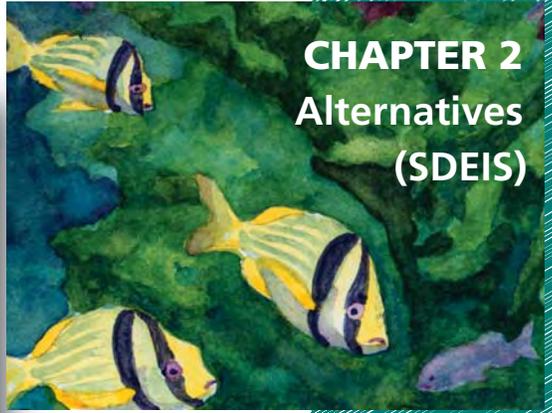


**CHAPTER 2**  
**Alternatives**  
**(SDEIS)**



CHAPTER 2: ALTERNATIVES

BACK OF DIVIDER PAGE

## INTRODUCTION

Chapter 2 describes the alternatives for management of Biscayne National Park. Alternatives 1 to 5 were described in the 2011 Draft GMP/EIS. Please see chapter 2 (pages 35–104) of that document for a full description of alternatives 2 to 5. We are presenting alternative 1 (no action) from the 2011 Draft GMP/EIS, here in the SDEIS to provide the basis for comparison with alternative 6 and alternative 7 that were developed in response to agency and public comments on the 2011 Draft GMP/EIS. These alternatives include a new zone—the special recreation zone. Summary tables include all seven alternatives to allow comparison.

### USER CAPACITY

General management plans for national park system units, including Biscayne National Park, must address user capacity management. The National Park Service defines user capacity as the type and extent of visitor use that can be accommodated while sustaining the quality of a park unit's resources and visitor experiences consistent with the park unit's purpose.

Managing user capacity in national parks is inherently complex and depends not only on the number of visitors, but also on where they go, what they do, and the “footprints” they leave behind. In managing for user capacity, park staff relies on a variety of management tools and strategies, rather than relying solely on regulating the number of people in a park. The ever-changing nature of visitor use in parks requires a deliberate and adaptive approach to user capacity management.

The foundations for making user capacity decisions in this general management plan are the park's purpose, significance, special mandates, and management zones. In

addition, based on the desired conditions, indicators and standards associated with visitor use are identified. These indicators and standards help assess changes in resource and social conditions related to human activity to ensure that desired conditions are being maintained. The planning team considered many potential issues and related indicators that would identify impacts of concern, and those described in the following table were considered the most salient given the importance and vulnerability of the resource or visitor experience affected by visitor use. The specific, measurable indicators are organized in the table by their associated broad issue (e.g., disturbance of viable fish populations, visitor experience/use conflicts). These indicators are applicable to some or all of the management zones identified in the plan. The assigned zones where these indicators will be monitored and conditions compared to the standards are identified in the first column of the table.

See table 1 for a summary of user capacity by management zone. The complete user capacity introduction and description is found on pages 35–45 of the 2011 Draft GMP/EIS, accessed online at: <http://parkplanning.nps.gov/documentsList.cfm?parkID=353&projectID=11168>.

### BOUNDARY MODIFICATION

The National Park Service is required to analyze the need for possible modifications to a park's external boundaries in all general management plans. (See 2011 Draft GMP/EIS for a complete discussion.) No new decisions or information regarding boundary modifications are included in this SDEIS.

## **PREFERRED ALTERNATIVE**

The full range of alternatives was developed from a number of different perspectives. This included comments received on the alternatives newsletter and during public and stakeholder workshops, public and agency comments received on the 2011 Draft GMP/EIS, cost estimates, and analysis of potential impacts.

With these and other elements in mind, the agency preferred alternative is alternative 6, which balances resource protection, visitor experience, and interagency collaboration. Alternative 6 replaces the former agency preferred alternative 4.

The agency preferred alternative and the environmentally preferable alternative are not synonymous.

## **MANAGEMENT ZONES**

Management zones define specific resource conditions and visitor experiences to be achieved and maintained in each particular

area of the park under each of the action alternatives (the no-action alternative does not have zoning). Each zone description includes the types of activities and facilities that are appropriate in that zone.

There were 10 management zones in the 2011 Draft GMP/EIS. A new zone (the special recreation zone) is included in the SDEIS as part of alternative 6 and alternative 7. The 11 management zones for Biscayne National Park are presented in table 2. Resource conditions, visitor experience, and appropriate management actions and facilities are described for each zone.

All lands within the park's legislated boundary are zoned regardless of whether or not the lands are currently owned in fee-simple title by the National Park Service. This specification provides direction for future management should such lands be acquired

TABLE 1. USER CAPACITY INDICATORS AND STANDARDS

Assigned Zone	User Capacity Indicators	User Capacity Standards	Related Monitoring Strategies	Potential Management Strategies
<b>Topic: Viable Fish Populations</b>				
Multiuse Zone (water) Slow Speed Zone Access-by-Permit Zone Sensitive Underwater Archeological Zone Special Recreation Zone Noncombustion Engine Use Zone	Harvest of regulated fish species Abundance and density of targeted fish species (those fish that are specifically sought such as species in the snapper-grouper complex)	Harvest of regulated fish species is within legal regulations no less than 70% of the time Abundance and density of targeted fish species maintains or exceeds baseline values when GMP was implemented	Periodic fish surveys and harvest monitoring Visitor satisfaction survey questions pertaining to fish	Increased awareness of the fishing education course Greater enforcement of fishing regulations Greater efforts toward public education and awareness regarding fishing relations (e.g., recruit volunteers to assist; Spanish language efforts)
Marine Reserve Zone Special Recreation Zone	Average size of targeted fish species Species diversity Abundance and density of targeted fish species	Average size of targeted fish species maintains or exceeds baseline values when zone was implemented Species diversity maintains or exceeds baseline values when zone was implemented Abundance and density of targeted fish species maintains or exceeds baseline values when zone was implemented	Periodic fish surveys Visitor satisfaction survey questions pertaining to fish	Greater enforcement of fishing limitations Greater efforts toward public education and awareness (e.g., recruit volunteers to assist; Spanish language efforts) Proper marking of the marine reserve zone or special recreation zone
Noncombustion Engine Use Zone Special Recreation Zone	Harvest of regulated fish species Abundance and density of targeted fish species Fisher satisfaction rate	Harvest of regulated fish species is within legal regulations no less than 70% of the time Abundance and density of targeted fish species maintains or exceeds baseline values when GMP was implemented The fisher satisfaction survey indicates at least 70% satisfaction	Periodic fish surveys Visitor satisfaction survey questions pertaining to fish Survey of fisher satisfaction	Increased awareness of the fishing education course Greater enforcement of fishing regulations Greater efforts toward public education and awareness regarding fishing relations (e.g., recruit volunteers to assist; Spanish language efforts)

**TABLE 1. USER CAPACITY INDICATORS AND STANDARDS**

Assigned Zone	User Capacity Indicators	User Capacity Standards	Related Monitoring Strategies	Potential Management Strategies
<b>Topic: Seagrass</b>				
Multiuse Zone (water)	Average number of new groundings per year	Average number of new groundings per year in seagrass beds does not exceed baseline values when zone was implemented	Assess damage from reported and unreported groundings	Better marking of shallows
Slow Speed Zone	Areal extent of seagrass beds	Areal extent of seagrass beds maintains or exceeds baseline values when zone was implemented	Look for unreported grounding sites	Greater efforts toward public education and awareness (e.g., recruit volunteers to assist; Spanish language efforts; participate in marine fairs)
Access-by-Permit Zone			Monitor restored sites	Greater enforcement of violations and increased ranger response to groundings
Sensitive Underwater Archeological Zone			Monitor visitor use (e.g., trailer counts, registered boater statistics, etc.)	Monitor natural recovery
Noncombustion Engine Use Zone				Active restoration and monitoring (bird stakes, substrate restoration, seagrass transplanting)
Marine Reserve Zone				
Special Recreation Zone				
<b>Topic: Coral Reefs</b>				
Multiuse Zone (water)	Number of new reported and unreported reef groundings per year	Number of new reported and unreported reef groundings per year does not exceed baseline values when zone was implemented	Damage assessment of groundings	Installation of mooring buoys
Sensitive Underwater Archeological Zone	Areal extent of new reef groundings per year	Areal extent of new reef groundings per year does not exceed baseline values when zone was implemented	Visitor satisfaction survey questions pertaining to reef health	Greater efforts toward public education and awareness (e.g., recruit volunteers to assist; Spanish language efforts)
Marine Reserve	Fishing debris volume and coverage on coral reefs, seagrass beds, and submerged archeological sites	Fishing debris volume and/or coverage does not exceed baseline values when zone is implemented	Overflights to do boat counts	Reef restoration techniques as outlined in the park's Coral Reef Restoration Programmatic Environmental Impact Statement (in progress)
Special Recreation Zone			Periodic assessments of fishing debris (e.g., during visual fish surveys)	Volunteer clean-up events for marine debris
<i>Note: There are no coral reefs in the other water-based zones</i>				Marine debris removal as mitigation (e.g., derelict trap removal)

TABLE 1. USER CAPACITY INDICATORS AND STANDARDS

Assigned Zone	User Capacity Indicators	User Capacity Standards	Related Monitoring Strategies	Potential Management Strategies
Marine Reserve Special Recreation Zone	Visitor damage at sites within 1,000 feet of mooring buoys (damage includes broken coral, garbage associated with divers and snorkelers, and damage to submerged cultural resources)	No more than 5% increase in broken coral or garbage relative to initial assessment when mooring buoy was first installed	Periodic monitoring by park staff and volunteer observations of selected sites	Greater efforts toward public education and awareness (e.g., recruit volunteers to assist; Spanish language efforts) Enforcement of violations and increased ranger presence Relocate mooring buoys to allow active or passive restoration of corals Add mooring buoys to displace or diffuse impacts
<b>Topic: Cultural Resources</b>				
Multiuse Zone (land) Administrative Zone	Change in facility condition as a result of visitor use (using the Facility Condition Index [FCI]) Evidence of missing historical artifacts, defacement, or damage	No more than a FCI change of 1% from established baseline of all structures when GMP was implemented No missing historical artifacts, defacement, or damage	Annual condition assessments and regular inspections by maintenance personnel with work orders created to track deferred maintenance	Greater efforts toward public education and awareness regarding resource sensitivities and the need for appropriate behaviors Enforcement of violations and increased ranger presence Modify regulations to reduce visitor conflicts
Multiuse Zone (water) Nature Observation Zone Sensitive Underwater Archeological Zone Special Recreation Zone	Number of shipwreck cleanups required to maintain sites Percent increase in the debris field as a result of visitor use Evidence of missing historical artifacts, defacement, or damage	No more than two cleanups per assessment period No more than a 5% increase in the debris field relative to the annual assessment when the GMP was implemented No missing archeological artifacts, defacement, or damage No damage to submerged cultural resources	Regular monitoring by annual condition assessments Periodic monitoring by park staff and volunteer observations of selected sites Reinspection after storms to start new baseline for reference of visitor impact	Greater efforts toward public education to encourage voluntary redistribution of use Enforcement of violations and increased ranger presence Regulate use levels and patterns (e.g., institute a permitting or reservation system, limit group sizes) Document submerged cultural resources and consult with state historic preservation office

**TABLE 1. USER CAPACITY INDICATORS AND STANDARDS**

Assigned Zone	User Capacity Indicators	User Capacity Standards	Related Monitoring Strategies	Potential Management Strategies
Multiuse Zone (land)  Nature Observation Zone  Special Recreation Zone	Percent increase in the debris field as a result of visitor use  Evidence of missing historical artifacts, defacement, or damage	No more than a 5% increase of the debris field relative to the annual assessment when the GMP was implemented  No missing archeological artifacts, defacement, or damage	Regular monitoring by annual condition assessments  Periodic monitoring by park staff and volunteer observations of selected sites  Reinspection after storms to start new baseline for reference of visitor impact	Greater efforts toward public education and awareness regarding resource sensitivities and the need for appropriate behaviors  Enforcement of violations and increased ranger presence  Regulate use levels and patterns (e.g., institute a permitting system, designate single-use permits)  Site closure as necessary to protect resources
Marine Reserve  Special Recreation Zone	Visitor damage at sites within 1,000 feet of mooring buoys (damage includes broken coral, garbage associated with divers and snorkelers, damaged submerged cultural resources)	No more than 5% increase in broken coral or garbage relative to initial assessment when mooring buoy was first installed; no damage to submerged cultural resources	Periodic monitoring by park staff and volunteer observations of selected sites	Greater efforts toward public education and awareness (e.g., recruit volunteers to assist; Spanish language efforts)  Enforcement of violations and increased ranger presence  Relocate mooring buoys to allow active or passive restoration of corals  Add mooring buoys to displace or diffuse impacts  Document submerged cultural resources and consult with state historic preservation office
<b>Topic: Visitor Experience/Use Conflicts</b>				
All zones	Number of incidents of user conflicts requiring law enforcement attention or intervention resulting in a case incident report / warning / citation	No more than five law enforcement incidents per day and an average of two per day on an annual basis	Continue existing tracking of case incidents	Greater efforts toward public education and awareness regarding visitor use etiquette and park regulations  Greater enforcement of existing visitor use regulations and increased ranger presence  Modify regulation as necessary to reduce visitor conflicts

TABLE 1. USER CAPACITY INDICATORS AND STANDARDS

Assigned Zone	User Capacity Indicators	User Capacity Standards	Related Monitoring Strategies	Potential Management Strategies
Visitor Services / Administrative Zone	Number of times visitor center parking lot has exceeded its physical capacity	Allowable once a month or during special events	Regular monitoring by park staff at the entrance gate	Greater efforts toward public education to encourage voluntary redistribution of use Explore ways to increase parking lot capacity through striping and parking time limitations Encourage carpooling to site via press releases/website Develop overflow parking area and use when needed Develop and use alternative parking areas (e.g., adjacent to the park)
Visitor Services / Administrative Zone	In the Boca Chita boat basin and the Elliott Key docks, number of times improper mooring occurs as a result of island marinas reaching capacity	No tolerance per Superintendent's Compendium	Periodic monitoring by park staff and volunteer observations of selected sites	Greater efforts toward public education to encourage voluntary redistribution of use Greater efforts toward public education regarding pertinent park regulations Greater enforcement of existing visitor use regulations Increased number of signs and information related to proper mooring locations and regulations
Visitor Services / Administrative Zone	Number of times group camping exceeds limits	No more than once per month	Periodic monitoring by park staff and volunteer observations of selected sites	Greater efforts toward public education to encourage voluntary redistribution of use Greater enforcement of existing visitor use regulations and increased ranger presence

**TABLE 1. USER CAPACITY INDICATORS AND STANDARDS**

Assigned Zone	User Capacity Indicators	User Capacity Standards	Related Monitoring Strategies	Potential Management Strategies
Visitor Services / Administrative Zone	Number of times individual campsites are seen outside of the designated camping area	No more than once per week	Periodic monitoring by park staff and volunteer observations of selected sites	Greater efforts toward public education to encourage voluntary redistribution of use Greater efforts toward public education on camping policies Better delineation of existing campsites Greater enforcement of existing visitor use regulations and increased ranger presence
All areas with mooring buoys	Number of complaints received that mooring buoy capacity is met and boats are unable to moor in their desired location	No more than 10 complaints per day	Continue existing tracking of complaints	Greater efforts toward public education to encourage voluntary redistribution of use Change the number and location of mooring buoys consistent with the Mooring Buoy and Marker Plan Greater enforcement of existing visitor use regulations Implement adaptive management strategies from the Mooring Buoy and Marker Plan

**TABLE 2. BISCAYNE NATIONAL PARK MANAGEMENT ZONES, ALTERNATIVES 2 THROUGH 7**

	Resource Condition	Visitor Experience	Management Actions and Facilities
<b>Special Recreation Zone (Alternatives 6 and 7)</b>	<p>The special recreation zone would provide some protection from direct human-caused impacts for water-based ecosystems, habitats, and processes while allowing visitors to experience the zone. Natural processes occur with minor disturbance from human use. This zone would provide a moderate-to-high level protection to natural resources such as marine nursery areas and coral reefs.</p> <p>The special recreation zone would provide the opportunity to compare the resource status of an area with limited extractive uses to other areas allowing removal of resources.</p> <ol style="list-style-type: none"> <li>1. Natural processes would predominate.</li> <li>2. Resource impacts would be reduced.</li> <li>3. Some lasting signs of human use would be reduced.</li> <li>4. Intervention and restoration could occur to mitigate and stabilize human-caused disruption or for resource management purposes.</li> <li>5. The significance and vulnerability of cultural resources would be evaluated and appropriate management actions would be determined.</li> </ol>	<p>Visitors would be immersed in nature with opportunities to experience natural sounds, tranquility, and closeness to nature. Recreational fishing would be allowed with limitations; nonextractive activities would be allowed. Research activities would continue to be allowed under the NPS permit process or by the National Park Service, consistent with all park areas.</p> <ol style="list-style-type: none"> <li>1. Appropriate visitor activities could include fishing (with limitations), boating, sightseeing, nature-watching, mooring, swimming, snorkeling, and diving. Anchoring would not be allowed.</li> <li>2. Visitors would be self-reliant and have maximum opportunities to experience a sense of discovery and adventure. Application of outdoor skills would be essential.</li> <li>3. Interaction with nature would predominate, with a moderate level of encounters with others. The sights and sounds of nature would generally be more prevalent than those of human activities. Visitor activities would be mostly self-directed and have minor resource impacts.</li> <li>4. Visitors would benefit from the research by learning about protected resources.</li> <li>5. Limited commercial services that provide appropriate visitor recreational activities might be allowed if compatible with resource protection goals and desired visitor experiences.</li> </ol>	<p>Management actions would focus on protecting resources, ensuring visitors have an uncrowded experience, minimizing impacts from visitor use, and providing visitors and with educational opportunities that encourage resource protection. Appropriate management actions could include:</p> <ol style="list-style-type: none"> <li>1. determining types and levels of use considering the desired visitor experience and the vulnerability of resources to impacts</li> <li>2. intervening and restoring natural resources to mitigate and stabilize human-caused disruption</li> <li>3. conducting research aimed at monitoring resource conditions and understanding natural processes to implement adaptive management</li> <li>4. prioritizing, overseeing, and managing research projects</li> <li>5. taking measures to prevent human-caused impacts</li> <li>6. defining additional compatible uses</li> </ol> <p>Facilities generally would not be appropriate, except when determined they would enhance resource protection or public safety. Facilities could include:</p> <ol style="list-style-type: none"> <li>1. signs, mooring buoys, and navigational aids</li> <li>2. research equipment—If installed, research apparatus would be minimal and unobtrusive</li> </ol>

