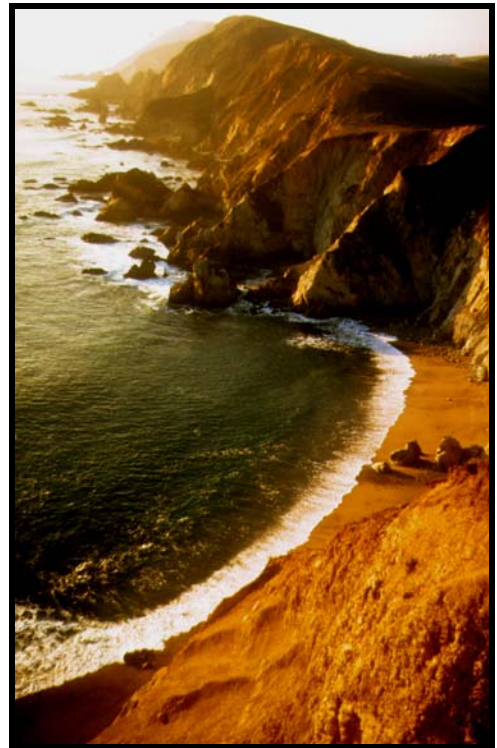


**Economic Impacts Study
Point Reyes National Seashore**

FINAL REPORT



Submitted to:

**Superintendent Don Neubacher
Point Reyes National Seashore
National Park Service**

December 11, 2006



December 11, 2006

Mr. Don Neubacher
Superintendent
Point Reyes National Seashore
National Park Service
1 Bear Valley Road
Point Reyes, CA 94956

Dear Mr. Neubacher:

Bay Area Economics ("BAE") is pleased to submit this final Economic Impacts Study for the Point Reyes National Seashore ("Park"). We have prepared a comprehensive analysis of the direct, indirect, induced impacts of the Park, including the Park's own operations, concessioner activities, visitor expenditures, agricultural operations, and activities of other private entities operating on Park lands. We have prepared estimates of these impacts on the economies of Marin and Sonoma counties as well as California.

In addition to the economic impacts, BAE has estimated jobs generated by the Park as well as tax impacts on the local and state economy.

It has been a pleasure to work with you and your staff on this study. Please do not hesitate to contact me if you have any questions at 510-547-9380 x28.

Sincerely,

A handwritten signature in black ink, appearing to read "D Shiver", is written over a light gray, textured rectangular background.

David Shiver
Principal

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Sunset looking towards the Headlands

Executive Summary

The National Park Service engaged Bay Area Economics (BAE) to prepare a comprehensive analysis of the economic impacts of the 71,000-acre Point Reyes National Seashore (PRNS) and an additional 20,000 acres of lands administered by PRNS on behalf of the Golden Gate National Recreation Area. BAE is a national urban real estate consulting firm based in Emeryville, California. This study is based upon 2005 data supplied by PRNS and supplemental data collected by BAE. Using the IMPLAN input-output model, BAE has prepared an analysis with the following findings:

Overall Impacts

- In 2005, Point Reyes National Seashore generated a total of \$71.8 million in direct, indirect, and induced impacts in Marin and Sonoma counties and accounted for approximately 850 jobs.
- Viewed as part of the broader Marin and Sonoma economy, the park accounts for approximately 0.163 percent of total economic activity in 2005.
- The park's impact on the California economy totaled \$45.2 million in total economic impacts and 432 jobs.
- Economic activity by the park generates approximately \$5.3 million in annual taxes for Marin and Sonoma counties and \$2.9 million for California.
- Point Reyes National Seashore is a major source of economic activity in Marin County, and one of the largest generators of economic activity in West Marin County.

Impacts from Park Operations

- PRNS operations totaled \$14.8 million in 2005 with \$14.3 million in direct park operations and expenditures and an additional \$436,000 in concessions receipts.
- Total impacts of the park operations were \$19.1 million in Marin and Sonoma counties and \$22 million in the State.
- Park operations represent 26.6 percent of total impacts in Marin and Sonoma counties from all categories of park activity. (See Table ES-1.)

Impacts from Visitor Expenditures

- There were approximately 2 million visitors to PRNS in 2005, comprised of day-trippers (61 percent), motel lodgers (23 percent), and campers (16 percent).
- Total visitor spending was \$36 million in 2005 in Marin and Sonoma counties; out-of-state visitors spent an additional \$8.1 million.
- Day-trippers to PRNS spent approximately \$18.3 million in 2005; out-of-state day-trippers spent \$4.5 million.
- Visitors staying in motels spent approximately \$12.7 million on lodging and other expenditures in Marin and Sonoma counties; an additional \$1.8 million (excluding lodging) was spent by visitors from outside California.
- In-state campers spent \$5 million and out-of-state campers \$1.1 million in Marin and Sonoma counties.
- The total economic impact (direct, indirect, and induced) from visitor spending was estimated at \$38.1 million in Marin and Sonoma counties and \$8.1 million for California.
- Visitor expenditures represented 53.1 percent of total park impacts in Marin and Sonoma counties. (See Table ES-1.)
- Visitor spending supports 540 jobs within Marin and Sonoma counties and an additional 110 jobs in California.
- A recent study of the Marin County tourism cluster identified the total impact of tourism in Marin County at \$238 million in 2005. PRNS' total visitor spending impacts would represent slightly more than 16 percent of this total. (Note: data for 2005 for total tourism impacts in Sonoma County were unavailable).

Impacts from Agricultural Activities

- PRNS has several active cattle and dairy operations with 2,562 animal units dedicated to beef and organic beef production and 3,451 units dedicated to dairy production in 2005.
- Total impacts from these agricultural activities totaled \$12.6 million in Marin and Sonoma counties and \$12.9 million in California, generating 100 and 90 jobs,

respectively.

- Agricultural activities represented 17.6 percent of total park impacts in Marin and Sonoma counties. (See Table ES-1.)
- The park's agricultural activities comprise a small percentage of total agricultural value in Marin and Sonoma counties, approximately 0.9 percent in 2005.

Impacts from Other Private Activities in the Park

- The analysis included the economic impacts for other private entities that operate within the park: the Point Reyes National Seashore Association and kayak operators.
- These other activities generated over \$1.9 million in direct, indirect, and induced impacts supporting 20 jobs in Marin and Sonoma counties, and \$2.1 million in total impacts in California supporting 22 jobs.
- Other Private Activities in the Park represented 2.7 percent of total park impacts in Marin and Sonoma counties. (See Table ES-1.)

