

LAND AND WATER CONSERVATION FUND

An Assessment of Its Past, Present and Future

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The Conservation Fund is a national, nonprofit land conservation organization headquartered in Arlington, Virginia. Since 1985, The Conservation Fund has acquired and protected more than 2 million acres of open space, wildlife habitat and historic sites throughout the nation. The Fund also assists partners in business, government and the nonprofit sector with projects that integrate economic development with environmental protection. Fund programs include: an American Greenways Program that assists the development of greenways and trails; a Civil War Battlefield campaign to safeguard Civil War battlefield sites; a Freshwater Institute to develop economically feasible and environmentally sound approaches to using freshwater resources; and a Land Advisory Service to provide landowners and communities with technical assistance on land-use planning, conservation, and sustainable development. For more information about The Conservation Fund, contact:

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THE LAND AND WATER CONSERVATION FUND

“The Nation behaves well if it treats the natural resources as assets which it must turn over to the next generation increased, and not impaired, in value.”

—President Theodore Roosevelt

The Land and Water Conservation Fund is one of the best kept secrets in America. Stop people on the street and ask them what it is and you’ll probably get blank stares. Yet the 35-year-old program has done more to preserve open space and bring outdoor recreation to virtually every county in the nation than any other federal program. So far, 37,300 LWCF state grants totaling \$3.2 billion have been instrumental in preserving 2.3 million acres and building 27,000 recreational facilities. Chances are you and your children have played on baseball fields, swam in pools or hiked around parks that wouldn’t exist without the benefit of the Land and Water Conservation Fund. Besides the successes of state grants program, the federal side of the program has preserved 4.7 million acres, including all or most of dozens of well-known national parks, from Cape Cod

and Padre Island national seashores to Voyageurs and Redwoods national parks. (Appendix 1).

Despite its successes, the program has suffered from insufficient, unreliable funding in the last 20 years. When the first cuts came in the early 1980s after several years of record funding, “there wasn’t much of a hue and cry,” said Henry Diamond, an attorney in Washington, D.C., whose close involvement with the

program dates to the late 1950s, when President Eisenhower established a federal commission to investigate the country’s recreation infrastructure and its future needs. Reawakening the constituency—the American people—who have benefited so greatly from the Land and Water Conservation Fund has become a top priority for conservationists as Congress debates legislation in the current Congress that revitalizes LWCF’s state and federal programs with guaranteed annual funding.



ORIGINS AND EARLY HISTORY

The Land and Water Conservation Fund owes its birth to forces in American society unleashed after World War II. From the end of the war into the 1950s, the United States witnessed a swift expansion in the demand for outdoor recreation. The baby boom and rapid urbanization, coupled with increases in disposable income, leisure time and mobility, all coalesced into a national awareness that the nation needed more opportunities for outdoor recreation. On June 28, 1958, President Eisenhower signed the Outdoor Recreation Resources Review Act into law, which established a National Outdoor Recreation Review Commission, to be chaired by Laurance S. Rockefeller. The commission's mandate was very broad:

- to preserve, develop and assure accessibility to all American people of present and future generations such quality and quantity of outdoor recreation resources as will be necessary and desirable for individual enjoyment, and to assure the spiritual, cultural, and physical benefits that such outdoor recreation provides, and
- to determine the amount, kind, quality, and location of such outdoor recreation resources and opportunities as will be required by the year 1976 and the year 2000, and shall recommend what policies should best be adopted and what programs be initiated, at each level of government and by private organizations and other citizen groups and interests, to meet such future requirements.



OUTDOOR RECREATION FOR AMERICA

After three years of work compiled in 28 reports totaling 5,080 pages, the 15-member commission in January 1962 made five major recommendations in its final report, “Outdoor Recreation for America.”

1) The United States should establish a national recreation policy to preserve, develop and make accessible to all Americans the resources needed “for individual enjoyment and to assure the physical, cultural, and spiritual benefits of outdoor recreation.”

2) All agencies administering outdoor recreation resources—public and private—should adopt programs designed to make the best possible use of available resources in light of people’s needs.

3) Each state, through a central agency, should develop a long-range plan for outdoor recreation, to provide adequate opportunities for the public, to acquire additional areas where necessary and to preserve outstanding natural sites.

4) An independent Bureau of Outdoor Recreation should be established in the Interior Department to lead nationwide efforts by coordinating federal programs, conducting nationwide planning and assisting other levels of government.

5) A Federal funding program should be established to provide grants to states that would stimulate and assist them to meet new demands for outdoor recreation and to pay for additions to the Federal recreation estate.



LEGISLATIVE HISTORY OF THE LAND AND WATER CONSERVATION FUND ACT OF 1965

“The Nation needs a land acquisition program to preserve both prime Federal and State areas for outdoor recreation purposes. . . . In addition to the enhancement of spiritual, cultural, and physical values resulting from the preservation of these resources, the expenditures for their preservation are a sound financial investment. Public acquisition costs can become multiplied and even prohibitive with the passage of time.”

—President John F. Kennedy, in a letter accompanying draft legislation that proposed the creation of a Land and Water Conservation Fund.

Shortly after the commission report was submitted to Congress and the President, the Kennedy administration proposed legislation to create the Land and Water Conservation Fund. No action was taken in the 87th Congress but several hearings were held on bills relating to land conservation. On Feb. 14, 1963, Kennedy sent revised draft legislation that created a Land and Water Conservation Fund to the new 88th Congress. Rep. Wayne Aspinall (D-Colo.), chairman of the House Interior and Insular Affairs, and Sen. Henry “Scoop” Jackson (D-Wash.), chairman of the Senate Interior committee, introduced the bill for the president, by request. House hearings on H.R. 3846 and 12 other related bills were held May 27–28, 1963. The House Subcommittee on National Parks spent 8 days that summer amending the bills and the full Interior committee spent another 8 days completing work on the bills and merging them into H.R. 3846. The bill was reported to the full House on Nov. 14, 1963, eight days before Kennedy was assassinated. The new President, Lyndon Johnson, sent a letter to Aspinall after only three weeks in office to urge speedy approval of the legislation.

The full House began debating the bill on July 22, 1964. “It is my own personal opinion that the bill . . . is of greater significance to the whole of the American public of today and of tomorrow than any of the measures which our committee is likely to report to the House for a long time to come,” Aspinall told his colleagues. The House approved the bill a day later by voice vote and sent H.R. 3846 to the Senate for consideration.

The Senate took up the bill on Aug. 12. “It would like to remind you that it is mostly to the open areas that 90 percent of all Americans go each year seeking refreshment of body and spirit,” Jackson told the Senate. “These are the places they go to hunt, fish, camp, picnic, swim, for boating or driving for pleasure, or perhaps simply for relaxation or solitude.” After a short debate, the Senate overwhelmingly passed the bill by a 92-1 vote.

After a conference committee reconciled the differences between the House and Senate bills, both houses approved the legislation on Sept. 1 by voice vote. President Johnson signed the Land and Water Conservation Fund Act into law on Sept. 3, 1964. It went into effect Jan. 1, 1965.

Enactment of the LWCF Act was not an isolated event. The decade of the 1960s were years of great achievement, reflecting a resurgence of interest in conservation that was unlike anything since the days of President Theodore Roosevelt. Some of the groundbreaking legislation that is taken for granted today—protecting wilderness and wild and scenic rivers, along with the Land and Water Conservation Fund Act—became law in the 1960s, thanks to the leadership of Interior Secretary Stewart Udall, Sen. Jackson and many others.

WHAT WAS THE PURPOSE OF THE LAND AND WATER CONSERVATION FUND?

“Few of us can hope to leave a poem or a work of art to posterity; but working together or apart, we can yet save meadows, marshes, strips of seashore, and stream valleys as a green legacy for the centuries.”

—Stewart Udall, Secretary of the Interior (1961–69)

The new law codified one of the commission’s key recommendations—the creation of a state grant program to encourage state and local governments to expand outdoor recreational opportunities. The House Interior committee thought the new state grant program would serve two purposes:

- to relieve increasing pressure on the federal government to acquire and develop areas of less than national significance, and
- to help build state and local park systems that increasingly were serving visitors from all over the country.

Congress stipulated that up to 60 percent of all appropriations could be devoted to the new state grant program. The money would be matched, on a 50–50 basis, by state spending for outdoor recreation planning, land acquisition and development.

The law set aside at least 40 percent of appropriations for federal land acquisition. Congress expected the new federal-side funding would address three problems:

- to acquire private inholdings within federally owned areas for their recreational value or to improve administration of the federal land,
- to address increasing demand for acquisition of recreational areas on private land in the East and Midwest, and

- to partially offset construction costs of reservoirs that are used for recreation.

Although state grants could be used for planning, acquisition and site development, Congress restricted the federal-side funding to land acquisition only.

Congress tapped four sources of revenue to fund the program: the sale of surplus federal property (\$50 million yearly); an existing motor boat fuel tax (\$30 million annually); a new system of entrance and recreation user fees at national parks and on other federal lands (up to \$65 million a year); and annual appropriations of \$60 million a year for eight years that were to be paid back. Because the user fees never raised more than \$16 million in the early years, Congress bolstered the original funding sources in 1968 by including a portion of federal revenue from offshore oil and gas drilling, which has become the key funding source for the LWCF. Congress saw its use

of offshore drilling revenue as a means to recycle money from a depleting natural resource to rejuvenate other natural resources. The program’s authorized funding level was increased to \$200 million a year in 1968, \$300 million in 1970 and \$900 million in 1977, the current level.



WHAT HAS THE LAND AND WATER CONSERVATION FUND ACCOMPLISHED?

America's outdoor heritage is more than 7 million acres richer thanks to the Land and Water Conservation Fund. Every state and most counties in the United States have benefited from the fund (Figure 1). On the federal side, 4.7 million acres have been acquired with LWCF funding, including most or all of the land in dozens of national parks.

