Just because a land trust owns legal title to some part of the property does not prevent such takings – only local political processes do. This underscores the importance to land trusts of using their land to provide and demonstrate clear value to the communities within which they work.

The Permanence of Regulation

Regulation of land use is another important technique to conserve and protect land. Protection of land through regulation is mostly done on the local government level through various forms of planning and zoning ordinances and other planning instruments (see Section 4 above). For purposes of this paper, land use regulation refers to the entire spectrum of local, state, and federal government requirements and procedures controlling private land use, including zoning, growth management ordinances, wetlands permitting statutes, the Endangered Species Act, and the Clean Water Act among others (Echeverria and Pidot, 2009).

Critics of conservation easements often see regulations as more effective, more equitable, and immune to the contradictory permanence issues arguably inherent in conservation easements (Bray, 2010). However, much like conservation easements, the permanence of land protection via land use regulations is a concern of many in the conservation community. While laws have the ability to regulate land use on a consistent landscape level, persuading a government body to regulate based on conservation is not a simple or rapid process. Even when a government does decide to promulgate progressive regulations and ordinances to protect land, those regulations are subject to elimination or modification through the political process at any time. For example, legislatures or town councils may discard regulation because of waning political support or a loss of funding. Unwanted regulations can also be replaced by new regulations that are more in vogue, or they can expire through sunset provisions (Vinson, 2007).

Proponents of regulation for land protection argue that despite the propensity of a political body to change a land use regulation when it deems necessary, the process

to actually get to that point is very difficult. A major political struggle is often required to establish a new regulatory program that protects land. Yet, once these regulations are established over a few years, changing the regulations can be an arduous task. Certain kinds of land use regulations, especially those in areas with settled land use patterns, tend to have durability (Echeverria and Pidot, 2009).

Hyde Park, New York – Impact of Changing the Political Guard

After passing regulations and ordinances aimed to protect and conserve the environment for over a period of twenty years, Hyde Park, New York has recently gone through a political upheaval among the town's administration and planning board, inviting revision to its local conservation laws that can negatively impact the environment. For example, recent revisions to its wetlands protection ordinance would no longer prohibit agricultural activities, motorized vehicles, the use of pesticides and herbicides for lawn care (subject to certain criteria), control of invasive species, paving and repaving of driveways, and installation of fountains in ponds within the 100-foot riparian buffer zones (Town of Hyde Park, New York Code § 63-1).

The permanence of regulatory land conservation programs can also be maintained for another reason. Once zoning and land use regulations are established, landowners must adapt to the restrictions by taking advantage of certain aspects of the regulations and making accommodations to minimize conflicts with others (Echeverria, 2005). Landowners can become substantially invested in the regulation – “the devil we know” – making it that much harder to change it again.

Still, others argue that impermanence – the ability to adapt to change – is an advantage to the land conservation community, and that the fickle nature of political decisions may actually help the protection of land. Impermanence may be both unavoidable and valuable, undermining a primary argument for using conservation easements in the first place. The malleability of regulation may be the best tool to allow restrictions to be modified as circumstances change. For example, the flooding of a coastal flood plain due to increased sea-level rise may be a great candidate for protection through appropriate regulation and not by a conservation easement in its current traditional form (Echeverria and Pidot, 2009). However, regulators must be careful to plan adequately for the long political process of regulation modification and amendment.

Regulations are permanent until they are not and most landowners across the country are weary of any additional regulations that may affect the use and enjoyment of their property. The challenge to conservationists is first to convince the community and government officials that regulating land for protection is in their best interests and then to maintain the momentum across administrations and changes in the political culture of a community (Echeverria and Pidot, 2009). The permanent perspective of local land trusts may, in fact, make them uniquely well positioned to help maintain this momentum over the long term.

Temporary Protection

Regulations also hold an advantage over the apparent permanency of conservation easements when dealing with constantly changing ecological conditions. The impermanent political reality of regulations makes them well-suited to facilitating the gradual, orderly transformation of land on the urbanizing fringe to development uses. Regulation may be a better conservation strategy on the fringe of urban growth where downzoning can be done relatively quickly. Conservation easements may lack the same adaptability unless they are drafted in a way that allows the easements to take into account future change. Likewise, regulations offer some advantages in addressing changing landscapes such as receding ocean shorelines. Regulations may provide more appropriate temporary protection for these areas (Echeverria, 2005). However, relying on regulation for conservation of individual properties may prove problematic by not being able to take into consideration the specific characteristics of that property and the property's owners.

Eminent Domain

Whenever government regulation impacts the ability of a landowner to use and enjoy his or her property, there may be constitutional restraints that must be considered. The Takings Clause of the United States Constitution requires the government to give “just compensation” for any property it may condemn. It is important to note that the Constitution does not prevent the taking of private property, but instead places a condition on that power – payment of financial compensation. There are two types of takings – physical and regulatory. If the government physically appropriates property, the action would constitute a taking. However, whether a regulation imposed can trigger the finding of a taking is not so certain.

Regulatory Takings and the Impermanence of Regulation Oregon Measures 37 and 49

In November 2004, Oregon voters adopted Measure 37, which requires local governments either to compensate landowners when land use restrictions reduce the value of their property or to waive the offending restrictions. The underlying premise of Measure 37 is to give rights to landowners that go beyond the private property rights recognized in the federal and state constitutions that protect against uncompensated takings of private property by governments. Unsurprisingly, Oregon governments received more requests for compensation than they could afford and instead waived the offending restrictions in all but one case. As a result, Oregon voters approved Measure 49, modifying Measure 37 in November, 2007. Measure 49 changed Measure 37 by not allowing challenges to restrictions on industrial or commercial uses of property. Claimants must now also prove their losses by presenting appraisals of the property one year before and one year after the enactment of the regulation that causes the restriction on the property. This

demonstrates one state's frustrations with land use regulations and Oregon's government and citizens' ability to change a regulation or statute within a short period of time. For more information visit <http://www.oregon.gov/LCD/MEASURE49/index.shtml>.

The United States Supreme Court currently gives the Takings Clause a narrow interpretation, reducing the likelihood that most regulations can give rise to viable takings claims (Echeverria, 2005). The Court has consistently held that takings recovery is limited to extreme circumstances. U.S. Supreme Court cases over the years suggest that diminutions in value of over 90% are not sufficient to establish a taking and lower federal and state court decisions apply this fairly consistently (Echeverria, 2005). In fact, a regulatory taking finding is unlikely unless a property only retains a value that is slightly greater than *de minimis*.

