An Evaluation of Acres for America

Prepared for the National Fish and Wildlife Foundation

June 1, 2015

prepared by



Edward W. Wilson, Ph.D 4136 Millbrook Road Mount Joy, PA 17552 717-618-1777 EdWilsonConsulting@gmail.com

Edward W. Wilson Consulting |1

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Executive Summary

This report presents the findings of an evaluation of Acres for America (Acres), a public-private partnership between Walmart and the National Fish and Wildlife Foundation (NFWF) established in 2005 to conserve lands of national significance, protect critical habitat for fish and wildlife, and provide benefits for people and local economies. From its inception through the end of 2014, Acres has made 52 grants for land conservation and urban environmental restoration totaling \$28.4 million. In addition, Acres made 8 grants totaling \$2.16 million to protect and restore critical wildlife habitat across the Gulf Coast in the wake of the Deepwater Horizon oil spill in 2010, which were not included in this evaluation.

Land Conserved by Acres for America

This report focuses on the 39 land conservation grants, which represent an investment of \$27.1 million. On average, Acres grants provide approximately 12 percent of the total project budget, and overall the program has helped leverage more than \$225 million in public and other private land conservation investments. As a result, 1,019,641 acres of land have been placed in permanent protection through either fee simple acquisition or permanent conservation easements. This achievement far exceeds the original acreage goal established in 2005—one acre of priority wildlife habitat for every developed acre of Walmart stores' current and future footprint—an expected total of 138,000 acres.

Some of the notable conservation projects include a 1,250-acre easement that that will protect the integrity of three national monuments, two national recreation areas, eight wilderness areas, and one of our nation's crown jewel national parks, Grand Canyon National Park. Acres has also protected 312,000 acres of working forest in Downeast Lakes, Maine, the second largest conservation easement in history, a project that is saving a mill and other forestry and natural resource-based jobs in the region. Another significant project is the 17,000-acre Powderhorn Ranch in Matagorda Bay, Texas. The ranch includes more than eleven miles of tidal bay front on Matagorda Bay and provides habitat for hundreds of species of birds and animals, including the federally-endangered whooping crane.

Significant Contributions to Fish and Wildlife and Iconic Landscapes

According to surveyed grantees, the most common type of habitat protected by Acres projects is rivers, lakes, streams, and riparian zones, followed by deciduous/mixed forest, freshwater wetlands, coniferous forests, and grasslands. The majority of Acres projects seek to protect large ecosystems that include several different habitat types. By conserving such ecosystems, Acres is helping to protect many iconic, important and at-risk species. A GIS analysis suggests that some 545 species whose Global Conservation Status is "critically imperiled," "imperiled," or "vulnerable" are likely to occur in areas protected by Acres projects. Also likely to occur in these areas are 91 species listed as "endangered" and another 19 listed as "threatened" under the Endangered Species Act.

Connecting existing protected lands to unify wild places and protect migration routes is another core objective of the program. A GIS analysis was conducted to measure the degree to which properties protected with the help of Acres funding connect to existing protected land. Among the findings were that:

• Thirty-six of the 38 Acres land conservation properties for which data are available (95 percent) are directly adjacent to at least one other parcel of existing protected land in the databases.

• Ten (26 percent) of the projects connect to more than 1 million acres of protected public lands, including national forests, national parks, state forests, county open space or Bureau of Land Management lands.

Additional information on connectivity comes from grantee reports on the degree to which their projects help protect areas important for animal movement, such as migration corridors, flyways, and fish passages. According to surveys, interviews, and grant documentation, more than 80 percent of Acres' land conservation projects support fish and wildlife migration corridors or flyways. It is notable that some of the areas that have little direct connectivity to protected lands according to the GIS analysis are nevertheless important to animal movement, protecting areas such as migration corridors or stopover habitats for migrating birds to rest and refuel.

Benefits for People and Communities

Another of the program's core objectives is to provide benefits to people and help local economies, specifically rural economies that depend on forestry, ranching, and recreation. Although some 90 percent of Acres land conservation projects are located in rural areas, more than 30 million Americans live within 50 miles of these projects, and therefore have the potential to both access outdoor recreation and benefit economies. The 50-mile range has long been reported as a comfortable travel distance for recreation, whether considering data on one-day trips or vacation homes. The National Park Service considers a 60-mile radius around parks as the "local gateway region" for analyzing economic benefit to the local community.

Grantees report that Acres projects benefit surrounding communities in various ways – most obviously by providing outdoor recreational opportunities. According to survey respondents, two-thirds of the Acres projects provide public recreational opportunities, including (in order of frequency) birdwatching/nature study, hiking, hunting, picnicking, fishing, boating/canoeing/kayaking, and bicycling. Grantees generally believe recreation and associated tourism will result in significant economic benefits for surrounding communities, though only a few were able to offer specific examples of such benefits.

Timber harvests occur on approximately 40 percent of the lands conserved by the Acres program, but in some cases the primary purpose of the tree harvests is for forest management, with any revenues from logging being a secondary consideration. Several grantees also spoke about Acres' contributions to strengthening the local economy by preserving timber industry jobs.

Ranching and agriculture continue to be practiced on many Acres-protected lands. According to survey respondents, about 42 percent of the properties include active livestock operations, and nine percent of the lands support a variety of crops.

Another important contribution of many Acres land conservation projects, according to grantees, is the protection and enhancement of water resources. Many projects conserve lands with an objective of protecting water resources and water quality. In other cases, projects intentionally focus on addressing issues of water scarcity and restoring water in stream for fish and other aquatic life. Carbon sequestration also is a likely benefit, though only two projects have developed carbon sequestration plans.

A critically important part of the long-term success of land conservation projects is whether they include financial and management provisions for their long-term stewardship. All 35 of the survey respondents who answered a question on land management said that their projects either have management plans or will have them in the future. More than half of these plans are overseen by state or federal government agencies, and more than 35 percent are overseen by non-governmental organizations. Eighty-five percent of survey respondents report that the management plans include provisions to protect threatened species and other plant and animal species of concern. Most include management provisions that ensure recreation and public access, as well as management of water resources. Many plans also include agricultural or ranch land management and timber management provisions to ensure that working lands remain active.

Slightly more than half (51 percent) of the land conservation projects include habitat restoration components, though in many cases these activities are funded by sources other than Acres. Restoration activities have included invasive species removal, stream restoration, restoration of habitat for particular species of concern, and efforts to restore indigenous biological communities such as longleaf pine forests in the southeast and mamane forests in Hawaii.

Catalytic Funding

Grantees report that Acres funding has often played a key role in leveraging other funding and thus helping their projects to move forward. A theme echoed by many was that a grant from NFWF, which has an excellent reputation, has helped legitimize their project in the eyes of other funders. In other words, NFWF's funding commitment through Acres is perceived as a "seal of approval" that has standing with other public and private funders. When asked about challenges and suggestions for improving Acres, few grantees had much to say. For those with suggestions, they included providing support for monitoring on protected land, funding staff salaries, a willingness to reinvest in a project area with follow-up grants, and encouraging more corporations to contribute to the Acres program.

Conclusions

Overall, Acres for America has done a good job of identifying and choosing to fund conservation projects that generally meet its four core objectives: providing public access, conserving critical habitat, connecting existing protected lands, and helping rural economies. The most successful projects are those that make significant contributions in all four of these areas, but in some cases the program has been willing to support projects that represent important opportunities for habitat conservation and connectivity but less so for public access and economic contributions. We believe the willingness to make such trade-offs is consistent with Acres' attribute of being a broad, flexible program, and is appropriate as long as the conservation opportunities are compelling.

While we do not recommend any major programmatic changes, we do offer several suggestions aimed at helping Acres for America demonstrate that its resources are being put to good use and its objectives are being met:

- Encourage applicants to provide more information:
 - At present there is only anecdotal evidence regarding the extent to which Acres projects support rural economies. NFWF should develop simple economic indicators that grantees can use to track how they are contributing to local economies. This will allow NFWF to better substantiate claims about the program's contribution to economic health.

- NFWF should encourage or require grant applicants to provide more information to demonstrate how the proposal will meet the objective of providing access for people to enjoy the outdoors. For instance, grantees should report visitation statistics whenever possible and share how many acres of natural lands or miles of river are open to the public to enjoy as a result of the project.
- NFWF should encourage applicants to submit more information on the ecological benefits that are derived or preserved from a conservation project (i.e., benefits to water, carbon, species and people) in order to capture the full range of ecological services supported by Acres.
- NFWF should consider requiring grantees to supply GIS shape files that include the property or properties under consideration for conservation as well as any adjacent protected lands to facilitate analyses of land connectivity and migratory corridors.
- The program should encourage and, in selected cases, provide support for the development and implementation of monitoring plans to ensure that projects achieve their long-term ecological and social objectives. Support for monitoring would be most warranted in cases where Acres money is being used for habitat restoration projects, and where there is a long-term goal of restoring populations of targeted fish and wildlife species.

Introduction

Acres for America (Acres), a public-private partnership between Walmart and the National Fish and Wildlife Foundation (NFWF), was established in 2005 to conserve lands of national significance, protect critical habitat for fish and wildlife, and provide benefits for people and local economies. Its priorities include:

- Providing access for people to enjoy the outdoors;
- Conserving critical habitats for birds, fish, plants, and wildlife;
- Connecting existing protected lands to unify wild places and protect migration routes; and
- Ensuring the future of rural economies that depend on forestry, ranching, and recreation.

This report presents the findings of an evaluation of the program that is guided by the following evaluation questions:

- 1. Outcome Achievement: To what extent has the program been able to make progress on the following core program objectives?
 - a. Providing access for people to enjoy the outdoors;
 - b. Conserving critical habitats for birds, fish, plants, and wildlife;
 - c. Connecting existing protected lands to unify wild places and protect migration routes; and
 - d. Ensuring the future of rural economies that depend on forestry, ranching, and recreation.
- 2. What types of projects have yielded the greatest benefits relative to these objectives and why?
- 3. Where do the data suggest that investments be directed in the future to maximize progress toward program objectives?

Methods

The research, which was conducted from December 2014 through March 2015, included the following components:

- A review of documents, including grant proposals, plans, and programmatic review reports for 39 land conservation projects and 13 urban restoration projects.
- A series of 28 telephone interviews with Acres land conservation grantees. The interviews were conducted with individuals deemed to have the best knowledge of the project. They occupied various roles and positions, including: project, state, regional, and executive director; land, forest, water resources, and stewardship director; ecologist; biologist; grant writer; and/or members of development departments. The report includes selected excerpts from these interviews, which are presented in italics. To preserve the anonymity of the interviewees, their names are not included in this report.
- Two telephone interviews with urban restoration grantees.

- An Internet-based survey of land conservation grantees, conducted in January and February 2015. The survey was sent to 39 grantee representatives, 35 of whom returned completed surveys, for a response rate of 90 percent.
- A GIS analysis, which was used to assess: connectivity (the extent to which Acres land conservation projects create linkages with other parcels of protected land), at-risk species (identification of endangered, threatened, and other at-risk species that occur, or are likely to occur, within Acres protected parcels), and demographics (characteristics of populations within 50 miles of Acres protected areas).

An Overview of Acres for America

In 2005, Walmart committed to supporting the permanent conservation of at least one acre of priority wildlife habitat for every developed acre of Walmart Stores' current and 10-year future footprint—an expected total of 138,000 acres. From its inception through the end of 2014, Acres for America has made 52 grants totaling \$28.4 million. The supported projects are divided into two categories: land conservation projects, whose primary purpose is to protect land of high conservation value through acquisition or conservation easements; and urban restoration projects, aimed at restoring waters and ecosystems in urban areas and connecting youth to the outdoors.¹

While this report focuses primarily on land conservation projects, a brief discussion of the urban restoration projects is presented near the end of the report (see page 35).

As Table 1 shows, more than \$27 million in grant dollars have been invested in 39 land conservation projects. The grants have ranged from \$200,000 to \$6,000,000, averaging just under \$700,000. In all projects Acres money has been leveraged with other sources of funding. On average Acres grants have constituted 12.1 percent of the total project budget, and overall the program has helped leverage more than \$225 million in land conservation investments. As a result the program has conserved almost exactly 1.0 million acres of land through either fee simple acquisition or permanent conservation easements, far exceeding the program's original goal.

Figure 1 shows point locations of Acres land conservation projects. (Note that many projects involve the acquisition of separate tracts of land. When these are widely separated, they are represented by more than one point on Figure 1.)

¹ A few grants for emergency response projects, focused on critical remedial actions for fish, wildlife, and habitat, have also been awarded under the Acres program, but these are beyond the scope of this evaluation.

