

# San Francisco Maritime National Historical Park Greening Charrette April 5-7, 2005 San Francisco, CA Executive Summary



San Francisco Maritime National Historical Park comprises a museum, administrative building and library, visitor center and hotel complex, workshops, other facilities, and a collection of historic vessels ranging from large sailing and steam ships to small sailing dinghies. It is located on the San Francisco Bay in the heart of the city, amidst tourist attractions and waterfront facilities for city residents. There were slightly more than 4 million visitors in

2004. The park has already undertaken several major greening activities and has cut the park's energy bill almost in half. Park staff members recognize that preservation of historic ships demonstrates sustainability and are working to interpret this theme.

This charrette was the eighth in a series co-sponsored by the National Park Service and the U.S. Environmental Protection Agency. The objective of the charrette was to develop a plan for further greening of San Francisco Maritime Historical Park in high priority areas such as solar and other alternative energy sources, use of green materials and products, and interpretation of sustainability for visitors.



The event began with a half-day tour of the site, designed to introduce speakers and other outside participants to issues at the park that might be addressed during the charrette. The tour began at the Visitor Center, proceeded to Hyde Street Pier, where the group toured one of the historic vessels, and then went on to the Maritime Museum and Building E at Fort Mason.

The first full day of the charrette began with welcomes from Kate Richardson, Superintendent; George Turnbull, Deputy Regional Director; Shawn Norton, NPS Environmental Leadership Coordinator; and Jared Blumenthal, Director of the Department of the Environment for the City of San Francisco.

Next, park staff presented a summary of issues and accomplishments at the park. The morning concluded with a short presentation by Ed Walls from Point Reyes National Seashore, site of a greening charrette in 2003, on lessons learned and impacts of the charrette at his park.



After lunch, Gail Lindsey introduced the sustainability topics that are the focus of this charrette series: environmental leadership and planning, transportation, facilities, operations and maintenance, concessions, interpretation and education, and procurement. Then, experts gave presentations on topics of particular interest to San Francisco Maritime Park. Ben Pearson, Cape Cod National Seashore, and Kent Bullard, Channel Islands National Seashore, discussed operations and maintenance. Sonya Capek from the Pacific West Region talked about green tools for environmental purchasing and waste reduction. Finally, Aimee Vincent talked about ideas for interpreting sustainability based on her experience at the Presidio.



Participants then broke into three work groups to discuss ideas for (1) operations and maintenance, (2) procurement and purchasing, and (3) interpretation and education. For the remainder of the day, the groups discussed a vision for their topic and the current status at San Francisco Maritime Park to create a baseline. The work groups returned the final day to establish short-term, mid-term, and long-term goals and actions; the groups also identified champions and partners for high-priority actions as well as barriers and opportunities and approximate level of cost.

At the conclusion of the charrette, the groups presented their results and Superintendent Kate Richardson asked the Division Chiefs to react to the proposals. They all said that the ideas seemed “doable” and some were similar to ideas that were underway. Kate complimented the group on their “excellent work” and said that the charrette had helped the park to “hone their priorities”. She wanted managers to capture the ideas as critical elements for staff. She thanked everyone and said that the charrette had been a great benefit for her personally and in building a foundation that all staff can work together on. Finally, she reminded the group that sustainability is about culture change that happens one person at a time.



<b>Priority Short-Term Goals/Actions</b>	<b>Champions</b>
<b><i>Operations and Maintenance</i></b>	
Install lighting switch on Balclutha	Channing Walker
Complete lighting plan report	Rob Kier
Find source for biodiesel	Steve Hyman
Change 2-cycle oil to biobased	Rob Kier
Change hydraulic oil to vegetable-based oil	Rob Kier
Change to citrus-based parts cleaners	Erik Olson
Use green janitorial products in park	David Houck
Eliminate disposable silverware and plates in senior center	Robert Trevorrow
Green the paint operation in park	Chris Jannini
Find stormwater management plan	Rob Kier
Inventory fixtures and meters	Channing Walker
<b><i>Green Procurement and Purchasing</i></b>	
Create a baseline – inventory usage	Dave Houck, Lena McDowall
Create management system for Environmentally Preferable Purchasing	Jeannie Haugh, Lucas Kary
<b><i>Interpretation and Education</i></b>	
Develop sustainable theme(s) for Long Range Interpretation Plan	Marc Hayman
Review current programs for sustainability message opportunities and develop appropriate messages for each program	John Cunnane
Insert weekly sustainability message in Morning Watch	Marc Hayman
Develop and provide training for park staff	Maritime History Training Committee

