

FINDING OF NO SIGNIFICANT IMPACT

Restore Visitor Access to Santa Rosa Area, Santa Rosa Island

GULF ISLANDS NATIONAL SEASHORE

Background and Need for the Project

The National Park Service (NPS) prepared a draft Environmental Assessment (EA) to assess impacts that could occur as a result of the reconstruction and repair J. Earle Bowden Way at Gulf Islands National Seashore (GUIS). J. Earle Bowden Way is a segment of NPS-owned and maintained road on Santa Rosa Island, Escambia County, Florida. The road extends approximately 7.5 miles between Pensacola Beach and Navarre Beach. This road has been in place for over 50 years under State, and then Federal, ownership.

Access to the Santa Rosa Area of the park has been severely curtailed for almost 3 years due to the destruction of large portions of J. Earle Bowden Way by Hurricane Ivan in September 2004. The road was repaired and briefly re-opened in July 2005, but soon closed again due to damage from subsequent wind storms (specifically, Tropical Storm Arlene, and Hurricanes Cindy and Dennis). Thus, except for a brief period in 2005, the roadway has been closed to vehicular traffic since September 2004.

The purpose of this action is to restore public access to the Santa Rosa Area to pre-Hurricane Ivan levels. The need exists to restore full access to this area in order to provide access for the visiting public to enjoy, better understand, and appreciate barrier island ecology and vistas. The GUIS is the most visited of all the national seashores and among the top ten most visited units in the National Park System.

The NPS, in cooperation with the Federal Highway Administration, has decided to reconstruct and repair J. Earle Bowden Way within the road footprint and alignment that existed prior to the most recent storm damage in July 2005. No hardened structures or armoring will be used to reinforce the road. However, damaged and missing portions of the road will be designed and rebuilt in such a way as to permit full vehicular access. The rebuilt road sections may be more vulnerable to future damage, since low-cost construction designs (described below) will be implemented in these areas to achieve a sustainable road surface.

The purpose of this document is to record the decision of the NPS and Federal Highway Administration and to declare a Finding of No Significant Impact (FONSI) pursuant to the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act Of 1969 (NEPA).

Alternatives Considered

The NPS considered three alternatives in the Environmental Assessment process: a “no action” alternative and two action alternatives. Brief descriptions of these alternatives are provided below. The alternatives are described in more detail in the draft EA.

Alternative A (no action): J. Earle Bowden Way would be left largely in its present, damaged condition. The NPS would make an effort to remove asphalt debris. Public access to the Santa Rosa Area of GUIs would be solely by foot, bicycle, or private watercraft. The customary evacuation route between Pensacola Beach and Navarre Beach, Florida would remain inaccessible and non-functional during times of emergency.

Alternative B: Under Alternative B, J. Earle Bowden Way would be reconstructed in a widened corridor that generally follows the northerly alignment approved in January 2005. A sewer line, phone and electric lines would be re-installed alongside the road to Opal Beach. The overall road corridor would be approximately 160 feet wide. Alternative B would allow the J. Earle Bowden Way to be rebuilt between Pensacola Beach and Navarre Beach, while interfering as little as possible with natural processes. No hardened road armoring would be constructed under this alternative. Natural processes such as overwash would be minimally impeded, short of what would occur were there no road at all. Two road segments totaling 1.57 miles would be realigned. In one location it would be necessary to breach an active, growing dune in order to achieve greater distance from the shoreline.

Alternative C: Alternative C would follow the same alignment and adopt the same road/utility design as Alternative B, but in strategic locations it would use sand berms and buried beach armoring to reinforce the roadway in anticipation of future storm damage. Specifically, Alternative C calls for the use of a mix of sand berms, geoweb mattresses, articulated concrete block, and widened outside shoulders (asphalt aprons) in order to minimize washouts. These would be placed at strategic locations only. All told, approximately 2.42 miles of protective armoring, or 32 percent of the ~7.5 mile roadway, are contemplated under this alternative. The purpose of these hardened protection measures would be to provide erosion control by reducing scour on the roadway slopes during storm events, thereby reducing the possibility of roadway damage. The total width of the road corridor, including protective sand berms and armoring, would be approximately 250 feet. This is approximately 90 feet wider than the pre-existing footprint from 2005. Except for the sand berm and buried armoring (i.e., geoweb mattresses, articulated concrete block, and asphalt aprons), this alternative is a replication of Alternative B.

