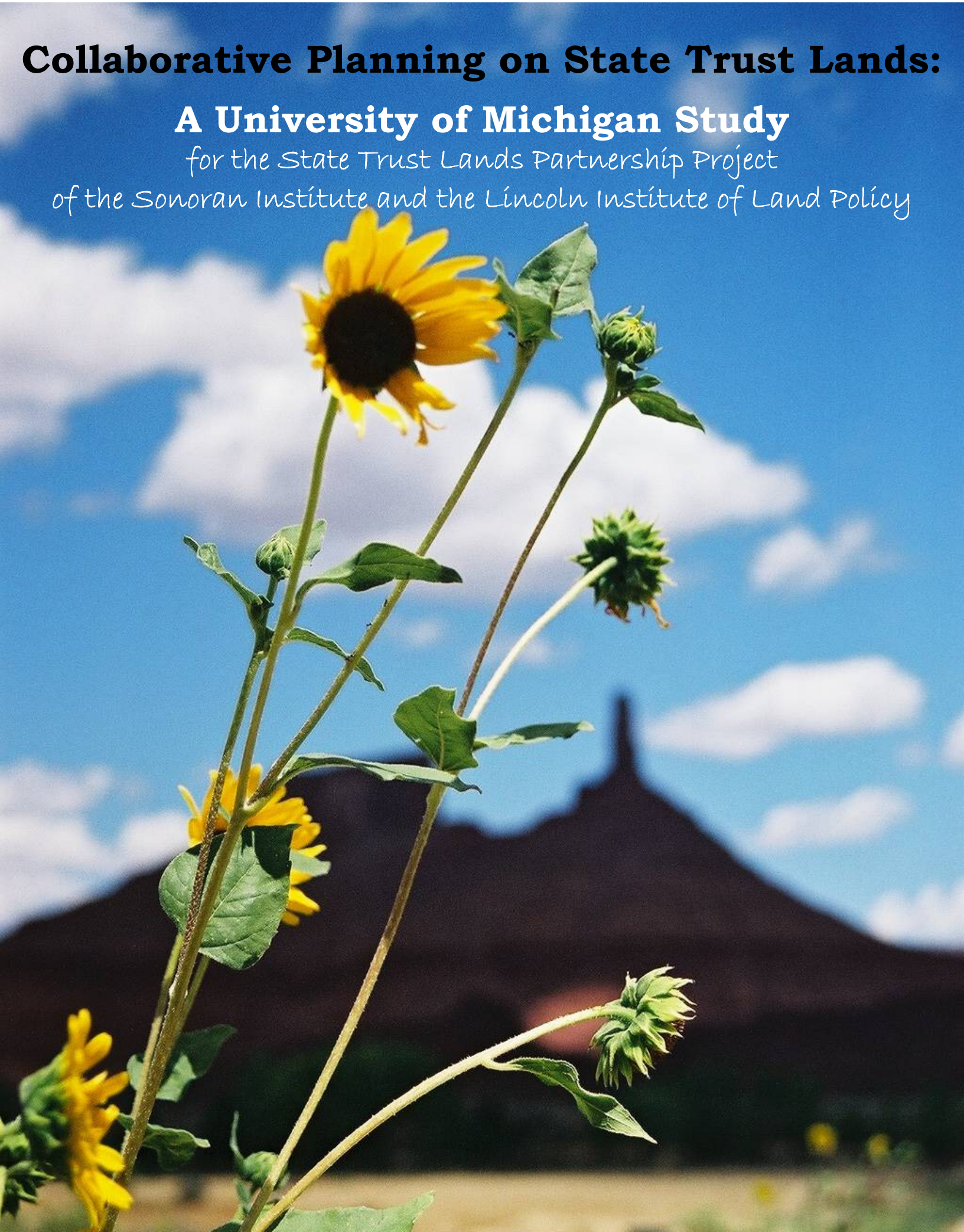
Collaborative Planning on State Trust Lands:

A University of Michigan Study

for the State Trust Lands Partnership Project
of the Sonoran Institute and the Lincoln Institute of Land Policy



About the Study:

Collaborative planning on state trust lands was identified for further research at the 2004 State Trust Lands Research and Policy Analysis Roundtable convened by the State Trust Lands partnership project of the Sonoran Institute and the Lincoln Institute of Land Policy. In March 2005, under the guidance of Dr. Steven L. Yaffee, a team of eight graduate students from the University of Michigan School of Natural Resources and Environment began conducting a region-wide survey and analysis of eight case studies in which state trust land agencies collaborated with stakeholders in trust land planning and management. The research team conducted 117 on-site and telephone interviews, each lasting roughly one to three hours. Through these interviews, the team answered a set of research questions concerning the benefits, challenges, costs and outcomes of collaborative planning on state trust lands. The goals of this research were to:

- Capture on-the-ground experiences of collaborative planning on state trust lands
- Analyze the advantages and disadvantages of this trust land management approach
- Distill a set of best management practices
- Provide broader recommendations for overcoming barriers to collaborative planning on state trust lands

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WHAT ARE THE BENEFITS AND COSTS OF COLLABORATIVE PLANNING?

This chapter identifies the main benefits and costs of collaboration observed in the eight cases. A survey of the literature on collaborative planning identifies five major categories of benefits: (1) better communication, (2) improved group dynamics and relationships, (3) greater resource sharing, (4) increased adaptability and (5) more effective outcomes.[1] On the other hand, scholars of collaborative planning acknowledge that there are costs associated with engaging in collaboration. The main costs identified in the literature include extra time, staffing costs, financial costs for volunteer participants and environmental costs.[2]

The benefits and costs examined in this chapter are described in the unique context of state trust land management and from the viewpoint of the participants involved. Looking at the benefits and costs in this light allows one to identify those outcomes that are most relevant and common to state trust land issues. In addition, given that this report aims to inform and assist state trust land agencies, several of the outcomes are framed by the interests of state trust land managers.

The benefits and costs discussed in this chapter often were seen in several of the cases. Some of the benefits and costs were witnessed in only one or two of the cases, yet they provided good examples of outcomes in the context of those cases. For example, better coordination between federal and state agencies is an outcome that can only be observed in cases involving those agencies. Regardless of frequency, for each benefit and cost noted, evidence of how collaborative planning contributed to that outcome is presented.

Of the several benefits identified across the eight cases, two distinct categories emerged: primary and secondary. Primary benefits are those that were directly related to the project's goals and relate to *outcomes* of the process. These included:

- A realization of or increase in the value of trust land, by facilitating transactions that increase revenues, increasing the value of land parcels, or reducing management costs
- An improvement in the natural environment in terms of habitat protection and environmental quality
- An improvement in the urban environment in terms of provisions for infrastructure, density, mixed-use development and open space
- A higher quality solution in terms of durability, creativity, and incorporation of science and the knowledge of a wide range of experts

Secondary benefits are those that were not set as goals but are seen nonetheless as *process* benefits by the researchers and the participants. Often secondary benefits support primary benefits but are still important in their own right. For example, in several cases collaborative planning helped build relationships. These relationships not only helped groups achieve desired outcomes, but they are also expected to be beneficial in future collaborations. The secondary benefits identified across the cases included:

- New and improved relationships
- Greater understanding and public awareness of state trust lands

- An increase in institutional capacity of state land offices and other government entities
- Positive public relations during and as a result of the process
- Successful models of land management for other areas of land in the west
- Better state and federal agency coordination

The costs encountered in the cases fell into the following categories:

- A reduction in the value of the trust asset
- A loss of environmental protection
- Direct costs, arising from conducting the process
- Opportunity costs, defined as the activities of value that groups or individuals gave up by participating in the process
- Personal and emotional costs
- Bad public relations

An overview of each of the categories of benefits and costs and the cases in which they were observed is presented in Table 14-1.

PRIMARY BENEFITS

This section discusses the common primary benefits observed across the eight cases. While all of the benefits in this section may likely result in an increase in the value of the trust, those that were identified by participants directly of having this effect are discussed first. The outcomes that led to an improvement in the natural or urban environment are discussed next and the ways in which collaborative planning led to higher quality solutions conclude this section.