# San Francisco Maritime National Historical Park Greening Charrette April 5-7, 2005 San Francisco, CA Final Report

## Background

San Francisco Maritime National Historical Park comprises a museum, administrative building and library, visitor center and hotel complex, workshops, other facilities, and a collection of historic vessels ranging from large sailing and steam ships to small sailing dinghies. It is located on the San Francisco Bay in the heart of the city, amidst tourist attractions and waterfront facilities for city residents. There were slightly more than 4 million visitors in 2004.



The park has already undertaken several major greening activities. For example, it has replaced most incandescent lamps with fluorescent and has installed motion sensors for specific zones on some ships; employees are encouraged to turn off lights when not in use. These actions have cut the park's energy bill almost in half. Park staff members recognize that preservation of historic ships demonstrates sustainability and are working to interpret this theme.

The park is currently planning for its participation in World Environment Day which will be held in San Francisco in June 2005. The charrette provided an opportunity to discuss themes and activities for this event with several park partners.



This charrette was the eighth in a series co-sponsored by the National Park Service and the U.S. Environmental Protection Agency. The objective of the charrette was to develop a plan for further greening of the park in high priority areas such as consideration of solar and other alternative energy sources, use of green materials and products, and interpretation of sustainability for visitors.

## Charrette Overview



The event began with a half-day tour of the site, designed to introduce speakers and other outside participants to issues at the park that might be addressed during the charrette. The tour began at the Visitor Center, proceeded to Hyde Street Pier, where the group toured one of the historic vessels, and then went on to the Maritime Museum, and Building E at Fort Mason.

The first full day of the charrette began with a welcome from Kate Richardson, Superintendent, and George Turnbull, Deputy Regional Director. Both declared their commitment to sustainability and enthusiasm for the charrette. Following introductions of participants, Shawn Norton, NPS Environmental Leadership Coordinator, “set the stage” for the charrette. He described key milestones in the NPS’ leadership in sustainability as well as more recent lessons from greening charrettes. Jared Blumenthal, Director of the Department of the Environment for the City of San Francisco, welcomed the group and described some of the sustainable activities in the city, such as recycling, green procurement, and LEED certified public buildings.



Next, park staff presented a summary of issues and accomplishments at the park. Kate emphasized the opportunity to talk to millions of visitors each year and to change the culture at the park and at home. She also noted specific opportunities such as reaching seniors who use the Senior Center at the park, replacing fixtures in public rest rooms with low-flow fixtures, and ensuring that concessions contracts include green provisions. Marc Hayman, Chief of Interpretation, called the NPS a “sleeping giant” that could make a huge impact on its visitors and through its purchasing. Lucas Kary discussed plans for the park’s activities for World Environment Day as well as sustainable efforts by administrative staff including an Integrated Solid Waste Management Plan, due in mid-April, green procurement, and saving energy with computers and other equipment. Robbyn Jackson discussed cultural resource and museum management activities, including preservation efforts at the library, restoration issues for the vessel C.A. Thayer, replacement of halons in vaults, and use of LED lights

in exhibits. Steve Rodgers talked about maintenance issues for facilities and vessels, noting that the park has moved away from oil-based paints, obtained some electric vehicles, and reduced its hazardous waste. He listed opportunities as well, such as motion sensors in offices, the diesel engine in the vessel Alma which does not meet smog requirements, the 1932 boiler in the museum, and the vehicle fleet, which includes no low-emission GSA vehicles. Representatives of several partner organizations, including Golden Gate National Recreation Area, the Senior Center at San Francisco Maritime Park, and the Dolphin Swimming and Boating Club, described their organizations and activities.



