



The economic benefits of preserves, trails, and conserved open spaces in the 1000 Islands region

THE
TRUST
FOR
PUBLIC
LAND



The economic benefits of preserves, trails, and conserved open spaces in the 1000 Islands region

The Trust for Public Land
October 2018



The Trust for Public Land creates parks
and protects land for people,
ensuring healthy, livable communities
for generations to come.

The Trust for Public Land's Conservation Economics team has extensive experience measuring the economic benefits and fiscal impacts of land conservation. Partnering with its award-winning GIS team, it has published over 40 economic analyses throughout the country, including communities in Alabama, Arizona, California, Colorado, Georgia, Illinois, Kansas, Kentucky, Maine, Massachusetts, Minnesota, Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Vermont, Virginia, Washington, and Wyoming.

The Trust for Public Land has advanced this research working with leading academic partners and research institutions, including Colorado State University, Dartmouth College, Georgia Institute of Technology, Michigan State University, University of California–Davis, University of Georgia, Texas A&M, University of Minnesota, University of New Hampshire, University of Vermont, University of Wyoming, and the U.S. Forest Service.

tpl.org/1000-islands-economic-benefits

Table of contents

Executive summary.....5

Map..... 9

Introduction..... 10

Enhancing property value..... 14

CASE STUDY: Zenda Farms Preserve 18

Boosting tourism..... 19

CASE STUDY: Otter Creek Preserve 25

Supporting economic development..... 26

CASE STUDY: Potters Beach..... 33

Conclusion..... 38

Endnotes..... 40

Acknowledgments

Expert technical review provided by:

Martin D. Heintzelman, PhD, Associate Professor, Frederic C. Menz Scholar of Environmental Economics, David D. Reh School of Business and Institute for a Sustainable Environment, Clarkson University.

This project would not have been possible without generous support from the Fresh Sound Foundation and the Thousand Islands Land Trust, Inc.



The Trust for Public Land gratefully acknowledges the individuals who contributed their time, energy, and ideas toward the creation of this report.

Jake R. Tibbles, Executive Director, Thousand Islands Land Trust, Inc.
Spencer Busler, Assistant Director, Thousand Islands Land Trust, Inc.

Executive summary

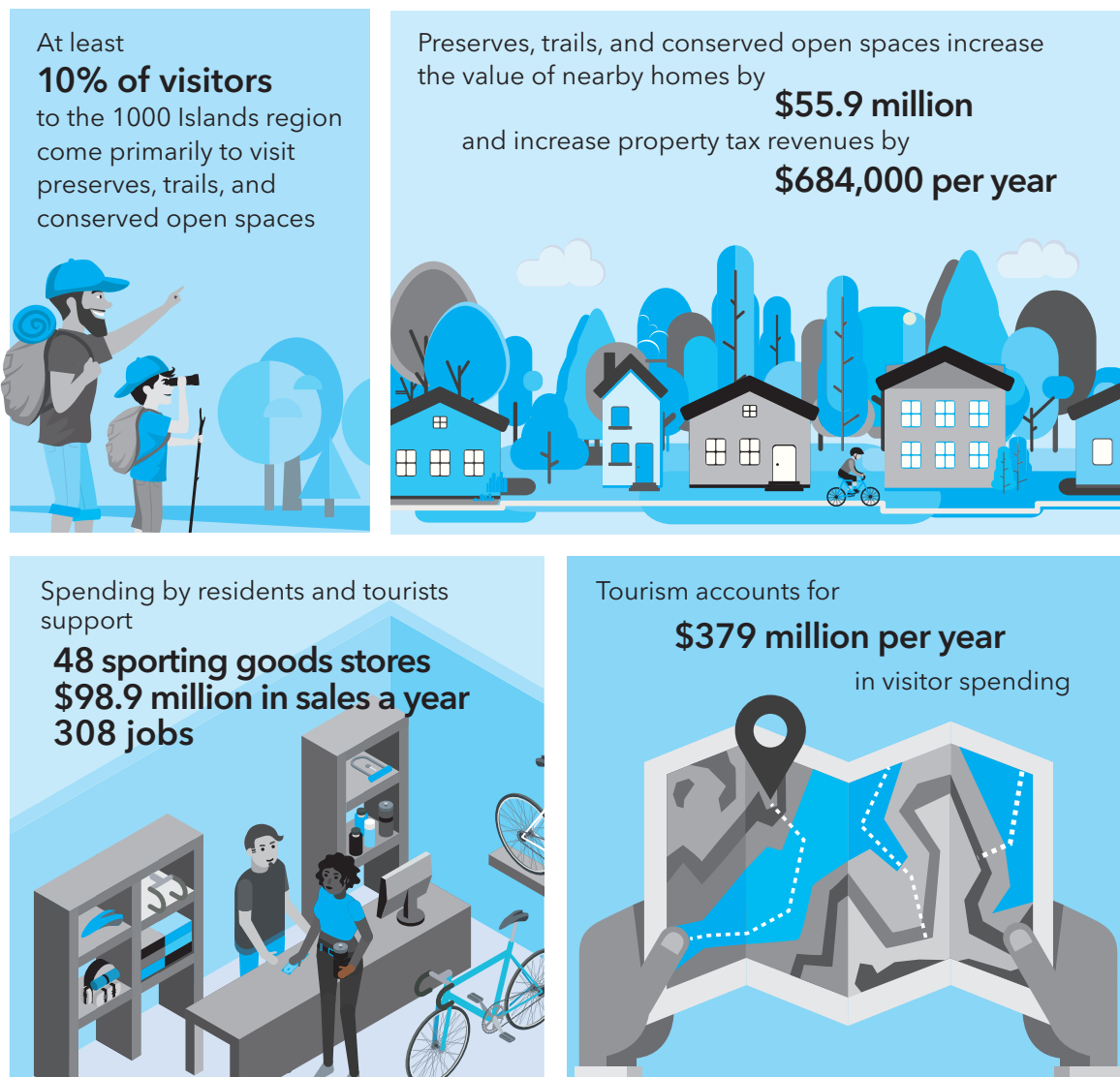
PRESERVES, TRAILS, AND CONSERVED OPEN SPACES ARE VALUABLE COMPONENTS OF HEALTHY, FLOURISHING COMMUNITIES. At the state level, previous research has found that every \$1 invested in conservation returns \$7 in natural goods and services such as water quality protection, provision of wildlife habitat, and flood prevention and control. Yet, natural goods and services are just one way these amenities generate economic value. This is the first report that directly analyzes the preserves, trails, and conserved open spaces in the 1000 Islands region and documents a selection of the significant additional economic benefits they create.

These amenities attract visitors to the region, enhance property values, provide recreational opportunities for residents, and boost economic development. By doing so, they also support local jobs, increase spending at local businesses, and generate local tax revenue. This analysis includes lands held by local land trusts as well as local, state, and federally protected lands.

FEATHERS IN FLIGHT PRODUCTIONS



Examples include the Otter Creek Preserve, Keewaydin State Park, the French Creek Wildlife Management Area, and the Minna Anthony Common Nature Center. See [Figure 1](#) for a map of the preserves, trails, and conserved open spaces in the 1000 Islands region. Specifically, the preserves, trails, and conserved open spaces in the 1000 Islands region produce the following economic benefits, reported in 2018 dollars ([Table 1](#)):





- Preserves, trails, and conserved open spaces increase the value of nearby residential properties in the 1000 Islands region because people enjoy living close to these amenities and are willing to pay for this proximity. Preserves, trails, and conserved open spaces in the 1000 Islands region raise the value of nearby homes by a total of \$55.9 million and increase property tax revenues by \$684,000 a year (see [Table 2](#) ➔).
- Tourism is a key component of the region's economy, accounting for \$379 million in visitor spending per year. At least 10 percent of visitors to the 1000 Islands region come primarily to visit preserves, trails, and conserved open spaces. These visitors are estimated to spend \$3.79 million annually in the 1000 Islands region and generate \$2.58 million and \$210 million in local and state tax revenues, respectively (see [Table 4](#) ➔).
- Preserves, trails, and conserved open spaces contribute to the high quality of life in the 1000 Islands region, which plays an important role in attracting business and employees to the area. These assets also enhance the robust recreation economy. By providing opportunities for recreation, these amenities support \$11.8 million in resident spending on sports, recreation, and exercise equipment annually. Along with tourist expenditures, this spending supports 48 sporting goods stores that generate \$98.9 million in sales and provide 308 jobs (see [Table 8](#) ➔).

This study illustrates that preserves, trails, and conserved open spaces in the 1000 Islands region are key economic drivers that contribute millions in economic benefits annually throughout the community ([Table 1](#) ➔).

