The Quinault's Quest

A northwest tribal nation emerges from a 130-year-old land dispute with a computerized plan for restoration

By William Poole

LARRY WORKMAN—QIN

A little before five in the evening, the line begins to form at the Quinault Beach Resort on Washington's Olympic Peninsula. It is seniors night—three dollars off Chef Doug's home-style dinner buffet—and diners begin arriving early in the resort's lobby, its walls hung with historic photographs of Quinault people.

Outside, wetlands spread with lupine, beach pea, and buttery iris separate the resort from a sandy beach. Inside, lit by a shaft of late-afternoon light from a nearby window and all but unnoticed by the gathering diners, two men and a woman huddle at a table over a glowing pair of laptop computers. They are as intent as teenaged gamers, except that their clicking fingers call forth not cops or robbers or soldiers or sorcerers, but timber stands, elk migration routes, salmon spawning habitat, and shoreline development.

WILLIAM POOLE

TPL greenprinting experts Breece Robertson and Woody Duncan review the Quinault Greenprint with Tony Hartrich, GIS systems manager for the Quinault Nation. Previous page: The rocky coastline of the Quinault Reservation.

"That's the Queets River. See all that alder?" Tony Hartrich points to a splash of red on a computerized map of the Quinault Indian Nation (QIN), north of the resort: 23 miles of spectacular coastline and more than 208,000 acres of the greenest, dampest, and most productive forestlands in the U.S.

As the manager of the QIN's Geographic Information Systems (GIS) program, Hartrich supplied much of the data displayed on the computerized map. With him are Breece Robertson and Woody Duncan, of The Trust for Public Land's GIS greenprinting program, who developed the computer models on which the map is based. The next day, in a resort meeting room, the three GIS experts will give the QIN tribal council its first look at a computerized modeling and mapping system commissioned by the Quinault and more than two years in the making.

"They get to see where all their resources fit together, and we want to get it right," Breece Robertson says.

TPL devised its prize-winning "greenprinting" approach to GIS modeling and mapping as a decision-support tool for communities seeking to conserve land. Using the approach, a community designates priorities for conservation—such as watershed and wildlife habitat protection, trail creation, farmland preservation, or parks for underserved populations. Greenprint maps display opportunities for conservation based on those priorities, which can be weighted and reweighted in the maps and models according to what the community decides. In the last several years, TPL has completed more than 40 greenprints.

LARRY WORKMAN—QIN

A fisherman heads up the Quinault River at dusk. Salmon habitat in the river was one of the resources studied and mapped in the Quinault Greenprint.

But the greenprint for the Quinault is in a class by itself. It is the first greenprint for a sovereign Indian nation—the first attempt to bring this modern, technological way of understanding a place to a community whose practical and spiritual knowledge of that place dates back to a time before history. And the circumstances of the plan are unique: it grew out of a 130-year-old land dispute that led to the restoration of more than 11,000 acres to the reservation.

Furthermore, the kinds of resources analyzed in the Quinault Greenprint differ from those targeted by greenprints for urban, suburban, or other rural environments, as do its goals. This nation of nearly 3,000 enrolled members—most living in two coastal villages, Taholah and Queets—is deeply rooted in the land and dependent on its natural resources, particularly forests and fisheries. Yet the nation actually owns less than a third of its reservation's acreage, largely as a result of 19th- and early-20th-century government land policy that caused many parcels to be allotted or sold into private hands. This makes it very difficult for tribal government to manage resources strategically for the long-term benefit of both the resources and tribal members.

"You can imagine what a nightmare it was having over 200,000 acres of land allotted," says Pearl Capoeman-Baller, former president of the QIN Business

The Quinault Greenprint seeks to help the nation understand not only how its natural and cultural resources might be protected and managed, but which lands might be restored to tribal control after years of land loss.

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Top: The first snow of the season dusts the north-boundary area. Omitted from an 1873 enlargement of the Quinault Reservation, the parcel was recently restored to the Quinault Nation. Above: Pearl Capoeman-Baller, former chair of the QIN Business Council and advisory council member of TPL's Tribal & Native Lands program.

Council and advisory council member of TPL's Tribal & Native Lands program, a partner in the greenprinting effort. "You can't manage land when it's in bits and pieces," Capoeman-Baller adds.

So the Quinault Greenprint seeks to help the nation understand not only how its natural and cultural resources might be protected and managed, but also which lands within the reservation's boundary might be restored to tribal control after years of land loss.