The morning concluded with a short presentation by Ed Walls from Point Reyes National Seashore, site of a greening charrette in 2003. Ed stressed the importance of not “biting off too much” at first. He also said that 65% if the objectives in the park’s EMS came from the charrette. Examples of sustainability actions at Point Reyes include the EMS, use of biodegradable hydraulic fluids, a rest room that was built with sustainable products and renewable energy, a

new ISWAP, use of solar energy throughout the park, and alternative fuel vehicles. Finally, Ed stressed the need for a person to make sure things happen.

After lunch, Gail Lindsey introduced the sustainability topics that are the focus of this charrette series: environmental leadership and planning, transportation, facilities, operations and maintenance, concessions, interpretation and education, and procurement. Then, experts gave presentations on topics of particular interest to San Francisco Maritime Park. First, Ben Pearson talked about lessons and successes from his experience at Cape Cod National Seashore including use of green janitorial products, plastic lumber, new alternatives to oil-based paints, an energy audit and savings from lighting and office equipment practices, waterless urinals and low-flow fixtures, natural vegetation, retread tires, bio-based hydraulic and chainsaw oil, biodiesel, better housekeeping



for hazardous materials and reducing the purchase of such materials, and a successful shuttle system. Kent Bullard discussed lessons and successes at Channel Islands National Seashore including reduction in fuel use through solar and wind (from 8000 to 260 gallons per year in one case and several islands are petroleum free), use of biodiesel, plastic decking, waterless urinals, and occupancy sensors and timers for office equipment. He encouraged participants to

continue to look for new ideas. Sonya Capek from the Pacific West Region talked about green tools for environmental purchasing and waste reduction including reports on specific products from the region, LEED, EPA's model green specifications, Web sites, an Environmental Purchasing Guide and training program, Green Janitorial Products and Practices Guide, Best Management Practices Guide, Green Office Practices Guide, and many specific opportunities. Finally, Aimee Vincent talked about ideas for interpreting sustainability based on her experience at the Presidio.

Participants then broke into three work groups to discuss ideas for (1) operations and maintenance, (2) procurement and purchasing, and (3) interpretation and education. For the remainder of the day, the groups discussed a vision for their topic and the current status at San Francisco Maritime Park to create a baseline. The work groups returned the final day to establish short-



term, mid-term, and long-term goals and actions; the groups also identified champions and partners for high-priority actions as well as barriers and opportunities and approximate level of cost. One high priority action was accomplished overnight – the Senior Center eliminated its use of disposal silverware and plates. Kate presented an award to Robert Trevorow to recognize his effort.

At the conclusion of the charrette, the groups presented their results and Superintendent Kate Richardson asked the Division Chiefs to react to the proposals. They all said that the ideas seemed “doable” and some were similar to ideas that were underway. Kate complimented the group on their “excellent work” and said that the charrette had helped the park to “hone their priorities”. She wanted managers to capture the ideas as critical elements for staff. She thanked everyone and said that the charrette had been a great benefit for her personally and in building a foundation that all staff can work together on. Finally, she reminded the group that sustainability is about culture change that happens one person at a time.



## Highlights of Discussion

Three work groups discussed a vision for their topic area, the current status or baseline conditions, and short-term, mid-term, and long-term goals. For the highest priority short-term goals, they also identified champions, partners, funding needed, and barriers.

## **Operations and Maintenance**

**Team:** James Adams, Kent Bullard, Bill Doll, Terry Dorman, Lou Ferrari, Chris Jannini, Rob Kier, Shawn Norton, Erik Olson, Ben Pearson, Meg Reilly, Steve Rodgers, Robert Trevorrow



### **Vision:**

Convert from diesel to biodiesel; convert the fleet to alternative fuels; use alternative energy for heating, tide generators, solar hot water, and green power on ships; install waterless and low-flow fixtures; build sustainable LEED Silver structures and rehabs; reduce solid waste by 50% and hazardous products by 10% per year; and use green janitorial products.

## ***Energy***

### **Current Status/Baseline Conditions**

- A lighting audit is complete, but heating/ventilation audits have not been done.
- 10-20% of incandescent bulbs need replacement.
- Only a small number of rooms have motion sensors.
- There is no energy management system for the park.
- The Museum Building is to be upgraded in 2007.