Another important factor in a court's takings determination is whether a regulation singles out a particular owner to bear a special burden or applies broadly across similarly situated folks in the community. If the regulation applies to only a few owners, the government may be forcing the few to bear the burdens of the public as a whole. Courts are more comfortable with a regulation that counterbalances the burden imposed by a regulation with the benefits of enforcement of the regulation to neighboring properties.

Takings should not be an impediment to comprehensive land use planning or land protection. Courts have consistently rejected takings challenges to sound growth regulations and laws, wildlife protection rules, historic preservation ordinances, and forest and agricultural zoning districts (Echeverria, 2005). In the rare instances when regulation may constitute a taking, the government is still allowed to condemn as long as just compensation is paid to the landowner. However, the courts have signaled that these cases will be few and far between.

As noted above, land trusts should also be mindful of the use of the eminent domain power to condemn property for uses that might include new transmission line corridors and renewable energy generation sites. In order to transport electricity from places where wind energy, solar energy, and other renewable sources are most prevalent, new transmission lines will have to be constructed, imposing a new wave of condemnation proceedings. The land will more than likely be condemned even with conservation easements or other restrictions.

Eminent Domain as a Strategy for Protection?

While eminent domain is mostly thought of as a potential impediment to regulatory protection of property, the eminent domain power of government may also be used to the advantage of the conservation movement. Eminent domain is mainly used against landowners who do not want to give up their land. When the government has a public need for the property such as utility

lines, roads, and other infrastructure necessities, it does not hesitate to use its eminent domain power to take the land. Governments can potentially use this same power to take land from unwilling landowners for conservation purposes. Unfortunately, governments and agencies are hesitant to do so because of the inflated transactional costs and use of resources necessary to pursue a condemnation action without the prospect of revenues usually associated with condemnation such as the construction of transmission lines, transportation corridors, and economic development.

Private and Public Approaches – Working Together to Achieve Permanence

At some level, arguments about the merits of the absolutely permanent nature of any form of land conservation may seem divorced from reality (Bray, 2010). Therefore, regulation and private acquisition should be coordinated to help achieve permanence when conserving appropriate lands in any given community or region. Some suggest that regulation should be considered first before private acquisition methods in order to provide a common baseline of mutual expectations and protections for the benefit of all members of a community, leaving private acquisition methods to be used for the following:

- When public access to the property is not a priority;
- When the property possesses extraordinary and enduring conservation attributes that warrant efforts to achieve permanent protection; and
- When needed regulations involve stringent or particularized restrictions or obligations that are so unfairly burdensome as to reach the level of a constitutional taking (Echeverria and Pidot, 2009).

Whether these suggestions take into consideration all the arguments for and against regulation and private acquisition is still up for debate. Moreover, this hierarchy fails to consider the use of other conservation strategies such as market-based incentives. Recognizing that not all communities in the country have the institutional and government resources or support to effectively regulate land uses for conservation, making regulation a priority for land conservation may not be the most efficient avenue for land conservation. This is especially true where there are clear differences in attitudes towards land use regulation across the United States. Instead, perhaps the method of conservation that will provide the most permanence is dependent on the situation and the goals of the community. This requires an organizational consideration of scale, resources, experience, and the political reality of a community.

Working to Ensure Permanence in Conservation

The Land Trust Alliance (LTA) is working to create good case law, educate attorneys, collect useful legal materials and provide tools to land trusts to assist the land trust community in ensuring that all conservation easements remain permanent. This includes the LTA's implementation of Land Trust Standards and Practices, the

National Land Conservation Conference, The LTA's Learning Center, the Standards and Practices Curriculum, and the Land Trust Accreditation Commission, an independent program of the LTA. Finding that the best way to avoid legal challenges is to prevent them, the Alliance's training courses are building the knowledge of land trust practitioners, helping them draft strong legal documents and implement sound easement stewardship. The LTA also established the Conservation Defense Fund, for use by the Alliance to intervene in certain cases, usually by filing a friend of the court brief. See www.landtrustalliance.org.

While land trusts are attempting to understand and recognize the importance of permanence through certification and other measures, the permanence fight will likely play out in courts. In Wyoming, the case of *Hicks v. Dowd* gained national attention by being the first reported case where the termination of a conservation easement was upheld, albeit on procedural grounds. In a later related case, *Salzburg v. Dowd*, the court held that the termination of the conservation easement had no legal effect, recognizing that conservation easements can be created, modified, or terminated in the same manner as other easements and that the Treasury Regulations continue to provide severe penalties to land trusts and landowners who improperly amend or terminate conservation easements. This holding was a reminder to land trusts to take conservation easements seriously and to draft them with diligence and care to defend future challenges (Lindstrom, 2010).

Discussion Questions

- If there is a question about the permanence of any form of land conservation, should the conversation focus around using the lack of permanence to the advantage of land conservation, rather than why any one land conservation strategy is or is not less permanent than another?
- How can a conservation organization or government body determine when the permanence of a conservation strategy is a priority at a given property?
- How much of a threat is permanence to current IRS policies? Do the policies of the IRS contradict the nature of conservation and changes to the environment? Are not changes to the environment inevitable?
- What other innovative strategies or techniques are there to address permanence while maintaining land conservation and protection?
- How can the regulatory process be improved to resist shorter-term pressure to protect private property rights and values? How can we resist the shorter-term political pressures to preserve only the land's financial value?

Organizations Doing Interesting Work

The Land Trust Alliance – In response to recent criticism towards the permanence of conservation easements, the Land Trust Alliance is very active in providing resources and support for developing conservation easements that are both amendable and permanent. For more information visit <http://www.landtrustalliance.org>.

Defense of Place – Defense of Place focuses on upholding the permanence of conservation easements and land donated for purposes of conservation by providing strategic advice, public relations, technical information, and legal assistance to land trusts, land owners, and conservation organizations. For more information visit <http://www.defenseofplace.org>.

Conservation Law, PC – Conservation Law, PC is a law firm founded by Jessica Jay, attorney and adjunct professor of law at the Vermont Law School and the University of Denver’s Sturm College of Law. Conservation Law focuses on protecting working landscapes and environmentally significant lands in Colorado and the Rocky Mountain West, and ensuring the permanence and perpetual nature of land conservation, by partnering with land trusts, government entities, and landowners. For more information visit <http://www.conservationlaw.org>.