Alternative C was the NPS’ preferred alternative in the draft EA. This alternative was preferred because it was a compromise among engineering considerations (i.e., reinforcement of the roadbed), fiscal constraints, and the mission of the NPS to protect the natural processes of this dynamic barrier island.

Selected Alternative

After additional review of the alternatives and consideration of comments received from the public, various agencies, and interested stakeholders, the NPS has decided not to implement the preferred alternative (Alternative C) from the draft EA. Instead, the NPS has chosen a revised version of Alternative B as the selected alternative. This alternative has been selected because it has lower construction costs and fewer adverse environmental impacts than either Alternative C or the original Alternative B.

Under revised Alternative B, the NPS will rebuild the damaged portions of J. Earle Bowden Way using the design of the existing footprint, i.e., two-lane roadway, with 5-foot paved shoulders to accommodate bicyclists. The road will *not* adopt the wider footprint and realigned sections called for in the original Alternative B. In addition, under revised Alternative B the repaired/ reconstructed J. Earle Bowden Way will follow the alignment that existed as of July 2005, the date the road was last open for public use. It should be noted that the selected route, using the existing footprint and with no realignment, is identical to the route selected for the 2005 repairs to the roadway. See FONSI dated January 6, 2005.

Repair of damaged sections will be accomplished using a 6-inch cement-stabilized-sand subbase, with a 1- to 1.5-inch asphaltic concrete surface. The cement stabilized sand will consist of semi-hardened mixture of sand and cement. Compacted sand-cement, often referred to as simply sand-cement, is a mixture of sand and calculated amounts of portland cement and water that are compacted to a high density. The result is a rigid slab having moderate compressive strength and resistance to the disintegrating effects of wetting and drying and freezing and thawing.

As the road is repaired, utilities will be re-installed alongside the road to Opal Beach, including sewer, water, phone, and electric lines. Most of the reconstruction activities will take place from October 2007 to April 2008. Finishing work such as road striping and signage may extend into July 2008.

Revised Alternative B will allow J. Earle Bowden Way to be repaired between Pensacola Beach and Navarre Beach at relatively low cost, while interfering as little as possible with natural processes. No hardened road armoring will be constructed under this alternative. In some places sand may have to be imported in order to create new roadbed. Any imported sand would be subjected to strict quality assurance and quality control measures to assure compatible grain size and color as the naturally occurring substrate. On the whole, however, natural processes such as overwash will be minimally impeded, short of what would occur were there no road at all.

Mitigation and Minimization Measures of the Selected Alternative

Care has been taken to assure as little damage occurs to the natural setting as possible; for example, any needed fill will *not* be taken from sands adjacent to the road prism, the

island's sand budget will be maintained, and fill will be from compatible sources. Only enough natural material (sand) necessary to accommodate the needed roadway elevation and fill will be introduced. The remainder of the overwash areas will be allowed to accrete and fill in by natural means. No permanent structural devices will be utilized or installed, such as head walls, culverts, bridges, or other devices common to road construction. To mitigate the effects of this alternative on threatened and endangered species, speed limits will be controlled and adjusted as necessary, particularly during the nesting season.

To deal with the problem of "lag" (i.e., foreign material on the beach that impedes the free movement of sand), the road contractor will be required to remove all asphalt (brick-size and above) in non-vegetated areas along the road corridor, as well as those former road sections now located in the surf. The NPS will subsequently filter non-vegetated sand to remove smaller (brick size and below) pieces of asphalt.

In order to mitigate and minimize potential impacts to natural and cultural resources during construction, contractor employees will be instructed on the sensitivity of the general environment and their activities will be monitored by NPS staff. Corridors for construction vehicle movement will be established and defined on the ground. No work will be done during night time hours. Work outside the road prism will be completed before or after shore bird nesting season in early April.