- Replacement of T-12s with T-8s is about 30% complete.
- Lighting on the Municipal Pier has a timer but needs energy management system.
- The ship Balclutha needs a switch for lighting and relighting of lower level.
- There is one solar panel in use for the Hicks Engine

### **Short-Term Goals and Actions**

1. Install lighting switch in Balclutha  
Champion: Channing Walker  
Funding: \$  
Partner: Chris Jannini
2. Complete lighting plan report



- Champion: Rob Kier  
Funding \$  
Partner: PG&E
- 3. Perform HVAC audit  
Champion: Rob Kier  
Funding: \$  
Partner: PG&E
- 4. Complete fluorescent lighting installation  
Champion: Erik Olson  
Funding: \$  
Partner: PG&E, City of San Francisco
- 5. Install motion sensors/ controls throughout  
Champion: Rob Kier  
Funding \$\$  
Partner: PG&E



#### Mid-Term Goals and Actions

- 1. Convert T-12 to T-8  
Champion: Erik Olson  
Funding: \$  
Partner: PG&E, Intraline
- 2. Upgrade Museum Building (line item)  
Champion: Rob Kier  
Funding: \$\$\$  
Partner: Denver Service Center
- 3. Relight lower level of Balclutha  
Champion: Steve Rodgers  
Funding: \$\$  
Partner: PG&E, Intraline
- 4. Consider/install solar hot water parkwide  
Champion: Steve Rodgers  
Funding: \$\$  
Partner: Regional Office, FEMP
- 5. Consider/install photovoltaics at Hyde Street Pier  
Champion: Steve Rodgers  
Funding: \$\$  
Partner: Bonneville Power, Regional Office



#### Long-Term Goals and Actions

- 1. Consider/install wind/tide energy generation at Municipal Pier  
Champion: Rob Kier  
Funding: \$\$\$  
Partner: FEMP, Regional Office

2. Consider/install parkwide alternative energy for power and heating

Champion: Steve Rodgers  
Funding: \$\$\$  
Partner: FEMP, Regional Office



3. Install sustainable lighting at Municipal Pier

Champion: Steve Rodgers  
Funding: \$\$\$  
Partner: FEMP, Regional Office

### ***Transportation***

#### Current Status/Baseline Conditions

- There are five electric vehicles, but no other alternatively fueled vehicles in fleet.
- Fleet size is reducing but needs evaluation.
- Equipment includes a crane, air compressor, generator that run on regular diesel now; there are also gardening and small engines that could be converted to biodiesel or electric.
- Five outboard motors are 4-stroke.
- Current oils are not biobased.



#### Short-Term Goals and Actions

1. Find source for biodiesel  
Champion: Steve Hyman  
Funding: \$  
Partner: Golden Gate NRA
2. Change 2-cycle oil to biobased oil  
Champion: Rob Kier  
Funding: \$  
Partner: Golden Gate NRA
3. Change hydraulic oil to vegetable-based oil  
Champion: Rob Kier  
Funding: \$  
Partner: Regional Office, Sonya Capek, Point Reyes NS
4. Change crane to biodiesel





Champion: Erik Olson

Funding: \$

Partner: Golden Gate NRA

5. Change air compressor to biodiesel

Champion: Erik Olson

Funding: \$

Partner: Golden Gate NRA

6. Change outboard motors to 4-stroke

Champion: Bill Doll

Funding: \$

Partner: US Park Police, Law Enforcement, Steve Rodgers

### Mid-Term Goals and Actions

1. Convert all small engines to electric or biodiesel  
Champion: Rob Kier  
Funding: \$\$  
Partner: Regional Office
2. Purchase tri-cycles  
Champion: Chris Jannini  
Funding: \$  
Partner: San Francisco Bicycle Coalition

### Long-Term Goals and Actions

1. Convert 100% of fleet road equipment to alternative fuels  
Champion: Rob Kier  
Funding: \$\$\$  
Partner: GSA, Regional Office
2. Investigate partnership with City Share Vehicle Program  
Champion: Steve Rodgers  
Funding: \$  
Partner: Laura Ingall, SF Green Building Department



### *Maintenance*

#### Current Status/Baseline Conditions

- Cutting fluids are biobased but other penetrating oils and lubricating oils and grease need to be assessed.

