

Piedras Blancas Light Station Outstanding Natural Area

Interpretive Plan

California



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Interpretive Plan



***Historical Point Piedras Blancas continues to provide
protection and refuge for people and wildlife***

**United States Department of Interior
BUREAU OF LAND MANAGEMENT
Bakersfield (CA) Field Office**

**Piedras Blancas Light Station
Outstanding Natural Area**

Interpretive Plan

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TABLE OF CONTENTS

| | | |
|---|-------------|-----------|
| Introduction | Page | 1 |
| Managing Agency | | 2 |
| Property Map of Piedras Blancas Light Station | | 3 |
| Setting | | 4 |
| Interpretive and Educational Goals and Objectives | | 6 |
| Context and Planning | | 7 |
| Summary of Current Situation | | 8 |
| Management Issues | | 9 |
| Visitor Demographics and Program Monitoring | | 12 |
| Interpretive Themes and Monitoring | | 15 |
| Partnerships and Programs | | 17 |
| Income from Associations/Friends Groups | | 18 |
| Income from Tour Fees | | 18 |
| Classroom Outreach, Environmental Ed and Field Trip Programs | | 18 |
| Existing Interpretation | | 19 |
| Interpretive Products | | 24 |
| Design Guidelines and NLCS and ONA Recognition | | 24 |
| Priorities and Strategies for Implementation | | 26 |
| High Priority Projects and Actions | | 27 |
| Conclusion | | 29 |
| Bibliography and Reference Materials | | 29 |
| Abbreviations | | 29 |
| Acknowledgements | | 30 |



Mission Statement, Piedras Blancas Light Station

Manage and restore the Piedras Blancas Light Station to a period in history when the site played a significant role in the protection of central California maritime activities. In addition, preserve and protect the natural, historical and cultural resources of the site while providing opportunities for compatible scientific, cultural, social and interpretive activities for the benefit of present and future generations.



Piedras Blancas Light Station, circa 1885.

1. Introduction

This Interpretive Plan contains guidelines and recommendations for interpretation and environmental education at the Piedras Blancas Light Station Outstanding Natural Area. The Plan assists in the future development of site interpretation and visitor services at the Piedras Blancas Light Station by evaluating the current work to date and by providing viable suggestions for future interpretive opportunities. This Plan is based on, and is inherently tied to, the Piedras Blancas Business Plan, the management goals and objectives as stated in the Piedras Blancas Management Plan, and the ongoing Caliente Resource Management Plan.



Managing Agency



Bureau of Land Management (BLM). Piedras Blancas Light Station (PBLS) is managed by the Bureau of Land Management of the U.S. Department of The Interior. The BLM is dedicated to sustaining the health, diversity and productivity of public lands for the use and enjoyment of present and future generations. The BLM is committed to managing PBLS in accordance with federal laws, regulations and policies that protect the natural, scientific, cultural, social and historic resources.

In 2008, PBLS was designated as an Outstanding Natural Area within the National Landscape Conservation System (NLCS). The NLCS collectively assembles BLM's most spectacular landscapes, including National Conservation Areas, National Monuments, Wilderness, Wilderness Study Areas, Wild and Scenic Rivers, and National Scenic and Historic Trails. The designation ensures the conservation, protection and restoration of the nationally significant landscape of PBLS which is recognized for its cultural, ecological and scientific values. PBLS is one of five sites included as a Gateway to the California Coastal National Monument, a designation that protects geological features and habitat for marine plants and animals found along the entire 1,100 miles of California coastline.

PBLS is bordered by land owned and managed by California Department of Parks and Recreation. The islets and rocks located offshore are part of the California Coastal National Monument. The surrounding coastal waters are part of the Monterrey Bay Marine Sanctuary managed by the National Oceanic and Atmospheric Administration.



Piedras Blancas Light Station, circa 1930.



PROPERTY MAP OF PIEDRAS BLANCAS LIGHT STATION



2. Setting

Piedras Blancas Light Station is located on a peninsula situated at the southern end of Big Sur and the Santa Lucia Mountains, six miles north of the community of old San Simeon. The 19 acre parcel includes approximately ½ mile of Pacific Ocean frontage and is surrounded by rocky shoreline that supports a diversity of marine life.

The site is dotted with buildings constructed during the past 135 years, including a truncated lighthouse (1875), fuel/storage building (1876), fog signal building (1906), fuel/oil house (1907), tank house (1935), two residential duplex housing units (1960), Navy mobile instrumentation station (1960) and boathouse (1970). Four of the structures - the lighthouse, fog signal building, fuel/oil house and fuel/storage building and are listed on the National Register of Historic Places.

When the BLM assumed management of Piedras Blancas in 2001, the site was covered with more than 40 non-native plant species dominated by a significant ground



Piedras Blancas Light Station, 2006 .

cover of iceplant (*Carpobrotus sp.*) The BLM invested in the removal of the non-native vegetation, and, as of January 2008, roughly 2/3^{rds} of the exotic plants have been eradicated, resulting in a proliferation of more than 60 native plant species.

In 2008, more than 1,500 compact cobweb thistles (*Cirsium occidentale var. Compactum*), listed as threatened in California, were documented as inhabiting the site. In 2001, there was a single plant. The increased abundance of native plant life has given rise to greater animal diversity, including bobcats, raccoons, deer, skunks, rabbits, grey fox, coyotes, weasels, squirrels and a variety of birds, and reptiles.



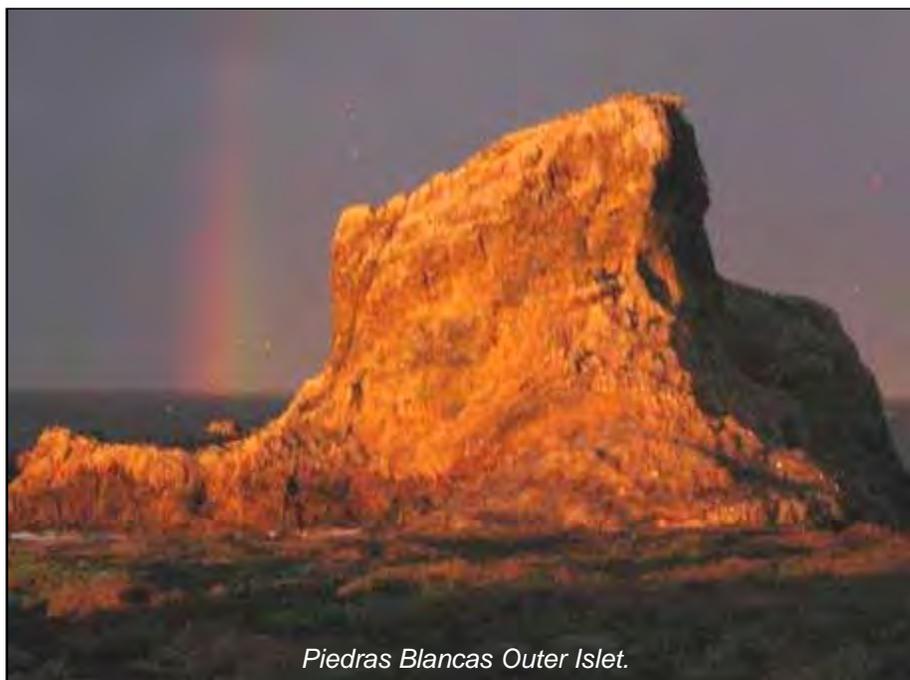
Northern elephant seals utilize the beaches surrounding Point Piedras.



