CHAPTER 12: PROPOSED PHASE III EARLY RESTORATION PROJECTS: FLORIDA (continued)

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12.45 Walton County Boardwalks and Dune Crossovers: Project Description A (Ed Walline Beach Access Improvements)

This project includes several components and the environmental review is done at the project level.

12.45.1 Project Summary

The proposed Walton County Ed Walline Beach Access Improvements project would improve the Ed Walline regional beach access facility in Walton County. The proposed improvements include replacing pavilions and restroom fixtures and upgrading all interior plumbing. The total estimated cost of the project is $117,700.

12.45.2 Background and Project Description

The Trustees propose to improve facilities at the Ed Walline regional beach access facility in Walton County, FL (see Figure 12-1 for general location). The objective of the Walton County Ed Walline Beach Access Improvement project is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving the facilities at the Ed Walline beach access point. The restoration work proposed includes replacing pavilions and restroom fixtures and upgrading all interior plumbing.

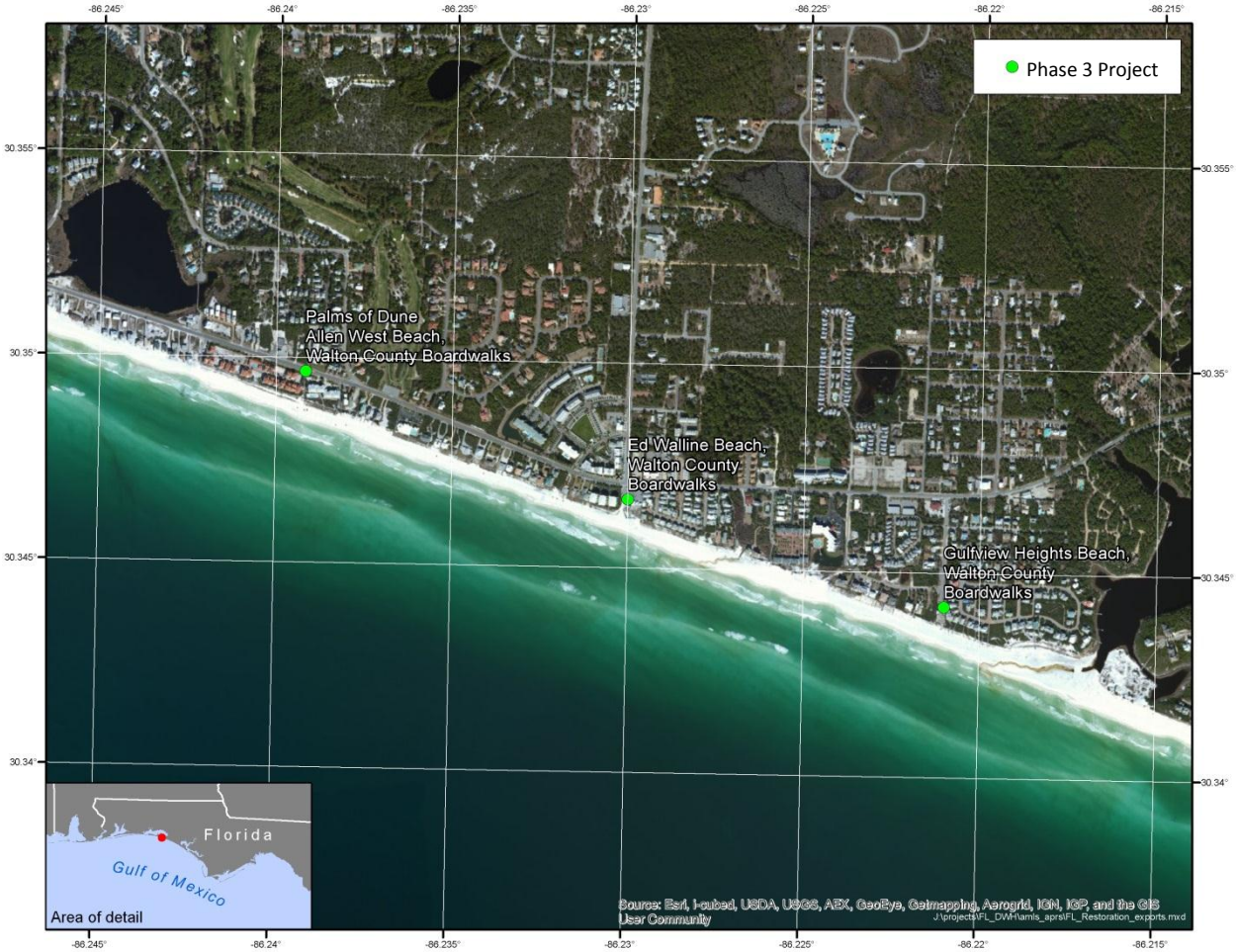


Figure 12-1. Location of Walton County Boardwalks and Dune Crossovers: Ed Walline Beach Access Improvements Project.