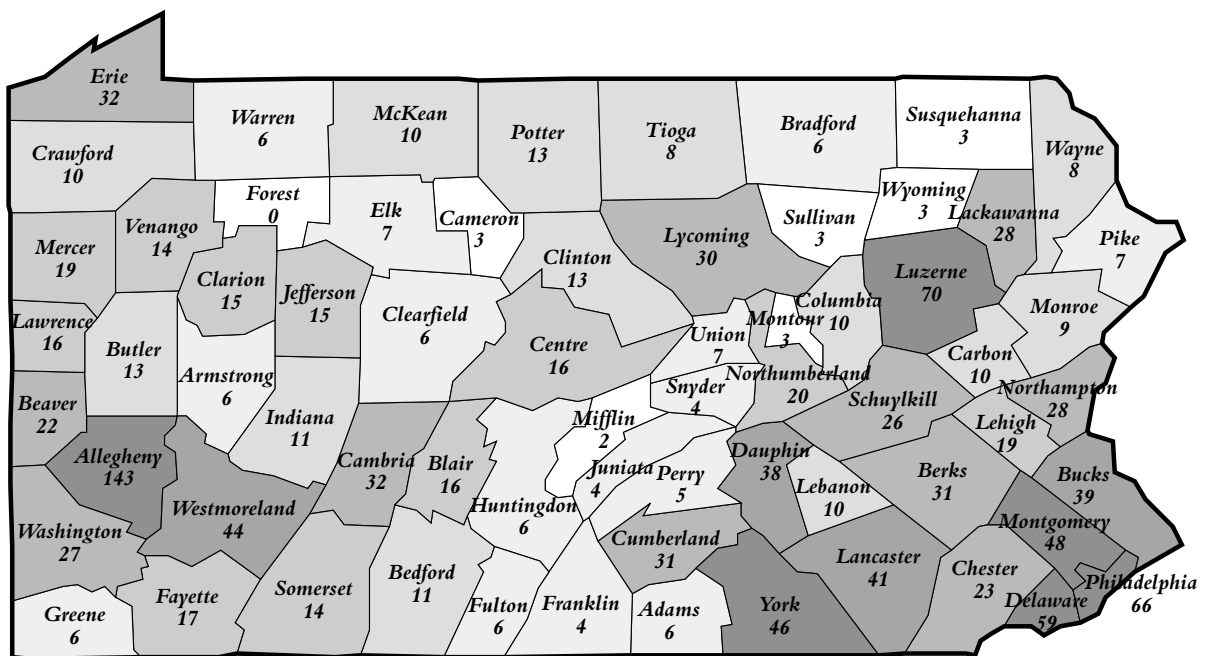
Through 1995, the state grant program has awarded 37,300 grants totaling \$3.2 billion, which was matched by \$3.2 billion in state and local money. The grants supported the purchase and protection of 2.3 million acres of recreation land and development of nearly 27,000 recreational facilities in every state and territory. States have received about 8,200 grants and counties some 4,800, while cities, towns and other local agencies matched more than 24,000.

The program also has funded 2,000 grants to redevelop older recreation facilities and improve access for people with disabilities. Another 550 planning grants funded state studies on recreation potentials, needs, opportunities and policies.

Below are some model projects that owe their existence to state grants from the Land and Water Conservation Fund:

■ **Renton, Wash.**—Beginning with its first grant in 1967, Gene Coulon Memorial Beach Park has received four LWCF grants totaling \$830,000 and \$6 million in funding from the City of Renton to become one of Washington's premier urban recreation areas. The 53-acre park, which includes 6,750 feet of Lake Washington shoreline, offers boating, water skiing, swimming, tennis, hiking, fishing, and group and family picnic sites.

Figure 1. Land and Water Conservation Fund Grants in Pennsylvania



Total LWCF Projects: 1,349

Total Grant Funds Received: \$140,923,675

Source: U.S. Department of Interior

■ **Lilburn, Ga.**—A good example of how a small grant can do wonders, this city near Atlanta received a \$20,178 LWCF grant in the early 1970s to develop a half-mile running/walking/fitness trail, a large multipurpose games field, playground and picnic shelter. At the time of the grant, the future park site was a reclaimed but vacant landfill near City Hall. The park now serves as a neighborhood focal point, where thousands of people visit each week, particularly on evenings and weekends.

■ **South Bend, Ind.**—A \$1.06 million grant helped South Bend convert the filled-in channel of an 1840s-era mill race into the first artificial kayaking, canoeing and rafting course in the country. Development of the East Race Waterway, which also acts as a fish ladder, culminated a decade-long project by the city to develop parks along the Saint Joseph River. Water levels in the race are controlled by three headgates that, with the placement of obstacles, create whitewater turbulence rated from novice to professional levels.

■ **California parks**—California leads all states with its acquisition of 184,400 acres of state and local parkland with matching LWCF grants. Parks added to the state system include Humboldt Redwoods, Montana de Oro, Anza Borrego and Santa Rosa Mountains. Wildlife areas include Meiss Lake, Antelope Valley and Mendota. Local acquisitions include Anadel Farms in Sonoma County, North Bay Beach in Marin Co., Riverfront Park in Contra Costa County, Baylands in San Mateo County, Santa Monica Mountains in Los Angeles County, Santa Ana Regional Park in Orange County and San Elijo Lagoon in San Diego.

■ **Fall Creek Falls, Tenn.**—The highest waterfall in North America east of the Rockies makes Fall Creek Falls in central Tennessee a popular gathering spot for visitors from nearby Nashville, Chattanooga and Knoxville. Three LWCF grants totalling \$376,000 helped acquire



new land and develop facilities at the park, which includes spectacular scenery, miles of trails, and a breath-taking pedestrian suspension bridge, along with camping, golf and a resort hotel.

■ **Boston, Mass.**—A \$1.7 million LWCF grant helped develop the Charlestown Waterfront park, a 16-acre site that was conveyed to Boston under the Federal Lands to Parks (Surplus Property) program, another initiative of the late Sen. Jackson. The project served as a centerpiece for millions of dollars in public and private investment in the restoration of the former Charlestown Shipyard site, which closed in 1974. The park gives visitors access to a playground and splash pool along with paths and boardwalks that offer panoramic views of Boston Harbor and downtown Boston.

■ **Custer, S.D.**—The Custer Parkway, a 1.25 mile trail of crushed limestone in Custer, S.D., was completed in 1992 with assistance from a \$22,030 LWCF grant. The project was the first completed section of the George S. Mickelson Trail, which runs 110 miles through the Black Hills. Hikers, bicyclists, horseback riders, cross-country skiers and snowmobilers use the trail.

(See Appendix 2 for a state-by-state summary of state grants.)

GROWING DEMAND FOR LAND CONSERVATION

While the nation has made great strides in building a solid recreation infrastructure on the local, state and national level, population and development trends threaten to overwhelm that progress. The population of the United States has jumped 41 percent since LWCF was enacted, from 194.3 million to 274.4 million. California, which had 18.6 million residents in 1965, has grown 78 percent to 33.1 million. Florida, which had just under 6 million residents 35 years ago, now has more than 15.1 million, a 154 percent jump. The number of Coloradans has increased 104%. Texas has nearly doubled its population from 10.4 million to 20 million residents. And in Nevada, which was one of the most sparsely populated states in the country 35 years ago with 444,000 residents, a population boom of 307 percent has boosted its population to 1.8 million in 2000.



But population increases alone, no matter how impressive, tell only part of the story. Americans' thirst for developing land seems unquenchable. Texas and Georgia each developed more than 1 million acres between 1992

and 1997. In Texas alone, an average of 668 acres of land were developed every day from 1992 to 1997, according to the 1997 National Resources Inventory (www.nhq.nrcs.usda.gov/NRI) released by the USDA's Natural Resources Conservation Service in December 1999.

Development rates in other states, particularly smaller states in the East, which don't possess the land mass that Texas does, are even more alarming. New Jersey, the most developed state in the country in 1982 with 27.7 percent of its land developed, went on to develop another 581,800 acres by 1997. It now has developed 40.8 percent of the state, well ahead of Massachusetts (31.9 percent), and Rhode Island (31.1 percent). What these numbers don't express is that the land that is being developed is prime land outside metropolitan areas, including some of the best farmland the country possesses.

Atlanta, Ga., provides a good example of what this sprawling development pattern means on the ground. Every week, 500 acres of green space, forest and farmland in the Atlanta area give way to build parking lots, shopping malls and housing subdivisions. The city's urban land area expanded 47 percent between 1990 to 1996, following a 25-percent expansion between 1980 and 1990, according to the Sierra Club's 1998 Sprawl Report (www.sierra-club.org). The group called Atlanta the most sprawl-threatened major city in the country.

The report cited Orlando, Fla., as the most sprawl-threatened medium-sized city in the United States. The population of metropolitan Orlando jumped 54 percent between 1980 and 1990, and another 28 percent between 1990 and 1996. The land area of Orlando also has ballooned over the years: 68 percent between 1990 and 1996 alone. Between 1982 and 1992, the amount of open space lost to development

in the Orlando metro area increased 57 percent.

McAllen, Texas, was identified as the most sprawl-threatened small city in the country. The city's urbanized land area has doubled twice since 1980. The region's metropolitan-area population surged over 65 percent between 1980 and 1990 and saw another burst of about 40 percent between 1990 and 1996. The density of metropolitan McAllen, on the other hand, dropped sharply (30 percent) from 2,842 persons per square mile in 1990 to 1,967 persons per square mile in 1996. Driving distances have increased by 30 percent in just six years.