The near-shore marine environment is dynamic - rich in species diversity and minimally impacted by humans. Kelp is abundant in the surrounding water, supporting a healthy population of southern sea otters (*Enhydra lutris nereis*). In addition, species such as red and black abalone, mussels and sea anemones are present in tide pool areas. One of the most striking features of Point Piedras Blancas is the Outer Islet, a 110 foot high rock located approximately 200 meters west of the Point. This rock provides a significant resting ground for a variety of birds including endangered species such as the brown pelican (*Pelicanus occidentalis californicus*), and the peregrine falcon (*Falco peregrinus*), which utilizes the rock as a breeding ground. The Outer Islet is also a significant haul-out site for the California sea lion (*Zalophus californicus*) and the lower lying surrounding reefs serve as haul-out areas for the harbor seal (*Phoca vitulina*). The largest rookery for northern elephant seas (*Mirounga angustirostris*) on the United States mainland can be seen for several kilometers both to the north and the south of the point. Piedras Blancas Light Station is an excellent place to observe cetaceans, as many species utilize the near-shore waters. Most notable are the cow-calf gray whale (*Eschrichtius robustus*) pairs, which migrate close to the Point during Spring on their north bound journey to Artic waters.

Point Piedras Blancas is situated near the cultural interface of two Native American groups: the Northern Chumash and the Salinan. It is assumed that both groups spent time in the area during the past 3,300 years, but neither tribe permanently inhabited the site.

Piedras Blancas Light Station is a site where visitors and researchers can explore both the cultural history of the area and the abundant marine life that finds sanctuary along the adjoining coastal boundaries.



Piedras Blancas Outer Islet.



3. Interpretive and Educational Goals & Objectives

Goals

The mission of the National Landscape Conservation System is to conserve, protect and restore nationally significant landscapes with outstanding cultural, ecological and scientific values for the benefit of current and future generations. Educating communities and individuals is an integral part of land management and is critical to ensuring sustained, long-term resource conservation. The NLCS provides many goals to guide management of the site. One goal in particular focuses on education and interpretation:

- Use public land resources to promote life-long learning for all users to explore and discover these special areas.

This goal has its roots in the BLM's fundamental mission and vision to:

- Enhance the quality of life for all citizens through the balanced stewardship of America's public lands and resources. And to sustain the health, diversity, and productivity of public lands for the use and enjoyment of present and future generations.

Interpretation and environmental education are forms of communication stressing ideas and relationships that help build connections between resources and people. Once engaged, an understanding and appreciation of resource values generally follows, which in turn often results in heightened resource stewardship.



A BLM employee dressed in the Lighthouse Service uniform discusses the life of the lighthouse keeper at Piedras Blancas.



Objectives

To meet the previously stated goals, interpretation at Piedras Blancas Light Station will be developed to accomplish the following:

- Increase public knowledge and appreciation for the BLM and their programs including the California Coastal National Monument.
- Increase public knowledge of the history of the Piedras Blancas Light Station
- Increase public knowledge of wildlife viewing etiquette and principles of resource stewardship.
- Monitor success of interpretive programs through the use of visitor surveys.
- Monitor visitation capacity to protect prehistoric, cultural and natural resources.

4. Context and Planning

The processes of communication and collaboration are vital to successful management of the Piedras Blancas Light Station. Given the passionate interest by local community members and the fact that the land and waters bordering the site are managed by California Department of Parks and Recreation and the Monterey Bay National Marine Sanctuary, implementation of the Interpretive Plan is guided by unique partnership arrangements. Assumptions under which this Plan has been developed are described below:

- There has been, and continues to be, solid support in the surrounding communities for structured access to the lighthouse for the general public. Likewise, there is great interest in, and demand for, interpretation and education;
- There has been and continues to be, strong public support to restore the Light Station to the historic period between 1875-1939;
- Sister agencies utilize Piedras Blancas as a base for scientific research;
- General public access to PBLS will continue to be day-use

Whale researchers scan the area waters surrounding Point Piedras Blancas for gray whales on their migration to the Arctic.





only with structured guided tours provided by BLM staff and *volunteers*;

- PBLS is not likely to be a primary destination for the majority of visitors to the area. However, the Light Station could be a destination site, especially if tours are combined with those of nearby Hearst Castle; and
- There is a need to increase awareness of available guided tours at the site.

5. Summary of Current Situation

On October 25, 2001, Piedras Blancas Light Station was officially transferred from the United States Coast Guard to the Department of The Interior's Bureau of Land Management. The area is managed to protect the habitat of indigenous species under the principles of multiple use management. The area's unique biological, cultural, geologic and recreational qualities will be maintained and enhanced within the guidelines, objectives and planned actions of the Piedras Blancas Light Station Management Plan.

Restoration Plan

During meetings with the general public held in 2001, participants tasked the BLM to restore the Light Station to its period of greatest historic significance (1875-1939). To accomplish this, the lighthouse, fog signal building, fuel/oil house, fuel and storage building, and tank house will require significant historic restoration. The barn, watch room, assistant light keeper's residence, head light keeper's residence, laundry room and the storage shed and other significant structures will require reconstruction. Finally, the Navy mobile instrumentation station, the boathouse and the two duplex housing units will be removed since they were constructed in the 1960s and 70s. The cost to restore the entire Light Station is expected to amount to approximately \$12 million which includes rehabilitation and restoration of historic buildings, as well as demolition of existing, historically incompatible structures. An additional \$275,000 will be necessary to meet annual maintenance and operational expenses.

Staff

The current staff at PBLS consists of one manager and one maintenance employee. The staff positions are supplemented by volunteers from nearby communities who manage tour operations and native plant restoration, and assist with maintenance and administrative tasks.

Research

The United States Geological Survey (USGS) uses the site to conduct population



studies of the southern sea otter and the northern elephant seal. Gray whale research is being carried out by the National Marine Fisheries Service. Other areas of scientific study include Pacific jet stream monitoring, managed by the National Oceanic and Atmospheric Administration and seismic studies, conducted by the United States Geological Survey. Researchers from the University of California at Santa Cruz and the Partnership for Interdisciplinary Studies of Coastal Oceans study inter tidal population dynamics.