12.45.3 Evaluation Criteria

This proposed project meets the evaluation criteria established for OPA and the Framework Agreement. As a result of the Deepwater Horizon oil spill and related response actions, the public's access to and enjoyment of their natural resources along Florida's Panhandle was denied or severely restricted. This project would enhance and/or increase the public's use and/or enjoyment of natural resources, helping to offset adverse impacts to such uses caused by the Spill and related response actions. Thus, the nexus to resources injured by the Spill is clear. See 15 C.F.R. § 990.54(a)(2); and Sections 6a-6c of the Framework Agreement.

The project is technically feasible and uses proven techniques with established methods and documented results. Further, the project can be implemented with minimal delay. Florida counties have successfully completed projects of similar scope throughout Florida over many years. For these reasons, the project has a high likelihood of success. See 15 C.F.R. § 990.54(a)(3); and Section 6e of the Framework Agreement. Additionally, the cost estimates are based on similar past projects and therefore the project can be conducted at a reasonable cost. See 15 C.F.R. § 990.54(a)(1); and Section 6e of the Framework Agreement. Finally, this proposed project is not anticipated to negatively affect regional ecological restoration and is therefore not inconsistent with the long-term restoration needs of the State of Florida. See Section 6d of the Framework Agreement.

Many recreational use projects, including ones similar to this project, have been submitted as restoration projects on the NOAA website (http://www.gulfspillrestoration.noaa.gov) and to the State of Florida (http://www.deepwaterhorizonflorida.com). In addition to meeting the criteria for the Framework Agreement and OPA, the Walton County Boardwalks and Dune Crossovers – Ed Walline Beach Access Improvements project also meets the State of Florida's additional criteria that Early Restoration projects occur in the 8-county panhandle area in which boom was deployed and that was impacted by response and SCAT activities for the Spill.

12.45.4 Performance Criteria, Monitoring and Maintenance

As part of the project cost, monitoring will be conducted to ensure project plans and designs were correctly implemented. Monitoring has been designed around the project goals and objectives. The project objectives are to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving the facilities at the Ed Walline beach access point. Performance monitoring will evaluate: 1) the replacement of the pavilions; 2) the replacement of the restroom fixtures; and 3) the update of all interior plumbing. Specific performance criteria include: 1) completion of the construction as designed and permitted, and 2) enhanced and/or increased access is provided to natural resources, which will be determined by observation that the facilities are open and available.

Long-term monitoring and maintenance of the improved facilities will be completed by Walton County as part of their regular public facilities maintenance activities. Funding for this post-construction maintenance is not included in the previously provided value for the project cost and will be accomplished by Walton County.

During the one year construction performance monitoring period, the Florida Trustees' Project Manager will go out twice to the site to record the number of users. Following the one year construction

performance monitoring period, Walton County will monitor the recreational use activity at the site. Walton County staff will visit the site twice a year to count the number of users at the beach access point. The visitation numbers will then be provided to the Florida Department of Environmental Protection.

12.45.5 Offsets

The Trustees and BP negotiated a BCR of 2.0 for the proposed recreational use project. NRD Offsets for the entire Walton County Boardwalks and Dune Crossovers project, of which this is a component, are $1,486,552 expressed in present value 2013 dollars to be applied against the monetized value of lost recreational use provided by natural resources injured in Florida, which will be determined by the Trustees' assessment of lost recreational use for the Oil Spill. Please see Chapter 7 of this document (Section 7.2.2) for a description of the methodology used to develop monetized Offsets.[1]

12.45.6 Costs

The total estimated cost to implement this project is $117,700. This cost reflects current cost estimates developed from the most current information available to the Trustees at the time of the project negotiation. The cost includes provisions for planning, engineering and design, construction, monitoring, and contingencies.

[1] For the purposes of applying the NRD Offsets to the calculation of injury after the Trustees' assessment of lost recreational use for the Spill, the Trustees and BP agree as follows:

- The Trustees agree to restate the NRD Offsets in the present value year used in the Trustees' assessment of lost recreational use for the Spill.
- The discount rate and method used to restate the present value of the NRD Offsets will be the same as that used to express the present value of the damages.