**TABLE 2. BISCAYNE NATIONAL PARK MANAGEMENT ZONES, ALTERNATIVES 2 THROUGH 7**

	Resource Condition	Visitor Experience	Management Actions and Facilities
<b>Marine Reserve Zone (Alternatives 3, 4, and 5)</b>	<p>The marine reserve zone would provide a high level of protection from direct human-caused impacts for water-based ecosystems, habitats, and processes while allowing visitors to experience the zone. Natural processes occur with negligible disturbance from human use. This zone would protect natural resources such as marine nursery areas and coral reefs.</p> <p>The marine reserve zone would provide the opportunity to compare the resource status of an area with no extractive uses to other areas allowing removal of resources.</p> <ol style="list-style-type: none"> <li>1. Natural processes would predominate.</li> <li>2. Resource impacts would be reduced significantly.</li> <li>3. Most lasting signs of human use would not be apparent. Evidence of human impact would be restricted to cultural resources such as historic shipwrecks.</li> <li>4. Intervention and restoration could occur to mitigate and stabilize human-caused disruption or for resource management purposes. Otherwise alterations to natural resources would not occur.</li> <li>5. The significance and vulnerability of cultural resources would be evaluated, and appropriate management actions would be determined.</li> </ol>	<p>Visitors would be immersed in nature with opportunities to experience natural sounds, tranquility, solitude, and closeness to nature. Visitors would have opportunities to observe and learn about the differences and benefits to resources of a nonextractive use area compared to areas allowing removal of resources. Research activities would continue to be allowed under the NPS permit process or by NPS, consistent with all park areas.</p> <ol style="list-style-type: none"> <li>1. Appropriate visitor activities could include boating, sightseeing, nature-watching, mooring, swimming, snorkeling, and diving. Commercial and recreational fishing would not be allowed, except for lionfish harvest. Anchoring would not be allowed.</li> <li>2. Visitors would be self-reliant and have maximum opportunities to experience a sense of discovery and adventure. Application of outdoor skills would be essential.</li> <li>3. Interaction with nature would predominate, with only occasional encounters with others. There would be a sense of relative remoteness. The sights and sounds of nature would be more prevalent than those of human activities. Visitor activities would be mostly self-directed and have negligible resource impacts.</li> <li>4. Special events, with the exception of cleanup events or citizen science, would generally not be allowed.</li> <li>5. Visitors would benefit from research by learning about protected resources.</li> <li>6. Limited commercial services that provide appropriate visitor recreational activities might be allowed if compatible with resource protection goals and desired visitor experiences.</li> </ol>	<p>Management actions would focus on the preservation and protection of water-based ecosystems, habitats, and processes. Appropriate management actions could include:</p> <ol style="list-style-type: none"> <li>1. determining types and levels of use considering the desired visitor experience and the vulnerability of the resources to impacts</li> <li>2. intervening and restoring natural resources to mitigate and stabilize human-caused disruption</li> <li>3. conducting research aimed at monitoring resource conditions and understanding natural processes</li> <li>4. prioritizing, overseeing, and managing research projects</li> <li>5. taking measures to prevent human-caused impacts</li> <li>6. defining additional compatible uses</li> </ol> <p>Facilities generally would not be appropriate, except when determined they would enhance resource protection or public safety. Facilities could include:</p> <ol style="list-style-type: none"> <li>1. signs, mooring buoys, and navigational aids</li> <li>2. research equipment—if installed, research apparatus would be minimal and unobtrusive; if research could be accomplished in another management zone, it would not occur in the marine reserve zone</li> </ol>

**TABLE 2. BISCAYNE NATIONAL PARK MANAGEMENT ZONES, ALTERNATIVES 2 THROUGH 7**

	Resource Condition	Visitor Experience	Management Actions and Facilities
<b>Visitor Services / Park Administration Zone (All Alternatives)</b>	<p>This zone would provide for a high level of visitor activity and administrative operations. The zone would be modified for visitor access and park operations in a way that aesthetically blends with the natural and cultural environment.</p> <ol style="list-style-type: none"> <li>1. Elements of the natural and cultural environment would remain.</li> <li>2. Sights and sounds of human activity would frequently supplant the sights and sounds of nature.</li> <li>3. There would be tolerance for some resource impacts to accommodate visitor services and park operations.</li> <li>4. New development of park administrative facilities would occur only on previously disturbed sites. Some development for visitor access and activities might occur. The zone would not be near sensitive natural or cultural resources if such resources could not be adequately protected.</li> <li>5. The significance and vulnerability of cultural resources would be evaluated, and appropriate management actions would be determined. Cultural resources might be stabilized and hardened (protecting archeological values from illegal artifact removal or other destructive activities) to permit visitor access or considered for adaptive reuse.</li> </ol>	<p>Visitors would have opportunities to receive orientation and information, interact with park staff, and experience and learn about park resources.</p> <ol style="list-style-type: none"> <li>1. Appropriate visitor activities could include sightseeing, walking, swimming, recreational fishing, boating, camping, participating in educational activities, and interacting with resources.</li> <li>2. Visitors would see native flora and fauna and might see cultural resources.</li> <li>3. Interpretive and educational opportunities would be greatest in this zone. Visitor activities might be self-directed and/or visitors might use interpretive services to plan their activities. Visitor education could be self-directed or structured.</li> <li>4. Interpretive services would be offered in multiple languages.</li> <li>5. Special events could be allowed in this zone with appropriate permits.</li> <li>6. The probability of encountering others would be high. Visitors would experience a modified environment that accommodates high levels of use and minimizes further resource impacts.</li> <li>7. Facilities and services would enhance opportunities to experience and understand park resources and provide an orientation to the park.</li> <li>8. Visitor activities might be highly regulated to preserve elements of the natural and cultural environment, allow access to cultural resources, prevent visitor conflicts, and enhance public safety.</li> <li>9. Vessel type, size, and speed might be regulated to enhance resource protection and preserve the desired visitor experience.</li> <li>10. Commercial visitor services and facilities would be appropriate in this zone.</li> </ol>	<p>Management actions would focus on managing the higher levels of visitor use within the zone and providing administrative services. Management actions could include:</p> <ol style="list-style-type: none"> <li>1. administering daily parkwide operations</li> <li>2. providing maintenance activities</li> <li>3. providing interpretive and enforcement services</li> <li>4. providing emergency services</li> <li>5. implementing resource stewardship</li> <li>6. prioritizing, overseeing, and managing research projects</li> <li>7. defining additional compatible uses</li> <li>8. limiting public access to certain parts of this zone (housing, maintenance, and administration)</li> <li>9. regulating visitor activities and vessel type, size, and speed authorizing commercial services</li> <li>10. managing fishing activities, including fishing vessels and fishing vessel operation, in accordance with the Fishery Management Plan, pending approval</li> </ol> <p>Facilities would be appropriate in size and scale, blending with the natural and cultural landscape. Extent, size, and layout would be the minimum needed to accommodate the intended purposes. Existing and new visitor facilities or improvements would be analyzed for ongoing need, usefulness, and impacts on resources. New administrative facilities could be located outside park boundaries.</p> <ol style="list-style-type: none"> <li>1. Appropriate visitor facilities could include visitor centers, kiosks, wayside exhibits, educational spaces, observation boardwalks, roads, parking areas, docks, restrooms, picnic areas, campgrounds, navigational aids, mooring buoys and trails improved and maintained as necessary for universal accessibility.</li> <li>2. Appropriate park administrative facilities could include maintenance, storage, offices, and staff housing.</li> </ol>

**TABLE 2. BISCAYNE NATIONAL PARK MANAGEMENT ZONES, ALTERNATIVES 2 THROUGH 7**

	Resource Condition	Visitor Experience	Management Actions and Facilities
Dredged Navigation Channels Zone (All Alternatives)	<p>The purpose of this zone is to allow transportation routes for vessels in existing channels including the Intracoastal Waterway and the Black Point, Homestead Bayfront, and Turkey Point channels.</p> <ol style="list-style-type: none"> <li>Natural conditions and processes could be impacted by transportation use of the zone.</li> <li>Unnatural sounds might be prevalent.</li> <li>Resources within the dredged navigation channels would continue to be impacted by activities that maintain existing channels. Within the channels, some impacts on natural conditions would be tolerated. Impacts on resources outside the channels would be kept to an absolute minimum.</li> <li>There could be a high level of human use and activity.</li> <li>The existing depth, configuration, and alignment of navigational channels would not be expanded, and no new channels would be created. Channels would not exceed the following existing depths within the park:              Intracoastal Waterway: 7 feet              Black Point Channel: 4.5 feet              Homestead Bayfront Channel: 4.5 feet              Turkey Point Channel: 7.5 feet</li> <li>Channels would be marked with signs and navigational aids to protect resources and enhance public safety.</li> <li>The significance and vulnerability of cultural resources would be evaluated, and appropriate management actions would be determined.</li> </ol>	<p>The visitor experience would involve moving along a marked navigational channel by water vessel and would be perceived as linear or sequential in nature.</p> <ol style="list-style-type: none"> <li>Appropriate activities would be the use of channels for traveling through the park and/or gaining access to other park areas.</li> <li>Visitor activity would be self-directed travel through or within the park at varying speeds.</li> <li>Opportunities for discovery, challenge, and adventure could be low. Visitors would need to be self-reliant and possess navigational skills.</li> <li>Visitors would benefit from learning about this zone and how to navigate safely within it.</li> <li>Special events would not generally be allowed in this zone.</li> <li>There could be a high probability of encountering other people in this zone. Visitors could expect to hear human-caused sounds.</li> <li>Because of congested vessel traffic at times, conditions in the navigational channels could be dangerous. Visitors might encounter commercial ships and would need to exercise caution. Visitors would navigate through a well-marked channel of a specified depth. Use could be intensively managed and regulated to ensure safe passage and resource protection.</li> <li>Vessel size would generally not be regulated, except by conditions of the channel. Speed of vessels in the Intracoastal Waterway would be at a pace that is appropriate to conditions and skill levels.</li> <li>Commercial traffic could be allowed in this zone without the requirement of a permit.</li> </ol>	<p>Management activities would focus on resource protection and navigational aids to facilitate safe travel through and within the park. Appropriate management actions could include:</p> <ol style="list-style-type: none"> <li>regulating visitor activities</li> <li>providing law enforcement services</li> <li>monitoring resource impacts</li> <li>managing these zones for transportation and public safety (there might be overlapping jurisdiction with other agencies; coordination and cooperation with other agencies would occur)</li> <li>taking measures to prevent human-caused impacts</li> <li>In most cases, other agencies are responsible for the dredging of these channels through existing agreements or commitments; therefore, implementation of this GMP would not affect those agreements (proposed dredging would need a site-specific environmental study and NPS approval)</li> </ol> <p>Facilities appropriate in these zones would include navigational aids and signs for resource protection and enhancing visitor safety.</p>

**TABLE 2. BISCAYNE NATIONAL PARK MANAGEMENT ZONES, ALTERNATIVES 2 THROUGH 7**

	Resource Condition	Visitor Experience	Management Actions and Facilities
<b>Multituse Zone (land and water) (Alternatives 2, 3, 4, 5, 6, and 7)</b>	<p>This zone would provide opportunities for visitors to recreate in natural or cultural settings. Natural and cultural scenes would remain largely intact.</p> <ol style="list-style-type: none"> <li>1. Natural conditions and processes would predominate. The environment might be adapted for human use.</li> <li>2. Sounds and sights of human activity might be apparent.</li> <li>3. There would be tolerance for minimal resource impacts.</li> <li>4. Additions to the landscape, including signs, buoys, and markers, might be used to enhance visitor experience and public safety and to protect resources.</li> <li>5. The significance and vulnerability of cultural resources would be evaluated, and appropriate management actions would be determined. To permit visitor access, cultural resources might be stabilized and hardened (protecting archeological values from unauthorized artifact removal or other destructive activities).</li> </ol>	<p>Visitors would experience a natural or cultural setting, whether they are on the water, under the water, or on land. Providing opportunities for people to interact with the resources in this zone would be important. Visitor use of this zone would be resource-based recreation and education that is consistent with park purpose and significance.</p> <ol style="list-style-type: none"> <li>1. Appropriate visitor activities could include sightseeing, boating, scuba diving, snorkeling, swimming, sport fishing, nature-watching, hiking, picnicking, camping, and visiting cultural resources. Commercial fishing would be managed as described in the Fishery Management Plan, pending approval.</li> <li>2. There would be opportunities for challenge, adventure, and discovery. Visitors might need to use outdoor skills and be self-reliant.</li> <li>3. Visitor activities might be self-directed, or visitors might use interpretive services to plan their activities.</li> <li>4. Special events could be allowed in this zone with the appropriate permit.</li> <li>5. The probability of seeing or encountering others would range from low to moderate most of the time.</li> <li>6. Occasional special events might result in high levels of visitor encounters for short periods.</li> <li>7. Visitor activities might be limited to protect resources and enhance public safety. Limitations might be short or long term.</li> <li>8. Vessel type, size, and speed could be regulated to enhance resource protection and public safety and preserve the desired visitor experience.</li> </ol>	<p>Management actions would focus on enhancing visitor experience and safety, protecting resources, minimizing impacts from visitor and commercial use, and restoring disturbed areas. Appropriate management actions could include:</p> <ol style="list-style-type: none"> <li>1. determining types and levels of use by considering the desired visitor experience and resource vulnerability to impact</li> <li>2. managing access based on the determined user capacity</li> <li>3. inventorying and monitoring resources</li> <li>4. providing interpretation and enforcement services</li> <li>5. conducting research and restoring and stabilizing resources</li> <li>6. minimizing and mitigating impacts from visitor and commercial use</li> <li>7. defining additional compatible uses</li> <li>8. managing fishing in consultation with the state and in accordance with the Fishery Management Plan, pending approval</li> <li>9. developing permit systems for various activities</li> <li>10. regulating vessel type, size, and speed</li> <li>11. managing recreational and commercial fishing in the interest of sound conservation to protect and preserve marine resources for the education, inspiration, recreation, and enjoyment of present and future generations and in accordance with the Fishery Management Plan, pending approval</li> </ol> <p>Facilities in this zone would be small, unobtrusive, and dispersed. Facilities would provide basic visitor services, enhance visitor safety, and be compatible with resource protection goals. Facilities could include:</p> <ol style="list-style-type: none"> <li>1. primitive trails</li> <li>2. signs, mooring buoys, and navigation markers</li> <li>3. interpretive exhibits</li> <li>4. restrooms, primitive camping, and picnicking sites</li> <li>5. research equipment</li> </ol>

**TABLE 2. BISCAYNE NATIONAL PARK MANAGEMENT ZONES, ALTERNATIVES 2 THROUGH 7**

	Resource Condition	Visitor Experience	Management Actions and Facilities
<b>Slow Speed Zone (All Alternatives)</b>	<p>The preservation of shallow water habitats, restoration of degraded and impacted resources, and continuation of natural processes would be the resource goals in this zone.</p> <ol style="list-style-type: none"> <li>1. Protection and continuation of natural processes.</li> <li>2. Minor impact to panoramic viewsheds.</li> <li>3. There would be tolerance for minor resource impacts, including noise levels.</li> <li>4. Evidence of human impact would be minimal or part of a cultural scene.</li> <li>5. The significance and vulnerability of the cultural resources would be evaluated, and appropriate management actions would be determined.</li> </ol>	<p>Visitors would have opportunities to experience nature.</p> <ol style="list-style-type: none"> <li>1. Appropriate visitor activities would include boating (motorized or nonmotorized), sightseeing, , fishing, swimming, snorkeling, and nature observation. Commercial fishing would be managed as described in the Fishery Management Plan, pending approval.</li> <li>2. Boats with motors could be used when propelled at slow (wakeless) speeds to reduce user conflicts and ensure visitor safety.</li> <li>3. Visitor activities would be mostly self-directed and have minor resource impacts.</li> <li>4. Limited commercial services might provide appropriate visitor recreational activities if compatible with resource protection goals and desired visitor experience.</li> </ol>	<p>Management actions would focus on protecting visitors and water-based resources, restoring disturbed areas, minimizing impacts from visitor use, and reducing conflicts between different types of users. Appropriate management actions could include:</p> <ol style="list-style-type: none"> <li>1. determining types of use (user capacity) considering the desired visitor experience and the vulnerability of the resources to impacts</li> <li>2. inventorying and monitoring resources</li> <li>3. providing interpretation and enforcement services</li> <li>4. conducting research and restoring and stabilizing resources</li> <li>5. taking measures to prevent human-caused impacts</li> <li>6. defining additional compatible uses</li> </ol> <p>Facilities generally would not be appropriate, except when determined they would enhance resource protection or public safety. Facilities could include:</p> <ol style="list-style-type: none"> <li>1. signs and other navigational aids</li> <li>2. research and monitoring apparatus that is minimal and unobtrusive</li> <li>3. mooring buoys and informational markers such as hazard markers</li> </ol>

**TABLE 2. BISCAYNE NATIONAL PARK MANAGEMENT ZONES, ALTERNATIVES 2 THROUGH 7**

	Resource Condition	Visitor Experience	Management Actions and Facilities
<b>Noncombustion Engine Use Zone (All Alternatives)</b>	<p>The preservation of natural sounds, near-shore nursery areas and shallow water habitats, restoration of degraded and impacted resources, and continuation of natural processes would be the dominant resource goals in this zone.</p> <ol style="list-style-type: none"> <li>1. Natural processes would predominate.</li> <li>2. Natural sounds, sights, and vistas would prevail. Panoramic viewsheds would remain unaltered.</li> <li>3. There would be tolerance for minor resource impacts.</li> <li>4. Evidence of human impact would be minimal or part of a cultural scene.</li> <li>5. Human-caused intrusions, including visual obstructions, would be kept to an absolute minimum, except for resource protection and visitor safety purposes.</li> <li>6. The significance and vulnerability of cultural resources would be evaluated, and appropriate management actions would be determined.</li> </ol>	<p>Visitors would be immersed in nature with opportunities to experience natural sounds, tranquility, and closeness to nature.</p> <ol style="list-style-type: none"> <li>1. Appropriate visitor activities could include noncombustion engine boating (paddling, poling, or trolling), sightseeing, fishing, swimming, snorkeling, and nature observation. Commercial fishing would be managed as described in the Fishery Management Plan, pending approval.</li> <li>2. Boats equipped with combustion engines could be used when propelled by push-pole or electric trolling motor, with outboard engine tilted up.</li> <li>3. Visitors would be self-reliant and have maximum opportunities to experience a sense of discovery and adventure. Application of outdoor skills would be essential.</li> <li>4. The sights and sounds of nature would be more prevalent than those of human activities. Visitor activities would be mostly self-directed and have minor resource impacts.</li> <li>5. There would be some opportunities for interpretive activities.</li> <li>6. Special events would not be allowed.</li> <li>7. Visitor activities in these zones could be limited in the interest of protecting resources and enhancing public safety. Limitations might be short or long term.</li> <li>8. Use of combustion engines would generally not be allowed. However, in designated areas (between 3 feet to 5 feet in depth), the use of combustion engines would be allowed at slow speeds in channels.</li> <li>9. Limited commercial services might provide appropriate visitor recreational activities if compatible with resource protection goals and desired visitor experience.</li> </ol>	<p>Management actions would focus on protecting water-based resources, restoring disturbed areas, minimizing impacts from visitor use, and providing visitors with educational opportunities that encourage resource protection. Appropriate management actions could include:</p> <ol style="list-style-type: none"> <li>1. inventorying and monitoring resources</li> <li>2. determining types and levels of use considering the desired visitor experience and the vulnerability of the resources to impacts</li> <li>3. providing interpretation and enforcement services</li> <li>4. conducting research and restoring and stabilizing resources</li> <li>5. taking measures to prevent human-caused impacts</li> <li>6. defining additional compatible uses</li> <li>7. developing a permit system for various activities</li> <li>8. managing recreational and commercial fishing in the interest of sound conservation to protect and preserve marine resources for the education, inspiration, recreation, and enjoyment of present and future generations and in accordance with the Fishery Management Plan, pending approval</li> </ol> <p>Facilities generally would not be appropriate, except when determined that they would enhance resource protection or public safety. Facilities could include:</p> <ol style="list-style-type: none"> <li>1. signs and other navigational aids</li> <li>2. research equipment—if installed, research apparatus would be minimal and unobtrusive; if research could be accomplished in another management zone, it would not occur in this zone</li> <li>3. mooring buoys</li> </ol>