CAPTURED OR INCREASED THE VALUE OF TRUST LAND

In six of the eight cases, the state trust land agency reported that the process enabled them to realize value of trust land parcels that were previously held up in conflicts and impasses. In some cases, value was also increased by creating higher revenues from the land parcel at hand, increasing the market value of the land parcel or reducing management costs of the property. Most often, collaborative planning achieved value realization by reducing conflict over pending sales and by creating broad community support for future urban development or natural resource extraction activities on the land. Reduced conflict and broader stakeholder support are benefits of collaboration that are consistently found in the literature on collaborative planning.[3]

Reduced Business Risk for Future Developers

In three of the four cases that involved future residential or commercial development, the Castle Valley Planning Process, the Houghton Area Master Plan Process and the Mesa del Sol Planning Process, state trust land officials claimed that the value of the trust land under their management increased because the collaborative planning process helped create land use plans that reduced uncertainty over future restrictions on development. Uncertainties for future owners arise over questions about future zoning restrictions, about the provisioning of infrastructure such as water and sewer and about the likelihood of community opposition to the development. Strong

Table 14-1: Benefits and Costs

Benefits and Costs Comparison Table

	CASE STUDIES									
	Castle Valley	Elliott	Emerald Mtn	HAMP	Mesa del Sol	Lake Whatcom	SE New Mexico	White-fish	Total	Percent
PRIMARY BENEFITS										
Captured or increased the value of trust land	✓	✓*	✓*	✓*	✓	✓	✓		**7**	**88%**
by reducing business risk for future developers	✓*	n.a.	n.a.	✓*	✓	n.a.	n.a.		**3**	**75%**
by facilitating transactions	✓		✓*			✓			**3**	**38%**
by establishing adjacent open space	✓	n.a.			✓	n.a.	n.a.		**2**	**40%**
by meeting laws and extraction goals more effectively	n.a.	✓*	n.a.	n.a.	n.a.	✓	✓		**3**	**75%**
by including beneficiary groups in the process		✓*			✓				**2**	**25%**
Improved the Natural Environment	✓	✓*	✓			✓	✓	✓	**6**	**75%**
by protecting wildlife habitat	✓	✓*	✓				✓	✓	**5**	**63%**
by improving environmental quality	✓					✓		✓	**3**	**38%**
Improved the Urban Environment	✓	n.a.		✓*	✓	n.a.	n.a.	✓	**4**	**80%**
by planning for infrastructure and municipal services	✓*	n.a.		✓	✓	n.a.	n.a.	✓	**4**	**80%**
by increasing development density		n.a.		✓	✓	n.a.	n.a.		**2**	**40%**
by requiring mixed use		n.a.		✓	✓	n.a.	n.a.		**2**	**40%**
by establishing open space	✓	n.a.		✓	✓	n.a.	n.a.	✓	**4**	**80%**
Produced Higher Quality Solutions	✓	✓*	✓	✓	✓	✓	✓	✓	**8**	**100%**
by producing an innovative solution	✓		✓	✓	✓	✓	✓	✓	**7**	**88%**
by producing a more informed solution	✓			✓		✓	✓	✓	**5**	**63%**
by producing a longer lasting solution		✓*	✓*		✓	✓		✓	**5**	**63%**
Other Primary Benefits										
Improved Public Safety						✓			**1**	**13%**
Protected Cultural Heritage/Resources			✓			✓			**2**	**25%**
Provided Access to Recreation	✓		✓					✓	**3**	**38%**
SECONDARY BENEFITS										
Created New and Improved Relationships	✓	✓	✓	✓	✓	✓	✓	✓	**8**	**100%**
Educated Public About State Trust Lands	✓	✓	✓	✓	✓	✓	✓	✓	**8**	**100%**
Increased Institutional Capacity	✓			✓	✓		✓		**4**	**50%**
Resulted in Positive Public Relations	✓				✓	✓	✓	✓	**5**	**63%**
Provided Successful Model of Land Management	✓	✓			✓		✓		**4**	**50%**
Improved State and Federal Agency Coordination		✓	✓	n.a.	n.a.	n.a.	✓	n.a.	**3**	**75%**
COSTS										
Reduced the Value of the Trust						✓			**1**	**13%**
Reduced Environmental Protection		✓*							**1**	**13%**
Required Private Fund Raising	✓								**1**	**13%**
Brought About Direct Planning Costs	✓	✓	✓	✓	✓	✓	✓	✓	**8**	**100%**
Brought About Opportunity Costs of Time Spent	✓	✓	✓	✓	✓	✓	✓	✓	**8**	**100%**
Brought About Emotional/Personal Costs	✓	✓	✓	✓		✓		✓	**6**	**75%**
Brought About Bad Publicity			✓			✓		✓	**3**	**38%**

✓= outcome noted by interviewee
✓*= outcome noted by interviewee but with contingency (i.e., Emerald Mountain and Castle Valley contingent on land exchange, Elliot and HAMP contingent on approval of plan developed by collaborative group)
n.a. = not applicable

community opposition may scare away buyers because of the potential for legal actions against the buyer or seller or for a damaged reputation of the buyer, who often intends to do more business in the community.

While traditional urban planning can address zoning and infrastructure issues, collaborative planning is effective at building community support for development activities and often reduces conflicts that may be hindering productive urban planning. In the Castle Valley Planning Process, for example, Ric McBrier, the School and Institutional Trust Lands Administration (SITLA) manager responsible for urban development activities in Utah, observed that future developers will benefit from community support and a completed development plan. Although the development plan in the Castle Valley Planning Process was never finalized, McBrier commented, "The plan will probably still create value for the trust in the exchange with the federal government because there has been planning done for the property."[4] SITLA's initial parcel sale in Castle Valley resulted in community opposition. SITLA later worked with the Castle Rock Collaboration, a community group, which led to the development of a planning contract for the area and a potential land exchange with the Bureau of Land Management. Similarly, the Arizona State Land Department (ASLD) participated with numerous stakeholders in the Houghton Area Master Plan (HAMP) Process for a large parcel of undeveloped land near Tucson, Arizona. The process reduced uncertainty over how state trust land may be developed by establishing a consensus based land use plan that the ASLD can choose to follow when it begins disposing of property in the area. Finally, in New Mexico, where the State Land Office (SLO) is forbidden by law to make leasehold improvements, the Mesa del Sol collaborative project fostered a public-private partnership between the SLO and a private developer. The partnership has made investments in planning that resulted in a master plan and development vision for 12,900 acres of land near Albuquerque, New Mexico, the state's largest city. SLO managers believe that because of this investment in planning and the attractiveness of the new urbanism development chosen, the land will yield higher revenue from future land leases and sales. A former New Mexico Land Commissioner noted that with the collaborative partnership, "you can help the developer succeed, and the more the developer succeeds, the more the school kids succeed."[5]

Facilitated Transactions by Reducing Conflict

By quelling local opposition to land sales, collaborative planning can help state land agencies close deals that otherwise would be too politically controversial. In three of the eight cases, state trust land managers credited collaborative planning with the successful closing of controversial land deals. For example, in the Emerald Mountain Planning Process, the development company interested in the State Land Board (SLB) parcel near Steamboat Springs, Colorado retracted its $17 million offer upon learning of the community's opposition to development on Emerald Mountain and of the Emerald Mountain Partnership's bid on the parcel to come up with a way to preserve the land. However, the SLB now has community support for a land exchange with the BLM at the current market value. In the Castle Valley case, Utah's School and Institutional Trust Lands Administration (SITLA) ultimately received support from the community for the sale of two parcels of land by entering into a negotiated land sale with a conservation-oriented land trust, Utah Open Lands. SITLA's first land sale at the base of Parriott Mesa in Castle Valley had angered the community.