					TYPE OF PF	ROTECTION				
EZG#	PROJECT NAME	STATE	YEAR	AMOUNT OF GRANT	% OF TOTAL PROJECT BUDGET	CONSERVED ACREAGE ²	DOLLARS PER ACRE	Fee Simple Acquisition	Permanent Conser- vation Easement	CURRENT STATUS
3229	Upper Mississippi Forestland Easement	MN	2009	\$750,000	1.7%	187,277	\$236	NO	YES	Completed
3383	Conserving Southern Blue Ridge Trout Habitat	TN, NC	2011	\$500,000	2.5%	12,055	\$1,659	YES	YES	Active
3536	Sommers-Grindstone Conservation Easement	WY	2009	\$365,100	1.9%	19,000	\$1,011	NO	YES	Completed
4649	Kane Ranch and Two Mile Ranch Acquisition	AZ	2005	\$1,000,000	22.2%	1,250	\$3,604	YES	NO	Completed
4792	McCloud Forests Project	CA	2006	\$1,000,000	15.9%	9,400	\$669	NO	YES	Completed
4859	Rimrock Ranch Conservation Easement	OR	2006	\$400,000	22.2%	1,120	\$1,609	NO	YES	Completed
4887	Catahoula National Wildlife Refuge Expansion	LA	2005	\$1,000,000	40.0%	6,273	\$399	YES	NO	Completed
4942	Prairie Pothole Grassland and Wetland Protection	ND, SD	2007	\$700,000	23.1%	14,322	\$212	NO	YES	Completed
5200	Arcadia Dunes on Lake Michigan	МІ	2006	\$500,000	2.8%	1,667	\$10,712	YES	NO	Completed
6557	Redwood Forest Protection and Management	CA	2007	\$1,000,000	2.1%	16,040	\$2,969	YES	NO	Completed
6562	Yellow River Ravines	FL	2007	\$1,000,000	4.3%	11,313	\$2,056	YES	NO	Completed
7148	Sun Ranch Conservation Easement	MT	2008	\$1,000,000	4.2%	10,500	\$2,268	NO	YES	Completed
7299	Connecticut River Forest Acquisition	NH	2008	\$500,000	17.9%	2,100	\$1,330	YES	NO	Completed
17341	Sherfield Cave Bat Hibernaculum Acquisition	AR	2005	\$400,000	26.7%	1,226	\$1,222	YES	NO	Completed
17439	Downeast Lakes Forestry Partnership	ME	2005	\$6,000,000	48.8%	312,000	\$39	NO	YES	Active
18055	St. Joe Basin Conservation Initiative	ID	2006	\$500,000	10.4%	28,000	\$172	NO	YES	Completed
18732	Carney Conservation Easement	WY	2009	\$317,475	7.3%	3,409	\$1,276	NO	YES	Completed
19021	Shasta Big Springs Ranch Acquisition	CA	2009	\$750,000	5.3%	4,136	\$3,421	YES	NO	Completed
21012	McArthur Lake Wildlife Corridor	ID	2009	\$500,000	11.6%	3,943	\$1,093	NO	YES	Completed
23705	Southern Sierra Partnership and Tehachapi Linkage	CA	2011	\$500,000	4.5%	14,945	\$743	NO	YES	Completed
25862	Palila Protection	н	2011	\$500,000	16.7%	4,469	\$670	YES	NO	Active
28949	Protection and Restoration of Longleaf Pine on the Fall Line	GA	2011	\$250,000	38.9%	278	\$2,255	YES	NO	Completed
29731	Panther Crossing Protection	FL	2011	\$200,000	3.0%	1,278	\$5,216	NO	YES	Completed

					% 05			TYPE OF PF	ROTECTION	
EZG#	PROJECT NAME	STATE	YEAR	AMOUNT OF GRANT	% OF TOTAL PROJECT BUDGET	CONSERVED ACREAGE ²	DOLLARS PER ACRE	Fee Simple Acquisition	Permanent Conser- vation Easement	CURRENT STATUS
29958	Rocky Flats National Wildlife Refuge Protection	со	2011	\$250,000	1.5%	1,487	\$12,401	YES	NO	Completed
33263	John Day Headwaters Protection	OR	2012	\$500,000	6.7%	13,082	\$570	YES	NO	Completed
33366	Establishing the Middle Rio Grande National Wildlife Refuge	NM	2012	\$500,000	2.7%	570	\$32,489	YES	YES	Active
33724	Brule-St Croix Legacy Forest Protection	WI	2012	\$500,000	3.0%	67,347	\$247	YES	YES	Active
33913	White Mountains to Moosehead Lake Initiative	NH, ME	2012	\$300,000	3.2%	8,386	\$1,118	YES	NO	Completed
34284	Devil's Eyebrow Protection	AR	2012	\$790,000	20.2%	1,954	\$2,001	YES	NO	Completed
35577	Completing Critical Habitat Complex on the Platte River	NE	2012	\$290,000	11.3%	577	\$4,448	YES	NO	Active
40025	Protecting Landscapes for Regional and National Conservation	PR	2013	\$280,000	12.1%	333	\$6,949	YES	NO	Active
40220	The Campaign to Protect the Last Coastal Forest	СТ	2013	\$250,000	2.5%	1,000	\$10,000	YES	YES	Active
40227	Cherry Valley Conservation Lands	PA	2013	\$500,000	6.7%	4,662	\$1,601	YES	NO	Active
40496	Sierra Valley Marsh Restoration	CA	2013	\$500,000	7.7%	18,460	\$352	YES	YES	Active
40523	Kings River Nature Preserve Conservation	AR	2013	\$550,000	39.3%	608	\$2,302	YES	NO	Active
45432	Hood Canal Landscape Conservation Initiative	WA	2014	\$450,000	7.7%	6,361	\$919	YES	YES	Active
45853	Coastal Headwaters Forest- Longleaf Conservation, Restoration	AL, FL	2014	\$1,000,000	4.8%	205,000	\$102	NO	YES	Active
45876	Texas Powderhorn Ranch Land Acquisition - II	тх	2014	\$525,000	1.1%	17,351	\$2,751	YES	YES	Active
45885	Lost Coast Redwood and Salmon Initiative	CA	2014	\$350,000	5.8%	6,462	\$934	NO	YES	Active
			TOTAL	\$27,167,575		1,019,641		25 employ	21 employ	24
	MEAN		\$696,604	12.1%	26,145	\$3,151	tee simple	easements	s completed	
MEAN			\$500,000	6.7%	6,273	\$1,330	acquisition			



Figure 1: Point Locations of Acres for America Land Conservation Projects

Conserving Critical Habitat and Protecting Important Species

Habitat Conservation

Conserving critical habitat for birds, fish, plants, and wildlife is one of the core objectives of the Acres for America program. Conservation criteria for grant awards stipulate that the proposed acquisition should conserve important fish, wildlife, and/or plant resources, such as endangered species, or areas of significant biological diversity.

According to survey respondents, the most common type of habitat protected by Acres projects is rivers, lakes, streams, and riparian zones, followed by deciduous/mixed forest, Acres for America has conserved critical habitats for birds, fish, plants, and wildlife

freshwater wetlands, coniferous forests, and grasslands (Figure 2). Most projects (71 percent) include more than one of the habitat types listed in Figure 2, and 43 percent include four or more of those habitat types. Other habitat types mentioned by respondents but not listed on the table include: wet meadows, mountain meadows, coastal prairies, oak woodlands, pine barrens, longleaf pine forests, and limestone/karst regions.

Figure 2: Habitat Types Protected by Acres Projects (From Survey)



Which of the following describe the type of habitat or environment that this project aims to protect? (Check all that apply)

Protecting At-Risk Species

The GIS analysis, the internet-based grantee surveys, and the telephone interviews all show that the program's objective to conserve critical habitat for birds, fish, plants and wildlife has been met.

A GIS analysis was conducted to identify at-risk species that are likely to occur within areas protected with the help of Acres funding.³ The results are summarized in Table 3, which lists species (grouped into commonly recognized taxonomic categories) identified as at-risk according to two different systems – Global Conservation Status rankings and U.S. Endangered Species Act Status (ESA).

As the Table shows, 115 species whose Global Conservation Status ranking is "critically imperiled" are likely to occur in areas protected by Acres. Another 168 species are ranked as "imperiled" and 262 are ranked as "vulnerable," for a total of 545 species. Ninety-one species listed as "endangered" according to the ESA ranking are likely to occur in Acres protected areas, as are another 19 species listed as "threatened." Eleven bird species and seven mammal species listed as endangered are likely to occur in Acres protected areas.

	G	lobal Conse	rvation Statu	IS	Endangered Species Act Status				
Informal Taxonomic Group Name	Critically Imperiled (G1)	Imperiled (G2)	Vulnerable (G3)	TOTAL (G1, G2, G3)	Listed Endangered (LE)	Listed Threatened (LT)	TOTAL (LE, LT)		
Mammals	1	5	6	12	7	0	7		
Birds	4	3	6	13	11	2	13		
Reptiles	3	1	8	12	4	1	5		
Amphibians	0	5	8	13	1	1	2		
Freshwater and Anadromous Fishes	2	5	16	23	4	3	7		
Invertebrates	39	41	55	135	20	2	22		
Plants	65	106	157	328	44	10	54		
Fungi and Lichens	1	2	6	9	0	0	0		
Total	115	168	262	545	91	19	110		

Table 3: At-Risk Species Likely to Occur in Areas Protected Through Acres (based on Data from NatureServe)

³ Geospatial data on at-risk species were obtained from NatureServe in the form of HUC 8 watersheds, each listing species known to occur in that watershed. Geospatial data for Acres properties were obtained either directly from grantees, downloaded from online sources, or roughly digitized by hand based on paper maps and descriptions. To identify at-risk species likely to occur in each Acres protected area, the species occurring in watersheds that intersected the project area were determined. Note that some of the identified species may not occur within the project boundaries, though they are known to occur in the vicinity of the project.

Table 4 shows the number of at-risk species that are likely to occur in each Acres project area. Two projects in the Southeast – The Coastal Headwaters Forest-Longleaf Conservation and Restoration, straddling the border between Florida and Alabama, and Florida's Yellow River Ravines project – top the list with respect to the number of species whose Global Conservation Status is "critically imperiled," "imperiled," or "vulnerable." However, the project with the most threatened or endangered species, according to the ESA ranking, is Palila Protection in Hawaii, where 25 flowering plants, nine vertebrates and two invertebrates are listed as endangered or threatened.

Interviewees' responses to open-ended questions regarding species provide additional perspective (see Appendix 1).⁴ Many grantees focused on the presence of species that are "charismatic" or "flagships" – that is, ones with widespread popular appeal or are considered iconic representatives of an environment – as well as "keystone" species, which play an important role in, and are indicators of, an intact ecosystem. (Projects for which grantees have indicated the presence of such species are indicated in the second-to-last column of Table 4.)

A few interviewees emphasized that the Acres for America program conserved land important to a particular charismatic species that relies heavily on that protected area. Examples include:

• The acquisition of 577 acres in the center of Audubon's Rowe Sanctuary on the Platte River in Nebraska. This "pinch in the hourglass" on the Central Flyway protects important habitat for whooping cranes, sand hill cranes, terns, and plovers. The interviewee for this project noted that "sandhill cranes are not endangered or at-risk, but 80 to 90 percent of the sandhill crane population relies on the Platte River."



Sandhill Crane



Whooping Crane

• The Sherfield Cave Bat Hibernaculum in Arkansas is home to the endangered Indiana bat and, during the summer, the endangered gray bat. The Indiana bat population, once at 13,000, has dwindled to between 750 and 1,000 individuals. This cave, described as the longest in Arkansas, is important to the bat's recovery.

⁴ Grantee data reported in the surveys and interviews were often not consistent or comprehensive, but the Appendix 1 gives a flavor of how the grantees responded to the question. The NatureServe data should be considered more reliable.

Table 4: At-Risk Species by Acres Project

			G	GLOBAL CONSERVATION STATUS (Critically Imperiled, Imperiled, or Vulnerable)					ESA STATUS (Threatened or Endangered)					CRITERIA
EZG#	PROJECT NAME	STATE	Flower- ing Plants	Verte- brates	Inverte- brates	Others	TOTAL	Flower- ing Plants	Verte- brates	Inverte- brates	Others	TOTAL	Presence of charismatic, flagstone, or keystone species?	Species of interest expected to populate area after restoration?
45853	Coastal Headwaters Forest-Longleaf Conservation, Restoration	AL, FL	37	14	36	6	93	1	5	5	1	12	YES	YES
6562	Yellow River Ravines	FL	34	9	30	3	76	0	2	1	0	3		
25862	Palila Protection	н	43	8	11	5	67	25	9	2	2	38		
3383	Conserving Southern Blue Ridge Trout Habitat	TN, NC	26	5	20	15	66	7	2	6	1	16	YES	
4649	Kane Ranch and Two Mile Ranch Acquisition	AZ	47	2	4	3	56	5	1	1	2	9	YES	
4792	McCloud Forests Project	CA	11	5	9	3	28	0	0	0	0	0		
45885	Lost Coast Redwood and Salmon Initiative	CA	17	5	0	3	25	1	1	0	2	4		
28949	Protection and Restoration of Longleaf Pine on the Fall Line	GA	11	2	7	3	23	3	1	4	0	8		YES
40227	Cherry Valley Conservation Lands	PA	6	4	10	1	21	1	1	2	0	4		
6557	Redwood Forest Protection and Management	CA	12	3	0	3	18	2	1	0	2	5	YES	
23705	Southern Sierra Partnership and Tehachapi Linkage	CA	10	5	3	0	18	2	2	0	0	4		
29958	Rocky Flats National Wildlife Refuge Protection	СО	12	1	4	1	18	2	0	0	0	2		
33913	White Mountains to Moosehead Lake Initiative	NH, ME	9	2	5	0	16	0	0	0	0	0		
3536	Sommers-Grindstone Conservation Easement	WY	13	0	0	2	15	0	0	0	0	0	YES	
18732	Carney Conservation Easement	WY	13	0	0	2	15	0	0	0	0	0	YES	
34284	Devil's Eyebrow Protection	AR	6	1	4	1	12	0	1	0	0	1		
40220	The Campaign to Protect the Last Coastal Forest	СТ	3	3	4	2	12	0	1	0	1	2	YES	
40523	Kings River Nature Preserve	AR	6	1	4	1	12	0	1	0	0	1		