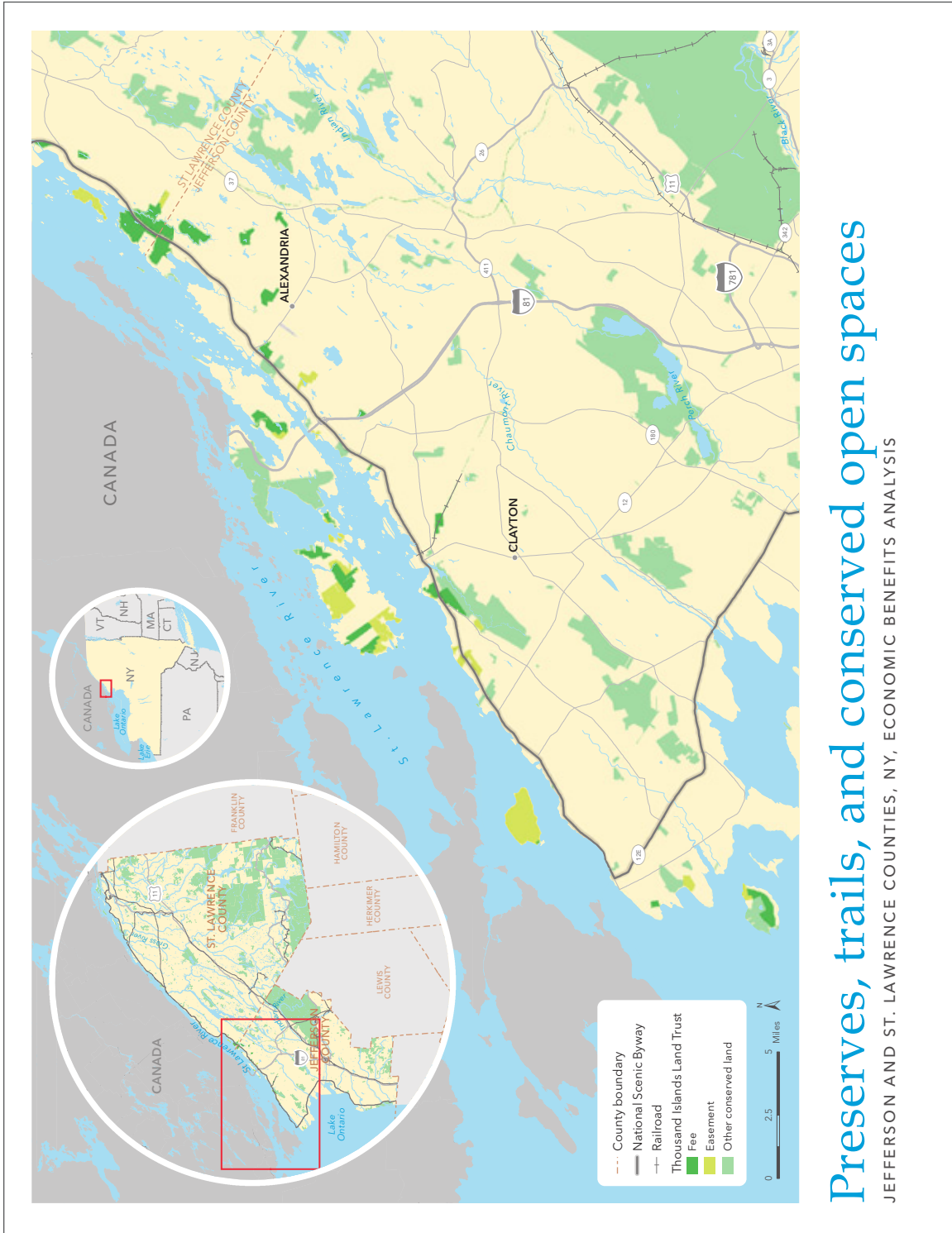
TABLE 1. SUMMARY OF ESTIMATED ECONOMIC BENEFITS PROVIDED BY PRESERVES, TRAILS, AND CONSERVED OPEN SPACES IN THE 1000 ISLANDS REGION

Benefit category	Value (2018\$)
Enhanced property value	
Total additional property value due to preserves, trails, and conserved open spaces	\$55,900,000
Additional annual property tax due to preserves, trails, and conserved open spaces	\$684,000
Tourism	
Total visitor spending due to preserves, trails, and conserved open spaces	\$37,900,000
Total local sales tax due to spending visiting preserves, trails, and conserved open spaces	\$2,580,000
Total state sales tax due to spending visiting preserves, trails, and conserved open spaces	\$2,100,000
Summary of industries supported by preserves, trails, and conserved open spaces in the 1000 Islands region*	
Economic development	
Annual spending on sports, recreation, and exercise equipment	\$11,800,000
Annual sales generated by sporting goods stores	\$98,900,000

* The economic development values presented here are illustrative of the importance of these industries to the region’s economy. Annual spending on sports, recreation, and exercise equipment includes spending on such things as bicycles, camping equipment, and fishing gear. Not all of the value in these categories is exclusively generated by preserves, trails, and conserved open spaces; however, these amenities do play an important role in supporting these industries.

The economic benefit values in this analysis are reported in 2018 dollars unless otherwise specified. The Trust for Public Land has rounded all numbers in the text and tables to three significant digits. Because of rounding, some report figures and tables may not appear to sum.

These benefits reach across many sectors of the region’s economy. Each estimate also represents a different type of value accruing to different beneficiaries such as local businesses, governments, and residents. Therefore, they cannot be summed into a single figure. In order to provide a robust and reliable report, this analysis relied on the most conservative methods supported by existing methodology and literature. For example, in any instance where multiple valuation methods were available, The Trust for Public Land utilized the method that produced the lower bound estimate.



Preserves, trails, and conserved open spaces

JEFFERSON AND ST. LAWRENCE COUNTIES, NY, ECONOMIC BENEFITS ANALYSIS

➤ **FIGURE 1** Preserves, trails, and conserved open spaces in the 1000 Islands region. This map shows all the lands that were included in the enhanced property value analysis. Copyright © The Trust for Public Land. The Trust for Public Land and The Trust for Public Land logo are federally registered marks of The Trust for Public Land. Information on this map is provided for purposes of discussion and visualization only.

Introduction

PRESERVES, TRAILS, AND CONSERVED OPEN SPACES ARE NECESSARY COMPONENTS OF HEALTHY, FLOURISHING COMMUNITIES. One way these amenities generate value in the 1000 Islands region is through the provision of natural goods and services.¹ These include but are not limited to flood control, water quality enhancement and protection, air pollution removal, carbon sequestration and storage, habitat for fish and wildlife (including game species), and food production.²

The Trust for Public Land has measured the return on public investment in land conservation across the United States, including New York, and found that these returns are significant. In New York, The Trust for Public Land found a return of \$7 in natural goods and services for every \$1 invested in land acquisition.³ However, natural goods and services are only one way preserves, trails, and conserved open spaces provide value. These spaces also provide additional, tangible economic benefits to local residents and governments.⁴ For example, when tourists come from out of town to visit the beauty and recreational opportunities of the 1000 Islands region, they also bring new money that filters throughout the local economy. So do families when they decide to purchase a second home or relocate to the area in their retirement, enticed in part by access to superb outdoor amenities, this is also an asset to the local economy. While these examples highlight some of the benefits a robust network of outdoor amenities provides, they also highlight some of the historical difficulties of understanding their precise impact. What percentage of tourism spending is attributable to the outdoors? How much of a home's value is related to its proximity to open spaces? How does this impact tax revenues?

Economic analysis makes it possible to answer these and many related questions. Accordingly, municipal and state agencies in New York are increasingly recognizing the role of well-planned open space protection as a vital component of local economic development.⁵ The 1000 Islands region generates numerous economic benefits related to open and conserved spaces in addition to providing natural goods and services.⁶ Economic analysis can help interested parties and decision makers gain a fuller understanding of the value of these amenities, as well as make more informed land use decisions.

Building on previous work on natural goods and services statewide, this report analyzes the preserves, trails, and conserved open spaces in the 1000 Islands region and documents a selection of the significant additional economic benefits that these amenities provide. This analysis includes lands held by local land trusts as well as local, state, and federally protected lands. Examples include the Otter Creek Preserve, Keewaydin State Park, the French Creek Wildlife Management Area, and the Minna Anthony Common Nature Center. These amenities attract visitors to the county, enhance property values, provide recreational opportunities for residents, and boost economic development. By doing so, they also support local jobs, increase



spending at local businesses, and generate local tax revenue. The lands considered (see [Figure 1](#) on page 9) consist of all public preserves, public trails, and conserved open spaces inside the 1000 Islands region, regardless of ownership or management (see [Box 1](#) on page 12).

Preserves, trails, and conserved open spaces increase the value of nearby residential properties in the 1000 Islands region because people enjoy living close to these amenities and are willing to pay for this proximity. In the **enhancing property value** section, The Trust for Public Land draws on research from across the country to calculate this premium for all homes near preserves, trails, and conserved open spaces in the 1000 Islands region. This premium represents additional property value that exists due to preserves, trails, and conserved open spaces. Further, as property tax is based at least partially on a home's value, additional annual property tax revenue is generated by these homes proximate to these amenities. This value is also calculated.

From forested trails to majestic islands, the preserves, trails, and conserved open spaces in the 1000 Islands region draw numerous visitors to the area each year. In the **boosting tourism** section, The Trust for Public Land uses information on visitor characteristics and spending

Defining preserves, trails, and conserved open spaces

Prior to this report, there was no single source or map record of the various public and conserved lands in the 1000 Islands region. The Trust for Public Land's Geographic Information System (GIS) team worked with the Thousand Islands Land Trust (TILT) to collect, compile, and classify multiple data layers of preserves, trails, and conserved open spaces in the 1000 Islands region for consideration in this analysis (see [Figure 1](#) on page 9).

THE 1000 ISLANDS REGION includes many towns and cities along the archipelago located between the United States and Canada on the St. Lawrence River from the northeast corner of Lake Ontario. For the purposes of this report, the 1000 Islands region refers specifically to St. Lawrence and Jefferson Counties on the United States side of the St. Lawrence River. Throughout the spatially based economic development and property value analyses, as well as the tourism analysis, these two counties are the geographic focus.

PRESERVES, TRAILS, AND CONSERVED OPEN SPACES include state and federally protected lands; municipal and county parks, trails, and conserved lands; private lands with conservation easements; lands held by local, regional, and national land trusts and conservation organizations; and all other publicly conserved spaces in St. Lawrence and Jefferson Counties.

to calculate the economic impact of preserves, trails, and conserved open spaces to the local tourism economy.

In addition to attracting visitors, the region's residents derive benefits from these magnificent spaces. High-quality preserves, trails, and conserved open spaces contribute to the high quality of life in the 1000 Islands region, which plays an important role in attracting businesses and employees to the area. These amenities also facilitate recreation and support the region's robust recreation economy. The **supporting economic development** section of the report describes the qualitative benefits of preserves, trails, and open spaces in the 1000 Islands region and looks at annual spending by residents on recreation.