A HISTORIC LAND DISPUTE

On the morning the greenprint is to be presented to the tribal council, tribal members David Martin and Jim Campbell pilot a pair of pickups into an ever-ascending, ever-narrowing maze of dirt and gravel roads above the Quinault River valley, 30 miles from the coast at the northern edge of the reservation. Campbell is forestry manager for the nation's Division of Natural Resources. Martin is general manager of

WILLIAM POOLE

Foreground, left to right: TPL project manager Nelson Mathews; David Martin of the Quinault Land and Timber Enterprise; and Jim Campbell, forestry manager for the Quinault Division of Natural Resources on a tour of the north-boundary area.

Quinault Land and Timber Enterprise, a tribally owned business. This morning they are guiding a tour for the TPL greenprint team and other visitors who have come to the reservation for the presentation.

At a roadside clearing, the group clambers out of the trucks. Sweeping views open up across a radically up-and-down landscape dressed in Pacific silver fir, Douglas fir, and Western hemlock. Here and there on the dark hillsides, geometric shapes in a lighter shade of green mark the sites of former timber harvests. Other, darker, patches are dressed in old growth and will now stay that way forever.

The roots and goals of the Quinault Greenprint are bound up in the long and torturous history of land loss on the reservation—and in a long-festering dispute over a 15,000-acre parcel in what is known as the "north-boundary" area. Owing to what might generously be described as a "surveying error" (the land ended up with a member of the surveyor's family), the parcel was left out of an 1873 reservation enlargement, despite falling within the designated boundaries. Located north and west of Lake Quinault, a large lake on the Quinault River, it includes flat land along the lake as well as steep, remote old-growth forestlands that eventually became part of Olympic National Forest. Also included in the parcel were bottomland groves of cedar—huge trees of the sort traditionally used for building canoes.

Over more than a century, the nation never gave up hope that this land would be added to the reservation.

Meanwhile, the federal government had instituted policies that would lead to further loss of Native American lands. The General Allotment Act of 1887, also known as the Dawes Act, divided reservation land among tribal members, ostensibly for farming. Land that was not allotted was sold off to homesteaders, and much of the allotted land was eventually sold to whites or inherited by a non-Indian spouse, or its ownership divided among dozens (sometimes hundreds) of descendents of the original allottees. Within 45 years of the Dawes Act, Native Americans nationwide lost nearly two-thirds of the land that they had reserved for themselves by treaty. On the Quinault Reservation, more than 30 percent of the land was lost to the nation in this way, often ending up in the hands of private timber companies.

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ELEMENTS OF THE QUINAULT GREENPRINT

For the Quinault Greenprint, maps were created to display data on the following resources and natural conditions:

Water quality and hydrology Geologic floodplains, hydrologic soils, repeated channel movements, well-head protection zones, point-source and non-point-source contamination sites, prairie bogs.

Development pressure Residential development around existing settlements, schools, and areas not developable because of floodplains.

Recreation and tourism Boat-launching and fish-loading sites, existing recreation areas.

Timber harvesting Ranking of timber stands based on age, site class, tree species, and net board per feet.

Cultural sites Historic sites along rivers.

Salmon habitat Fish presence, channel migration zones, potential soil erosion areas, riparian zones, boat-launching and fish-loading sites.

Habitat protection Elk migration routes, elk calving and wintering sites, locations of threatened and endangered species, fish locations (other than salmon), locations of clams and mussels.

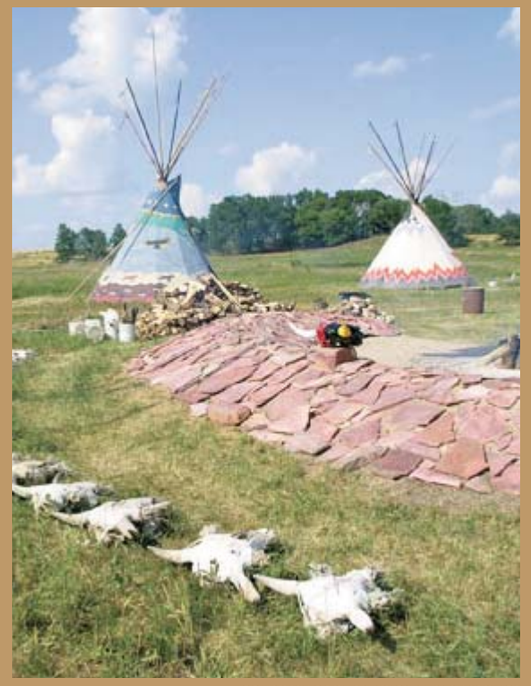
All these elements are modeled together to rank land for acquisition, then overlaid with a map showing information about parcel ownership.