Reducing conflict and building community support also helped facilitate the closing of natural resource based transactions. Near the city of Bellingham, Washington, the Department of Natural Resources (DNR) reported that it received approval from a local review committee for the DNR's first timber sale in the Lake Whatcom watershed since legislation halted timber activity in the area in 1999. The timber sale approval came after the Board of Natural Resources approved a Landscape Plan that had been four years in the making by DNR officials and an advisory group of state and local officials, tribes and public citizens. Upon completion of the plan, the editorial board of the Bellingham Herald wrote, "Citizens have to step up too and accept that logging around the lake is not only a reality, but also a preferred land use … everyone in this county should back the careful logging plans that were ironed out over four hard years for the Lake Whatcom Watershed."[6] This type of community support represented a major shift in attitude towards the DNR and its activities in the watershed compared to the public firestorm that was set off by logging activity in watershed six years earlier.

Increased Land Value by Establishing Adjacent Open Space

In two cases, the state trust land office reported that the value of its real estate holdings in one area increased because open space adjacent to the parcel was established as a result of the collaborative planning effort. Many land buyers pay a premium for property bordering or nearby protected land because of scenic, recreational and habit values. Because collaborative planning processes often engage experts in land planning and locals that understand the value of open space in their communities, more opportunities are identified for setting aside conservation lands. In the Castle Valley Planning Process case, state trust land officials reported that its remaining trust land had increased in value because it is now borders conserved land. In the Mesa del Sol Planning Process, the planning team established a buffer of open space around Sandia Labs and Kirtland AFB. The establishment of this protected area allowed the planners to increase development densities on the rest of the land, permitting more structures and therefore more revenue for beneficiaries.

Met Regulations and Extraction Goals More Effectively

Often collaborative planning can help state trust land departments achieve compliance with environmental regulations and extraction goals more effectively by engaging experts in environmental policy. In the Elliott State Forest Planning Process, where timber harvesting benefits the Common School Fund, initial compliance with the Endangered Species Act resulted in a drastic reduction of timber revenues. However, by working in a collaborative process with multiple stakeholders including officials from the U.S. Fish and Wildlife Service and National Marine Fisheries Service, the Oregon Division of State Lands and the Oregon Department of Forestry were able to develop a Habitat Conservation Plan (HCP) that will more effectively comply with the law and generate higher revenues for the public school system. If the HCP is approved, it is expected to increase the value of the state forest land by as much as $100 million or 35% over the current value of the land. Similarly, the Landscape Plan for the Lake Whatcom watershed brought the Department of Natural Resources into compliance with legislation passed to protect water quality and public safety, while allowing the area to be harvested for timber revenue. While the annual harvest has been reduced significantly compared to pre-legislation

levels, it represents an improvement over the moratorium on logging that had been in place since 1999.

In some cases, a collaborative planning effort can mobilize the resources necessary to help state trust land owners achieve preemptive, voluntary compliance with environmental laws, allowing agencies to better meet their resource extraction goals. In New Mexico, the State Land Office developed a management plan with the help of federal and state agencies and representatives from industry and environmental groups, which is expected to prevent the listing of the lesser prairie chicken and sand dune lizard under the Endangered Species Act. One official estimated that the bird's listing alone would have cost the trust hundreds of millions of dollars if it had prohibited all oil and gas production in the area. Similarly, state land mangers of the Elliott State Forest hope that their proposed Habitat Conservation Plan (HCP) will help shield them from the listing of any new endangered species by protecting habitat for species other than just the spotted owl and marbled murrelet for which the HCP was required.

Increased Revenue because Beneficiary Groups have Greater Say in the Process

Because collaborative processes seek to include all who have a stake in the process, beneficiary representatives are frequently invited to join a collaborative process. By participating and making their voices heard on behalf of the public school systems, beneficiaries can more effectively align the outcome with their goals. A lobbyist for the Confederation of Oregon School Administrators (COSA) who was involved in selecting the beneficiary representative to participate in the Elliott State Forest Planning Process stated that by having beneficiaries "show up at the meeting where the discussion is occurring … [beneficiaries] have gotten more money because [they] have gotten more involved."[7] Rick Howell, Superintendent of the South Coast Educational Service District, a member of COSA, was chosen to be the "man on the ground" representative for the beneficiaries.[8] The process also included a local county commissioner who advocated strongly for increased revenue because his county was a beneficiary of the trust. In the Mesa del Sol Planning Process, the University of New Mexico, the primary beneficiary to the land under consideration, worked with the SLO after an initial auction failed to produce acceptable offers for the land. The beneficiaries involvement helped guide the planning process that resulted in the public-private partnership that is believed to have significantly increased the value of the land by making investments in land use planning for the area.

IMPROVED THE NATURAL ENVIRONMENT

In five of the eight cases, participants reported positive environmental outcomes in terms of greater protection of wildlife habitat and higher environmental quality. A collaborative process helps achieve improved environmental protection because, in many cases, environmental advocates are asked to join the process, and because the process harnesses the expertise of scientists who are best equipped to identify opportunities for environmental improvement.[9] In some cases, an environmental improvement is achieved because a compromise is forged. The compromise represents an improvement over the "do nothing" alternative that persists because the conflict is held up by litigation or political conflict.[10] The different ways positive environmental outcomes were achieved are described below.

Protected Wildlife Habitat

In five of the cases, wildlife habitat was protected as a result of the collaborative process. In the Castle Valley Planning Process, critical wildlife habitat for the La Sal mule deer was established when Utah's School and Institutional Trust Lands Administration entered into a negotiated sale with a conservation buyer as a result of the planning process. Similarly, in the Emerald Mountain Planning Process, elk calving grounds on Emerald Mountain are likely to be protected if the land exchange between the BLM and the State Land Board is completed. In the Elliott State Forest Planning Process, the Department of Forestry and Division of State Lands partnered with local and federal officials to develop a Habitat Conservation Plan (HCP) that will help protect habitat for the threatened northern spotted owl and marbled murrelet. However, an environmental group involved in the process felt that the proposed HCP would actually provide less protection of wildlife habitat in the forest. Similarly, an alternative for a Bureau of Land Management (BLM) Resource Management Plan (RMP) Amendment for a large area of land in Southeast New Mexico was developed through the Southeast New Mexico Working Group that included representatives of the BLM, the New Mexico Department of Game and Fish, the State Land Office (SLO), USFWS, the ranching industry, the oil and gas industry, and conservation organizations. The RMP Amendment will help protect habitat for the lesser prairie chicken and sand dune lizard to prevent their listing under the Endangered Species Act. In the Houghton Area Master Plan Process, Mesa del Sol Planning Process and the Whitefish Neighborhood Planning Process, three cases that dealt with urban development, wildlife habitat was protected through the potential establishment of open space.

Improved Environmental Quality

In some of the cases, the collaborative process ushered in improvements in the quality of air, land or water by reducing pollution. For example, the Lake Whatcom Landscape Plan included management strategies to improve water quality. Specifically, by establishing stream buffers and a road abandonment plan and by eliminating fertilizers, herbicides and harvesting on unstable slopes, the plan will result in fewer non-point source pollutants, improving the quality of drinking water for the city of Bellingham. The Landscape Plan was devised by Department of Natural Resource foresters who collaborated with other state agencies, local officials and representatives from the public. In the Castle Valley Planning Process, the development plan negotiated between the community and School and Institutional Trust Lands Administration (SITLA) is expected to protect the Castle Valley aquifer, the town's main source of drinking water, by reducing development density on the remaining state trust land in the area. While the town and SITLA never signed the agreement, future owners of the land are expected to abide by the recommendations in the water analysis done for the area. Improvements in environmental quality were also achieved in cases that established open space and in those that resulted in forms of new urbanism that reduce pollution. These types of improvements in the urban environment are discussed below.

Improved the Urban Environment

In all of the cases that included an urban planning element, participants reported that the collaborative process contributed to the development of a land use plan that would bring about

an improvement in urban form. For the purposes of this analysis, improved urban form was achieved when the land use plan included better planning for infrastructure and municipal services, increased development density, mixed use objectives and areas of open space.