6. Management Issues

While the management of Piedras Blancas Light Station is the responsibility of the BLM, the lands surrounding the site are managed by the California Department of Parks and Recreation and the coastal waters are managed by the Monterey Bay National Marine Sanctuary. Some of the more prominent issues relating to interpretation are shared by these agencies but are managed differently. These issues are briefly described below as they relate to interpretation and education:

Non-Native Species

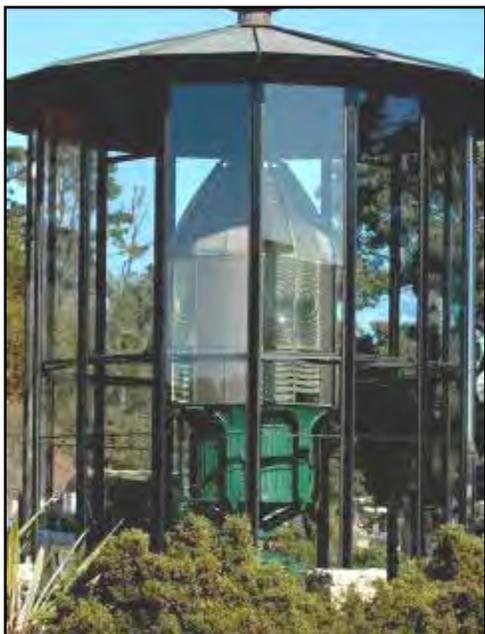
Controlling noxious, non-native and invasive plant species is a significant management challenge. Since the acquisition of the property, more than 800 tons of dried iceplant have been removed from the site, resulting in the return of native flora and fauna. The entire site is expected to be cleared of all non-native plant species by 2009. These are important issues to be addressed through interpretation and education.

Protection and Restoration of Archeological Resources

This geographic area was used by two Native American tribes: the Chumash and the Salinan. Point Piedras Blancas contains significant archeological resources throughout the property, most of which is covered by native vegetation. The tribes should be partners in creating any interpretive signage. Effective interpretation and education can be a tool with which these tribes preserve their heritage.



Local volunteers work extensively to remove non-native species such as iceplant that have dominated the landscape since the 1940s.



This Fresnel lens, once situated atop the Piedras Blancas Lighthouse, is now on display in the nearby town of Cambria.

Protection and Restoration of Cultural Resources

Historic era restoration of the Piedras Blancas Light Station is anticipated to take a minimum of ten years to complete. Some buildings have experienced extensive earthquake damage and require vital repairs that will result in altering the tours as buildings close to the public.

Non-intentional Harassment of Wildlife

Due to a lack of human interface, the terrestrial and marine mammals regard Piedras Blancas as a sanctuary free from disturbance. Marine mammals in particular are vulnerable to non-intentional harassment. These animals haul-out in large numbers on the shoreline and stampede when approached too closely.

Visitor Access

Visitors have access to PBLS through guided docent tours every Tuesday and Thursday, and the third Saturday of every month. For the Tuesday/Thursday tours, visitors meet at the Piedras Blancas Motel, recently acquired by the California Department of Parks and Recreation. Visitors drive together in their private vehicles, following a BLM pilot car. On the Saturday tours, visitors meet at the Hearst Castle and are shuttled by bus provided by California Department of Parks and Recreation. Approximately 30 vehicles can park at the Lighthouse Station. With an increase in tours anticipated for the near future, and with limited parking available on site, having visitors shuttled by bus from the Piedras Blancas Motel to PBLS would both protect the site and help maintain a healthy partnership between the BLM and the California Department of Parks and Recreation.

Fee Collection

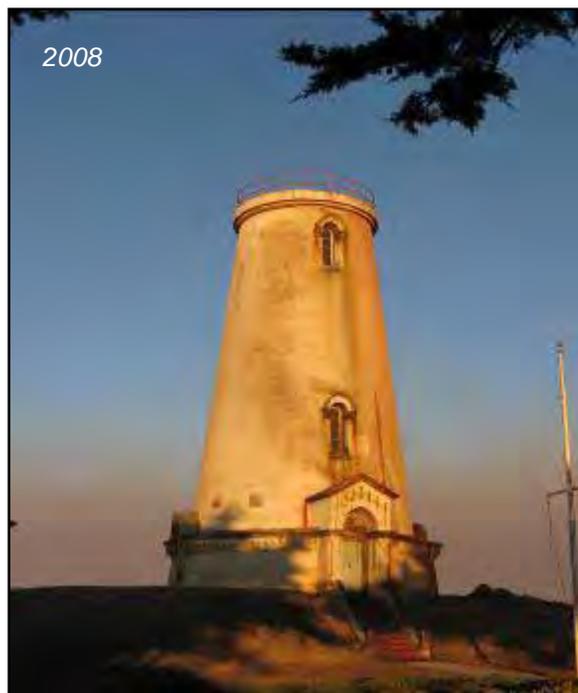
Currently, fees are collected for the guided docent tours on the third Saturday of every month by a BLM representative who travels to the site from the Bakersfield Office in accordance with the Federal Lands Recreation Enhancement Act. There is no fee charged for the mid-week tours due to a shortage of staff needed to perform fee collecting duties. Instead, voluntary donations are solicited by the Piedras Blancas Lighthouse Station Association (PBLSA). An increase in the number of docent-led tours is anticipated for the future which would necessitate assessing fees for all interpretive programs. Income generated from tour fees would then be available to BLM and/or PBLSA.





Accessibility for the Disabled

At present, all trails and buildings open to the public are compliant with the Americans with Disabilities Act (ADA), with the exception of the lighthouse and the gift shop. Unfortunately, making the lighthouse ADA compliant would harm the integrity of the historic structure. An alternative strategy for individuals with disabilities to view the interior structure of the lighthouse may be to experience a "virtual tour". In this context, a virtual tour would be comprised of panoramic images with a sequence of hyperlinked still or video images and/or virtual models of the lighthouse interior. This tour could be provided in the gift shop building until the assistant light keeper's residence is reconstructed, which will eventually serve as the permanent visitor center. The gift shop will be ADA compliant by December, 2008.



California Coastal Trail

Coastwalk, a statewide non-profit organization, in conjunction with Coastal Conservancy, Coastal Commissions, State Parks and other community groups, is creating a recreation trail from Mexico to Oregon running along the coast of California. This trail will traverse state park lands adjacent to PBLS property near South Beach where elephant seals haul out. Discussion of the trail's proximity to South Beach and subsequent impact on wildlife, must occur between all interested parties. An additional challenge will be to create a management strategy to contend with hikers who may enter PBLS property to visit the site without paying the entry fee.