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5.2: Examples, sources of information and other key points from the discussion

Some of the examples, sources of information and key points from the discussion included the following:

- Many in the land conservation community are starting to question the “sacred cow” of permanence:
 - Development will happen – how can land trusts embrace and help direct it without destroying the areas they love?
 - Need to think more broadly about permanence – how it derives from healthy cities, rural communities and economies.
 - Need to engage more widely to sustain more permanent effects – need a really big tent, including developers, environmental justice communities and many others.
 - Need to work at a landscape scale – from iconic protected areas, through productive working landscapes, to green suburbs and livable cities.
 - Static conceptions of permanence inhibit innovation and ignore the realities of a dynamic world – need to lay a foundation for protecting options for future generations that are more adaptive or resilient than permanent.
- In theory, regulation can be changed. In practice, change often happens less often as regulations become part of peoples’ embedded expectations.
- One suggestion for addressing the perceived unfairness of tough land use regulation is to: (a) adopt and enforce strong regulations; (b) know the value of the land at the time the regulation is adopted; and (c) if the value is less when the land is sold, make the landowner whole by having the government pay the difference.
- “Zoning by petition” allows a group of landowners to come together and develop their own controls over land use; which they can then take to the local government to have adopted more widely. Examples of this happening in Montana were cited.
- Neither conservation easements nor regulations are permanent.
- Should the responsibility for enforcing conservation easements be shifted from land trusts to the state or should land trusts consider offering – for a fee – to enforce municipal/publicly held easements?
- Both conservation easements and zoning requirements have impacts on surrounding land: easements benefit neighboring sites; regulations share benefits and burdens more widely across the jurisdiction.

- Valuing conservation easements at the development value of the property does not make sense – ideally the price should reflect the values (ecological, cultural, etc.) for which it is being acquired.
- If permanence means maintaining public support, it also means maintaining educational programs about and access to open space . . . a task land trusts are well positioned to help undertake through both private and public processes.
- These broader views of permanence, in effect, require land trusts to engage in local land use planning and regulation.
- Land trusts have an opportunity to host wide-ranging, inclusive discussions about future land use goals – in fact, it is often easier for them to do so than for governments.
- Land trusts have to look at how conservation affects local and regional economies. If economies fail, so too will many conservation efforts.
- The “green jobs” discussion within the present efforts to retool the U.S. economy is also creating new opportunities for conservation organizations to connect with groups working on economic development and social justice.
- The Cascade Land Conservancy (<http://www.cascadeland.org/>) is the largest land conservation, stewardship and community building organization in Washington State. It includes a wide range of skill sets and funding sources, including:
 - A R&D/policy team working on urban development and land conservation strategies (12-15 people);
 - A transactional team working on both conservation and new development projects (15 people);
 - Land stewards (15) and back office/administrative support (15);
 - Donations from individuals;
 - Grants from foundations; and
 - Transaction fees, plus proceeds from the sale of development rights or land to developers.
- If one focuses on the importance of people to permanence, one really should look to the stewardship traditions of Native American tribes for guidance – given their rich history of sustainable land use as trustees of the land.
- Are “mature” land trusts – i.e., those doing more stewardship than acquisition – trending toward bankruptcy as a result of their monitoring and enforcement responsibilities or toward a bright new future as community educators and stewards of healthy communities over time?

Section 6: *Costs and Timing of Private Land Conservation v. Public Land Use Planning and Regulation*

6.1: Background

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Background

A number of tools—some via regulation others through private acquisition—are used at the local and regional scale for conserving land, biodiversity, water, and other resources. The application of these tools is often not systematic, begging the question of if and how these tools might support and, in some cases, undermine, each other. While there are a number of individual examples, no replicable formula seems to exist for calculating the costs and benefits of using each of these tools, making comparisons difficult, ad hoc, and largely dependent on local contextual factors (e.g., the development pressures).

That said, a number of resources do exist to help us understand how the costs and timing of applying some of these tools purposefully may increase social welfare and decrease overall costs of conservation.

Local governments, which face the rigmarole of public hearings, notices, and other state and federal provisions, are generally considered slower than the private sector as a means of conserving land. And, without a sense of threat or immediacy, there may not be the needed momentum to make headway in the public arena. Land trusts tend to have fewer parties at the table to attend to and do not face the same public process that local governments do. Yet, when a land trust relies on local government for funding or faces intractable landowners, this nimbleness may be substantially diminished.

Regarding costs, regulation is often considered a less expensive (and less permanent) alternative than acquisition. However, when governments find themselves compensating property owners and entangled in lawsuits, this convention becomes blurred.

Costs of Private Land Conservation

The costs for private land conservation are typically conceived as two categories: the acquisition costs (which include transaction costs) and the stewardship costs. As land is comprised of a bundle of rights, the acquisition may take a variety of forms, from in-fee ownership to acquisition of access, development, or mineral rights.

Acquisition Costs

In cases where land or development rights are not fully donated, acquisition costs may very well make up the lion's share of the cost. Over the next thirty years, the least costly option for protecting 22% of the continental lands of the US (approximately 411 million acres) would be under a land rentals and leases scenario (Casey, McMurray, Kroeger, Michalack, and Manalo 2008). The undiscounted cost of this option would be \$412 billion. Alternatively, fee simple purchases and associated management costs over the given time period would be nearly four times the former scenario. Yet, there is not presently enough conservation money for either of these options.

Example of New Jersey Highlands:

Total acquisition costs for priority-listed agricultural and conservation lands (162, 557 acres) is approximately \$1.3 billion (Highlands Council, 2008).

Transaction Costs

Transaction costs for purchasing or accepting donations of land or easements include paying attorneys, surveyors, staff members, and other experts for activities like baseline documentations, title searches, surveys, easement negotiations, appraisals, and recording the deed at a county office. For land trusts that are not all-volunteer organizations, paying for the staff and overhead involved in buying the land is another substantial cost. The mid-Atlantic region of the Trust for Public Land (TPL) studied its transaction costs and estimated it as a minimum of 10% of the cost of the land they were buying.

Stewardship and Enforcement

For conservation easements, stewardship includes the costs of managing, monitoring, and enforcing property rights or contracts. The stewardship costs may include paying consultants and staff members to prepare written reports, walk the property, take onsite and aerial photographs, provide narrative descriptions, and take vegetation measurements. For properties owned in fee, stewardship may involve these as well as larger capital costs of restoring land, improving it (e.g., creating trails for public access), and paying permanent staff to conduct regular management. Enforcement costs might include taking steps to prevent or mitigate trespassing and paying attorneys, mediators, and staff members to lead or participate in dispute resolution, attend court, or work with the landowner to halt violations.