As urban areas spread out, surrounding open space disappears. Population densities drop. More people spend more time in their cars to



reach jobs, schools and shopping malls far away from their homes. The urban area of Ft. Lauderdale, Fla., spread by 44 percent between 1982-92, with Riverside/San Bernardino, Calif. (37 percent), Atlanta (37 percent), Miami (36 percent) and Phoenix, Ariz., (35 percent) not

far behind. Atlantans lead all urban residents by driving 39 miles per day, followed by residents of Dallas (30 mpd), St. Louis (28 mpd), Kansas City (28 mpd) and Cincinnati (27 mpd). In terms of time wasted behind the wheel, residents of Riverside/San Bernardino logged the

most, at 75 hours per year. Residents of Washington, D.C., San Francisco/Oakland, Los Angeles and Houston all waste more than 60 hours a year stuck in traffic, according to the study.

SAVING LAND FROM SPRAWL

Sprawl hasn't become a problem overnight. Cities, counties and states haven't stood still as prime recreation, park and farm land and open space have been gobbled up. In the last two years alone, the grass-roots reaction to the loss of open space has been dramatic—86 percent of 249 open space referenda around the country passed. Voters at the municipal, county and state levels agreed to spend more than \$9.2 billion on land conservation.

In November 1998, voters approved 124 of 148 (84 percent) state, county and municipal ballot questions that devoted \$5.3 billion to land preservation, according to the Land Trust Alliance (www.lta.org). Some examples:

- Residents of New Jersey agreed by a 2-to-1 margin to devote \$98 million a year for 30 years to preserve up to 1 million acres of farms, open space, recreation land and historic sites.
- In Minnesota, voters agreed by a 3-to-1 margin to steer another \$700 million of lottery proceeds into the state's Environment and Natural Resources Trust Fund.



- Arizonans agreed to spend \$220 million to buy and manage state trust lands for conservation.

While eight of 10 statewide ballot questions to protect open space were approved, the bulk of the action occurred at the county and municipal level, where 116 of 138 ballot questions were approved.

- In Jefferson County, Colo. voters overwhelmingly approved \$160 million in bonding authority to acquire open space.
- More than 50 counties and municipalities in New Jersey approved measures to provide local matches to the statewide effort to protect 1 million acres of farms, open space, recreation land and historic sites.
- On Long Island, N.Y., Suffolk County voters agreed by a 2-to-1 margin to approve \$62 million in bonds to create a "Community Greenways Fund" for parks, farmland and habitat preservation.
- In Fairfax County, Va., voters overwhelmingly approved \$20 million in bonds for acquisition of parks.
- On Cape Cod, Mass., all 15 towns approved property tax hikes to raise \$114 million over 20 years to create land acquisition banks in each town.
- Austin, Texas, voters agreed to spend \$36 million to acquire open space.

Voters were even more enthusiastic about land conservation in 1999, an off year for elections. Voters approved 91 of 101 (90 percent)

referenda that committed more than \$1.8 billion to acquire conservation land or easements. The dollar total actually is much higher because the \$1.8 billion figure doesn't include the amount generated by property tax increases that were permanent and therefore didn't have a set dollar figure.

A geographic sampling:

- In the only statewide vote last year, Maine residents approved a \$50 million bond issue to renew funding for the Land for Maine's Future Program.
- In Phoenix, voters approved a 1/10-cent sales tax increase for open space acquisition by an 80/20 margin, which will raise an impressive \$256 million.
- Glastonbury, Conn., residents by a 3-to-1 margin approved a \$3 million bond issue to acquire land and conservation easements.
- In Kane County, Illinois, residents voted by a 2-to-1 margin to approve a \$70 million bond issue to fund a new forest preserve district.
- In North Carolina, Mecklenburg County voters approved two bond issues totaling \$270 million for open space, greenways and park improvements.



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Last but not least, Californians on March 7, 2000, approved by nearly a 2-to-1 margin a \$2.1 billion parks bond issue, the largest ever and the first such bond in the state since 1988. The park bond issue provides funding for all the state agencies that protect land and recreational resources and makes grants to local agencies that perform the same functions. State parks will receive \$545 million. Grants to local agencies totaling \$827 million will be devoted to urban parks, trails and recreational facilities. Another \$266 million will be spent on wildlife conservation and \$220 million goes to five land conservancies.

California voters also approved a \$1.97 billion water bond issue by the same margin. It includes \$95 million for river parkway acquisition and restoration and \$70 million for acquisitions and easements for habitat and farmland in flood plains.

LIMITED FUNDING CREATES BACKLOG

The pressing open space needs that have stirred local and state governments into action now have reached the national level, after decades of neglect. Although Congress authorized a spending level of \$900 million a year for the Land and Water Conservation Fund, appropriations have never approached the authorized amount (Figure 2). As a result of this lack of appropriations, the Treasury Department estimates that it holds a paper “balance” for the

LWCF of about \$12 billion. The peak year for appropriations came more than two decades ago during the Carter administration, when Congress appropriated \$805 million in 1978. But in the last few years, Congress has recognized the mounting need for open space funding. For fiscal 1998, Congress appropriated \$969 million for land acquisition, including a \$699 million one-time allocation under the 1997 budget agreement.

Before the 1997 agreement, spending aver-

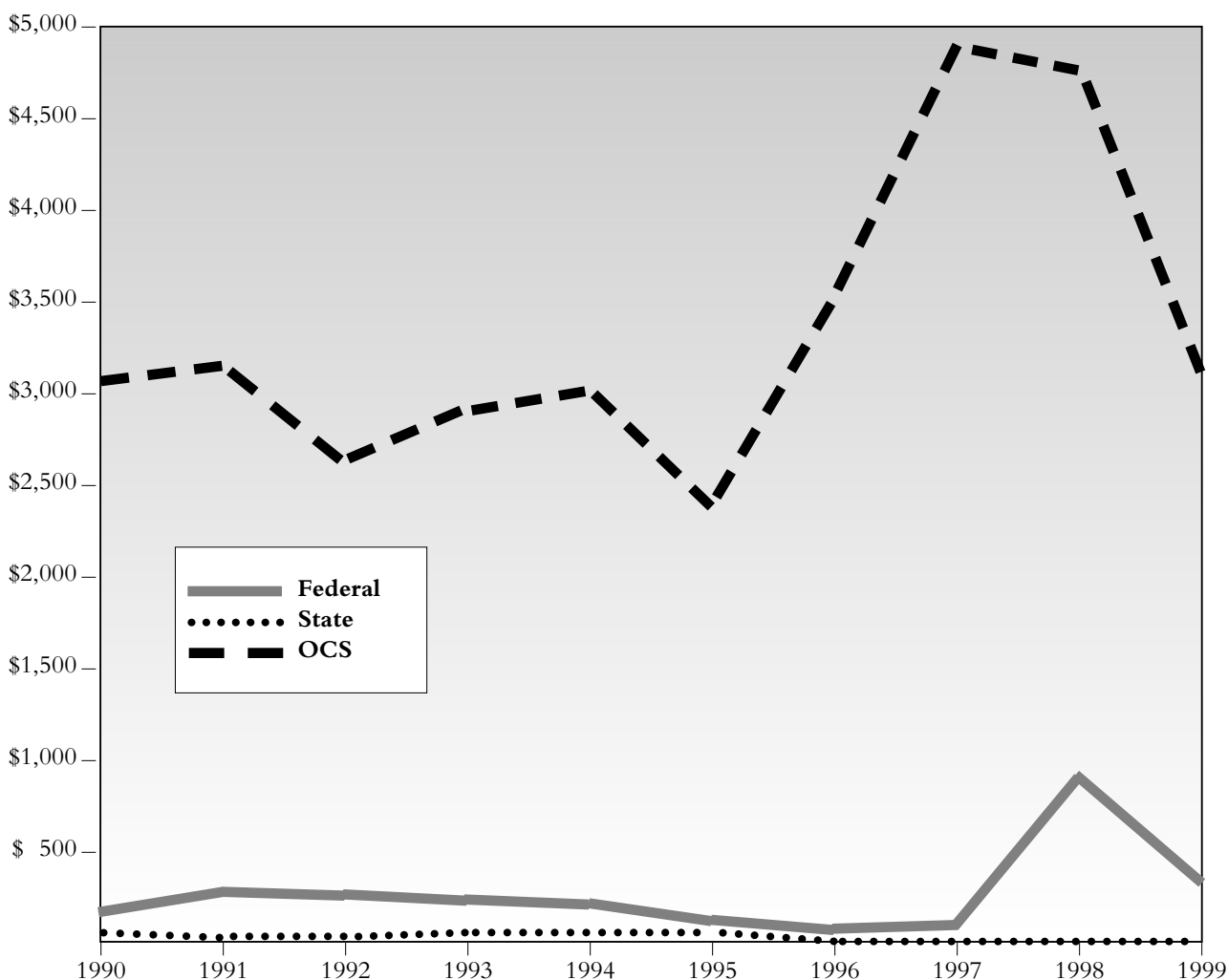


Figure 2. How Outer Continental Shelf (OCS) Receipts Compare to Federal and State LWCF Appropriations, 1990-1999 (in millions of dollars)