This report brings to light many of these previously intangible benefits of the preserves, trails, and conserved open spaces in the 1000 Islands region. Complementing these analyses throughout the report are three case studies highlighting the positive economic impacts of these amenities. In order to provide robust and grounded economic estimates, this report relies on the most conservative methods supported by comparable economic valuation studies. In any instance where multiple valuation methods are supported, or where a range of values are available for analysis, The Trust for Public Land selects the method or values producing the lower bound estimate. As such, it is likely that the actual benefits are higher than what The Trust for Public Land estimates in the following pages. Despite this conservative approach, it is clear that the 1000 Islands region's exceptional outdoor amenities are key contributors to the local economy.

The Thousand Islands Land Trust

The Thousand Islands Land Trust is a 501(c)3 nonprofit founded in 1984 by a group of year-round and seasonal residents concerned that without a balance between land conservation and land development, the very foundation of the 1000 Islands region's ecological health, economic vitality, and quality of life could be degraded. TILT was the first and is currently the only land trust to focus exclusively on the conservation, protection, and restoration of the 1000 Islands region and St. Lawrence River Valley.

TILT's mission is to conserve the natural beauty, diverse wildlife habitats, water quality, and outdoor recreation opportunities of the 1000 Islands region, for present and future generations. TILT works with private landowners, community and government leaders, and various conservation partners to accomplish this mission and has demonstrated its ability throughout the 1000 Islands region. Currently, TILT owns in fee 5,420 acres and holds conservation easements on 4,230 acres. TILT successfully manages 1,500 acres of wetlands on Grindstone Island, the Crooked Creek Preserve, the Otter Creek Preserve, and Black Ash Swamp and 2,500 acres of forest, shrubland, and grassland habitat. TILT also manages over 40 miles of recreational trails that are open to the public. True to its roots, this work supports TILT's original vision to sustain resilient ecosystems that promote healthy people and a vibrant economy.

CHRIS MURRAY PHOTOGRAPHY



Enhancing property value

PRESERVES, TRAILS, AND CONSERVED OPEN SPACES HAVE A POSITIVE IMPACT ON NEARBY RESIDENTIAL PROPERTY VALUES.⁷ All other things being equal, people are willing to pay more for a home close to these amenities. Through economic analysis, it is possible to isolate and quantify the impact that preserves, trails, and conserved open spaces have on home values. This additional value also translates into greater property tax revenues generated annually from homes proximate to protected spaces. The following section estimates the enhanced property value due to preserves, trails, and conserved open spaces in the 1000 Islands region, as well as the additional tax revenue generated due to this proximity.

The benefits of preserves, trails, and conserved open spaces on local property value are evident in the 1000 Islands region. Proximity to preserves is often used as a selling point in local real estate listings.⁸ Jonathan Taylor, principal architect at the local architecture firm Taylored Architecture PLLC, also notices this impact. “I deal with a lot of different clients,” notes Mr. Taylor, “and proximity to trails and preserves certainly adds value for most clients.”⁹ According



TERRA BACH, THOUSAND ISLANDS LAND TRUST

to Mr. Taylor, a primary reason for this desirability is that buyers like knowing that a nearby open space will remain open, and this is consistent with the literature. Research from across the country has found that the property value added by protected spaces is separate from the value residents gain from the recreational use of preserves, trails, and conserved open spaces.¹⁰ Property value goes up even if the resident never visits or uses these spaces. In fact, property value is affected by two factors. The first is the quality of the preserve, trail, or conserved open space. The second is the distance from these spaces.¹¹

The quality of preserves, trails, and conserved open spaces can affect nearby property values several ways. Beautiful natural areas with public access, scenic vistas, and bodies of water are markedly valuable. Less attractive or poorly maintained spaces may provide only marginal value, and in some cases, they may actually reduce nearby property values. When looking at the impact of individual preserves, trails, or conserved open spaces, economic analysis is complicated by the subjective nature of an area's quality and the variation in quality across time. Over a number of years, for instance, any given preserve, trail, or conserved open space may go through cycles of disrepair and reconstruction. However, variations in individual premiums can be accounted for when looking at the impact of an entire region's preserve, trail, and conserved open space system. A premium can be calculated that isolates the minimum average additional value created by these spaces, separate from other locational factors that affect a home's value, such as proximity to school systems or employers. Using this method, the open space premium is not based on any one preserve, trail, or conserved open space but rather on the entire system of these spaces. This makes it possible to generate a reliable estimate of the total impact of these protected areas on property values based on established rates from comparable studies.

In addition to quality, distance from preserves, trails, and conserved open spaces is another factor influencing property values. The premium for proximity to these spaces can affect market values up to 2,000 feet by 20 percent or more.¹² A 2009 report from the National Association of Realtors found that the premium for homes near parks starts at 20 percent, declining as the distance from the park increases.¹³ These results are consistent with local studies as well, such as a recent study looking at state forests in three rural New York communities that found proximity to state forests increased residential property values.¹⁴ Similar work in the Adirondacks region found significant price premiums for properties in more remote lots.¹⁵ Another study of over 77,000 real estate transactions in the greater Adirondack region between 2004 and 2013 found that proximity to wilderness areas created as much as 25 percent value premium.¹⁶

Since property tax is related to a home's value, the increase in property value for preserve-, trail-, and conserved open space-proximate homes also leads to additional property taxes generated annually. In fact, national research over several decades found that this additional tax revenue can offset the costs associated with preserves, trails, and conserved open spaces as well as any reductions in the total taxable land, refuting the idea that such amenities result in a net reduction in the value of an area's tax base.¹⁷

Using the most conservative method of analysis supported by these and other studies, The Trust for Public Land analyzed the value premium and increased tax revenue from homes due to preserves, trails, and conserved open spaces in the 1000 Islands region. The Trust for Public Land first identified all homes in St. Lawrence and Jefferson Counties within 500 feet of these spaces using spatial analysis.¹⁸ Assessment data from each county was then used to obtain 2017 property value and 2018 tax information for all homes in the county.¹⁹ Last, this information was combined with the spatial analysis to isolate a 5 percent value premium for homes proximate to preserves, trails, and conserved open spaces as well as the accompanying property tax contributions due to this premium.

TERRA BACH, THOUSAND ISLANDS LAND TRUST



TABLE 2. ENHANCED PROPERTY VALUE DUE TO PROXIMITY TO PRESERVES, TRAILS, AND CONSERVED OPEN SPACES IN THE 1000 ISLANDS REGION

Category	Value (2018\$)
Number of homes within 500 feet of preserves, trails, and conserved open spaces	
Jefferson County	4,140
St. Lawrence County	3,220
Total	7,360
Total market value of homes within 500 feet of preserves, trails, and conserved open spaces	
Jefferson County	\$733,000,000
St. Lawrence County	\$384,000,000
Total	\$1,120,000,000
Additional market value due to preserves, trails, and conserved open spaces*	
Jefferson County	\$36,700,000
St. Lawrence County	\$19,200,000
Total	\$55,900,000
Additional annual property tax revenue due to preserves, trails, and conserved open spaces	
Jefferson County	\$417,000
St. Lawrence County	\$267,000
Total	\$684,000

* The additional market value due to preserves, trails, and conserved open spaces is a one-time benefit and does not accrue annually.

This method is conservative for three primary reasons. First, only homes within 500 feet of preserves, trails, and conserved open spaces were included in the analysis, even though studies across the country have shown impacts from proximity to these spaces can be felt up to 2,000 feet or more. Second, the 5 percent premium applied to the homes included in the analysis is the lower end of the proximity premium found in the literature, where the proximity premium has been found to be up to 20 percent or greater. Finally, although property tax rates in the region trend upwards over time, this analysis looks only at current tax rates. Thus, this analysis shows the lower bound estimate of the enhanced property value and increased tax generation due to preserves, trails, and conserved open spaces in the region.

Table 2 shows the results of this analysis. In total, 7,360 of the region’s homes are located within 500 feet of these amenities. These homes had a total market value of \$1.12 billion. An added \$55.9 million in residential property value exists in the 1000 Islands region because of proximity to preserves, trails, and conserved open spaces. The residential property tax rates for each parcel were used to determine how much additional tax revenue was raised throughout the two counties due to this proximity premium. Each year, \$684,000 in additional property tax revenue is generated by preserves, trails, and conserved open spaces in Jefferson and St. Lawrence Counties.

Zenda Farms Preserve: maintaining community roots while attracting new development

Zenda Farms Preserve has a history befitting its exotic name. In a region known for dairy and beef production, this pioneering dairy farm named after an 1800s adventure novel was a leader in the field during its operations from 1939 to the late 1950s. Among many innovations, it housed the first automated milk bottling plant in the region. When the original owner passed away in 1958, farming continued into the 1960s, but eventually operations ceased, equipment was sold off, and lands were left fallow. However, over the last 20 years, Zenda Farms has transformed again. This time, it has grown into a multiuse preserve providing a host of community benefits. Besides supporting diverse activities and programming, this new community amenity is even attracting new development in the region.

The most recent chapter began in the late 1990s when 100 acres, including the farm, were donated to TILT. A community picnic that TILT hosted shortly after this donation was an early indicator of the potential for the property as a community development tool. "We saw the great opportunity to make this a community space," notes Rebecca Dahl, Zenda Farms Preserve program director. "It put a spark there, that this is a place to bring people to the land and make connections."²⁰ In the years since, TILT has worked to expand the property to its current size of 400 acres and realize that vision. Now supporting a mile and a half of public trails, ecologically significant wetlands, community gardens, new farm operations, and even an apiary, Zenda Farms Preserve is modeling what it means to be a modern preserve. Traditional Arts in Upstate New York, an organization dedicated to showcasing the culture and traditions of the North Country, recognized this impact by adding Zenda Farms Preserve to its Register of Very Special Places.