12.46 Walton County Boardwalks and Dune Crossovers: Project Description B (Gulfview Heights Beach Access Improvements)

12.46.1 Project Summary

The proposed Walton County Gulfview Heights Beach Access Improvements project would improve the Gulfview Heights beach access facility in Walton County. The proposed improvements include replacing restroom fixtures, updating all interior plumbing, and repairing all soffits on pavilions. The total estimated cost of the project is $87,981.

12.46.2 Background and Project Description

The Trustees propose to improve facilities at the Gulfview Heights beach access facility in Walton County, FL (see Figure 12-2 for general location). The objective of the Walton County Gulfview Heights Beach Access Improvement project is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving the existing facilities at the beach access point. The restoration work proposed includes replacing restroom fixtures, updating all interior plumbing, and repairing all soffits on pavilions.

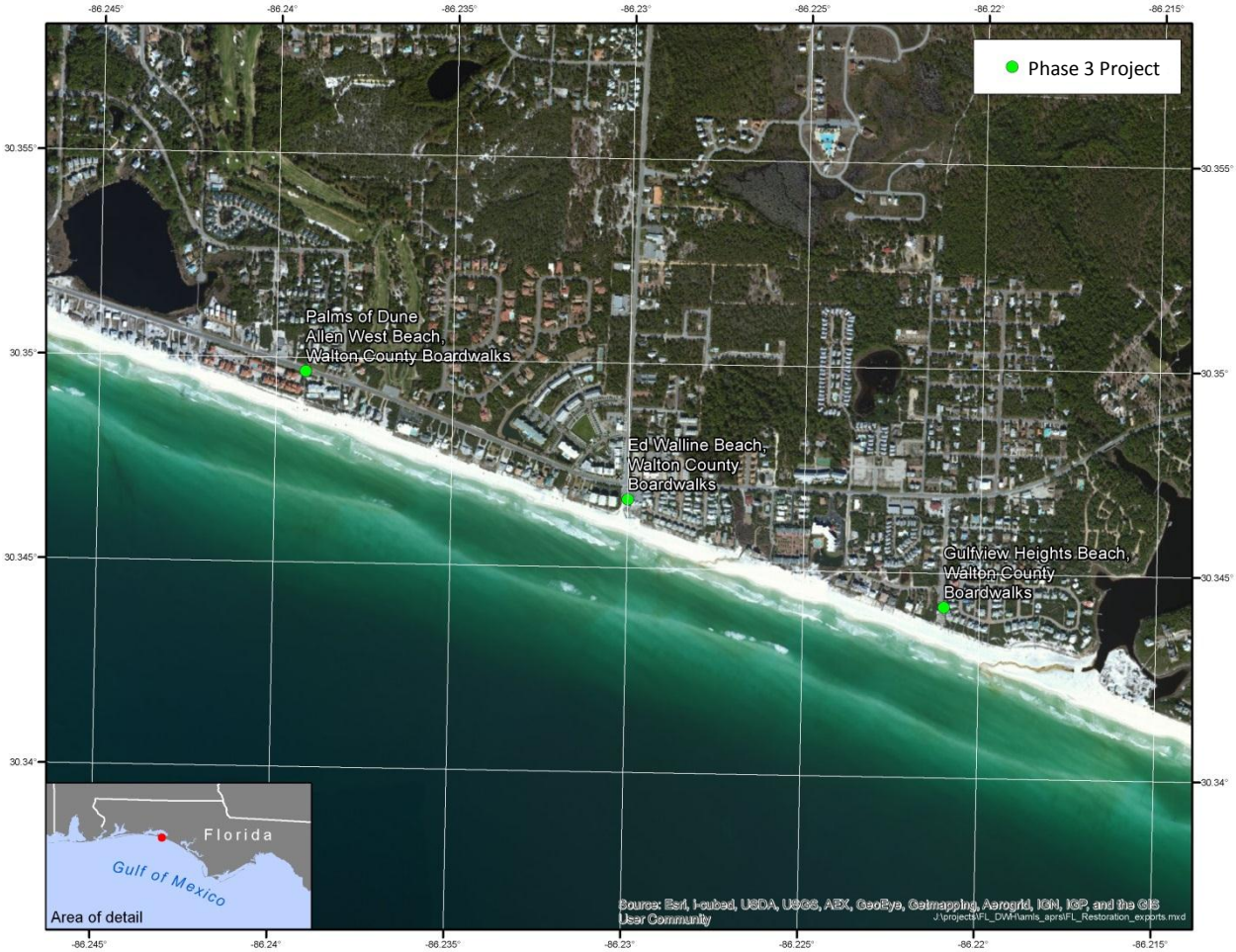


Figure 12-2. Location of Walton County Boardwalks and Dune Crossovers: Gulfview Heights Beach Access Improvements Project.