Tribal & Native Lands Gallery

TPL's Tribal & Native Lands program works at the request of and in cooperation with Native groups to help preserve and promote their unique, land-based cultures, by protecting traditional sites, ensuring Native access to land, and in some cases placing land directly under Native control. Since its founding in 1999, the program has helped 50 tribes or Native groups protect or secure 200,000 acres in 16 states. Notable recent projects include:

PIPESTONE NATIONAL MONUMENT

For centuries Native Americans have come to quarries in southwestern Minnesota in search of a red stone known as catlinite, from which to carve pipes for personal and ceremonial use. Pipes and pipestone were central to the religious and ceremonial culture of Plains peoples and became valuable trade goods. In 1937, Pipestone National Monument was created as a unit of the National Park Service to protect the quarries, with digging only by Native people permitted. The park also protects archaeological resources and natural features such as Winnewissa Falls on Pipestone Creek. Recently the local school district sought to sell 15.3 acres it owned adjacent to the monument, raising the possibility of development close to Winnewissa Falls in an area that could contain significant archaeological resources. TPL purchased the land and donated it to the National Park Service.



COURTESY OF THE NATIONAL PARK SERVICE

Pipestone National Monument

BEAR RIVER MASSACRE SITE

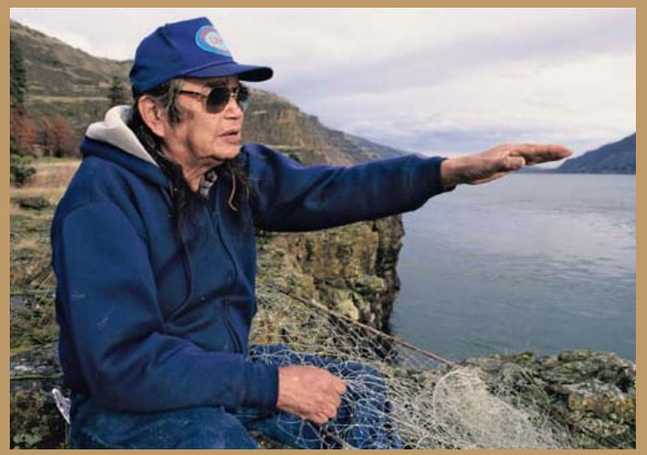
In January 1863, U.S. volunteer soldiers attacked the winter camp of the Northwestern Band of the Shoshone Nation on Bear River, near what is today the Idaho–Utah border. They slaughtered as many as 350 men, women, and children in what is believed to be the largest massacre of Native American people in U.S. history. Surviving members of the band struggled for years to keep their culture intact without a land base or federal recognition as a tribe, which finally occurred in 1980. In 2003, 140 years after the massacre, the band's sense of its history and identity advanced significantly when TPL purchased 19 acres of the massacre site, along with a seven-acre buffer, and presented it to the tribe. The land had been used for years as cattle pasture. The American West Heritage Center, in Wellsville, Utah, worked with TPL to raise funds for the land's return, which was celebrated at a gathering of band members and supporters.

PHIL SCHERMEISTER

Bear River Massacre Site

WAO KELE O PUNA, HAWAI'I

At nearly 26,000 acres, Wao Kele o Puna is the largest remaining intact rainforest on the island of Hawai'i. Native Hawaiians have used the forest for traditional hunting, gathering, and religious practices for centuries. In the 1980s, Native Hawaiian and environmental activists protested development of Wao Kele o Puna for geothermal energy, leading to decades of litigation. Working with the landowner, the U.S. Forest Service, the state, the Office of Hawaiian Affairs (OHA), and the Pele Defense Fund—a Native Hawaiian rights group—TPL acquired Wao Kele o Puna in 2006 and transferred the forest to the OHA, which manages programs, services, and advocacy to benefit Native Hawaiians. Funding was provided through the U.S. Forest Service Forest Legacy Program with the support of U.S. senators Daniel Inouye and Daniel Akara. Of the 1.8 million acres that belonged to the Kingdom of Hawai'i, Wao Kele o Puna is one of the first significant parcels of land to be returned to Native Hawaiian control.