The success of this model is bringing new business, education, and development opportunities to the region. TILT is now partnering with Coyote Moons Vineyard to plant grapes on a portion of the property and develop a Zenda Farms Preserve branded wine. Similarly, TILT is working with a local organic farm to create a Zenda Farms Preserve branded cheese. In both instances, these efforts are leading to educational opportunities such as introducing area students to the cheese-making process.

An interesting effect of TILT's community-building approach has been attracting new development to the region. Mac MacFarlane, a member of the family that donated the original parcel to TILT, has also subdivided some of the remaining lands for new housing. Four new homes have been built, another is on the way, and four more plots are available for development. The attraction? Being close to the preserve. "When you buy one acre of property here, you are really buying 101 acres because of connections to the TILT land," notes Mr. MacFarlane. "The buyers are local, some going back three generations ... and with Zenda not being built out, it really gives a whole different perspective to river living."²¹

Balanced land use is a dynamic enterprise. Managing a historic landscape for conservation, development, community programs, and agriculture concurrently is an even taller order. But the approach has been worth it. At Zenda Farms Preserve, TILT is showing that conservation can enhance economic development opportunities in the region.

Boosting tourism

FROM THE WETLANDS AND UPLAND FORESTS MADE ACCESSIBLE BY THE CROOKED CREEK PRESERVE AND THE MACSHERRY TRAIL TO THE SANDY POTTERS BEACH, OR THE EXPANSIVE FARMLAND OF ZENDA FARMS PRESERVE, PRESERVES, TRAILS, AND CONSERVED OPEN SPACES PLAY A CRITICAL ROLE IN DRIVING THE TOURISM INDUSTRY IN JEFFERSON AND ST. LAWRENCE COUNTIES. Many visitors enjoy these amenities and spend considerably on goods, entertainment, lodging, fuel, gifts, and other items during their stay in the 1000 Islands region. This section documents the total impact of tourism and isolates the contribution of preserves, trails, and conserved open spaces to this sector of the economy.

Though not always recognized, preserves, trails, and conserved open spaces play a significant role in the tourism economy. These amenities are an important part of the tourism industry because they enhance the local quality of life, preserve scenery that tourists experience from the land and water, and provide places for people to access nature, engage in outdoor activities, and enjoy wildlife. Preserves, trails, and conserved open spaces are essential for the region to attract visitors, including seasonal residents. In fact, a 2012 study of Jefferson County’s seasonal residents demonstrates that outdoor recreation is important. It revealed that 74.1 percent of



TERRA BACH, THOUSAND ISLANDS LAND TRUST



respondents participated on the water and 46.1 percent of respondents participated on land. According to the survey, 92 percent of respondents indicated that local recreation opportunities were excellent or good and 91 percent of respondents said the same about the quality of the environment. Quality of life in the region was the third most important community indicator; 79 percent of respondents rated it as excellent or good.²²

A survey of visitors to the 1000 Islands region also indicates that access to outdoor activities and high-quality scenery are important drivers of tourism. In fact, 29.1 percent of survey respondents went fishing, boating, or paddling, 35.4 percent visited state parks, and 68.5 percent went on a scenic boat tour during their stay.²³ According to Todd Buchko, general manager at the 1000 Islands Harbor Hotel, “Our customers love the beauty of the land, islands, water, sights, and great hiking. If there wasn’t a river, I’m not sure what type of tourism would be here. Because the land is so beautiful, people return each year. We have some amazing organizations that keep the river clean and parks pristine, which is why people keep coming back to the area.” The membership of TILT also highlights the importance of these amenities to the region’s ability to attract visitors and seasonal residents. In fact, 74 percent of TILT members live most of the year outside its service area.²⁴

While it is clear that the preserves, trails, and conserved open spaces in the region are fundamental drivers of the community’s tourism economy, the actual contribution due to these spaces has not been isolated prior to this analysis. Even if tourists use a preserve or trail without paying a user fee, or spend modestly on recreational activities, they make other purchases that flow through the local economy. Tourist activities; the number of visitors to preserves, trails,

and conserved open spaces; and tourist spending determine the contribution of these amenities to the tourism economy. In the 1000 Islands region, a diverse set of agencies and organizations owns or manages the tapestry of preserves, trails, and open spaces. This includes municipal, county, state, and federal governments, as well as private land conservation organizations such as TILT, Ontario Bays Initiative, Indian River Lakes Conservancy, St. Lawrence Land Trust, Tug Hill Tomorrow Land Trust, and others. The amenities provided by these entities are extremely important to the local economy. For example, New York state parks within the 1000 Islands region received 1.75 million visits between April 2015 and March 2016. The economic impact of these visitors is quite large considering that nonlocal visitors to New York state parks spend between \$93.50 and \$140 on average depending on the park region, and local visitors spend an average of \$44.20 per visit.²⁵

Together, the tapestry of preserves, trails, and conserved open spaces in the 1000 Islands region provides amenities and programming that attract visitors, though data are not available from each entity on visitor numbers or tourist expenditures. Thus, it is not possible to extrapolate the impact of visitors using this information, so The Trust for Public Land estimated the spending of visitors to the 1000 Islands region using existing information on visitor spending and tourist profiles.

The first step in estimating the tourism impact was to determine the total amount of visitor spending that occurs in Jefferson and St. Lawrence Counties. Existing data demonstrate that tourism is important to the economy in New York and the 1000 Islands region. The 1000 Islands communities are particularly well positioned within the growing tourism industry in New York. Together, Jefferson and St. Lawrence Counties alone account for \$379 million in traveler spending annually. Of that spending, 67 percent occurs in Jefferson County and 33 percent in St. Lawrence County (Table 3). Thirty-two percent of the spending by visitors to the 1000 Island region is on the rental and upkeep of seasonal homes, 26 percent on restaurants, 14 percent on

TABLE 3. TOTAL TOURISM IMPACT, JEFFERSON AND ST. LAWRENCE COUNTIES (2018\$)

County	Traveler spending	Labor income	Employment	Local taxes	State taxes
Jefferson	\$254,000,000	\$115,000,000	4,360	\$17,400,000	\$14,100,000
St. Lawrence	\$124,000,000	\$48,700,000	1,750	\$8,470,000	\$6,890,000
Total	\$379,000,000	\$164,000,000	6,100	\$25,800,000	\$21,000,000

lodging, 14 percent on retail and service stations, 8 percent on transportation, and 6 percent on recreation. The spending by visitors to Jefferson and St. Lawrence Counties has a large impact on the local economy, generating \$164 million in labor income and 6,100 jobs each year, as well as \$25.8 million in local taxes and \$21.0 million in state taxes annually.²⁶ In fact, if not for the tourism-related taxes, the average household in the 1000 Island region would have to pay an additional \$456 each year to maintain the same level of government revenue.²⁷

The second step in estimating the tourism benefits due to preserves, trails, and conserved open spaces was to determine the portion of the total visitor spending that is attributable to these amenities that make the outdoors accessible to tourists. Data are not currently available to distinguish the visitors who come primarily for the outdoors from those who come for other primary purposes in the 1000 Islands region; however, visitor data are available in similar regions. For example, 14 percent of overnight visitors and 10 percent of day visitors to the Adirondacks came for the primary purpose of visiting the outdoors. In addition, 17.5 percent of visitors to Lake George's Warren County came for the primary purpose of outdoor recreation.²⁸

IAN
CORSTINE



The Trust for Public Land used this information to estimate the tourism spending that is attributable to outdoor visitors in the 1000 Islands region. To be conservative, The Trust for Public Land assumed that 10 percent of visitors came for the primary purpose of the outdoors and would not have come if the outdoor amenities were not available as they are today.

Assuming that 10 percent of the total tourism spending in Jefferson and St. Lawrence Counties results from outdoor visitors suggests that a minimum of \$37.9 million in spending each year is attributable to the preserves, trails, and conserved open spaces in the counties that make the outdoors accessible to tourists (Table 4). Spending by visitors generates at least \$2.58 million and \$2.10 million in local and state tax revenues, respectively, each year. Spending by outdoor-related tourists in these counties supports at least 610 jobs and \$16.4 million in labor income.

TABLE 4. IMPACTS OF PARKS, TRAILS, AND OPEN SPACES ON TOURISM IN THE 1000 ISLANDS REGION (2018\$)			
Category attributable to preserves, trails, and conserved open spaces	Jefferson County	St. Lawrence County	Total
Traveler spending	\$25,400,000	\$12,400,000	\$37,900,000
Labor income	\$11,500,000	\$4,870,000	\$16,400,000
Tourism employment	436	175	610
Local taxes	\$1,740,000	\$847,000	\$2,580,000
State taxes	\$1,410,000	\$689,000	\$2,100,000

These figures are conservative because they only include spending and tax revenues generated by visitors who come to the region for the primary purpose of visiting the outdoors, not by visitors who come for another primary reason. For example, many visitors come to visit friends and family or explore places such as Boldt Castle and may extend their stay in order to enjoy these preserve, trail, and conserved open space amenities, further increasing their spending impacts in the community. Additionally, the percentage used to represent visitors' primary purposes of travel was the lowest value that The Trust for Public Land could have reasonably applied based on the motivations for travel in similar regions. Finally, information from the New York Statewide Comprehensive Outdoor Recreation Plan cited the New York State Office of the State Comptroller attributing approximately \$11.3 billion (over 25 percent) of the tourism economy to outdoor recreation.²⁹



More recent information from the Outdoor Industry Association indicates that the outdoor recreation economy in New York is even larger. In fact, statewide the industry generates \$41.8 billion in consumer spending that produces \$3.6 billion in local and state tax revenues and supports 313,000 direct jobs with an associated \$14.0 billion in wages and salaries; however, it is unclear how much of this is attributable to residents or to visitors.³⁰ In addition, the U.S. Department of Commerce, through the Bureau of Economic Analysis, has recently started to measure the size and growth of the outdoor recreation economy due to its nationwide importance. A recent analysis found that this industry accounted for 2 percent of the U.S. economy, or \$374 billion in 2016.³¹ The Bureau of Economic Analysis has announced that it will release additional statistics in late 2018.