			G	GLOBAL CONSERVATION STATUS (Critically Imperiled, Imperiled, or Vulnerable)				ESA STATUS (Threatened or Endangered)					OTHER CRITERIA	
EZG#	PROJECT NAME	STATE	Flower- ing Plants	Verte- brates	Inverte- brates	Others	TOTAL	Flower- ing Plants	Verte- brates	Inverte- brates	Others	TOTAL	Presence of charismatic, flagstone, or keystone species?	Species of interest expected to populate area after restoration?
	Conservation													
33724	Brule-St Croix Legacy Forest Protection	WI	1	3	6	1	11	0	1	2	0	3	YES	
40496	Sierra Valley Marsh Restoration	CA	8	0	0	3	11	0	0	0	0	0		
21012	McArthur Lake Wildlife Corridor	ID	1	2	3	4	10	0	0	0	0	0		
4859	Rimrock Ranch Conservation Easement	OR	1	1	0	7	9	0	0	0	0	0		
29731	Panther Crossing Protection	FL	5	2	2	0	9	1	4	0	0	5		
33366	Establishing the Middle Rio Grande National Wildlife Refuge	NM	8	0	1	0	9	0	0	1	0	1		YES
19021	Shasta Big Springs Ranch Acquisition	CA	7	0	1	0	8	1	0	0	0	1		
4942	Prairie Pothole Grassland and Wetland Protection	ND, SD	2	0	2	3	7	1	0	0	0	1		
18055	St. Joe Basin Conservation Initiative	ID	2	1	1	3	7	0	0	0	0	0		
33263	John Day Headwaters Protection	OR	5	1	0	1	7	0	0	0	0	0		
17341	Sherfield Cave Bat Hibernaculum Acquisition	AR	2	2	2	0	6	0	1	0	0	1	YES	
17439	Downeast Lakes Forestry Partnership	ME	2	1	3	0	6	0	0	0	0	0		
7148	Sun Ranch Conservation Easement	MT	4	0	0	0	4	1	0	0	0	1	YES	
35577	Completing Critical Habitat Complex on the Platte River	NE	2	2	0	0	4	2	2	0	0	4	YES	
45876	Texas Powderhorn Ranch Land Acquisition - II	тх	2	2	0	0	4	0	2	0	0	2	YES	
5200	Arcadia Dunes on Lake Michigan	MI	3	0	0	0	3	2	0	0	0	2	YES	
7299	Connecticut River Forest Acquisition	NH	1	1	1	0	3	0	0	1	0	1		
4887	Catahoula National Wildlife Refuge Expansion	LA	1	0	0	0	1	0	0	0	0	0	YES	YES
45432	Hood Canal Landscape Conservation Initiative	WA	1	0	0	0	1	0	0	0	0	0		
3229	Upper Mississippi Forestland Easement	MN	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	YES	
40025	Protecting Landscapes for Regional and National Conservation	PR	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data		

While some projects focused on particular species that may be considered "key drivers," a number of grantees emphasized that many other species also benefitted from these conservation efforts, since the focal species are indicators of healthy ecosystems.

- Speaking about a Washington state project that will conserve 6,361 acres of forest and riparian corridor for the threatened Summer Chum Salmon, an Acres grantee remarked: *"There are so many species out there beyond the endangered ones. For example, there is this resident beaver, and you can see him knocking down logs in the water and what he does is dynamic. He created the pools for the Summer Chum. It is all interwoven, the interaction."*
- An interviewee for an Acres funded project that purchased and is managing 16,000 acres of redwood forests, coastal streams, and riparian habitat in California explained: *"The keystone of the project was the northern spotted owl and the coho salmon. These are important indicators of ecosystem health. They were the key drivers. They were the critical element in justifying our engagement."*

Some projects may confer important benefits for species conservation even if the targeted species are not currently on the land. Several grantees noted that restoration efforts are expected to increase

critical habitat and allow important species to colonize the conserved parcels:

• In the Chattahoochee Fall Line Conservation Area (Georgia), efforts are underway to enhance habitat for red cockaded woodpeckers, several of which nest within neighboring Fort Benning, a United States Army post. As the interviewee explained: *"We are trying to create a conservation corridor and compound conservation impact in the region... The neighboring tract has gopher tortoise, which is close to being listed, and red cockaded woodpecker, which is endangered."*

An interviewee for the newly established Valle de Oro National



Active gopher tortoise borrow

- Wildlife Refuge in New Mexico (formerly, Middle Rio Grande National Wildlife Refuge) explained that the newly conserved parcel would become important species habitat after restoration: "Adjacent habitat has silvery minnow, yellow-billed cuckoo, and the New Mexico jumping mouse. At this point the land is a hayfield, but when USFWS does restoration it will act as a buffer for the adjacent habitat and provide more of that habitat on the refuge."
- Acres supported the acquisition of a working forest easement on a large commercially-owned property in Alabama and Florida that requires habitat restoration to expand species coverage. "The landowner will be required to protect and reforest suitable sites, including having fires every five years... Most of the loblolly pine areas will become longleaf pine. It will help protect and, more importantly, enhance habitat for 44 different at-risk [species] and critical habitat... Some of the species we know are on the property, and with habitat restoration more will become residents."

Finally, several interviewees elaborated on the regional, national, or global significance of protecting specific species.

• The Lost Coast Redwood and Salmon Initiative in California will protect more than 6,400 acres of forestland important to coho salmon. "SONCC (Southern Oregon/North Coastal California) coho salmon are threatened. The Coho Recovery Plan has just been released. We have been following the recommendation in the draft plan. According to the Coho Recovery Plan, the South Fork Eel River tributaries are the best and strongest of coho habitat, and that it is essential to keep this area alive or



Coho Salmon

we could lose the whole SONCC unit of coho from California all the way to Oregon. There are also chinook and steelhead." The land is threatened by subdivision, industrial forestry, and industrial-scale marijuana production.

• An interviewee for an acquisition of 6,098 acres within the Catahoula National Wildlife Refuge explained the significance of the project as follows: *"The general area is habitat for red-cockaded woodpecker and pallid sturgeon, but they cannot make a direct connection to the 6,000 acres... This 6,000 acres is connected to the refuge's existing acres. It is in the middle of it. Numerous migratory birds come through the refuge. It is bottomland hardwood and it floods. Migratory fowl, neo-tropical migrants, and other wetland dependent birds come to refuge. The wetlands is recognized on a national level, continental level, and I think, world level... Catahoula Lake is recognized as a Wetlands of International Significance by the Ramsar Convention for its historic concentration area for shorebirds, waterbirds, and migrating/wintering waterfowl."*

Connecting Existing Protected Lands

Acres seeks to protect parcels of land that contribute to "landscape level" conservation efforts that help reduce fragmentation and enhance habitat and migration routes for fish and wildlife.

A GIS analysis was conducted to assess the extent to which Acres land conservation projects have actually helped connect wild places together. Several databases, particularly the two below, were used to identify other protected areas to which Acres properties may be connected: Acres for America has connected existing protected lands to unify wild places and protect migration routes

- The Protected Areas Database of the United States (PAD-US), compiled by the USGS National Gap Analysis Program and described as "the official inventory of protected open space in the United States."
- The National Conservation Easement Database (NCED), maintained by a partnership of private conservation organizations and the USGS National Gap Analysis Program, a national database of conservation easement information that compiles records from land trusts and public agencies throughout the United States and includes an estimated 40 million acres of conservation easement lands.⁵

Descriptions of these databases are presented in Appendix 2. Among the findings that can be drawn from this analysis are the following (see Appendix 3):

- Thirty-six of the 38 Acres land conservation properties for which data are available (95 percent) are directly adjacent to at least one other parcel of existing protected land in the spatial databases examined in this analysis.
- Ten (26 percent) of the projects connect to more than 1 million acres of protected public lands, including national forests, national parks, county forests, or Bureau of Land Management lands.
- Six (16 percent) of the Acres projects connect to protected lands that are between 100,000 to one million acres in size.

⁵ Note that these databases do not include lands anticipated to be protected in the near future, but not yet under a protected designation.

Many of the highly connected projects are located in western states such as California, Arizona, and Idaho, which is not surprising considering the relatively large amount of preexisting protected land in such states. It is worth noting that some small-acreage projects are connected to vast swaths of protected lands. For instance, the Kane Ranch and Two Mile Ranch Acquisition in Arizona, has conserved 1,250 acres, but is connected to millions of acres of National Park lands.

Evaluating the extent to which grantees met Acres for America's core objective of connecting existing protected lands and migration routes went beyond GIS analysis to include an assessment of grantee interviews and project documents. Appendix 3 presents qualitative indicators of connectivity including comments from grantees on wildlife movement – migration corridors for mammals; flyways for birds; and fish runs, passages or fisheries. Of the 39 Acres land conservation projects, grantees report that 37

(94%) protect areas important for animal movement, such as migration corridors (15 projects), flyways (10 projects), and fish passages (17 projects). The following are some notable examples:

• A conservation easement in Montana contains an important Greater Yellowstone Ecosystem wildlife corridor. As the interviewee commented: *"It shares a border with Lee Metcalf Wilderness. Two ranges, Gravelly and Madison in Beaverhead National Forest, come close together*



Elk in early spring

at this property. It is a key connectivity route for carnivores and ungulates. It is a 'pinch point' especially important for grizzly bears because they won't cross the creek where there are no trees. It's important for wolverines, and there are denning wolves on the property...."

- A conservation easement project in Oregon protected 1,120 acres of riparian and upland habitat. As the interviewee explained, "The project was driven by fish [i.e., protecting habitat for redband trout, steelhead trout, and chinook salmon], but it also connects to big federal lands, the Crooked River National Grasslands to the north and 6,000 acres of nice BLM land... We have an immediate connectivity goal of protecting core winter range of mule deer and Rocky Mountain elk."
- A conservation easement in Wyoming helped to protect the second longest mammal migration route in the Western Hemisphere. The path is 200 miles long and is used by hundreds of antelope in the spring and fall. Thousands of acres of a bottleneck in the migration route of the Grand Teton/Path of the Pronghorn antelope herd were protected.



Pronghorn antelope

Appendix 3 shows that some of the protected areas that have little connectivity to existing protected lands are nevertheless important for wildlife movement. For instance, the Panther Crossing Protection project in Florida is not directly adjacent to protected lands according to the databases, but, as its name implies, it protects a critical migration corridor for the Florida panther. Similarly, the project on the Platte River which is directly adjacent to only a few thousand acres of protected lands is an important stopover on migration corridors for both the sandhill and whooping cranes. The GIS-based analysis of connectivity, which is based solely on the location of the protected areas, is informative, but it tells only part of the story about connectivity. Ultimately, it is more important to understand how these conservation projects relate to the movement patterns of particular species.

Ensuring the Future of Rural Economies

NFWF and Walmart established Acres for America not only to conserve land of national significance and protect fish and wildlife critical habitat, but also to benefit local communities, specifically rural economies that depend on forestry, ranching, and recreation.

Characteristics of Host Communities

As Figure 4 shows, of the 35 grantees who responded to our survey, 32 (more than 90 percent) described the communities in which their projects are located as rural. This reflects the

relatively remote locations of most Acres land conservation

Acres for America has contributed to rural economies, especially those that depend on forestry, ranching and recreation

projects. (Note that this does not include Acres restoration projects, many of which are located in relatively urban areas.)



Figure 4: Kinds of Communities in Which Acres Acquisition Projects are Located (From Survey)

Table 6 presents the results of a GIS analysis of populations in the vicinity of Acres land projects – more specifically, of the populations residing within 50 miles of the center point of each project area. (Where these 50-mile radiuses intersect one another, the projects have been combined.) Despite the rural context of most of these projects, many Americans live nearby and potentially have access to them. The average number of residents within 50 miles of each project is more than 990,000, and the total population within 50 miles of one of these projects is more than 28 million. Twenty-two project regions (76 percent) have median household incomes below the national median, suggesting that many Acres projects are located in relatively poor parts of the country. Many are also in regions with substantial minority populations.