12.46.3 Evaluation Criteria

This proposed project meets the evaluation criteria established for OPA and the Framework Agreement. As a result of the Deepwater Horizon oil spill and related response actions, the public's access to and enjoyment of their natural resources along Florida's Panhandle was denied or severely restricted. This project would enhance and/or increase the public's use and/or enjoyment of natural resources, helping to offset adverse impacts to such uses caused by the Spill and related response actions. Thus, the nexus to resources injured by the Spill is clear. See 15 C.F.R. § 990.54(a)(2); and Sections 6a-6c of the Framework Agreement.

The project is technically feasible and uses proven techniques with established methods and documented results. Further, the project can be implemented with minimal delay. Florida counties have successfully completed projects of similar scope throughout Florida over many years. For these reasons, the project has a high likelihood of success. See 15 C.F.R. § 990.54(a)(3); and Section 6e of the Framework Agreement. Additionally, the cost estimates are based on similar past projects and therefore the project can be conducted at a reasonable cost. See 15 C.F.R. § 990.54(a)(1); and Section 6e of the Framework Agreement. Finally, this proposed project is not anticipated to negatively affect regional ecological restoration and is therefore not inconsistent with the long-term restoration needs of the State of Florida. See Section 6d of the Framework Agreement.

Many recreational use projects, including ones similar to this project, have been submitted as restoration projects on the NOAA website (http://www.gulfspillrestoration.noaa.gov) and to the State of Florida (http://www.deepwaterhorizonflorida.com). In addition to meeting the criteria for the Framework Agreement and OPA, the Walton County Boardwalks and Dune Crossovers – Gulfview Heights Beach Access Improvements project also meets the State of Florida's additional criteria that Early Restoration projects occur in the 8-county panhandle area in which boom was deployed and that was impacted by response and SCAT activities for the Spill.

12.46.4 Performance Criteria, Monitoring and Maintenance

As part of the project cost, monitoring will be conducted to ensure project plans and designs were correctly implemented. Monitoring has been designed around the project goals and objectives. The project objectives are to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving the existing facilities at the beach access point. Performance monitoring will evaluate: 1) the replacement of the restroom fixtures; 2) the update of all interior plumbing; and 3) the repair of all soffits on pavilions. Specific performance criteria include: 1) the completion of the construction as designed and permitted, and 2) enhanced and/or increased access is provided to natural resources, which will be determined by observation that the facilities are open and available.

Long-term monitoring and maintenance of the improved facilities will be completed by Walton County as part of their regular public facilities maintenance activities. Funding for this post-construction maintenance is not included in the previously provided value for the project cost and will be accomplished by Walton County.

During the one year construction performance monitoring period, the Florida Trustees' Project Manager will go out twice to the site to record the number of users. Following the one year construction

performance monitoring period, Walton County will monitor the recreational use activity at the site. Walton County staff will visit the site twice a year to count the number of users at the beach access point. The visitation numbers will then be provided to the Florida Department of Environmental Protection.

12.46.5 Offsets

The Trustees and BP negotiated a BCR of 2.0 for the proposed recreational use project. NRD Offsets for the entire Walton County Boardwalks and Dune Crossovers project, of which this is a component, are $1,486,552 expressed in present value 2013 dollars to be applied against the monetized value of lost recreational use provided by natural resources injured in Florida, which will be determined by the Trustees' assessment of lost recreational use for the Oil Spill. Please see Chapter 7 of this document (Section 7.2.2) for a description of the methodology used to develop monetized Offsets.[2]

12.46.6 Costs

The total estimated cost to implement this project is $87,981. This cost reflects current cost estimates developed from the most current information available to the Trustees at the time of the project negotiation. The cost includes provisions for planning, engineering and design, construction, monitoring, and contingencies.

[2] For the purposes of applying the NRD Offsets to the calculation of injury after the Trustees' assessment of lost recreational use for the Spill, the Trustees and BP agree as follows:

- The Trustees agree to restate the NRD Offsets in the present value year used in the Trustees' assessment of lost recreational use for the Spill.
- The discount rate and method used to restate the present value of the NRD Offsets will be the same as that used to express the present value of the damages.