Otter Creek Preserve: creating an outdoor experience enjoyed by all

The 1000 Islands Land Trust opened the Otter Creek Preserve in the town of Alexandria in the fall of 2015. One of TILT's newest preserves, the Otter Creek Preserve is within walking distance of the Village of Alexandria Bay and provides key access to the outdoors for the area's numerous tourists.

Upon arrival, visitors to the preserve are welcomed with a kiosk and seating space that was created through a partnership between TILT and the Thousand Islands Arts Center. The preserve features nearly 2 miles of trails that were designed for walking, hiking, cross-country skiing, and snowshoeing through pine forests and on granite outcroppings. Portions of the trail are ADA-accessible, including a wildlife observation tower that overlooks a Golden-winged Warbler Demonstration Area. The preserve also boasts a cable suspension bridge and dramatic views of both Otter and Lynch Creeks and the marshland, where great blue herons and wood ducks are frequently seen.

In the few years since it opened, the Otter Creek Preserve has already become a draw for tourists of all levels of physical ability. One of its greatest features is that it allows diverse user groups to access nature and the outdoors, which are critical components of tourism in the local economy. TILT estimates that at least 6,000 residents and tourists visit the Otter Creek Preserve annually, including over 200 visits to attend popular events hosted by TILT, such as the Otter Creek Community Picnic, the Otter Creek Family Fun Run-Walk 5K, and the Otter Creek Moonlight snowshoe hike. In addition, local

Scout troops frequently visit the preserve for nature outings and to participate in cleanup efforts to obtain badges.

While the value of tourist visits to the preserve is included in the tourism analysis, the preserve also provides additional value to residents. Drawing on over 420 studies from a national recreation database, The Trust for Public Land determined that each visit to the Otter Creek Preserve is worth approximately \$20 in recreational use value.³²

The Otter Creek Preserve is just one of the preserves, trails, and conserved open spaces that together are strongly linked to the local tourism economy in Alexandria. These spaces provide critical access to outdoor experiences that tourists seek and provide beautiful, undeveloped spaces that are the backbone of the region's natural beauty and cultural identity.



TERRA BACH | THOUSAND ISLANDS LAND TRUST

Supporting economic development

PRESERVES, TRAILS, AND CONSERVED OPEN SPACES SUPPORT ECONOMIC DEVELOPMENT IN THE 1000 ISLANDS REGION IN TWO IMPORTANT WAYS. First, as scenic amenities, they provide diverse leisure opportunities for residents and visitors. This enhances quality of life in the 1000 Islands region. The high quality of life, in turn, attracts talent, employers, and investment to the region. Second, residents take advantage of the 1000 Islands region’s plentiful outdoor recreation opportunities. By purchasing equipment and gear to use while participating in those activities, residents boost local recreation businesses and contribute to the region’s recreation economy. This section explores how these amenities enhance quality of life, boost the recreation economy, and support local businesses. It includes in-depth statistics on participation in recreation and annual household spending on sports and recreation equipment, indices of market and spending potential, and a comparison of these results for the 1000 Islands region with national averages as well as with five comparison regions. The section also explores common household types using a spatial analysis tool called Esri Tapestry Segmentation to shed light on residents’ recreation and purchasing habits.

Enhancing quality of life

The 1000 Islands region is an attractive area for businesses and employees. The region is home to Fort Drum—the largest single-site employer in the state, as well as numerous colleges, farm operations, small businesses, manufacturing, and tourism-based ventures.³³ Jefferson County is the fastest-growing county in New York State, with a 3.5 percent increase in population since 2010.³⁴ According to Marshall Weir, director of marketing at Jefferson County Economic Development, sharing a border with Canada, abundant water resources, and proximity to major markets including Boston and New York City are important draws for prospective businesses and some of the drivers of this growth.³⁵

While the beautiful preserves, trails, and conserved open spaces throughout the region are recognized draws for tourists, it is less well recognized how much of a resource these spaces are for residents. Besides offering access to a wide array of activities, these amenities also increase quality of life by offering community spaces that bring residents together. Lori Arnot, founder of the Clayton Food Co-op, notices this impact with the community gardens at Zenda Farms Preserve: “This year we’ve got young couples and families, military people, and all these different folks who are passionate and growing strong together.”³⁶ Ms. Arnot also notes the connection between quality open spaces and community health through access to high-quality local and organic produce: “The co-op relies on protected open spaces to produce high-quality food with a high nutrient content to support our healthy lifestyles.” Whether providing recreation opportunities, bringing people together, or supporting local agricultural production, open spaces contribute to quality of life in diverse ways.



Quality of life plays an important role in economic development because the most sought-after employees in today's economy consider more than salary when choosing places of employment. For example, focus groups conducted by Carnegie Mellon University have found that young creative workers, particularly those in high-technology fields, consider lifestyle factors, such as environmental and recreational quality, more heavily than the job itself when choosing where to live.³⁷ Within the 1000 Islands region, numerous local governments and economic development agencies specifically highlight outdoor amenities and activities as key strengths that are a draw for prospective employees and businesses.³⁸ Prospective residents' opportunities for recreation activities such as hiking, skiing, camping, fishing, and boating are similarly highlighted throughout the region's chamber of commerce organizations.³⁹

These amenities are also an important draw for the many seasonal residents of the 1000 Islands region. In a survey of 941 seasonal residents in Jefferson County, recreational opportunities, quality of the environment, and overall quality of life were the three highest-rated community characteristics in the county.⁴⁰ Another illustrative example of residents' preferences for these amenities comes from the Town of Clayton. According to a 2014 survey of 230 seasonal and year-round residents, 97.3 percent of respondents were in favor of land use for public outdoor recreation and 95 percent were in favor of land use for protection of natural areas.⁴¹

Boosting the recreation economy

In addition to enhancing quality of life, preserves, trails, and conserved open spaces enable recreation activities that generate economic benefits by supporting related businesses, including those that sell recreation equipment. In order to understand the recreation-related economic activity that occurs in the 1000 Islands region, The Trust for Public Land utilized information from the Esri Business Analyst tool, which allows users to understand consumer behavior, participation in leisure activities, and business activity in a defined geography.⁴² Using this tool, one can begin to understand how an area compares to the U.S. average, as well as other communities across the country, such as the five comparison regions considered in this analysis: Lake Michigan, Michigan; Newport, Rhode Island; Finger Lakes, New York; Lake Placid, New York; and Lake George, New York.⁴³ These comparison regions were chosen because of a combination of similar high-quality water-based amenities, rural character, geography, and other characteristics.

According to the Business Analyst tool, participation in outdoor recreation activities is prevalent among residents of the 1000 Islands region.⁴⁴ The top activity was walking for exercise—26.3 percent of households did so in the last 12 months (Table 5). Other popular activities included swimming (16.3 percent), fishing (15.4 percent), jogging (12.3 percent), and hiking (9.6 percent),

TABLE 5. PARTICIPATION IN RECREATION AND MARKET POTENTIAL FOR TOP 10 RECREATION ACTIVITIES IN THE 1000 ISLANDS REGION

Activity	Households that participated in the last 12 months	Market potential index (MPI)
Walking for exercise	26.3%	97.5
Swimming	16.3%	105
Fishing	15.4%	129
Jogging/running	12.3%	91.3
Hiking	9.6%	93.4
Bicycling	9.4%	91.4
Golf	8.5%	97.4
Canoeing/kayaking	6.3%	108
Hunting	5.8%	131
Boating	5.5%	111



all activities available through local preserves, trails, and conserved open spaces. Esri Business Analyst also calculates a market potential index (MPI) that measures the relative likelihood of individuals and households in an area to participate in certain activities or exhibit certain consumer behavior compared to the U.S. average. The MPI is tabulated to represent a value of 100 as the overall demand for the United States. An MPI of more than 100 therefore represents a higher than average demand and a value of less than 100 represents a lower than average demand. For example, an MPI of 120 implies that demand is likely to be 20 percent higher than the national average. In the 1000 Islands region, the MPI for many of the top activities is greater than national averages, including fishing (129), hunting (131), boating (111), canoeing/kayaking (108), and swimming (105), meaning that households in the region are more likely to engage in these activities than elsewhere in the United States.

Recreation expenditures and spending potential

Individuals who participate in recreation activities purchase products to enhance their experiences, such as exercise clothing, footwear, bicycles, and fishing tackle. In addition to participation, the Esri Business Analyst tool compiles estimates of recreation expenditures and calculates a spending potential index (SPI) that represents the amount spent for products and services relative to the national average. As with the MPI, the SPI can be useful for comparing

the region to other communities and national averages. The SPI for each type of merchandise is an indicator of what level of discretionary income local consumers are willing to devote to a particular good or service compared to national averages.

Residents of Jefferson and St. Lawrence Counties spend \$11.8 million annually on sports, recreation, and exercise equipment—an average of \$135 per household (Table 6). This spending—among other recreation equipment expenditures—includes \$49 on exercise equipment,⁴⁵ \$35 on outdoor gear,⁴⁶ and \$20 on bicycling. From camping along the edge of the St. Lawrence to hiking or going for a paddle at the Crooked Creek Preserve, the preserves, trails, and conserved open spaces in the region enable a wide array of recreation activities and thus support these recreation expenditures.