				MEDIAN HOUSEHOLD	DIFFERENCE FROM NATIONAL	PERCENT	
			POPULATION	INCOME	HOUSEHOLD	NON-	PERCENT
EZG#	PROJECT	STATE	(2014)	(2014)	INCOME	WHITE	HISPANIC
45432	Hood Canal Landscape Conservation Initiative	WA	4,142,287	\$64,560	24%	28.6%	9.7%
40227	Cherry Valley Conservation Lands	PA	3,978,787	\$71,300	37%	17.7%	10.7%
40220	The Campaign to Protect the Last Coastal Forest	СТ	3,833,692	\$68,806	32%	22.3%	14.3%
29958	Rocky Flats National Wildlife Refuge Protection	СО	3,540,199	\$61,663	18%	20.5%	22.0%
3383	Conserving Southern Blue Ridge Trout Habitat	TN, NC	1,894,939	\$38,605	-26%	10.4%	5.2%
45853	Coastal Headwaters Forest-Longleaf Conservation &						
& 6562	Yellow River Ravines	AL, FL	1,499,642	\$44,382	-15%	28.4%	4.7%
29731	Panther Crossing Protection	FL	1,227,088	\$44,712	-14%	21.1%	22.8%
23705	Southern Sierra Partnership and Tehachapi Linkage	CA	1,077,383	\$46,472	-11%	43.0%	49.7%
	Protection and Restoration of Longleaf Pine on the Fall						
28949	Line	GA	1,015,558	\$40,590	-22%	43.6%	5.2%
34284, 40523 &	Devil's Eyebrow Protection, Kings River Nature Preserve Conservation, & Sherfield Cave Bat Hibernaculum						
17341	Acquisition	AR	1,003,573	\$41,634	-20%	15.3%	11.5%
33366	Establishing the Middle Rio Grande National Wildlife Refuge	NM	924,263	\$48,137	-8%	31.2%	47.8%
7299 &	Connecticut River Forest Acquisition & White Mountains						
33913	to Moosehead Lake Initiative	NH, ME	920,940	\$47,560	-9%	4.7%	1.4%
40496	Sierra Valley Marsh Restoration	CA	647,769	\$50,664	-3%	21.9%	21.4%
21012 & 18055	McArthur Lake Wildlife Corridor & St. Joe Basin Conservation Initiative	ID	368,431	\$45,380	-13%	6.7%	3.7%
4887	Catahoula National Wildlife Refuge Expansion	LA	323.458	\$35.232	-32%	36.6%	3.1%
33724	Brule-St Croix Legacy Forest Protection	WI	282.422	\$44,194	-15%	9.9%	1.6%
4942	Prairie Pothole Grassland and Wetland Protection		249 144	\$52 727	1%	6.0%	5.4%
5200	Arcadia Dunes on Lake Michigan	MI	247 716	\$13.896	-16%	6.3%	2.7%
4792 &	McCloud Forest Project & Shasta Big Springs Ranch	1411	247,710	÷+3,030	-10/0	0.370	2.770
19021	Acquisition	CA	237,313	\$40,830	-22%	14.1%	9.6%
4859	Rimrock Ranch Conservation Easement	OR	210,187	\$47,693	-8%	11.5%	9.5%
		-	-, -				
35577	Completing Critical Habitat Complex on the Platte River	NE	208,720	\$50,605	-3%	12.7%	15.5%
45876	Texas Powderhorn Ranch Land Acquisition - II	ТХ	207,377	\$45,939	-12%	22.0%	42.0%

Table 6: Characteristics of Populations within 50 Miles of Project Center Points⁶

⁶ In cases where the 50-mile radiuses around project center points intersect, the projects have been combined. Data are not available for the Upper Mississippi Forestland Easement (EZG# 3229) and Protecting Landscapes for Regional and National Conservation (EZG# 40025)

EZG#	PROJECT	STATE	POPULATION (2014)	MEDIAN HOUSEHOLD INCOME (2014)	DIFFERENCE FROM NATIONAL HOUSEHOLD INCOME	PERCENT NON- WHITE	PERCENT HISPANIC
25862	Palila Protection	н	183,143	\$47,987	-8%	67.6%	12.4%
45885 & 6557	Lost Coast Redwood and Salmon Initiative & Redwood Forest Protection and Management	СА	166,254	\$41,062	-21%	22.5%	21.3%
17439	Downeast Lakes Forestry Partnership	ME	163,054	\$38,861	-25%	6.1%	1.4%
4649	Kane Ranch and Two Mile Ranch Acquisition	AZ	66,780	\$40,602	-22%	42.0%	6.6%
18732 & 3536	Carney Conservation Easement & Sommers-Grindstone Conservation Easement	WY	48,590	\$67,941	30%	9.3%	11.2%
33263	John Day Headwaters Protection	OR	22,572	\$39,942	-23%	6.1%	3.7%
7148	Sun Ranch Conservation Easement	MT	22,013	\$54,181	4%	4.4%	3.4%
		TOTAL	28,713,294	22 project regions have median incomes below the national median.			
		AVERAGE	990,114	\$56,295 ⁷	-7%	20%	13%

Economic Activities and Benefits - Overview

Survey respondents were asked what types of economic activities are conducted on land protected through Acres. The results, displayed in Figure 5 show that more than 60 percent of the project areas accommodate recreational activities. But other commercial activities are also significant, notably farming, ranching and timber production. Ninety-four percent of the surveyed projects support at least one of these activities. Appendix 4 shows which of these economic activities are occurring on Acres for America land conservation projects.

Survey respondents were also asked for their opinions about stakeholders who they think are likely to benefit from Acres projects (Figure 6). Conservation/environmental groups topped the list, along with recreational users. Nearly 90 percent felt that private landowners – presumably those from whom land or easements have been acquired – also have benefitted from Acres projects. While local businesses (such as restaurants, hotels, and outfitters) are not high on the list, more than three-quarters of the respondent thought they were at least somewhat likely to derive benefits from the projects.

⁷ This is a population-weighted average.

Figure 5: Economic Activities on Acres Protected Land (From Survey)



Which of the following economic activities are conducted on this land? (Check all that apply.)

Figure 6: Perceived Benefits for Various Stakeholder Groups (From Survey)

To what extent do you think the following stakeholder groups are likely to benefit from this project?





Public Access and Recreational Opportunities

The program's guidelines give preferential consideration to projects that will provide public access. Data collected from the surveys and the interviews show that recreational opportunities on land protected with the help of Acres are considerable. Although grantees reported that a variety of recreational opportunities are available on Acres-funded conserved land, only a few grantees attempted to quantify visitation data.

Most grantees answered the survey question regarding frequency of activities on the project area land (Figure 7) but skipped the survey question requesting data on "visitation in users/year" and "revenue from users in dollars/year." In addition, only three grantees provided comments from interviews on actual and estimated visitation data. Therefore, it is difficult to quantify how well projects are meeting Acres' core objective of providing access for people to enjoy the outdoors and whether or not recreation is, as is often claimed, benefitting the local economies.

- The interviewee for Completing Critical Habitat Complex on the Platte River (Audubon's Rowe Sanctuary) in Nebraska reported that when the birds are most active there are 17,000 visitors within a six-week time period. "The rest of the year there are another 3000 visitors plus 5,000 children in school programs and summer camps... Most visitors are from out of the area."
- The interviewee representing Sherfield Cave Bat Hibernaculum Acquisition in Arkansas reported that "20,000 visitors is TNC's estimate."



Educational program at Rowe Sanctuary

• The interviewee for Rimrock Ranch Conservation Easement described public access as follows: *"It is a conservation easement... private property. The landowners desire to have public access in a guided context. ...there are probably 50 to 100 visitors a year."*

Survey respondents were presented with a list of recreational activities and asked to estimate the frequency with which each activity was conducted within Acres project areas. The results are shown in Figure 7.

When interviewees were asked about the impacts of Acres grants on local economies, recreational opportunities and the revenue generated from recreation and/or the potential for revenue generation were often cited. Of the 29 grantees interviewed, 27 discussed the connection between recreational opportunities and economic development. While a few alluded to concrete examples of economic impacts, others spoke about anticipated revenues associated with recreational activities.

Acres for America projects provide access for people to enjoy the outdoors Only one grantee had quantitative data on the impact of recreation opportunities to the local economy. The interviewee for Completing Critical Habitat Complex on the Platte River (Audubon's Rowe Sanctuary) in Nebraska referenced two economic studies that linked ecotourism to local economic benefit. In 2009, a study done by University of Nebraska at Lincoln concluded that Rowe Sanctuary contributes \$2 million per year to the local economy, and the whole migration area contributes \$10 to \$15 million per year. Another study done in 1997-1998 by Fermata, Inc. estimated the migration area contributing \$20 to \$50 million to the local economy, with most of the money coming from outside the state.

Figure 7: Frequency of Recreational Activities (From Survey)



Please note the frequency of the following activities conducted by the public on this land over the last 3 years. (Check all that apply.)

■ Frequent (5+ visits/month)

□ Occasional (<5 visits/month)

In most instances interviewees gave general, unsubstantiated comments regarding a project's impact on the local economy, such as, *"It's nationally known that open space and wildlife bring in money."* Several expressed expectations for future recreational tourism that would generate revenue to benefit the local community, though it has not yet happened. While many such aspirational comments seemed to lack empirical backing, a few projects stood out for making preparations for future economic benefits. For example, The Sierra Valley Marsh Restoration project has well-developed plans to bring tourist dollars to the two financially challenged counties of Sierra and Plymouth in California. The project area is a critical migratory stop on the Pacific Flyway. *"It's next to the big tourist area of Tahoe. We want to pull tourism money north into this area, but there has been no destination and no lodging… We are considering a visitor center and camping for birders, and are partnering with the Sierra Business Council and have worked with National Geographic on a geotourism plan."*

Forestry and Ranching

When the grantees were questioned about other commercial activities taking place on the land conserved with Acres for America grant money, they discussed logging, ranching, agriculture, restoration, and the military. Logging and ranching were the most commonly mentioned in interviews, and these activities were strongly represented in the survey responses as well.

Logging and Forest Management

Sustainable timber and forest management discussions came up in 14 of the 29 interviews. The conversations covered a broad array of logging issues, including: preventing forest fragmentation for wildlife; forest restoration techniques; creating a forest for sustainable timber harvest; the economic viability of the timber industry; and the cultures and families that rely on a sustainable timber industry.

Some grantees explained that logging done on the conserved land was primarily for forest management. Several discussed using restoration activities such as cutting, planting, fire, and natural fire mimicking techniques to protect existing healthy forests. In some cases the forest management will generate revenue, either immediately or at some time in the future, but that income was seen as a bonus; the real goal was to maintain intact forests. For example, the interviewee for the Lake Michigan Arcadia Dunes acquisition explained that, although logging produces an income of approximately \$20,000 per year, the money is not their motivation. Rather, logging is just part of the replanting process with the goal of returning the forest to a mix of ages and species, particularly hemlock and beeches.

Several grantees talked about the connections between land conservation for forest management and beneficial impacts on local economies. They pointed out that healthy forests were essential to providing the timber industry with jobs that support local families and therefore strengthened the local economy. As the following example illustrates, some of the rationales for logging's economic benefit to the local community were convincing, although financial data were lacking. The conservation easement portion of the Hood Canal Landscape Conservation Initiative project, which is owned by two paper companies and produces revenues in the millions, *"will remain a working forest with the development rights stripped. It is a logging community, and families' economics center around timber. For the mills to exist, you have to have a base of acres in working forest. When acres are lost to conversion, the mills close. We have seen that in the Northwest. We are keeping working lands working lands, and then the mills stay."*

Ranching and Agriculture

Ranching is taking place on some of the lands conserved with Acres dollars. In all cases this represents a continuation of prior land uses. Seven interviewees referenced ranching as a commercial activity occurring on the conserved land. Grantees noted that management plans and/or monitoring for ecological sustainability were in place and that there is a direct connection between ranching and fiscal health. Financial analysis to support the assertion of a benefit to the local economy was not provided. For example:

- A spokesperson for an Arizona acquisition project described the ranch management as a "very progressive livestock program, with agricultural management that is 'light on the land'" but also noted that "the local community is way away."
- An interviewee representing Carney Conservation Easement in Wyoming described ranching as *"hugely beneficial. Ranchers want to stay on working land, and the conservation easement money gets pumped back into the economy."*

Farming activities were mentioned by a few grantees. For example, the interviewee for Audubon's Rowe Sanctuary on the Platte River in Nebraska mentioned agriculture, including *"leasing for row cropping, also grazing and haying for habitat management. We also do burning for management. Ag leases bring in \$35,000 per year."*

Other Economic Activities

A few grantees noted that habitat restoration activities are a source of employment and therefore benefit the local economy. Again, most grantees made general references to the economic contributions, but only one provided dollar estimates. An interviewee for Rimrock Ranch Conservation Easement reported, *"This is a \$10 million project, and we'll hire local contractors. That's approximately a million dollars a mile. We probably will spend \$3 million on restoration, and about 75 percent of that will be in contracts, actual construction. A native plant nursery started with the restoration project in mind."*

A few of the projects involved cooperative agreements with, or are located adjacent to, military facilities. Local economic benefits linked to the health of the local military bases were noted by several grantees. For example, Acres supported a project in Florida that protected an 11,000-acre parcel that had been identified as an area of high biodiversity and a connector to join 834,000 acres of conservation land. The grantee pointed out that the *"land was headed for development, subdivisions, because it is close to military towns. The military supported conservation because they do training and flyovers, and that is more complicated over houses. People complain of noise, etc. It is important for military bases to be able to maintain their mission, so they don't get looked at by BRAC (Base Closure and Realignment Commission)."*

Enhancing Ecosystem Services: Water and Carbon

In addition to protecting and enhancing habitat and migration corridors for important species, Acres for America projects provide other ecosystem services – notably the protection and improvement of water resources and carbon sequestration.

Improving Water Resources

Many grantees explained that Acres-supported land conservation and restoration activities improve water quality and quantity. Although interviewees noted that forest management, riparian buffers, and watershed protection improved water quantity and/or quality, few had plans in place to monitor or quantify water improvements. Most of the water plans that do exist focus on restoring natural filtration processes within floodplains, wetlands, and wet meadows.

For example, the spokesperson for Rimrock Ranch Conservation Easement in Oregon, which protected 1,100 acres of riparian and upland habitat, explained that the conserved land has *"water rights that are being converted to instream water rights, since they are no longer used for agriculture irrigation."* Transferring instream water rights is a common tool for flow restoration in Oregon. They are *"restoring the floodplains and the wet meadows, so in the spring the water will flow and then in summer it will spread to the meadows. This will regulate temperature,*

which is important to fish."