12.47 Walton County Boardwalks and Dune Crossovers: Project Description C (Grayton Dunes Beach Access Boardwalk Improvements)

12.47.1 Project Summary

The proposed Walton County Grayton Dunes Beach Access Boardwalk Improvements project would improve the Grayton Dunes beach access and boardwalk facility in Walton County. The proposed improvements include replacing the dune walkover allowing beach visitors to access the beach. The total estimated cost of the project is $168,076.

12.47.2 Background and Project Description

The Trustees propose to improve facilities at the Grayton Dunes beach access boardwalk in Walton County, FL (see Figure 12-3 for general location). The objective of the Walton County Grayton Dunes Beach Access Boardwalk Improvement project is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving access to the beach. The restoration work proposed includes replacing the dune walkover allowing beach visitors to access the beach.

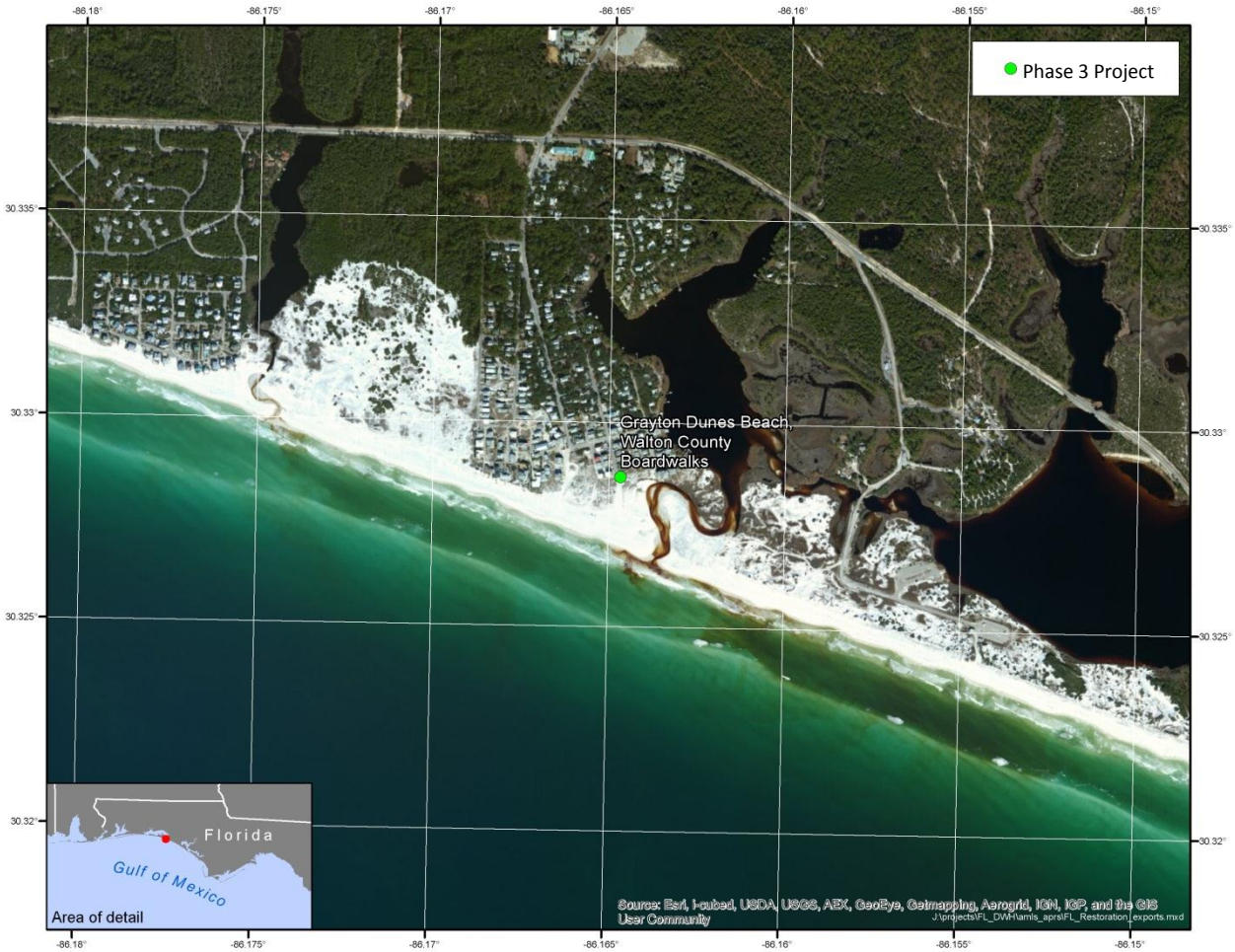


Figure 12-3. Location of Walton County Boardwalks and Dune Crossovers: Grayton Dunes Beach Access Improvements Project.