Looking at household spending on sports and recreation in the 1000 Islands region compared to national figures as well as comparison regions provides several insights into local consumer preferences and behavior. Spending per household in the 1000 Islands region is 22 percent lower than both national averages and the average spending of the five comparison regions

TABLE 6. ANNUAL HOUSEHOLD SPENDING ON SPORTS, RECREATION, AND EXERCISE EQUIPMENT IN THE 1000 ISLANDS REGION (2018\$)

Spending category	Average amount spent per household	Total spending	Spending potential index (SPI)
Sports, recreation, and exercise equipment	\$135.00	\$11,800,000	77.5
Exercise equipment and gear, game tables	\$49.20	\$4,290,000	81.0
Bicycles	\$19.90	\$1,750,000	68.9
Camping equipment	\$12.20	\$1,070,000	72.4
Hunting and fishing equipment	\$35.20	\$3,080,000	81.0
Winter sports equipment	\$3.78	\$332,000	61.9
Water sports equipment	\$3.90	\$342,000	67.4
Rental and repair of sports, recreation, and exercise equipment	\$1.62	\$142,000	73.0
Other sports and recreation equipment	\$9.38	\$817,000	87.1

TABLE 7. ANNUAL HOUSEHOLD SPENDING ON SPORTS, RECREATION, AND EXERCISE EQUIPMENT FOR 1000 ISLANDS REGION AND COMPARISON REGIONS (2018\$)

Region	Average amount spent per household	Population	Total spending	Median household income (2018\$)	Spending potential index	Total spending compared to income
1000 Islands	\$135	236,000	\$11,800,000	\$46,808	78	0.29%
Lake Michigan	\$156	26,800	\$1,740,000	\$51,220	89	0.30%
Newport	\$215	83,300	\$7,650,000	\$75,474	123	0.28%
Finger Lakes	\$176	112,000	\$7,920,000	\$58,563	101	0.30%
Lake Placid	\$152	36,608	\$2,460,000	\$51,792	87	0.29%
Lake George	\$166	67,000	\$4,730,000	\$56,067	95	0.30%
Average of comparison regions	\$173	65,100	\$4,900,000	\$58,600	99	0.30%
1000 Islands compared to average	78.0%	362%	241%	79.8%	78.3%	97.7%

(Table 7). However, total spending on these items was greatest in the 1000 Islands region and more than double the average of the comparison regions (\$11.8 million versus the average of \$4.9 million). While this is due in part to the greater number of households in 1000 Islands region, it also signifies a large total market for recreation goods in the area.

The local demand for outdoor recreation becomes even clearer when looking at recreation expenditures in relation to recreation participation and income. Despite lower spending per household, household spending in the 1000 Islands region is right in line with the comparison regions when spending is compared to income. As discussed above, participation in outdoor activities is close to, and above, national averages for many top activities in the 1000 Islands region. Lower spending per household on equipment related to these activities is therefore not a symptom of a lack of consumer demand for recreation but shows that households in the region are participating more while spending less. This further underlines the value residents derive from the excellent free and low-cost preserves, trails, and conserved open spaces available to area households that enable such participation.

Local recreation businesses

Recreation-related spending by residents as well as tourists supports a wide range of local businesses, including those that sell related equipment. According to Esri's Business Analyst, there are 48 sporting goods stores in the 1000 Islands region (Table 8).⁴⁷ This includes businesses such as fishing and tackle retailers, those that sell camping gear or hiking equipment, wholesalers, and many others. In total, these businesses generate \$98.9 million in sales each year and employ 308 people.

Whether through renting equipment directly to users, giving tours, or providing instruction, many businesses also enable recreation-related activities in the region. This includes businesses involved in equipment rentals, outdoor guides and tours, instructors, and recreation centers. There are 130 such businesses in the region. These businesses provide 1,010 jobs and generate over \$54.0 million in sales each year.⁴⁸ Together with sporting goods, this represents 2.12 percent of all businesses in the 1000 Islands region. Accounting for differences in size, this is comparable to the other regions analyzed in New York (Finger Lakes, Lake Placid, and Lake George). The relative number of businesses (that is, compared to total businesses) involved in sporting goods and recreation-related activities in the 1000 Islands region was greater than that in the Finger Lakes region (1.83 percent), but lower than that in the Lake Placid region (2.67 percent) and Lake George region (2.49 percent).

Although they make up a subset of the above two categories, it is also worth noting the significant impact of water-based activities in the 1000 Islands region. This includes businesses such as marinas, tackle suppliers, and diving equipment providers. There are 54 of these businesses within the region, employing 259 people and generating \$44.8 million in sales each year.

TABLE 8. LOCAL RECREATION BUSINESSES IN THE 1000 ISLANDS REGION

Category	Number of businesses	Employees	Annual sales (2018\$)
Sporting goods stores	48	308	\$98,900,000
Businesses supporting recreation-related activities	130	1,010	\$54,000,000
Businesses supporting water-based activities*	54	259	\$44,800,000

* Businesses supporting water-based activities are a subset of sporting goods stores and businesses supporting recreation-related businesses.

Potters Beach: land protection keeps this popular family destination free and open

Sightseeing along the St. Lawrence River is one thing; actually visiting these spectacular islands is another story. Many of the islands are privately held with no public access. For both residents and visitors, this makes publicly accessible gems such as Grindstone Island Preserve particularly valuable community assets. TILT conserves over 40 percent of Grindstone Island—the fourth-largest island in the 1000 Islands—enabling residents and visitors to go birding, camping, and spending time on Potters Beach with family and friends.

Several preserves on the interior of Grindstone Island, including the Howard-Smith and Rusho Farm Preserves, protect the agricultural heritage of the island as well as sensitive habitat for various native species. There are also many amenities for residents and visitors to enjoy. Located within the preserve, Potters Beach has been a popular summertime destination for generations and is one of the only naturally occurring sandy beaches in the region. During the summer months, it is not uncommon to see lines of boats anchored off the sandy shores.

While the value of tourist visits to Potters Beach is included within the tourism analysis, the beach provides additional recreation value to residents. Using a national database of over 420 recreational studies, The Trust for Public Land determined that residents who use Potters Beach gain approximately \$30 in recreational use value per visit.⁴⁹

All this traffic also translates into spending at local businesses. According to Rick Gregware, owner and operator of Northern Marine since 1980, 200 boats may anchor off Potters Beach over the course of a good weekend. “A lot of them are our customers,” notes Mr. Gregware, whose marina offers fuel, repairs, and other services to area boaters. “It is one of the most popular spots on this part of the river ... and thanks to TILT, it is now forever public.”

CHRIS MURRAY PHOTOGRAPHY



Incredible open space amenities such as Grindstone Island Preserve also grow local businesses. Mike Stock, owner of Riverbay Adventure Inn, sees these spaces as critical economic assets. Mr. Stock grew up spending his summers in the region, and in 2009, enticed by the positive experiences of his youth, he moved to the 1000 Islands to purchase and begin renovating the property that became Riverbay Adventure Inn. The property now has 10 cottages where visitors from across the region can spend a night or a week along the river, as well as a boat and kayak rental business that keeps Mr. Stock and his staff busy from April through October. “The reason why people come to the 1000 Islands is because this is a special area, full of special places,” notes Mr. Stock. “It can be ruined if not properly preserved.”

Households

Understanding the types of households in the 1000 Islands region further highlights residents' preferences for and spending on recreation-related activities. By extension, this gives insight into the value residents place on outdoor amenities including preserves, trails, and conserved open spaces. Esri's Tapestry Segmentation tool allows for the analysis of household behavior by categorizing a given population into "tapestry segments" based on common demographic and consumer patterns. The Trust for Public Land utilized this tool to look at residents in both Jefferson and St. Lawrence Counties. Several of the top household types in both counties are attracted to the diverse amenities provided by preserves, trails, and conserved open spaces.

In St. Lawrence County, all five of the top tapestry segments, representing almost 60 percent of all households, have strong indicators for outdoor recreation (Table 9 [👉](#)). The top tapestry segment, Heartland Communities (19.4 percent of households), consists of households that actively participate in outdoor activities and particularly enjoy fishing, hunting, and walking for exercise. Both Traditional Living (11.2 percent of households) and The Great Outdoors (10.2 percent of households) also enjoy fishing; The Great Outdoors households additionally favor



TERRA BACH, THOUSAND ISLANDS LAND TRUST

TABLE 9. TOP TAPESTRY SEGMENTS IN ST. LAWRENCE COUNTY (2018\$)

Tapestry segment	Households	Median age	Median income	Household traits
Heartland Communities	19.4%	42.3	\$42,400	Heartland Communities are semirural and semiretired. Their hearts are with the country; they embrace the slower pace of life here but actively participate in outdoor activities and community events. Traditional and patriotic, these residents support local businesses and always buy American.
Traditional Living	11.2%	35.5	\$39,300	Many households encompass two generations who have lived and worked in the community; their children are likely to follow suit. The manufacturing, retail trade, and health care sectors are the primary sources of employment for these residents. This is a younger market–beginning householders who are juggling responsibilities while retaining their youthful interests in style and fun.
The Great Outdoors	10.2%	47.4	\$56,400	These households are educated empty nesters living an active but modest lifestyle. Their focus is land. They are active gardeners and partial to homegrown and home-cooked meals. Although retirement beckons, most of these residents still work, with incomes slightly above the national level.
Southern Satellites	9.4%	40.3	\$47,800	This market consists of slightly older, settled married-couple families who own their homes. Workers are employed in a variety of industries, such as manufacturing, health care, retail trade, and construction, with higher proportions in mining and agriculture than in the rest of the U.S. Residents enjoy country living, preferring outdoor activities and do-it-yourself home projects.
Rooted Rural	9.1%	45.2	\$42,300	Rooted Rural households live in many of the heavily forested regions of the country. This group enjoys time spent outdoors, hunting, fishing, or working in their gardens. These communities are heavily influenced by religious faith and family history.

hiking, hunting, and boating. Households in Jefferson County have a similar zest for the types of activities enabled by preserves, trails, and conserved open spaces (Table 10 [↗](#)). Southern Satellites, Rural Resort Dwellers, and Middleburg Households all enjoy activities such as fishing and hunting. Meanwhile, Military Proximity households particularly enjoy staying active and participating in sports and exercising. These household indicators, taken together with the high participation rates in recreation activities discussed above, demonstrate a strong demand for, and appreciation of, the types of activities available through the region’s preserves, trails, and conserved open spaces.