Better Planning for Infrastructure and Municipal Services

In four of the cases, participants reported better planning for infrastructure and municipal services. For example, in the Castle Valley Planning Process, the development contract negotiated by the Castle Rock Collaboration and the School and Institutional Trust Lands Administration reduced the number of potential development units on the trust land from approximately 884 to 207 without decreasing the value of the land. This reduction in development units addressed concerns identified by a study that revealed that the town's aquifer would not be able to support the original number of planned home sites. Although the development plan was never officially signed, the U.S. Bureau of Land Management is expected to benefit from the development plan and the natural resources and water analysis. Better planning for infrastructure was also identified as a benefit in the Houghton Area Master Plan and Mesa del Sol processes. In the Whitefish Neighborhood Planning Process, the Department of Natural Resources and Conservation was able to address the disparity between trust lands and adjoining private property regarding zoning, infrastructure and other public services by securing entitlements for trust lands that were comparable to those of neighboring land.

Increased Development Density

While reducing development density in certain areas was important in the Castle Valley process because of water constraints, the planners in the Mesa del Sol Planning Process included an increase in development density in their land use plans.[11] Increased development density reduces urban sprawl and makes cities more livable by keeping commercial areas, work places and residential areas in closer proximity to one another. In contrast, in the Whitefish Neighborhood Planning Process, the Neighborhood Plan preserves the Flathead County zoning density of one home per 20 acres, which may hinder more environmentally-friendly development.[12]

Required Mixed Use Development

In both Houghton Area Master Plan Process and the Mesa del Sol Planning Process, land use plans emerged that had provisions for mixed use development. Mixed use is one of the tenets of new urbanism that holds that residential and commercial properties should be mixed together instead of in separate parts of town. Mixed use reduces car trips and puts work and shopping closer to home. In the Mesa del Sol case, a planner for the city of Albuquerque and former State Land Office employee, compared previous development to mixed use, saying:

> The West Side of Albuquerque has a lot of problems … typically it hasn't developed the way it should have. All of the employment is on the east side; all of the housing is on the west side. Outside of the city is where the development is happening and it is not the most quality development. So Mesa del Sol is happening. I think it's very good. It's exactly what the city needs.[13]

Established Open Space

Four of the cases, the Whitefish Neighborhood Planning Process, the Mesa del Sol Planning Process, the Emerald Mountain Planning Process and the Houghton Area Master Process developed land use plans that provided for areas of open space. In some cases, such as the Whitefish Planning Process, open space was large continuous tracts of land. In others, such as the Houghton Area Master Plan Process, open space was areas set aside for city parks in an urban area. As discussed above, open space may increase the value of surrounding land. Residents near conserved lands enjoy scenic views, access to recreation if permitted and wildlife viewing. For example, in the Whitefish Neighborhood Planning Process, the Neighborhood Plan aims to preserve 96 percent of the 13,000-acre area for open space and recreation. The Plan also makes use of such tools as conservation easements and land exchanges to limit the local impact of trust land development. However, four percent of the land remains available for development and this is expected to enable the Department of Natural Resources and Conservation to meet its fiduciary responsibility.

HIGHER QUALITY SOLUTIONS

Overall, many of the participants in the eight cases felt that the agreement reached was more innovative, more informed or more durable than anything that could have been developed by a single party. Generally speaking, these characteristics speak to the superior quality of the solution achieved. Examples of creative, well informed and durable solutions are discussed below.

Produced an Innovative Solution

In seven of the eight cases, interviewees reported that collaborative planning brought about an innovative or creative solution. Collaborative planning fosters creativity by providing a "forum for dialogue" that encourages new ideas that meet the needs of multiple stakeholders.[14] Such a venue existed in the Emerald Mountain Planning Process. The Emerald Mountain Partnership had been struggling to come up with solutions to conserve a parcel of state trust land near the town of Steamboat Springs in a way that provided adequate revenue for the State Land Board (SLB). At the same time, the SLB knew that a land sale to a traditional developer would be difficult considering the town's desire to protect the land for agricultural uses, recreation and wildlife habitat. A local U.S. Bureau of Land Management (BLM) official suggested that the SLB consider a land exchange with the BLM. The land exchange ultimately became the SLB's and the community's preferred outcome. It represented a unique solution because it involved hundreds of parcels of BLM land around Routt County and multiple stakeholders and met the SLB's need to dispose of the parcel at market value. The land exchange also met the BLM's desire to streamline the management of its land holdings in Routt County and the interests of the Partnership to preserve open space, agriculture and recreational access on the parcel. Without the collaborative process, an auction process would have virtually eliminated the possibility of a land exchange because of the extensive time required to put a land exchange together.

Similarly, the Castle Valley Planning Process ultimately resulted in a proposal for a land exchange that provided a unique solution that could satisfy the interests of all stakeholders

involved. The Whitefish Neighborhood Planning Process was considered innovative by many participants for its creative agreement that allows the community to come up with ways to generate revenues from the trust land over a 20-year period. According to Department of Natural Resources and Conservation Unit Manager Bob Sandman, this timeline structure is one of the reasons why the Neighborhood Plan is "revolutionary."[15]

The Lake Whatcom Landscape Planning Process demonstrated creativity because it helped find a solution to an issue that had not been raised by the architects of the planning process. During one of the advisory Committee's meetings, a representative of the Lummi Nation, a local tribe, noted the need to protect resources in the watershed that were important to the tribe's culture, history and spiritual activities. The group later devised strategies to help protect the cultural resources identified in the watershed. One of the members of the process concluded that this aspect of the process was unique, saying:

> For me the most significant element that came out was the tribal involvement as a government entity. There was a total new element introduced: the cultural resources. Spots for ceremonies and purity bathing were identified. They did not have to tell us exactly where they were. Instead the entire area would come out of the mix. The tribal participation was very unique. The status quo is that tribes review timber sales. This made a recognition of tribal resources more prominent than usual.[16]

Produced a More Informed Solution

In five of the eight cases studies participants believed that the product of their work was better informed because the process brought additional information and resources to the process. This additional information provided for better decision. In *Collaboration: A Guide for Environmental Advocates*, Dukes and Firehock found that collaboration brings together sufficient resources to accomplish what cannot be accomplished by any one single party or smaller coalition.[17]

The Houghton Area Master Plan Process benefited from two outside studies that provided market acceptance and readiness research, and the process was better informed by having professional developers and planners on the Citizen's Review Committee. In the Castle Valley Planning Process, several different types of financial resources were brought in to pay for the activities. The most noteworthy was perhaps the utilization of funds from the Utah Division of Wildlife Resources to help pay for the La Sal mule deer critical range habitat. In the Southeast New Mexico Working Group, the State Land Office and other participants were able to work together effectively on land use planning as a result of sharing information regarding leased areas and locations of prairie chicken habitat.

In the Lake Whatcom case, in a report to the legislature, the Department of Natural Resources (DNR) stated that the process brought forth "the best available information to make forest management decisions."[18] Bill Wallace, the DNR's Norwest Regional Manager, said, "there was a lot of information shared. We learned from each other … as we got input, ultimately, the

recommendations from the Committee were as informed as they could be over this period of time."[19]

In the Whitefish Neighborhood Planning Process, the Advisory Committee brought financial resources, time and expertise to the decision-making process, which otherwise may not have been available to the Department of Natural Resources and Conservation (DNRC). One of the main contributions of Committee members was the dedication of time to completing the Neighborhood Plan. Montana DNRC Unit Manager Greg Poncin recognized this time commitment: "It's not that common that you find members of a community who are so passionate that they would dedicate hundreds, if not thousands, of hours of their time to something as specific as this with no compensation. The state of Montana owes them a huge debt of gratitude."[20]

Produced a Longer Lasting Solution

Because collaborative planning helps create buy-in from stakeholders, the processes can produce more durable solutions. Land use decisions that are made unilaterally in areas where many people feel they have a stake in the outcome are often challenged by interest groups after the fact. By giving stakeholders a chance to participate, collaborative planning creates ownership in the process.[21] In addition, by helping achieve solutions that meet the interests of multiple-parties, collaborative planning helps creates buy-in to the outcome.[22] Ownership in the process is also achieved because the experience tends to empower the community.