Lost Coast Redwood Salmon Initiative in California has "pioneered stream flows to coho habitat and has created a model for the state for wetland restoration." They are "working on 90 acres of riparian corridor restoration on tributaries for coho habitat. Water flow is an issue; juvenile coho have been dying from being stranded in pools with no water flow back to stream."



An example of coho salmon habitat restoration



A waterway in the Valle de Oro National Wildlife Refuge

At The Valle de Oro National Wildlife Refuge in New Mexico, "Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA) is a partner in this project. They will be using a part of the property, in partnership with USFWS, for control, containment, and treatment of water. When the arroyos get moving and flow out into the Rio Grande, debris and sediment get dumped. Before the levies channeled the Rio Grande into one flow, water would flood out and be filtered before it went into the river. AMAFCA is going to use the property to mimic that natural process so sediment will flood out and be filtered before entering the river water system. Instead of a treatment facility it will run onto the property for natural filtration."

One other noteworthy project, the Texas Powderhorn Ranch, has a restoration plan that includes evaluation of the hydrology. The grantee explained possible wetland restoration activities: *"They may dig wells to enhance*



Wetlands at Texas Powderhorn Ranch

the wetlands that are already there. This has happened in other places. They dig a solar well that pumps water during the dry months so the wetlands don't disappear during the dry months."

A few grantees mentioned that they were working with government agencies and water companies on improving or protecting water quality. The Redwood Forest Protection Management Plan project is working with a state agency: *"The California State Water Board was involved with the idea that by improving forest practices the water quality would improve."* A spokesperson for Cherry Valley Conservation Lands in Pennsylvania noted that, *"For PAW [Pennsylvania American Water Company] this is still an active water site for local water. This is tremendously important. PAW has land adjacent to the project area, which they are keeping, with reservoirs and treatment plants."*

Carbon Sequestration

Most interviewees had no knowledge of carbon sequestration activities on the conserved land. Some maintained that the conserved property was too small or in *"the wrong climate,"* or that the project was completed before their organization was exploring carbon sequestration. Carbon activities are being considered for the future by a couple of organizations, and two projects already have carbon sequestration plans underway.

- The interviewee for Redwood Forest Protection Management (CA) noted that they are "deep into carbon... Big River Improved Forest Management Project is registered with the Climate Action Reserve... The Conservation Fund diversifies forest revenues by selling carbon offsets through California's Climate Action Reserve. The Conservation Fund has contracted to sell 1,094,578 Climate Reserve Tonnes (CRT, a verified metric ton of sequestered carbon dioxide) expected to be produced by the forests between 2007 and 2016. Carbon offset buyers include Pacific Gas and Electric Company, the Disney Company, and United Parcel Service. The total value of the CRTs sold and contracted for sale exceeds \$7,000,000."
- The survey response for the McCloud Forest Project in California noted, "The landowner has developed a forest carbon offset project under California's regulatory greenhouse gas reduction program and expects to have California Compliance Offsets issued by the Air Resources Board in the near future. The conservation easement terms secure the offsets and set the management standards to increase forest carbon stores permanently."

A few grantees mentioned problems with carbon exchanges and carbon programs. For example, an interviewee remarked that Hawaii is not allowed on the California or Northeast carbon markets, and they have begun exploring the voluntary carbon market. An Arkansas grantee explained, *"Further south, gradual reforestation is happening in this area of Arkansas. In the last 50-70 years many small farms have been abandoned and reforested, so there is lots of standing timber that is holding carbon. We have a lot of land we would like to get into a [carbon] program... all the programs are about planting and watching the trees grow."*

Land Management and Restoration

Management Plans

If they are to have lasting benefits, land conservation projects must include provisions for long-term management of the land. Of the survey respondents who answered a question on land management, all said their projects either have management plans or will have them in the future. As Figure 8 shows, more than half of these plans are overseen by either state or federal government agencies and about 29 percent are overseen by non-governmental organizations. Of the respondents who answered "other," one said the management plan is implemented by a private owner and monitored by a conservation organization, and most of the rest indicated that the plan is still under development.

18.4%
Management plan overseen by state agency
Management plan overseen by federal agency
Management plan overseen by a non-governmental organization
18.4%
Other

Figure 8: Management Plans (From Survey)

Which of the following best describes the management plan for the land protected by the Acres for America project?

Figure 9 shows various elements reported to be included in management plans. Notably, 86 percent of survey respondents report that the management plans include provisions to protect threatened species and other species of concern, and nearly the same percentage include management of game or other non-threatened species.

Most (77 percent) include management of recreation and public access, as well as management of water resources. Many plans also include agricultural or ranch land management and timber management (though one respondent noted that the timber management is to protect old growth for bat conservation, not for timber production). Other plan elements not listed in the chart include: woodlands protection, wilderness area management, road management, old growth management, fire management, erosion control, and use of properties as outdoor classrooms for science education.



Figure 9: Elements Included in Management Plans (From Survey)

Which of the following elements are included in the management plan for this property? (Check all that apply.)

Habitat Restoration on Land Conservation Projects

Slightly more than half (51 percent) of the land conservation projects include restoration components, though in many cases these activities are funded by sources other than Acres. As Table 7 shows, restoration activities on land protected with Acres support have included invasive species removal, stream restoration, restoration of habitat for particular species of concern, and efforts to restore indigenous biological communities such as longleaf pine forests in the southeast and mamane forests in Hawaii.

Table 7: Habitat Restoration Activities on Land Conservation Projects

EZG#	PROJECT NAME	STATE	YEAR	RESTORATION ACTIVITIES
4649	Kane Ranch and Two Mile Ranch Acquisition	AZ	2005	experimental grassland restoration; reduce grazing and restore habitat
5200	Arcadia Dunes on Lake Michigan	MI	2006	remove invasive species
4859	Rimrock Ranch Conservation Easement	OR	2006	stream restoration
6557	Redwood Forest Protection and Management	CA	2007	restore aquatic and terrestrial habitat for endangered species, including coho salmon, steelhead trout and northern spotted owls
6562	Yellow River Ravines	FL	2007	restore longleaf pine habitat
19021	Shasta Big Springs Ranch Acquisition	CA	2009	stream restoration
25862	Palila Protection	н	2011	mamane reforestation
29731	Panther Crossing Protection	FL	2011	wetland and habitat restoration
28949	Protection and Restoration of Longleaf Pine on the Fall Line	GA	2011	restore longleaf pine habitat
29958	Rocky Flats National Wildlife Refuge Protection	CO	2011	restoration of native prairie habitat
35577	Completing Critical Habitat Complex on the Platte River	NE	2012	restore wetlands; clear invasive plants
33366	Establishing the Middle Rio Grande National Wildlife Refuge	NM	2012	wetland and habitat restoration
40523	Kings River Nature Preserve Conservation	AR	2013	stream bank restoration
40025	Protecting Landscapes for Regional and National Conservation	PR	2013	habitat restoration
40496	Sierra Valley Marsh Restoration	CA	2013	restore wetlands and wet meadows
40220	The Campaign to Protect the Last Coastal Forest	СТ	2013	stream restoration
45853	Coastal Headwaters Forest- Longleaf Conservation, Restoration	AL, FL	2014	restore longleaf pine habitat
45432	Hood Canal Landscape Conservation Initiative	WA	2014	restore riparian buffer for salmon habitat
45885	Lost Coast Redwood and Salmon Initiative	CA	2014	coho habitat instream and groundwater restoration
45876	Texas Powderhorn Ranch Land Acquisition - II	ТХ	2014	restore indigenous coastal habitats
	Number (percent) of projects wi	th restoration	components:	20 (51.2 %)

Urban Restoration Projects

While most of this report concentrates on land conservation projects and their outcomes, this section briefly examines Acres' urban restoration grants, an overview of which is presented in Appendix 5.

From 2011 to 2012 Acres piloted funding to urban restoration projects, awarding \$1,214,300 for restoration on about 390 acres in urban regions throughout the country. The 13 restoration grants have been smaller than the land conservation grants, averaging about \$93,000. Acres grants have provided about a third of the total project budget, on average, and have helped leverage a total of \$3.6 million for ecological restoration.

Interviews with two urban restoration grantees conducted as part of this evaluation provide additional perspectives on urban restoration projects beyond the dollars invested and acres restored:

• An Acres-funded restoration project in the San Diego Bay National Wildlife Refuge, near the path of the San Diego Bayshore Bikeway and connected to the 6,000-acre Otay Valley Regional Park, has restored 65 acres to benefit migratory and resident wildlife. According to the grantee, *"In the first year, there were six species of birds and as of May/June 2014 there were 45 species using the land. In the second year, it was documented that three Least Bell Vireos, which are on state and federal endangered lists, used the land for the first time."*

The project has contributed to the local economy by hiring local contractors for weed control and contracting a well share agreement with a local nursery for the three years before the plot is self-sufficient. Public outreach has included: 200 community volunteers doing site cleanup; Girls Scouts troops planting trees; a local high school receiving classroom and field training in bio-monitoring and plant identification; and efforts by the California Youth Conservation Corp and the San Diego County Urban Conservation Corp, which work with at-risk youth, training them in planting, weeding, using mowers and tractors, bio-monitoring, and plant identification.

• A project to restore and enhance habitat for the southern tarplant on the 118-acre mesa at Bolsa Chica Ecological Reserve in California has *"exceeded the expectations"* of the grantee. Seedling plantings of the southern tarplant, considered rare by The Native Plant Society and endangered by the California Department of Fish and Wildlife, are surviving at a rate of 98 percent.

Approximately 5,000 community volunteers have participated in outreach and education offered by the project. As the grantee reported, "A special work day took place on April 28, 2012 for the employees of Walmart and their families. 76 volunteers from Walmart came on site and planted 390 one-gallon native plants, which included hand watering the plants using 2,000 gallons of water. At the end of the work day the volunteers took a docent-led tour of the Reserve."

In addition, protective fencing and an educational kiosk have been installed, and aerial mapping, project site plans, and GPS mapping have been completed.

The Role of Acres Funding

When grantees were asked why securing an Acres for America grant was important to their organizations, most responded by explaining that funding from a variety of grantmakers was essential and that Acres has played a key role. One described Acres funding as a *"critical piece in building a funding pyramid."* According to responses from interviewees, Acres funds serve as a catalyst and help attract other funding sources. They also fill gaps in funding while a deal is developing, and can serve as the capstone grant to close out a deal.

The importance of Acres in the funding pyramid has been variable. For example, two separate grantees discussed the concept of *"anchor grants."* One commented that the project was in an economically-depressed region with no available local funders: *"Anchor grants, like Acres for America, help us get money from outside the area."* Another grantee characterized Acres money as playing a secondary role, describing it as a *"matching, gap-filling grant"* used to match funding commitments from *"anchor grants, for example USDA Forest Legacy that would cover 50 to 75 percent of the project."*

The timing of the Acres funding was another theme that emerged from the interviews but, again, with variable perspectives. Several interviews described the timing of Acres grants as important to closing the project. One said, *"It was the capstone,"* and another commented that Acres funding *"brought it to a close."* Several other grantees emphasized the importance of Acres being the first grant, with comments such as, *"serving as a catalyst to other funding"* and *"early partner, and that signals to other funders."*

A theme echoed by many interviewees was that NFWF's excellent reputation and programs create significant leverage for any project. An association with NFWF, which uses a scientific approach to conservation and enjoys national prominence as a conservation leader, brings legitimacy and recognition to the projects. NFWF's support of a project suggests to other funders that the project is deserving of additional money. As two grantees commented:

- *"To have a nationally recognized funder that is well respected contribute is valuable. We can use press releases to announce that contribution and rally others to the cause."*
- *"NFWF has a reputation. NFWF understands projects and evaluates projects using a scientific approach. NFWF's contribution makes the project stronger."*

Challenges and Suggestions for Improvement

When asked, "What are some of the challenges that you have come across, and do you have any suggestions for how the Acres grant program could be restructured to help you meet those challenges?" most of the interviewees were initially stumped. They had a hard time coming up with challenges or suggestions. Typical responses included only praise for the program, including positive comments regarding communication with helpful NFWF staff and praise for the Easygrants process. Grantees also expressed gratitude for Acres for America and hopes for the program's continuation. Several comments reflected the grantees' positive perspective on, and satisfying experience with, Acres for America:

- *"Frankly, the program is very well implemented and effective, and it accomplished the outcome. The process was straightforward. I hope it continues. It is a great program. I hope we can use it again."*
- "Our experience was seamless and straightforward. I don't have any suggestions. We are thankful for the grant."

There were some further suggestions of features to add to the program, including supporting monitoring programs and staff salaries; considering reinvesting in a project area; and encouraging more corporations to become funding sources for the Acres program.

- "Monitoring is important, especially on big parcels like this. Investing in monitoring and new technologies for monitoring is important or the conservation could be called into question. It would be good if [Acres] would fund monitoring and monitoring endowments."
- "Raising funds for staff is hard, too. It would be good if ten percent or even five percent of the grant could be used for operating costs for staff."
- *"If you are lucky enough to get an Acres grant, then the next project you work on you won't get an Acres grant, even if the new project connects to the original one. Acres invests and then moves on not a lot of reinvestment."*
- "Originally Acres had one corporation and other companies were going to join. They should draw multiple corporations into investing in the program. The bang for the buck is really large, none wasted. Other corporations would and should invest."