Just as preserves, trails, and conserved open spaces are interspersed throughout the 1000 Islands region, these amenities are interwoven into, and augment, economic development opportunities throughout their communities. These amenities provide economic development in diverse ways. By contributing to the quality of life, they draw new businesses and workers. They also help drive recreation expenditures and supply many households with access to the activities with which they love to engage. Finally, these amenities directly support hundreds of businesses and employees that rely on outdoor recreation.



TERRA BACH - THOUSAND ISLANDS LAND TRUST

TABLE 10. TOP TAPESTRY SEGMENTS IN JEFFERSON COUNTY (2018\$)

Tapestry segment	Households	Median age	Median income	Household traits
Southern Satellites	11.2%	40.3	\$47,800	This market consists of slightly older, settled married-couple families who own their homes. Workers are employed in a variety of industries, such as manufacturing, health care, retail trade, and construction, with higher proportions in mining and agriculture than in the rest of the U.S. Residents enjoy country living, preferring outdoor activities and do-it-yourself home projects.
Rural Resort Dwellers	8.3%	54.1	\$50,400	These communities are centered in resort areas where the change in seasons supports a variety of outdoor activities. Retirement looms for many of these blue-collar, older householders, but workers are postponing retirement or returning to work to maintain their current lifestyles. They are passionate about their hobbies, such as freshwater fishing and hunting.
Rustbelt Traditions	8.1%	39	\$51,800	Rustbelt Traditions households are a mix of married-couple families and singles living in older developments. There is a higher concentration of skilled workers in manufacturing, retail trade, and health care. Rustbelt Traditions represents a large market of stable, hardworking consumers.
Middleburg	7.8%	36.1	\$59,800	Residents are conservative, family-oriented consumers. They are thrifty but willing to carry some debt and are already investing in their futures. They rely on their smartphones and mobile devices to stay in touch and pride themselves on their expertise. This market is younger but growing in size and assets.
Military Proximity	7.5%	22.6	\$48,600	The armed forces are a common bond for consumers in this segment, which represents one of the youngest markets. Most of the labor force is on active duty or has civilian jobs on military bases. The labor force participation rate, with the armed forces, is close to 80 percent, the highest among tapestry markets. Consumers live a young, active lifestyle with a focus on their families.

Conclusion

PREVIOUS STUDIES HAVE DOCUMENTED HOW LAND CONSERVATION PROVIDES VALUABLE NATURAL GOODS AND SERVICES, FROM WATER QUALITY PROTECTION TO FLOOD MITIGATION SERVICES. This study finds the direct contributions of preserves, trails, and conserved open spaces to the 1000 Islands region. From attracting visitors to enhancing the quality of life for seasonal and year-round residents, the 1000 Islands region's beautiful and unique preserves, trails, and conserved open spaces are an integral part of the local economy. This is the first time a selection of the diverse economic contributions of the amenities in the 1000 Islands region has been measured.

Residents choosing to call the 1000 Islands home value being close to the region's preserves, trails, and conserved open spaces. Be it a family home near Zenda Farms Preserve or a summer cottage near one of the several state parks in the region, these amenities create additional value across the 1000 Islands region. Preserves, trails, and conserved open spaces increase the value of nearby residential properties in the 1000 Islands region by \$55.9 million and increase property tax revenues by \$684,000 per year.

Preserves, trails, and conserved open spaces also contribute to the tourism economy. These amenities, like the Otter Creek and Grindstone Island Preserves, are central to the region's identity and have been attracting visitors to the region for generations. Approximately



ROBIN TURBOLINO, THOUSAND ISLANDS LAND TRUST



10 percent of visitors to the 1000 Islands region come for the primary purpose of visiting these amenities. These visitors spend an estimated \$37.9 million annually in the 1000 Islands region, which generates \$2.58 million and \$2.10 million in local and state tax revenues, respectively. For both seasonal and year-round residents, these spaces support the high quality of life in the region, which helps attract businesses and employees. It also drives a robust recreation economy. Residents take advantage of the incredible opportunities to hike local trails, kayak to protected islands, and fish protected streams. By providing opportunities for recreation, these amenities support \$11.8 million in resident spending on sports, recreation, and exercise equipment annually, or an average of \$135 per household. Along with tourist expenditures, this spending supports 48 sporting goods stores that generate \$98.9 million in sales and provide 308 jobs, further demonstrating that preserves, trails, and conserved open spaces are significant contributors to the 1000 Islands economy.

Far from luxuries, this study illustrates that these amenities are key economic drivers that contribute millions annually in economic benefits. Further, although this analysis determines many of the economic benefits of preserves, trails, and conserved open spaces in the 1000 Islands region, it does not capture the full value of these spaces for area residents. From having a quiet place to walk and reflect to a community garden in which to meet your neighbors or an open access preserve for the first family camping trip, the full value of preserves, trails, and conserved open spaces goes far beyond dollars and cents. Nevertheless, understanding these values is a critical step for municipalities, stakeholders, and communities to make informed decisions about their lands and future.

Endnotes

- 1 Martin D. Heintzelman and Maura Maguire, *The Value of Open Space: A Review of the Literature Applied to the Thousand Islands Region and the Work of the Thousand Islands Land Trust*, 2017.
- 2 Jared S. Nunery and William S. Keeton, "Forest Carbon Storage in the Northeastern United States: Net Effects of Harvesting Frequency, Post-Harvest Retention, and Wood Products," *Forest and Ecology Management* 259, no. 8 (2010): 1363-1375; D. Russi et al., *The Economics of Ecosystems and Biodiversity for Water and Wetlands*, London: IEEP, 2013, accessed March 26, 2018, <http://www.teebweb.org/publication/the-economics-of-ecosystems-and-biodiversity-teeb-for-water-and-wetlands/>; U.S. Environmental Protection Agency, *Economic Benefits of Wetlands*, EPA843-F-06-004, 2006, accessed April 2, 2018, <https://www.epa.gov/sites/production/files/2016-02/documents/economicbenefits.pdf>; U.S. Department of Agriculture, Forest Service, "Ecosystem Services from National Grasslands," accessed March 7, 2018, www.fs.fed.us/grasslands/ecoservices/; American Farmland Trust, *The Environmental Benefits of Well-Managed Farmland*, DeKalb, IL: Center for Agriculture in the Environment, 2005; Todd Gartner et al., "Protecting Forested Watersheds Is Smart Economics for Water Utilities," *Journal of American Water Works Association* 106, no. 9 (2014): 54-64.
- 3 The Trust for Public Land, *The Economic Benefits of New York's Environmental Protection Fund*, 2012, <http://cloud.tpl.org/pubs/local-ny-economic-benefits-rpt2012.pdf>.
- 4 The Land Trust Alliance and U.S. Fish and Wildlife Service, *Investing in Nature: The Economic Benefits of Protecting Our Lands and Waters*, accessed May 29, 2018, <http://s3.amazonaws.com/landtrustalliance.org/USFWS-LandTrustAlliance-Economic-Benefits-Brochure.pdf>.
- 5 Office of the State Comptroller, New York, *Economic Benefits of Open Space Preservation*, 2010, accessed May 29, 2018, https://www.dec.ny.gov/docs/lands_forests_pdf/openspacepres.pdf.
- 6 J. C. Bergstrom and R. C. Ready, "What Have We Learned from Over 20 Years of Farmland Amenity Valuation Research in North America?" *Review of Agricultural Economics* 31, no. 1 (2009): 21-49; C. E. Carpio, M. K. Wohlgenant, and T. Boonsaeng, "The Demand for Agritourism in the United States," *Journal of Agricultural and Resource Economics* 33, no. 2 (2008): 254-269; S. C. Deller, T. H. Tsai, D. W. Marcouiller, and D. B. K. English, "The Role of Amenities and Quality of Life in Rural Economic Growth," *American Journal of Agricultural Economics* 83, no. 2 (2001): 352-365; A. Ghermandi, J. C. Van Den Bergh, L. M. Brander, H. L. F. de Groot et al., "Values of Natural and Human-Made Wetlands: A Meta-Analysis," *Water Resources Research* 46 (2010): 12516; P. Nilsson, "The Influence of Urban and Natural Amenities on Second Home Prices," *Journal of Housing and the Built Environment* 30, no. 3 (2015): 427-450; N. C. Poudyal, D. G. Hodges, J. Fenderson, and W. Tarkington, "Realizing the Economic Value of a Forested Landscape in a Viewshed," *Southern Journal of Applied Forestry* 34, no. 2 (2010): 72-78; J. E. Reynolds and A. Regalado, "The Effects of Wetlands and Other Factors on Rural Land Values," *Appraisal Journal* 70, no. 2 (2002): 182-190.
- 7 Virginia McConnell and Margaret Walls, *The Value of Open Space: Evidence from Studies of Nonmarket Benefits* (Washington, DC: Resources for the Future, 2005); John L. Crompton, "The Impact of Parks on Property Values: Empirical Evidence from the Past Two Decades in the United States," *Managing Leisure* 10, no. 4 (2005): 203-218.
- 8 Garlock Realty, "South Shore Drive," accessed May 22, 2018, https://www.garlockrealty.com/-/listing/NY-JLBOR/S1072429/129-South-Shore-Drive-Clayton-NY-13624?display_page=1&from=results&index=8&lpp=20&total_listings=96; Zillow, "Bartlett Point Road," accessed May 23, 2018, https://www.zillow.com/homes/for_sale/30549976_zpid/44.282755,-76.009169,44.178326,-76.193705_rect/12_zm/1_fr/.
- 9 Jonathan Taylor, principal, Taylored Architecture, PLLC, personal communication with the author, May 23, 2018.
- 10 Jacqueline Geoghegan, "The Value of Open Spaces in Residential Land Use," *Land Use Policy* 19 (2002): 91-98; Elena G. Irwin, "The Effects of Open Space on Residential Property Values," *Land Economics* 78, no. 4 (2002): 465-480.
- 11 John L. Crompton, "The Impact of Parks on Property Values: Empirical Evidence from the Past Two Decades in the United States," *Managing Leisure* 10, no. 4 (2005): 203-218.
- 12 John L. Crompton, *The Proximate Principle: The Impact of Parks, Open Space and Water Features on Residential Property Values and the Property Tax Base*. (Ashburn, VA: National Recreation and Park Association, 2004).
- 13 Brad Broberg, "Everybody Loves a Park: Green Space Is a Premium When Building, Buying, or Selling," National Association of Realtors, *On Common Ground* (2009): 20-25.
- 14 Elysa Smigielski, *Effect of New York State Forests on Residential Property Values*, State University of New York College of Environmental Science and Forestry, 2014.
- 15 Carrie M. Tuttle and Martin D. Heintzelman, "The Value of Forever Wild: An Economic Analysis of Land Use in the Adirondacks," *Agricultural and Resource Economics Review* 42, no. 1 (2013): 119-138.