In the eight cases, many of these benefits were evident. For example, the Whitefish Neighborhood Planning Process has mobilized stakeholders. Before the process, land conservation was a peripheral issue, but today at least two interests groups have emerged that are focused on implementation of the Neighborhood Plan. In the Elliott State Forest Planning Process, having more stakeholders represented in the Steering Committee and Core Planning Team benefited the process by increasing the level of buy-in from all parties involved. One participant observed, "there is more buy-in from stakeholders. This is particularly true, I believe, of Coos County and the local school superintendent … we have their support in a 'bottom line' in our negotiations."[23] Participants in the Elliott State Forest Planning Process also believe that by including representatives from the U.S. Fish and Wildlife Service and the National Marine Fisheries Service in the planning process, the draft Habitat Conservation Plan stands a better chance of being approved.

Other Primary Benefits

In addition to habitat protection and improved environmental quality, other primary benefits included the designation of recreational areas, increased public safety and the protection of cultural and archeological resources. In the Castle Valley Planning Process, the School and Institutional Trust Lands Administration (SITLA) worked with the community to protect land at the base of Castleton Tower, which provided recreational access to a popular climbing venue. Through the Castleton Tower Preservation Initiative, which was initiated as a result of the Planning Process, the land at the base of the Tower was purchased for conservation and recreational access. In the Whitefish Neighborhood Planning Process, one of the main

motivations for the process was threatened recreational access. After the completion of the Neighborhood Plan, one of the first implementation efforts has been to create a recreation trail that circles Whitefish Lake.

In Steamboat Springs, Colorado, the Emerald Mountain Partnership developed a management plan for the Emerald Mountain state trust land parcel, which includes recreational areas and protection of the town's ranching heritage. This plan is now one of four alternatives the Bureau of Land Management (BLM) is considering in their Environmental Assessment for the parcel. As part of the proposed land exchange, the BLM will amend its Resource Management Plan for the area to include the Emerald Mountain parcel and adopt a multiple-use management plan, which would include recreational access for mountain bikers, hikers and cross-country skiers, as well as wildlife management and some grazing. The new recreational access on Emerald Mountain may reduce the environmental impact on other undeveloped areas in the surrounding region. The community's plan, if adopted, would also include recommendations regarding the preservation of ranching on the land to preserve Routt County's ranching heritage, a feature that is unique among the many mountain resort towns in the Rockies. Cultural resource protection also resulted from the Landscape Plan for Lake Whatcom, where strategies to protect tribal petroglyphs, sacred bathing areas and burial sites were established. In addition, the Landscape Plan included management strategies that would improve public safety by reducing the risk of land slides near residential areas.

SECONDARY BENEFITS

Many of the cases resulted in secondary benefits. Secondary benefits are those that were not set as goals by process participants but were recognized nonetheless as *process* benefits by the participants and the researchers. The secondary benefits identified in the cases and discussed in this section include new and improved relationships, greater understanding and public awareness of state trust lands, an increase in institutional capacity of state land offices and other government entities, positive public relations during and as a result of the process, successful models of land management for other areas of land in the west and better state and federal agency coordination.

NEW AND IMPROVED RELATIONSHIPS

In all of the cases, participants reported that they established new relationships and/or improved existing relationships. This outcome is consistent with findings in the literature on collaborative planning. In *Making Collaboration Work,* Wondolleck and Yaffee argue that collaboration can enable parties to build new and improved relationships.[24] Good personal relationships benefit a process by increasing trust, building respect, facilitating professional interaction and creating a more productive atmosphere, all of which help groups achieve their primary objectives. Relationships are established or improved because of the time spent together, which allows for people to talk through their differences.

In the Castle Valley Planning Process, personal and professional relationships were noted between the community and the School and Institutional Trust Lands Administration (SITLA).

The trust land official involved commented, "The opportunity to get to know communities, to engage the communities and to make a difference in the communities is a large part of what has kept me working [at SITLA]."[25] Relationships helped achieve creative solutions, according to the group's facilitator who said that the process "has produced a lot of relationships that led to some creative deals that made things happen that wouldn't have happened otherwise."[26] In the Southeast New Mexico Working Group, it was observed that relationships built greater trust and understanding. During an open meeting in southeast New Mexico, one rancher, who had previously voiced his mistrust of conservation interest at the table, reprimanded a community member for disrespecting the group's major conservation representative.

By building relationships, collaborative processes help lay the ground work for working together in the future. In the Whitefish Neighborhood Planning Process, Advisory Committee members predicted that their relationships with local Department of Natural Resources and Conservation staff will facilitate implementation of the Neighborhood Plan. Similarly, in the Houghton Area Master Plan Process, officials from the Arizona State Land Department (ASLD) and the City of Tucson noted that the experience of working together during the Houghton Area Master Plan Process will make future interactions much easier. In addition to land in the Houghton Road area, the ASLD also owns a significant amount of land to the south of Tucson. The working relationships established during the Houghton Area Master Plan Process will likely help if and when the ASLD decides to develop or sell any of that land. The ASLD also recently opened a Southern Arizona office in Tucson. Their presence in the area should also help facilitate the development of working relationships.

GREATER UNDERSTANDING AND PUBLIC AWARENESS OF STATE TRUST LANDS

In all of the cases, participants noted that the process contributed to greater understanding and public awareness of state trust lands. Many participants learned for the first time during these processes what trust lands are, how they came into existence and how and for whom they are managed. In the Castle Valley Planning Process, participants observed that the community learned about the School and Institutional Trust Lands Administration's (SITLA) mandate to generate revenue for the beneficiaries and generally about the nature of trust lands in Utah. SITLA's Director, Kevin Carter, noted that those who "were involved in the collaboration certainly understand who we [SITLA] are better."[27] As a result, parties understood each other in a more meaningful way, which allowed for better collaboration because by understanding the needs and interests of each party, one is more willing to engage in productive discussions.

According to the State Land Board official responsible for the Steamboat Springs region, the Emerald Mountain Planning Process increased the visibility of both the agency and the state trust lands themselves. The process specifically educated the public about the obligation of the state trust land offices to manage their land holdings to generate income for trust beneficiaries. According to State Land Board Northwest District Manager Beverly Rave, "I think that whole community has a much better understanding of what state trust lands are, and why we have to manage those lands in the manner in which we do. There were more public meetings about Emerald Mountain than any other property the State Land Board owns in Colorado."[28]

Likewise, in the Whitefish Neighborhood Planning Process, it was noted that the process enhanced understanding of trust land management. Although not everyone agreed with the interpretation of the state trust land mandate, everyone learned to recognize that state trust lands are different from national parks and other multi-use lands. According to State Land Board staffer Kathy Bramer, "everybody who has been engaged in [this process] now fundamentally understands that state trust lands are not parks. There is a mandate that they operate within and we're not trying to be mean and we're not trying to be greedy. It is what the law requires."[29]

In some cases, local participants involved in the collaboration, in addition to the state trust land officials, took on the responsibility of educating the community about the legal obligations associated with state trust land management. This situation occurred in the Emerald Mountain Planning Process when the Partnership informed the community about how trust lands worked in Colorado. According to State Land Board Northwest District Manager Beverly Rave, the majority of public outreach was accomplished by the Emerald Mountain Partnership, "They wanted to make sure people were really informed about what it was they were trying to accomplish, and at the same time, make it clear to people what *our* mission was. What our expectations had to be for that property."[30] Also, the publicity itself of the conflict around Emerald Mountain meant that people statewide were learning about trust lands. In the Whitefish Neighborhood Planning Process, members of the Advisory Committee explained the trust obligation to their neighbors at the final public hearing.

INCREASED INSTITUTIONAL CAPACITY

In four of the eight cases, participants reported that going through the process helped build institutional capacity for the organizations they represented. Collaborative planning builds institutional capacity because for some participants it requires them to develop new skills. For example, participants in the Southeast New Mexico Working Group noted that they are now better trained in multi-stakeholder collaborative processes, which will enable them to more effectively participate in similar processes in the future.

Other institutions build capacity because they engage in a planning process that is unfamiliar to them but the process becomes important to carrying out future duties. The Castle Valley Planning Process illustrates this secondary benefit because without the impetus of the collaborative planning process, the town of Castle Valley would not have been forced to go through a zoning process. During the process, the town increased the sophistication of their land use ordinances and their general procedures for addressing development. In the Houghton Area Master Plan Process, the City of Tucson became more able to tackle development challenges that involve large tracks of undeveloped land. In the Mesa del Sol Planning Process, the State Land Office (SLO) gained experience in establishing public-private partnerships and a partner to turn to in the future, Forest City Covington, LLC, who entered into the deal with the SLO.