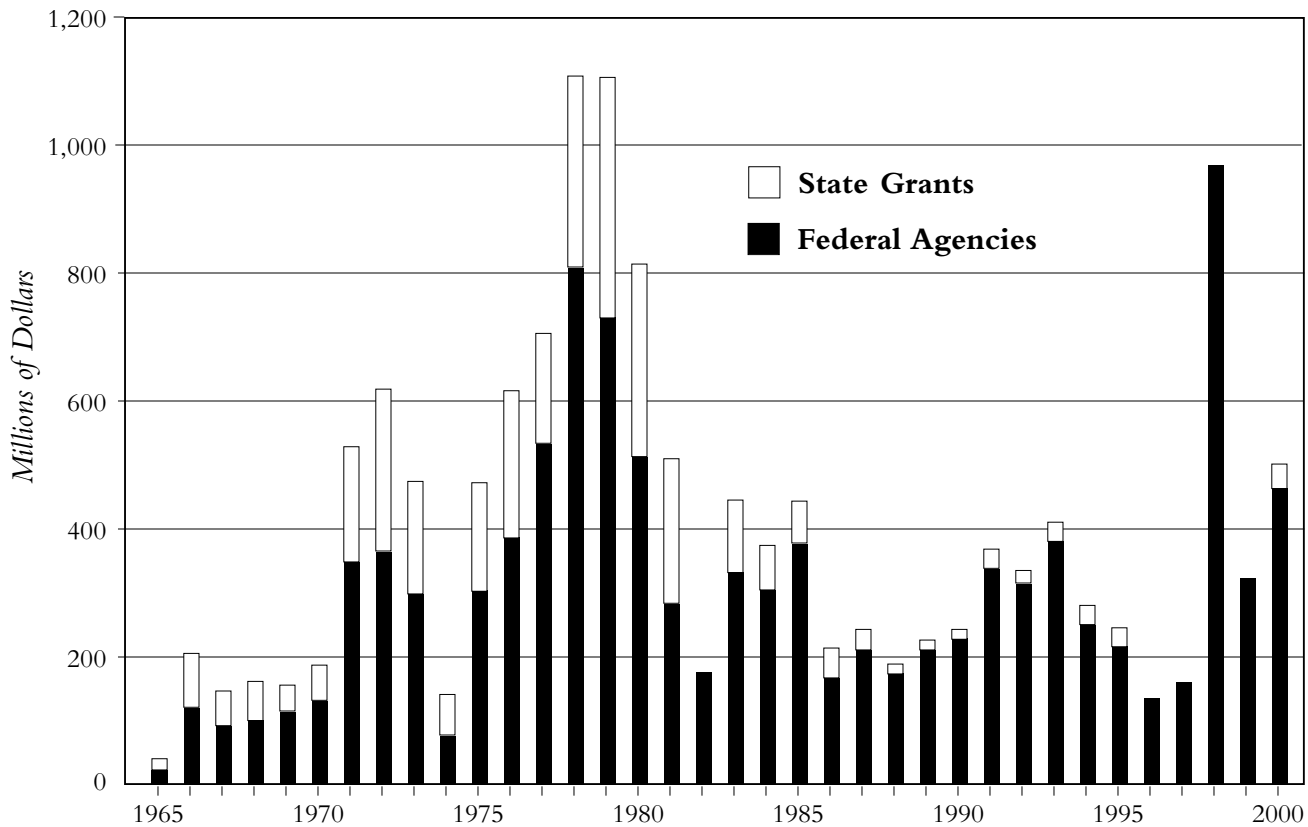


Figure 3. Land and Water Conservation Funding, Fiscal Years 1965-2000

aged well below \$300 million a year for most of the 1980s and 1990s. Funding for state grants, which peaked in 1979 at \$370 million, dried up completely by the mid-1990s. But after four years of zero funding for state grants, Congress in fiscal 2000 revived the program with a \$40 million appropriation (Figure 3).

The state-side demand remains high, judging from the interest in 1995, the last year that state grants were awarded. States received 3,795 grant requests totalling \$614.8 million in 1995. They selected 495 projects for \$33.3 million in funding, meeting just 13 percent of demand in terms of grants and 5 percent of demand in terms of money.

A recent survey of 500 local park and recreation agencies found \$27.7 billion in capital needs for the 1995-99 period. And the \$40 million that Congress appropriated in state

grants for 2000 won't last long. State and local governments identified 1,600 projects totalling \$1.8 billion that would be submitted for state grant funding and the Urban Park and Recreation Recovery program, an urban park revitalization program that received \$2 million in 2000, according to the National Park and Recreation Association.

On the federal side, the Interior Department estimates that the overall backlog for acquisitions that await funding now exceeds \$10 billion. The Fish and Wildlife Service alone has a backlog of 165 approved projects totalling 3.95 million acres that requires \$3.1 billion in funding. Another 84 projects under a separate Migratory Bird Conservation Fund program total 4.4 million acres with a price tag of \$1.6 billion.

MORE PEOPLE MEANS MORE PRESSURE ON LAND

When Americans wonder why there are so many cars around or why they wait in long lines, it's helpful to take a moment to comprehend how the population of the United States has grown. This year, the population will reach 275 million. In 1968, during the height of the Vietnam War, there were just 200 million Americans. We've been adding 25 million new people every decade since then. The U.S. Census Bureau predicts the United States will be home to 300 million people in 2010, 325 million in 2020 and 350 million in 2030. By 2025, California is expected to have 49 million residents. Texas will have 27 million. Florida will be home to 21 million people. The population of just those three states in 2025 will equal the total U.S. population in 1915. The eight most populous states in 2025 (the big three plus New York, Illinois, Pennsylvania, Ohio and Michigan) will be home to 165 million people, as many as the entire country held in 1955.

These people will need homes, schools and places to work and shop, and more roads too. The American Housing Survey, conducted

every two years by the U.S. Census Bureau, estimated there were 99.5 million housing units in the U.S. in 1997. Assuming 2.26 people per household, 30 million housing units will need to be built by 2025 to accommodate the expected population increase. If past trends hold, most of these homes will impinge on open space along the outer rim of suburbs and in rural areas. Between 1993 and 1997, two-thirds of the 4.8 million new homes were built in suburban or rural areas. The number of suburban and rural homes grew by 6.3 percent between 1993–97 while central city housing grew by just 2.3 percent.

The U.S. Department of Education predicts that the Western states alone will have 12.3 million public school students in 2008, up 1 million from 2000. Using the national average school size of 527 students per school, 1,898 more schools will be needed to accommodate these children. Add to these homes and schools, the workplaces, fast-food restaurants and shopping malls the population will demand and one can see why open space remains at risk.

The demographics of the Mountain West provide a unique perspective on the problems of sprawl and open space. In 1965, escaping to the desert Southwest or Rocky Mountain states was little more than an idle dream for most Americans. Since then hundreds of thousands of people have fled urban congestion in other parts of the country and settled everywhere from Montana and Idaho down the Rockies to Arizona and New Mexico. Cities such as Tucson, Phoenix, Salt Lake City and Boise have found that their fabled, wide-open spaces are dwindling as problems with traffic and air quality have increased. Mountain state governors and legislators are taking notice and devising plans to preserve their open spaces while achieving more orderly growth.



DEMAND FOR RECREATION ISN'T LETTING UP

As the population increases and Americans continue to enjoy a comfortable lifestyle, there is no sign that demand for recreation will let up. In fact, just the opposite is true. As the population of the U.S. jumped 41 percent between 1965 and 2000, visitation to units of the National Park System skyrocketed by 134 percent, from 121.3 million visitors in 1965 to an estimated 284.1 million in 1999.

In 1946, the year after World War II ended, 21 million people visited national parks. In 1999, Grand Canyon National Park alone attracted 4.6 million people, up 171 percent since 1965. Nearly 3.5 million people visited Yosemite NP in 1999, up 114 percent from 1965. Yellowstone had 1 million more visitors last year than in 1980. More than 2.6 million people visited Acadia NP in Maine last year, twice the state's population.

Demand for recreation on federal land does not begin and end at the National Park System's 378 units. The Forest Service recorded more than 729 million visits at the nation's national forests and grasslands. In terms of visitor days (one visitor spending 12 hours at a national forest), visitors spent more than 160 million days at national forests in 1965 and 341 million by 1996, a 113 percent jump since the LWCF Act was enacted. Forest Service planners are expecting a 64 percent jump in visits by 2045, to 1.194 billion visits a year.

The Fish and Wildlife Service, which manages more than 500 wildlife refuges, drew 34.9 million visitors, up 26 percent in just four years. The trend in the last five years, (up 2 million a year) contrasts with visitation in the 1970s and 1980s, when estimated visitation at the refuges hovered just above 20 million.

Visits to the recreation facilities at Bureau of Reclamation sites in the West have doubled



since the LWCF Act was enacted. In 1966, BuRec recorded 44.9 million visits. Last year, 90 million people visited. The agency sees no letup is sight.

Although the arrival of computers and the Internet have dramatically altered how Americans work and play, the outdoors still holds its allure. According to the latest National Survey on Recreation and the Environment (NSRE), conducted by the Forest Service in 1994–95, walking is the most popular outdoor recreational activity, with 133.7 million participants. While walking increased 43 percent in popularity from 1982–83, bird watching jumped 155 percent, from 21.2 million participants to 54.1 million. Hiking jumped 93 percent to 47.8 million, and backpacking, camping in primitive areas and attending an outdoor play or concert all registered greater than 50 percent gains over the 1982–83 survey. After walking, sight-seeing (113.4 million), picnicking (98.3 million), attending a sporting event (95.2 million) and swimming in a pool (88.5 million) were the most popular outdoor activities.

WHY PROTECT MORE LAND?

Open space plays a much more complex role today in the United States than it did thirty-five years ago. When Congress debated whether to create a Land and Water Conservation Fund in 1964, the discussion focused on recreation: how to acquire land and develop facilities to meet rising demand for recreational opportunities. As the new century dawns, parks, open space, greenways and trails make great contributions to modern American society by continuing to meet growing recreational demand, but also by preserving land and water habitat for plants and animals, shaping and directing growth, reducing flood damage, preserving irreplaceable farm and forest land and protecting historical and cultural areas.

It is important to remember that Congress created the Land and Water Conservation Fund before some of the nation's key environmental laws took shape—the Clean Air Act of 1970, the Federal Water Pollution Control Act of 1972 (Clean Water Act) and the Endangered Species Act of 1973. The Land and Water Conservation Fund now plays numerous unintended

yet vitally important roles under all three environmental laws. A few examples: Forests act as carbon sinks and remove carbon dioxide from the air, which in turn helps to combat global warming. Wetlands and vegetative buffers along waterways filter out numerous pollutants from water, saving cities money they would have spent on facilities to remove pollutants from their drinking and waste water. Wetlands act like huge water storage facilities during floods and help allay flood damage. They also provide habitat for countless numbers of plants and animals, some of which are endangered and others that are on the verge.