**TABLE 2. BISCAYNE NATIONAL PARK MANAGEMENT ZONES, ALTERNATIVES 2 THROUGH 7**

	Resource Condition	Visitor Experience	Management Actions and Facilities
<b>Access-by-Permit Zone (Alternatives 3 and 5)</b>	<p>The access-by-permit zone would provide opportunities for visitors to recreate in natural or cultural settings where natural processes occur with minor evidence of disturbance from human use. The zone would provide protection for resources such as fish nursery areas and coral reefs.</p> <ol style="list-style-type: none"> <li>1. Natural processes would predominate. This management zone would perpetuate a full complement of native species.</li> <li>2. Natural sounds, sights, and vistas would prevail.</li> <li>3. There would be tolerance for minor resource impacts.</li> <li>4. Evidence of human impact would be minimal or part of a cultural scene.</li> <li>5. Human-caused intrusions, including visual obstructions, would be kept to an absolute minimum, except for resource protection and visitor safety purposes.</li> <li>6. The significance and vulnerability of cultural resources would be evaluated, and appropriate management actions would be determined.</li> </ol>	<p>Visitors would be immersed in nature. Visitor activities and access to these zones would be managed through a permit system to provide visitors with opportunities to experience natural sounds, tranquility, closeness to nature, and a sense of relative remoteness. Limited numbers of visitors would enjoy a full range of resource-based recreational opportunities.</p> <ol style="list-style-type: none"> <li>1. Appropriate activities could include sightseeing, boating, swimming, snorkeling, scuba diving, and participating in recreational and commercial fishing.</li> <li>2. Visitor activities would usually be self-directed, which would require self-reliance and provide maximum opportunities to experience a sense of discovery and adventure. Application of outdoor skills would be essential.</li> <li>3. Visitors would receive orientation and information, interact with park staff and experience and learn about park resources before and after entering the park. Interpretive and educational opportunities would enable visitors to plan their trip into the park in advance through the permitting system.</li> <li>4. Special events would not be allowed.</li> <li>5. The probability of encountering others would be low. There would be only occasional encounters with others outside of one's social group.</li> <li>6. Vessel type, size, and speed might be regulated to enhance resource protection and preserve the desired visitor experience.</li> <li>7. Visitor activities could be structured through the use of commercial services with groups of limited size.</li> </ol>	<p>Management actions would focus on protecting resources, ensuring visitors have an uncrowded experience, minimizing impacts from visitor use, and providing visitors with educational opportunities that encourage resource protection. Appropriate management actions could include:</p> <ol style="list-style-type: none"> <li>1. determining types and levels of use considering the desired visitor experience and the vulnerability of resources to impacts</li> <li>2. managing and limiting access through a permit system</li> <li>3. providing interpretation and enforcement services</li> <li>4. taking measures to prevent human-caused impacts</li> <li>5. regulating visitor activities and vessel type, size, and speed</li> <li>6. authorizing commercial services</li> <li>7. conducting research and monitoring resource conditions; restoring and stabilizing resources</li> <li>8. managing recreational and commercial fishing in the interest of sound conservation to protect and preserve marine resources for the education, inspiration, recreation, and enjoyment of present and future generations and in accordance with the Fishery Management Plan, pending approval</li> </ol> <p>Facilities generally would not be appropriate, except when determined they would enhance resource protection or public safety. Facilities could include:</p> <ol style="list-style-type: none"> <li>1. signs and other navigational aids</li> <li>2. limited mooring buoys</li> <li>3. primitive trails</li> <li>4. research equipment—If installed, research apparatus would be minimal and unobtrusive; if research could be accomplished in another management zone, it would not occur in the access-by-permit zone</li> </ol>

**TABLE 2. BISCAYNE NATIONAL PARK MANAGEMENT ZONES, ALTERNATIVES 2 THROUGH 7**

	Resource Condition	Visitor Experience	Management Actions and Facilities
<b>Nature Observation Zone (Alternatives 2, 3, 4, 5, 6, and 7)</b>	<p>The preservation of natural and cultural resources, restoration of degraded and impacted resources, and continuation of natural processes would be the dominant goals in this zone. The nature observation zone would provide a sustainable ecosystem, including fully functioning communities, with natural complexity structure, and diversity of organisms.</p> <ol style="list-style-type: none"> <li>1. Natural processes would predominate. Nature observation areas would preserve and/or restore a full complement of native species.</li> <li>2. Natural sounds, sights, and vistas would prevail. Panoramic viewsheds would remain unaltered.</li> <li>3. There would be tolerance for minor resource impacts.</li> <li>4. Evidence of human impact would be minimal or part of a cultural scene.</li> <li>5. Human-caused intrusions, including visual obstructions, would be kept to an absolute minimum, except for resource protection and visitor safety purposes.</li> <li>6. The significance and vulnerability of cultural resources would be evaluated, and appropriate management actions would be determined.</li> </ol>	<p>Visitors would be immersed in nature with opportunities to experience natural sounds, tranquility, solitude, and closeness to nature. Visitors would have opportunities to experience and gain in-depth knowledge about sustainable ecosystems with fully functioning interdependent communities of organisms.</p> <ol style="list-style-type: none"> <li>1. Appropriate visitor activities could include sightseeing, nature observation, and fishing.</li> <li>2. Visitors would be self-reliant and have maximum opportunities to experience a sense of discovery and adventure. Application of outdoor skills would be essential.</li> <li>3. Interaction with nature would predominate, with only occasional encounters with others. There would be a sense of relative remoteness. The sights and sounds of nature would be more prevalent than those of human activities. Visitor activities would be mostly self-directed and have minor resource impacts.</li> <li>4. There would be opportunities for interpretive activities emphasizing sustainable ecosystems.</li> <li>5. Special events would not be allowed.</li> <li>6. Visitor activities in these zones could be limited in the interest of protecting resources and enhancing public safety. Limitations might be short or long term.</li> <li>7. Limited commercial services that provide appropriate visitor recreational activities might be appropriate if compatible with resource protection goals and desired visitor experience.</li> </ol>	<p>Management actions would focus on protecting resources, restoring disturbed areas, minimizing impacts from visitor use, and providing visitors with opportunities that encourage understanding of the natural functioning of resources within a sustainable ecosystem. Appropriate management actions could include:</p> <ol style="list-style-type: none"> <li>1. determining types and levels of use considering the desired visitor experience and the vulnerability of resources to impacts</li> <li>2. intense inventorying and monitoring of resources</li> <li>3. providing interpretation and enforcement services</li> <li>4. conducting research and restoring and stabilizing resources</li> <li>5. taking measures to prevent human-caused impacts</li> <li>6. defining additional compatible uses</li> <li>7. developing permit systems for various activities</li> </ol> <p>Facilities generally would not be appropriate, except when determined that they would enhance resource protection or public safety. Facilities could include:</p> <ol style="list-style-type: none"> <li>1. signs and other navigational aids</li> <li>2. primitive trails</li> <li>3. research equipment—if installed, research apparatus would be minimal and unobtrusive; If research could be accomplished in another management zone, it would not occur in the nature observation zone</li> </ol>

**TABLE 2. BISCAYNE NATIONAL PARK MANAGEMENT ZONES, ALTERNATIVES 2 THROUGH 7**

	Resource Condition	Visitor Experience	Management Actions and Facilities
<b>Sensitive Resource Zone (Alternatives 2, 3, 4, 5, 6, and 7)</b>	<p>The sensitive underwater archeological zone would provide protection for significant and vulnerable underwater cultural sites. Research activities could occur.</p> <ol style="list-style-type: none"> <li>1. Natural sea and soundscapes would be maintained as much as possible.</li> <li>2. Human-caused cultural resource degradation would not be tolerated. Intervention to natural processes would be allowed if necessary to protect cultural site integrity.</li> <li>3. Preservation and stabilization actions might occur.</li> </ol>	<p>Visitors would view protected resources from within vessels on the surface of the water. Research activities might be allowed under permit.</p> <ol style="list-style-type: none"> <li>1. Appropriate visitor activities could include sightseeing, nature-watching, hook and line fishing, and transit through the zone. Apparatus other than hook and line fishing gear would not be allowed in the water below the lowest point of the vessel. Trapping would not be allowed. Anchoring and mooring would not be allowed.</li> <li>2. Visitors must remain in their boats, and access to the water for activities including swimming, snorkeling, or diving would not be allowed.</li> <li>3. Researchers and other cooperating personnel could enter the zone for authorized purposes. Any impacts on cultural resources would be negligible.</li> <li>4. Visitors would benefit from the research by learning about significant and vulnerable resources as well as how they are studied and preserved.</li> <li>5. Commercial services would only transit through the zone.</li> <li>6. Underwater viewing devices, including but not limited to, face masks, glass-bottom vessels, glass-bottom buckets, and/or underwater cameras of any kind would not be allowed.</li> </ol>	<p>Management actions would focus on preservation and protection of underwater cultural sites. Appropriate management actions could include</p> <ol style="list-style-type: none"> <li>1. mitigating, stabilizing, and restoring resources and collecting artifacts in imminent danger of destruction or loss</li> <li>2. conducting research aimed at monitoring resource conditions and understanding the cultural context</li> <li>3. prioritizing, overseeing, and managing research projects</li> <li>4. taking measures to prevent human-caused impacts</li> <li>5. defining additional compatible uses</li> <li>6. managing recreational fishing in the interest of sound conservation to protect and preserve marine resources for the education, inspiration, recreation, and enjoyment of present and future generations and in accordance with the Fishery Management Plan, pending approval</li> <li>7. entering into agreements aimed at resource protection</li> </ol> <p>Facilities generally would not be appropriate, except when determined that they would enhance resource protection or public safety. Facilities could include</p> <ol style="list-style-type: none"> <li>1. signs and other navigational aids</li> <li>2. research equipment—If installed, research apparatus would be minimal and unobtrusive; if research could be accomplished in another management zone, it would not occur in the sensitive underwater archeological zone</li> </ol>

## FORMULATION OF THE ALTERNATIVES

The National Park Service prepares management alternatives to explore different approaches of managing the park. Each alternative must be within the bounds of laws, policies, and the park's purpose. They also present different ways to achieve the desired future conditions of the park.

The alternatives focus on *what* resource conditions and visitor uses and experiences/opportunities should be at the park rather than on details of *how* these conditions and uses/experiences should be achieved. Thus, the alternatives do not include many details on resource or visitor use management.

More detailed plans or studies will be required before most conditions proposed in the alternatives are achieved. The implementation of any alternative also depends on future funding and environmental compliance. This plan does not guarantee that funding would be forthcoming. The plan establishes a vision of the future that will guide day-to-day and year-to-year management of the park, but full implementation could take many years.

### ACTIONS COMMON TO ALL ALTERNATIVES

The following actions would be implemented regardless of which alternative is approved.

Full descriptions of these actions can be referenced in the 2011 Draft GMP/EIS on pages 60–62, accessed online at: <http://parkplanning.nps.gov/documentsList.cfm?parkID=353&projectID=11168>. One key change from the 2011 Draft GMP/EIS is the acquisition of Fowey Rocks Lighthouse.

### Fowey Rocks Lighthouse

In the 2011 Draft GMP/EIS released for public comment in 2011, acquisition of the historic (1878) Fowey Rocks Lighthouse by the National Park Service from the U.S. Coast Guard via the General Services Administration was presented in alternative 5, but not in the preferred alternative 4. The National Park Service received public comments as well as comments from the Florida state historic preservation office supporting both NPS acquisition of the lighthouse as well as the proposal in alternative 4 to partner with the eventual owner of the light after its divesture by the U.S. Coast Guard through the National Historic Lighthouse Preservation Act. In the intervening time period, the National Park Service contracted the completion of a detailed condition assessment and obtained cost estimates for stabilization and rehabilitation needs of the lighthouse. The results of these reports led park managers to believe that the best strategy for ensuring the continued protection and public interpretation of the lighthouse (located within the boundary of Biscayne National Park) would be to accept the no-cost transfer of the structure from the U.S. Coast Guard. This transfer was completed in October 2012. The National Park Service will manage the lighthouse in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* and has initial plans in place to complete repairs that will stabilize the structure, protect it from further deterioration, and potentially provide for visitor access in the future. It is currently closed to visitation due to safety concerns.

### Fishing

Recreational and commercial fishing would continue in the park in accordance with the

Fishery Management Plan, when approved, except in the marine reserve zone in alternatives 3, 4, and 5, and with limitations, in the special recreation zone in alternatives 6 and 7. (Note: for alternatives 6 and 7, after the 10-year evaluation interval, the option to institute a marine reserve zone would be considered.) Implementing the Fishery Management Plan, if approved, would be accomplished through state rulemaking by the Florida Fish and Wildlife Conservation Commission and federal special regulations promulgated in consultation with the commission. Harvest of invasive lionfish would continue to be managed in compliance with existing plans.

### **Mooring Buoys**

The use of mooring buoys and anchoring in the presence of mooring buoys would continue to be consistent with park policies and federal regulations.

Other elements and/or actions common to all alternatives as described in the 2011 Draft GMP/EIS are:

- management of Stiltsville
- establishment of a Miami area visitor center
- acquisition of Ragged Keys from willing sellers
- use of Black Point Jetty
- management of dredged navigation channels
- management of naturally occurring channels
- future establishment of a research learning center
- administrative closures to protect human health and safety, sensitive natural and cultural resources, and areas undergoing environmental restoration
- management of nonnative plants
- management of vessel grounding

## ALTERNATIVE 1: NO ACTION

### CONCEPT

Under alternative 1, the no-action alternative, future management would be a general continuation of what is being done now to provide visitor opportunities and to protect and preserve park resources. Current law, policy, and plans, such as the 1983 General Management Plan and 2003 General Management Plan Amendment, would continue to provide the framework of guidance. This alternative would continue to emphasize a high level of access with recreational opportunities throughout the park. Natural resources, activities for restoration, and recovery or maintenance of habitats and dependent species would continue to be actively managed. Cultural resources maintenance and monitoring would continue. The park would continue to seek partnership opportunities to provide visitor services and resource management beyond current park boundaries. For example, park employees could staff visitor contact stations and monitor water quality parameters beyond park boundaries. This alternative serves as a basis of comparison between the park's existing management and the action alternatives 2 through 7.

Funded projects that would be conducted under this alternative include an upgrade of the radio system, erosion control, building and grounds maintenance, landscape enhancement, maintenance mentoring program, completion of the Hurricane Sandy related repair projects, and collection recovery.

### THE MAINLAND

Convoy Point would continue to be the primary land-based entry point to the park. Visitors would park here and access the various available visitor services. The Dante

Fascell Visitor Center would continue to provide orientation and interpretive information, including exhibits, videos, and sales of interpretive/educational materials. Park interpretive staff would continue to provide a variety of special talks and programs at Convoy Point. Visitors would have access to designated paths, the interpretive boardwalk, and jetty as part of the landscaped grounds surrounding the visitor center and park administration buildings. They could continue to picnic, bird-watch, and sightsee, with broad vistas of the bay available from the second-floor veranda of the visitor center. Pole fishing, cast-netting, and yo-yo fishing would continue to be allowed from the walkway/jetty area, but would continue to be prohibited in the boat basin.

From Convoy Point, a commercial operator may continue to provide the following authorized visitor services through a concessions contract:

- a small retail store where visitors can buy sandwiches, soft drinks, practical/convenience vacation items, and souvenirs
- rentals of canoes, kayaks, and paddle boats; snorkeling and scuba diving equipment; snorkeling and diving trips to the park's coral reefs and submerged cultural resources; boat tours to view the coral reefs without getting in the water; and a transport service to and from the mainland and Elliott or Boca Chita keys for visitors who want to attend a ranger-led walk, hike independently, or camp

The park's narrow mainland areas north and south of Convoy Point are composed primarily of mangrove forest. For the most part, these areas receive very little visitation and would continue to be managed as remote

natural areas primarily to protect fish nurseries and crocodile habitat.

## **BAY AND OCEAN WATERS**

Under this alternative, the park would continue to be open to visitors with private boats of varying sizes and sources of power, including motorboats and sailboats. Visitors could continue to choose from a variety of activities including shallow and deep-water boating, snorkeling, diving, fishing, touring via commercial visitor services boats, visiting the keys, camping, canoeing, kayaking, sailing, windsurfing, and participating in boating events. The bay, the keys, and the coral reefs would continue to provide different settings to recreate in a marine atmosphere. Visitors could continue to seek solitude, if desired, and appreciate the many natural sights and sounds of nature—both above and below the water.

Fishing would continue in accordance with the enabling legislation of the park and as regulated by the state.

Popular snorkeling, diving, and anchoring sites would be evaluated for the installation of mooring buoys. This would provide targeted resource protection and serve to disperse use at these locations and limit the number of boats. For more information on mooring buoys, refer to the “Common to All Alternatives” section.

## **LEGARE ANCHORAGE**

The purpose of the triangular-shaped Legare Anchorage (3 square miles in size) would continue to be the long-term protection of submerged cultural resources, particularly the H.M.S. *Fowey* shipwreck, owned by the government of the United Kingdom of Great Britain and Northern Ireland. Visitors would not have underwater access; boaters could continue to traverse the area on the water’s surface, or troll, but they could not stop, anchor, swim, or dive.

## **SLOW SPEED AREAS**

The bay includes many shallow water areas, and less experienced boaters often run into difficulties that result in groundings and/or propeller damage to park resources. These areas include the Safety Valve Shoals, the Featherbed Banks, the shallows around the southern keys, the manatee habitat adjacent to the coast, and congested visitor use areas in and near Sands Cut. The park has regulations to manage boating activity in some of these areas to protect resources and ensure visitor safety.

The management objective of the slow speed zone is to enhance visitor safety and resource protection by slowing vessel speeds in shallow water areas. Less experienced boaters often run into difficulties that result in groundings and/or propeller damage to these shallow water areas. There would continue to be three slow speed zones in the park. The first area would be the manatee protection area that parallels the mainland, out to 1,000 feet from shore, from Black Point County Park south to Turkey Point. The second area would continue to be south of Sands Key along the northwest shore of Elliott Key to Coon Point. The noncombustion engine use area in Jones Lagoon would also continue. In this noncombustion engine zone, boats equipped with combustion engines could be used when propelled by push-pole or electric trolling motor with the outboard motor tilted up.

## **THE KEYS**

### **Boca Chita Key**

Boca Chita Key would continue to be a park destination point for people who like boating as well as getting out and strolling in a historic designed landscape. Visitors could continue to dock in the harbor for day use activities and walk among the historic stone structures (such as the covered picnic pavilion and chapel) and tour the ornamental lighthouse. Restrooms, a picnic area, a

walking trail, a primitive campground for individual and group camping overnight docking, and boat camping would also continue to be available. Kiosks for interpretation/education would remain at the harbor. The historic barn and chapel, currently used for storage, would also remain. The park would explore options to adaptively reuse these structures for park operations and visitor services. User fees would continue to be collected on Boca Chita, as would the existing procedure that allows the private use of some visitor facilities via a park-issued special use permit (SUP).

### **Elliott Key**

Elliott Key would continue to be open to visitors to dock (both day use and overnight docking / boat camping), picnic, hike, camp, access restrooms, and obtain potable water. Interpretive programs, facilitated by a concession operation, would continue. Several trails would remain for visitor activities—the unhardened central hiking trail referred to as “Spite Highway,” the east-west breezeway trail, and the self-guided interpretive loop boardwalk trail. The visitor contact/ranger station would continue to be opened occasionally to provide park law enforcement, visitor safety services, some environmental education activities, administrative operations, and interpretive visitor services.

A formal ranger-led environmental education program would continue to be offered at Elliott Key.

Day-use docking would continue to be allowed at University Dock, and existing ranger residences would remain.

### **Adams Key**

Facilities at Adams Key would continue to include a day-use dock, a picnic pavilion, restrooms, a walking trail, interpretive wayside exhibits, maintenance facility, and ranger residences. Adams Key would

continue to remain an alternate (backup) site for the formal ranger-led environmental education program.

### **Porgy, Totten, Old Rhodes, Reid, Rubicon, Swan, Long Arsenicker, and East Arsenicker**

These keys would remain relatively remote places that seldom have visitors and could be closed should circumstances warrant, as described in the “Common to All Alternatives” section. The historic structures on Porgy Key would remain stabilized. Visitors would not be encouraged to visit the Jones Homestead site on Porgy Key. Interpretive information about these keys would continue to be provided off-site at visitor areas like Convoy Point.

### **Arsenicker Key, West Arsenicker Key**

These areas and the waters extending 200 feet from their shores would continue to be closed to visitors for natural resource protection. In particular, these keys provide important habitat for nesting birds.

Soldier Key would remain closed for the protection of sensitive natural or cultural resources.