RESULTED IN POSITIVE PUBLIC RELATIONS

Some processes benefit participants and organizations involved because they result in positive public relations. For state trust land agencies, good public relations from a collaborative planning process may serve as a good example of community involvement and can create goodwill with

the community. Utah's School and Institutional Trust Lands Administration (SITLA) described the Castle Valley Planning Process as an example of superior community involvement in their 10th Anniversary Report and several of their annual reports. In the Southeast New Mexico Working Group, the process was a source of positive public relations for the State Land Office (SLO) because it demonstrated that they can generate income for schools in a sustainable way. Shawn Knox, a biologist at the SLO, cited this as a major benefit of the working group, noting that the SLO would be "seen in a light that [the SLO] can develop their resources, support public schools, and do it in a sustainable way."[31]

While the Lake Whatcom Planning Process was turbulent at times, the local Department of Natural Resources (DNR) official earned praise from several members of the Committee for his professionalism and dedication to the process. In addition, by the end of the process, the editorial board of the Bellingham Herald argued for strong support of the DNR's Landscape Plan, representing a major shift in public opinion from the beginning of the process.

PROVIDED SUCCESSFUL MODEL OF LAND MANAGEMENT

In the Castle Valley, Southeast New Mexico Working Group and Mesa del Sol cases, participants involved believed the processes could provide a successful model of land management for other western land issues. In the Southeast New Mexico Working Group, facilitator Toby Herlzich noted, "If there's a way to help 'unstick' some of those [western land] issues and work together to find new understanding and solve the problem, then that would be an overall contribution to all the work in the west on natural resources."[32] Learning from the Mesa del Sol Planning Process, Ray Powell, the former Commissioner of the State Land Office (SLO), hopes Mesa del Sol will "set the standard for how you live in an arid environment, while making a whole lot more for the school kids."[33] The current Commissioner says the agency will collaborate with private sector partners and the community to design a master plan for an upcoming project in Las Cruces, but will give the developers even more responsibility to decrease the SLO's time investment in the process.[34]

IMPROVED STATE AND FEDERAL AGENCY COORDINATION

In three of the four cases involving federal agencies, participants reported that going through the process has improved coordination between their agency and the federal agency involved. The Southeast New Mexico Working Group created consistent policies in response to a need for agencies to work across jurisdictional boundaries and to create more consistent land use plans across all types of land. Both the Bureau of Land Management (BLM) and the New Mexico State Land Office indicated that the process resulted in consistent policies that have ultimately facilitated management for all agencies involved. The participants in the Elliot State Forest Planning Process believed that they will be able to work with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service more effectively in the future because they included them in their habitat conservation planning process.

COSTS

The literature on collaboration reveals several costs, including time, staff costs, financial costs, and environmental costs. In *Making Collaboration Work: Lessons from Innovation in Natural Resource Management,* Wondolleck and Yaffee found that agencies, nonprofit organizations and volunteers endure significant time costs when participating in collaborative processes.[35] Agencies and organizations also face financial costs in the form of staff salaries.[36] Some environmental groups oppose collaborative processes because they view the processes as being environmentally costly. To these critics, collaboration turns legal and regulatory standards into "bargaining chips."[37] They also argue that collaborative processes emphasize local economic and social values at the expense of natural resources, giving a "small group of private individuals undue influence over public goods."[38]

In this study's cases of collaboration involving state trust lands participants identified a number of costs. These costs include direct planning costs, opportunity costs due to time spent devoted to the process and, in some cases, costs arising from poor public relations, emotional and personal costs and a loss to either trust value or environmental protection.

REDUCED THE VALUE OF TRUST ASSETS

In the Lake Whatcom Landscape Planning Process, the Department of Natural Resources (DNR) estimated that because of logging restrictions in the Landscape Plan, the area will generate about half the revenue that would have been generated without the plan. The plan's requirements beyond current rules and regulations resulted in an increase in land taken out of commercial forest management, causing a reduction of 35 percent in the planning area's asset value based on future earnings from logging.[39] The Final Environmental Impact Statement reported lost revenue to trust beneficiaries as follows:

> The projected revenues generated through implementation of the FEIS Preferred Alternative would be significantly lower than those estimated for the No Action Alternative. For the entire 200-year modeled planning period it is estimated that revenues under the Preferred Alternative would total $177,210,000, a reduction of $160,182,000 from the anticipated revenues of $337,392,000 under the No Action Alternative.[40]

Critics of the DNR's analysis noted that the financial estimates of the loss of revenue varied widely during the process and that a base case for comparison that more accurately reflected the current situation should have been chosen. That is, the base case for comparison could have been the *no logging* alternative that was in effect due to the moratorium on logging rather than the No Action Alternative that represented the logging practices that resulted in the moratorium on logging. Had a *no logging* base case been applied, the harvesting activity resulting from the Landscape Plan would have been described as an increase of $177 million to the trust rather than a $160 million loss.

LOSS OF ENVIRONMENTAL PROTECTION

Environmental groups involved in the Elliott State Forest Planning Process have stated that the Oregon Department of State Lands and the Oregon Department of Forestry have proposed a Habitat Conservation Plan (HCP) that will in fact reduce habitat protection for the spotted owl and marbled murrelet. Many of the challenges faced by the Steering Committee and Core Planning Team highlight some of the faults of HCP process and HCPs themselves as effective means of protecting threatened species. In 1998, a survey of spotted owls conducted on the Elliott State Forest revealed that the number of owls remaining had fallen from 69 in 1993 to 23 in 1998, which was much lower than the number of owls that should have remained given the number of owl takes permitted in the incidental take permit in the HCP.[41]

DIRECT PLANNING COSTS

All of the processes examined in this study incurred direct planning costs. In many cases, the most significant direct planning costs derived from wages for participants who participated on behalf of government agencies or private companies and were therefore being paid for their time involved in the process. Public citizens that volunteered in the process often gave up wages (discussed below as opportunity costs. Other direct planning costs included those incurred to hold group and public meetings and to facilitate the exchange of information for items such as printing materials. Planning costs also included the costs of facilitation services and expert studies.

Of the eight cases, cost data was best documented in the Lake Whatcom Landscape Planning Process. The Washington Department of Natural Resources (DNR) reported that preparing the Environmental Impact Statement and the Lake Whatcom Management Plan cost the agency approximately $800,000.[42] This estimate does not include wages for participants on the payroll of other state agencies or local governments. According to DNR officials, the costs incurred by the DNR will be borne by all state trust land beneficiaries. The $800,000 was deducted from the DNR's general management account, which means that all beneficiaries, not just those whose trust land is contained in the planning area, incur the plan's development costs.[43] While cost figures were not available for the Elliott State Forest Process, state trust land officials also noted that the costs of the process would be borne by beneficiaries statewide.

According to estimates obtained by researchers, the Castle Valley Planning Process cost the town of Castle Valley significantly, the School and Institutional Trust Land Administration more than $100,000, and Utah Open Lands $50,000 per year in salary and other expenses. In addition, some personal costs were not reimbursed. Prior to the planning process' formal beginning, several community members from Castle Valley personally paid for much of the pre-planning activities, such as initial maps, without being reimbursed.[44] However, some costs of the process were offset by grants from Sonoran Institute, Patagonia and Tides Foundation. Finally, in the Emerald Mountain Planning Process, the Partnership paid for a planning lease with the State Land Board that cost $28,000 and raised money to pay for advertising, consulting fees for survey data, a land appraisal, website hosting and postage.