Tax Impacts

- In 2005, activities at PRNS generated \$5.3 million in tax revenue for Marin and Sonoma counties and \$2.9 million for California.
- BAE estimates that Marin and Sonoma counties received approximately \$339,000 in transient occupancy tax revenue from visitors staying in lodging near the Park.

Other Economic Benefits

- Point Reyes National Seashore also contributes to the region's economic development infrastructure by stimulating scientific understanding of complex ecosystems, promoting habitat restoration in support of fisheries and wildlife, and advancing science and environmental education.
- The park collaborates with area schools and universities to monitor and restore key habitats for important species such as Coho salmon, spotted owls, and marine mammals.
- PRNS is home to the Pacific Coast Learning Center and Main Science Center (facilities at Sacramento Landing) that support coastal resource stewardship through science.

- PRNS operates a “Sabbatical in the Park” program that brings expert faculty to the park to support natural and cultural resource protection and management activities. In 2005, there were 80 research projects underway with a value of approximately \$500,000.
- The park also runs several environmental stewardship education programs for students from kindergarten through college, including the Nature Science Camp and free ranger-led field trips. PRNS offers scholarships through the Point Reyes National Seashore Fund, Seashore Association, and Point Reyes Observatory Endowment Fund.
- Point Reyes National Seashore has remained popular throughout the years, drawing nearly 2 million in attendance last year.
- Many businesses and organizations have emerged to provide Park visitors with services and goods, such as several small bed and breakfasts and recreational companies. According to the National Parks Conservation Association, the Village of Point Reyes Station would not be able to attract the volume of people without the existence of the National Seashore.

Table ES-1
Total Economic Impacts
of Point Reyes National Seashore
on Marin and Sonoma Counties
Fiscal Year 2005

<u>Impact Categories</u>	<u>Total Impacts</u>	<u>Percent</u>
Park Operations	\$19,096,000	26.6%
Visitor Expenditures	\$38,096,000	53.1%
Agricultural Activities	\$12,604,000	17.6%
Other Private Activities	\$ 1,962,000	2.7%
Total Annual Expenditures	\$71,758,000	100.0%

Sources: PRNS; Bay Area Economics, 2006.

Introduction

The National Park Service, Point Reyes National Seashore commissioned Bay Area Economics (BAE) to estimate economic impacts resulting from Park and Park-related activities. This study's purpose is to identify and quantify impacts of Point Reyes National Seashore on the local economy (defined as Marin and Sonoma counties) as well as the overall California economy. The analysis is based upon budget and visitor information provided by the National Park Service as well as supplemental data collected by BAE.

The study begins with a brief description of Point Reyes and then proceeds to estimate the direct, indirect, and induced economic impacts generated by it as well as employment generated and tax impacts. BAE also describes a number of economic benefits that are more qualitative in nature and not subject to quantification. These other economic benefits are found in the Park's community service activities and partnerships for educational or research purposes with other organizations and institutions both inside and outside Park boundaries.

By reviewing both the quantitative and the qualitative analyses provided herein, policy-makers and the general public will have a comprehensive understanding of the Park's economic contributions and its importance in the local economy.



The Great Beach at Point Reyes

Point Reyes National Seashore

Park Overview

Established in 1962, Point Reyes National Seashore is one of the nation's coastal treasures. With over 71,000 acres, including 33,000 wilderness acres, the Park encompasses estuaries, beaches, grasslands, salt marshes, and coniferous forests, creating an 80 mile haven of unspoiled and undeveloped coastline in California (See Figure 1). The Park serves as an important link in a chain of protected areas, sharing boundaries with the Gulf of the Farallones and Cordell Bank National Marine Sanctuaries, Tomales Bay State Park, and Golden Gate National Recreation Area (it should be noted that the PRNS manages an additional 20,000 acres of lands within the Golden Gate National Recreation Area). Over 45 percent of North American avian species and 18 percent of California plant species can be found within the Park. Point Reyes is internationally recognized by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) as part of the Central California Coast Biosphere Reserve.



Point Reyes Lighthouse

In addition to its abundant natural resources, Point Reyes also has 297 designated historic structures, over 120 archeological sites, 498,000 museum objects, and one National Historic Landmark.

The Park offers a multitude of outdoor recreational opportunities including 147 miles of hiking trails, spectacular beaches, and four back-county campgrounds. Point Reyes operates three visitor centers and two educational centers. The Park receives approximately 2.5 million visitors annually who

undertake a variety of activities: hiking, picnicking, camping, kayaking, birding, whale-watching, cycling, museum-going, and participating in educational programs. The Park benefits from its location in Marin County, which is part of the San Francisco Bay Area, a ten-county region with over seven million residents. Point Reyes is approximately a one hour drive from major population centers in San Francisco, San Mateo County, and East Bay.



Mission and Vision

The economic impacts of Point Reyes should be considered in light of the mission of the National Park Service and the Park's own vision. The overall National Park Service mission is set forth in the 1916 Organic Act:

"....to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

Complementing its primary mission, Point Reyes has formulated its own vision statement as follows:

"Point Reyes will be a model of environmental stewardship – a coastal sanctuary where all park staff and the public are actively involved in the common goal of maintaining, protecting, restoring, and preserving the natural and cultural integrity of the Park."

The economic activity of the Park is to be supportive of the Park's mission and vision. By measuring specific impacts, the public can gauge the economic benefits that accompany preservation and protection of natural and cultural resources.

Park Management

Point Reyes National Seashore is a unit of the National Parks system managed by the National Park Service, U.S. Department of the Interior. Park management of its programs and operations is accomplished by several divisions: Administrative, Interpretation and Resource Education, Natural Resources Management, Resource Protection, Cultural Resources Management, Facilities Management, Science, and Fire. Point Reyes had 147 employees and a total budget of \$14.3 million in fiscal year 2005.



Northern spotted owl, elephant seals, and gray fox

Methodology: The IMPLAN Input-Output Model

For years, economists have used regional and national input-output models as a tool to understand the extremely complex interactions among the various parts of an economy. The economic model used in this analysis, IMPLAN (“IMPact analysis for PLANning”), is a widely-accepted, PC-based computer software package that automates the process of developing input-output models for regions within the United States.

At the heart of the model is an input-output dollar flow table. For the specified region, the input-output table accounts for all of the dollar flows between the different sectors within the economy. Using this information, the IMPLAN software models the way income injected into one sector is then spent and re-spent in other sectors of the economy, generating waves of economic activity, or so-called “economic multiplier” effects.