PHIL SCHERMEISTER

Lyle Point

MOCCASIN BEND

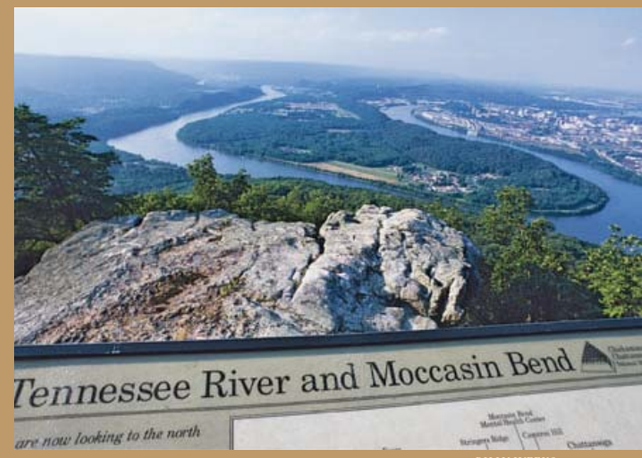
This boot-shaped bend of the Tennessee River near Chattanooga long has been important to Native Americans. Archaeological sites there date human habitation to as early as 12,000 years ago. In the late 1830s, Moccasin Bend was a staging area for what became known as the Trail of Tears, the 800-mile relocation of several Southeast tribes to Oklahoma. Efforts to protect the land go back six decades. In 2003, at the urging of TPL and other groups and through the leadership of U.S. Congressman Zach Wamp, Congress created the Moccasin Bend National Archeological District as a unit of the Chickamauga and Chattanooga National Military Park. TPL then transferred 780 acres on Moccasin Bend to the National Park Service. Today, park service officials and community members are meeting to plan a visitors center, exhibits, and other features of the new park unit.

PHILIP ROSENBERG

Wao Kele o Puna

LYLE POINT

Native people have lived and fished at the junction of the Columbia and Klickitat Rivers for thousands of years. They also buried their dead there, and the land is considered sacred. In 1992 a 33-unit subdivision was approved for Lyle Point, and it seemed likely the land would end up as a gated community, cutting off access to the tribal fishing site. The Confederated Tribes and Bands of the Yakama Nation and Confederated Tribes of Warm Springs launched litigation, and environmental groups held a series of protests. At the same time, TPL negotiated with the landowners while discussing with tribal members how to protect and steward the site. As part of a legal settlement, two of the 33 lots were purchased by the U.S. Army Corps of Engineers for fishing access—but plans for the development moved forward, and TPL continued to negotiate with the developer. This summer, 15 years after development was first approved for Lyle Point, TPL transferred the remainder of the land to the Confederated Tribes and Bands of the Yakama Nation.



BILLY WEEKS

Moccasin Bend

Beginning in the 1960s, the Quinault Indian Nation began to assert its sovereign right to manage its own resources. In order to do this more efficiently, it began to acquire some of these private lands within the reservation boundaries. But finding funds to consolidate reservation lands was always a problem.

The fate of the north-boundary property became intimately involved with the nation's plans for land acquisition. Over the years since the land was left out of the reservation, the nation had sued and won in court, but had never been offered what it considered a fair settlement for the land. Now the nation hoped that the land would be returned to them so they could manage some of it for timber and use the funds to buy other private parcels, especially in areas key to resource management. In 1988, after long negotiations, Congress transferred the north-boundary land back to the Quinault Nation, which specifically agreed to use timber harvest revenues to buy lands within the reservation borders.

Which is how the story would have ended, had not two feathered species reminded everyone that some of these north-boundary lands were valuable above all else for their natural and habitat values.

BYRON JORJORIAN

LARRY WORKMAN—QIN

Spotted owls are one of the endangered species that use the Quinault north-boundary area. The area is now protected by a conservation agreement negotiated with TPL's help. Below: Old-growth forest on the Quinault Reservation.