OPPORTUNITY COSTS ARISING FROM TIME SPENT DEVOTED TO THE PROCESS

Opportunity costs include anything of value that was given up by participating in the process. For members of the public who participated on a voluntary basis, the largest opportunity costs included foregone wages. As many of the processes consumed a great deal of the participants' time, opportunity costs should not be underestimated. In addition to time spent in actual meetings, significant time is spent preparing and traveling for meetings. In the Lake Whatcom Landscape Planning Process, the Committee met 37 times, not including the public hearings they attended. Assuming an average of ten hours per meeting (five hours of preparation and five hours of actual meeting time – some meetings lasted all day and were convened during work hours) and that all nine members of the Committee were in attendance at every meeting, the process required 3,330 hours of the Committee's time. In the Castle Valley Planning Process, travel time was required for meetings that were held in Castle Valley, Salt Lake City, Boulder and Denver. In the same process, Castle Rock Collaboration board members met once or twice a month for a period of two or three years during the planning process, during which board members opened their houses to hold the meetings.[45] The time devoted to organize was estimated by the group's organizers to be at least 20 hours per week throughout the process and often much more.[46] Finally, one member of the Emerald Mountain Partnership estimated that the process consumed 1,500 hours of his time over 12 years, which detracted from time for family, recreation and relaxation.

EMOTIONAL AND/OR PERSONAL COSTS

In six of the eight cases, participants noted that they suffered emotional distress or personal costs arising from time away from family and leisure and from stress or damaged relationships. In the Lake Whatcom Planning Process, the process was emotionally and personally draining for several participants. The Department of Natural Resources official responsible commented, "You've got folks that are yelling at you from all directions. It's tough on staff."[47] He added that the process took an "enormous personal toll on staff, me included."[48] Similarly, in the Whitefish Neighborhood Planning Process, Department of Natural Resources and Conservation Trust Lands Management Division Administrator Tom Schultz faced internal strife from agency staff who did not agree with his decision to endorse the community's proposal for a Committee. In the Emerald Mountain Planning Process, a rancher reported losing time devoted to family and leisure activity and felt his relationship with the city of Steamboat Springs was severely damaged. In the Houghton Area Master Plan Process, one of the participants mentioned members gave up personal time and time with family.

In some cases relationships were damaged. In the Castle Valley Planning Process, "There were some friendships at least strained and maybe in some instances ruined or severely stressed …and that's not a success."[49] Another participant echoed this saying, "You get personally involved. It can be emotional, and it can be draining, and you make friends, you lose friends."[50] In the Whitefish Neighborhood Planning Process, Advisory Committee member and Whitefish Chamber of Commerce President Sheila Bowen's job was jeopardized by controversy surrounding the planning process.

BAD PUBLIC RELATIONS

In the Whitefish Neighborhood Planning Process, the Department of Natural Resources and Conservation (DNRC) experienced some bad publicity and damage to its reputation because of its involvement in the planning effort. Whitefish community members and trust beneficiaries criticized the DNRC during the process for its approach to neighborhood planning. Administrator Tom Schultz recalls the local newspaper, *The Whitefish Pilot*, having a lot of "heartburn" about the roles of the Advisory Committee and the general public in the process. Indeed, Schultz wrote several editorials defending the agency's approach before and after the formation of the Advisory Committee.

In the Emerald Mountain Planning Process, by appearing to support a controversial land exchange, the Division of Wildlife (DOW) was criticized by opponents of the deal. The situation also put a magnifying glass on those agency employees who were involved with the process. Libbie Miller remembers,

> We might have taken some hard knocks from the opposition, being perceived as a supporter. People wanted to know "How could we possibly be supporting this, particularly since losing these lands is going to hurt the economy of our local towns through the loss of hunting!" There are probably some people who feel a little bit negative about the Division or myself, with our position on the exchange.[51]

While participants remember the DOW receiving criticism for supporting the exchange, they also recall DOW under fire for raising concerns about the exchange at one Partnership meeting. The process exposed possible conflicts of interests because the Department of Natural Resources houses both the DOW, whose mission is to protect wildlife, and the State Land Board, whose mission is to generate revenue. This conflict, along with other land use issues and controversies occurring around that time, prompted the DOW to redesign their inter-agency land use commenting procedures.

COMPARING BENEFITS TO COSTS

A discussion of the benefits and costs naturally leads to the question: how do the benefits and costs compare? Do the benefits outweigh the costs? Are the costs greater than the benefits? There are at least two reasons why such a comparison is difficult in this report. First, at the aggregate level looking across the eight cases, a comparison of cost and benefits would be ill-advised because net benefits at the aggregate level would not justify an individual process that resulted in net costs. Second, even at the individual case level, comparing the benefits to the costs is not possible without first putting benefits and costs into a common unit, such as dollars, which would allow one to arrive at the net present value of the process as a whole to society. While several methods exist in the field of economics to value benefits of non-market goods, the scope of this study did not include an economic valuation of each of the benefits and costs

discussed.[1] In addition, the valuation of many of the secondary benefits discussed, such as improved relationships, may not be possible at all.

Despite the absence of valuation data for each benefit and cost, the data collected during the case study interviews suggests that had such a valuation for each case been conducted, the benefits would outweigh the costs in most cases. The fact that the number of benefits identified in each case greatly outnumbered the number of costs identified by interviewees suggests that benefits outweigh costs. For example, in the Castle Valley Planning Process, the researchers identified ten categories of benefits compared to three categories of costs. Five of the benefits identified were considered primary benefits, including an increase in the value of the trust, an improvement in the natural environment, an improvement in the urban environment, a higher quality solution and the establishment of recreational access. While not related to the participants' original goals, five additional secondary benefits were identified, including new and improved relationships, public education about state trust lands, increased institutional capacity of the Castle Valley town government, positive public relations for the state trust land agency and a successful model of land management for other land use processes. Table 14-1 shows that for all of the cases of collaborative planning on state trust land in this report, the number of benefits identified in each case by interviewees far outnumbered the number of costs identified.

The participants' views about whether the process as a whole was successful and whether they would be willing to participate in a collaborative process again in the future further suggest that the benefits outweighed the costs in most cases. Both inquiries were included in the set of interview questions asked off all participants. The first question, "Was the process successful?" zeroes in on whether the participant thought the benefits outweighed the costs of the process overall. The second question, "Would you collaborate again in the future?" which included the follow-up question, "Was this a value-added activity?" focuses on whether the benefits outweighed the costs for the individual.[2]

Eighty percent of interviewees (or 71 out of 89) believed the process was successful when asked directly whether they thought the process was successful or whether they would collaborate again in the future. Twenty-eight of the 117 interviewees did not answer either of these questions and several of the participants in the ongoing processes conditioned their answers on implementation of the final outcome. Table 14-2 shows the responses to these interview questions summed up for each case study and the sums as a percent of the total interviewees who responded.

[1] The most common economic techniques for valuing non-market goods and non-use values of natural resources include contingent valuation, hedonic pricing, travel costs and option valuation.
[2] The full list of interview questions can be found in Exhibit 1 in the Appendix to this report.

Table 14-2: Weighing Benefits and Costs: Responses to Interview Questions #4 and #4F

Response to Interview Question #4 "Was the Process Successful?" or Interview Question #4F "Would you Collaborate Again in the Future?"	CASE STUDIES								
	Castle Valley	Elliott	Emerald Mtn	HAMP	Mesa del Sol	Lake Whatcom	SE New Mexico	White-fish	Total
Affirmative	10	9	9	11	5	4	15	8	71
Negative	2	1	0	0	0	1	1	0	5
Mixed Response	3	1	2	0	1	2	0	4	13
Total Interviewees Who Responded	15	11	11	11	6	7	16	12	89
Total Interviewees Who Did Not Respond	0	0	2	5	8	6	2	5	28
Total Interviewees	15	11	13	16	14	13	18	17	117
Affirmative	67%	82%	82%	100%	83%	57%	94%	67%	80%
Negative	13%	9%	0%	0%	0%	14%	6%	0%	6%
Mixed Response	20%	9%	18%	0%	17%	29%	0%	33%	15%
Total Interviewees Who Responded	100%	100%	100%	100%	100%	100%	100%	100%	100%

At the individual case level, the majority of participants in each case believed the process was successful when asked directly whether they thought the process was successful or whether they would collaborate again in the future. The majorities ranged from 57 percent of those who answered the questions in the Lake Whatcom Landscape Planning Process to 100 percent of those who answered the questions in the Houghton Area Master Plan Process. Despite the qualitative and quantitative evidence identified in this report that shows that collaborative planning on state trust lands appears to result in overall net benefits, a full benefits-costs analysis by an economist of these, or other, cases is an important opportunity for further study.