Regions studied using the IMPLAN model can be defined at various geographic levels to fit the particular analysis. The developers of the model maintain large databases of economic and trade data that are collected and published by the federal government. These data are compiled and formatted for use in the IMPLAN model.

The data regarding input-output relationships between sectors used in the model for this analysis are from 2003 (latest currently available), and have been adjusted to provide results expressed in 2005 dollar figures. The data that IMPLAN uses are customized to reflect the specific, detailed economic characteristics of each individual county that is included within the specified regional study area. The IMPLAN model in turn is able to summarize the economic effects of a given economic “event” that is input into the model, expressing the impacts in terms of direct, indirect, and induced jobs, output, value added, and income by industry sector.

The IMPLAN model is well respected as the industry standard for projecting economic impacts. This study looks at several IMPLAN model “events” related to the PRNS, including:

- Park operations
- Visitor expenditures
- Agricultural activities
- Other private activities on Park lands (excluding agriculture)

Data for these events have been supplied by the Park and reflect conditions in fiscal year 2005. The impacts analysis divides economic impacts between a local economy, defined as Marin and Sonoma counties, and the State of California. Marin and Sonoma counties were identified as the primary local market since the Park lies at the northern end of Marin County close to the Marin-Sonoma county line.

Types of Economic Impacts

For every dollar spent in economic activities at the Park, some portion of that dollar remains in the local economy. PRNS staff provided the characteristics of the economic activities that take place at the Park, which in conjunction with the IMPLAN computerized input-output model determine the direct impacts of the PRNS on the economies of Marin and Sonoma counties and the State of California. For this analysis the IMPLAN model estimates six categories of impacts:

- Direct impacts
- Indirect impacts
- Induced impacts
- Total economic impacts
- Employment
- Tax impacts

Direct Impacts

Direct impacts indicate the initial change in economic activity due to the event. Or in other words, direct impacts are the total amount of economic value available to circulate through the economy to generate multiplier effects. For example, a park visitor spending \$25 on campground fees has a direct effect of \$25. Other examples of direct impacts are PRNS purchases of goods and services to operate the Park, visitor expenditures on gas, food, lodging, and recreational activities, and expenditures made by dairy operators or concessioners at the Park.

Indirect Impacts

Indirect impacts are changes in inter-industry transactions as supplying industries respond to increased demand (as measured by the direct effect). Put in other words, the indirect impacts trace the direct impact as it ripples through the local and state economy. In the simple example of the \$25 campground fee, indirect impacts reflect business to business activities necessary to provide a night of camping at the Park. These impacts occur both within and outside of the local and state economies.

Induced Impacts

Induced impacts result when wage earners directly or indirectly linked to the events spend their income in the local and state economy. Continuing with our example, a ranger collecting

campground fees and PRNS staff that support that ranger spend their income by making purchases of goods and services. Not all income is spent locally and a portion will leak out of the local economy.

Total Economic Impact

The total economic impact of the \$25 expenditure for a campground fee would be the sum of the direct, indirect, and induced impacts.

Employment Generated

Based upon the inputs of Park data, IMPLAN generates an estimate of total number of employees associated with a given level of output or operating income for direct, indirect, and induced impacts.

Tax Impacts

Based upon the total economic impacts, the IMPLAN model estimates the total state and local taxes generated by the Park.



American Bittern

Impacts from Park Operations

The operation of the Park itself generates economic impacts through the hiring of staff and purchases of goods and services, contracting with concessioners to provide visitor-serving services, and operating its four campgrounds. PRNS staff provided operating budget and concessioner data for 2005, and they are used as the basis for the Park operations “event” that was input into the IMPLAN model.

Table 1 indicates that the Park directly expended \$14.3 million in 2005. Concession activities grossed an additional \$436,000 in annual receipts, making total expenditures related to Park operations \$14.8 million. Table 1 shows the separate components of Park operations inputs into the IMPLAN model.

Table 1
Park Operations
Point Reyes National Seashore
Fiscal Year 2005

Expenditures/Receipts	FY 2005
Park Operations Expenditures	\$14,338,000
Concessions Receipts:	\$ 435,560
<i>Food</i>	\$ 28,517
<i>General Merchandise</i>	\$ 7,030
<i>Lodging</i>	\$ 99,375
<i>Horsecamp Activities</i>	\$ 300,638
Total Park Operations	\$14,773,560

Sources: PRNS; Bay Area Economics, 2006.

Using these input data, the IMPLAN model estimates that the direct economic impact from Park operations¹ in fiscal year 2005 was approximately \$11.3 million in Marin and Sonoma counties, and \$11.9 million in the State (see Table 2). It should be noted that IMPLAN estimates that approximately \$3.5 million dollars is spent outside of the two counties, and \$2.9 spent outside of the State.²

¹ For the purposes of this study, the following IMPLAN sectors are used to represent PRNS’ annual operating activity: Federal Government Non-Defense (adjusted to reflect labor’s share of budget), Food Stores, General Merchandise, Other Lodging (non-hotel/motel), and Other Recreational Activities.

² \$14.8 million total Park operations less \$11.3 million local direct impact equals \$3.5 million spend outside local economy; similar calculation for State.

Indirect impacts for Park operations total \$1.1 million within Marin and Sonoma counties and \$1.6 million for California. Induced impacts are \$6.6 and \$8.5 million, respectively. The total economic impacts of Park operations are \$19.1 million for the local economy and \$22 million for California.

Table 2
Economic Impacts
Park Operations

Impact (a)	Output		Employment	
	Marin and Sonoma Counties	California	Marin and Sonoma Counties	California
Direct (b)	\$11,340,000	\$11,911,000	120	130
Indirect	\$1,133,000	\$1,639,000	10	10
Induced	\$6,623,000	\$8,483,000	60	70
Total	\$19,096,000	\$22,033,000	190	210

Notes:

(a) All impacts are reported in 2005 dollars.

(b) Direct Impact does not include payments to the federal government, state and local government, payments to capital, inventory additions/deletions.

Sources: IMPLAN; Bay Area Economics, 2006.

Employment generated by Park operations is estimated by the IMPLAN model to be 190 within Marin and Sonoma counties and 210 in California. Note that the employment reported in Table 2 is derived by IMPLAN from Park budget and concessioner receipts information for direct, indirect and induced economic activity. Actual employment at PRNS differs; as of 2005 the PRNS itself reported 115 full-time equivalents.