Additional "Conservation Measures" for protected species affected by this project are listed in a letter dated May 22, 2007, from Janet Mizzi, Deputy Field Supervisor, United States Fish and Wildlife Service (USFWS), to Jerry Eubanks, Superintendent, GUIIS (copy attached). All of the Conservation Measures identified by USFWS are hereby incorporated by reference in this FONSI.

Alternatives Considered but Dismissed

The following alternatives were considered by the project team but were dismissed from further analysis as being unfeasible:

- *Land bridge, with some realignment and protection measures.* This alternative would involve reconstructing J. Earle Bowden Way on pilings for the length of the island. It was dismissed due to being cost prohibitive, and because of the impacts that individual pilings would have on physical dynamics and natural erosive processes.
- *Use of alternative road surfacing materials.* This alternative would involve reconstructing J. Earle Bowden Way using shell, clay, or similar material as has been done in places at Assateague Island National Seashore. This alternative was dismissed because desired road speeds would not be achievable with these materials. In addition, the use of alternative materials would result in high life cycle costs, high maintenance costs, introduction of foreign materials (clay) to the local environment, and possible scattering of shell debris due to road length and intensity of use.

Environmentally Preferred Alternative

Of the alternatives described above, Alternative A (no action) was identified as environmentally preferred in the draft EA. The environmentally preferred alternative is determined by applying the criteria stated in NEPA, which is guided by Council on Environmental Quality (CEQ) regulations. CEQ regulations provide direction that “[t]he environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA’s Section 101(b). Generally this means the alternative which causes the least damage to the biological and physical environment. It also means the alternative that best protects, preserves, and enhances historic, cultural, and natural resources.” This includes alternatives that:

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- Assure for all generations safe, healthful, productive, and esthetically and culturally pleasing surroundings;
- Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
- 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;
- Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life’s amenities; and
- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Alternative A is the environmentally preferred alternative because it would cause the least damage to critical nesting habitat for sea turtles and shorebirds. It also would avoid damage to nascent dune and swale structures. However, Alternative A does not meet the objective of providing public access to GUIs. The selection of revised Alternative B is based on the need to provide public access while interfering as little as possible with natural shoreline processes. Revised Alternative B would have fewer adverse environmental impacts than the original Alternative B because it would be constructed on a narrower footprint and within the pre-existing alignment. Unlike the original Alternative B, no dunes would be breached. Revised Alternative B would also have fewer adverse environmental impacts than Alternative C because it would forego the use of hardened structures or berms to protect the roadway. Building the road without these structures would allow shoreline processes to proceed relatively unimpeded. The selected alternative would thus achieve a balance between resource protection and public access.

Why the Selected Alternative will not have a Significant Effect on the Human Environment

Consideration of the effects described in the draft EA, and a finding that they are not significant, is a necessary and critical part of this FONSI, as required by 40 CFR §1508.13. Significance criteria are defined in 40 CFR § 1508.27. These criteria direct NPS to consider direct, indirect, and cumulative impacts of the proposed action, as well as the context and intensity of impacts.

Context. This measure of significance considers the setting within which an impact was analyzed in the draft EA, such as the affected region, society as a whole, affected interest, and/or a locality. The selected alternative affects only the immediate local area, in terms of resources, employees, and/or visitors. Therefore, any possible impact is limited to this level of least significance.

Intensity. This measure of significance refers to the severity of impacts, which may be both beneficial and adverse, and considers measures that will be applied to minimize or avoid impacts. As directed by 40 CFR § 1508.27, intensity is evaluated by considering the following factors:

1. Impacts that may be both beneficial and adverse. The selected alternative will have no or negligible impacts on air quality, water resources, archeological resources, cultural landscapes, ethnographic resources, lightscape management, or environmental justice. Contrary to what was stated in the draft EA, no wetlands will be affected by the proposed repair of J. Earle Bowden Way. Investigations subsequent to issuance of the draft EA indicate that no wetlands are present along the existing alignment. The selected alternative is not likely to adversely affect any special status species, including federally-listed threatened or endangered species. Impacts to geology and topography, soils, vegetation, and wildlife will be minor, long-term, and adverse. Moreover, these impacts will be less than those that would occur under either original Alternative B or Alternative C (see discussion of the Environmentally Preferred Alternative above). Impacts to the socioeconomic environment are likely to be moderate, long-term, and beneficial. Impacts to park operations and visitor use and experience will be major, long term, and beneficial.