Endnotes

[1] Julia M. Wondolleck and Steven L. Yaffee, *Making Collaboration Work: Lessons from Innovation in Natural Resource Management* (Washington, D.C.: Island Press, 2000), 23-40; Richard Krannich et al., *Incorporating Social Assessment and Public Involvement into Ecosystem-Based Resource Management*, Report for the U.S. Dept. of Agriculture, 1994.

[2] Barb Cestero, *Beyond the Hundreth Meeting: A Field Guide to Collaborative Conservation on the West's Public Lands* (Tucson: Sonoran Institute, 1999); Wondolleck and Yaffee, *Making Collaboration Work: Lessons from Innovation in Natural Resource Management,* 165-166.

[3] Wondolleck and Yaffee, *Making Collaboration Work: Lessons from Innovation in Natural Resource Management,* 33-34.

[4] Ric McBrier (Assistant Director of Planning and Development, SITLA), interview by Stephanie Bertaina and Eirin Krane, August 15, 2005, SITLA, Salt Lake City, UT.

[5] Ray Powell (Former Commissioner of Public Lands, New Mexico State Land Office), interview by Emily Kelly and Drew Vankat, August 18, 2005, Albuquerque, NM.

[6] "Lake logging plan merits our support," *Bellingham Herald*, November 9, 2004.

[7] Chuck Bennett (Director of Government Relations, Confederation of Oregon School Administrators), interview by Eirin Krane and Drew Vankat, August 22, 2005, State Capitol Building, Salem, OR.

[8] Ibid.

[9] Wondolleck and Yaffee, *Making Collaboration Work: Lessons from Innovation in Natural Resource* Management, 200.

[10] Ibid., 7.

[11] Parts of the Castle Valley development plan included increased development density for parts of the land (i.e., cluster development that reduced sprawl), but overall the development density was reduced.

[12] Jeanne Holmgren (Real Estate Management Bureau Chief, Trust Land Management Division, DNRC), interview by Jessica Mitchell and Lisa Spalding, August 15, 2005, DNRC, Helena, MT.

[13] Chris Hyer (Senior Planner, city of Albuquerque), interview by Emily Kelly and Drew Vankat, August 15, 2005, Albuquerque, NM.

[14] Wondolleck and Yaffee, *Making Collaboration Work: Lessons from Innovation in Natural Resource Management,* 133-134.

[15] Bob Sandman (Area Manager, Northwestern Land Office, DNRC), telephone interview by Jessica Mitchell and Lisa Spalding, September 7, 2005.

[16] Richard Rodriguez (Regional Planner, Washington State Department of Health), interview by Alden Boetsch and Matt Stout, August 11, 2005, DOH, Kent, WA; Richard Rodriguez (Regional Planner, Washington State Department of Health), interview by Alden Boetsch and Matt Stout, August 11, 2005, DOH, Kent, WA.

[17] E. Franklin Dukes and Karen Firehock, *Collaboration: A Guide for Environmental Advocates* (The University of Virginia Press, 2001).

[18] "Report to Legislature: Lake Whatcom Landscape Pilot Project," Washington State Department of Natural Resources, 2004.

[19] William Wallace (Northwest Regional Manager, Washington State Department of Natural Resources), interview by Alden Boetsch and Matt Stout, August 9, 2005, DNR, Sedro-Woolley, WA.

[20] Greg Poncin (Unit Manager, Kalispell Unit Office, DNRC), telephone interview by Jessica Mitchell and Lisa Spalding, September 6, 2005.

[21] Wondolleck and Yaffee, *Making Collaboration Work: Lessons from Innovation in Natural Resource Management,* 146.

[22] Ibid., 30.

[23] Dan Shults (Southern Oregon Area Director, Southern Oregon Area, Oregon Department of Forestry), interview by Eirin Krane and Drew Vankat, August 24, 2005, ODF, Roseburg, OR.

[24] Wondolleck and Yaffee, *Making Collaboration Work: Lessons from Innovation in Natural Resource Management,* 162.

[25] Ric McBrier (Assistant Director of Planning and Development, SITLA), interview by Stephanie Bertaina and Eirin Krane, August 15, 2005, SITLA, Salt Lake City, UT.

[26] Marty Zeller (Planner, Conservation Partners), telephone interview by Stephanie Bertaina and Eirin Krane, September 28, 2005.

[27] Kevin Carter (Director, SITLA), interview by Stephanie Bertaina and Eirin Krane, July 26, 2005, Western States Land Commissioners Association Summer Conference, Great Divide Lodge, Breckenridge, CO.

[28] Beverly Rave (Northwest District Manager, Colorado State Land Board), interview by Lisa Spalding and Matt Stout, August 5, 2005, Denver, CO.

[29] Kathy Bramer (Montana Office of Public Instruction), interview by Jessica Mitchell and Lisa Spalding, August 15, 2005, The Overland, Helena, MT.

[30] Beverly Rave (Northwest District Manager, Colorado State Land Board), interview by Lisa Spalding and Matt Stout, August 5, 2005, Denver, CO.

[31] Shawn Knox (Wildlife biologist, New Mexico State Land Office), interview by Stephanie Bertaina and Emily Kelly, August 22, 2005, SLO, Santa Fe, NM.

[32] Toby Herzlich (Principal, Toby Herzlich & Company), telephone interview by Stephanie Bertaina and Emily Kelly, October 28, 2005.

[33] Ray Powell (Former Commissioner of Public Lands, New Mexico State Land Office), interview by Emily Kelly and Drew Vankat, August 18, 2005, Albuquerque, NM.

[34] Patrick H. Lyons (State Land Commissioner, New Mexico State Land Office), interview by Stephanie Bertaina and Emily Kelly, July 26, 2005, Western States Land Commissioners Association Conference, Breckenridge, CO.

[35] Wondolleck and Yaffee, *Making Collaboration Work: Lessons from Innovation in Natural Resource Management.* 56-57.

[36] Ibid.; Cestero, 74.

[37] Dukes and Firehock, 1, 11.

[38] Ibid.

[39] "Report to Legislature: Lake Whatcom Landscape Pilot Project," Washington State Department of Natural Resources, 2004.

[40] *Lake Whatcom Landscape Plan Final Environmental Impact Statement*, Washington State Department of Natural Resources, http://www.dnr.wa.gov/htdocs/agency/whatcom/index.html.
[41] Ibid.

[42] "Report to Legislature: Lake Whatcom Landscape Pilot Project," Washington State Department of Natural Resources, 2004.

[43] Doug Sutherland (Commissioner of Public Lands, Washington State Department of Natural Resources), interview by Alden Boetsch and Matt Stout, July 26, 2005, Great Divide Lodge, Breckenridge, CO.

[44] Wendy Fisher (Executive Director, Utah Open Lands), personal communication [email] with Stephanie Bertaina, December 16, 2005.

[45] Dave Erley (Southeastern Field Agent, Utah Open Lands), personal communication [email] with Stephanie Bertaina, January 2, 2006.

[46] Ibid.

[47] William Wallace (Northwest Regional Manager, Washington State Department of Natural Resources), interview by Alden Boetsch and Matt Stout, August 9, 2005, DNR, Sedro-Woolley, WA.

[48] Ibid.

[49] Richard Schwartz (Member of Planning and Zoning Commission, Town of Castle Valley), interview by Stephanie Bertaina and Eirin Krane, August 19, 2005, Castle Valley Community Center, Castle Valley, UT.

[50] Wendy Fisher (Executive Director, Utah Open Lands), interview by Stephanie Bertaina and Eirin Krane, August 16, 2005, Utah Open Lands Office, Salt Lake City, UT.

[51] Libbie Miller (District Wildlife Manger, Colorado Division of Wildlife), interview by Lisa Spalding and Matt Stout, August 3, 2005, Colorado Division of Wildlife Area 10 Office, Steamboat Springs, CO.