Staffing

At present, the staff employed by the BLM at PBLS consists of one manager and one maintenance worker. The BLM depends upon a core group of volunteers to manage tour operations, restore native flora and assist in maintenance and administrative tasks. In conjunction with BLM management, volunteers have been charged with duties which include the creation of the interpretive tour content, visitor management, volunteer recruitment and scheduling, historical research, iceplant removal and the restoration of native plant species. With additional public tours expected in the near future, the operational sustainability of depending entirely upon volunteers is uncertain. Hiring one individual to manage the tours and volunteers and also collect tour fees would help sustain both the volunteer program and the tour operations.



7. Visitor Demographics and Program Monitoring

Creation of a successful interpretive strategy requires understanding the target audience and recognizing their expectations, establishing parameters of functional programs and identifying appropriate interpretive resources. With proper program monitoring, the interpretive strategy can be adapted as necessary to achieve desired objectives.

Visitor Demographics

Successful interpretation relates to visitors' prior knowledge and their expectations of the experience itself. This Interpretive Plan categorizes visitors into three groups: residents of the local and regional area, non-locals, and organized groups. The characteristics of these particular visitor groups are described on the following page:

Local and Regional Resident Visitors and Volunteers



A guest at the Light Station fills out a comment card.

Local and regional residents are considered to be those living in San Luis Obispo and Monterey Counties, who make up the majority of visitors to PBLS. When local residents are informed about the availability of more frequent tours, it can be assumed that they will be more likely to visit. As might be expected, the majority of the volunteers at PBLS are retirees who reside in Cambria or other nearby towns. Having the opportunity to volunteer at a local site of such historical and ecological importance has enabled these community members to become

invested in the protection and sustainability of PBLS. In addition, some long-standing residents of the area have had an abiding interest in the lighthouse and have provided additional historical information to the enduring story of Piedras Blancas Light Station.

Non-Local Visitors

Non-local visitors to the area are those often traveling on State Highway 1 along Big Sur. This route stretches over 70 miles in length from Carmel in Monterey County to the north to San Simeon in San Luis Obispo County to the south. In 2006, the Big Sur area was voted the #3 top vacation destination in the United States by the Travelers Choice Awards.



Visitor Trend information provided by the San Luis Obispo Chamber of Commerce and Visitors Bureau indicates that the county hosted 8.6 million visitors in 2005 who spent \$1.1 billion in patronizing local hotels, restaurants, shops and other businesses. Top attractions for visitors to the region include Hearst Castle, the city of San Luis Obispo, the numerous local beaches and the over 200 wineries and vineyards located in the area. Tourism in Monterey County was a \$1.9 billion industry in 2005, ranking as the 11th highest county for tourism expenditures in the state. Nearly 8 million individuals visit Monterey County annually, of which the Monterey Bay Aquarium is the most popular destination.

Attractions situated near Piedras Blancas Light Station draw a large number of annual visitors. In 2007, over 650,000 guests toured the Hearst Castle while the San Simeon Discovery Center hosted approximately 17,500 visitors. It is estimated that over 300,000 visitors stopped at the Elephant Seal Rookery, which is located one mile south of the Light Station. Approximately 1,095,000 visitors passed by PBLS in 2007 on their travels along State Highway 1.

Piedras Blancas Light Station is currently not considered to be a primary visitor destination, but as its existence becomes more widely known, it will likely become an important attraction to visit while in the area. For example, members of the U.S. Lighthouse Society often plan their travels around visiting our nation's lighthouses and would be likely to visit PBLS when it opens to the public on a regular basis.

Organized Group Visitors

This category of visitors includes groups affiliated with primary and secondary schools (grades K-12), colleges and universities, civic clubs and organizations, churches and special interest clubs. These groups typically come to the site for special tours, often related to their own specific interests. Both volunteers and the Site Manager provide interpretive programs to these organized visitor groups.

Program Monitoring

Both the effectiveness of interpretation as a management tool and the quality of visitor amenities is measured through monitoring and evaluation. Because guided tours offer the only access the general public has to the PBLS site, it is paramount that these programs be both professional and financially successful.

Monitoring and evaluating interpretive programs and services can be complex. Rarely can all dimensions of an interpretive experience be effectively measured. Visitor engagement in the interpretive program, their physical comfort, and adherence to rules and regulations should be monitored and acted upon by tour guides. The content of the interpretive tour and quality of facility amenities should be continuously evaluated



and improved upon.

Several methods are frequently used to evaluate the effectiveness of interpretive programs. Visitor use counts, visitor self-reporting, and casual observations and visitor interviews are currently used to monitor PBLS interpretive programs.

Visitor Use Counts

Baseline data about visitation levels can be collected to measure increases or decreases in visitor number at PBLS. Conducting these counts on a monthly basis could help the manager adjust interpretive program offerings. For example, if there are large groups of people who arrive during the whale migrations, the manager could then offer more programs to the public during those time periods.

Visitor Self-Reporting

Self-reports include suggestion box comment cards, responses to questionnaires and visitor log entries. The evaluative feedback that visitor self-reporting provides can help assist the manager in improving interpretative content and delivery, quality of facility amenities and the overall visitor experience.

Casual Observations and Visitor Interviews

This technique, while not statistically valid, can result in information that often provides sufficient data to direct management actions. Casual observations may occur at any location during the guided tour and can help guides and managers assess visitor satisfaction. For example, if participants appear tired during certain parts of the tour, providing benches at various intervals may be helpful. Visitor interviews may include one or two questions asked in informal, friendly conversation with guests who have just completed the guided tour. Sample questions could be, “What did you enjoy most about the light station?”, or “What did you learn about the marine life?”

Often these are among the simplest and most effective observations. Conversations with visitors are also a personal way to compile information concerning general impressions, likes and dislikes, areas of confusion, and areas of understanding and inspiration.

A volunteer in historic era attire describes the local flora and fauna.





8. Interpretive Themes and Objectives

Interpretive Themes

Themes provide a structure for both organizing information and focusing interpretive efforts on the preservation of key ideas. All information presented to the visitor should communicate the main interpretive theme. The primary interpretive theme at PBL is:

Historic Point Piedras Blancas continues to provide protection and refuge for people and wildlife.

Directly related to this primary theme are several sub-themes that are more specific and guide the development of interpretive and educational programs. These are identified below:

- For thousands of years, Native American tribes such as the Chumash and Salinan utilized the terrestrial and marine environments of Point Piedras Blancas for its abundant resources;
- Spanish exploration of the coast near Point Piedras Blancas and the establishment of inland missions occurred during the 17th and 18th Centuries;
- Increased ship traffic after the California gold rush and subsequent danger of ship wrecks necessitated the construction of a lighthouse at Point Piedras Blancas;
- Between 1874 and 1906, Point Piedras Blancas developed into a fully operational Light Station using both light and sound as aids to maritime navigation;
- The daily operation of the Light Station was a labor-intensive process involving such tasks as cleaning the Fresnel lens, winding the counterweight, trimming the wicks, polishing the brass-work, and hauling fuel to the lighthouse;
- Life at the Light Station was difficult due to harsh weather, lack of water and supplies and social isolation;
- There exist three methods of identifying a lighthouse from sea, including its physical appearance, the sound of the fog signal and the pattern of the light signal;



Northern elephant seals, Point Piedras Blancas, 2008.