Clem Miller Environmental Education Center

Economic Impacts Study
Point Reyes National Seashore

Impacts from Visitor Expenditures

Visitor Expenditures are another source of economic activity generated by the Park. PRNS reports slightly less than 2 million (1.99 million) visitors in 2005. Of these visitors, about 29 percent originated from Marin and Sonoma counties and 18.7 percent originated from outside California, according to a survey of visitors conducted by PRNS in 1997. The remainder originated from other parts of the San Francisco Bay Area and California.

Types of Visitors

To estimate impacts a distinction must be made among visitor types. There are three major categories of Park visitors: (i) day-trippers; (ii) motel lodgers; and (iii) campers. Day-trippers enter and exit the Park on the same day and do not utilize overnight accommodations. Motel lodgers visit the Park for more than one consecutive day, but stay in indoor lodgings. Campers visit the Park for more than one consecutive day and stay at a campground, either at the Park itself in one of four campgrounds or at other campgrounds in nearby parks such as Tamalpais or Samuel P. Taylor State Parks.

Expenditure Patterns

The 1997 visitor survey estimates the average daily expenditures on food, gas, lodging, gifts, and other retail expenditures within a 60-mile radius of the Park. These daily expenditures are made on a per “visitor-party” basis.³ The analysis further differentiates visitors by type of visitor (i.e. day tripper, visitors staying in motels, and campers), as each type of visitor has a unique spending pattern. These spending patterns are the basis for estimating the economic impacts of visitor expenditures and they are shown in Table 3 below.



Dogs on leash along Limantour Beach

³ A visitor-party refers to one or more visitors who attend the Park together.

Table 3
Visitor Expenditure Breakdown
Point Reyes National Seashore

Expenditures Per Party Day 2005	Day Trippers	Overnight		Total
		Motel	Campers	
Lodging	\$0	\$117	\$25	\$142
Groceries	\$19	\$25	\$14	\$58
Gas/Oil	\$16	\$21	\$12	\$48
Dining Out	\$35	\$46	\$26	\$106
Gifts	\$13	\$17	\$9	\$39
Other	\$5	\$6	\$4	\$14
Total Expenditures Per Party Day	\$84	\$224	\$87	\$394

Sources: PRNS 1997 Visitor Survey; Bay Area Economics, 2006.

Estimates of Visitor Expenditures

In the following sections, BAE presents its estimate of total annual expenditures for each type of visitor. These total expenditures for each category represent the visitor expenditure “event” input into the IMPLAN analysis.⁴ The adjustment factors used in determining the percentages of visitor expenditures spent in the counties can be found in Appendix A.

Day-Trippers. According to the most recent survey of visitors completed in 1997, over 60 percent of all visitors are day-trippers. Day-trippers most likely include local visitors who reside in Marin and Sonoma counties, due to the proximity of their homes to the Park.

As some of the local visitors from Marin and Sonoma counties would be likely to visit other state parks in the two counties absent the PRNS, not all local visitor expenditures within the counties are attributable to the PRNS. In order to estimate the net impacts to the two counties from day-tripper expenditures, BAE assumed in its analysis that half of the local visitors would otherwise spend their money within the two counties at other recreational sites, and excludes their expenditures from the model. For the purposes of estimating California impacts, the analysis only includes expenditures from those day-trippers coming from outside of the State.

The analysis further adjusts visitor expenditures reported in the 1997 survey in order to account for where the expenditures take place. Using a common sense approach to where day-trippers are likely to make purchases throughout the day, the analysis assumes that 15 percent of oil/gas expenditures (visitors fill their gas tanks at home prior to traveling to the park), 50 percent of

⁴ For the purposes of this study, the following IMPLAN sectors are used to represent visitors’ annual expenditures: Food and Beverage Stores, Gasoline Stations, Miscellaneous Store Retailers, Other Accommodations (non hotel/motel), Hotels and Motels, and Food Services and Drinking Places.

food and dining expenditures (visitors split their expenditures between home and destination), 100 percent of gift expenditures (visitors buy gifts at their destination), and 80 percent of “other” expenditures are spent within the two counties (visitors tend to buy miscellaneous items along the way to or at their destination).⁵ Applying these factors to the spending patterns of total day tripper Park visitors⁶ generates the following total annual expenditures within the two counties and California displayed in Table 4:

Table 4
Annual Expenditures
Day-Trippers

Expenditure Category	Day-trippers	
	Total	Out-of-State
Lodging, Hotel/Motel	\$ -	\$ -
Lodging, Camping	\$ -	\$ -
Groceries	\$ 3,792,000	\$ 928,000
Gas/Oil	\$ 948,000	\$ 232,000
Dining Out	\$ 6,953,000	\$ 1,702,000
Gifts	\$ 5,056,000	\$ 1,238,000
Other	\$ 1,517,000	\$ 371,000
Total Annual Expenditures	\$ 18,266,000	\$ 4,471,000

Sources: PRNS; Bay Area Economics, 2006.

Overnight Visitors, Motel Lodgers. According to the 1997 visitor survey, approximately 23 percent of all visitors are motel lodgers. They can either stay in a motel, bed and breakfast, lodge, youth hostel, or other type of indoor lodging.

As there are few lodging choices in the immediate Park vicinity, the analysis applies adjustment factors to determine the portion of lodging expenditures that will impact the two counties. The analysis also applies similar adjustment factors to each other expenditure category as a means of determining the impacts to the local and state economies. Unlike the day-trippers, motel lodgers are likely to spend different portions of their expenditures in the local economy depending on whether they come from outside of the State. The analysis assumes that for all visitors, approximately 20 percent of lodging expenditures, 50 percent of food expenditures, 15 percent of gas/oil expenditures, 100 percent of gift expenditures, and 80 percent of “other” expenditures will be spent in the two counties.

⁵ The same adjustment factors used for total visitors apply to out-of-state visitors.

⁶ Total non-local day-tripper visitors include one-half of the local visitors from Marin and Sonoma Counties.

For the out-of-state visitors, the analysis assumes that none of their lodging expenditures represent a Park impact on the California economy, as they would likely spend the night in the State, independent of their visit to the Park. In addition, the analysis assumes that approximately 50 percent of food expenditures, 15 percent of gas/oil expenditures, 100 percent of gift expenditures, and 80 percent of “other” expenditures represent the out-of-state visitors’ net contribution to the California economy from their visits to the Park. Applying these factors to the spending patterns of total motel lodger Park visitors generates the \$12.7 million and \$1.8 million in total annual expenditures within the two counties and the State, respectively.