As scientific knowledge of plants and animal has expanded, biologists have become more aware about how critical specific habitats are for their existence. Since 1965, conservationists have expanded their focus from acquiring bits and pieces of land on an ad hoc basis to preserving riparian corridors and other larger habitat systems, such as elk corridors or seasonal wetlands that are essential for migratory waterfowl. These roles that open space preservation now play were largely outside the debate over the Land and Water Conservation Fund that Congress held 35 years ago.

In the 1990s, still another role for open space has emerged. Protecting open space strikes to the core of what Americans now consider their quality of life. Ninety percent of respondents to a national poll conducted in 1999 by Frank Luntz said that “open spaces make our communities more livable” and 85 percent agreed that “parks and open spaces contribute to the property values and economic stability of neighborhoods.”



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ECONOMIC BENEFITS OF PRESERVING LAND

As the role of open space in modern society has expanded, so has its “worth,” as measured in economic terms. Preserving greenways, trails, parks and open space:

■ **Increases property values:** Many studies have shown that parks and greenways increases adjacent property values. One study found that the average value of homes in Boulder, Colo., next to greenbelts was 32 percent higher than houses 3,200 feet away. Clustered homes in Amherst, Mass., appreciated faster than homes in a more conventional subdivisions even though the conventional subdivisions had considerably larger lot sizes, according to another study.

■ **Stimulates spending by local residents:** Spending by local residents on park and greenway-related activities helps support recreation-oriented businesses and employment, as well as other businesses that are patronized by greenway and trail users. Based on retail sales, if fishing, wildlife watching and hunting were private corporations, they would have ranked 18th (\$37.7 billion), 23rd (\$29.2 billion) and 36th (\$22.1 billion), respectively, on the 1996 Fortune 500 list, according to a report by the Izaak Walton League of America.

■ **Increases tourism:** Parks, greenways and trails often are major tourist attractions that generate expenditures on lodging, food and recreation-oriented services. They also improve the overall appeal of a community to prospective tourists and new residents. In 1996, nearly 77 million Americans 16 years old and older participated in fishing, hunting, and wildlife observation, feeding and photography, according to the Fish and Wildlife Service. This repre-

sents 38 percent of the U.S. population 16 years old and older. They spent over \$100 billion on their activities.

■ **Attracts corporations:** Evidence shows that the quality of life of a community is an increasingly important factor in corporate relocation decisions. Corporate CEOs said that quality of life for employees was the third most important factor in locating a business, behind only access to domestic markets and availability of skilled labor, according to one survey. More than 80 percent of the 450 members of the Sierra Business Council in California and Nevada cited the region’s high quality of life, e.g., the area’s rural landscape and quality wildlands, as a significant advantage of doing business in the region.

■ **Brings in government spending:** The agency responsible for managing a river, trail or greenway can help support local businesses by purchasing supplies and services. Jobs created by the managing agency also may help increase local employment.

To quantify the economic benefits of national parks on local economies, the National Park Service developed a “Money Generation Model.” In 1993, the 273 million visitors to national parks created more than \$10 billion in direct and indirect expenditures, which generated more than 200,000 jobs. The agency’s operating budget was \$1 billion in 1993, bringing taxpayers a 10-to-1 return on their investment.

- Visitors at Yellowstone National Park produced more than \$725 million in expenditures, creating 16,163 jobs.
- At Fort McHenry National Monument and Historic Shrine, visitors spent more than \$11 million and created 227 jobs in Baltimore.



- Visitors at Big Bend National Park along the Texas-Mexico border produced \$76 million in expenditures and created 1,674 jobs for the local economies.
- In Washington, D.C., the Frederick Douglass National Historic Site attracted visitors who spent more than \$1 million and created 24 jobs.

■ **Reduces public costs:** The conservation of rivers, trails and greenways can help local governments and other public agencies reduce costs from flooding and other natural hazards. Tree loss in the Baltimore-Washington, D.C., urban corridor between 1973 and 1997 resulted in a 19 percent increase in runoff from major storms, according to an American Forests study. Replacing the lost stormwater retention capacity would cost \$1.08 billion. The lost trees also would have removed 9.3 million pounds of air pollutants annually at a value of \$24 million.

Open space saves local governments money in another way. Owners of farm, forest and open land pay more in local tax revenue than it costs local governments to provide services to their properties, according to a report by the

American Farmland Trust that reviewed more than 70 studies (www.farmlandinfo.org/fic/tas/tafs-cocs.html) conducted over the past decade. On average, AFT found that farm and forest land cost local governments 37 cents for every dollar received from the landowners. Residential development costs local governments \$1.15 for every dollar collected in taxes.

In an analysis of USDA statistics, AFT found that between 1982 and 1992, every state lost some of its high-quality farmland to urban development. Nearly 80 percent of the country's production of fruit, 69 percent of the vegetables, 52 percent of the dairy products, 28

percent of the meat and 27 percent of the grain are being produced on high-quality farmland threatened by development.

Texas lost more quality farmland than any other state (489,000 acres), accounting for 11.5 percent of the total loss in the United States. Other leading states with farmland lost to urban development were North Carolina, Ohio, Georgia, Louisiana, Florida, Illinois, Tennessee, Indiana and California.

Open space also helps revitalize cities, attract investment, prevent flood damage and safeguard the environment. "The Economic Benefits of Parks and Open Space," a report by the Trust for Public Land (www.tpl.org) detailed examples where open space plays a vital role in the economic and social and environmental health of the area.

Among its findings:

- Rank of open space/parks/recreation among factors used by small businesses in choosing a new business location: 1
- Estimated annual value of open space to the economy of New Hampshire: \$8 billion
- Approximate fraction of the state's total economy this amount represents: 25 percent

- Percentage of Denver residents who in 1980 said they would pay more to live near a greenbelt or park: 16.
- Percentage who said so in 1990: 48.
- Estimated gross increase in residential property value resulting from proximity to San Francisco's Golden Gate Park: \$500 million to \$1 billion.
- Increased property taxes resulting from this value: \$5–\$10 million.
- Estimated cost to New York City to buy watershed lands to protect upstate drinking water supplies: \$1.5 billion.
- Estimated cost to New York City to build a filtration plant if upstate watershed lands are developed: \$6 billion to \$8 billion.

Last but not least, open space and the recreational opportunities it affords also promote healthy lifestyles. State grants from the Land and Water Conservation Fund have helped build 5,000 baseball, soccer and other athletic fields across the country. And the Centers for Disease Control and Prevention reported last year that more than half the adults in the United States are overweight and 22 percent are obese. Among the factors that are contributing to the explosion in obesity: neighborhoods lack sidewalks and walking or bicycling has been replaced by automobile travel for all but the shortest distances.

A RENEWED LAND AND WATER CONSERVATION FUND

“There is value in any experience that reminds us of our dependency on the soil-plant-animal food chain, and of the fundamental organization of the biota. Civilization has so cluttered this elemental man-earth relation with gadgets and middlemen that awareness of it is growing dim. We fancy that industry supports us, forgetting what supports industry.”

—Aldo Leopold,
from “Wildlife in American Culture,”
first published in 1953 as part of the Round River essays.

At the heart of the argument favoring the preservation of America’s open space, left unsaid until now, lies its power to stir the soul and reawaken a childlike fascination with the natural world. Aldo Leopold awoke early one morning more than 50 years ago and gave us his impressions of a pre-dawn marsh: “To arrive too early in the marsh is an adventure in pure listening; the ear roams at will among the noises of the night, without let or hindrance from hand or eye. When you hear a mallard being audibly enthusiastic about his soup, you are free to picture a score guzzling among the duckweeds. When one widgeon squeals, you may postulate a squadron without fear of visual contradiction. And when a flock of bluebills, pitching pondward, tears the dark sill of heaven in one long rending nose-dive, you catch your breath at the sound, but there is nothing to see except stars.”

The preservation of marshes, parkland and open space don’t happen by chance. Imagine the foresight it took to create Central Park in New York City in the 1850s. Or Yellowstone National Park in 1872. Or the urban parks that dot the historic district of Savannah, Ga. It’s an understatement to say that Central Park couldn’t be built on Manhattan today. Once land is developed, it’s gone for good. Every American

can remember a special place from childhood that’s now developed and unrecognizable. It only exists as a memory. Special places exist today that need to be preserved before they too become just memories. “Public acquisition costs can become multiplied and even prohibitive with the passage of time,” President Kennedy said in 1963. How right he was.

Despite great efforts in the 19th and 20 centuries to preserve land in the United States, the protection of open space is not complete; and as long as population growth pushes development farther out from urban cores, it never will be. New neighborhoods need new parks. High-quality farmland needs protection. As long as scientific knowledge of the inner workings of complex ecosystems expands, the need for open space will expand as well. Witness the recent explosion of knowledge about the vital role that wetlands, once thought of as worthless “swamps” good only as landfills, play in the web of life.

Just as there is a competition for land to be developed, there are competing interests in selecting which lands should—and shouldn’t—be set aside for parks, greenways, trails, and fish and wildlife habitat. As development impinges on green space, planners and elected officials not only must decide where parks and green-

ways should be located, but what fish and wildlife habitat and wetlands are “worth” preserving.