- Point Piedras Blancas is a sanctuary for terrestrial species and coastal marine life;
- Point Piedras Blancas provides safety, protection and refuge to humans and wildlife;
- The beaches surrounding Piedras Blancas are important haul-out and rookery sites for the northern elephant seal;
- California sea lions and harbor seals utilize the Outer Islet and surrounding rocks as haul-out points;
- Sea otters, once hunted to near-extinction, utilize the waters surrounding Point Piedras Blancas and contribute to the health of the kelp forests;
- Point Piedras Blancas serves as an important area for ongoing and future scientific research; and
- There is mosaic of management by varying agencies for Point Piedras Blancas and the bordering lands and coastal waters.



Existing interpretive sign about marine mammals.

Interpretive Objectives

Visitors will gain a deeper knowledge and appreciation for all facets of PBLS including the cultural history, lighthouse operations and the marine and coastal ecosystems. An objective of interpretive and educational programming is for at least 25 percent of visitors participating in such programs to be able to:

- Describe how different cultural groups historically utilized Point Piedras Blancas;
- Explain reasons for the construction of the Piedras Blancas Light Station;
- Describe challenges the early lighthouse keepers families faced living at PBLS; and
- Explain why some marine mammals utilize the waters surrounding PBLS.

Through interpretation and education visitors will learn about natural and cultural resource management issues within the Outstanding Natural Area. As a result, at least 25 percent of the visitors participating in PBLS programs will be able to:



- Explain how introducing non-native plant species can effect a given area and the benefits of native plant restoration.
- Explain why it is essential to protect the archeological resources found on the property;
- Describe why BLM is restoring the buildings to the historical period between 1875-1939; and
- Explain the importance of marine ecosystems and the need for protecting them.



Native plants are now flourishing at PBLs.

Staff Roles

Staff and volunteers will communicate a variety of messages to the public through various media. Staff is expected to keep abreast of trends in the field of interpretation and environmental education. They should also be informed of current management issues and known health and safety risks specific to PBLs.

9. Partnerships and Programs

Organizations continue to partner with BLM to provide support and information for interpreters, facilitate guided tours and conduct on-site research. BLM's partners at Piedras Blancas Light Station include the following:

- Piedras Blancas Lighthouse Station Association
- California Department of Parks and Recreation
- Monterey Bay National Marine Sanctuary
- California Department of Fish and Game
- United States Geological Survey
- National Marine Fisheries
- Central Coast Lighthouse Keepers Society



- National Oceanic and Atmospheric Administration

10. Income from Associations/Friends Groups

There is a strong need for active and consistent financial support for PBLS to supplement federal funding. Interpretive associations such as the Piedras Blancas Light Station Association provide necessary funding through the sale of merchandise, guidebooks and educational materials to the general public. Profits earned from these sales are kept on-site and provide essential financial support for the operation and development of interpretive services and building reconstruction and restoration. Voluntary public donations from tours are another effective source of income. They are also indicative of the degree to which the public supports interpretive programs and services. PBLSA also receives grants and donations from various sources to help site restoration efforts.

11. Income from Tour Fees

Currently, a \$15.00 fee (in accordance with the Federal Lands Recreation Enhancement Act as an Expanded Amenity Fee) is charged for tours occurring on the third Saturday of every month with no admission fee assessed for the Tuesday and Thursday tours. Once a bonded BLM staff member is hired, fees may be proposed for all tours. Expanded amenity fees are charged for specialized outdoor recreation sites and services that provide direct benefits to individuals or groups. At Piedras Blancas this would include participation in an enhanced interpretive program of guided tours and the use of a reservation system.

The money generated by fees will be used for restoration and operations and maintenance. This will supplement any appropriated funding. The revenues from 25,000 paying adult visitors would generate approximately \$370,000, enough to offset many operational costs. Additional visitation would provide funds for restoration purposes. One goal of the PBLS staff should be to generate enough income through tour fees to provide visitors with a quality recreation experience through enhanced facilities and services.

12. Classroom Outreach, Environmental Ed and Field Trip Programs

Classroom educational outreach efforts will be developed. Outreach groups are traditionally comprised of students from elementary school to university level, but may also be associated with service organizations, youth groups, or the like. These audiences often desire more in-depth information, as well as opportunities offering direct study.

The outreach program must follow state curriculum standards and highlight local,



natural and cultural history with field study exercises.

A curriculum is currently being created for teachers and students at the 4th and 5th grade levels which complements the California history provided in the 4th grade. This curriculum will include an information packet for teachers with the option for an on-site field trip to PBL. As an alternative, a staff member may visit the school to discuss the cultural and natural history of Piedras Blancas. Teachers can also request additional classroom materials. The curriculum will adapt and apply to multiple disciplines including history, mathematics, science and English.



A unique partnership between a group of dedicated school students at Grover Heights Elementary in Grover Beach and those who care for the Piedras Blancas Light Station has collected more than \$4,000 toward the restoration of the 132-year-old lighthouse through the "Pennies for Piedras" program.

It is important that the students experience an authentic learning opportunity where they are able to investigate their natural and cultural heritage and apply what they have learned to their everyday life.