2. Degree of Effect on Public Health and Safety. Restoration of the roadway will allow visitors to once more obtain safe access to GUIs. It will also restore a traditional hurricane evacuation route for persons living in Navarre Beach and Pensacola Beach. The selected alternative will thus have important long-term benefits for public health and safety.

3. Unique Characteristics of the Geographic Area Such as Proximity to Historic or Cultural Resources, Park Lands, Prime Farmland, Wetlands, Wild and Scenic Rivers, or Ecologically Critical Areas. Lands at GUIs contain ecologically critical wildlife habitat, wetlands, and archaeological sites. Through careful location and alignment of the existing roadway, these unique characteristics will be avoided. The selected alternative

will follow the existing alignment and stay within the existing footprint. Moreover, measures will be implemented to mitigate and avoid impacts to transient or variable values that may exist or could occur, such as birds, emergent vegetation, and inadvertent contact with previously unknown archaeological resources (see discussion of mitigation measures above).

4. Degree to Which Effects on the Quality of the Human Environment Are Likely to be Highly Controversial. GUIIS received 15 comments objecting to Alternative C and 6 comments suggesting another approach to restoring access to Santa Rosa Island. Many of those objecting to Alternative C were experts in the field of coastal geomorphology. Of those objecting to the former preferred alternative, a number suggested that Alternative B would have much less impact on coastal geomorphic processes and would be less costly. Having considered these comments, the NPS has selected a revised version of Alternative B. The selected alternative is not likely to be highly controversial.

5. Degree to Which the Possible Effects on the Human Environment are Highly Uncertain or Involve Unique or Unknown Risks. The proposed action restores the status quo by repairing and reconstructing J. Earle Bowden Way within its existing footprint and along the existing alignment. The risks from this action are well known based on prior efforts to rebuild the road in an inherently shifting and unstable environment. The selected alternative attempts to compensate for these risks by using a method of repair that is low-cost and protects as much as possible the natural processes of Santa Rosa Island.

6. Degree to Which the Action Establishes a Precedent for Future Actions with Significant Effects or Represents a Decision in Principal about a Future Consideration. Nothing in the proposed action establishes a precedent that would result in significant effects in the management of GUIIS or any other areas in the National Park System. The selected alternative merely allows for the in-kind repair of a pre-existing road on Santa Rosa Island. J. Earle Bowden Way has been restored after previous storms, e.g., Hurricane Opal in 1995.

7. Whether the Action is Related to Other Actions with Individually Insignificant but Cumulative Significant Impacts. There are no significant cumulative impacts associated with the selected alternative.

8. The Degree to Which the Action May Adversely Affect Districts, Sites, Highways, Structures, or Objects Listed on National Register of Historic Places or May Cause Loss or Destruction of Significant Scientific, Cultural, or Historic Resources. The NPS, as a Federal land-holding agency, is required to locate, inventory, and nominate properties to the National Register, and to exercise caution to protect such properties under Section 106 of the **National Historic Preservation Act** (16 U.S.C. § 470). The site of the proposed action has been surveyed and examined and found to be devoid of resources eligible for listing on the National Register, or of other significant cultural or historic resources.