Conclusions

Since its inception in 2005, Acres for America has invested \$27.1 million in land protection projects, helping to leverage more than \$225 million in additional funds to place more than one million acres in permanent conservation protection. In doing so it has helped preserve habitat and migration corridors for hundreds of endangered, threatened, and vulnerable species and contributed to the protection of such iconic American wildlife as Florida panthers, gray wolves, grizzly bears, wolverines, pronghorn antelopes, Rocky Mountain elk, bald eagles, peregrine falcons, spotted owls, whooping cranes, sandhill cranes, piping plovers, coho salmon, and eastern brook trout. Nearly 30 million people live within about 50 miles of areas protected with the help of Acres funds, and more than 60 percent of the project areas accommodate recreational activities ranging from birdwatching and nature study to more active pursuits such as hiking, hunting, fishing, and camping. Many projects also contribute to rural economies and ways of life by supporting ranching, logging, and crop farming.

What Types of Projects Have Yielded the Greatest Benefits?

As a program with multiple purposes, Acres has provided support for a broad range of land protection projects that yield a variety of benefits. Clearly the most successful projects are those that contribute to

each of the four main objectives of the initiative: providing public access, conserving critical habitat, connecting existing protected lands, and helping rural economies. Examples of projects that make significant contributions in all four areas include:

 The Catahoula Wildlife Refuge Expansion in Louisiana added 6,000 acres to the 25,162acre refuge, a portion of which borders the 26,000-acre Catahoula Lake natural wetlands. This is one of only eighteen in the U.S. recognized by the Ramsar Convention as a Wetlands of International Significance. It is an important stop for migratory fowl and birds, and it attracts 40,000 visitors per year who come for birding, fishing, and hiking. It also



Catahoula Wildlife Refuge Expansion

provides public access to hunting at a time when inexpensive hunting opportunities are dwindling. Visitors to the refuge support the local economy by purchasing food and supplies.

 The John Day Headwaters Protection in Oregon purchased and transferred 13,000 acres to USFS, including 35 miles of streams critical to spawning and rearing fish, thereby creating an *"unbroken landscape of 150,000 acres."* Public access to the area for hiking, biking, and hunting, especially premier elk hunting, reportedly adds substantially to the local economy with visitors patronizing local lodging, grocery and outfitter establishments.



John Day Headwaters Protection

 Hood Canal Landscape Conservation Initiative, using both fee simple acquisition and conservation easements, is working to protect a 6,300-acre area adjacent to Olympic National Forest and other conserved lands. The property will protect forested upland and riparian habitat for wildlife, including Summer Chum and Chinook salmon, and will provide outdoor recreational opportunities to almost four million people living in the greater Seattle-Tacoma metropolitan area. Plans include a rugged-terrain riparian trail for public use. By conserving a

working forest through a conservation easement, the project supports the local economy by protecting timber industry jobs. In cooperation with the Department of Defense (Readiness and Environmental Protection Integration program), it is part of a buffer program to prevent land use conflicts around the Naval Base Kitsap which provides over 30,000 jobs.



White Mountains to Moosehead Lake Initiative

• The White Mountains to Moosehead Lake Initiative will conserve 49,227 acres of habitat and recreational resources, including habitat for eastern brook trout and endangered Atlantic salmon. The area is part of a 2.7 million-acre wildlife corridor that extends from White Mountains National Forest in New Hampshire to Moosehead Lake in Maine and is significant for climate change adaptation, as the area is predicted to provide a lower-temperature refuge for wildlife. Guaranteed public access and state-planned timber harvest for habitat management will benefit the recreation and logging industries (described as "cornerstones of the local economy").

Other projects make strong contributions toward some of the program's core objectives but less so to others:

- The Sun Ranch Conservation Easement protects an important wildlife corridor in the Greater Yellowstone Ecosystem that is routinely used by grizzly bear, elk, and antelope on the way to and from Yellowstone National Park, but this project has not met the objective of providing public access. Montana Fish Wildlife and Parks, an original stakeholder in the transaction, had hoped to facilitate permanent fee-based public hunting on the parcel, but negotiations with the landowner stalled and there is no public access on the conserved land.
- The Rimrock Ranch Conservation Easement clearly meets three of the Acres core objectives. It connects existing protected lands and migration routes by protecting a migration corridor that connects two large blocks of federal land for mule deer, elk, and other migratory animals. With a multi-million-dollar restoration plan that will hire local contractors, spending approximately \$1 million per stream mile, the project also meets the program's objectives to conserve critical habitat and to benefit the local economy. However, public access has been limited, with only 50 to 100 people participating in public programs each year.
- The Protection and Restoration of Longleaf Pine on the Fall Line meets two of the core objectives. Once acquisition takes place, the plan is to restore the longleaf pine habitat, after which neighboring gopher tortoises (potential to become listed) and red cockaded woodpeckers (endangered) should repopulate the conserved land. This will meet the core objective of conserving critical habitat. The connectivity objective will also be met, as the newly-conserved land will be an addition to a contiguous 30,000-acre landscape of longleaf pine restoration. Contributions to the other two core objectives, public access and local economic benefit, are unclear, though it is hoped that the conserved land will bring tourists and tourism dollars to the area.

A review of the current grant portfolio shows that the Acres for America program has done a good job of balancing its four main objectives, but in regard to individual projects it has been willing to make tradeoffs, supporting some that present significant opportunities in terms of conservation, even if they fall short in other respects.

Acres could avoid trade-offs among the four objectives by directing support only to those projects that make clear contributions in all four areas. The program already prioritizes such projects, but it could go

further by rigorously excluding those that are deficient in any one area, such as the three listed above. While this would be a reasonable approach, it would mean foregoing many projects that otherwise would present promising conservation opportunities.

In conclusion, Acres in its current form is a broad and flexible program that supports a variety of land conservation projects that confer benefits of various kinds. Nearly all projects seem to be making important contributions to at least two of the four main objectives, especially habitat protection and connectivity. Unless the program chooses to narrow its scope – for example, by making species conservation the overarching objective or by declaring that *all* supported projects must contribute to *all* four objectives – there is little basis for saying that any of the projects funded so far were unworthy of support.

Cost effectiveness is an additional aspect that should be considered when selecting the projects that will most likely provide the greatest benefits. Supported projects vary dramatically in the cost of land per acre – ranging from \$39 per acre for the Downeast Lakes Forestry Partnership in Maine to more than \$32,000 per acre for the Middle Rio Grande National Wildlife Refuge in New Mexico. (See the column labeled "Dollars per Acre" in Table 1. Note that these figures reflect total project costs, not just Acres' contributions, and they may include costs other than land acquisition, such as restoration and acquisition of water rights.) Other things being equal, lower costs per acre are preferred; however, there may be circumstances that warrant relatively high costs per acre. For example, some projects that are conservation priorities may include high-value real estate such as shorelines. The Arcadia Dunes project in Northern Michigan, with a cost per acre of about \$10,800, is a case in point. In addition, land that is threatened by imminent development is likely to cost more than land that is not on the path of development. In general, land in or near urban and suburban areas is likely to cost more than land in remote areas. While Acres could maximize its "bang for the buck" by focusing on inexpensive projects far from population centers, that would conflict with the goal of enhancing people's access to outdoor experiences.

Where Should Investments be Directed in the Future?

Acres for America has done an excellent job of identifying and choosing to fund conservation projects that generally meet its four core objectives. Assuming that the objectives remain the same and that partners wish to maintain the program's character as a flexible source of funding for a variety of nationally important land protection efforts, we do not recommend any major changes in grantmaking priorities or criteria. To the extent possible, the program should continue prioritizing projects that clearly meet all four of the core objectives. However, projects that are not particularly strong in regard to public access or economic benefits should not necessarily be excluded, as long as the opportunities for habitat conservation and connectivity are compelling.

While we do not recommend significant programmatic changes, we do offer several suggestions aimed at helping Acres for America demonstrate that its resources are being put to good use and its objectives are being met.

As noted earlier, evaluative information on the economic benefits of Acres projects is relatively weak. Grantees should be encouraged to provide information to substantiate their claims about benefits to local economies. Several projects have done a good job in this regard. Completing Critical Habitat Complex on the Platte River in Nebraska offered two independent economic studies as verification; Sierra Valley Marsh Restoration in California has referenced partnering with the local business council and cited a geotourism plan created with National Geographic; and Rimrock Ranch Conservation Easement in Oregon provided financial figures on restoration dollars to be spent. These examples provide tangible evidence that local economies are benefitting from the Acres program, unlike the majority of projects, which could only offer general statements such as: *"conservation brings tourists, tourists buy food and stay in local lodging and therefore benefit the economy,"* or *"the conservation easement is on private land which is producing revenue, but we can't know how much because that information is proprietary."*

To increase understanding of whether or not Acres-funded projects are meeting the objective of providing access for people to enjoy the outdoors, the program could encourage grantees to include quantitative visitation information in their interim or final programmatic report. This information could be difficult and prohibitively expensive to collect, and it may not be available for some projects. However, several interviewees suggested that federal and state agencies involved with the management plans for the conserved land might have visitation data. Some possible sources of visitation data mentioned during the interviews were USFWS, National Parks Service, Florida Forest Service, Georgia Department of Natural Resources, New Hampshire Department of Fish and Game, Appalachian Trail datasets, and Texas Parks & Wildlife Department. As Acres moves forward, requesting visitation data in interim and/or final programmatic reports may help with understanding if the public access objective is being met.

Another suggestion for enhancing NFWF's ability to evaluate projects is to require grantees to provide GIS shape files for land acquisitions. While this requirement might have been unduly burdensome a few years ago, most conservation organizations, especially the relatively sophisticated groups that typically receive Acres grants, now have the necessary skills and technology to provide digital GIS files. Additionally, given that NFWF's Easygrants application system now has built-in mapping functionality that is required of all applicants, Acres applicants should be required to upload detailed shapefiles to this tool.

Finally, Acres for America should encourage grantees to develop and implement monitoring plans to ensure that their projects are having the intended ecological impacts. Moreover, since monitoring can entail significant costs, the program should consider providing funds to support ecological monitoring, where appropriate. Support for monitoring would be most warranted in cases where Acres money is being used for habitat restoration projects, and where it is hoped that targeted species will populate habitats that have been restored.

Appendix 1: At-Risk Species Identified by Survey Respondents

PROJECT	STATE	SPECIES
Arcadia Dunes on Lake Michigan	MI	BIRDS Grasshopper Sparrow (less than 25%) Short-eared Owl (less than 25%) Red-shouldered Hawk (less than 25%) Northern Harrier (less than 25%) Merlin (less than 25%) Peregrine Falcon (less than 25%) Bald Eagle (less than 25%) Lggerhead Shrike (less than 25%) Caspian Tern (less than 25%) Western Meadowlark (less than 25%) Hooded Warbler (less than 25%) REPTILES Blanding's Turtle (less than 25%) PLANTS Pitcher's Thistle (less than 25%) Fascicled Broom-rape (less than 25%) American Chestnut (less than 25%) Ginseng (less than 25%) Lake Huron Locust (less than 25%)
Brule-St Croix Legacy Forest Protection	WI	BIRDS Sharp-tailed Grouse Golden-winged Warbler Upland Sandpiper Connecticut Warbler Canada Warbler Canada Warbler Vesper Sparrow Bald Eagle REPTILES Blanding's Turtle MAMMALS Gray Wolf
Cherry Valley Conservation Lands	PA	BIRDS Cerulean Warbler REPTILES Bog Turtle
Coastal Headwaters Forest-Longleaf Conservation, Restoration	AL, FL	BIRDS Bachman's Sparrow REPTILES Gopher Tortoise 50% Barbour's Map Turtle Escambia Map Turtle Florida Red-bellied Turtle - Florida Panhandle PLANTS Apalachicola Wild Indigo Bog Spicebush Eared Coneflower FRESHWATER MUSSELSChoctaw Bean Fuzzy Pigtoe Narrow Pigtoe Rayed Creekshell Southern Sandshell

Completing Critical Habitat Complex on the Platte River	NE	BIRDS Whooping Crane <25 Interior Least Tern <25 Piping Plover <25 MAMMALS River Otter <25 BUTTERFLIES AND SKIPPERS Regal Fritillary Butterfly <25
Connecticut River Forest Acquisition	NH	BIRDS Northern Harrier (including nesting sites) PLANTS Goldies Fern (Dryopteris goldiana)
Downeast Lakes Forestry Partnership	ME	BIRDS BlackTern (state endangered) Least Bittern (state endangered) Sedge Wren (state endangered) Short-eared Owl (state threatened) PLANTS White Adders mouth-Malaxis Monophyllos (state endangered) Vasey Rush-Junius Vaseyi (state endangered) Small Purple Bladderwort-Utricularia Resupinata (state threatened) FRESHWATER MUSSELS Brook Floater (state threatened) FRESHWATER AND ANADROMOUS FISH Atlantic Sea-run Salmon (federally endangered) OTHER TAXONOMIC GROUPS Tomah Mayfly (state threatened)
Hood Canal Landscape Conservation Initiative	WA	BIRDS Marbled Murrelet (less than 25%) FRESHWATER AND ANADROMOUS FISH Summer Chum Salmon (less than 25%)