Factors influencing the enforcement costs for conservation easements include:

- Whether the conservation easement or contract is clear and simple enough to be easily enforced in court
- The size of the parcel (there are fixed costs like traveling to a property that are irrespective of acreage, but others like walking the boundaries are incremental)
- Easement purposes (those allowing uses like a limited subdivision or mineral extraction will have costlier monitoring; those protecting wildlife habitat over open space will have restoration costs and often more complicated easements that are more easily and often violated)
- The resources and commitment of the violating landowner

Much like for any business, high costs may limit the amount of services that the land trust can afford to provide. In fact, conservation easements were developed in part to reduce the upfront costs by acquiring only the most relevant rights (e.g., the right to develop). With limited financial resources, land trusts engaging in private land conservation must consider which property rights to purchase. After discussing the costs and tradeoffs to purchasing an easement versus in fee title, Parker (2002) concludes that easements are more cost-effective than fee-simple when preserving large parcels of open space on working lands, and potentially less so on smaller, more actively managed lands.

These costs may be covered by a number of pots of money, including tax benefits (e.g., state income credits), individual giving (e.g., capital campaigns), institutional grants (e.g., state and local), fees-for-service (e.g., sale of ecosystem services), debt (e.g., state revolving loan funds), credit against income taxes due (e.g., new market tax credits), and equity (e.g., private Timberland Investment Management Organizations and Real Estate Investment Trusts)—all of which differ in complexity, risks, and returns. Still, as Story Clark noted: “At present, there is simply not enough monetary return on most conservation transactions to attract private investment and thus bring new money to the market” (Coady, 2007, p.2). While commercial banks show up from time-to-time in land deals, it is usually based on a strong personal relationship and clear collateral (Coady, 2007).

On its website, the Palmer Land Trust (PLT) of southeastern Colorado provides landowners a breakdown of hypothetical costs associated with granting a conservation easement. These include:

Palmer Land Trust Conservation Easement Cost Estimates

Items or Services	Cost	Rationale
Legal Counsel	\$2,000-\$10,000	Highly recommended
Financial Advisor	Cost varies widely	Tax incentives justify the expense
Baseline Inventory	\$2,000-\$4,000	Baseline documentation required
Title Commitment & Insurance	\$600-\$1,500	Verify ownership and identify exceptions to title
Mineral Report	\$0-\$1,500	IRS requires for split estates
Appraisal	\$6,000-\$10,000	Required to claim federal and state income tax benefits for gift and to determine value of easement
Record Conservation Easement	\$75-\$100	Must be recorded in county where located
Palmer Land Trust Administrative Fee	\$5,000	For portion of legal review expenses
Contribute to Easement Stewardship Fund	\$15,000	Required by IRS

Source: Palmer Land Trust. Conservation Easement Landowner's Guide. Retrieved on January 2, 2011 from <http://www.palmerlandtrust.org/land-conservation-tools>.

Other costs not accounted for in tabulations like these include the opportunity cost and expenses taken on by taxpayers. When conservation easements are acquired at discount through a subsidized charitable donation, public money is either expended or foregone as the tax subsidy “impose[s] financial losses and opportunity costs on government and conferring financial gains on landowners” (Echeverria and Pidot, 2009, p. 10870).

Costs of Public Land Use Planning and Regulation

Much like land trusts, local governments have an array of conservation tools to choose from, each of which has its own costs. While there is debate among academics about how to quantify the transaction costs of public land use policy, we can begin to understand the various costs of developing, implementing, and enforcing plans and regulations from several examples.

Comprehensive Plans

Comprehensive plans typically include “maps, plats, charts, descriptive materials, and planning policies which will form the basis of the implementing tools of zoning and subdivision regulations, official maps for streets, parks, drainage, and a long term financial program” (Freilich, 1971, p. 69).

When budgeting for the planning process, local governments will consider the level of inclusivity, the number of special and technical reports (e.g., traffic and transportation analysis), as well as publicity and publication costs. While consultants

for towns or townships may range from \$25,000 to \$50,000, Purdue University Extension (2005) suggests building in 10-20% extra for unexpected costs like additional studies.

In Tulsa, Oklahoma, the Comprehensive Plan Process Task Force estimated updates to the Comprehensive Plan to cost between \$1 million – \$2.5 million over the course of two-to five budget years (CPPTF, n.d). A survey conducted by the Task Force indicated that the costs in other cities range from several hundred thousand dollars to several million (ibid).

Traditional Land Use Regulation

For local governments adopting or revising zoning ordinances, much like with comprehensive plans, there are costs for staff and overhead involved to see the public process through. But, unlike comprehensive plans, there are also the costs of enforcement. While regulation is typically considered a less expensive option than acquisition, a number of additional costs, like compensating landowners for depreciated property values or court fees from defending regulations, may complicate this outlook. Additionally, as zoning may not protect all areas (e.g., incorporated areas of a county), additional costs of acquiring priority lands left unprotected by zoning must be accounted for.

In Flathead County, Montana, after a several-year lawsuit, the county recently settled to pay a developer \$1 million in cash and to build and pay for roads and highway turn lanes (an additional \$2 million) for the developer’s subdivision that the county had formerly denied (Hintze, 2010).

The initial period following the adoption of zoning may include complaints and lawsuits, with claims that regulations either favor some landowners over others, or that a takings violation had occurred without just compensation. In states like Oregon, where citizen initiatives may be placed on the ballot, Measure 37 was enacted after a citizen approval of 61%, granting land owners the right to compensation if, after taking ownership of a property, “the state or local government enact[ed] or applie[d] a land use regulation restricting the property’s use, thus reducing its fair market value.” (Carter, 2008, p. 150). Unlike other property rights compensation statutes, Measure 37 had a retroactive application. While the bill was later deemed unconstitutional and compensations not granted, over 7500 claims, covering 750,000 acres and exceeding \$20 billion, were made (Carter, 2008).

Transfer of Development Rights

The idea of transfer of development rights (TDR) has been around since the early 20th century, when New York City passed a zoning ordinance that allowed landowners to sell unused air rights to adjacent lot owners, who could then exceed height and setback requirements. A TDR program

Example of New Jersey Highlands

Initial capitalization of TDR Bank: \$50 million (approximately \$10 million per year for the first five years of the program) (Highlands Council, 2008).

requires that a local government “oversee (or contract out oversight of) the market; track and defend deed restrictions; and assist in proper preparation of easement documents” (Hanly-Forde, Homsy, Lieberknecht, and Stone, n.d.). TDR programs can potentially mitigate a number of public costs (e.g., by preventing loss of farmland, reducing sprawl, preserving environmental quality, and reducing community service and infrastructure costs). The administrative costs, however, tend to be higher than those of other traditional forms of zoning, as markets must be formed and monitored, and TDR credits created and administered (*ibid.*). (See also discussion in Section 4: Efforts to Build Conservation Incentives and Requirements into Zoning Codes).