13. Existing Interpretation

Natural Resources

Interpretive Trail

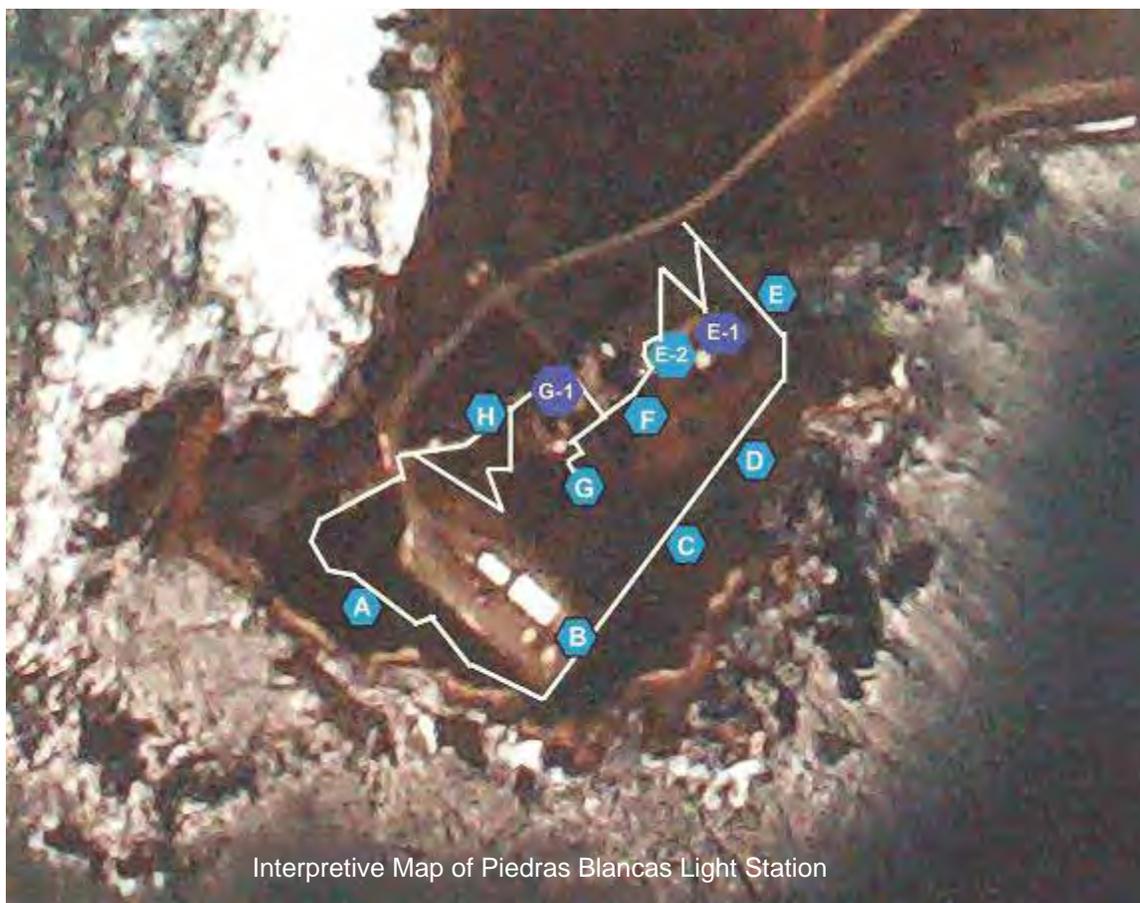
Encircling the Light Station is a half-mile interpretive trail that visitors may walk to learn about the Light Station and view the extensive marine habitat and wildlife. The stations listed and described below are where interpretive panels, viewing overlooks and benches will be placed:



Station A. From this vantage point, visitors face the 110 foot high Outer Islet, 200 meters off the shoreline. Here California sea lions haul out, brown pelicans and Brandts cormorants rest and peregrine falcons nest. There are currently two panels at this location - one is associated with the Monterey Bay Marine Sanctuary and the various marine mammals that live within its boundaries - the other discusses whale migration. The latter should be removed and replaced with a panel discussing the importance of the California Coastal National



Monument as habitat for marine species. Two benches are placed at this overlook to accommodate visitors.



Interpretive Map of Piedras Blancas Light Station

Station B. Native plant restoration should be discussed at this station. A small overlook area with a bench is located here. Native plant restoration can be discussed along the trail at several locations.

Station C. The whale migration panel removed from Station A should be placed at this location. Two benches are located at this location.

Station D. The sub themes of this particular panel should be: kelp beds, otters and elephant seals. A bench is located at this station. (The shell midden will be briefly pointed out but will be explained in greater detail at station G.)

Station E. The trail should be enlarged at this location and interpreters can talk to groups about the history of the wharf and tender ships. A bench is located here.



Benches will be needed at Stations E1 and E2.

Station F. Currently, there are two temporary panels at this station discussing the significance of the head and assistant light keepers' houses. These two panels could remain until the construction of the houses are completed at which point they should be removed. An additional sign may be needed here to discuss the laundry facility and water tank buildings. There are four picnic tables at this location which should remain.

Station G. A large viewing area should be constructed and two panels added to this location outlining the different cultural groups that have passed through or utilized this area.

The first panel should be associated with Native American usage of Point Piedras Blancas. The second panel should outline the other cultural groups that impacted the area, including Spanish explorers; Portuguese whalers, Chinese seaweed collectors, Japanese abalone fishermen and Swiss dairy operators. Two benches would be useful at this location.

At Station G1, there is currently a temporary sign discussing the importance of planting cypress trees as windbreaks. This sign should be a permanent sign and relocated to station F to emphasize the hardships of daily life at the light station.

Station H. At present, there is a temporary panel here discussing the removal of non-native plant species and re-growth of the native flora. This should be replaced with a more weather-resistant panel that is more consistent with other signage on the trail. There is currently a bench at this location that could remain.

Cultural Resources

Visitor Center

The visitor center will be the principal public information facility for the Light Station. Primary topics of information will include an introduction to Piedras Blancas and its natural and cultural resources. An interim visitor contact center will be located in the fuel storage shed after this building has been restored. The permanent visitor center will be housed in a replica of the assistant light keeper's residence, once it is reconstructed over the next ten year period. It will house a museum and an information station on the first floor and management offices





on the second floor. Public restrooms will be located both in the visitor center and the replica residential storage shed.

To present consistent and effective messages to visitors about Piedras Blancas, indoor and outdoor exhibits should be consistent with the goals, objectives and themes identified in this Interpretive Plan.

Fog Signal Building

- The fog signal building includes exhibits that interpret the following subjects:
- Native American usage of the area;
- The function and operation of the fog signal building;
- Shipwrecks in the near vicinity; and
- Marine mammals.



The fog signal building is seen at the top of the photo with the fuel/oil house in the front.

Display cabinets located in the fog signal building contain examples of Native American artifacts found on-site or in nearby areas and artifacts from shipwrecks that have been donated to PBLA. When the permanent visitor center is built, it is recommended that the Native American artifacts be moved to this site where they can be displayed in closer proximity to Native American interpretive panels.

Fuel/Oil House

Here visitors learn how the fuel oil that powered the Light Station and Fresnel lens was stored in what is one of the first federally built reinforced concrete structures in California.

Lighthouse

The pivotal point in the tour is visiting the lighthouse where visitors learn about the management and operations of this structure during the historic time period. Original cabinets within the lighthouse contain implements used by the keepers who worked for the U.S. Lighthouse Service. Visitors will explore the following sub-themes when in the lighthouse:



- How the lighthouse was architecturally constructed;
- The various lighting techniques utilized in lighthouse signal operations;
- The purpose and operation of the Fresnel lens;
- The purpose and function of day marks and light signal patterns; and
- The lives of people who managed and resided at the Light Station.



Piedras Blancas Light Station brochures are located in the lighthouse. A donation box hangs by the door as visitors exit the structure. This will be initially moved to the interim visitor contact center and eventually to the permanent visitor center.