John Day Headwaters Protection	OR	BIRDS Mountain Quail White-headed Woodpecker Lewis's Woodpecker Pileated Woodpecker Black-backed Woodpecker Great Grey Owl Northern Goshawk Bald Eagle FRESHWATER AND ANADROMOUS FISH Bull Trout 90% of stream miles (32.74 miles in project) Steelhead (75% of stream miles) Westslope CutthroatTrout (75% of stream miles) Redband Trout (75% of stream miles) Chinook Salmon (c. 10% of stream miles) Pacific Lamprey MAMMALS Townsend's Big-eared Bat Fringed Myotis American Marten Wolverine DRAGONFLIES and DAMSELFLIES Columbia Clubtail
Kings River Nature Preserve Conservation	AR	BIRDS Bald Eagle 75%+ Golden eagle 75%+ FRESHWATER MUSSELS Fusconia Ozarkensis Ozark Pig-toe Mussel in river only Lampsilis Reeviana Brevicula Broken Ray Mussel in river only OTHER TAXONOMIC GROUPS Allocapnia Jenae Winter Stonefly in river only Allocapnia Ezerkana Winter Stonefly in river only
Lost Coast Redwood and Salmon Initiative	СА	BIRDS Spotted Owl FRESHWATER AND ANADROMOUS FISH Soncc Coho Salmon Steelhead Chinook Salmon
McArthur Lake Wildlife Corridor	ID	FRESHWATER AND ANADROMOUS FISH Westslope Cutthroat Trout (less than 25%) PLANTS Dwarf Birch Small Yellow Lady's Slipper Slender Spikerush Green-keeled Cottongrass MAMMALS Grizzly Bear (less than 25%) Canada Lynx (less than 25%) Gray Wolf (less than 25%)

McCloud Forests Project	CA	BIRDS Northern Goshawk (75 - 100%) Bald Eagle (50 - 74%) Willow Flycatcher (less than 25%) Northern Spotted Owl (less than 25%) Osprey (less than 25%) Golden Eagle (50 - 74%) PLANTS Klamath Fawn Lily (less than 25%) Pacific Fuzzwort (less than 25%) Pacific Fuzzwort (less than 25%) FRESHWATER AND ANADROMOUS FISH McCloud River Redband Trout (less than 25%) MAMMALS Pacific Fisher (50 - 74%) AMPHIBIANS Davide Trout (less than 25%)
Palila Protection	н	BIRDS Palila (less than 25%)
Panther Crossing Protection	FL	MAMMALS Florida Panther
Protecting Landscapes for Regional and National Conservation	PR	BIRDS West Indian Whistling Duck (Dendrocygna arborea) Brown Pelican (Pelecanus occidentalis) Puerto Rican Broad-winged Hawk Puerto Rican Parrot REPTILES Endangered Marine Turtles Puerto Rican Boa AMPHIBIANS Puerto Rican Crested Toad
Redwood Forest Protection and Management	CA	BIRDS Cooper's Hawk Northern Spotted Owl Osprey Vaux's Swift PLANTS Calamagrotsis Bolanderi Coptis Laciniata Cupressus Goveniana ssp. Pigmaea Lilium Rubenscens Piperia Candida Sidalcea Malachroides Usnea Longissima FRESHWATER AND ANADROMOUS FISH Steelhead Coho Salmon REPTILES Western Pond Turtle AMPHIBIANS Northern Red-legged Frog Tailed Frog Southern Seep/torrent Salamander

Rimrock Ranch Conservation Easement	OR	BIRDS Bald Eagle (75% or greater) Common Nighthawk (75% or greater) Lewis's Woodpecker (50-74%) Long-billed Curlew (less than 25%) Mountain Quail (75% or greater) Pygmy Nuthatch (75% or greater) Pygmy Nuthatch (75% or greater) Pygmy Nuthatch (75% or greater) Pricolored Blackbird (50 -74%) PLANTS Peck's Penstemon (less than 25%) FRESHWATER AND ANADROMOUS FISH Bull Trout (less than 25%) Mid Columbia Steelhead (less than 25%) Chinook Salmon (less than 25%) Redband Trout (less than 25%) MAMMALS Spotted Bat (25-49%) Long-legged Myotis (25-49%) Long-legged Myotis (25-49%)
Rocky Flats National Wildlife Refuge Protection	со	MAMMALS Prebles Meadow Jumping Mouse (less than 25%)
Shasta Big Springs Ranch Acquisition	CA	FRESHWATER AND ANADROMOUS FISH Coho Salmon (50-74%)
Sherfield Cave Bat Hibernaculum Acquisition	AR	BiRDS Bald Eagle 100% Winter only MAMMALS Indiana Bat (100%) Gray Bat (100%) Summer only OTHER TAXONOMIC GROUPS Ozark Cave Amphipod ('Stygobromus Ozarkensis) (50%) Cave Isopod (Caecidotea Stiladactyla). (50%)
Sierra Valley Marsh Restoration	CA	BIRDS Greater White-fronted Goose Redhead White-faced Ibis Golden Eagle Ferruginous Hawk Swainson's Hawk Northern Harrier Bald Eagle Osprey Prairie Falcon Peregrine Falcon Greater Sandhill Crane Long-billed Curlew Black Tern Short-eared Owl Burrowing Owl Yellow-headed Blackbird
Southern Sierra Partnership and Tehachapi Linkage	CA	BIRDS California Condor (<25%)

Sun Ranch Conservation Easement	МТ	MAMMALS Grizzly Bear Canada Lynx Wolverine Gray Wolf
Texas Powderhorn Ranch Land Acquisition - II	тх	BIRDS Whooping Crane (unknown) Reddish Egret (unknown)
The Campaign to Protect the Last Coastal Forest	СТ	BIRDS Wood Thrush Blue Winged Warbler Prairie Warbler Prairie Warbler PLANTS False Hop Sedge Eastern Prickly Pear Marsh Milkwort MAMMALS Eastern Red Bat Southern Bog Lemming Bobcat REPTILES Eastern Box Turtle Ribbon Snake AMPHIBIANS Spotted Salamander Northern Dusky Salamander Red Spotted Newt Gray Tree Frog Wood Frog
White Mountains to Moosehead Lake Initiative	NH, ME	BIRDS Osprey (1%) Common Loon (30%) MAMMALS American Marten (30%) FRESHWATER AND ANADROMOUS FISH Eastern Brook Trout (100%)
Yellow River Ravines	FL	PLANTS (less than 25%) Panhandle Lily (less than 25%) MAMMALS Eastern Chipmunk (less than 25%) Florida Black Bear (50-74%) FRESHWATER AND ANADROMOUS FISH Black-tip Shiner (less than 25%) REPTILES Florida Pine Snake (50-74%) Gopher Tortoise (50-74%) AMPHIBIANS Pine Barrens Tree Frog (25-49%) Tiger Salamander (less than 25%)

Appendix 2: Details on the PAD-US and NCED Databases

Protected Areas Database of the United States (PAD-US)

The Protected Areas Database of the United States (PAD-US) is the official inventory of protected open space in the United States. With over 715 million acres in thousands of holdings, the spatial data in PAD-US include public lands held in trust by national, state, and some local governments, and by some nonprofit conservation organizations.

The PAD-US database is produced by the U.S. Geological Survey Gap Analysis Program (GAP). GAP produces data and tools that help meet critical national challenges such as biodiversity conservation, renewable energy development, climate change adaptation, and infrastructure investment.

Key Features

- Includes fee-protected lands in addition to other lands under voluntary conservation easement.
- Developed by aggregating state by state inventories, as well as Federal agency and national conservation organization data.
- All lands are assigned GAP conservation status codes to indicate the level of protection. GAP codes 1 and 2 are lands managed for different levels of biodiversity protection, code 3 designates multiple use lands that may support extractive uses, and code 4 indicates no known mandate for permanent protection.
- Supports International Union for the Conservation of Nature rankings and represents the contribution of the United States to the United Nations Environment Programme–World Conservation Monitoring Centre's World Database on Protected Areas.⁸

National Conservation Easement Database (NCED)

The National Conservation Easement Database (NCED) is the first national database of conservation easement information, compiling records from land trusts and public agencies throughout the United States. This public-private partnership brings together national conservation groups, local and regional land trusts, and state and federal agencies around a common objective.

NCED is an initiative of the U.S. Endowment for Forestry and Communities. The NCED team consists of five leading conservation organizations, including: Conservation Biology Institute, Defenders of Wildlife, Ducks Unlimited, NatureServe, and The Trust for Public Land. The NCED team also collaborates with the USGS National Gap Analysis Program (GAP) Protected Areas Database – United States (PAD-US) on data acquisition and standards. Four federal agencies - the U.S. Fish & Wildlife Service, U.S. Department of Agriculture's Natural Resources Conservation Service, U. S. Geological Survey, and the U.S. Forest Service – are sponsors of the effort and are partnering with the Endowment in support of the national database. Other key sponsors include The Nature Conservancy and the Land Trust Alliance.

In the first phase of the NCED project, four of the five partners actively collected data from agencies and land trusts, with each assigned to a specific set of states. Currently, The Trust for Public Land is responsible for the public easement data collection and Ducks Unlimited is responsible for the private

⁸ From the PAD-US Fact Sheet: <u>http://pubs.usgs.gov/fs/2013/3086/</u>

easement data collection. The database does not contain any identifying information about landowners. Only publicly available information from land records and basic statistics is included, such as the easement boundary, purpose and holder.⁹

⁹ From the NCED website: <u>http://conservationeasement.us/about</u>

Appendix 3: Qualitative Indicators of Connectivity

EZG#	Project	Acres conserved	Adjacent Protected Acres	Comments about migratory corridor for mammals in project area:	Comments about flyway for birds in project area:	Comments about fish run, passage or fishery in project area:
3229	Upper Mississippi Forestland Easement	187,277	1M+		"Protect vast areas of the Mississippi River flyway, protecting myriad migratory birds, waterfowl and game species."	"Protect over 280 miles of riparian habitat, including 30 miles of state-designated trout streams."
3383	Conserving Southern Blue Ridge Trout Habitat	12,055	100K-1M	Protect and fortify "wildlife corridorsfor the benefit of the Eastern brook trout and golden-winged warbler and other species."		"protect 37 miles of headwater streams, including three tracts with confirmed southern Appalachian brook trout populations, permanently linking isolated high quality water habitat and existing native trout resources."
3536	Sommers-Grindstone Conservation Easement	19,000	1M+			"A fishing easement was acquired which allows public use of approximately 5 miles of the Green River –a popular and extremely productive fishery."
4649	Kane Ranch and Two Mile Ranch Acquisition	1,250	1M+	Working to "develop models that inform how landscape change affects connectivity for species like puma, bobcat, pronghorn, and mule deer."		
4792	McCloud Forests Project	9,400	1M+	"The property provides migratory habitat for deer and elk herds."		The property "includes spawning areas Fall River rainbow trout, and contains two key refugia for the imperiled California redband trout."
4859	Rimrock Ranch Conservation Easement	1,120	1M+	"The conservation easement will provide connectivity between large adjacent federal ownerships for mule deer, elk, and other migratory wildlife."		" key component of one of the most significant fisheries restoration projects ever under taken in the Pacific Northwest; the reintroduction of salmon and steelhead to the upper Deschutes River basin."
4887	Catahoula National Wildlife Refuge Expansion	6,273	1-50K		"Catahoula Lake is recognized as a Wetlands of International Significance by the Ramsar Convention for its historic concentration area for shorebirds, waterbirds, and migrating/wintering waterfowl."	

EZG#	Project	Acres conserved	Adjacent Protected Acres	Comments about migratory corridor for mammals in project area:	Comments about flyway for birds in project area:	Comments about fish run, passage or fishery in project area:
4942	Prairie Pothole Grassland and Wetland Protection	14,322	Insufficient data		"part of a larger system known as the Prairie Pothole Region which is globally recognized as the Duck Factory, a critical breeding ground for waterfowl The United States Shorebird Conservation Plan (USSCP) has identified the Prairie Pothole Region as a critical breeding and migratory stopover habitats."	
5200	Arcadia Dunes on Lake Michigan	1,667	1-50K		"The shoreline is part of the migration route for Monarch butterflies and multiple birds species, including the endangered Peregrine Falcon and the threatened Merlin."	
6557	Redwood Forest Protection and Management	16,040	50-100K			" protected redwood forests, coastal streams and riparian habitat for sensitive species including coho salmon, steelhead trout"
6562	Yellow River Ravines	11,313	100K-1M			
7148	Sun Ranch Conservation Easement	10,500	1-50K	"Grizzly bear, elk, and antelope routinely migrate through this area. On their way to nearby Yellowstone National Park."		"The property protects outstanding fisheries habitat and spawning groundsfor a variety of fish species including brown, rainbow, and westslope cutthroat trout."
7299	Connecticut River Forest Acquisition	2,100	<1K			"The cold water fishery along this stretch of the Connecticut is critical habitat to wild brook trout, brown trout, rainbow trout and land locked Atlantic salmon."
17341	Sherfield Cave Bat Hibernaculum Acquisition	1,226	1-50K	"occupied during the winter by the largest hibernaculum of Indiana bats in Arkansas. " a population of endangered gray bats summers in Sherfield Cave."		
17439	Downeast Lakes Forestry Partnership	312,000	100K-1M			"A tremendous cold water fishery for salmon and bass."
18055	St. Joe Basin Conservation Initiative	28,000	50-100K			"outstanding conservation values, including healthy populations of west slope cutthroat trout and bull trout"

EZG#	Project	Acres conserved	Adjacent Protected Acres	Comments about migratory corridor for mammals in project area:	Comments about flyway for birds in project area:	Comments about fish run, passage or fishery in project area:
18732	Carney Conservation Easement	3,409	<1K	"A conservation easement on 2,409 acres with high value for the continued migration of the Grand Teton/Path of the Pronghorn antelope herd." " 200- mile path that hundreds of antelope use every spring and fall" the second longest annual terrestrial journey in the Western Hemisphere "		
19021	Shasta Big Springs Ranch Acquisition	4,136	1-50K			Protect "nearly six miles of anadromous fish streams specifically coho salmon and Chinook salmon habitat."
21012	McArthur Lake Wildlife Corridor	3,943	1M+	"protect key habitat in an area used heavily by elk, moose and other wildlife moving between the Selkirk and Cabinet-Yaak Mountains."		
23705	Southern Sierra Partnership and Tehachapi Linkage	14,945	1M+	"the Property is a key component of the Sierra Madre to Sierra Nevada linkage, allowing species to move freely among the many interconnected coast and interior ranges in response to climate change."		
25862	Palila Protection	4,469	100K-1M			
28949	Protection and Restoration of Longleaf Pine on the Fall Line	278	1-50K			
29731	Panther Crossing Protection	1,278	<1K	"the property is an anchor for the last remaining corridor for Florida panther migration across the Caloosahatchee River, making this property critical to long-term panther recovery."		
29958	Rocky Flats National Wildlife Refuge Protection	1,487	1M+	"An elk migration corridor goes through the parcel, it was the last piece of the corridor to be connected."		
33263	John Day Headwaters Protection	13,082	1M+	"preserve wildlife corridors for big game, such as Rocky Mountain elk and mule deer."		"Preserving the Headwaters of the John Day as clean, cold critical aquatic habitat for Pacific lamprey, Chinook salmon, summer steelhead, cutthroat, redband and bull trout."