Short-Term Goals and Actions

1. Change to citrus-based parts cleaners  
Champion: Erik Olson  
Funding: \$  
Partner: none



2. Use green janitorial products in the park  
Champion: Dave Houck  
Funding: \$  
Partner: Golden Gate NRA
3. Eliminate disposable silverware and plates in senior center  
Champion: Robert Trevorrow  
Funding: none  
Partner: Senior Center
4. Green paint operations in park

Champion: Chris Jannini  
Funding: \$  
Partner: Bill Doll, consultant

5. Change to green lubricating oils for park  
Champion: Bruce VanVick  
Funding: \$  
Partner: Kent Bullard
6. Expand recycling program on Hyde Street Pier  
Champion: Lucas Kary  
Funding: \$  
Partner: Rob Kier
7. Use green landscaping products for park  
Champion: Rob Kier  
Funding: \$  
Partner: Golden Gate NRA



Mid-Term Goals and Actions

1. Change hazardous waste generation status to exempt  
Champion: Timothy Przygocki  
Funding: \$\$  
Partner: Stephen Rodgers
2. Create a composting system  
Champion: Rob Kier  
Funding: \$

- Partner: Golden Gate NRA
3. Use sustainable coatings on all ships and structures  
Champion: Chris Jannini, Rob Kier  
Funding:  
Partner: vendors, San Francisco Dry Dock Company

## Water

### Current Status/Baseline Conditions

- Approximately 20% of fixtures are low-flow.

### Short-Term Goals and Actions

1. Find stormwater management plan  
Champion: Rob Kier  
Funding: none  
Partner: Public Utilities Commission
2. Inventory fixtures and meters  
Champion: Channing Walker  
Funding: \$  
Partner: none
3. Initiate a water management plan  
Champion: Steve Rodgers  
Funding: \$  
Partner: Public Utilities Commission



### Mid-Term Goals and Actions

1. Install salt water pump for ships  
Champion: Steve Rodgers  
Funding: \$  
Partner:
2. Replace all fixtures with low-flow  
Champion: Erik Olson, Rob Kier  
Funding: \$\$  
Partner: Public Utilities Commission
3. Install low-water irrigation system  
Champion: Rob Kier  
Funding: \$\$  
Partner: Golden Gate NRA
4. Install low maintenance/ drought resistant plantings  
Champion: Rob Kier



Funding: \$\$  
Partner: Golden Gate NRA

### **Green Purchasing**

**Team:** Sonya Capek, Laura Castellini, David Houck, Steve Hyman, Robbyn Jackson, Lucas Kary, Elizabeth Kibbey, Lena McDowall, Kate Richardson



### **Vision:**

- An effective EPP system – a fluid inventory system of priority products (janitorial, oil, lubricants, carpet, paint, lumber, paper) that measures and tells the story of positive change
- Ongoing education and awareness – to address decentralized purchasing, cost, partners, and how to make choices – get everyone up to speed and working together
- Leadership role – influence goes beyond the park.



### **Current Status/ Baseline Conditions**

- There is no inventory of janitorial products and the park assumes they are not green.
- Central purchasing is not required – there would be lower cost for bulk purchasing of paper, archival paper, toner and cartridges, etc. – it might be possible to partner with Golden Gate for some purchases.
- Some products have special requirements – for example, are there greener options for archival paper?
- There is a need for training – Sonya Capek can provide a one-day training program on purchasing and a “how to” guide for a green procurement plan – the



park hopes to schedule this program by September 2005; Ben Pearson can provide an example of an internal green guide.