Ballot Measures

Financing campaigns for ballot measures differ from candidate campaigns in two ways: there are no state limits on an individual’s or organization’s contributions to ballot measure campaigns and disclosure procedures for disclosing ballot measure contribution and expenditure are much weaker than candidate campaign disclosure practices. Expenses may vary, often depending on whether industries, ideological groups, or grassroots and special interests are competing with each other. Conventionally, it is believed that robust spending to oppose an initially popular measure will likely ensure defeat, while heavy spending supporting a measure will not ensure its passage (BISC, n.d.). For example, during a 2006 ballot campaign in Arizona (Prop 105 and 106) to conserve several thousand acres of land, proponents spent over \$3 million and opponents spent over \$2 million (*ibid.*). Despite the proponents efforts, the measure failed to pass.

Much like the nature of the parties involved, whether the campaign is for a citizen initiative or a referendum also has important implications for cost, with the former typically being a more expensive endeavor. In a recent campaign in Oregon over a proposed ballot measure to raise income taxes to support higher education and other social services, more than \$12.5 million was spent by opposing sides (Maples, 2010). High costs, however, have put a damper on the number of initiatives in Oregon and elsewhere.

Timing of Private Land Conservation

Underlying the strategy of private land acquisition is the fact that it is voluntary. If a landowner is unwilling to sell or if his or her price expectations are too high for a land trust, the acquisition may be delayed indefinitely. Assuming a landowner is willing to sell and that expectations can be met reasonably, an action plan for a project typically is based on a 12 – 24 month timeline. The first few months might be geared towards negotiations and contracts, appraisals, title searches, and finding grants. Following these steps, the land trust might spend the next months creating a stewardship plan, conducting surveys and audits, and closing on the deal. Final months would go towards publicity and celebration, with stewardship and development continuing. Some processes do not last a year, while others drag on for much longer periods. A

surveyor, for example, will not take his expensive machinery out in the rain, while other professionals may disappear during hunting season and the holidays. Don Morrow, an experienced project manager at TPL, recommends doubling the time you think you will need; then, maybe you'll have enough time (Morrow, 2010).

Private Land Acquisition Action Plan Timeline

Action	Estimated Timeline
Title	3-45 days
Environmental Audit	15-45 days
Survey	30-90 days
Appraisal	30-60 days

Source: Morrow, 2010.

Timing of Public Land Use Planning and Regulation

“No ‘invisible hand’ can be relied on to produce a good arrangement of the whole from a combination of separate treatments of the parts.” – A.C. Pigou, 1929.

While acquisitions are considered to be quicker options for stopping the bulldozers, some government actions—with strong political and public support—may be able to quickly address a new or emerging public problem. Yet, while support may be garnered and while tools like mediation exist to abate conflicts and build consensus, gridlock and state and federally mandated procedures tend to make these inherently lengthy processes.

Just as the time to craft and adopt regulations and plans will vary, so too will their shelf life. Short-term, interim regulations may be employed to implement moratoriums on development until planning processes have been completed. For example, both Dade County, Florida and Fairfax County, Virginia adopted short-term sewer moratoriums to prevent issuance of building permits and thus development in areas lacking sewer and water facilities. Other controls like subdivision rules and minimum lot sizes tend to be longer-term forms of regulation that may last several decades.

Comprehensive Plans

Comprehensive plans typically have a long-term horizon of ten, twenty, and even thirty years. Far from static, planning is a dynamic process—at its best, “a continuous and systematic study and appraisal of conditions” that attempts to guide “the making and execution of important decisions coordinated with established objectives” (Freilich, 1971, p.72). Initial steps of preparation may include budgeting, writing request for offers, hiring consultants, conducting stakeholder analysis, assembling a steering committee, conducting background studies (e.g., demographic trends and history of the community), and updating or creating new maps. Creating plans entails the public process described in Section 3, while implementation is an ongoing process.

Comprehensive Plan Process and Timeline

Action	Timeline
Preparation	3 months to 1 year
Creation	6 months to 2 years
Adoption	Up to 3 months
Implementation	Up to 30 years

Source: Purdue Extension, 2005

In Tulsa, Oklahoma, the Comprehensive Plan Process Task Force estimated that the steps involved in developing its comprehensive plan (research and analysis, data management, update and maintenance of base mapping, planning studies, citizen participation, and its 'Growth Guidance System) would take from two-to-five years, depending on the scope of services involved (CPPTF, n.d.).

Traditional Lane Use Regulation

Timing as it pertains to zoning may have a number of facets, including how long the regulation lasts, how often it is revised, and how often the zoning ordinance is challenged and changed. Many elements of zoning codes are amended with regularity. In the city of Madison, Wisconsin, a city zoning administrator recently noted that the city amends its zoning code to accommodate individual projects with frequency. "It happens all the time. All the time. There are amendments to the text that relate to projects regularly."³ Other cities like Kirtland, Ohio have not undergone major changes in their zoning ordinances since they were first adopted in 1975.⁴

³ Czubkowski, K. (2010). "Controversy follows proposed zoning change for Edgewater." The Cap Times.

⁴ Scott, B. (2010). Kirtland zoning changes proposed. The News-Herald.

Transfer of Development Rights

While TDRs may provide incentives and flexibility for developers, they also can be very complicated tools to create and implement. In Section 4 of this series, Strobo describes the difficulty of identifying suitable receiving areas, determining the value of development rights, and establishing systems to track and record TDR credits. Due to these and other difficulties, TDR programs may take years to set up and several more to become effective conservation tools.



Source: Hazel Wong, Senior Campaign Manager, TNC. (2010). Presentation: Conservation Funding Through the Ballot. Strategies for Land Conservation, Yale School of Forestry & Environmental Studies.

Ballot Measures

Campaigns for ballot measures tend to be short-lived efforts, typically lasting several months. However, as seen in Gallatin County, Montana, with the creation of the first public funding for conservation in the state, a ballot campaign can ripple to nearby counties and, as seen in Los Angeles and New York City, become part of a larger, dynamic series of campaigns.

Reducing Costs

While land trusts and local governments will coordinate with some regularity on such efforts like preacquisitions, in which the land trust will acquire and then transfer land to a city or county, strategies for public and private conservation efforts are typically not coordinated systematically across the public and private divide. When a single strategy is used to conserve land, a number of perverse results may emerge. For example, conservation easements and purchase of development rights will result in a patchwork of protected lands that will attract development on unprotected adjacent lands in a scenario in which zoning is absent (Bengston, Fletcher and Nelson, 2004).