### **Jones Lagoon**

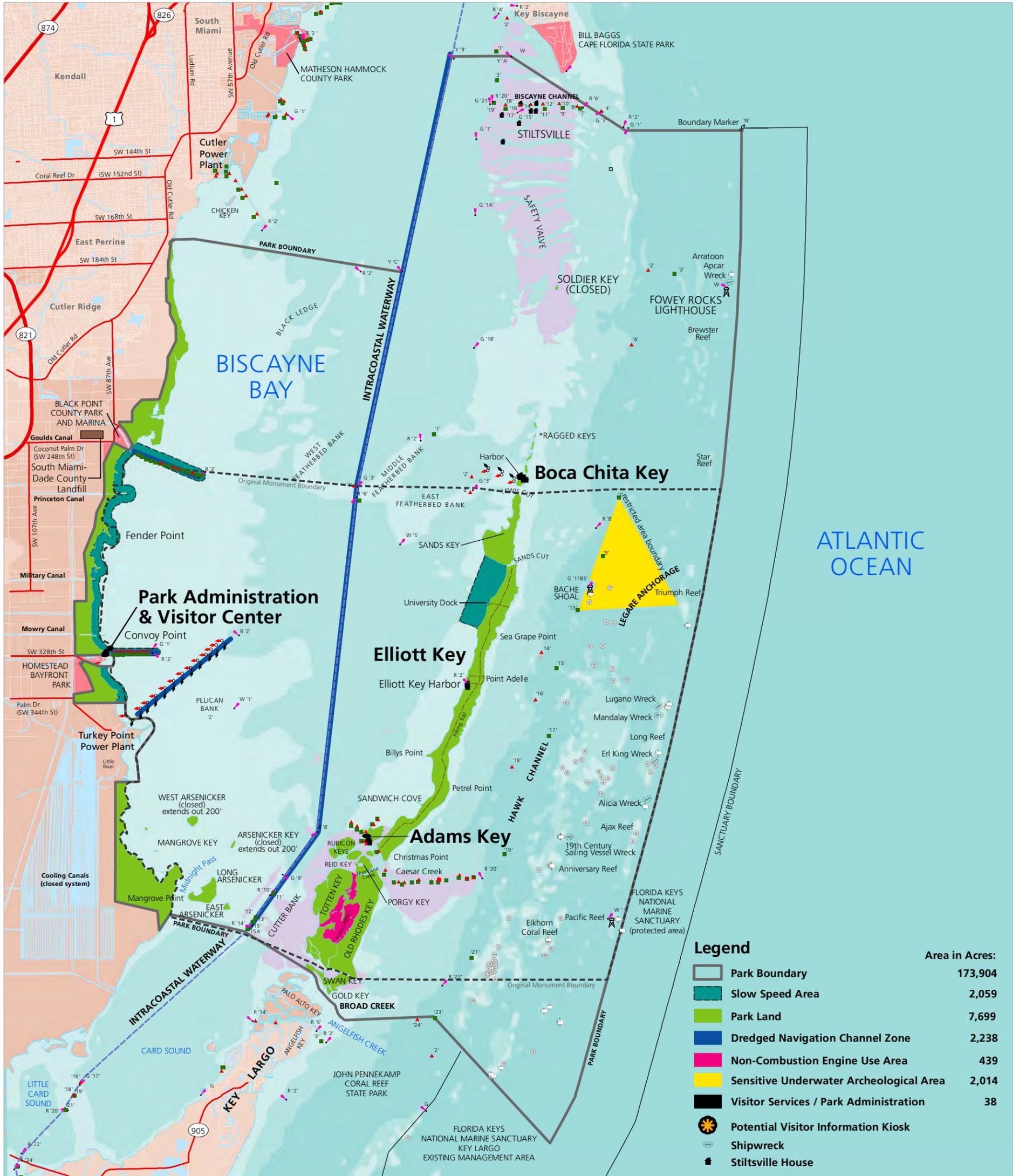
The lagoon would continue to be managed as a noncombustion engine use area to protect resources and provide a variety of visitor experience opportunities.

## **PARTNERSHIPS**

The park would continue to engage in partnership agreements to expand the park’s capacity both inside and beyond park boundaries at sites such as marinas and state and county parks.

Biscayne National Park would coordinate with Florida Keys National Marine Sanctuary and the South Atlantic Fishery Management Council to ensure compatible management strategies in adjacent federal waters.

The National Park Service would continue to collaborate with other entities to address water quality and many other concerns. These partnerships could include federal, state, and local agencies; community groups; commercial organizations; and individuals.



0 1 2 Kilometers  
 0 1 2 Statute Miles  
 0 1 2 Nautical Miles  
**Map not for navigation**

**Note: To show visually, the size of zone colors have been enlarged in certain areas.**

**Map Key to Water Features and Landmarks**

<b>Water Depths</b>		
	0-6 feet (0-1.8 meters)	
	6-12 feet (1.8-3.6 meters)	
	Over 12 feet (Over 3.6 meters)	
<b>Shallows and Reefs</b>		
	Shoal or spoil area	
	Coral reef near water surface	
	Coral reefs also lie deeper below water surface.	
<b>Aids to Navigation (entering from seaward)</b>		
	Red	
	Port side lateral marks (even numbered)	
	Green	
	Starboard side lateral marks (odd numbered)	
<b>Other Aids and Landmarks</b>		
	Light	
	Light color: R Red, G Green, W White, Y Yellow	
	Danger Shoal	
	Mooring buoy	

\*RAGGED KEYS #2, #3, and #5 are Private Properties

# Alternative 1

## Biscayne National Park

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## ALTERNATIVES 2 THROUGH 5

Alternatives 2, 3, 4, and 5 are fully described in the 2011 Draft GMP/EIS on pages 69–103, accessed online at: <http://parkplanning.nps.gov/documentsList.cfm?parkID=353&projectId=11168>. Summaries and maps for each alternative are provided below for comparison with the two new alternatives, 6 and 7. The basic concept of each is listed below for reference; refer to the 2011 Draft GMP/EIS for complete descriptions.

### ALTERNATIVE 2

Alternative 2 would emphasize the recreational use of the park while providing resource protection as governed by law, policy, and resource sensitivity. This concept would be accomplished by providing the highest level of services, facilities, and access to specific areas of the park of all the action alternatives. Visitors would be able to access the entire park except small areas set aside for the protection of sensitive resources. Substantial concession services would enable visitors without their own boats to access the keys and bay and ocean waters. Additional staffing and a substantial built environment might be required to implement this alternative, and some areas might be developed beyond the current level. A high level of interaction among visitors, park staff, and park resources would be expected while providing a minimum level of resource protection.

### ALTERNATIVE 3

Alternative 3 would allow all visitors a full range of experience opportunities throughout most of the park and use a permit system to provide opportunity for visitors to experience a sense of solitude in two discrete areas of the bay. Small areas would be set aside that prohibit visitor access to protect

sensitive resources and allow wildlife a respite from human contact. Management actions would provide strong natural and cultural resource protection and diverse visitor experiences.

Additional staffing and some additional development might be required to implement this alternative.

Visitor opportunities in this alternative would range from the challenges of exploring the natural environment alone to the convenience of built surroundings. A high level of interaction among visitors, park staff, and park resources would be expected. Orientation to the park would help visitors choose types and locations of activities and learn about resource preservation and stewardship. Some impacts on resources might be tolerated in high-use areas of the park. Biscayne National Park staff would coordinate with Florida Keys National Marine Sanctuary staff to ensure compatible management strategies in adjacent federal waters.

This alternative includes a marine reserve zone.

### ALTERNATIVE 4

This alternative would emphasize strong natural and cultural resource protection while providing a diversity of visitor experiences. Visitor opportunities in this alternative would range from the challenges of exploring the natural environment alone to the convenience of built surroundings. A limited amount of resource impacts would be tolerated in high-use areas of the park. Some areas would be closed to visitors to protect sensitive resources and allow wildlife a respite from human contact. Other areas,

such as the Legare Anchorage, would be reserved for limited types of visitor use.

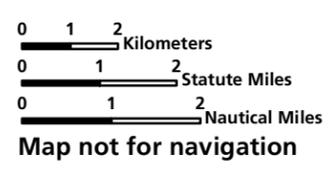
This alternative includes a marine reserve zone.

### **ALTERNATIVE 5**

The park would be managed to promote the protection of natural and cultural resources, including taking actions to optimize conditions for protection and restoration. Natural processes would prevail except when management actions were needed to preserve and protect significant cultural resources. This alternative would provide the highest level of resource protection and still authorize a level of visitor services greater than the no-action alternative. Visitor access

and activities would be highly managed for resource protection while still enabling visitors to participate in a variety of activities. To accomplish this variety, a permit system would be used to provide an opportunity to experience a sense of solitude in the bay, in one portion of the park. Other areas, such as the Legare Anchorage, would offer diverse visitor experiences and recreational activities. Some areas would be closed to visitors to protect sensitive resources and provide wildlife a respite from human contact. The built environment would be limited to basic visitor safety and services and would be geographically concentrated or outside park boundaries.

This alternative includes a marine reserve zone.

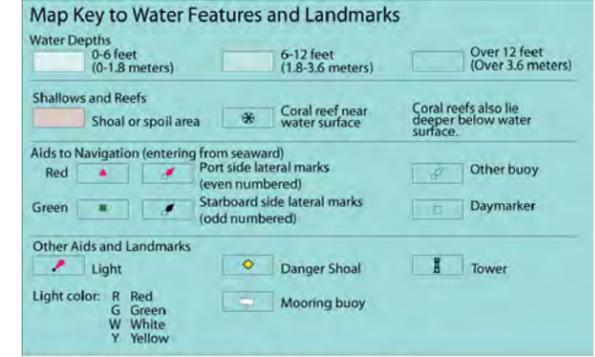


Map not for navigation

**Note 1:** Existing conditions and some features such as the locations of shoals, reefs, and shallow coral areas, may be considered unchanged.

**Note 2:** To show visually, the size of zone colors have been enlarged in certain areas.

**Note 3:** Some areas in the Park Boundary are not NPS owned but do not appear at this map scale. Zoning shown would not apply to non NPS lands unless they were acquired from a willing seller.



\*RAGGED KEYS #2, #3, and #5 are Private Properties

# Alternative 2

## Biscayne National Park

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**Map Key to Water Features and Landmarks**

Water Depths	0-6 feet (0-1.8 meters)	6-12 feet (1.8-3.6 meters)	Over 12 feet (Over 3.6 meters)
Shallows and Reefs	Shoal or spoil area	Coral reef near water surface	Coral reefs also lie deeper below water surface.
Aids to Navigation (entering from seaward)	Red	Port side lateral marks (even numbered)	Other buoy
	Green	Starboard side lateral marks (odd numbered)	Daymarker
Other Aids and Landmarks	Light	Danger Shoal	Tower
Light color:	R Red	G Green	W White
	Y Yellow		Mooring buoy

\*RAGGED KEYS #2, #3, and #5 are Private Properties

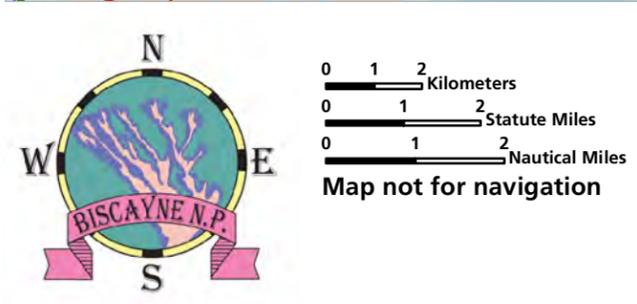
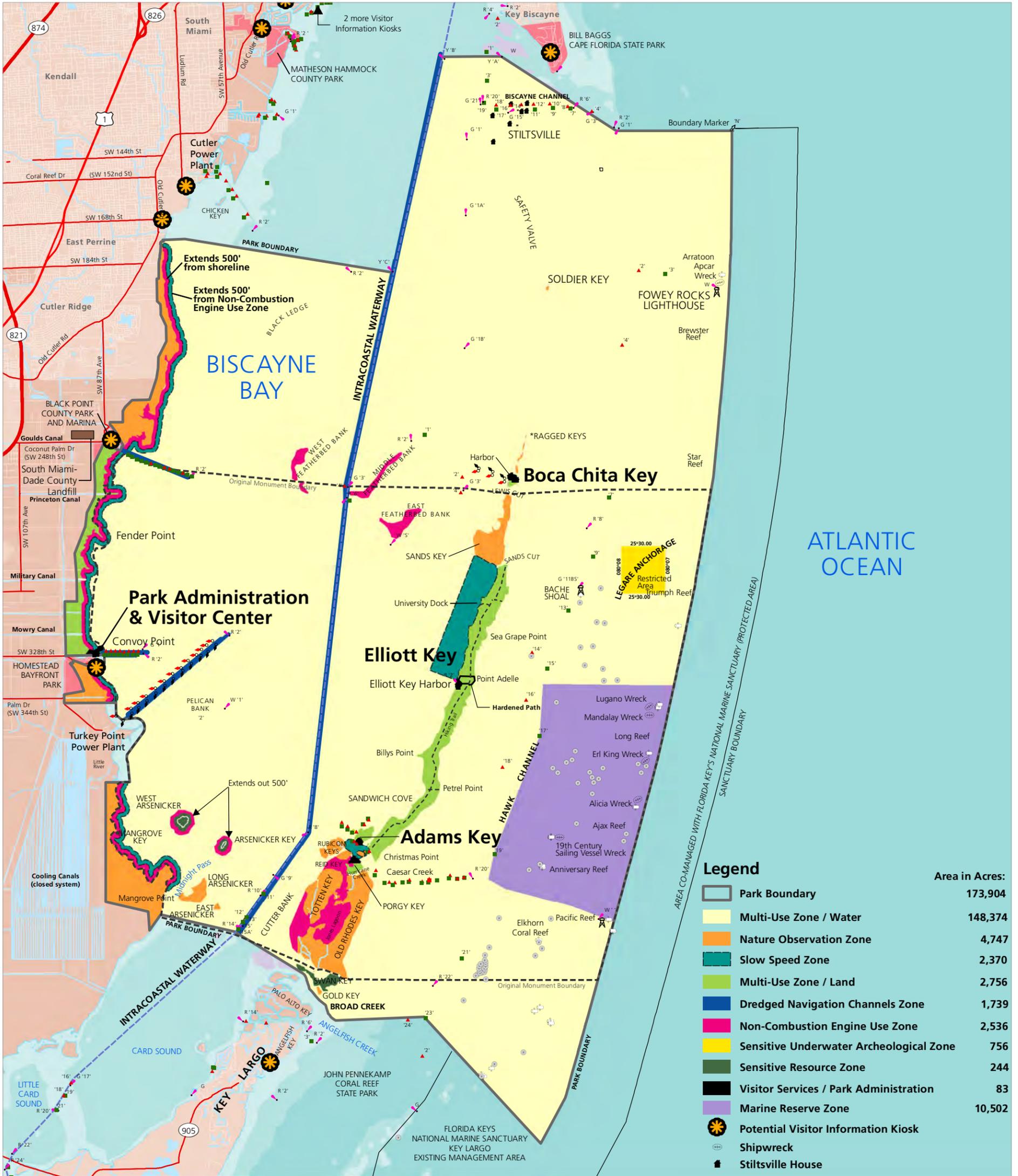


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 0 1 2 Statute Miles  
 0 1 2 Nautical Miles  
**Map not for navigation**

# Alternative 3

Biscayne National Park  
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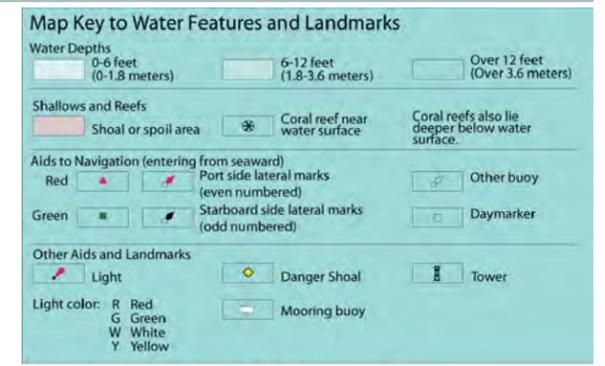
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**Note 1:** Existing conditions and some features such as the locations of shoals, reefs, and shallow coral areas, may be considered unchanged.

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**Note 3:** Some areas in the Park Boundary are not NPS owned but do not appear at this map scale. Zoning shown would not apply to non NPS lands unless they were acquired from a willing seller.



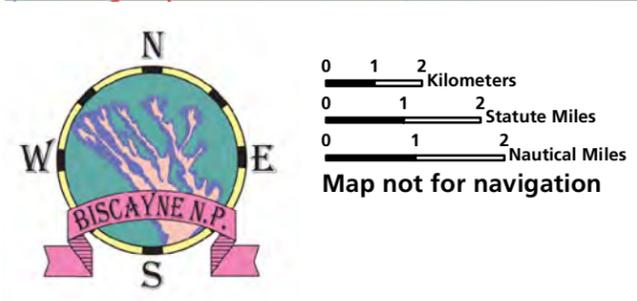
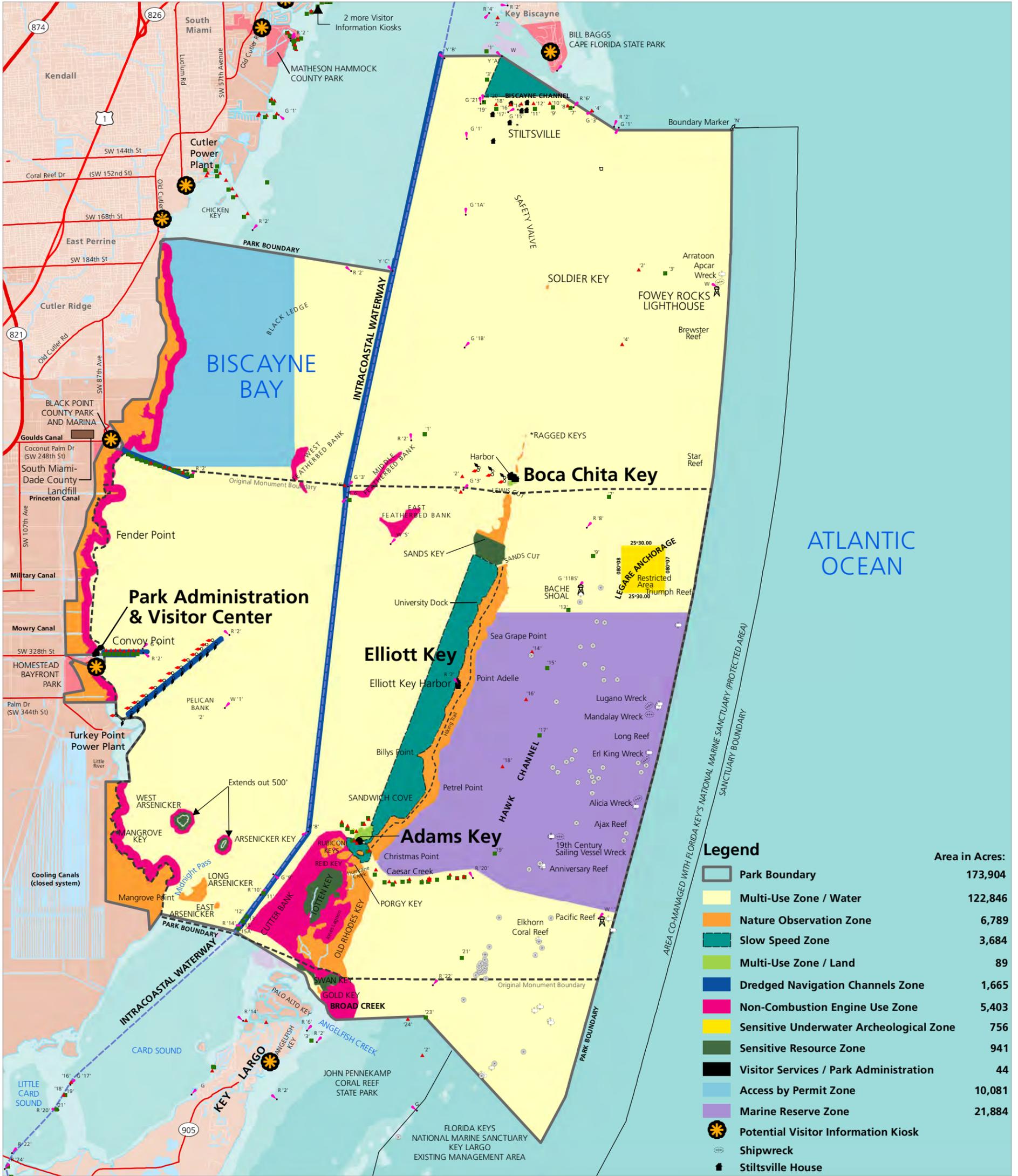
# Alternative 4

## Biscayne National Park

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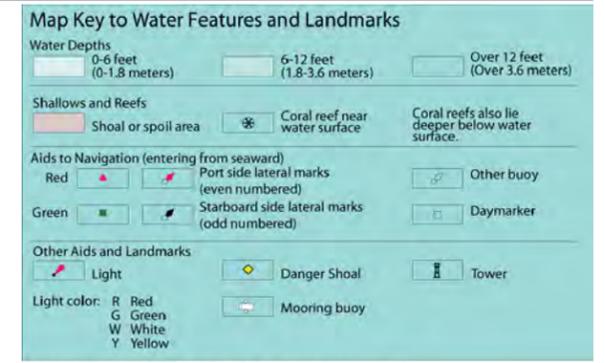
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**Note 1:** Existing conditions and some features such as the locations of shoals, reefs, and shallow coral areas, may be considered unchanged.