### Short-Term Goals and Actions

1. Create a baseline – inventory usage of products(janitorial, paper/ office supplies, paints, oils, restoration materials) and utilities (electricity/ energy and water quantity/ quality)
  - gather information (track and meter)
  - analyze and review information



- find good vendors
  - obtain training (Tom Baron)
  - develop contract clause (Heather Davies, DOI)
- Champion: Dave Houck, Lena McDowall

(Erik Olson, Joyce Kim, Marlene Cruz, SCA - Nick Funding:  
Partners: Sonya Capek, City of San Francisco, PG&E

2. Create a management system for Environmentally Preferable Purchasing (EPP)
  - EPP Summit
  - list of products to use that are environmentally preferable
  - how to disseminate
  - how to purchase – (central v. decentralized)
  - process for “on list” or “off list”
  - create share-point Web site in park to disseminate list of products

Champion: Jeanne Haugh and Lucas Kary  
(Joyce Kim, Dave Houck, Sara Diamond, Marlene Cruz, Loretta Hom, Barbara Helphrey, Mark Goldstein)

Funding:

Partners: Sonya Capek (Regional Tools), Jamie Sherril, Ben Pearson

3. Complete ISWAP (already underway) and implement recommendations through best management practices

Champion: Tim Przygocki, Lucas Kary

Funding:

Partner: Sonya Capek, Senior Center



4. Establish effective links with O&M and Interpretation (already happening with Environmental Management Team)



Champion: EMT as connection

Funding:

Partner:

5. Review upcoming projects with sustainable considerations (e.g., specifications for paints, coatings, lubricants, hydraulic fluids; LEED Silver level)

Champion: Lynn Cullivan, Robbyn Jackson, Steve Rodgers

Funding

Partner: Sonya Capek-Alameda County material, Directive 48, Jack Williams checklist

6. Promote awareness and education (all staff meeting, training)

Champion: Lynn Cullivan

Funding:

Partners: Sonya Capek, Tom Baron

7. Identify showcase projects or projects that show “sustainability”

Champion: Lynn Cullivan

Funding:

Partners:

### Mid-Term Goals and Actions

1. Assess GSA fleet vehicles and look for hybrid vehicles, bicycles, “cool” alternative transportation
2. Transition to EnergyStar appliances
3. Continue education and training
4. Enhance and expand partnerships
5. Coordinate stronger partnerships with O&M, particularly in terms of lessons learned with products
6. Develop expertise and leadership



### Long-Term Goals and Actions

1. Upgrade utilities (especially electric and mechanical)
2. Obtain feedback, continuous upgrade of inventory
3. Conduct ongoing training and education
4. Continue to enhance and expand strong partnerships
5. Continue to measure and monitor implementation for continual improvement





## Interpretation and Education

Team: Laura Atkins, Christine Baird, John Cunnane, Lynn Cullivan, Sara Diamond, Marc Hayman, Amy Hosa, Laura Ingall, Tracy Neal, Mark Neuweld, Timothy Przygocki, Karen Reyna



### Vision:

- Interpret *current* practices at the park that visitors could take home
- Interpret *historical* practices and their consequences – the link between past processes and ecological issues, without introducing current biases – explore lessons from new and old technologies and processes
- Educate all staff on issues and involve all staff in interpretive planning
- Get more involved with each partner and the community in developing interpretation of sustainability that is tailored to their mission and activities

### Current Status/ Baseline Conditions

- Current programs have some sustainability messages woven in, but none have sustainability as a primary theme.
- The park is starting to include messages about environmental implications of Bay history in programs.
- City of San Francisco is working to develop buildings and streetscapes to reduce water runoff into the Bay (through



green roofs, etc.) – opportunity for more park participation.

- There are many potential partners, such as the California Coastal Commission, Adopt-A-Beach program, Clean Boating program, and others.
- K-12 programs at the park currently do not include sustainability but do include stewardship themes; 10,000 school children participate each year in Age of Sail program and 12,000 participate in another, Ranger-led program
- Archive collections are a great resource but archive/ library staff are not directly involved in interpretation process – need better integration

- In May 2005, the park is sponsoring a visitor survey to gather information on visitor demographics, interests, and expectations – this will be useful in developing sustainability messages as well as other park programs.



- Planning is underway for park activities for World Environment Day in June 2005; the planned eco-history walking tour and exhibits might be incorporated into more permanent exhibits; will look at 100 years ago and today – could also consider the future.