Rather, a portfolio of tools and integrated strategies is needed. Managing growth and conserving open space requires interlinked, coordinated, and synergistic approaches. Maryland's Smart Growth Program, for example, "utilizes an array of policy approaches including programs to encourage growth in existing developed districts (e.g., priority funding areas, brownfields redevelopment, live near your work, job creation tax credit, and expanded-transit programs) and programs to protect open land," like the Rural Legacy and GreenPrint Programs (Bengston et al., 2004, p. 281). In addition to coordination, public policy tools must have flexibility and be contextual. Parker (2002) provides a federal example whereby the government could reduce costs using the case of the USDA Wetlands Reserve Program (WRP), which provides easements and cost-shares for landowners—but not in fee simple options. The rigid, standardized WRP easements do not permit flexibility based on local conditions. Rather, land conservation policies should support land trusts' efforts to minimize costs by offering incentives to fully examine the tradeoffs involved in taking either a fee-simple ownership or a conservation easement (Parker, 2002).

A number of other steps have been developed to reduce costs. In the Highlands as well as the Pine Barrens, governments creating parkland zoning take proactive steps. Instead of taking the risk of potential litigation and hefty court fees, they have set aside money in advance to compensate landowners.

Discussion Questions:

- How might land trusts get a better handle on these costs or estimate them before they decide to embark down one path or the other?
- What are some local or regional examples where land trusts and local governments have worked systematically to reduce costs?

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6.2: Examples, sources of information and other key points from the discussion

Some of the examples, sources of information and key points from the discussion included the following:

- Regulating land use generally costs less than acquiring land (if there is no litigation involved), but it also:
 - Creates more winners and losers;
 - Is not designed to be permanent;
 - Lags the realities of real estate markets;
 - Has enforcement costs at the public expense;
 - Promotes too much sprawl.
- At the same time, acquiring land:
 - Has seasons – such as the current “cold winter of public funding”;
 - Is opportunistic and not as strategic as comprehensive planning;
 - Tends to be more durable than regulation;
 - Tends to be more politically popular than regulation; and
 - Tends to have more predictable timing.
- Acquisition tends to work best in one-off efforts to protect individual sites from development or for complicated parcels/deals drawing from multiple

funding sources, while regulation works well across larger landscapes (particularly when paired with acquisition).

- There are cases where landscape scale regulation has promoted the acquisition of conservation lands, for example:
 - In the Adirondacks, the regulatory limits on subdivisions helped The Nature Conservancy purchase over 160,000 acres of timberlands from Finch Pruyn & Co.
 - In Maine, similar regulatory limits on development in the unincorporated townships helped convince Plum Creek to propose a combination of cluster development, donated working forest easements and outright conservation sales as a way to monetize its holdings.
- The Natural Lands Trust (<http://www.natlands.org/home/default.asp>) has been combining planning, regulation, ballot measure and acquisition tools for conservation in the greater Philadelphia area for many years.
- “Density bonuses” for developers – in the form of permissions for extra lots they can sell – may help ease the pain of limits on development elsewhere.
- One key challenge for regulation is how it can best help bring small, affordable lots onto the market.
- New Jersey has four large landscapes where planning and regulation provide the backbone for regional development efforts:
 - Great Swamp National Wildlife Refuge (<http://www.fws.gov/northeast/greatswamp/>) and the “ten towns committee” (<http://www.tentowns.org/10t/>)
 - The Highlands (<http://www.highlands.state.nj.us/>)
 - The Pinelands (<http://www.state.nj.us/pinelands/>)
 - The Meadowlands (<http://www.njmeadowlands.gov/>)
- Any of these regional efforts require information-based decision-making – land trusts have lots of useful information to contribute and they should do so.
- The New Jersey Conservation Foundation (<http://www.njconservation.org/>) partnered with state and local officials to build a state-wide network of greenway plans and then to make strategic acquisitions within identified priority areas.
- The skill sets for managing/stewarding sites and enforcing easements are not the same as those for acquiring sites. This will pose challenges for land trusts over time.

- Land trusts will need to find ways to work on green infrastructure in cities – or watch new organizations do so.
- Educational efforts and projects in cities will be increasingly important for the land conservation coalition.
- As land trusts seek to find new donors, they must remember that communities of color are increasing in wealth, as well as size and influence.
- The Obama administration’s focus on the Great Outdoors offers an opportunity to broaden the conservation community – land trusts should participate in the “listening sessions” being held across the US (<http://www.doi.gov/americasgreatoutdoors/>).

Section 7: *Skills and Capacities Needed*

7.1: Background

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Background

Engaging in public planning and regulation will be a big step out of many land trust's comfort zones and areas of expertise. Reputational risks, financial costs, and capacity limitations may make this an infeasible or undesirable prospect for some. But for others, there are many potential opportunities and benefits to engaging in the public land use arena.

The key skill sets land trusts will need to have include the following – some of which grow directly out of areas of traditional land trust strength, others of which are likely to require new training or personnel.

Engaging Communities

Finding new sources of funding and support will require land trusts to engage new partners in their respective communities as well as to reconsider basic paradigms and, possibly, even their own missions. Engaging nontraditional partners will require cultural competence, which includes being patient, sensitive, and willing to meet potential collaborators where they are and to speak to their environmental values. In California, for example, the Land Trust of Santa Cruz has hosted a series of community forums for citizens and elected officials to see what natural resources they want protected for the next generation. It is a “listening exercise” that will help the land trust set its priorities and, possibly, influence others.

In addition, land trusts can take this collaborative information and use their own lenses of GIS mapping to suggest corridors, linkages, areas of outright protection, as well as areas for limited development or even dense development (receiving zones). This look at the land is different than the multi-layered approach of planning and, hopefully can be integrated into future planning documents and the many interests they must address.

Building Partnerships

Creating partnerships requires building trust and respect. The process for doing so requires a willingness and ability to create civil, respectful, and safe spaces in which

to become acquainted, as well as to learn from and work with other stakeholders. Land trusts may consider convening workshops, roundtable discussions, and other events, as well as attending events held by other community organizations, with completely different goals to get to know new groups and identify where their different interests may overlap. This outreach, to school, affordable housing, union, economic development, or private real estate concerns should also begin to educate and cultivate diversity in ideas and the people in the movement. Land trusts' permanent commitment to land conservation in their communities provides them a unique foundation on which to build such long-term partnerships.

Other non-profit groups can provide useful knowledge and resources. Citizen groups like 1000 Friends of Oregon offer decades of experience in land use planning. These groups have a wide array of experience, from acting as enforcement agents suing municipalities that do not complete their comprehensive plans, to being watchdogs, and, more recently, acting as education and advocacy groups seeking to improve the quality of life of their communities through sound planning. 1000 Friends groups exist in Connecticut, Wisconsin, Florida, Iowa, Maryland, and elsewhere. Partnerships with citizen advocacy groups like these may permit land trusts to be involved but not necessarily in the spotlight on more sensitive topics.