MURRELETS, OWLS, AND AN EASEMENT FOR THE NORTH BOUNDARY

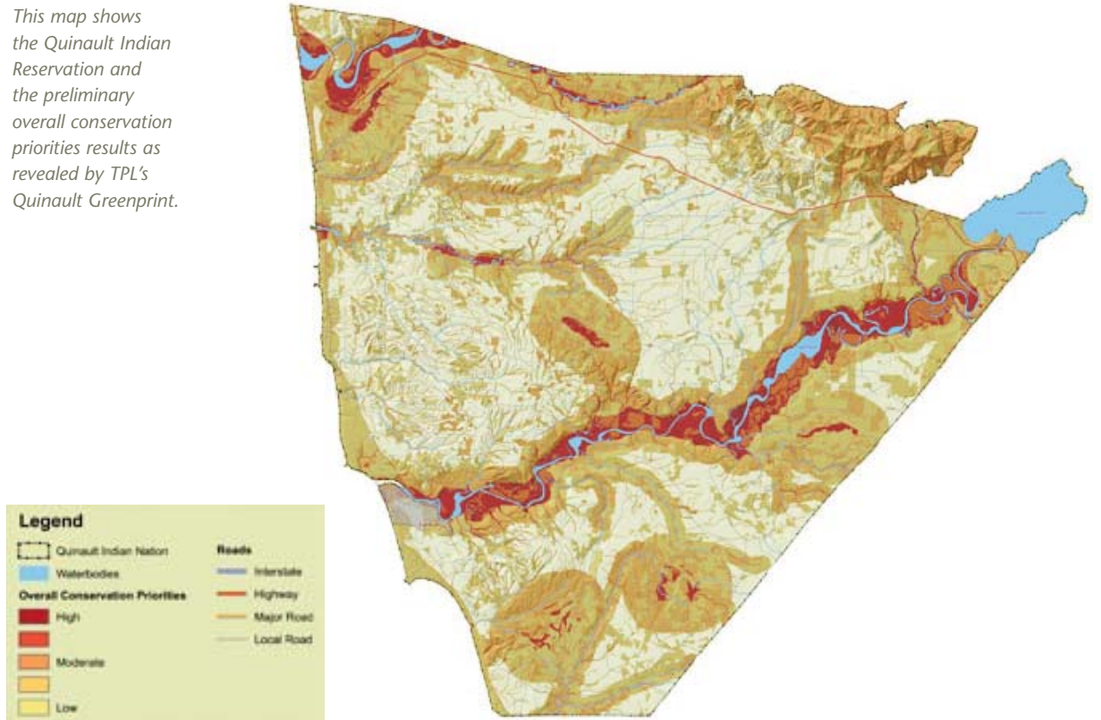
"Originally we were going to utilize some of this timber for the benefit of the nation, to help fund our land acquisition program," says David Martin, who was vice president of the nation at the time. But in the early 1990s, the forestland was identified as important habitat for spotted owls and marble murrelets, endangered species dependent on Northwest old-growth forests. "That was where this whole thing got started," Martin says, referring to negotiations that would ultimately lead to a conservation easement on the land.

While the spotted owl became a poster animal for forest conservation, the marbled murrelet is less well known. Feeding many miles out at sea, these small, football-shaped, black-and-white birds nest in the north-boundary old growth, torpedoing up the canyons to their nest sites on short stubby wings each night. The discovery of the birds put an end to the nation's plans to harvest portions of the north-boundary area—if only because it would have been inconsistent with their own long-term efforts to be good stewards of the land.

"The north-boundary easement was the biggest headache in my entire life," says Pearl Capoeman-Baller, then tribal chair. While the nation wanted to see the land protected, it also wanted to recover the value it felt it was owed by being deprived of the land for more than 130 years. A preservation agreement—an easement—would

QUINAULT INDIAN NATION'S OVERALL CONSERVATION PRIORITIES

This map shows the Quinault Indian Reservation and the preliminary overall conservation priorities results as revealed by TPL's Quinault Greenprint.



reimburse the nation for the land's protection. "But this was easier said than done," says Capoeman-Baller. Many questions needed to be resolved, including how much a conservation easement across the land might be worth. Repeatedly Capoeman-Baller sent David Martin back to Washington for negotiations, to no avail.

In March 1999, the Department of the Interior and the Quinault Nation asked TPL for help. "TPL understood what we were trying to do," says Capoeman-Baller. Fully six years later, in 2005, TPL, QIN, and the federal government negotiated an easement to protect the largest nonpublic block of old-growth forest west of the Cascade Mountains, at last resolving a dispute that had begun during the administration of Ulysses S. Grant.