Table 5
Annual Expenditures
Motel Lodgers

Expenditure Category	Motel Lodgers	
	Total	Out-of-State
Lodging, Hotel/Motel	\$ 3,573,000	\$ 125,000
Lodging, Camping	\$ -	\$ -
Groceries	\$ 1,896,000	\$ 354,000
Gas/Oil	\$ 474,000	\$ 89,000
Dining Out	\$ 3,475,000	\$ 650,000
Gifts	\$ 2,527,000	\$ 473,000
Other	\$ 758,000	\$ 142,000
Total Annual Expenditures	\$ 12,703,000	\$ 1,833,000

Sources: PRNS; Bay Area Economics, 2006.

Overnight Visitors, Campers. According to the Visitor Survey, approximately 16 percent of all Park visitors stay overnight at a campground. In addition to the four campgrounds operated by PRNS, campgrounds also include RV parks, group camping areas, and “leave no trace” campsites outside but nearby the Park. The volume of camping reported by visitors in the survey does not match the campground capacity offered within the Park. BAE determined that while visitors reported themselves as “camping” most were camping outside the Park. Visitor expenditures reported in the visitor survey are significantly higher than the Park’s camping fee revenues, which supports the assumption that many of the “campers” camp in other parks but visit Point Reyes. Several campgrounds are located within the vicinity of the Park, including Olema Ranch Campground, Samuel P. Taylor Park, Mt. Tamalpais State Park, and other state parks on the Sonoma Coast.

In order to determine the impact of campers’ expenditures on the two counties and California, BAE formulated and applied a discount factor to each category of spending, using the same approach used to determine day-tripper expenditures. The analysis assumes that 100 percent of camping expenditures, 15 percent of oil/gas expenditures, 50 percent of food and dining expenditures, 100 percent of gift expenditures, and 80 percent of “other” expenditures are spent

within the two counties.⁷ To avoid double counting campground receipts, only campground expenditures made by visitors at other campgrounds is included; campground fees paid by visitors for PRNS-operated campgrounds are already included in Park operations. Applying the adjustment factors to the spending patterns of total campers, camper Park visitors generate total annual expenditures of \$5 million within the two counties and \$1.1 million in California.

Table 6
Annual Expenditures
Campers

Expenditure Category	Campers	
	Total	Out-of-State
Lodging, Hotel/Motel	\$ -	\$ -
Lodging, Camping	\$ 1,399,000	\$ 472,000
Groceries	\$ 749,000	\$ 140,000
Gas/Oil	\$ 187,000	\$ 35,000
Dining Out	\$ 1,373,000	\$ 257,000
Gifts	\$ 999,000	\$ 187,000
Other	\$ 300,000	\$ 56,000
Total Annual Expenditures	\$ 5,007,000	\$ 1,147,000

Sources: PRNS; Bay Area Economics, 2006.

Total Visitor Spending

As indicated in Table 7, the total spending by visitors from all three categories is approximately \$36 million of which \$7.5 million is attributed to visitors originating from out of state.

Table 7
Total Visitor Spending
Point Reyes National Seashore

Expenditure Category	All Visitors	
	Total	Out-of-State
Day Trippers	\$ 18,266,000	\$ 4,471,000
Motel Lodgers	\$ 12,703,000	\$ 1,833,000
Campers	\$ 5,007,000	\$ 1,147,000
Total Annual Expenditures	\$ 35,976,000	\$ 7,451,000

Sources: PRNS; Bay Area Economics, 2006.

⁷ The same adjustment factors used for total visitors apply to out-of-state visitors.

Economic Impacts

Direct Impacts. Total spending data were input into the IMPLAN model, and the model estimates that of the total \$36 million spent by local visitors, approximately \$23 million represented the net direct impact to the counties. The State had a net direct impact of \$4.4 million, as displayed in Table 8.

It should be noted that the nature of retail expenditures accounts for the large differential between the total visitor expenditures and their estimated direct impact. The model assumes that only the retail markup impacts the local economy, particularly for industries heavily populated with national firms such as gas stations and grocery stores. Since local stores buy goods from wholesalers and manufacturers outside of the area, and corporate profits also leave the local economy, only the retail markup will be available for distribution within the local economy. To the extent that retailers' headquarters are located within the State, the model allocates their portions of the impacts to the local economy.

Table 8
Economic Impacts
Visitor Expenditures
Point Reyes National Seashore

Impact (a)	Output		Employment	
	Marin and Sonoma Counties	California	Marin and Sonoma Counties	California
Direct (c)	\$22,913,000	\$4,414,000	410	80
Indirect	\$7,158,000	\$1,741,000	60	10
Induced	\$8,025,000	\$1,939,000	70	20
Total	\$38,096,000	\$8,094,000 (b)	540	110

Notes:

- (a) All impacts are reported in 2005 dollars.
- (b) Impacts to California are lower than the counties, reflecting alternative destinations within the State that visitors could visit absent the existence of PRNS.
- (c) Direct Impact does not include payments to the federal government.

Sources: IMPLAN; Bay Area Economics, 2006.

Indirect and Induced Impacts. As shown in Table 8, the Park generated \$7.2 million in indirect impacts and \$8 million in induced impacts within the two counties and \$1.7 million and \$1.9 million for California, respectively.

In addition to lower direct and indirect impacts, a second consequence of retail transactions is that they generate larger induced impacts than indirect impacts. For both retail and lodging operations, labor's portion of the operating budget constitutes the largest portion of the operating budget that's available to circulate through the local economy. For example, once the cost of goods sold leaks out of the local economy for retail, the remaining markup that remains in the two counties and California is heavily distributed to labor. As further example, a large portion of goods and supplies purchased by motels are sourced outside the local area; however, motel employees are likely to live in relatively close proximity to the motel, making labor's portion of the operating budget heavily represented in the multiplier effects. Thus, the induced impacts that represent households' expenditures are greater than the indirect impacts that represent business-to-business expenditures.

Total impacts of visitor expenditures is approximately \$38.1 million. To put this in context, a recent study of the Marin County tourism cluster⁸ identified the total impact of tourism in Marin County at \$238 million in 2005. PRNS would represent slightly more than 16 percent of this total. Data for 2005 for total tourism impacts in Sonoma County were unavailable.

Employment Generated. Visitor spending generates a significant number of jobs, 540 within Marin and Sonoma counties and an additional 110 jobs in California.



Bear Valley Visitors Center

⁸ Marin County Targeted Industries Study; Sonoma State University, Center for Regional Economic Analysis 2005.

Impacts from Agricultural Activities

The Park is home to several historic cattle grazing and dairy operations that generate economic activity. BAE has incorporated these agricultural activities into the economic impacts analysis.