Interpretative Display Cases

There exist two mobile interpretative display cases containing tangible, hands-on teaching tools. One is stationed outside the fog signal building and the other near the Navy mobile instrumentation station. The fog signal building display case contains Native American artifacts. It is recommended that this case be placed closer to the site where Native American interpretation will occur and stored either in the fuel and storage building, once it is restored, or in the garage of one of

the Coast Guard residencies. The other display case with marine mammal pelts and skulls may remain where it is currently located, but should eventually be moved to the whale overlook site during the tours.

Virtual Tour

A virtual tour of the interior of the lighthouse should be created for individuals with disabilities who cannot physically access the structure. This should be housed in the visitor center once it is completed. Until then, the virtual tour could be located in the



visitor contact center.

California Coastal Light Station Auto Trail Tour

In the future, an auto tour could be developed to connect the various light stations located along California State Highway 1. The tour could be promoted with interpretive materials that illustrate the history of the California Coastal light stations and their individual unique features.

14. Interpretive Products

The following interpretive products are currently available to the public from the BLM:

Piedras Blancas Light Station brochure

Native Plant Restoration brochure

Tour information brochure

Tour information 3 x 5 card

California Coastal National Monument brochure

Monterey Bay Marine Sanctuary brochure

BLM internet website: www.blm.gov/wo/st/en.html

NLCS website: www.blm.gov/wo/st/en/prog/blm_special_areas/NLCS.html

Piedras Blancas website: www.blm.gov/ca/st/en/fo/bakersfield/Programs/pbls.html

15. Design Guidelines and NLCS and ONA Recognition

Properly designed signs and publications are important aspects of creating “place recognition”. Consistency and repetition in the use of logos, print style, and designs/formats of signs and publications establishes a visual cue that visitors will associate with Piedras Blancas Light Station. A sign plan will establish formal guidelines for administrative, informational and interpretive signs.

The Logo

The Piedras Blancas Light Station BLM logo is the primary brand for this Outstanding Natural Area. This logo is to appear on all publications and most signs, as well as on the PBLS internet website. The logo will appear with the phrase, **Piedras Blancas Light Station Outstanding Natural Area, Unit of the National Landscape Conservation System.**



**Piedras Blancas Light Station Outstanding Natural Area
Unit of the National Landscape Conservation System**

For all printed materials the following logo design standards need to be established:

- The logo's colors, text, font and layout must be consistent in all products that represent PBLA. Use of the logo on signs and exhibits must conform to the federal accessibility requirements;
- Placement of the logo has been determined for a variety of print and electronic media in order to establish and maintain consistency; and
- When used alone, the logo will be placed in the upper-left corner of the document (within established page/document borders). When used in conjunction with two or more federal logos (DOI, BLM, USDA, and/or USFS), the logo will be of equal size, located on the same line and usually centered between them. When used with only one other federal logo, the Piedras Blancas logo will be of equal size and lined up appropriately next to, or below it.

Publications

All publications representing Piedras Blancas Light Station should incorporate standardized design elements. Consistent formatting and use of logos, colors, texts and fonts are important for fostering public recognition of the Outstanding Natural Area.

Electronic templates should be designed for use in three and four-fold brochures, rack cards, fliers and other such products. These templates will help establish consistency



in the publications.

Publications should always reference the address, telephone number and internet website: www.blm.gov/ca/st/en/fo/bakersfield/Programs/pbls.html.

The Theme Statement should also be included: *Historical Point Piedras Blancas continues to provide protection and refuge to both humans and wildlife.*

Guidelines for Interpretive Exhibits and Publications

The following guidelines are applicable to the development of interpretive exhibits and publications:

- An interpretive message should be based on an established theme;
- Graphics, poetry or other art forms should be used where appropriate to illustrate themes;
- Stories or descriptions of events should be used to teach concepts rather than solely convey facts;
- Titles should use five or fewer words to identify concepts and ideas;
- Subtitles should be used to identify themes and introduce text paragraphs; Colors which reflect the surrounding environment should be incorporated into an exhibit's design;
- Text should be written to convey a certain message;
- Text in exhibits should be at least 24 point font size;
- Text blocks should not be entirely in capital letters;
- Graphics should be clear, easy to identify and complementary to the text; and
- The logos of the Outstanding Natural Area and the National Landscape Conservation System should be included in the exhibit.

16. Priorities and Strategies for Implementation

A challenge for BLM staff will be to provide visitor interpretation while simultaneously restoring and reconstructing site buildings. Based upon funding availability, the following list outlines the general order of restoration and reconstruction efforts:



1. Laundry room and water tank building restoration
2. Fog signal building restoration
3. Fuel/oil house restoration
4. Removal of Coast Guard buildings and Navy instrumentation station
5. Lighthouse restoration
6. Barn reconstruction
7. Light keepers' residences reconstruction.

During reconstruction and restoration, buildings will be off-limits to the visitor and interior exhibits temporarily removed. During restoration of the fog signal building, the exhibits could be housed in the gift shop, a converted garage in the Coast Guard building or in the Navy instrumentation station. When the lighthouse is under restoration, interior exhibits could be housed in the gift shop or fog signal building. If funding becomes available and the barn or watch room constructed prior to lighthouse reconstruction, this space could be used to display exhibits from the other buildings.

17. High Priority Projects and Actions

1. Adopt basic design guidelines for interpretive materials and facilities, ensuring that accessibility requirements are met. Create a virtual tour of the interior of the lighthouse for individuals with disabilities who are unable to access the site. This tour could be provided in the visitor contact center until the assistant light keeper's residence is reconstructed. Retrofit existing wheelchairs with mountain bike tires to increase trail accessibility for individuals with mobility challenges. Ensure availability of an individual who is fluent in American Sign Language to provide programs for those who are hearing impaired.
2. Hire at least one staff member who can manage volunteers, create interpretive programs, collect tour fees, and assist the site manager.
3. Determine the carrying capacity of Piedras Blancas Light Station. The number of daily tours and number of people permitted on each tour needs to be established in light of the number of staff and volunteers available to provide the tours and educational programs.
4. Obtain a shuttle vehicle to transport all tour participants from the Piedras Blancas Motel to PBLS.
5. Design and construct interpretive viewpoint areas and place benches at designated locations along the walking trail.
6. Design standardized, weather-resistant interpretive panels and place them at the appropriate locations along the walking trail. Work with local Chumash and Salinan



tribal members to design an interpretive panel that is both historically accurate and culturally sensitive.

7. For more effective and efficient program delivery, the following guidelines should be adopted:

- A consistent interpretive theme that is communicated to the public on the general tours;
- A uniform travel route that all tours follow; and
- A standardized fee structure for all tours.

8. Create special tours and/or programs based on seasonal themes. For example, whale programs could be presented during the spring migration and/or elephant seal programs during the mating/birthing season. Establish fees for special tours and events.