9. *Degree to Which the Action May Adversely Affect an Endangered or Threatened Species or Critical Habitat.* In accordance with Section 7 of the *Endangered Species Act of 1973*, as amended, (16 U.S.C. §§ 1531-1543) (ESA), the USFWS was contacted in July 2006 regarding potential impacts of the project on federally listed threatened and endangered species and their critical habitat. In November 2006, GUIIS initiated formal consultation with the USFWS. Consultation involved the potential effect of Alternative C (the former preferred alternative) on the following species: Leatherback Sea Turtle, Green Sea Turtle, Loggerhead Sea Turtle, Kemp's Ridley Sea Turtle, Piping Plover, Wilson's Plover, Snowy Plover and Santa Rosa Beach Mouse. During the course of consultation, NPS decided to choose revised Alternative B as the selected alternative. After this decision was made, the NPS determined that the proposed action was not likely to adversely affect federally-listed threatened and endangered species. By letter dated May 22, 2007, the USFWS concurred with NPS' determination, subject to NPS' adherence to Conservation Measures outlined in the letter. As noted above, those Conservation Measures are incorporated by reference in this FONSI.

10. *Whether the Action Threatens a Violation of Federal, State, or Local Environmental Law.* This action violates no Federal, State, or local environmental law. The Florida Department of Environmental Protection has reviewed this project for consistency with Florida law and has determined that, at this stage of the project, the proposed activities are consistent with the Florida Coastal Management Program. See letter dated May 21, 2007, from Sally B. Mann, Director, Office of Intergovernmental Programs to Jerry Eubanks, Superintendent, GUIIS (copy attached).

Impairment

In addition to reviewing the list of significance criteria, the NPS has determined that implementation of the proposal will not constitute an impairment to GUIIS' resources and values. This conclusion is based on a thorough analysis of the environmental impacts described in the draft EA, relevant scientific studies, and the professional judgment of the decision-maker guided by the direction in *NPS Management Policies 2006*. Because there would be no major, adverse impacts to a resource or value the conservation of which is (1) necessary to fulfill specific purposes identified in the enabling legislation of GUIIS; (2) key to the natural or cultural integrity of GUIIS; or (3) identified as a goal in GUIIS' General Management Plan or other relevant NPS planning documents, there will be no impairment of GUIIS' resources or values.

Public Involvement

The draft EA entitled *Restore Visitor Access to Santa Rosa Area, Santa Rosa Island* was released for public review on October 31, 2006. Availability of the EA was announced through local and regional news media, mailings to a list of interested parties, and GUIIS' web page. Public meetings were held in November 2006 to explain the alternatives in the draft EA and accept public comment.

A total of 67 comments were received on the draft EA. Comments were received for and against Alternative C (NPS' former preferred alternative). There were 46 comments in favor of Alternative C (or in favor of just restoring access generally), 15 comments against Alternative C, and 6 comments suggesting another approach. The only substantive comments received outlined objections to Alternative C. These comments set forth alleged deficiencies in the analysis supporting Alternative C as the NPS' preferred alternative. Based in part on consideration of these substantive comments, the NPS has chosen revised Alternative B as its selected alternative, as discussed above.

Conclusion

The selected alternative does not constitute an action that normally requires preparation of an Environmental Impact Statement (EIS). The selected alternative will not have a significant effect on the human environment. Adverse environmental impacts that could occur are minor in intensity. There are no unmitigated adverse impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, or elements of precedence have been identified. Implementation of the action will not violate any Federal, State, or local environmental protection law.

Based on the foregoing, it has been determined that there is no significant impact associated with the selected alternative. Accordingly, an EIS is not required for this project and will not be prepared.

Approved:

Patricia A. Hooks
Regional Director, Southeast Region, National Park Service

Date

Melisa Ridenouer
Division Engineer, Federal Highway Administration

Date

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GULF ISLANDS NATIONAL SEASHORE

ENVIRONMENTAL ASSESSMENT

RESTORE VISITOR ACCESS TO SANTA ROSA AREA, SANTA ROSA ISLAND

ERRATA

As required by National Park Service Director's Order No. 12, the following errata sheets respond to all substantive comments submitted on the environmental assessment (EA) entitled "Restore Visitor Access to Santa Rosa Area, Santa Rosa Island."

Substantive comments from various individuals and organizations have been consolidated and paraphrased for purposes of this document. The comments, with NPS' response, are set forth below. They follow a brief description of how the selected alternative (revised Alternative B) differs from the preferred alternative in the EA (Alternative C).