**Note 2:** To show visually, the size of zone colors have been enlarged in certain areas.

**Note 3:** Some areas in the Park Boundary are not NPS owned but do not appear at this map scale. Zoning shown would not apply to non NPS lands unless they were acquired from a willing seller.



# Alternative 5

## Biscayne National Park

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## ALTERNATIVE 6: THE NPS PREFERRED ALTERNATIVE

### CONCEPT

This alternative would emphasize strong natural and cultural resource protection while providing a diversity of visitor experiences. Visitor opportunities in this alternative would range from the challenges of exploring the natural environment alone to the convenience of built surroundings. A limited amount of resource impacts would be tolerated in high-use areas of the park. Some visitor activities would be restricted in certain areas to protect sensitive resources and allow wildlife a respite from human contact. Other areas, such as the Legare Anchorage, would be reserved for limited types of visitor use.

This alternative includes a special recreation zone that would be managed as part of an adaptive management strategy to achieve the goal of a healthier coral reef ecosystem within the zone to provide a more enjoyable and diverse visitor experience.

Taking action in this alternative to protect reefs from other pressures such as overfishing; land-based sources of pollution; and physical damage from fishing gear, anchoring, and vessel groundings might increase reef resiliency, potentially delaying the effects of climate change stressors.

Under alternative 6, some types of fishing would be prohibited and fishing pressure would be limited via permits in the special recreation zone. An adaptive management strategy (appendix F) is used to evaluate the effectiveness of this approach at 3-, 5-, 8-, and 10-year intervals after implementation with the option of implementing management actions to affect fishing pressure as indicated by monitoring data. Following the 10-year adaptive management period for the special recreation zone, the National Park Service would consider monitoring data and consult with the Florida Fish and Wildlife

Conservation Commission, NOAA Fisheries, other relevant agencies, and an expert panel. At that point, the National Park Service would decide whether to continue adaptive management strategies for a special recreation zone or implement a marine reserve zone.

### THE MAINLAND

Convoy Point would be in the visitor services / park administration zone and remain the park's primary administrative and visitor service area on the mainland, as described in alternative 1. If additional administrative space were needed, some functions would be expanded on-site while an alternate location in the local community would be studied for moving other functions and facilities.

Additionally, the park would actively seek opportunities to develop a modern visitor education facility outside Convoy Point (in the Miami area).

A boardwalk and viewing platform would be built near Convoy Point to interpret the dwarf mangrove and marsh ecosystems. Site-specific environmental planning would be conducted before constructing the boardwalk.

The visitor center boardwalk and jetty could be improved for safety and visitor access. These improvements would consist of benches and shade structures.

The mainland area between Convoy Point and Black Point County Park would be zoned multiuse, totaling 2,756 acres of land, and the remainder would be a nature observation zone, totaling 4,751 acres of land.

## BAY AND OCEAN WATERS

The multiuse zone would be applied to most of the park's water acreage (see alternative 6 map). Midnight Pass would remain open and part of the multiuse zone. Visitors could engage in a wide variety of activities such as sightseeing, boating, fishing, scuba diving, snorkeling, swimming, canoeing and kayaking, hiking, picnicking, camping, and visiting shipwrecks. The multiuse zone includes 144,522 acres of water, which is 83% of the park.

There would be a slow speed zone for 1,000 feet adjacent to the mainland shoreline from the northern boundary to the north end of Midnight Pass near the southern boundary. This would lessen the need for two sets of navigation markers that would have been needed to delineate both a slow speed zone and Noncombustion engine use zone as proposed in alternative 4, lessen the chance of boater confusion, and maintain boater access while still providing protection for Florida manatees and safety for kayakers. This designation is consistent with the Florida Manatee Recovery Plan (USFWS 1996), and the Dade County Manatee Protection Plan (FWC 1995).

A slow speed zone would also be along the bay side of Elliott Key beginning at Sands Key and extending south to Elliott Key Harbor, a larger area than described in alternatives 2 and 3. A slow speed zone would also be along Caesar Creek, south of Adams Key to Porgy Key, including the navigational channel between markers 20 to 24. The slow speed zone includes a total of 3,593 acres, or about 2% of the park.

Two shallow-water areas of the park would be included in the noncombustion engine use zone in alternative 6. This zone includes the waters around the park's southern keys including the bay side of Old Rhodes and Totten, and near portions of Rubicon, Reid, Porgy, and Swan keys. It would also include West, Middle, and East Featherbed banks. Boats equipped with combustion engines

could be used when propelled by push-pole or electric trolling motor, with outboard engine tilted up. The noncombustion engine use zone totals 903 acres, or less than 1% of the park.

## SPECIAL RECREATION ZONE

In alternative 6, the special recreation zone would extend from Hawk Channel to the park's eastern boundary, extending from 2 miles south of Pacific Reef north to Long Reef (14,585 acres). The proposed special recreation zone in alternative 6 would be about 8% of the park.

Within the special recreation zone, the following activities and limitations would be put into effect through rule-making processes:

- recreational fishing allowed year-round with a special permit required
- hook and line fishing only, with exception of lampara nets for the ballyhoo fishery
- no grouper harvest allowed
- no lobster harvest (recreational or commercial)
- no spearfishing, with the exception of nonnative lionfish or other invasive species identified by the park
- anchoring prohibited, additional mooring buoys to be installed
- all other state and federal fishing regulations apply
- no commercial fishing, with exception of the ballyhoo lampara net fishery
- snorkeling and diving allowed
- active removal of marine debris
- initiation of a research and monitoring program to inform adaptive management of the zone
- adoption of an adaptive management strategy (see appendix F)

The special recreation zone would be implemented using an adaptive management

strategy whereby resource conditions and fishing activities are monitored and management actions are reconsidered and adjusted on pre-defined intervals. A science and research strategy would be developed in the first three years of implementation to more clearly establish baseline conditions, thresholds for management actions, and monitoring protocols and metrics. Evaluation intervals at years 3, 5, and 8 would consider the need to potentially reduce the number of fishing permits to be issued for following years and the need to refine monitoring protocols to improve data quality for future evaluations. Also, the evaluation would consider adjustments to other management actions such as the location and number of mooring buoys and zone boundary markers, marine debris removal, public outreach efforts, and law enforcement efforts. Following the 10-year evaluation, the National Park Service, after consultation with Florida Fish and Wildlife Conservation Commission and other relevant agencies, and consideration of the expert panel recommendations, would determine appropriate adaptive management adjustments in SRZ management immediately following the panel report. This NPS decision may include relaxing regulations such as allowing grouper harvest or further restricting regulations to include possible conversion to a no-take marine reserve. The decision to either continue the adaptive management strategies or implement a marine reserve zone would be predicated on the monitoring data showing a sufficiently improved resource condition and that the park has met its goals for an improved visitor experience in the zone and the expectation that the trend would continue; otherwise the marine reserve zone would be implemented to more immediately address the downward trend in resource conditions and/or visitor experiences.

Dual permits would be required for fishing and take. A dual permit, anticipated to be an FWC special activity license (SAL) / NPS special use permit, would be required for fishing and take in the special recreation zone

(other than for lionfish harvested by approved spearing devices or hand-held nets). A maximum of 500 special activity licenses would be issued annually; currently set at 430 angling permits and 70 fishing guide permits, but could be decreased or reallocated if needed. It is anticipated that the Florida Fish and Wildlife Conservation Commission would issue these on a lottery basis annually; however, the specifics for issuance of these licenses have not been determined at this time. An educational component could be required for permit holders. Permit holders would be required to submit a monthly logbook with effort, catch, and harvest information.

As anchoring is prohibited under this alternative, additional mooring buoys would be added over time as needed to disperse visitor use and improve the safety of diving operations. Mooring buoys may also be relocated periodically within the zone to redistribute fishing, snorkeling, and diving impacts.

The special recreation zone would allow the lampara net commercial fishery for ballyhoo because this fishery does not physically impact coral reef habitat although there might be temporary noise impacts on reef organisms. Furthermore, there are only a small number of commercial fishers tied to this area with limited ability to easily relocate.

If selected as the proposed action in the "Record of Decision" at the end of this planning process, these limitations and requirements would be set forth in a memorandum of understanding with the Florida Fish and Wildlife Conservation Commission. A federal formal rule-making process would be used to establish the regulatory framework for the execution of these limitations and requirements associated with this and other zones.

## **LEGARE ANCHORAGE**

In alternative 6, the Legare Anchorage would be reduced to about 1 square mile and included in the sensitive underwater archeological zone, primarily to continue protecting underwater cultural resources. To facilitate protection and make it easier for boaters to identify, the area would be delineated by latitude and longitude lines and marked by dayboards or buoys. Travel through the area in a vessel would be allowed, but drifting, mooring, anchoring, and entering the water would not. Hook-and-line fishing would be allowed while trolling. Trapping would not be allowed. This area could be used for permitted research activities.

## **THE KEYS**

### **Boca Chita Key**

The northern portion of Boca Chita Key, including the day use area, campground, and boat basin, would be part of the visitor services / park administration zone. The management and use of the existing facilities in this northern portion of the key would remain as described in alternative 2. There would be no new construction. The southern portion of Boca Chita Key would be managed according to the multiuse zone.

The private use of some visitor facilities via a park-issued special use permit would continue.

### **Elliott Key**

Only the Elliott Key Harbor area would be included in the visitor services / park administration zone. The remainder would be in the multiuse land zone. Elliott Key would continue to be open to visitors to dock (both day use and overnight docking / boat camping), picnic, hike, camp, access restrooms, and obtain potable water, as described in alternatives 1, 2, and 3.

Current visitor services and park administration facilities would continue to be used, but the specific uses of these facilities could change to improve efficiency, including opening a small visitor contact station in the multiuse building that currently houses the environmental education program. The park would continue to use Elliott Key as the main location for its environmental education program and to use Adams Key as a backup location.

A staging area for canoes and kayaks could be built on the Elliott Key developed area, allowing visitors to be shuttled by motorboat to the key and depart from there to explore the island shorelines.

The Breezeway Loop Trail and boardwalk would be made universally accessible. The ranger residences would remain.

### **Adams Key**

Only the southern portion of Adams Key that includes the dock, day use / park administration area, pavilion, restrooms, and the two ranger residences would be part of the visitor services / park administration zone. Existing facilities and uses would continue as described in alternative 1. A staging area for canoes and kayaks might be built at the Adams Key developed area, allowing visitors to explore the island shorelines.

Should the park move the environmental education program to Adams Key, facilities may need to be built or rehabilitated, and appropriate environmental planning would occur before construction.

The northern portion of this key would be in the multiuse zone and managed accordingly.

### **Porgy Key**

Only the northern portion of Porgy Key would be placed in the visitor services / park

administration zone. The ruins from the old Jones Homestead would be maintained and interpreted on-site. A canoe dock would be established.

The southern portion of the key would be in the multiuse zone and would be managed as described in the multiuse zone in this alternative.

### **Other Keys**

Several keys would be included in the nature observation zone—the Ragged Keys, Sands Key, Rubicon Keys, Reid Key, Old Rhodes Key, Totten Key, Gold Key, East Arsenicker Key, Long Arsenicker Key, and Mangrove Key.

West Arsenicker Key, Arsenicker Key, the water extending out 300 feet from these keys, as well as Swan Key and Solider Key would be included in the sensitive resource zone (and marked by dayboards or buoys) to accommodate motorboat use in a greater area around the currently closed islands while protecting the sensitive resource that is consistent with the best available science. While access to the general public would be prohibited, scientific research would continue to be allowed following NPS research permitting procedures.

At Jones Lagoon, the noncombustion engine use zone provides boater access and ease of navigation in the creeks of the area. The sensitive resource zone would extend for 300 feet around the small keys to protect the wading bird colonies in Jones Lagoon.

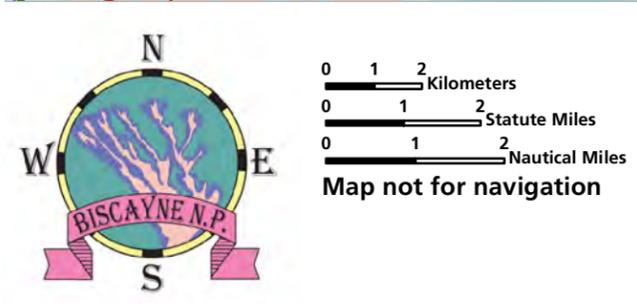
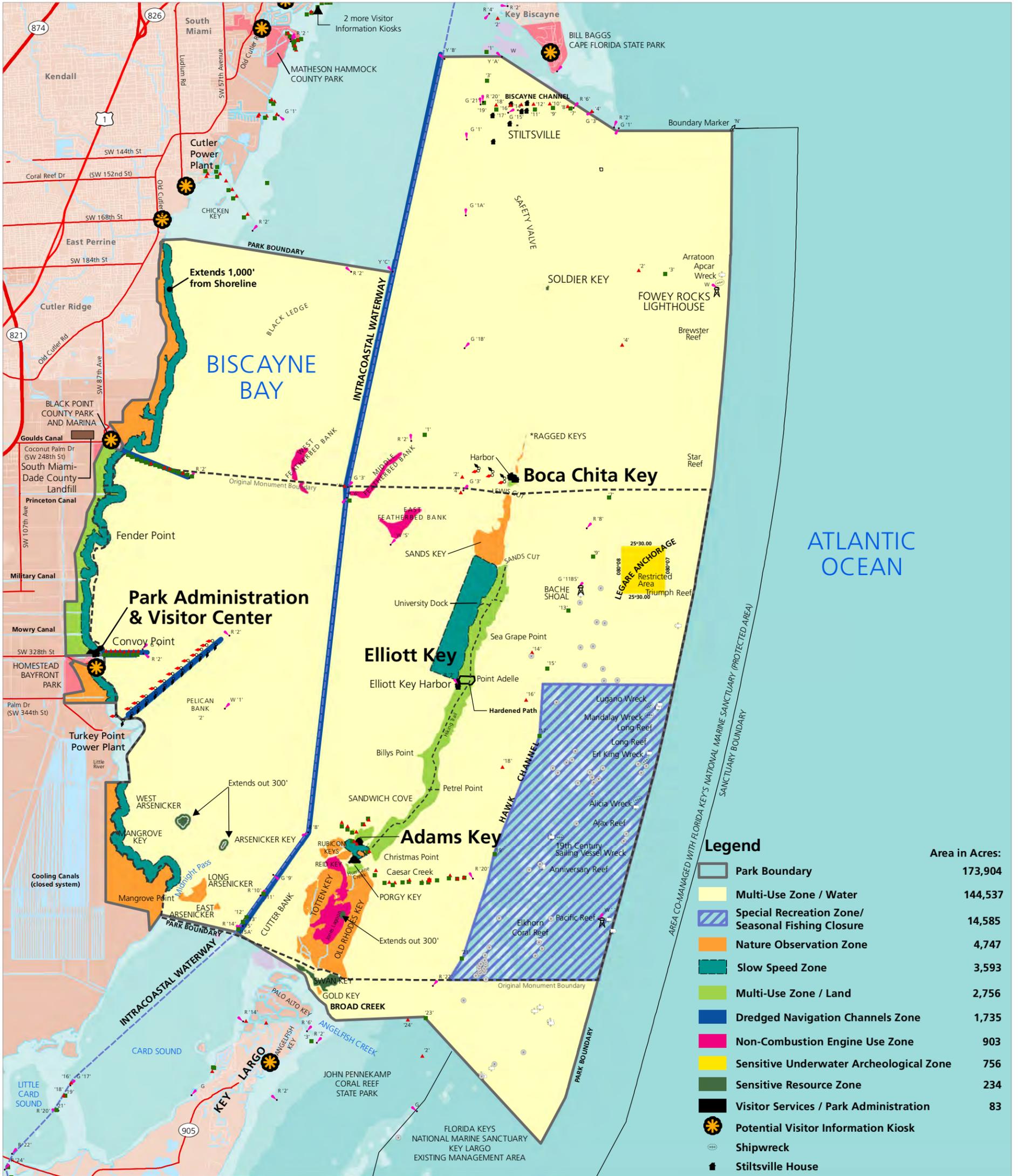
### **PARTNERSHIPS**

All partnerships would be similar to alternative 2 found in the 2011 Draft GMP/EIS on page 78. The exception is for the Fowey Rocks Lighthouse, which the National Park Service has acquired.

The National Park Service and the Florida Fish and Wildlife Conservation Commission would continue to collaborate on implementation of the adaptive management strategy for the special recreation zone. Additional research collaborations may be developed in support of this adaptive management strategy.

The National Park Service would continue to collaborate with other entities to address water quality and many other concerns. These partnerships could include federal, state, and local agencies; community groups; commercial organizations; and individuals.

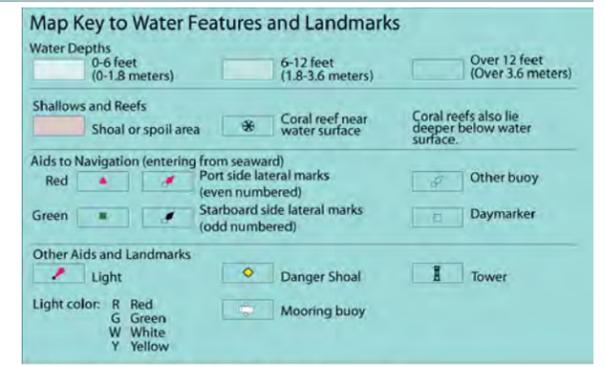




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# Alternative 6

## Biscayne National Park

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## ALTERNATIVE 7

### CONCEPT

This alternative is exactly the same as alternative 6, except some details specific to the administration of the special recreation zone.

This alternative would emphasize strong natural and cultural resource protection while providing a diversity of visitor experiences. Visitor opportunities in this alternative would range from the challenges of exploring the natural environment alone to the convenience of built surroundings. A limited amount of resource impacts would be tolerated in high-use areas of the park. Some visitor activities would be restricted in certain areas to protect sensitive resources and allow wildlife a respite from human contact. Other areas, such as Legare Anchorage, would be reserved for limited types of visitor use.

This alternative is similar to alternative 6 in that it incorporates an adaptive management approach to the special recreation zone. This alternative includes fishing limitations, including a seasonal fishing closure, to achieve the goal of a healthier coral reef ecosystem within the zone to provide a more enjoyable and diverse visitor experience.

Taking actions under alternative 7 to protect coral reefs from other pressures such as overfishing and physical damage from fishing gear, anchoring, and vessel groundings might increase reef resiliency, potentially delaying the effects of climate change stressors.