The time is ripe for a much more systematic approach to open space preservation. Much of the land preservation that has taken place in this country has been piecemeal, not landscape-level. More cities and counties are rising to the task by developing well thought out, comprehensive open space plans. Communities that plan the future of their gray infrastructure (e.g., roads, sewers and utilities) increasingly are devoting the same thoughtful approach to their green infrastructure—the network of open space, woodlands, wildlife

habitat, parks and other natural areas that sustain clean air, water and natural resources, and enrich the quality of life of their residents. These networks of ecological areas, working landscapes and outdoor recreation areas and trails are being created at different scales, from the “greenprint” that Pittsford, N.Y., (pop. 25,000) developed to protect 2,000 acres of remaining open space, to Florida’s statewide greenways plan, which combines an ecological network of natural hubs, linkages, river corridors and coastlines with a recreational trail system connecting parks, cities and cultural sites.

Developing these comprehensive plans, especially ones that cross jurisdictional boundaries,



is a great challenge. But the success in Southern California in developing habitat conservation plans for hundreds of thousands of acres to protect endangered species and keep other plants and animals from becoming endangered shows that such large-scale open space planning is an achievable goal, especially so when adequate funding is available. We can grow without destroying the places we love. Progress does not demand degraded surroundings. We need to spend more time planning and creating the kind of places we all admire. A reinvigorated Land and Water Conservation Fund would play a key role in meeting the expanding open space needs of the new century.

APPENDIX 1

The Land and Water Conservation Fund has provided more than \$7 billion to acquire new federal recreation lands. Below are a few of the areas added to national park, forest, wildlife refuge, river and trail systems in the last 35 years, for which all or a major part of some land purchases were funded by the federal side of the LWCF. The Fund also has helped expand existing areas through acquisition of key recreation and conservation sites in almost every national forest and wildlife refuge east of the Rocky Mountains.

- Cape Cod National Seashore, Mass.
- Flaming Gorge National Recreation Area, Utah, Wyo. (U.S. Forest Service)
- Ozark National Scenic Riverway, Mo.
- Padre Islands National Seashore, Texas
- Point Reyes National Seashore, Calif.
- Assateague Island National Seashore, Maryland
- Sawtooth National Recreation Area, Idaho (U.S. Forest Service)
- Cape Lookout National Seashore, N.C.
- Gulf Islands National Seashore, Texas
- North Cascades National Park, Wash.
- Oregon Dunes National Recreation Area, Ore. (U.S. Forest Service)
- Indiana Dunes National Lakeshore, Ind. (Lake Michigan)
- Pictured Rocks National Lakeshore, Mich. (Lake Superior)
- Redwoods National Park, Calif.
- Lower Rio Grande Valley National Wildlife Refuge, Texas (U.S. Fish and Service)
- Sleeping Bear Dunes National Lakeshore, Mich. (Lake Michigan)
- Apostle Islands National Lakeshore, Wis. (Lake Superior)
- St. Croix and Lower St. Croix Nat. Scenic Rivers, Minn., Wis.
- Rio Grande Wild and Scenic River, Texas
- Appalachian National Scenic Trail, Maine to Ga.
- Biscayne National Monument (now National Park), Fla.
- C&O Canal Nat. Historical Park, D.C., Md. and W.Va.
- Voyageurs National Park, Minn.
- Cumberland Island National Seashore, Ga.
- Buffalo National River, Ark.
- Big Cypress National Preserve, Fla.
- Lower Suwannee National Wildlife Refuge, Fla. (U.S. Fish and Wildlife Service)
- Big Thicket National Preserve, Texas
- Big South Fork National River, Ky., Tenn.
- Cuyahoga Valley National Recreation Area, Ohio
- Chickasaw National Recreation Area, Okla.
- Atchafalaya National Wildlife Refuge, La. (U.S. Fish and Wildlife Service)
- Obed Wild & Scenic River, Tenn.
- Canaveral National Seashore, Fla.
- Congaree Swamp National Monument, S.C.
- Lowell National Historic Park, Mass.

- Pinelands National Reserve, N.J.
- Delaware National Scenic River, Pa., N.J.
- Chattahoochee River National Recreation Area, Ga.
- Missouri National Recreational River, Nebraska, S.D.
- Jean Lafitte National Historic Park and Reserve, Louisiana
- Santa Monica Mountains National Recreation Area, Calif.
- New River Gorge National River, W.Va.
- Minnesota Valley National Wildlife Refuge, Minn. (U.S. Fish and Wildlife Service)
- Martin Luther King, Jr. National Historic Site, Ga.
- Natchez Trace National Scenic Trail, Tenn.
- Mississippi National River and Recreation Area, Minn.
- Steamtown National Historic Park, Pa.
- Bluestone National Scenic River, W.Va.
- Petroglyph National Monument, N.M.

Source: National Park Service

APPENDIX 2

State-by-State History of LWCF State Grants (1965–95)

	1965-95 Total Funding
ALABAMA	
Model Projects:	
Gulf State Park —A 1973 grant of \$120,369 helped acquire this 6,150-acre park, which offers visitors 2.5 miles of white sand beaches. Facilities include a marina, trailer/camper sites, picnic sites, golf course, tennis courts and nature trails.	\$52,993,043
Lagoon Park —A 1974 grant helped Montgomery acquire 135 acres of land in a blighted area of the city to build a park. Further LWCF grants helped leverage other investments that have built a ballfield complex, tennis courts, a picnic area, public fishing lakes, a nature trail, bicycling trails and a golf course.	
ALASKA	
Model Projects:	
Chester Creek Greenbelt —Grants totaling \$861,026 helped acquire 65 acres of Anchorage’s Chester Creek Greenbelt, which crosses the city. An additional \$411,591 in LWCF assistance helped provide access points, picnic areas, paved trails, fishing facilities and other recreation.	\$28,134,468
Chilkat Bald Eagle Preserve and Chilkat State Park —More than 330 acres were added to the Chilkat Bald Eagle Preserve with \$75,000 in LWCF assistance in 1975. This 49,320-acre site near Haines provides bald eagle habitat and world-renowned wildlife viewing opportunities. The adjacent Chilkat State Park received an additional \$2.337 million in LWCF assistance.	
ARIZONA	
Model Projects:	
Catalina State Park —LWCF was used to assist in the acquisition of this 5,500-acre park north of Tucson. This high-desert park hosts an array of desert plants and wildlife in the foothills, canyons and streams at the base of the Santa Catalina Mountains. Miles of equestrian, birding, and hiking trails wind through the park and the Coronado National Forest.	\$46,289,424
Phoenix — The city has used 30 LWCF grants to acquire land for 30 community parks.	
ARKANSAS	
Model Projects:	
Village Creek State Park —A \$671,000 LWCF grant helped acquire more than 7,000 acres to create the Village Creek State Park. Visitors hike five trails to explore the unique geology of Crowley’s Ridge and enjoy the park’s lush forest of oak, sugar maple, beech, butternut and tulip poplar trees.	\$40,452,119
Beaver Lake State Park —A \$1.3 million LWCF grant helped acquire the 11,646-acre Hobbs State Management Area, which offers limited outdoor recreation and nature study, and access to the undeveloped 28,000-acre Beaver Lake. The area includes three trails with 11 miles of hiking and five remote, primitive campsites.	
CALIFORNIA	
Model Projects:	
Point Dume State Beach —A 1979 grant of \$2.47 million helped acquire a 33-acre section of Point Dume State Beach west of Santa Monica that features headlands, cliffs, secluded coves and tide pools. The beach headlands provides views of migrating California gray whales between November and May.	\$233,257,245
Kenneth Hahn Recreation Area —Site of the 1932 Olympiad, 158 acres of this 370-site was acquired by Los Angeles County in 1979 with a \$1.8 million grant from the LWCF. A subsequent grant helped develop trails, a lake and other facilities. Activities include hiking, fishing, group and family picnicking and play areas.	

COLORADO

Model Projects:

Castlewood Canyon State Park—LWCF grants totaling \$1.5 million helped the state acquire land in a key state park and develop basic visitor facilities at Castlewood Canyon outside of Denver. The canyon is a deep slash in an otherwise flat to gently rolling prairie environment that gives visitors scenic vistas, trails and nature areas. \$48,761,804

Barr Lake State Park— Seven grants were awarded through the LWCF state grant program to acquire 2,536 acres and develop facilities at Barr Lake north of Denver. Bird watchers can spot over 300 species of birds in the park, which is home to the Colorado Bird Observatory and an important Colorado wildlife refuge. Visitors can also enjoy fishing, sailing, and canoeing.

CONNECTICUT

Model Projects:

Bluff Point Coastal Reserve—A \$2.6 million grant in 1974 tripled the size of this significant State natural and recreation resource. A 100-acre tidal salt marsh, inland impoundments and upland forest offer excellent hiking and nature study opportunities. \$53,573,244

Blackledge Riverfront Acquisition—Glastonbury used a \$325,000 grant to acquire 79 acres along the Blackledge River that includes a 6.5 acre pond, 30-foot waterfall, wetlands and heavily wooded areas. Park users enjoy hiking, fishing, boating, and swimming.

DISTRICT OF COLUMBIA

Model Project:

Walter Pierce Park—One of the few remaining open spaces available in the Columbia Heights, Lanier Heights, and Mt. Pleasant communities was purchased with a \$995,000 grant. The park was developed into an outdoor recreational facility serving city residents. \$13,371,387

DELAWARE

Model Projects:

White Clay Creek State Park—With seven grants totaling \$1.1 million, the park, which was created in 1968 when the state bought 24 acres, has grown to almost 2,500 scenic acres in the continuing effort to preserve and protect the natural resources of the valley. \$30,077,014

Lums Pond State Park—The park, created in 1963, has used \$2.5 million in grants to acquire and develop 1,757 acres, which feature excellent fishing, sports facilities and hiking trails on the north side of the Chesapeake and Delaware Canal.