EZG#	Project	Acres conserved	Adjacent Protected Acres	Comments about migratory corridor for mammals in project area:	Comments about flyway for birds in project area:	Comments about fish run, passage or fishery in project area:
33366	Establishing the Middle Rio Grande National Wildlife Refuge	570	1-50K		"Whole refuge is on the Rio Grande flyway. "	
33724	Brule-St Croix Legacy Forest Protection	67,347	1-50K			
33913	White Mountains to Moosehead Lake Initiative	8386	100K-1M			" protect prime habitat for the eastern brook trout and endangered Atlantic salmon"
34284	Devil's Eyebrow Protection	1,954	<1K			
35577	Completing Critical Habitat Complex on the Platte River	577	1-50K		"Pinch in the hourglass of the Central Flyway. Critical stop over for sandhill crane on northern migration. Critical habitat for whooping crane on southern and northern migration."	
40025	Protecting Landscapes for Regional and National Conservation	333	1-50K			
40220	The Campaign to Protect the Last Coastal Forest	1,000	<1K			"A key component of the restoration effort is the removal of dams and the construction of fish ladders that allow access to upriver spawning sites. CT DEEP has successfully restored a variety of coastal habitat sites over the last 25 years, including riverine migratory corridors at 33 sites in 22 towns."
40227	Cherry Valley Conservation Lands	4,662	<1K		The project provides critical habitat protection for migratory song birds, raptors and bats.	"Nearly half of this property is located within the watershed of the Aquashicola Creek, a portion of which is a state designated "Class 'A' Wild Trout Stream" that supports native brook trout."
40496	Sierra Valley Marsh Restoration	18,460	1M+	Sierra Valley is an important pronghorn corridor from the Great Basin to Sierra Nevada	"a critical migratory stop along the Pacific Flyway for 230 bird species, and breeding habitat for more than 17 rare or threatened birds including the Greater Sandhill Crane, White-faced Ibis, Yellow-headed Blackbird, and the Black Tern."	

EZG#	Project	Acres conserved	Adjacent Protected Acres	Comments about migratory corridor for mammals in project area:	Comments about flyway for birds in project area:	Comments about fish run, passage or fishery in project area:
40523	Kings River Nature Preserve Conservation	608	1-50K			
45432	Hood Canal Landscape Conservation Initiative	6,361	1-50K			Protecting "freshwater rivers, streams, tidal wetlands, saltwater inlets, and shoreline that provide critical habitat for federally listed species, including Summer Chum salmon, Chinook salmon, Bull trout, Steelhead, and Marbled Murrelet."
45853	Coastal Headwaters Forest-Longleaf Conservation, Restoration	205,000	100K-1M		"Support the numerous migratory species that rely on these forests as stopover, breeding, and wintering habitat"	
45876	Texas Powderhorn Ranch Land Acquisition - II	17,351	1-50K		Protect "some 200 pothole freshwater wetlands that provide important stopover and wintering habitat for whooping cranes, migratory waterfowl, shorebirds, and songbirds."	
45885	Lost Coast Redwood and Salmon Initiative	6,462	50-100K	"permanently expand habitat and migration corridors for numerous wide- ranging mammals such as mountain lions, black bears, bobcats, coyote, and deer."		"The property includes the headwaters of two key northern California salmon-bearing watersheds:much of the highest priority unprotected habitat for the southernmost population of the endangered SONCC (Southern Oregon/North Coastal California) coho salmon",

Appendix 4: Economic Activities on Acres for America Properties (From Survey)

EZG#	PROJECT TITLE	STATE	RECREA- TION	AGRI- CULTURE (CROPS)	AGRI- CULTURE (LIVE- STOCK)	LOGGING	OIL/GAS DEVELOP- MENT	MINING/ MINERAL DEVELOP- MENT	OTHER
3229	Upper Mississippi Forestland Easement	MN							
3383	Conserving Southern Blue Ridge Trout Habitat	TN, NC							
3536	Sommers-Grindstone Conservation Easement	WY	x	x	x				
4649	Kane and Two Mile Ranch Acquisition	AZ	x		х				
4792	McCloud Forests Project	CA				х			
4859	Rimrock Ranch Conservation Easement	OR			х				
4887	Catahoula National Wildlife Refuge Expansion	LA	x						
4942	Prairie Pothole Grassland and Wetland Protection	ND, SD							
5200	Arcadia Dunes on Lake Michigan	MI	х	х		х			
6557	Redwood Forest Protection and Management	CA	x						x
6562	Yellow River Ravines	FL	х			х			
7148	Sun Ranch Conservation Easement Purchase	MT	x		x				
7299	Connecticut River Forest Acquisition	NH	x			х			
17341	Sherfield Cave Bat Hibernaculum Acquisition	AR	x						
17439	Downeast Lakes Forestry Partnership	ME	x			х			
18055	St. Joe Basin Conservation Initiative	ID							
18732	Carney Ranch Conservation Easement	WY			х				
19021	Shasta Big Springs Ranch Acquisition	CA			х				
21012	McArthur Lake Wildlife Corridor	ID	х			х			
23705	Southern Sierra Partnership and Tehachapi Linkage (called Tollhouse Ranch Acquisition on survey)	CA			x				
25862	Palila Protection (Kukaiau Palila)	н			х				
28949	Protection and Restoration of Longleaf Pine on the Fall Line (GA)	GA	x						
29731	Panther Crossing Protection	FL			х				
29958	(Expansion of) Rocky Flats National Wildlife Refuge in Colorado	со			x				
33263	John Day Headwaters Protection	OR	х		х	х			

5704		CTATE	RECREA-	AGRI- CULTURE	AGRI- CULTURE (LIVE-		OIL/GAS DEVELOP-	MINING/ MINERAL DEVELOP-	OTUED
33366	Establishing the Middle Rio Grande National Wildlife Refuge (Price's Dairy/Valle de Oro National Wildlife Refuge)	NM	x	(CROPS)	STOCK)	LUGGING	IVIENT	VIENT	UTHER
33724	Brule-St. Croix Legacy Forest Protection Project	WI	x			x			
33913	White Mountains to Moosehead Lake Initiative	NH ME	x			х			
34284	Devil's Eyebrow Protection	AR							
35577	Completing Critical Habitat Complex on the Platte River	NE	x	x	x				
40025	Protecting Landscapes for Regional and National Conservation	PR							
40220	The Campaign to Protect the Last Coastal Forest (Called "The Preserve" on the survey)	СТ	x						
40227	Cherry Valley Conservation Lands	PA	х						
40496	Sierra Valley Marsh Restoration	CA	х		х				
40523	Kings River Nature Preserve	AR	х						
45432	Hood Canal Landscape Conservation Initiative	WA	х			x			
45853	Coastal Headwaters Forest- Longleaf Conservation/Restoration	AL FL	x			x			
45876	Texas Powderhorn Ranch Acquisition	тх			x		x		x
45885	Lost Coast Redwood and Salmon Initiative	CA				x			
Numb	er of projects on which the activity ta	kes place:	23	3	14	12	1	0	2

Appendix 5: Overview of Acres Urban Restoration Grants

EZG#	PROJECT NAME	STATE	YEAR	AMOUNT OF Acres GRANT	% OF TOTAL PROJECT BUDGET	CURRENT STATUS	OUTCOMES
28984	Blackwall and Ruler's Bar Salt Marsh Restoration	NY	2011	\$114,300	49.5%	Completed	Restored over 30 acres of salt marsh on two badly degraded marsh islands, In addition to improving water quality, the restoration preserves migratory stopover and breeding grounds for over 330 species of birds, preserves estuarine nursery and habitat for over 100 species of finfish, improves the recreational environment for anglers, boaters, and community members and provides protection from dangerous storm surges.
27538	Hegewisch Marsh Restoration	IL	2011	\$100,000	50.0%	Completed	4 invasive species removed on 30 acres; native plants installed on 30 acres; 5 newly trained/certified restoration professionals; 30 restored acres for state endangered species; 20 new habitats to help native species return; 10,800 lbs of woody material removed; 1,460 lbs of herbaceous material removed; 38,366 lbs of garbage removed; 3.4 linear miles of trails maintained.
28841	New York Botanical Garden Lower Portage Trail Restoration	NY	2011	\$100,000	50.0%	Completed	The New York Botanical Garden renovated the Lower Portage Trail to improve public access to and better integrate it with the ecology of the Bronx River.
29068	Southern Tarplant Enhancement	CA	2011	\$100,000	11.8%	Completed	11,160 native plants (3,800 Southern tarplant) have been planted. Large areas have been cleared of non-native plants.
30137	Stormwater Bioretention in the Anacostia River Watershed	DC	2011	\$100,000	14.7%	Completed	Stormwater Maintenance, addressed first round of comments from the D.C. Department of the Environment on erosion and sediment control and stormwater.
33972	Anacostia Wetlands Awareness and Restoration Effort	DC	2012	\$100,000	40.6%	Completed	An area of 3.76 acres of tidal emergent wetlands has been subject to restoration actions from Phragmites removal to the installation of exclosures to prevent overgrazing by Canada geese.
27020	Eggers Grove Marsh and Swale Restoration	IL	2012	\$100,000	57.1%	Completed	22 acres of invasive species control, 22 acres of burning, 30 volunteers/students/ teachers trained, and 40 acres surveyed.

EZG#	PROJECT NAME	STATE	YEAR	AMOUNT OF Acres GRANT	% OF TOTAL PROJECT BUDGET	CURRENT STATUS	OUTCOMES
39141	Horseshoe Crab and Shorebird Habitat Restoration	ΓN	2012	\$80,000	90.9%	In Progress	PROPOSED: Provide for a temporary restorative habitat that will support successful nesting and spawning by horseshoe crabs, and utilization of the beaches by migratory shorebirds this year
32576	Nyberg Creek Wetland Preserve Restoration	OR	2012	\$100,000	8.5%	Completed	Installed bare root cuttings and plants to help enhance habitat quality and increase biodiversity; identified hydrologic constraints for buffer; 8 circular plots of blackberry has been removed and controlled; Reduced to 50% of reed canary grass; volunteer involvement planting.
32592	Otay Delta Habitat Restoration	CA	2012	\$100,000	35.9%	Completed	55 acres of fallow land have been restored to native riparian vegetation; 5 service days have been held with over 200 participants.
28523	Pequonnock River Apron Fish Passage	СТ	2012	\$100,000	23.3%	Completed	The modification of the concrete apron on the Pequonnock River to include a pool and weir fishway has now been completed.
39978	Flower Avenue Green Street Development	MD	2013	\$40,000	1.9%	In Progress	PROPOSED: Install low impact design storm-water management facilities as a environmental mitigation to address polluted runoff entering Sligo Creek & Long Branch Creek that tributaries to the Anacostia River.
40346	Integrated Stormwater Management Systems in the Anacostia River Watershed	DC, MD	2013	\$60,000	2.0%	In Progress	PROPOSED: Install three Smart, Integrated Stormwater Management Systems in the Anacostia River Watershed to demonstrate the improved nutrient removal rates of stormwater systems that have networked, real-time controls.
		TOTAL	\$1,194,300			TOTALS (Includes work in progress):	
AVERAGE				\$91,869	33.5%		• 1.2 miles of beach restored
						10 completed	 7.8 river miles opened for migratory fish access 33 lake acres opened for migratory fish acres 180 feet of shoreline/upland slope treated to remove invasives & replant with natives 1,100 square feet of permeable pavement installed 3 smart, integrated stormwater management systems installed