Within the special recreation zone, some types of fishing would be prohibited altogether, and the area would be closed to recreational fishing during the summer months (June through September). This period is when fish that are caught and released are less likely to survive due to warm water conditions. An adaptive management

strategy (appendix F) is used to evaluate the effectiveness of this approach at 3-, 5-, 8-, and 10-year intervals after implementation with the option of implementing management actions as identified by an expert panel to affect fishing pressure as indicated by monitoring data. Following the 10-year adaptive management period for the special recreation zone, the National Park Service, after consultation with relevant agencies and consideration of expert panel recommendations, would decide whether to continue adaptive management strategies for a special recreation zone or implement a marine reserve zone.

### THE MAINLAND

Same as alternative 6.

### BAY AND OCEAN WATERS

Same as alternative 6.

### SPECIAL RECREATION ZONE

In alternative 7, the special recreation zone would extend from Hawk Channel to the park's eastern boundary, extending from 2 miles south of Pacific Reef, north to Long Reef (14,585 acres). The proposed special recreation zone in alternative 7 would be about 8% of the park.

Within the special recreation zone, the following activities and limitations would be put into effect through rule-making processes:

- recreational fishing prohibited during summer months

- hook and line fishing only, with the exception of lampara nets for the ballyhoo fishery
- no grouper harvest allowed
- no lobster harvest (recreational or commercial)
- no spearfishing, with the exception of the nonnative lionfish
- anchoring prohibited
- all other state and federal fishing regulations apply
- no commercial fishing, with the exception of the ballyhoo lampara net fishery
- snorkeling and diving allowed
- active removal of marine debris
- initiation of a research and monitoring program to inform adaptive management of the zone
- adoption of an adaptive management strategy (see appendix F)

The special recreation zone would be implemented using an adaptive management strategy whereby resource conditions and fishing activities are monitored and management actions are reconsidered and adjusted on pre-defined intervals. A science and research strategy would be developed in the first three years of implementation to more clearly establish baseline conditions, thresholds for management actions, and monitoring protocols and metrics. These evaluation intervals at years 3, 5, and 8 would consider the need to refine monitoring protocols to improve data quality for future evaluations. Also, the evaluation would consider adjustments to management actions such as the location and number of mooring buoys and zone boundary markers, marine debris removal, public outreach efforts, and law enforcement efforts. Following the 10-year adaptive management period for the special recreation zone, the National Park Service would consider monitoring data and consult with state and federal agencies, and an expert panel. At that point, the National Park Service would decide whether to continue adaptive management strategies for a special recreation zone or implement a

marine reserve zone. The decision to either continue the adaptive management strategies or implement a marine reserve would be predicated on the monitoring data showing a sufficiently improved resource condition and that the park has met its goals for an improved visitor experience in the zone; and the expectation that the trend would continue; otherwise, the marine reserve zone would be implemented to more immediately address the downward trend in resource conditions and/or visitor experiences.

During the seasonal closure, angler access would be closed June through September when water temperatures peak. At these increased temperatures, oxygen solubility is decreased, fish are more easily fatigued, and a caught fish is less likely to recover if it were to be released. Thus, this closure would allow a greater protection to reef fish during a time when they are already stressed by environmental extremes.

As anchoring is prohibited under this alternative, additional mooring buoys would be added over time as needed to disperse visitor use and improve the safety of diving operations.

The special recreation zone would allow the lampara net commercial fishery for ballyhoo because this fishery does not physically impact coral reef habitat although there might be temporary noise impacts on reef organisms. Furthermore there are only a small number of commercial fishers who fish this area and they have limited ability to relocate.

If selected as the proposed action in the “Record of Decision” at the end of this planning process, a federal formal rule-making process would be used to establish the regulatory framework for the execution of these limitations and requirements associated with this and other zones.

The Florida Fish and Wildlife Conservation Commission would not participate in the research, monitoring, or rule development

process associated with this alternative. All regulatory changes required under this alternative would be implemented via federal special regulation.

### **LEGARE ANCHORAGE**

Same as alternative 6.

### **THE KEYS**

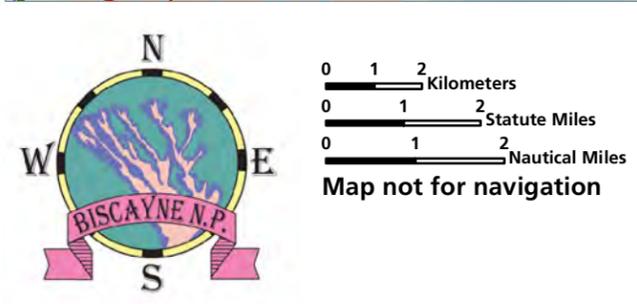
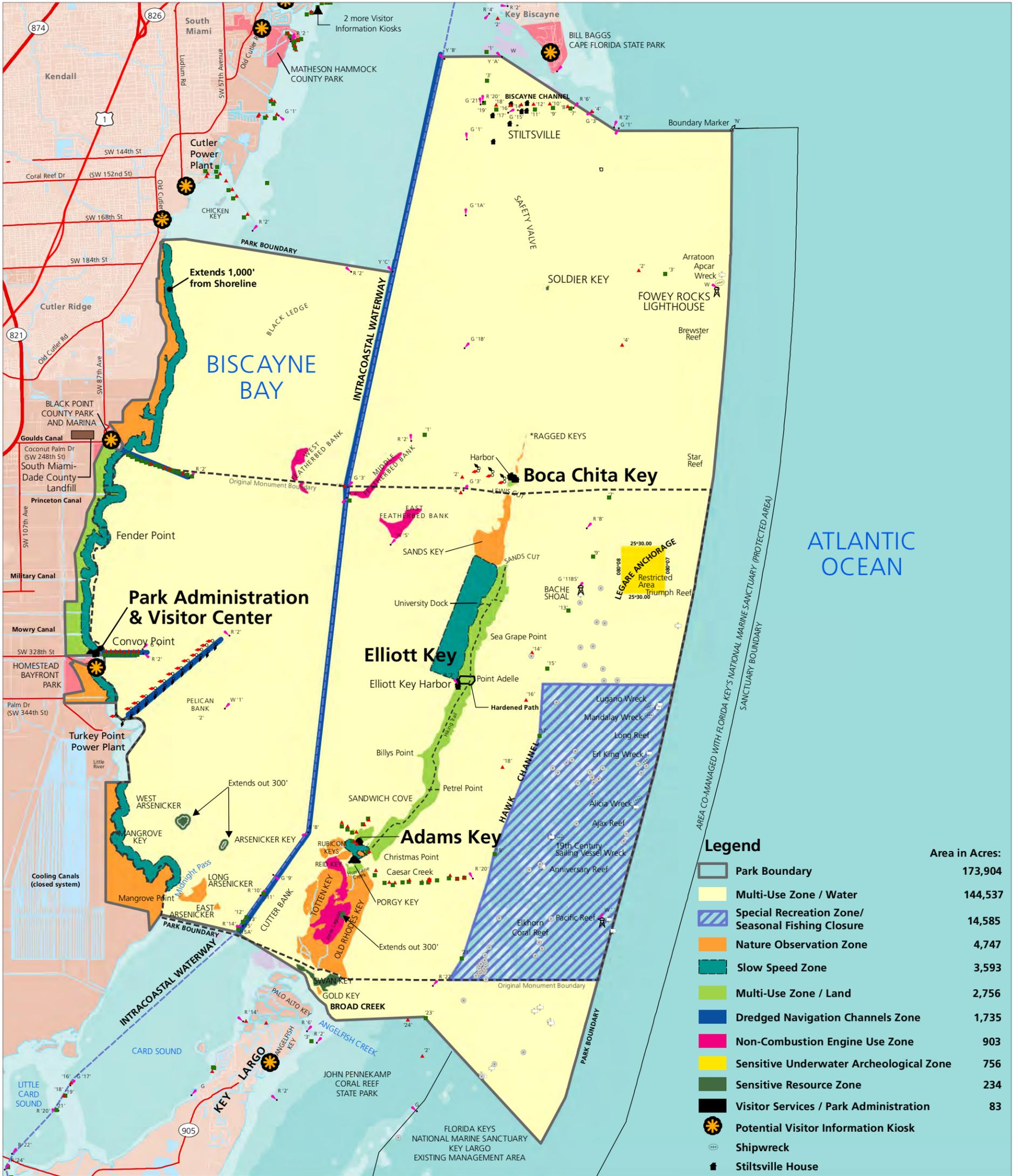
Same as alternative 6.

### **PARTNERSHIPS**

All partnerships would be similar to alternative 2 found in the 2011 Draft GMP/EIS on page 78. The exception is the Fowey Rocks Lighthouse, which the National Park Service has acquired. The Florida Fish and Wildlife Conservation Commission would continue ongoing cooperative activities, but would not be involved in the implementation of seasonal closures and other aspects of adaptive management strategies.

Additional research collaborations may be developed in support of this adaptive management strategy.

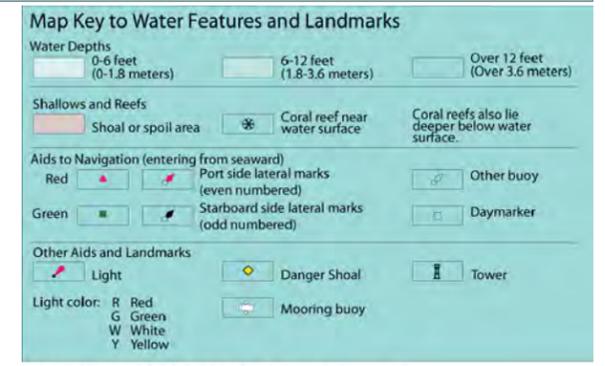




**Note 1:** Existing conditions and some features such as the locations of shoals, reefs, and shallow coral areas, may be considered unchanged.

**Note 2:** To show visually, the size of zone colors have been enlarged in certain areas.

**Note 3:** Some areas in the Park Boundary are not NPS owned but do not appear at this map scale. Zoning shown would not apply to non NPS lands unless they were acquired from a willing seller.



# Alternative 7

## Biscayne National Park

United States Department of the Interior - National Park Service

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## ALTERNATIVES OR ACTIONS CONSIDERED BUT DISMISSED

During development of alternatives 6 and 7, representatives from the National Park Service, Florida Fish and Wildlife Conservation Commission, and the NOAA Fisheries considered several new zone possibilities to protect patch reefs in the southeast corner of the park to enhance fisheries for a more enjoyable visitor experience that included both fishing and nonfishing opportunities. A number of management strategies (e.g., catch and release only, species-specific limits) associated with a new zone were considered to meet these objectives. In addition, different zone configurations (size, shape, and location) were

also considered. Some of the reasons these concepts were ultimately dismissed from analysis included significant overlap with management actions already being addressed in the draft Fishery Management Plan, lack of effectiveness at meeting the goal of the alternatives, and lack of feasibility for effective enforcement and regulation.

For alternatives or actions that were previously considered but dismissed, see page 93 of the 2011 Draft GMP/EIS accessed online at:  
<http://parkplanning.nps.gov/documentsList.cfm?parkID=353&projectID=11168>.

## MITIGATION MEASURES COMMON TO ALL ACTION ALTERNATIVES

Additional mitigation measures and best management practices would be applied to avoid or minimize potential impacts from implementation of the alternatives. These measures would apply to all action alternatives and are fully described in the 2011 Draft GMP/EIS on pages 94–97. Specific topics covered include:

- Natural Resources
  - Air Quality
  - Nonnative Species
- Soils
- Special Status Species
- Vegetation
- Water Resources
- Wildlife
- Wetlands
- Cultural Resources
- Soundscapes
- Sustainable Design and Aesthetics

## FUTURE STUDIES AND PLANS NEEDED

### PLANS

After completion and approval of a general management plan for managing the park, other more detailed studies and plans would be needed for implementation of specific actions. As required, additional environmental compliance (National Environmental Policy Act, National Historic Preservation Act (NHPA), and other relevant laws and policies) and public involvement would be conducted. Those additional studies include, but would not be limited to, the items described in the 2011 Draft GMP/EIS on pages 98–99.

### OTHER FUTURE NEEDS

As noted in the special rulemaking requirements described on pages 98–99 in the 2011 Draft GMP/EIS, the National Park Service can close areas or otherwise regulate specific uses through special regulations published in 36 *Code of Federal Regulations*

(CFR) when necessary for safety or resource protection. Several use limitations proposed under alternatives 6 and 7 would require special regulations. Implementing the special recreation zone (and potential subsequent conversion to a marine reserve zone) and noncombustion engine use zone would restrict uses of these areas and so would require special regulations under 36 CFR 1.5b.

If alternative 6 is selected for implementation, a new memorandum of understanding with the National Park Service and the State of Florida would be established to implement the adaptive management strategy (appendix F). It would include cooperative development of a science and research plan to establish the methods used to collect and analyze data, thresholds for management action, responsibility for data collection and analysis, priority research needs, budgetary considerations, and other implementation-level details specific to the special recreation zone.

## ESTIMATED COSTS

Cost estimates in general management plans are required by the 1978 Parks and Recreation Act and are requested by Congress. The purpose of cost estimates is to assist managers with setting priorities and to inform the public. For comparison purposes, the planning team estimated the cost to implement each of the alternatives (see table 3 at the end of this section).

The implementation of the approved plan, no matter which alternative, would depend on future NPS funding levels; servicewide priorities; and partnership funds, time, and effort. The approval of a general management plan does not guarantee that funding and staffing needed to implement the plan will be forthcoming. Full implementation of the plan could be many years in the future.

The following applies to costs presented in this plan:

- The cost figures shown here and throughout the plan are intended only to provide an estimate of relative costs of the alternatives and should not be used for budgeting purposes.
- The costs presented (in 2013 dollars) have been developed using NPS and industry standards to the extent available.
- Actual costs will be determined at a later date, considering the design of facilities and identification of detailed resource protection needs.
- Potential costs for land protection measures (easements, acquisitions, etc.) to implement any boundary adjustment proposals in this General Management Plan are not included in these estimates.
- The cost estimates represent the total costs of projects. Potential cost-sharing opportunities with partners could reduce the overall costs.

The NPS facility planning model was used to determine the needs for visitor service and administrative space.

The 2011 Draft GMP/EIS fully described the cost estimate for alternatives 2 through 5 on pages 100–103 of the 2011 Draft GMP/EIS. Summary tables are included here for ease of comparison. All costs were adjusted to 2013 dollar estimates.

### ASSOCIATED COSTS: ALTERNATIVE 1 (NO ACTION)

Costs associated with implementing this alternative are ongoing operations (base funding) and one-time projects that are already approved and funded. Already funded projects include an upgrade of the radio system, erosion control, building and grounds maintenance, landscape enhancement, maintenance mentoring program, completion of the underwater trail, and cost of collection recovery. The total funding requested for these projects is \$536,000 in facility costs and \$169,000 in nonfacility costs. This amount is included in the estimates for all alternatives. In addition to the above costs, periodic increases in base funding would be required to cover inflation and maintain the current level of park operations.

### ASSOCIATED COSTS: ALTERNATIVE 6

Cost estimates for this alternative include construction of the new facilities and amenities at the following locations:

**Miami Area.** Construction of a new visitor center. A possible partnership with the City of Miami would cut NPS costs.

**Convoy Point.** Upgrade jetty and boardwalk or viewing platform to interpret the dwarf

mangrove forest and the mangrove shoreline north of the visitor center.

**Boca Chita Key.** Conversion of two structures used for park operations and visitor services. The number of kiosks providing interpretive information would be increased. The retaining wall on the north side of the island would be strengthened to maintain its current configuration.

**Elliott Key.** Make the Breezeway Loop Trail and boardwalk universally accessible.

**Special Recreation Zone.** Personnel and equipment would be needed to implement the provisions of the special recreation zone including buoy installation and maintenance, increased law enforcement patrol, and administration of fishing permits. It would also include additional resource management personnel to undertake the monitoring requirements described in the adaptive management strategy. Additional personnel and one-time costs would be needed to increase visitor understanding of the zones via personal interpretive services, exhibits, media, and publications.

#### **ASSOCIATED COSTS: ALTERNATIVE 7**

Cost estimates for this alternative include construction of new facilities and amenities at the following locations:

**Miami Area.** Construction of a new visitor center. A possible partnership with the City of Miami would cut NPS costs.

**Convoy Point.** Upgrade jetty and boardwalk or viewing platform to interpret the dwarf mangrove forest and the mangrove shoreline north of the visitor center.

**Boca Chita Key.** Conversion of two structures used for park operations and visitor services. The number of kiosks providing interpretive information would be increased. The retaining wall on the north side of the island would be strengthened to maintain its current configuration.

**Elliott Key.** Make the Breezeway Loop Trail and boardwalk universally accessible.

**Special Recreation Zone.** Personnel and equipment would be needed to implement the provisions of the special recreation zone including buoy installation and maintenance as well as increased law enforcement patrol to enforce the seasonal fishing closure. It would also include additional resource management personnel to undertake the monitoring requirements described in the adaptive management strategy. Additional personnel and one-time costs would be needed to increase visitor understanding of the zones via personal interpretive services, exhibits, media, and publications.

**TABLE 3. ESTIMATED RELATIVE COSTS OF THE ALTERNATIVES (IN 2013 DOLLARS)**

	<b>Alt 1 (no action)</b>	<b>Alt 2</b>	<b>Alt 3</b>	<b>Alt 4</b>	<b>Alt 5</b>	<b>Alt 6 (preferred)</b>	<b>Alt 7</b>
<b>Recurring Costs</b>							
<b>Enacted FY 2012</b>	\$4,254,000	\$4,254,000	\$4,254,000	\$4,254,000	\$4,254,000	\$4,254,000	\$4,254,000
<b>Additional Operational</b>	\$0	\$1,521,000	\$1,492,000	\$1,187,000	\$1,618,000	\$1,803,000	\$1,811,000
<b>Total</b>	<b>\$4,254,000</b>	<b>\$5,775,000</b>	<b>\$5,746,000</b>	<b>\$5,441,000</b>	<b>\$5,872,000</b>	<b>\$6,057,000</b>	<b>\$6,065,000</b>
<b>Additional Staffing (FTE<sup>1</sup>)</b>	—	+20	+19	+14	+19	+19	+19
<b>One-time Costs</b>							
Facility Costs	\$536,500	\$6,008,000	\$5,719,000	\$1,146,000	\$375,000	\$1,146,000	\$1,146,000
Nonfacility Costs	\$169,000	\$641,000	\$1,000,000	\$975,000	\$1,159,000	\$1,260,000	\$1,235,000
<b>Miami Visitor Service Center</b>		\$4,820,000	\$4,820,000	\$4,820,000	\$4,820,000	\$4,820,000	\$4,820,000
<b>Total One- time costs</b>	\$705,000	\$11,469,000	\$11,539,000	\$6,941,000	\$6,354,000	\$7,226,000	\$7,201,000

<sup>1</sup>Total full-time equivalents (FTE) are the number of employees required to maintain the assets of the park at a stable level, provide acceptable visitor services, protect resources, and generally support park operations. This includes effort needed to operate the potential Miami area visitor center. The FTE number would not necessarily be NPS employees, instead FTE reflects the level of work needed. Park managers would explore opportunities to work with partners, volunteers, and other federal agencies to manage the park efficiently.

## ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The National Park Service is required to identify the environmentally preferable alternative in its NEPA documents for public review and comment. The National Park Service, in accordance with the Department of the Interior NEPA regulations (43 CFR 46) and CEQ's Forty Questions, defines the environmentally preferable alternative (or alternatives) as the alternative that best promotes the national environmental policy expressed in NEPA (section 101(b)) (516 DM 4.10). The CEQ's Forty Questions (CEQ 1981) further clarifies the identification of the environmentally preferable alternative stating:

this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best

protects, preserves, and enhances historic, cultural, and natural resources (CEQ 40 Questions, Question 6a)

Alternative 5 was selected as the environmentally preferable alternative because it is the alternative that would best protect the largest amount of park lands and waters and the most sensitive resources and habitats from the negative impacts of motorized boating, fishing, and marine debris. It also includes specific actions to enhance the preservation of important natural and cultural resources. Alternative 5 was previously identified in the 2011 Draft GMP/EIS as the environmentally preferable alternative and so remains unchanged.