- 16 Martin D. Heintzelman and Chuan Tang. *Towards the Measurement of the Value of Public Land Designations in the Adirondack Park*, 2015, accessed May 15, 2018, http://bewildnewyork.org/wp-content/uploads/2015/11/Clarkson-Study-2016_small.pdf.
- 17 John L. Crompton, *The Proximate Principle: The Impact of Parks, Open Space and Water Features on Residential Property Values and the Property Tax Base*. (Ashburn, VA: National Recreation and Park Association, 2004).
- 18 A home consists of a residential structure that is owned and taxed. This analysis includes single-family homes and multiple-unit dwellings (e.g., condos). Other property types were not considered in this analysis because sufficient data were not available to quantify the benefit. Nonresidential property types are rarely studied in the academic literature as they are more difficult to statistically analyze—there are more variables that influence value and fewer real estate transactions to compare.
- 19 2017 home values were the most recent available at the time of this analysis. These values were adjusted to 2018\$ using the consumer price index.
- 20 Rebecca Dahl, Zenda Farms program director, Thousand Islands Land Trust, personal communication with the author, May 17, 2018.
- 21 Mac MacFarlane, personal communication with the author, May 16, 2018.
- 22 Gary DeYoung, 1000 Islands International Tourism Council, and Raymond Petersen and Joel LaLone, The Center for Community Studies, State University of New York, Jefferson, Jefferson County Seasonal Residents Study 2012.
- 23 Thousand Islands International Tourism Council, *Leisure Visitor Study: 1000 Islands Region, New York*, 2016.
- 24 Spencer Busler, assistant director, Thousand Islands Land Trust, email message to author, March 28, 2018.
- 25 Political Economy Research Institute, *Economic Benefit of the New York State Park System*, prepared for Parks and Trails of New York, accessed January 11, 2018, <https://www.ptny.org/application/files/6515/0903/5031/Economic-benefits-of-NYS-parks.pdf>.
- 26 Economic impact includes direct, indirect, and induced impacts.
- 27 Tourism Economics, *The Economic Impact of Tourism in New York: Thousand Islands Focus, 2015 Calendar Year*, 2016.
- 28 Longwoods International, *Adirondacks, NY: 2015 Visitor Report*, 2016, accessed March 16, 2018, <http://www.roostadk.com/wp-content/uploads/2016/10/Adirondacks-2015-Visitors-Report-Final.pdf>.
- 29 New York State Office of Parks, Recreation and Historic Preservation, Statewide Comprehensive Outdoor Recreation Plan 2014-2019, accessed January 11, 2018, <https://parks.ny.gov/inside-our-agency/documents/201419StatewideComprehensiveOutdoorRecreationPlan.pdf>.
- 30 Outdoor Industry Association, "Outdoor Recreation Economy," accessed January 11, 2018, <https://outdoorindustry.org/advocacy/>.
- 31 U.S. Department of Commerce, Bureau of Economic Analysis, "Prototype Statistics: Outdoor Recreation Accounted for 2 Percent of GDP in 2016," accessed March 16, 2018, <https://blog.bea.gov/2018/02/14/prototype-statistics-outdoor-recreation-accounted-for-2-percent-of-gdp-in-2016/>.
- 32 The availability of data limits The Trust for Public Land's ability to calculate a recreational use value for residents who utilize the Otter Creek Preserve, but economists know that park and trail amenities provide value because people are willing to pay for recreational access to parks and trails. This value exists even if individuals do not have to pay to access these amenities (e.g., pay an entry fee). Access to the Otter Creek Preserve is free. Thus, the benefit accrues to the user in one of two ways: by providing cost savings to individuals who were willing to pay to recreate but did not have to and by providing travel cost savings to individuals who do not have to travel to access a substitute site. Each visit a resident takes to the Otter Creek Preserve can be assigned a dollar value. The recreational activity can be approximated utilizing estimates of outdoor recreation value from Oregon State University's Recreation Use Values Database. Oregon State University's database contains values for more than 20 activities and is based on over 420 economic studies that estimated the use value of recreation activities in the United States and Canada from 1958 to 2015. Recreational activities in the preserve that have been well studied in the literature include hiking, wildlife viewing, and picnicking. In determining which values are relevant, The Trust for Public Land's economists researched the value that was most recent, conservative, and relevant to the Northeast. Residents who use the Otter Creek Preserve gain approximately \$20.20 in recreational use value per visit. This value incrementally decreases as the number of visits in a year increases, consistent with the economic theory of diminishing marginal returns. Oregon State University, Recreation Use Values Database, accessed June 21, 2016, <http://revaluation.forestry.oregonstate.edu/database>.

- 33 Gordon Block, "Fort Drum Economic Impact Increases in 2017, Breaking a Five-Year Streak of Losses," *Watertown Daily Times*, February 28, 2018, accessed May 15, 2018, <http://www.watertowndailytimes.com/news03/fort-drum-economic-impact-increases-in-2017-breaking-five-year-streak-of-losses-20180228>.
- 34 Jefferson County Economic Development, "Home," accessed May 15, 2018, <http://www.jcida.com/Home.aspx>.
- 35 Marshall Weir, director of marketing, Jefferson County Economic Development, personal communication with the author, May 15, 2018.
- 36 Lori Arnot, founder, Clayton Food Co-op, personal communication with the author, May 24, 2018.
- 37 Richard Florida, *Cities and the Creative Class* (New York: Routledge, 2005), accessed August 18, 2016, https://books.google.com/books?id=SDeUAgAAQBAJ&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false.
- 38 Town of Alexandria, Comprehensive Land Use Plan, 2013; Town and Village of Hammond, New York, Joint Comprehensive Plan, 2013.
- 39 St. Lawrence County Chamber of Commerce, "Area Communities," accessed May 23, 2018, <http://www.northcountryguide.com/pages/area-communities>.
- 40 Gary DeYoung and Raymond Peterson, Seasonal Resident Survey, Jefferson County, New York, 2012.
- 41 Joint Town/Village of Clayton, Comprehensive Land Use Plan Survey Questions, 2014.
- 42 Esri, "ESRI Business Analyst," accessed April 20, 2018, <http://www.esri.com/software/businessanalyst>.
- 43 The counties selected for each comparison region were as follows: Charlevoix County, Michigan (Lake Michigan); Newport County, Rhode Island (Newport); Tomkins County, New York (Finger Lakes); Essex County, New York (Lake Placid); and Warren County, New York (Lake George). These comparison regions were chosen because of a combination of similar high-quality water-based amenities, rural character, geography, and other characteristics.
- 44 The data analyzed here are from the Sports and Leisure Market Potential report and are based on national propensities to use various products and services, applied to local demographic composition. Usage data were collected by GfK MRI, a leading market research firm, in a nationally representative survey of U.S. households.
- 45 This spending category includes exercise equipment and gear, as well as game tables.
- 46 Includes fishing and hunting gear.
- 47 The number of sporting goods stores was determined based on NAICS codes 42391 (sporting and recreational goods and supplies merchant wholesalers) and 45111 (sporting goods stores).
- 48 As it did with sporting goods stores, The Trust for Public Land analyzed several categories of NAICS codes related to outdoor recreation activities and included codes for businesses that could benefit either directly or indirectly from outdoor recreation on preserves, trails, and protected open spaces in the 1000 Islands region.
- 49 The availability of data limits The Trust for Public Land's ability to calculate a recreational use value for residents who utilize Potters Beach, but economists know that these kinds of amenities provide value because people are willing to pay for recreational access to public and private beach facilities. This value exists even if individuals do not have to pay to access these amenities (e.g., pay an entry fee). Access to Potters Beach is free. Thus, the benefit accrues to beach users by providing cost savings to individuals who were willing to pay to recreate but did not have to and by providing travel cost savings to individuals who do not have to travel to access a substitute site.
- Each visit a resident takes to Potters Beach can be assigned a dollar value. The recreational activity at Potters Beach can be monetized utilizing estimates of outdoor recreation value from Oregon State University's Recreation Use Values Database. Oregon State University's database contains values for more than 20 activities and is based on over 420 economic studies that estimated the use value of recreation activities in the United States and Canada from 1958 to 2015. In determining which values are relevant, The Trust for Public Land's economists researched the values of beach use and motorized boating that were most recent, conservative, and relevant to the northeast region. Residents who use Potters Beach gain approximately \$30.10 in recreational use value per visit. This value incrementally decreases as the number of visits in a year increases, consistent with the economic theory of diminishing marginal returns. Oregon State University, Recreation Use Values Database, accessed June 21, 2018, <http://recvaluation.forestry.oregonstate.edu/database>.



THE
TRUST
FOR
PUBLIC
LAND

The Trust for Public Land
101 Montgomery St., Suite 900
San Francisco, CA 94104
415.495.4014

FRONT TOP: FEATHERS IN FLIGHT PRODUCTIONS; FRONT BOTTOM: TERRA BACH, THOUSAND ISLANDS LAND TRUST;
BACK: SUSIE WOOD, THOUSAND ISLANDS LAND TRUST.

tpl.org