Agricultural Economic Output Estimation

According to PRNS staff, there are currently 2,562 animal units (AUs) dedicated to beef production and 3,451 AUs dedicated to dairy production located on 25,000 acres of Park land. Of this total, approximately 90 AUs are dedicated to organic beef production. The Minnesota Department of Agriculture provided conversion factors that estimate that a mature dairy cow equals 1.2 AU, a slaughter steer or stock cow equals 1.0 AU, a heifer equals 0.7 AU, and a calf equals 0.2 AU.



Bull in grazing pasture

BAE's impacts analysis uses the AU conversion factors in conjunction with average values per AU from northern California studies and interviews with agricultural professionals to determine the average value per AU for beef farms, organic beef farms, and dairy farms that operate at the Park. According to local sources, a non-organic beef cow has an average value of \$393 per AU, while an organic beef cow has an average value of \$3,019 per AU. Dairy cattle are more expensive than beef cattle, with value of \$1,450 per non-organic AU and \$3,356 per organic AU. This translates into a total of \$6.3 million in agricultural value at the Park. Of this total, non-organic dairy cattle account for approximately \$5.0 million, or 80 percent, of the total value. (See Table 9.)

The analysis used the total value as the "event" for the IMPLAN input-output model.⁹ Table 9 shows the total annual value of agricultural activities at the Park and supporting assumptions. The value of the Park's agricultural activities comprises a small percentage of the total value of

⁹ For the purposes of this study, the following IMPLAN sectors are used to represent annual agricultural operations: Cattle Ranching and Farming, and Fluid Milk Production.

agriculture in Marin and Sonoma counties. The California Farm Bureau Federation reports a total of \$695.6 million in total agricultural value for Marin and Sonoma counties in 2005. With \$6.3 million in total value, the Park accounts for 0.9 percent.

Economic Impacts

The model estimates that the full value of approximately \$6.3 million represented a net direct impact to Marin and Sonoma counties and California, as agricultural industries tend to have a 100 percent direct impact on their local economies (see Table 10).

Total indirect impacts are just under \$5 million for the local economy and \$4.9 million for California. Induced impacts were estimated at \$1.4 million for Marin and Sonoma counties and \$1.7 million for California. As some of the inputs that farmers and ranchers require for their operations cannot be purchased in the two counties, but would be available within the State, the indirect and induced impacts are higher for California than in Marin and Sonoma counties.

The total economic impacts of agricultural activities at the Park thus total \$12.6 and \$12.9 million for the local economy and California, respectively.

Table 9
Total Agricultural Output
Point Reyes National Seashore

Activity	Acres	Animal Units (a)		Total Value
		Total	Value per Unit	
Beef				
Beef Cattle (b)	13,184	2,472	\$393	\$971,480
Organic Beef Cattle	11	90	\$3,019	\$271,688
Subtotal Beef	13,195	2,562	NA	\$1,243,169
Dairy				
Dairy Cattle	11,805	3,451	\$1,452	\$5,012,259
Organic Dairy Cattle	0	0	\$3,356	\$0
Subtotal Dairy	11,805	3,451	NA	\$5,012,259
Total (c)	25,000	6,013	NA	\$6,255,427

Notes:

(a) One animal unit equals 1 bull, slaughter steer or heifer; 0.83 mature dairy cows; 1.4 dairy heifers; or 5 calves.

(b) Includes grass-fed beef.

(c) Includes cattle located outside of the Point Reyes National Seashore in the Golden Gate National Recreation Area. However, as Point Reyes staff manage the land leases for these farms, their total cattle counts are included in this analysis.

Sources:

California Department of Agriculture, Dairy Programs, 2006.

Harper, John M., Karen M. Klonsky, and Pete Livingston, 2005. *Sample Costs for an Organic Cow-Calf Operation, 50 Head, Mendocino & Lake Counties*. University of California, Cooperative Extension. Department of Agricultural and Resource Economics. Davis, CA.

Klonsky, Karen M., Stephanie Larson, Pete Livingston, and Cary Thompson, 2004. *Pasture-Fed Beef Cost and Returns Study, 200 Head, Marin and Sonoma Counties*. University of California, Cooperative Extension. Department of Agricultural and Resource Economics. Davis, CA.

Leslie (Bees) Butler of UC Davis, 2006.

Lisa Bush, Farm Advisor's Office/UC Coop Extension, 2006.

Minnesota Department of Agriculture, 2006.

PRNS; Bay Area Economics, 2006.

Economic Impacts Study
Point Reyes National Seashore

Table 10
Economic Impacts of Agricultural Activities
Point Reyes National Seashore

Impact (a)	Output		Employment	
	Marin and Sonoma Counties		Marin and Sonoma Counties	
	California	California	California	California
Direct	\$6,275,000	\$6,275,000	30	30
Indirect	\$4,954,000	\$4,903,000	60	50
Induced	\$1,375,000	\$1,736,000	10	10
Total	\$12,604,000	\$12,914,000	100	90

Notes:

(a) All impacts are reported in 2005 dollars.

Sources: IMPLAN, 2006; Bay Area Economics, 2006.



McClure Dairy Ranch

Impacts from Other Private Activities in the Park

In addition to the activities of PRNS, its concessioners, and historic cattle and dairy operations, there are other private entities that operate in the area because of the access that the Park provides. The Point Reyes National Seashore Association (PRNSA), one such organization, is a non-profit organization that works with the National Parks Association on preservation, education, and fund raising endeavors. According to the PRNSA's records, the 2005 operating income of the PRNSA was approximately \$1.1 million. In addition, there are several kayak operators that teach or run sea-kayaking operations off of Tomales Bay. According to PRNS staff, these operators generated approximately \$231,000 in revenues in 2005. Table 11 shows that this additional spending for activities directly related to the Park totaled \$1.3 million in 2005.

Table 11
Operations of Other Private Parties
Point Reyes National Seashore
2005

Other Private Parties in Park	Expenditures 2005 Dollars
Point Reyes National Seashore Association	\$1,096,297
Kayak Operators	\$230,768
Total Expenditures	\$1,327,065

Sources: PRNS Financial Statements; Bay Area Economics, 2006.

Using the operating figures as inputs,¹⁰ the IMPLAN model estimates that these other private entities operating in the Park generated approximately \$1.1 million in direct impacts in both the local Marin and Sonoma economy and California. Total impacts of these activities for Marin and Sonoma counties were over \$1.9 million and over \$2.1 million for California. This cluster of activity generates 20 jobs in the local economy and 22 in California.

¹⁰ For the purposes of this study, the following IMPLAN sectors are used to represent annual operations of secondary industries: Social Advocacy Organizations and Other Recreational Activities.