## CONSISTENCY WITH THE PURPOSES OF NEPA

NEPA requires an analysis of how each alternative meets or achieves the purposes of the act (section 101[b]). Each alternative analyzed in a NEPA document must be assessed as to how it meets the following purposes:

1. fulfill the responsibilities of each generation as trustee of the environment for succeeding generations
2. ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings
3. attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences
4. preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice
5. achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities
6. enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources (42 USC 4331)

The Council on Environmental Quality has promulgated regulations for federal agencies' implementation of NEPA (40 CFR 1500–1508). Section 1500.2 states that federal agencies shall, to the fullest extent possible, interpret and administer the policies, regulations, and public laws of the United States in accordance with the policies set forth in the act (sections 101[b] and 102[1]); therefore, other acts and NPS policies are referenced as applicable in the following discussion.

### ALTERNATIVE 1 (NO ACTION)

The no-action alternative (alternative 1) does not provide as much resource protection as the other alternatives and existing impacts would be expected to persist or escalate over time. Continuation of the widespread and relatively unregulated motorized boating in the park would continue to result in continued or increased resource degradation, visitor conflicts, and safety concerns over time as visitation increases. Thus, the no-action alternative would not meet purpose 5 as well as alternative 5 to achieve a balance between population and resource use because extractive resource use would continue to degrade the ecosystem. There would also continue to be few locations, on land, water, or underwater managed so as to provide opportunities for visitors who wish to experience natural ecosystems without extractive activities, natural soundscapes, and solitude. Thus, the no-action alternative would not meet purpose 3 as well as alternative 5 to attain the widest range of beneficial uses of the environment without degradation and purpose 4 to preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice.

### ALTERNATIVE 6

This alternative would provide additional visitor use opportunities and facilities, but such developments have the potential for adverse impacts on the environment. In most park waters, including the sensitive coral reef environments in the southeast corner of the park, some impacts to fish and submerged aquatic communities would persist due to the continuation of fishing and related marine debris as well as boating impacts compared to

alternatives that include a marine reserve zone. These impacts would potentially continue to deplete important park resources, albeit at a slower rate than the no-action alternative, and so do not meet purpose 1 as well as alternative 5 to fulfill the responsibilities of each generation as trustee of the environment for succeeding generations. Furthermore, the continuation of fishing and associated marine debris does not meet purpose 2 as well as alternative 5 to ensure safe, healthful, productive, and esthetically and culturally pleasing surroundings for all Americans. And while some important resources would be targeted for preservation efforts under this alternative and fishing as a traditional activity would be continued, many submerged cultural resources and important submerged aquatic habitats would continue to be impacted by fishing, marine debris, and boating and so it does not meet purpose 3 as well as alternative 5 to preserve important historic, cultural, and natural aspects of our natural heritage.

#### **ALTERNATIVE 7**

This alternative would provide additional visitor use opportunities and facilities, but such developments have the potential for

adverse impacts on the environment. In most park waters, including the sensitive coral reef environments in the southeast corner of the park, some impacts to fish and submerged aquatic communities would persist due to the continuation of fishing and related marine debris as well as boating impacts compared to alternatives that include a marine reserve zone. These impacts would potentially continue to deplete important park resources, albeit at a slower rate than the no-action alternative, and so do not meet purpose 1 as well as alternative 5 to fulfill the responsibilities of each generation as trustee of the environment for succeeding generations. Furthermore, the continuation of fishing and associated marine debris does not meet purpose 2 as well as alternative 5 to ensure safe, healthful, productive, and esthetically and culturally pleasing surroundings for all Americans. And while some important resources would be targeted for preservation efforts under this alternative and fishing as a traditional activity would be continued, many submerged cultural resources and important submerged aquatic habitats would continue to be impacted by fishing, marine debris, and boating and so it does not meet purpose 3 as well as alternative 5 to preserve important historic, cultural, and natural aspects of our natural heritage.

## **SUMMARY OF ALTERNATIVES AND IMPACTS**

A series of tables follows as a quick reference to summarize the alternatives (table 4) as well as conclusions regarding impacts of each alternative (tables 5 and 6).

**TABLE 4. SUMMARY OF ALTERNATIVES**

Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6 (preferred)	Alternative 7
<b>General Theme / Concept</b>						
<p>Alternative 1 (no action) would continue current management trends to provide visitor opportunities and preserve resources under current laws, policies, and plans.</p> <ul style="list-style-type: none"> <li>– Emphasize high level of access, with recreational opportunities throughout park.</li> <li>– Actively manage natural resources, activities for restoration, and recovery or maintenance of habitats and dependent species.</li> <li>– Continue cultural resources maintenance and monitoring.</li> </ul>	<p>Alternative 2 would emphasize the recreational use of the park while providing for resource protection as governed by law, policy, and resource sensitivity. This concept would be accomplished by providing the highest level of services, facilities, and access to specific areas of the park of all the action alternatives.</p> <ul style="list-style-type: none"> <li>– Manage for a relatively high level of new or enhanced access, visitor services, and facilities at some locations.</li> <li>– Minimally modify natural resources for increased visitor access and development.</li> </ul>	<p>Alternative 3 would allow all visitors a full range of experience opportunities throughout most of the park and use a permit system to authorize a limited number of visitors to access some areas of the park. There would be limited access to other park areas to provide an uncrowded experience, and small areas would be set aside that prohibit visitor access to protect sensitive resources and allow wildlife a respite from human contact.</p> <ul style="list-style-type: none"> <li>– Add a relatively high level of new or enhanced access, visitor services, and facilities at some locations.</li> <li>– Relative to alternatives 1 and 2, provide additional opportunities to experience uncrowded areas and natural sounds.</li> <li>– Designate a marine reserve to provide visitors the opportunity to experience a healthy, natural, and ecologically intact reef community.</li> </ul>	<p>Alternative 4 would emphasize strong natural and cultural resource protection while providing a diversity of visitor experiences. Some areas would be closed to visitors to protect sensitive resources and allow wildlife a respite from human contact. Other areas would be reserved for limited types of visitor use.</p> <ul style="list-style-type: none"> <li>– Provide moderate level of new or enhanced access, visitor services, and facilities.</li> <li>– Compared to alternatives 1, 2, and 3, increase opportunities to experience natural sounds.</li> <li>– Create a combination of increased noncombustion engine use and slow speed zones to provide high level of resource protection.</li> <li>– Designate a marine reserve to provide visitors the opportunity to experience a healthy, natural, and ecologically intact reef community.</li> </ul>	<p>Alternative 5 would promote the protection of natural and cultural resources. This alternative would provide the highest level of resource protection while allowing the lowest level of visitor services of all the action alternatives. Visitor access and activities would be highly managed for resource protection while still enabling visitors to participate in a variety of activities.</p> <ul style="list-style-type: none"> <li>– Provide the highest level of opportunity to experience uncrowded areas and natural sounds of the action alternatives.</li> <li>– With the combination of increased noncombustion engine use and slow speed zones, provide the greatest resource protection of the action alternatives.</li> <li>– Designate the largest marine reserve (of the action alternatives) in the park to provide visitors the opportunity to experience a healthy, natural, and ecologically intact reef community.</li> </ul>	<p>Alternative 6 (preferred alternative) would emphasize strong natural and cultural resource protection while providing a diversity of visitor experiences. Some visitor activities would be restricted in certain areas to protect sensitive resources and allow wildlife a respite from human contact. Other areas would be reserved for limited types of visitor use.</p> <ul style="list-style-type: none"> <li>– Provide moderate level of new or enhanced access, visitor services, and facilities.</li> <li>– Compared to alternatives 1, 2, and 3, increase opportunities to experience natural sounds.</li> <li>– Create a combination of increased noncombustion engine use and slow speed zones to provide high level of resource protection.</li> <li>– Designate a special recreation zone where some types of fishing would be prohibited, and recreational fishing would be by special permit, and snorkeling and diving activities would be allowed.</li> </ul>	<p>Alternative 7 would emphasize strong natural and cultural resource protection while providing a diversity of visitor experiences. Some visitor activities would be restricted in certain areas to protect sensitive resources and allow wildlife a respite from human contact. Other areas would be reserved for limited types of visitor use.</p> <ul style="list-style-type: none"> <li>– Provide moderate level of new or enhanced access, visitor services, and facilities.</li> <li>– Compared to alternatives 1, 2, and 3, increase opportunities to experience natural sounds.</li> <li>– Create a combination of increased noncombustion engine use and slow speed zones to provide high level of resource protection.</li> <li>– Designate a special recreation zone with same geography and size of alternative 6 where some types of fishing would be prohibited, recreational fishing would be closed June through September, and snorkeling and diving activities would be allowed.</li> </ul>
<b>Visitor Experience</b>						
<b>Mainland</b>						
<p>Maintain current primary land-based area where visitors learn about the park and its resources and picnic, bird-watch, sightsee, and fish.</p>	<p>Similar to alternative 1 plus provide expanded opportunities to explore, sightsee, and experience natural sights and sounds in relatively remote surroundings along mangrove shoreline.</p> <p>Add a viewing platform and a boardwalk/loop trail with viewing platforms for interpreting the dwarf mangrove forest and mangrove shoreline.</p>	<p>Same as alternative 2.</p>	<p>Same as alternative 2.</p>	<p>Provide highest level of opportunities (of the action alternatives) to experience natural sounds and sights in relatively remote surroundings along <i>all</i> of the shoreline.</p> <p>Maintain current primary land-based area where visitors learn about the park and its resources and picnic, bird-watch, sightsee, and fish, and possibly upgrade visitor center boardwalk and jetty.</p>	<p>Same as alternative 2.</p>	<p>Same as alternative 2.</p>

**TABLE 4. SUMMARY OF ALTERNATIVES**

Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6 (preferred)	Alternative 7
<b>Bay and Ocean</b>						
<ul style="list-style-type: none"> <li>– With the exception of personal watercraft, keep park waters open to boats of varying sizes and power sources and a variety of activities including diving, camping, visiting shipwrecks, and recreational and commercial fishing.</li> <li>– Continue three slow speed zone for visitor safety.</li> <li>– Continue one noncombustion engine use area.</li> <li>– Legare Anchorage: Continue allowing visitors to drift fish, troll, and traverse area but not to stop or enter the water. Continue to allow commercial fishing under future special regulations, prohibit trapping.</li> </ul>	<ul style="list-style-type: none"> <li>– Keep a large percentage of park waters open to boats of varying sizes and power sources in multiuse zone (where visitors can experience wide range of activities in natural and cultural settings).</li> <li>– Include four slow speed zones.</li> <li>– Provide two noncombustion engine zones for opportunities to experience natural soundscapes.</li> <li>– Legare Anchorage: Reduce size; visitors may travel through area and fish by hook and line, but they cannot stop or enter water. Prohibit commercial fishing and trapping.</li> </ul>	<ul style="list-style-type: none"> <li>– Provide large percentage of waters in multiuse zone.</li> <li>– Include four slow speed zones.</li> <li>– Similar to alternative 2, provide two noncombustion engine zones for opportunities to experience natural soundscapes in those areas.</li> <li>– Manage two access-by-permit only zones for opportunities to experience areas with reduced congestion.</li> <li>– Legare Anchorage: Same as alternative 2.</li> <li>– Designate a marine reserve zone to provide swimmers, snorkelers and divers the opportunity to experience a healthy, natural coral reef and reduce visitor use conflicts.</li> </ul>	<ul style="list-style-type: none"> <li>– Provide large percentage of waters in multiuse zone.</li> <li>– Include three slow speed zones.</li> <li>– Provide four noncombustion engine zones for extensive opportunities to experience natural soundscapes.</li> <li>– Legare Anchorage: Same as alternative 2.</li> <li>– Designate a marine reserve zone: same as alternative 3.</li> </ul>	<ul style="list-style-type: none"> <li>– Provide moderate percentage of park waters in multiuse zone of action alternatives.</li> <li>– Include three slow speed zones. Provides the largest area covered by slow speed zones of all action alternatives.</li> <li>– Provides highest area of noncombustion engine zone areas for opportunities to experience natural soundscape.</li> <li>– Provides largest area of access-by-permit zone area of all action alternatives for opportunities to experience reduced congestion areas.</li> <li>– Legare Anchorage: Same as alternative 2.</li> <li>– Designate largest marine reserve zone.</li> </ul>	<ul style="list-style-type: none"> <li>– Provide large percentage of waters in multiuse zone.</li> <li>– Include three slow speed zones.</li> <li>– Provide two noncombustion engine zones for extensive opportunities to experience natural soundscapes.</li> <li>– Legare Anchorage: Same as alternative 2.</li> <li>– Designate a special recreation zone with recreational fishing by special permit to accommodate some recreational fishing while meeting the goal of providing a healthy coral reef ecosystem for a more enjoyable and diverse visitor experience.</li> </ul>	<ul style="list-style-type: none"> <li>– Provide large percentage of waters in multiuse zone.</li> <li>– Include three slow speed zones: same as alternative 6.</li> <li>– Provide two noncombustion engine zones: same as alternative 6.</li> <li>– Legare Anchorage: Same as alternative 2.</li> <li>– Designate a special recreation zone (same as alternative 6 where recreational fishing does not need a permit and is not allowed for the months of June through September).</li> </ul>
<b>Keys</b>						
<ul style="list-style-type: none"> <li>– Maintain Boca Chita, Elliott, and Adams keys as destination sites with some development (depending on key) for boaters who want to hike, picnic, camp, or sightsee.</li> <li>– Maintain relatively remote locations and self-directed activities on many remaining keys for visitor experiences.</li> </ul>	<ul style="list-style-type: none"> <li>– Similar to alternative 1 for Boca Chita, Elliott, and Adams keys, but with expanded opportunities (depending on keys) for hiking, camping, canoeing, kayaking, and increased docking capacity.</li> <li>– Porgy Key: Provide improved access to and interpretation of Jones Homestead.</li> <li>– Provide opportunities to experience natural sounds, sights, and systems in uncrowded, relatively remote surroundings on remaining park keys except Swan, West Arsenicker, and Arsenicker keys.</li> </ul>	<ul style="list-style-type: none"> <li>– Similar to alternative 2, except Elliott Key trail would only be improved and there would be no additional campsites on Elliott Key.</li> </ul>	<ul style="list-style-type: none"> <li>– Same as alternative 3, except reduce area of visitor services/park administration zone on Boca Chita, Elliott, Adams, and Porgy keys compared to alternatives 2 and 3. Other areas similar to alternative 1.</li> </ul>	<ul style="list-style-type: none"> <li>– Same as alternative 4 for Boca Chita and Adams keys; eliminate visitor services/park administration zone on Porgy Key and discourage visitation at Jones Homestead. Designate Elliott Key as a nature observation zone.</li> <li>– Visitors experience natural sounds, sights, and systems in relatively remote surroundings on Porgy and Elliott keys.</li> </ul>	<ul style="list-style-type: none"> <li>– Same as alternative 2 and 3 except reduce area of visitor services/park administration zone on Boca Chita, Elliott, Adams, and Porgy keys compared to alternatives 2 and 3.</li> <li>– Featherbed keys and Jones Lagoon managed for noncombustion engine use.</li> <li>– Other keys similar to alternative 4 managed for sensitive resource zone, slow speed zone, and nature observation zone to provide opportunities to experience natural sounds, sights, and sounds in uncrowded, relatively remote surroundings.</li> </ul>	<ul style="list-style-type: none"> <li>– Same as alternative 6.</li> </ul>
<b>Mainland Shoreline</b>						
Maintain the mangrove habitat and the fresh and saltwater wetlands in their natural state.	Add a viewing platform and a boardwalk/loop trail with viewing platforms for interpreting the dwarf mangrove forest and mangrove shoreline.	Same as alternative 2.	Same as alternative 2.	Manage all of mainland to support sustainable, fully functioning, natural systems except zone encompassing visitor center and headquarters at Convoy Point.	Same as alternative 2.	Same as alternative 2.

**TABLE 4. SUMMARY OF ALTERNATIVES**

Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6 (preferred)	Alternative 7
<b>Resource Management</b>						
<b>Bay and Ocean</b>						
<ul style="list-style-type: none"> <li>– Keep existing three slower speed areas to protect manatee in two areas (along mainland shoreline; west of the north part of Elliott Key; and the area of Caesar Creek in front of the Adams key dock).</li> <li>– Keep existing noncombustion engine use area in Jones Lagoon.</li> <li>– Legare Anchorage: Maintain protection for submerged cultural resources (2,360 acres).</li> <li>– Manage the Fowey Lighthouse in accordance with the Secretary of the Interior’s Standards for the Treatment of Historic Properties and complete repairs that will stabilize the structure, protect it from further deterioration, and potentially provide for visitor access in the future.</li> </ul>	<ul style="list-style-type: none"> <li>– Designate four slow speed zones.</li> <li>– Designate two noncombustion engine use zones</li> <li>– Legare Anchorage: Maintain protection for submerged cultural resources (663 acres).</li> <li>– Manage the Fowey Lighthouse the same as alternative 1.</li> </ul>	<ul style="list-style-type: none"> <li>– Designate four slow speed zones.</li> <li>– Designate two noncombustion engine use zones to protect shallow water habitat along shoreline and around south-central keys — similar to alternative 2.</li> <li>– Legare Anchorage: Same as alternative 2.</li> <li>– Designate access-by-permit zone to limit damage to resources.</li> <li>– Designate marine reserve zone and manage it for healthy, natural coral reef, with large and numerous tropical reef fish and an ecologically intact reef system.</li> <li>– Manage the Fowey Lighthouse the same as alternative 1.</li> </ul>	<ul style="list-style-type: none"> <li>– Designate three slow speed zones.</li> <li>– Designate four noncombustion engine use zones to protect shallow water habitat.</li> <li>– Legare Anchorage: Same as alternative 2.</li> <li>– Designate Marine Reserve Zone same as Alternative 3</li> <li>– Manage the Fowey Lighthouse the same as alternative 1.</li> </ul>	<ul style="list-style-type: none"> <li>– Designate three slow speed zones.</li> <li>– Represents largest area of protection by slow-speed zones of all action alternatives.</li> <li>– With four Noncombustion Engine Use Zones, provide highest level of protection for shallow water habitat of all action alternatives.</li> <li>– Legare Anchorage: same as alternative 2.</li> <li>– Designate largest access-by-permit zone of all action alternatives in the northwest part of the park.</li> <li>– Designate largest marine reserve zone of all.</li> <li>– Manage the Fowey Lighthouse the same as alternative 1.</li> </ul>	<ul style="list-style-type: none"> <li>– Designate three slow speed zones.</li> <li>– Designate two Noncombustion Engine Use Zones to protect shallow water habitat.</li> <li>– Legare Anchorage: Same as alternative 2.</li> <li>– Manage the Fowey Lighthouse the same as alternative 1.</li> </ul> <p>Designate a special recreation zone with recreational fishing by special permit to accommodate some recreational fishing while meeting the goal of providing a healthy coral reef ecosystem for a more enjoyable and diverse visitor experience.</p>	<ul style="list-style-type: none"> <li>– Designate three slow speed zones.</li> <li>– Designate four Noncombustion Engine Use Zones to protect shallow water habitat.</li> <li>– Legare Anchorage: Same as alternative 2.</li> <li>– Manage the Fowey Lighthouse the same as alternative 1.</li> </ul> <p>Designate a special recreation zone (same as alternative 6 where recreational fishing does not need a permit and is allowed for the months of June through September.</p>
<b>Keys</b>						
<ul style="list-style-type: none"> <li>– Continue to close four keys to visitation for protection of exceptional and sensitive resources—Arsenicker, West Arsenicker, Soldier, and Sands keys.</li> <li>– Continue to manage remaining keys for varied visitor access and recreational use.</li> </ul>	<ul style="list-style-type: none"> <li>– Close three keys to visitation for resource protection—Arsenicker, West Arsenicker, and Swan.</li> <li>– Possibly minimally modify resources on Boca Chita, Elliott, Adams, and Porgy keys to allow for visitor access and recreation.</li> <li>– Make current hiking trail universally accessible . Develop primitive trails. Establish primitive.</li> <li>– Provide higher level of historic structure reuse on Boca Chita Key than in alternative 1.</li> <li>– Manage southern cluster of keys and Sands and Ragged keys to support sustainable, fully functioning, natural systems.</li> </ul>	Same as alternative 2, but no additional campsites on Elliott Key.	<ul style="list-style-type: none"> <li>– Close three keys as in alternative 2.</li> <li>– Manage Boca Chita, Elliott, Adams, and Porgy keys for visitor access and recreation, except manage larger areas as multiuse zone to limit development.</li> <li>– Manage remaining park keys as in alternative 2.</li> </ul>	<ul style="list-style-type: none"> <li>– Close three keys as in alternative 2.</li> <li>– Manage Boca Chita and Adams keys as in alternative 4.</li> <li>– Manage majority of Elliott and Porgy keys to support sustainable, fully functioning, natural systems.</li> <li>– Manage southern cluster of keys and Sands and Ragged keys as in alternative 2.</li> </ul>	<ul style="list-style-type: none"> <li>– Close three keys as in alternative 2.</li> <li>– Manage Boca Chita, Elliott, Adams, and Porgy keys for visitor access and recreation, except manage larger areas as multiuse zone to limit development.</li> </ul> <p>Manage remaining park keys as in alternative 2.</p>	<ul style="list-style-type: none"> <li>– Close three keys as in alternative 2.</li> <li>– Manage Boca Chita, Elliott, Adams, and Porgy keys for visitor access and recreation, except manage larger areas as multiuse zone to limit development.</li> </ul> <p>Manage remaining park keys as in alternative 2.</p>
<b>Facilities</b>						
<b>Mainland</b>						
Maintain visitor services and infrastructure at or near current levels with the visitor center, designated paths, boardwalk, and jetty.	Add a viewing platform and a boardwalk/loop trail with viewing platforms for interpreting the dwarf mangrove forest and mangrove shoreline. Improve safety and accessibility of existing jetty and boardwalk, possibly with shade	Same as alternative 2.	Same as alternative 2.	Same as alternative 1.	Same as alternative 2.	Same as alternative 2.