Land trusts should also look to examples in places such as Colorado and Oregon, where local governments and land trusts have already formed effective partnerships. The Colorado Coalition of Land Trusts, "the collective voice for land conservation in Colorado," includes city and county governments as well as land trusts (CCLT, n.d.). The Board of Directors is composed of members from land trusts, open space and trails departments, and rural land use centers. Collectively, the Coalition "promotes and supports land conservation excellence through leadership, advocacy, education and outreach" (ibid). Since 1991, this non-profit coalition has provided conservation training, public relations, lobbying, and a number of other services to preserve Colorado's open space heritage.

Other groups like Intertwine Alliance, based in the Portland, Oregon and Vancouver, Washington region, represent an "ever-growing network of integrated parks, trails and natural areas," both in rural and metropolitan areas (Intertwine, n.d.). They provide similarly broad coalitions of land trusts, foundations, businesses, local governments, research institutes, and other non-profit organizations.

Partnerships between corporations, land conservation groups, and government agencies should also be fostered. Corporations such as GE have identified significant parcels of the corporation's property that have been set aside for conservation (Klee, 2010). There are also opportunities to lobby corporations for funding for various conservation initiatives and programs. Corporations are stepping up their Corporate Social Responsibility (CSR) programs to create competitive advantage and to improve corporations' public perception.

The Cascade Agenda – Working Together for Conservation

Led by Cascade Land Conservancy, nearly 100 businesses, non-profit organizations, and government agencies, along with more than 750 community leaders and citizens in Washington have formed a collaborative effort known as The Cascade Agenda. Supporters range from farmers, foresters, and tribes to housing, arts, and cultural interests. Together, these stakeholders are advancing two primary goals: (1) conserve nearly 1.3 million acres of working forest, farmlands, shorelines, parks, and natural areas and (2) make cities and towns great places to live, work and raise families. The Cascade Agenda is joining with key regional initiatives like the Puget Sound Partnership and the Prosperity Partnership to achieve its mission. The Cascade Agenda includes a variety of conservation strategies: a working lands revolving loan fund, environmental mitigation, preparations for climate change, a sustainable cities program, community forest bonds, an agricultural preservation program, and a Transfer of Development Rights program. For more information visit <http://cascadeagenda.com/>.

Most importantly, land trusts, government officials, landowners, and other stakeholders must be able to work together in a professional manner. There will always be disputes over the best way to achieve land conservation. However, efforts must be made to find where different strategies complement each other, rather than prematurely criticizing divergent strategies.

Reflecting Development Priorities in Conservation Activities

To engage in land use planning and regulation, land trusts may need to change the scale and concepts around which they work. In addition to wildlife corridors, they should think about where development should happen – such as in transportation corridors, transfer of development rights (TDR) receiving areas, or other special areas designated in comprehensive plans. With this in mind, land trusts may begin to engage hand-in-hand with local governments in belt-and-suspender approaches, by purchasing lands designated as sensitive or flood hazard areas, supporting urban growth boundaries, partnering in conservation developments for the less sensitive areas, and even supporting streamlined zoning and regulations for “receiving areas.”

Engaging in Built Landscapes

Much of the focus of land conservation is on property outside of urban areas. However, in order to have a comprehensive conservation strategy, land conservation organizations must also incorporate the built landscape. Many of the problems associated with urban growth boundaries start with the lack of conservation innovation within the boundaries, as well as how those urban growth boundaries impact property outside the “sphere of influence.” In the built environment, new urbanism and comprehensive neighborhood redevelopment makes sense, and with

limited land, cities and counties must accommodate needs such as housing (market and affordable), commercial and retail uses, cultural and civic institutions, schools, food suppliers, transportation, and all the services a neighborhood or community needs to thrive. Land trusts need to understand and participate in this larger vision to avoid unnecessary conflicts over equally important goals. And through this understanding and partnerships with developers, museums, libraries, and schools, land trusts can incorporate (and finance) greenways, blueways, parkways, and parklands that can complement and enhance the value, the livability, and sustainability of the built world, relieving the stress and need to push up against the growth boundaries for more open space. Efforts must be made to recognize the interconnections between the sustainable development of the built environment, the corridors between the built and more natural environments, and the lands prioritized for conservation to conserve sustainably land for the future.

Applying Broad Definitions of “Policy” and “Regulation”

A number of opportunities exist outside of comprehensive plans and traditional forms of zoning. Other plans such as hazard mitigation plans, forms of regulation like wildlife habitat overlay districts, and Endangered Species Act Habitat Conservation Plans and Species Recovery Plans provide additional tools and processes to protect sensitive and highly valued areas. Land trusts should also explore these plans and the resources used to develop these plans to help determine their conservation priorities.

Thinking Like Land Use Planners

Expanding conservation strategies to meet land trusts’ goals may also require the addition of new skills, staff, and volunteers. Whether or not a land trust decides to add planners to the staff or board of directors, an understanding of the processes, costs, conflicts, and benefits discussed in these papers will be critical to engaging in public land use planning and regulation.

Land trusts considering working in the public land use realm should know what happens at the state level, including what the state enabling acts allow local governments to do, as well as how state land management agencies raise money, make decisions, and use the land.

Planning skills are needed for this work. These skills include the following abilities: to learn from and listen to a community’s desires and needs; to be politically savvy (and able to bring people with different values to consensus); to apply technical skills (e.g., analyzing population data and growth trends); and to earn and maintain the trust of public officials and citizens (Kelly, 2010).

In terms of the adoption of regulations and plans, it will be critical to establish a solid grounding in the public processes that enable land trusts to propose or influence effective regulations that will be adopted and endure.

Several existing large-scale preservation areas offer key insights for conceptualizing and developing complementary approaches that integrate planning, zoning, and acquisition. From early examples like the Adirondack Preserve (in the late 1800’s) to more recent large-scale planning areas like the Pinelands, Columbia River Gorge

National Scenic Area, and the New Jersey Highland Preservation Act, these cases demonstrate applications of innovative technology and real community participation to create visions for entire ecosystems, not just for the water or land quality issues, but also to determine demographics, transportation patterns, cultural and economic needs, and probable/desired growth areas.