Summary of Differences: The selected alternative (Revised Alternative B) differs from Alternative C as follows:

Under revised Alternative B, the NPS will *not* adopt the wider footprint called for in Alternative C. NPS will rebuild the damaged portions of J. Earle Bowden Way using the design of the existing footprint, i.e., two-lane roadway, with 5-foot paved shoulders to accommodate bicyclists. In addition, NPS will not adopt the realigned sections called for in Alternative C. Instead, the reconstructed J. Earle Bowden Way will follow the alignment that existed as of July 2005, the date the road was last open for public use. Furthermore, NPS will not use sand berms or hardened protective measures to reinforce the road, as contemplated in Alternative C. Under revised Alternative B, the road will be replaced essentially in kind, using a low-cost approach in order to minimize the amount of investment that would be vulnerable to future washouts. Repair of damaged sections will be accomplished using a 6-inch cement-stabilized-sand subbase, with a 1- to 1.5-inch asphaltic concrete surface. The cement stabilized sand will consist of semi-hardened mixture of sand and cement.

1. Comment: The NPS concluded in January 2006 (at the Value Analysis/Choosing by Advantages workshop) that hardened structures would severely interfere with natural processes. Alternative C calls for an untested design, with a non-scientific justification, that will cause clear environmental degradation. The proposed hardened structures are essentially buried sea walls. The literature describes in some detail the adverse effects of these structures on coastal geomorphological processes. The EA does not adequately

assess the associated impacts or justify selection of an alternative (Alternative C) that incorporates hardened structures.

For the reasons described in the Finding of No Significant Impact, NPS has chosen not to implement Alternative C. The selected alternative, revised Alternative B, does not call for the use of armoring or sand berms. The road will be repaired and reconstructed in the existing footprint, on the existing alignment.

2. Comment: The EA should not have dismissed the alternative of replacing the road with alternative materials. One stated reason for dismissal – that these materials would not allow desired road speeds – is arbitrary.

The reconstruction/repair of J. Earle Bowden Way with alternative materials was dismissed because the use of such materials is not feasible. In addition to the reasons outlined in the draft EA, a local ordinance prohibits the use of clay on Santa Rosa Island. Also, the United States Fish and Wildlife Service (USFWS) has expressed concern that shell scatter and other foreign materials could have adverse impacts on threatened or endangered species. Achievement of desired road speeds on J. Earle Bowden Way is a relevant consideration given that the road is a through-route that connects two communities and is a traditional hurricane evacuation route. NPS retains the ability to regulate road speeds as needed to protect threatened and endangered species.

3. Comment: Alternative C would impede overwash and thus adversely affect piping and snowy plovers. The GUI is critical habitat for these birds from a range-wide perspective. Contrary to the EA, Alternative C would harm park resources, particularly threatened and endangered birds (piping plover and snowy plover).

As noted above, NPS has chosen not to implement Alternative C, but has selected revised Alternative B instead. The NPS has determined that revised Alternative B is not likely to adversely affect any federally-listed threatened or endangered species. The USFWS has concurred in this determination.

4. Comment: The fact that NPS will seek a policy waiver means that it is knowingly choosing the worst environmental alternative (Alternative C), in contradiction of the stated objectives of the project.

The NPS has decided not to implement Alternative C. Revised Alternative B minimizes impacts to natural shoreline processes and is consistent with NPS Management Policies.

5. Comment: The EA does not present a full range of alternatives. Examples include a cheaper sacrifice road, and bus-sized dune buggies with beach sand compatible tires that could travel on sand, not asphalt.

The EA analyzes all alternatives deemed feasible given the purpose and need for the project, as well as such factors as funding constraints, the need to connect local

communities, etc. Alternative B from the EA calls for what amounts to a sacrificial road. Revised Alternative B is a lower-cost version of the original Alternative B.

6. Comment: The preferred alternative would bisect an important dune. The analysis of impacts to this dune is not adequate. Inadequate mitigation is proposed.

The selected alternative, revised Alternative B, will not bisect any dunes. The road will be repaired and reconstructed in the existing footprint, on the existing alignment.