**TABLE 4. SUMMARY OF ALTERNATIVES**

Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6 (preferred)	Alternative 7
Continue limited visitor contact facilities outside the park to provide contact information and signs at public sites.	structures and benches.  Increase visitor contact points outside the park through kiosks, signs, possibly educational programs and NPS personnel established at marinas and state/local parks through partnerships.	Visitor contact points outside the park: same as alternative 2.	Visitor contact points outside the park: Same as alternative 2	Visitor contact points outside the park: Same as alternative 2.	Visitor contact points outside the park: Same as alternative 2	Visitor contact points outside the park: Same as alternative 2
<b>Keys</b>						
Existing facilities:  – Boca Chita: Dock, kiosks, harbor, historic structures, picnic areas, restrooms, primitive campground, and maintenance building. Possibly reuse some historic structures for park operations. – Elliott: Dock, marina, trails, picnic and restroom facilities, environmental education center, maintenance facility, ranger station and residences. – Adams: Dock, trail, day use picnic pavilion, restroom facilities, wayside exhibits, ranger residences, and maintenance facility. – Porgy: Remains of historic dock, Jones home site, no interpretation. – Manage the Fowey Lighthouse in accordance with the Secretary of the Interior’s Standards for the Treatment of Historic Properties and complete repairs that will stabilize the structure, protect it from further deterioration, and potentially provide for visitor access in the future.	– Boca Chita: Reuse more historic structures for park operations and visitor services; add new docks; strengthen retaining wall on north side. – Elliott: Improve existing/establish new trails and enhance access; establish new primitive campsites and visitor kiosks; establish canoe launch; and possibly a food concession. Keep ranger residences. – Adams: Build new staging area for canoes/ kayaks, develop primitive campsites; improve trails, improve dock, possibly establish canoe rentals, and possibly a campers/convenience store and classroom facility. – Porgy: Improve Jones Homestead. – Manage the Fowey Lighthouse the same as alternative 1.	– Boca Chita: Same as alternative 2. – Elliott: Same as alternative 2 except no primitive campsites. – Adams: Same as alternative 2 except no primitive campsites. – Porgy: Same as alternative 2. – Manage the Fowey Lighthouse the same as alternative 1.	– Boca Chita: On north part continue s day use facilities, campground, and boat basin; use some historic structures for park operations/visitor services. – Elliott: Maintain existing harbor facilities and continue administrative and visitor services uses, and open small visitor contact station. Make Breezeway Loop Trail and boardwalk universally accessible. – Adams: Build new staging area for canoes/kayaks. Establish environmental education program with minimal facilities. – Porgy: Build rustic dock to improve site for visitation; stabilize Jones Homestead site and offer interpretation on site. – Manage the Fowey Lighthouse the same as alternative 1.	– Boca Chita: Same as alternative 4. – Elliott: Continue administrative and visitor services uses in existing harbor facilities. – Adams: Same as alternative 1. – Porgy: Same as alternative 1. – Manage the Fowey Lighthouse the same as alternative 1.	Same as alternative 4.  – Manage the Fowey Lighthouse the same as alternative 1.	Same as alternative 4.  – Manage the Fowey Lighthouse the same as alternative 1.

**TABLE 5. SUMMARY OF KEY IMPACTS OF IMPLEMENTING THE ALTERNATIVES**

	ALTERNATIVE 1 — NO ACTION	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	ALTERNATIVE 5	ALTERNATIVE 6 - PREFERRED	ALTERNATIVE 7
<b>Impacts on Natural Resources</b>							
Fisheries	Existing impacts on fisheries and fish habitat from boating and fishing would continue to be adverse, minor to moderate, and long term.  No new adverse impacts.	Some existing adverse impacts now occurring on fisheries and fish habitat in the park would be reduced, resulting in a long-term beneficial impact and continuation of a minor to moderate adverse impact.  No new adverse impacts.	Some ongoing adverse impacts now occurring to fisheries and fish habitat in the park would be further reduced, resulting in a long-term, beneficial impact overall. However they would be less than alternative 2, due to the marine reserve zone.  No new adverse impacts.	Same as alternative 3.	Some ongoing adverse impacts now occurring to fisheries and fish habitat in the park would be further reduced, resulting in a long-term, beneficial impact overall. However they would be less than alternative 3, due to the larger marine reserve zone.  No new adverse impacts.	Some ongoing adverse impacts now occurring to fisheries and fish habitat in the park would be further reduced, resulting in a long-term, beneficial impact overall. However they would be less than alternative 3, because some fishing is still allowed in special recreation zone.  No new adverse impacts.	Same as alternative 6 but with more beneficial impacts due to seasonal fishing closure.  Some impacts would be reduced in the special recreation zone resulting in a long-term, beneficial impact to fish and fish habitat.  No new adverse impacts.
Threatened and Endangered Species	Existing long-term, moderate adverse impacts on some species (sea turtles, smalltooth sawfish, and stony corals) would persist as a result of boating, fishing, and marine debris.  Existing long-term, negligible, adverse impacts on some species (manatees, crocodiles, and butterflies) would persist as a result of pre-existing habitat modifications and continued recreational use.  No new or additional impacts.	Existing long-term, moderate, adverse impacts on some species (sea turtles, smalltooth sawfish, and acroporid corals) would persist as a result of recreational activities.  Existing long-term, negligible adverse impacts on some species (manatees, crocodiles, and butterflies) would persist.  Long-term, beneficial impacts on manatees due to slow speed and noncombustion engine zones.  Proposed development that could have negligible to minor long-term, adverse impacts American crocodiles, sea turtles, and butterflies, most impacts would be mitigated.  No new or additional impacts.	Existing long-term, moderate adverse impacts on some species (sea turtles, smalltooth sawfish, and acroporid corals) would persist in some areas as a result of recreational activities.  Existing long-term, negligible adverse impacts on some species (manatees, crocodiles, and butterflies) would persist in some areas.  Long-term, beneficial impact on manatees due to slow speed and noncombustion engine zones.  Localized long-term, beneficial impact to stony corals, sea turtles, and smalltooth sawfish in marine reserve zone.  Proposed development t could have long-term, adverse, negligible impacts on habitats utilized by American crocodiles, sea turtles, and butterflies, but most impacts would be mitigated.  No new or additional impacts.	Same as alternative 3.	Same as alternative 3.	Same as alternative 3.	Same as alternative 3.
Special Status Species	Continuation of long-term, negligible adverse impacts on some state listed bird species due to disturbance by park visitors.  No new or additional impacts.	Proposed development could result in long-term, negligible, adverse impacts on various state listed species.	Same as alternative 2.	Same as alternative 2.	Same as alternative 2.	Same as alternative 2.	Same as alternative 2.

TABLE 5. SUMMARY OF KEY IMPACTS OF IMPLEMENTING THE ALTERNATIVES

	ALTERNATIVE 1 — NO ACTION	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	ALTERNATIVE 5	ALTERNATIVE 6 - PREFERRED	ALTERNATIVE 7
Terrestrial Vegetation	Existing long-term, negligible to minor, adverse impacts on terrestrial vegetation in the park would continue as a result of visitor activities.  No new or additional impacts.	Long-term, localized, negligible to minor adverse impacts associated with minor construction projects and continued or increasing visitor use.  Some construction related adverse impacts would be mitigated through project design.	Same as alternative 2.	Same as alternative 2.	Same as alternative 2.	Same as alternative 2.	Same as alternative 2.
Submerged Aquatic Communities	existing, minor to moderate, adverse impacts on submerged aquatic vegetation would continue as a result of boating, fishing, and marine debris  No new or additional impacts.	Long-term—beneficial impacts on submerged aquatic communities.  Existing, minor to moderate, adverse impacts on submerged aquatic vegetation would continue as a result of boating, fishing, and marine debris in much of the park though protective zoning would reduce those impacts in some areas.	Same as alternative 2. However benefits would be more than alternative 2 and less than alternative 5 due to the marine reserve zone.	Same as alternative 3.	Same as alternative 2. However benefits would be greatest with larger marine reserve zone.	Same as alternative 2. However benefits would be less than alternative 3 by allowing some fishing in the special recreation zone.	Same as alternative 2. However benefits would be less than alternative 3 by allowing some fishing in the special recreation zone and better than alternative 6 with a seasonal fishing closure.
Wetlands	No new or additional impacts.	Proposed development would have a long-term, minor, adverse impact on the wetlands along the mainland coast of the park, particularly the mangroves.  Short-term impacts associated with construction would continue to be adverse but minor to moderate and localized.  Long-term impacts would be mitigated through design and would be adverse but localized and minor.	Same as alternative 2.	Same as alternative 2.	Beneficial, long-term impacts to wetlands as a result of protective zoning.	Same as alternative 2.	Same as alternative 2.
Natural Soundscapes	Existing long-term, minor to moderate adverse impacts on natural soundscapes would continue as a result of persistent boat-related noise.  Existing negligible, short-term adverse impacts on natural soundscapes would continue as a result of routine park operations and maintenance activities.  No new or additional impacts.	Long-term beneficial impacts on soundscapes due to protective zoning.  Short-term negligible to minor, adverse impacts during construction existing minor to moderate adverse impacts on natural soundscapes would continue as a result of persistent boat-related noise in much of the park.  Existing negligible, short-term adverse impacts on natural soundscapes would continue as a result of routine park operations and maintenance activities.	Same as alternative 2.	Same as alternative 2.	Same as alternative 2.	Same as alternative 2.	Same as alternative 2.

**TABLE 5. SUMMARY OF KEY IMPACTS OF IMPLEMENTING THE ALTERNATIVES**

ALTERNATIVE 1 — NO ACTION	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	ALTERNATIVE 5	ALTERNATIVE 6 - PREFERRED	ALTERNATIVE 7	
<b>Impacts on Cultural Resources</b>							
Archeological Resources  (including Submerged Maritime Resources)	Localized, negligible to minor, adverse, short-term to permanent impacts on submerged and terrestrial archeological resources due to visitor use.  Beneficial impacts from ongoing survey and inventory efforts.  No new or additional impacts.  For section 106 there would be no adverse effect.	Same impacts on archeological resources as those listed under alternative 1. Although they would be subjected to greater potential risk because of expanded recreational use and increased visitor services, facilities, and access in some areas of the park.  For section 106 there would be no adverse effect.	Same impacts on archeological resources as those listed under alternative 1. Although they would be subjected to minor to moderate potential adverse impact by the alternative’s provision for expanded recreational use and enhanced visitor services, facilities, and access to some areas of the park.  Beneficial impacts to submerged maritime resources in the marine reserve zone.  For section 106 there would be no adverse effect.	Same impacts on archeological resources alternative 1. Although the strong emphasis on cultural resource protection could be expected to have some additional, long-term, beneficial impacts on archeological sites.  For section 106 there would be no adverse effect.	Same as alternative 4.	Same as alternative 4.	Same impacts as described in alternative 4, though potentially there would be slightly more benefits from alternative 7 due to a slight anticipated reduction in fishing related impacts on submerged cultural resources.
Historic Structures and Buildings	Localized, long-term, beneficial and long-term negligible to minor adverse impacts due to preservation or rehabilitation undertakings, natural deterioration, and wear and tear from visitor use.  No new or additional impacts.  For section 106 there would be no adverse effect.	Same impacts on historic structures and buildings in the Boca Chita Key Historic District and at the Fowey Rocks Lighthouse as those listed under alternative 1.  Impacts on historic structures and buildings would be localized, long term to permanent, and generally beneficial.  For section 106 there would be no adverse effect.	Same as alternative 2.	Same as alternative 2.	Same as alternative 2.	Same as alternative 2.	Same as alternative 2.
Cultural Landscapes	Beneficial impacts on the landscape at the Boca Chita National Historic District, as well as other potential cultural landscapes because park properties would continue to be surveyed, inventoried, and evaluated to determine their eligibility for listing in the national register.  Short-term and long-term, minor, adverse impacts on integrity of potential cultural landscapes at popular visitor destinations would persist.  No new or additional impacts.  For section 106 there would be no adverse effect.	Same beneficial impacts on cultural landscapes as those listed under alternative 1, although expanded recreational use, enhanced visitor services, facilities, and access, and increased development could have some minor, adverse, long-term impacts on the integrity of the park’s potential cultural landscapes.  For section 106 there would be no adverse effect.	Same as alternative 2.	Same as alternative 2.	Same as alternative 2.	Same impacts on the park’s cultural landscapes as those listed under alternative 1, although the emphasis on natural resource preservation, as well as protection of significant cultural resources, could be expected to have some additional long-term, beneficial impacts.  For section 106 there would be no adverse effect.	Same impacts as described in alternative 6, though potentially there would be slightly more benefits from alternative 7 due to a slight anticipated reduction in fishing related impacts on cultural landscapes.

TABLE 5. SUMMARY OF KEY IMPACTS OF IMPLEMENTING THE ALTERNATIVES

ALTERNATIVE 1 — NO ACTION		ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	ALTERNATIVE 5	ALTERNATIVE 6 - PREFERRED	ALTERNATIVE 7
<b>Impacts on Visitor Experience</b>							
	Continued speed limitations would have negligible, long-term, adverse impacts on current visitor use patterns or opportunities.  Potential for increased crowding and conflict resulting in increased short-term, minor to moderate, adverse impacts.  Lack of visitor services and facilities to support access to park waters and keys would continue to result in long-term, minor to moderate, adverse impacts to visitors.  No new or additional impacts.	Additional speed limits and new noncombustion engine requirements would be a long-term, minor, adverse impact on some visitors.  Long-term, beneficial impacts due to zoning to reduce conflicts, improve safety, and improve diversity of visitor opportunities.  Long-term, beneficial impacts due to upgrades of visitor services and facilities.	Impacts in most of the park would be the same as alternative 2.  Establishment of a marine reserve zone would result in beneficial impacts to snorkelers and divers, minor to moderate adverse impacts to visitors who formerly fished in the marine reserve zone, and beneficial impacts to visitors who fish outside the marine reserve zone.	Same as alternative 3.	Additional slow speed zones, new noncombustion engine use zones, a new access-by-permit zone, and a large marine reserve zone would be a long-term, adverse impact to some visitors.  Marine reserve zone would result in beneficial impacts to snorkelers and divers, minor to moderate adverse impacts to visitors who formerly fished in the marine reserve zone, and beneficial impacts to visitors who fish outside the marine reserve zone.	Additional speed limitations and new noncombustion engine use zones would be a long-term, minor to moderate, adverse impact to some visitors.  Long-term beneficial impacts due to zoning to reduce conflicts, improve safety, and improve diversity of visitor opportunities as well as upgrades in in visitor information, services, and facilities.  Long-term adverse and beneficial impacts would occur to different visitor groups from implementing the special recreation zone with fishing permit requirements.	Same as alternative 6.
<b>Impacts on Park Operations and Facilities</b>							
	Continuing, long-term, moderate adverse impacts on park operations and facilities due to unmet operational needs.  No new or additional impacts.	Short-term and long-term, minor to moderate, adverse impacts on park operations and facilities.	Same as alternative 2.	Same as alternative 2.	Same as alternative 2.	Same as alternative 2. However short-term and long-term, major, adverse impacts on park operations would be exacerbated due to additional capacity needed to implement the special recreation zone and associated permit system.	Same as alternative 2. However, existing long-term, moderate, adverse impacts on park operations would be exacerbated due to additional capacity needed to implement the special recreation zone with seasonal fishing closure.
<b>Impacts on the Socioeconomic Environment</b>							
	Existing contributions to the local and regional economies would continue to be long-term and beneficial.  No new or additional impacts.	Short-term and long-term beneficial economic impacts in the region.	Same as alternative 2.	Long-term negligible adverse impact and short-term and long-term beneficial impacts on the regional economy.	Same as alternative 4.	Same as alternative 4.	Same as alternative 4.

TABLE 6. THREATENED AND ENDANGERED SPECIES IMPACT DETERMINATIONS

Species	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6 (preferred)	Alternative 7
<b>Florida manatee</b> ( <i>Trichechus manatus latirostris</i> )	No effect	May affect, not likely to adversely affect (NLAA)	NLAA	NLAA	NLAA	NLAA	NLAA
<b>Sea turtles</b> ( <i>Caretta caretta</i> , <i>Chelonia mydas</i> , <i>Lepidochelys kempii</i> , <i>Eretmochelys imbricata</i> , and <i>Dermochelys coriacea</i> )	May affect, likely to adversely (LAA) effect on three species	LAA	LAA	LAA	LAA	LAA	LAA
<b>American crocodile</b> ( <i>Crocodylus acutus</i> )	No effect	NLAA	NLAA	NLAA	NLAA	NLAA	NLAA
<b>Smalltooth sawfish</b> ( <i>Pristis pectinata</i> )	LAA	LAA	LAA	LAA	LAA	LAA	LAA
<b>Schaus swallowtail butterfly</b> ( <i>Heraclides aristodemus ponceanus</i> )	No effect	NLAA	NLAA	NLAA	NLAA	NLAA	NLAA
<b>Miami blue butterfly</b> ( <i>Cyclargus thomasi bethunebakeri</i> )	No effect	NLAA	NLAA	NLAA	NLAA	NLAA	NLAA
<b>Stony corals</b> (staghorn coral, <i>Acropora cervicornis</i> ; elkhorn coral, <i>A. palmata</i> ; boulder star coral, <i>Montastraea annularis</i> ; mountainous star coral, <i>M. faveolata</i> ; star coral, <i>M. franksi</i> ; pillar coral, <i>Dendrogyra cylindrus</i> ; rough cactus coral, <i>Mycetophyllia ferox</i> ; elliptical star coral, <i>Dichocoenia stokesii</i> ; Lamarck sheet coral, <i>Agaricia lamarcki</i> )	LAA	LAA	LAA	LAA	LAA	LAA	LAA