- NOAA is planning a Maritime Heritage Conference with the call for papers out now; this might be an educational opportunity for staff.
- An exhibit on tides and wind will be installed on the pier; this could incorporate messages on current and historic water quality.
- Waysides could focus on people and their relationship to water quality and Bay ecology; this would require funding and partners could include Goldman Sachs, Haas, City of San Francisco, Fisherman's Wharf Association.
- The vessel C.A. Thayer is undergoing restoration; the park could photo-document the process and the sustainability issues raised, such as use of old-growth timber.
- Junior Ranger program is undergoing new planning process; this is an opportunity to incorporate sustainability messages and related activities.
- Other potential opportunities include the following: cruise ships with water ballast can introduce non-native species, fishing industry has many impacts (at Half Moon Bay, the Farallones Sanctuary has posted signs about more sustainable fishing practices – this is a potential partnership opportunity)



- Potential themes include the following: urban watershed interface with San Francisco Bay, wise vs. unwise use of resources, historical view of ships as support for humans’ need for extractive activities and for moving resources long distances.

Short-Term Goals and Actions

1. Develop sustainable theme(s) for the Long Range Interpretation Plan

- preservation *is* sustainability
- link between historical processes and ecological consequences

Champion: Marc Hayman  
 Funding: staff time  
 Partner: Age of Sail  
 Barriers: none



2. Review current programs for sustainability messaging opportunities and develop appropriate messages, media, and timetable for each program. Use matrix to assist in brainstorming and implementation.

Message	Media	Timetable

- Interpretive staff meeting to identify opportunities in interpretive programs (John Cunnane)
- Work with Sign Plan Committee to identify opportunities and messages (Lynn Cullivan)
- Review publications to identify opportunities and messages (Christine Baird)
- Review electronic media to identify opportunities and messages – next year

Champion: John Cunnane  
 Funding: staff time  
 Partners: Age of Sail  
 Barriers: time (volume of material to review), logistics (getting groups together), Intranet might address some barriers



3. Insert weekly sustainability message in Morning Watch (“factoid” or new activity at park)

Champion: Marc Hayman to kick off and do schedule, then responsibility will rotate among Division Chiefs

Funding: staff time

Partners: none

Barriers: attitudes – “too busy”

4. Develop/ provide training for park staff (bring in training and send staff to conferences) – could include opportunities for staff to attend interpretive programs within the park

Champion: Maritime History Training Committee

Funding: staff time, cost of outside experts, cost of conferences

Partners: Presidio Trust, Golden Gate NRA, Port of San Francisco, Save the Bay, Bay Keepers, California Coastal Commission, Surfriders Foundation

Barriers: none



5. Develop a “template” that would enable staff to prepare temporary signs to highlight sustainability messages or activities (signs would go through regular channels of review).

#### Mid-Term Goals and Actions

1. Communicate park sustainability successes to park staff (increase interaction among divisions)
2. Develop additional messages, media for curriculum
3. Review Web site and other electronic media and identify opportunities for sustainability messages

4. Develop sustainability-related programs with partners that relate to the partner’s mission; a partial list of potential partners includes Argonaut Hotel, Dolphin Swimming and Boating Club, Fisherman’s Wharf Merchants Association, Senior Center, Fort Mason Association, Aquarium, San Francisco



Ocean Film Festival, NOAA, City of San Francisco, Galileo High School, environmental organizations, California Coastal Commission (Green Boating and Clean Marinas programs to reach recreational boaters)

5. Prepare and present sustainability-related papers at conferences and attend professional meetings and conferences
6. Include volunteers in planning programs and training
7. Collect and distribute materials related to sustainability topics in the Library; create a “sustainability center” in the Visitor Center or Library.

## Closing

At the conclusion of the charrette, the groups presented their results and Superintendent Kate Richardson asked the Division Chiefs to react to the proposals. They all said that the ideas seemed “doable” and some were similar to ideas that were underway. Kate complimented the group on their “excellent work” and said that the charrette had helped the park to “hone their priorities”. She wanted managers to capture the ideas as critical elements for staff. She thanked everyone and said that the charrette had been a great benefit for her personally and in building a foundation that all staff can work together on. Finally, she reminded the group that sustainability is about culture change that happens one person at a time. Gail Lindsey and Joel Todd, the consultants to NPS on this greening effort, ended the charrette with thanks to all and a reminder that the National Park Service will be contacting the park in six months to check on progress.