"Everyone benefits," then-interior secretary Gale Norton said at the time. "The public gets conservation of sensitive forest habitat for a threatened species. The Quinault retain sovereignty over their land and gain support for their economic development. And Interior fulfills its responsibilities for tribal development and conservation of threatened species."

"Resolving the northern boundary dispute was one of the more challenging projects I have worked on in my years in Congress," says Congressman Norm Dicks, who worked tirelessly in support of the settlement. "Nevertheless, resolving the dispute was critically important for natural resource management as well as for assuring equitable compensation for the tribe. In the end we

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Bow detail of a Quinault canoe.

were able to protect the old-growth habitat along the border through this settlement, which resolved the longstanding dispute and provided fair compensation to the Quinault Tribe."

A GREENPRINT FOR THE QUINAULT

Settling the north-boundary dispute left the Quinault with a payment, a problem, and a potential partner in TPL. The $32.2 million the tribe received as part of the agreement, a portion of which was raised privately by TPL, will help buy back private lands within the reservation. But which lands should be acquired for sustainable timber harvesting, fisheries protection, conservation of cultural resources, and economic development? Over the years, the nation had collected a lot of data about reservation resources, but it had no way of visualizing that data or weighing the relative importance of difference resources on different sections of land. Perhaps most important, it had no way of visualizing nontribal landownership on the reservation, or how such ownership overlapped land that might be acquired for resource protection and management.

As TPL staff learned about the nation's needs and goals, it became clear that GIS greenprinting could provide the models and maps they needed to visualize reservation resources and acquisition opportunities. Under contract with the nation, TPL also furnished tribal members with training in acquisition real estate and legal skills, as well as an online database of additional public and private funding sources that might be available for tribal land acquisition.

"This partnership is not just about getting the nation the compensation due for the north boundary property," TPL senior vice president Bowen Blair told the tribal council before the greenprint presentation. "It's also about training, and the greenprint, and funding. It's about protecting culture, conservation, and economic development."

At the presentation, Breece Robertson stood before a screen showing an ever-changing map of the reservation. Colors spread along the coast, up the river bottoms, over the mountains, showing lands necessary for timber, wildlife habitat, water quality, and salmon habitat. In all, the Quinault Greenprint includes 43 separate models in eight categories. "We took what you told us was important to you and your reservation and translated it into the GIS framework," Robertson said.

Later, meeting attendees stood in turn to thank the tribal and TPL GIS experts. "The creator gave us air, land, and water," said Chuck Sams, director of TPL's Tribal & Native Lands program. "We have a covenant to protect, preserve, and enhance those gifts."

Years of work lie ahead for the Quinault as they work to rebuild their land base for the future. But it will be worth the effort, as Pearl Capoeman-Baller told the group. "The whole goal of this work is the preservation of this land. You can't think in 20 years, you can't think in 50 years. We have to think longer than that if we are going to preserve this land for our children."

William Poole is the editor of Land&People.

LARRY WORKMAN—QIN

Foresters from the national Intertribal Timber Council visit the north boundary area during a conference hosted by the Quinault Indian Nation.

GREENPRINT HIGHLIGHTS

TPL's Conservation Vision service has worked on more than 50 greenprints and other conservation planning exercises in more than two dozen states since 2002. Thirteen were completed in 2007, including:

Plum Creek Timberlands, Montana
Helped Plum Creek Timber Company analyze its landholdings in northern Montana to identify critical areas for conservation.

Big Sky, Montana
Worked with this Rocky Mountain community to design a recently expanded park; analyzed how funds can be raised to pay for park development and maintenance.

Lake County, Florida
Created a greenprint for a citizen advisory committee to use in comparing parcels of land for conservation protection.

Armand Bayou Watershed, Texas
Worked with communities along this Gulf Coast waterway near Houston to identify opportunities for conservation, public conservation funding, and watershed restoration.

Deerfield, Massachusetts
Worked with residents and elected officials to develop a park and conservation plan that preserves the rural and historic character of their New England community.

Connecticut River Valley
Analyzed the changing landscape of New England's largest river valley in support of a four-state conservation strategy.

Litchfield County, Connecticut
Worked with local communities and a nonprofit partner in this rapidly developing rural area to identify working landscapes, forests, wildlife habitat, lands vital to water quality, and scenic areas worthy of protection; made this data available in an online mapping utility.

For more information on greenprinting and other TPL conservation services, go to **www.tpl.org/services** or contact Caryn Ernst at (202) 543-7552.