9. Work with PBLSA to create and distribute educational and outreach materials for school programs;

10. Develop new publications and update existing ones, incorporating consistent design standards throughout; and

11. Market PBLS to various chambers of commerce, travel bureaus and individuals throughout the state and country;

12. Create standardized press/media kits that include basic information about PBLS, its partnerships, the site's geographic and biological features, and the region's history and people; and

13. Create translation sheets of interpretive panels in Spanish, French, German, Chinese and Japanese.





18. Conclusion

The Piedras Blancas Light Station provides a unique example of creative and cooperative collaboration between federal and state agencies, non-profit organizations and community members which can serve as a model for the future management of BLM properties.

19. Bibliography and Reference Materials

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Conducting Meaningful Interpretation by Ward and Wilkinson, 2006

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Native Plant Restoration brochure, Piedras Blancas Light Station, BLM

Piedras Blancas Light Station Photo Collection, 2008

Piedras Blancas Light Station Management Plan and Environmental Assessment, 2007

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Piedras Blancas Light Station Information Manual for Tour Guides, 2008

Piedras Blancas Light Station Business Plan

Santa Rosa and San Jacinto Mountain National Monument Interpretive Plan, 2007

The Federal Recreation Enhancement Act

Workbook for Planning Interpretive Projects in California State Parks, 2008

Yaquina Head Outstanding Natural Area Management Plan

Abbreviations

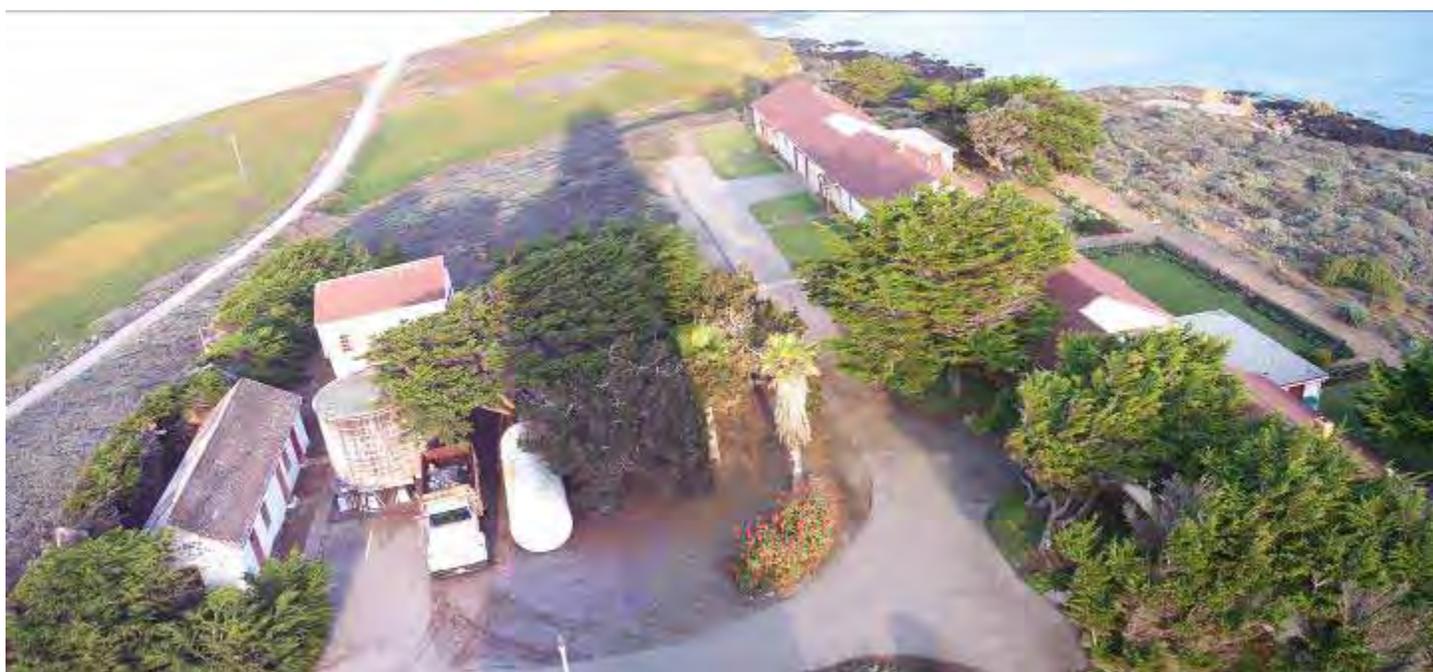
| | |
|------|--|
| ADA | Americans with Disabilities Act |
| BLM | Bureau of Land Management |
| DOI | Department of The Interior |
| NLCS | National Landscape Conservation System |
| ONA | Outstanding Natural Area |
| PBLS | Piedras Blancas Light Station |



| | |
|-------|---|
| PBLSA | Piedras Blancas Light Station Association |
| USDA | United States Department of Agriculture |
| USFS | United States Forest Service |
| USGS | United States Geological Survey |

Photographs

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|---|-------------|
| Piedras Blancas Light Station, 2006 | Cover |
| Piedras Blancas Light Station, circa 1885 | 1 |
| Piedras Blancas Light Station, circa 1930 | 2 |
| Aerial View of Piedras Blancas Light Station | 3 |
| Piedras Blancas Light Station, 2006 | 4 |
| Elephant Seal Haul-out on South Beach | 4 |
| Piedras Blancas Outer Islet | 5 |
| BLM Employee Duane Christian Giving an Interpretive Program | 6 |
| Whale Researchers | 7 |
| Volunteers Removing Iceplant | 9 |
| Fresnel Lens | 10 |
| Piedras Blancas Lighthouse, 2008 | 11 |
| A Guest at the Light Station | 12 |
| Tour group | 14 |
| Northern Elephant Seals | 15 |
| An Existing Interpretive Sign | 16 |
| Native Flora | 17 |
| School Group | 19 |
| An Existing Interpretive Sign | 19 |
| Aerial Interpretive Map of Piedras Blancas Light Station | 20 |
| Existing Interpretive Sign and Bench | 21 |
| Aerial View of the Fog Signal Building/Fuel Oil House | 22 |
| Display Cabinet Inside the Lighthouse | 23 |
| Lighthouse with Rainbow | 23 |
| Piedras Blancas Light Station, 2008 | 28 |
| The Compound Area Adjacent to the Lighthouse | 31 |
| The Coastline at Piedras Blancas | 32 |
| The Lighthouse Looking at the Entrance Door, 2008 | Inside Back |



*View of the living quarters and compound from the top of the lighthouse.
The photograph was taken prior to the removal of the water storage tank.*



Acknowledgements

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The rugged coastline at Piedras Blancas.