Taking Innovation in New Directions

Dealing with new and emerging land conservation issues can be difficult for any land conservation organization. In order to develop effective solutions to these emerging problems, land conservation organizations must be willing to experiment and innovate in new areas. The large number of local land use political bodies, land trusts, and other conservation organizations can act as the laboratories for conservation innovation. Land trusts must experiment with new techniques (e.g., ecosystem services), new collaborations (e.g., real participatory design) with different partners with different needs, and new systems (e.g., Highlands, Pinelands, Columbia River Gorge regional planning efforts) to deal with the changing dynamics of land conservation. Experiments will have varying degrees of success, but when a successful strategy or policy is discovered that strategy can be disseminated to other jurisdictions and areas around the country.

Land conservation organizations should take full advantage of organizations that collect and disseminate information on the various land conservation techniques being explored. These organizations and programs include, among others, the Pace Land Use Law Center, the Trust for Public Land's Conservation Almanac and the Land Trust Alliance Exchange. These organizations do a great service by compiling into central locations case studies, ordinances, policies, and programs that work well around the country. The organizers of these programs recognize that the dissemination of innovation is key to future conservation efforts.

Dealing with New Issues – Premature Land Subdivisions

As a consequence of the housing and economic crisis facing the United States, previous areas of rapid development have slowed considerably. In the western United States, this has resulted in a problem known as “premature land subdivisions.” Premature land subdivisions occur when a landowner divides a parcel of land into lots for sale far in advance of the market for those lots. Although premature land subdivisions have occurred in the past, they have never occurred on the current scale. There are well over a hundred thousand estimated premature land subdivisions in the western United States. Local governments and private land acquisition organizations must utilize the range of regulatory and legal tools such as economic incentives, growth management strategies, and land acquisitions to improve the quality and conservation value of those properties and to promote more efficient growth within a given community. For more information visit http://www.lincolnst.edu/pubs/1761_Premature-Subdivisions-and-What-to-Do-About-Them.

Addressing Permanence in the Face of Change

There is not a land conservation strategy existing that is completely permanent. Every strategy for land conservation should include plans for preventing or responding to legitimate changes that may occur. Deliberate and thoughtful amendments in regulations that address changes in circumstances (i.e., completely different demographics) are unavoidable and necessary. That being said, initially land trusts need to identify, define and protect the core attributes that guided the original zoning, and then allow for flexibility around the few “inalienable truths”. This way land trusts can address change but also prevent short-term political, single-issued, or economic interests from driving the new process. The same proves true with conservation easement restrictions, and the ownership and management of conservation lands. Conservation groups must take the relative permanence of a conservation strategy into consideration when deciding what strategy best fits their conservation goals for a property. The best land use strategy for a parcel or landscape does not always have to be stagnant. Rather, a dynamic land use plan may better incorporate the efficient management of a given property. With the advent of global climate change, rising sea levels, and unpredictable weather events, land conservation organizations must take a serious look at the current tools of conservation and advocate for changes to those tools to conform to the ecological realities of the world today. This is especially important where the land trust community relies heavily on the perpetuity of conservation easements, which, in reality, may be an impossible contingency.

Discussion Questions

- How can a land trust identify whether and when it is suited to engage in what public land use planning and regulation activities?
- What are the best situations to use conservation easements? Regulation? Other strategies? How can several strategies be incorporated to work together?
- Where have conservation easements failed? Where has regulation failed? What can we learn from these failures?
- What steps should land conservation organizations take to prepare for changing climate conditions? Should tax regulators reassess perpetuity requirements? Should rolling easements or easement amendments be explored further?
- What skill sets most need to be added to those of a traditional land trust to enable it to engage in public land use planning and regulation?

Organizations Doing Interesting Work

The Cascade Conservancy – Led by Gene Duvernoy, the Cascade Conservancy has developed the Cascade Agenda and also the Olympic Agenda in the northwest region of the United States. These programs take an innovative, holistic approach to

conservation, incorporating many different strategies into the future. For more information visit <http://www.cascadeland.org/>.

Piedmont Environmental Council – Like the Cascade Conservancy, the Piedmont Environmental Council is also taking a multi-faceted approach to conservation. For more information, visit <http://www.pecva.org>.

The Land Trust of Santa Cruz – This organization recently embarked on a new strategic planning process in Santa Cruz County, in which it launched “a new era of conservation,” which includes developing a conservation blueprint to guide the work of public agencies and private conservation groups; shaping public funding for open spaces; and strategically engaging with community members. See <http://www.landtrustsantacruz.org/>.

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- Connecticut, <http://www.100ofriends-ct.org/>.
- Florida, <http://www.100ofriendsofflorida.org/>.
- Iowa, <http://100ofriendsofiowa.org/>.
- Maryland, <http://friendsofmd.org/>.
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Randal A. Strobo completed his undergraduate work at the University of Kentucky, earning a Bachelor of Science in biology. He received a *juris doctor* from the Brandeis School of Law at the University of Louisville with honors. While attending law school, he clerked at the Kentucky Resources Council, a regional environmental law and policy non-profit organization. Mr. Strobo is currently of counsel to the law firm W.H. Graddy & Associates in Midway, Kentucky, specializing in environmental and land use law and policy. He is also a 2011 Master of Environmental Management candidate at the Yale School of Forestry & Environmental Studies.

Yale Program on Strategies for the Future of Conservation **Bradford S. Gentry, Director**

The purpose of the Yale Program on Strategies for the Future of Conservation is:

- To support the efforts of the Maine Coast Heritage Trust, the Land Trust Alliance and similar private organizations to develop and apply new, innovative strategies for land conservation by linking the convening, research, and teaching activities at the Yale School of Forestry & Environmental Studies ever more closely to the needs of the land conservation community.

Established by a gift from Forrest Berkley and Marcie Tyre, the Program has two parts:

- Sponsoring student internships and research projects (through the Berkley Conservation Scholars program), to bring the passion, experience and creativity of Yale graduate students to bear on these issues; and
- Convening workshops and other conversations across sectors and perspectives in the search for new approaches to expanding the resources applied to land conservation in the United States.

Berkley Conservation Scholars are students of high potential who receive funding for their research and professional experiences at the cutting edge of land conservation. Support is available during both the school year and the summer, creating a virtual “R&D Department” for the U.S. land conservation community. The Berkley Conservation Scholars play a critical role in helping to bring together practitioners and academics in the search for new conservation tools.

The Yale Program on Strategies for the Future of Conservation is a major extension of the Yale School of Forestry & Environmental Studies’ continuing efforts to enhance the effectiveness of land conservation. Working with an advisory group of land conservation leaders, the program hosts workshops, training programs and other activities around the themes of engaging new communities in conservation, expanding the conservation toolkit, and ensuring the permanence of conservation gains.

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