FLORIDA

Model Projects:

Wekiwa Springs State Park—A 1969 grant of \$1.3 million helped acquire this 7,000-acre park, which offers abundant recreational opportunities and a chance to see how areas of central Florida looked when the Timucuan Indians speared fish in the spring-fed creeks and stalked the uplands. \$99,947,762

St. George Island State Park—Nine miles of undeveloped beaches and dunes, surrounded by the Gulf of Mexico and Apalachicola Bay provide the perfect setting for this 1,962 acre park, which was acquired with LWCF assistance in 1975.

GEORGIA

Model Projects:

Pigeon Mountain Wildlife Management Area—A \$1.7 million grant in 1974 helped acquire 10,000 acres of the 14,000-acre site. Recreational opportunities include hunting, wildlife viewing, hiking, fishing and camping. \$66,589,549

Sweet Water Creek State Park—A \$1.4 million grant acquired 1,400 acres of the 1,900-acre park. Located minutes from downtown Atlanta, it features natural and cultural resources, including the ruins of the New Manchester Manufacturing Company, a Civil War era textile mill.

HAWAII

Model Projects:

Malaekahana State Recreation Area—Two-thirds of the 110-acre recreation area on Oahu was acquired with a \$5.2 million grant. The wooded beach park offers swimming, bodysurfing, beach-related activities and shore fishing. \$31,677,422

James Kealoha and Leleiwi Beach Parks—Hawaii County acquired 4.8-acre and 5.57-acre additions to Kealoha Leleiwi Beach Parks located near Hilo with \$1.25 million in LWCF assistance.

IDAHO

Model Projects:

Boise River Greenbelt—Nearly \$1 million in acquisition and development grants have added 193 acres to the Boise River Greenbelt, which provides 25 miles of uninterrupted pedestrian/bicycle pathway along the Boise River in the state's capital. \$32,063,540

Prince Property—A 1977 grant of \$938,115 helped acquire more than 11,527 acres in the Hells Canyon area south of Lewiston. Retained in its natural state, this large parcel of land provides prime deer and elk habitat and excellent wildlife viewing opportunities from the Snake River.

ILLINOIS

Model Projects:

Illinois Beach State Park—A \$5.5 million grant helped the state acquire the 4,160-acre state park, which provides 6.5 miles of sandy shoreline along Lake Michigan. Protected is the only remaining beach ridge shoreline left in Illinois, which provides habitat for 650 plant species. \$133,345,240

Spring Lake Preserve—A \$1.7 million grant helped acquire Spring Lake Preserve by the Cook County Forest Preserve District. The natural beauty of the acquired lands within the Chicago metropolitan area will be preserved, restored, and protected in as close to their natural state and condition as possible for the purpose of education and recreation of the public.

INDIANA

Model Projects:

Harrison-Crawford State Forest—Grants totaling \$689,300 helped acquire and develop a 1,500-acre addition to the 26,000-acre state forest in 1973. Facilities include 45 miles of hiking and 80 miles of horse trails, along with opportunities to boat, canoe and fish. \$70,511,212

Harmonie State Park—In 1965, one of the first LWCF grants provided \$1.1 million to assist in the acquisition and development of 3,700 acres for the creation of Harmonie State Park. The park offers diverse trail opportunities for walking, biking and horseback riding.

IOWA

Model Projects:

Mines of Spain State Park—A \$1.4 million grant helped acquire the 1,380-acre recreation area. Much of the area is rugged, wooded Mississippi River Bluffland, which includes burr oak trees that are over 250 years old. \$45,230,398

Lake Manawa State Park—Lake Manawa was formed during a flood in 1881 when the meandering of the great Missouri River cut off a portion of the river channel. The 1,529-acre park, acquired with the help of a \$720,000 grant, includes a beautiful 660-acre natural lake.

KANSAS

Model Projects:

Chisholm Creek Park—Wichita used a \$375,000 grant to acquire one of its largest parks. \$41,960,386

Shawnee Mission Park—A \$560,000 grant helped Johnson County acquire an addition to Shawnee Mission Park in the Kansas City metropolitan area.

	1965-95 Total Funding
KENTUCKY	
Model Projects:	
Ohio County Park Acquisition and Development —The county acquired a reclaimed 154-acre strip mining site in 1977 through a grant of \$400,000. The seed money led to the development of ballfields, trails, a fort play structure and amphitheater over 20 years.	\$49,107,540
Kenton County Golf Course Acquisition —A 1972 grant of \$200,000 helped acquire 60 acres to build a 9-hole golf course. Through other LWCF grants, Kenton County has expanded the facility to a 54-hole golf course, making it the largest public golf course in the state.	
LOUISIANA	
Model Projects:	
Lake Caliborne State Park —Grants totaling \$526,000 helped acquire and develop the 620-acre park near the 6,400-acre Lake Claiborne. Recreational opportunities include swimming, fishing, hiking, boating, camping and picnicking.	\$59,883,288
Shreveport Riverfront Park —The 112-acre park was acquired with a \$182,324 grant in 1971 as part of a large linear riverfront park on the Red River in Shreveport. Biking and jogging trails extend from downtown Shreveport for 6 miles to Bickham Dixon Park.	
MAINE	
Model Projects:	
Allagash Wilderness Waterway —A \$1.45 million grant helped acquire 22,840 acres along the 92-mile waterway corridor, a canoe camper's paradise that connects large public reserved land units and is surrounded by a vast, privately-owned commercial forest.	\$32,160,341
Portland Riverfront —Portland used a \$56,000 grant in 1974 to help buy a prime 16.2-acre open space along the Presumpscot River. The acquisition connects existing facilities with Riverton Park, creating a continuous greenbelt along the river.	
MARYLAND	
Model Projects:	
Sandy Point State Park —Five grants totaling \$3 million have made the park one of the most beautiful and extensively used parks in the state. It offers a great view of the Chesapeake Bay Bridge, swimming beaches, marinas, trails, pavilions, picnicking and wildlife preserve.	\$ 66,215,752
Seneca State Park —Five grants totaling \$10 million have helped acquire and develop the 6,609-acre park, viewed as one of the crown jewels of Maryland's state park system. The beauty of the park, the lake, wildlife preserve and surrounding areas have made this a favorite place.	
MASSACHUSETTS	
Model Projects:	
Stoughton Conservation Area —The Stoughton Conservation Commission bought 310 acres with a \$214,615 grant in 1972 that connected existing town conservation and recreation land with the C.W. Welch Memorial Fish and Game Preserve.	\$81,788,244
Charles River Watershed —The acquisition of 222 acres with a \$462,338 grant in Needham preserved critical wetlands, open fields and stands of hard and softwood trees. It provides opportunities for hiking, cross-country skiing, horseback riding and picnicking.	
MICHIGAN	
Model Projects:	
Manistee-AuSable Rivers —Grants totaling \$4.5 million helped acquire 36,000 acres along 50 miles of the two rivers, which are nationally known for their excellent trout and canoeing waters and overall recreational opportunities.	\$109,485,872
Detroit Linked Riverfront Parks —Detroit received \$2.3 million in grants to acquire 32 acres along the Detroit River and develop Chene Park, Mt. Elliot Park and the St. Aubin Marina.	

MINNESOTA

Model Projects:

Fort Snelling State Park—Six LWCF grants helped acquire 898 acres and develop the historic park, the site of a fort that dates to the 1820s. The park offers swimming, hiking/biking and ski trails, fishing, picnicking and play areas. \$59,094,013

Minnesota Valley Trail and State Recreation Area— Five grants helped acquire 4,000 acres and develop support facilities at the recreation area, which runs 72 miles along the Minnesota River. The trail links Fort Snelling State Park to the Minnesota Valley National Wildlife Refuge.

MISSISSIPPI

Model Projects:

Ballard Park—A 1968 grant of \$125,455 acquired this 143-acre park in Tupelo. Subsequent grants helped develop recreational facilities, which include a lake, dam structure, walkways, picnic areas, large picnic pavilion and a playground area. \$38,578,812

Trace State Park—The 2,500-acre park was acquired with help from a 1969 grant of \$145,626. Subsequent LWCF development grants totaling \$603,000 helped develop tent camping, camping pads, boating, and fishing facilities at the park at this popular and heavily used park.

MISSOURI

Model Projects:

Castlewood State Park—Grants totaling \$957,000 helped acquire 1,700 acres along the Meramec River near Baldwin, providing superb canoeing and fishing opportunities less than 20 miles from downtown St. Louis. \$71,149,899

Little Blue Trace—Jackson County used a \$1.2 million grant to buy 1,400 acres along 25 miles of the Little Blue River. The greenbelt connects recreation areas within the Kansas City metro area, including the 2,000-acre Blue Springs Reservoir and the 5,000-acre Longview Reservoir.

MONTANA

Model Projects:

Beaverhead River—A \$391,000 grant helped acquire 440 acres on the Beaverhead River near Dillon. The land provides access to one of the country's premier trout fisheries. A number of spring-fed creeks and sloughs are also present. \$31,563,237

Mt. Haggin Recreation Area—A 1977 LWCF grant provided \$1.5 million to acquire 54,000 acres northwest of Butte. The property constituted one-half of the former Mt. Haggin Livestock Ranch. In a unique agreement, the U.S. Forest Service purchased the other half of the property.

NORTH CAROLINA

Model Projects:

Stone Mountain State Park—Grants totaling \$2.3 million helped acquire 5,422 acres of the 13,447-acre park in Allegheny and Wilkes County. One of the premier units of the state park system, the park contains significant biologic, geologic, scenic and archaeological resources. \$62,834,588

Dismal Swamp State Natural Area—In 1974, a \$1.179 million grant helped acquire 14,344 acres, which make up the Dismal Swamp State Natural Area in Camden County. The Dismal Swamp is the largest remaining swamp in the eastern United States.