Table 12
Economic Impacts
Other Private Parties Operating in the Park
Point Reyes National Seashore

Impact (a)	Output		Employment	
	Marin and Sonoma Counties		Marin and Sonoma Counties	
	California	California	California	California
Direct	\$1,062,000	\$1,062,000	12	12
Indirect	\$432,000	\$487,000	4	5
Induced	\$468,000	\$596,000	4	5
Total	\$1,962,000	\$2,145,000	20	22

Notes:

(a) All impacts are reported in 2005 dollars.

Sources: IMPLAN, 2006; Bay Area Economics, 2006.



Kayaking on Tomales Bay

Total Economic Impacts

Table 13 summarizes total economic impacts of the Park across all activity areas. The Park's total direct impact is estimated to be \$41.6 million for Marin and Sonoma counties and \$23.7 million for California. Indirect impacts are \$13.7 and \$8.8 million, respectively. The induced impacts of the Park are approximately \$16.5 million for the local economy and \$12.8 million for California. The Park directly and indirectly supports a total of 850 jobs in Marin and Sonoma counties and 432 jobs in California.

With a total impact of \$71.8 million, the Park has a significant role in the local economy, particularly west Marin County and southern Sonoma County where many of the services supporting both employees and visitors are located. Using county personal income and gross regional product data for the San Francisco Bay Area, BAE estimates that the Park's economic activity accounts for 0.163 percent of \$44.1 billion total economic activity within Marin and Sonoma counties.

Table 13
Total Economic Impacts
Point Reyes National Seashore

Impact (a)	Output		Employment	
	Marin and Sonoma Counties	California	Marin and Sonoma Counties	California
Direct	\$41,590,000	\$23,662,000	572	252
Indirect	\$13,677,000	\$8,770,000	134	75
Induced	\$16,491,000	\$12,754,000	144	105
Total	\$71,758,000	\$45,186,000	850	432

Notes:

(a) All impacts are reported in 2005 dollars.

Sources: IMPLAN; Bay Area Economics, 2006.

Tax Impacts

In addition to reporting the economic impacts of the PRNS and related activities, IMPLAN reports the tax impacts from the total impacts¹¹ of each activity on state and local government. These tax impacts do not include education revenues, Transient Occupancy Tax (TOT) revenues, or other special revenues. However, this analysis estimates the local TOT revenues that the two counties receive from camping and other lodging facilities, separately.

State and local revenues that are reported include: taxes on corporate profits, taxes on dividends, indirect business taxes (motor vehicle license taxes, fines and fees, property taxes, state and local non taxes, sales taxes, and severance taxes), personal taxes (estate and gift taxes, income taxes, motor vehicle license taxes, fines and fees, fishing and hunting taxes, and property taxes), and social insurance taxes (employee and employer contributions). As this analysis focuses on the impacts to the counties and the State, this document focuses on the state/local tax impacts of the PRNS and related industries. Unfortunately, the model does not distinguish between state and local taxes. Thus, the analysis cannot report the impacts at the county or regional level.

IMPLAN-Calculated Tax Impacts

State and local tax impacts differ between the two counties model and the state model, as the state model includes impacts from economic activities that occur within the State but outside of the two counties. Just as the economic impacts tend to be higher for the State than the two counties, the tax impacts will also be higher for the state model than the two counties model. Table 14 below shows IMPLAN's estimated tax impacts to the two counties and the State.



Bear Valley Visitor Center

¹¹ The total impacts include direct, indirect, and induced impacts.

Table 14
State and Local Tax Impacts
Point Reyes National Seashore

Tax Impacts, 2005 Dollars	Marin and Sonoma Counties	California
Transient Occupancy Tax (a)	\$339,408	\$339,408
State and Local Taxes (b)		
PRNS Operations	\$1,133,000	\$1,303,000
Visitor Expenditures (c)	\$3,220,000	\$659,000
Agricultural Operations	\$451,000	\$476,000
Secondary Industry Operations	\$105,000	\$117,000
Total Tax Impacts	\$5,248,408	\$2,894,408

Notes:

(a) Includes TOT revenues from visitors who stay at hotel/motels. This is the total tax collected by Marin and Sonoma counties.

(b) Includes taxes on corporate profits, dividends, motor vehicle licenses (personal and indirect business), business property, sales, severance, estate and gifts, personal income, fines and fees, fishing and hunting, and other indirect business taxes.

(c) Taxes from Visitor Expenditures are only calculated on the taxes that are new to the State from non-resident visitors.

Sources: Marin County Treasurer-Tax Collector's Office; Sonoma County; Bay Area Economics, 2006.

IMPLAN estimates that the total state and local tax impacts will be almost \$5.3 million from the two counties model and \$2.9 million from the state model. Although the state model has a higher tax base for most of the individual activities (PRNS operations, agricultural operations, and secondary industries), the smaller impact from the visitors' expenditures activity generates a higher overall tax impact in the two counties model.

Transient Occupancy Tax (TOT) Revenues

In addition to the tax impacts that IMPLAN estimates, BAE estimated the TOT revenues that Marin and Sonoma counties receive from private lodging facilities. The TOT rate is ten percent for Marin County, and nine percent for Sonoma County. Applying an average TOT rate of 9.5 percent for both counties to total visitor expenditures on hotel/motel lodging, TOT revenues generated approximately \$339,000 for both counties in 2005.

Other Economic Impacts

The Park's role in the regional and state economy goes far beyond the dollars it generates and the jobs it supports through its visitor expenditures. It is widely recognized as an important natural resource asset that continues to contribute to the education and enjoyment of both residents in the San Francisco Bay Area and visitors from outside the area. Due to the uniqueness and variety of its habitat, PRNS has a rich biological diversity, with over 45 percent of North American avian species and nearly 18 percent of California's plant species. In addition, the Park is home to several historically significant cultural sites, including Coast Miwok Indian village sites and the Lifeboat Station, a National Historic Landmark.



Red-tailed hawk

PRNS's extensive research programs and educational offerings contribute to the regional and state economic infrastructure by stimulating scientific understanding of complex ecosystems, promoting habitat restoration in support of fisheries and wildlife, and advancing science and environmental education. In this way, PRNS programs contribute to California's expanding base of environmental sustainable industries – industries that are widely seen as significant drivers of the state economy in the future.

Stewardship of Natural and Cultural Resources

PRNS plays a key role in resource management, working in conjunction with several schools and agencies to monitor and restore key habitats. Key partners include the National Marine Sanctuary Program, the U.S. Geological Survey, California Department of Fish and Game, the Tomales Bay Marine Station, universities, local colleges, and other institutions. With these partners, the Park manages and supports large-scale wetlands restoration, continued invasive species removal, Coho and Steelhead monitoring and education programs, the Tomales Bay Biodiversity Inventory, and wildlife protection and recovery programs for spotted owls, snowy plovers, and other animals. Recent inventorying and monitoring research on elephant seals and tule elk have received national attention.

Numerous culturally significant sites are located within the Park. Point Reyes has over 100 known village sites of the Coast Miwok Indians, the first human inhabitants of the peninsula. Other cultural



Traditional Coast Miwok dancers

sites include the nationally significant Point Reyes Lighthouse complex, several historic ranch complexes (such as Pierce Ranch), and the National Historic Landmark Lifeboat Station.

In order to protect these natural and cultural resources, the Park devotes the equivalent of about 50 full-time employees to cultural and natural resource management and science. These employees conduct cultural resource preservation programs, historic building cyclic maintenance, natural resource monitoring programs and special status species management. Thousands of volunteer hours are also spent on restoration, research, and monitoring projects through volunteer groups, internships, and docent programs.

Education and Research

PRNS is home to several research and educational facilities that support coastal stewardship through science. The Pacific Coast Learning Center leverages research and science from partner agencies, universities and other organizations to reduce the research backlog at the park. The newly created Marin Science Center has research and classroom facilities at Sacramento Landing on the water. The Sabbatical in the Parks program assists in arranging university faculty sabbaticals to



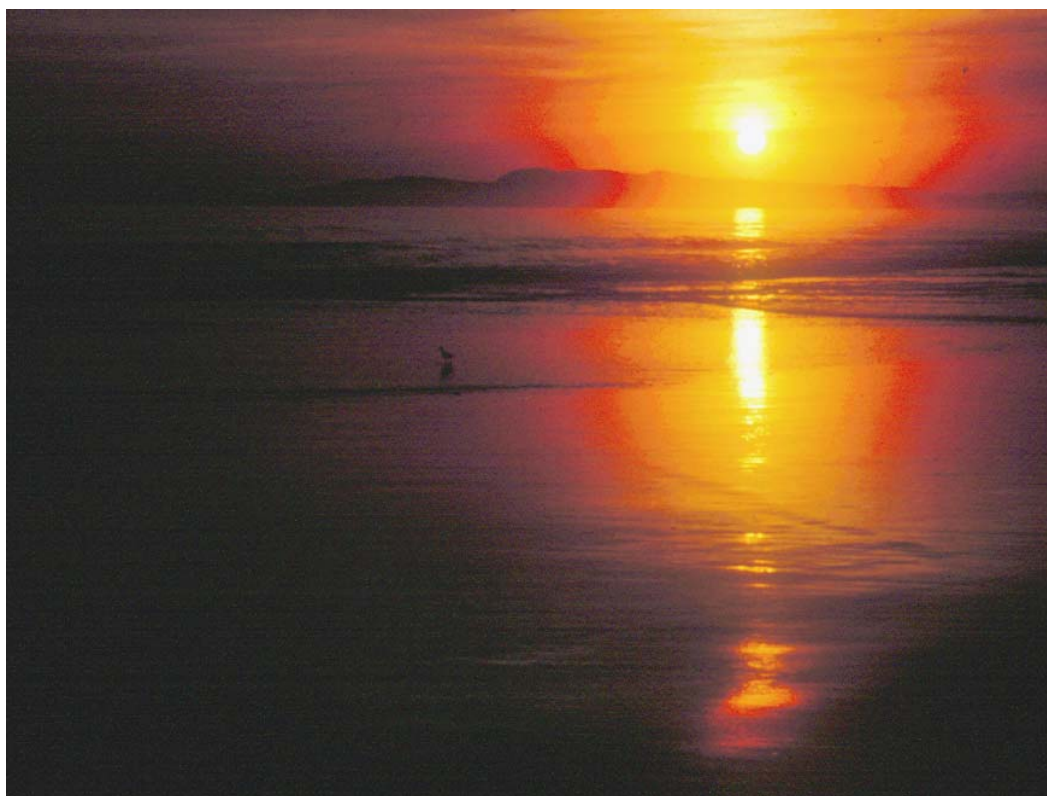
Interpretive ranger at Point Reyes Lighthouse

conduct relevant research in the Park. Research by faculty or students include ecosystem monitoring; landscape ecology; water quality or quantity; wilderness management; social science; fire ecology; restoration ecology; invasive species; geology; cultural and environmental history; and aquatic, wildlife, marine, and plant ecology. In 2005, the Point Reyes National Seashore had 80 research projects underway. These projects are being conducted by outside parties such as universities at little or no cost to the park. The estimated value of the research is \$500,000 annually.

The Park also runs several environmental education programs for students from kindergarten through college. Programs include weekend field seminars, Nature Science Camp, free ranger-led field trips ranging from whale watching to habitat restoration, and intensive Bioquests for older students to help inventory species diversity. In addition, the Park distributes several scholarships, including the Point Reyes National Seashore Fund and Point Reyes Bird Observatory Endowment Fund, both administered by the Marin Community Foundation. The Seashore Association also offers scholarships to assist students attending school programs and Nature Science Camp at the Park.

Local Economy

Point Reyes National Seashore has remained popular throughout the years, drawing nearly 2 million in attendance last year.¹² Many businesses and organizations have emerged to provide Park visitors with services and goods, such as several small bed and breakfasts, recreational companies, and businesses within Point Reyes Station such as The Creamery/The Emporium. According to the National Parks Conservation Association, the Village of Point Reyes Station would not be able to attract the volume of people without the existence of the National Seashore.¹³



Sunset from Limantour Beach

¹² California Tourism. *California Fast Facts 2006*. Sacramento: 2006.

¹³ National Parks Conservation Association. *National Treasures as Economic Engines: The Economic Impact of Visitor Spending in California's National Parks*. 2001.

Appendix A

Annual Point Reyes National Seashore Visitor Expenditure Adjustment Factors

Percent of Expenditures Spent in Marin and Sonoma Counties	All Visitors			Out of State Visitors		
	Day Trippers	Overnight		Day Trippers	Overnight	
		Motel	Campers		Motel	Campers
Lodging, Hotel/Motel	0.0%	20.0%	0.0%	0.0%	20.0%	0.0%
Lodging, Camping	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Groceries	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Gas/Oil	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
Dining Out	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Gifts	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Other	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%

Source: BAE, 2006.