NORTH DAKOTA

Model Projects:

Turtle Mountain State Forest—The Turtle Mountains are recognized as one of the state's prime recreation and scenic areas. The LWCF assisted in the acquisition of over 4,000 acres on the Canadian border for the creation of a recreational forest. \$28,836,430

Fort Abraham Lincoln State Park—Grants helped expand the park, the site from which Lt. Col. George Armstrong Custer and his cavalry rode on their expedition against the Sioux at Little Big Horn. Reconstructed earthlodges depict the lifestyle of the Mandan Indians, who occupied the site from 1575-1781.

NEBRASKA

Model Projects:

Platte River State Park—Nebraska lacked a major state park in the eastern third of the state, where three quarters of the population resides. A 1980 grant acquired park land between Lincoln and Omaha along the Platte River. The area is now one of state's most heavily used parks. \$37,376,406

Fort Robinson State Park—Grants totaling \$650,000 helped acquire the former James Ranch as an addition to the 25,000-acre Fort Robinson State Park. Crazy Horse, Walter Reed, Red Cloud, Arthur MacArthur, Dull Knife, General Crook and Doc Middleton are but a few of the colorful characters who played significant parts in carving Fort Robinson's place in western lore.

NEVADA

Model Projects:

Lake Tahoe State Park—Nevada used \$3.7 million in LWCF grants to acquire 3,000 acres and develop the new state park. Visitors enjoy sandy beaches, boat launching, picnicking, hiking, mountain biking, catch-and-release fishing, cross-country skiing and primitive camping. \$32,225,698

Washoe Lake State Park—Grants helped the state acquire and develop the 2,961-acre park on the shores of picturesque Washoe Lake between Carson City and Reno. Visitors enjoy bird watching, hiking, horseback riding, picnicking, windsurfing, water skiing and catamaran sailing.

NEW HAMPSHIRE

Model Projects:

Rand Pond—Goshen used a \$23,650 LWCF grant in 1995 to help purchase a one-acre lot on Rand Pond, the town's first recreation land. It is the only publicly accessible swimming beach on the 38-acre pond. The remainder is either in private ownership or posted for no swimming. \$30,512,313

Monandnock State Park—A \$212,000 grant aided in the acquisition of 289 acres of this state park. With its 5,000 acres of protected highlands, 3,165-foot Mt. Monadnock offers 40 miles trails and 100-mile views to points in all six New England states.

NEW JERSEY

Model Projects:

Wharton Tract Addition—A grant of \$1.2 million enabled the state to acquire 3,230 acres next to Wharton State Park. The acquisition protects the wild and scenic beauty of the Pine Barrens landscape in two of New Jersey's fastest urbanizing areas. \$101,393,271

Pompeston Creek Park—Moorestown used \$289,450 in grant money to acquire 70 acres along the Pompeston Creek for a linear park. The acquisition allowed for development of a trail system and bikeways. Visitors enjoy nature study, birding, hiking, fishing.

NEW MEXICO

Model Projects:

Volcano Park—LWCF grants in 1976 and 1977 provided Albuquerque with \$434,000 to help acquire 1,340 acres along the western edge of the city. The property contains three extinct volcano cones. \$33,889,808

Bond Ranch—As Albuquerque expanded westward, LWCF grants totaling \$320,000 helped acquire 622 acres of the Bond Ranch, the first phase of a 10-year project for the city to acquire all the 2,100-acre ranch, which would then define the western edge of the city.

NEW YORK

Model Projects:

Roberto Clemente State Park—Grants totaling \$3.5 million helped acquire and develop 51 acres in the Bronx for the first state park to be opened in New York City. Extremely popular with residents, the park features an Olympic-size pool, ballfields, an entertainment pavilion for live music and dance performances, and a waterfront promenade. \$199,477,143

Arden Point Acquisition—New York used a \$719,290 grant to acquire 35 acres in Philipstown along the Hudson River to protect the Hudson River peninsula and upland area. This property is in the heart of the Hudson Highlands and offers some spectacular views of the river corridor.

OHIO

Model Projects:

Sycamore State Park—A \$2 million grant assisted in the acquisition of 2,250 acres at Sycamore State Park. The Dayton area park offers an oasis within the midst of expansive western Ohio farmland. Through an extensive conservation effort, second growth forest is occurring. \$125,204,705

Quail Hollow State Park—Ohio used a \$1.7 million grant to help acquire 700 acres for a state park in densely populated northeast Ohio. It is devoted to the recreational study and appreciation of Ohio cultural and natural history. The Natural History Study Center is located there.

OKLAHOMA

Model Project:

Oklahoma City Youth Park—A \$1.4 million LWCF grant helped acquire a former sand and gravel surface mine in northwest Oklahoma City. The city reclaimed the mine and the park now offers hiking, biking, picnicking, swimming, playgrounds, soccer, softball and baseball. \$45,872,236

PENNSYLVANIA

Model Project:

Archbald Pothole State Park—A portion of the 150-acre park near Scranton was acquired and rehabilitated with a \$134,034 LWCF grant. Hiking trails are available on park grounds and over 100 acres are open to hunting in season. The park's name is derived from Archbald Pothole, a geologic feature formed during the Wisconsin Glacial Period 15,000 years ago. \$140,829,133

RHODE ISLAND

Model Projects:

Scarborough State Park—Rhode Island used a \$421,816 LWCF grant to acquire 12 acres and turned a private beach into a public beach and open space area. The heavily used beach in Narragansett has 800 feet of beachfront on the Atlantic Ocean. \$ 33,211,063

Rodman's Hollow II—Rhode Island and Shoreham used a \$460,031 grant to acquire 114 acres that provides one of Block Island's most spectacular vistas of the Atlantic Ocean. The tract is a wildlife preserve. Visitors can fish and hike the property.

SOUTH CAROLINA

Model Project:

Mountain Bridge Recreation and Wilderness Area—Grants totaling \$1.8 million matched by \$3 million in state funding and private donations allowed the acquisition of 11,000 acres of mountainous area for public use in Greenville and Pickens counties. \$48,361,607

SOUTH DAKOTA

Model Project:

Custer State Park—A \$620,000 grant in 1966 helped acquire 23,000 acres in the 73,000-acre park, one of the largest state parks in the nation. It offers a unique drive along Needles Highway that is perhaps the most scenic approach to Mount Rushmore National Park. \$30,525,226

TENNESSEE

Model Projects:

Barlett Park Acquisition—A 1974 grant of \$172,552 and subsequent grants helped acquire 124 acres and develop the 350-acre Barlett Park, a major urban park in Shelby County. \$60,229,745

Falls Creek Falls State Park—A 1969 LWCF grant of \$150,261 helped acquire Falls Creek Falls park, which features water cascades, sparkling streams, gorges, and timberlands, as well as numerous recreation facilities, making it one of the most popular parks in the state.

	1965-95 Total Funding
TEXAS	
Model Projects:	
Herman Brown Park —LWCF assistance totaling \$4.5 million helped buy 700 acres land needed to create Houston’s second largest park, located in the northeast section of the city.	\$139,581,997
Mustang Island State Park —A \$2.2 million grant helped acquire a seashore park on Mustang Island, a coastal barrier island with a unique and complicated ecosystem. It is part of the 250-mile long barrier island paralleling the Texas gulf coast.	
UTAH	
Model Project:	
Antelope Island State Park —Located 39 miles south of Salt Lake City, Antelope Island is the largest island in the Great Salt Lake. Two LWCF grants acquired 2,536 acres for the state park on the island. The park’s 28,463 acres of natural habitat also provide recreation activities such as saltwater bathing, bird watching, camping, hiking, biking and horseback riding.	\$39,857,870
VERMONT	
Model Projects:	
Burt Forest —More than \$1.46 million of LWCF assistance was used to add 6,000 acres to the Mt. Mansfield State Forest, over 900 acres to the Camels Hump State Park and 3,700 acres to Putnam State Forest on the western slopes of the Worcester Mountain Range.	\$27,374,751
Glen Lake —A \$1.07 million grant allowed the state to acquire a 2,145-acre tract, which included the 200-acre Glen Lake and two small ponds with 20,700 feet of shoreline, to Vermont’s public recreation estate.	
VIRGINIA	
Model Projects:	
Fountainhead Regional Park —A \$148,668 grant helped acquire the regional park that provides a natural enclave in rapidly growing Fairfax County. The park offers fishing, boating, a mountain bike trail, picnic facilities, and nature trails that include access to the 17-mile Bull Run-Occoquan hiking and equestrian trail.	\$67,858,433
Signal Hill Park —Manassas Park used \$290,000 in grants to acquire 113 acres of open, rolling fields, wooded land, and riparian land along Russian Branch. Important for its role in the Civil War, the site also offers picnicking, hiking/walking, nature study and wildlife observation.	
WASHINGTON	
Model Projects:	
Mercer Slough Nature Park —A LWCF grant acquired 60 acres of the 300-acre park in Bellevue. Hiking the park’s five-mile trail system or canoeing or kayaking through the park wetlands allows visitors to see 100 bird species, coyote, beaver and muskrat.	\$57,065,227
Green River Gorge Conservation Area —Ten grants acquired 518 acres that were added to the 2,500-acre conservation area south of Black Diamond in King County. Recreation opportunities include hiking, fishing, camping, inner-tubing, rafting, kayaking, birdwatching, and picnicking.	
WYOMING	
Model Projects:	
Dry Creek Park —To enhance the county of Laramie’s Greenway system, a LWCF grant was awarded in April 1993 to acquire one acre that was developed into a community park. Visitors enjoy walking and hiking a trail that is connected to the county greenway system, picnicking, and sports and play fields.	\$27,822,770
Independence Rock State Park —A \$93,500 grant helped the state acquire and develop 100 acres of historically important land into a state park. Independence Rock, which stands 6,028 feet tall, lies on part of the Mormon Trail.	

Source: U.S. Department of Interior.

Note: Data for Oregon, West Virginia and Wisconsin were unavailable.