12.47.3 Evaluation Criteria

This proposed project meets the evaluation criteria established for OPA and the Framework Agreement. As a result of the Deepwater Horizon oil spill and related response actions, the public's access to and enjoyment of their natural resources along Florida's Panhandle was denied or severely restricted. This project would enhance and/or increase the public's use and/or enjoyment of natural resources, helping to offset adverse impacts to such uses caused by the Spill and related response actions. Thus, the nexus to resources injured by the Spill is clear. See 15 C.F.R. § 990.54(a)(2); and Sections 6a-6c of the Framework Agreement.

The project is technically feasible and uses proven techniques with established methods and documented results. Further, the project can be implemented with minimal delay. Florida counties have successfully completed projects of similar scope throughout Florida over many years. For these reasons, the project has a high likelihood of success. See 15 C.F.R. § 990.54(a)(3); and Section 6e of the Framework Agreement. Additionally, the cost estimates are based on similar past projects and therefore the project can be conducted at a reasonable cost. See 15 C.F.R. § 990.54(a)(1); and Section 6e of the Framework Agreement. Finally, this proposed project is not anticipated to negatively affect regional ecological restoration and is therefore not inconsistent with the long-term restoration needs of the State of Florida. See Section 6d of the Framework Agreement.

Many recreational use projects, including ones similar to this project, have been submitted as restoration projects on the NOAA website (http://www.gulfspillrestoration.noaa.gov) and to the State of Florida (http://www.deepwaterhorizonflorida.com). In addition to meeting the criteria for the Framework Agreement and OPA, the Walton County Boardwalks and Dune Crossovers – Grayton Dunes Beach Access Boardwalk Improvements project also meets the State of Florida's additional criteria that Early Restoration projects occur in the 8-county panhandle area in which boom was deployed and that was impacted by response and SCAT activities for the Spill.

12.47.4 Performance Criteria, Monitoring and Maintenance

As part of the project cost, monitoring will be conducted to ensure project plans and designs were correctly implemented. Monitoring has been designed around the project goals and objectives. The project objective is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving beach access. Performance monitoring will evaluate the replacement of the dune walkovers. Specific performance criteria include: 1) the completion of the construction as designed and permitted, and 2) enhanced and/or increased access is provided to natural resources, which will be determined by observation that the dune walkovers are open and available.

Long term monitoring and maintenance of the improved facilities will be completed by Walton County as part of their regular public facilities maintenance activities. Funding for this post-construction maintenance is not included in the previously provided value for the project cost and will be assumed by Walton County.

During the one year construction performance monitoring period, the Florida Trustees' Project Manager will go out twice to the site to record the number of users. Following the one year construction performance monitoring period, Walton County will monitor the recreational use activity at the site.

Walton County staff will visit the site twice a year to count the number of users at the beach access boardwalk. The visitation numbers will then be provided to the Florida Department of Environmental Protection.

12.47.5 Offsets

The Trustees and BP negotiated a BCR of 2.0 for the proposed recreational use project. NRD Offsets for the entire Walton County Boardwalks and Dune Crossovers project, of which this is a component, are $1,486,552 expressed in present value 2013 dollars to be applied against the monetized value of lost recreational use provided by natural resources injured in Florida, which will be determined by the Trustees' assessment of lost recreational use for the Oil Spill. Please see Chapter 7 of this document (Section 7.2.2) for a description of the methodology used to develop monetized Offsets.[3]

12.47.6 Costs

The total estimated cost to implement this project is $168,076. This cost reflects current cost estimates developed from the most current information available to the Trustees at the time of the project negotiation. The cost includes provisions for planning, engineering and design, construction, monitoring, and contingencies.

[3] For the purposes of applying the NRD Offsets to the calculation of injury after the Trustees' assessment of lost recreational use for the Spill, the Trustees and BP agree as follows:

- The Trustees agree to restate the NRD Offsets in the present value year used in the Trustees' assessment of lost recreational use for the Spill.
- The discount rate and method used to restate the present value of the NRD Offsets will be the same as that used to express the present value of the damages.

12.48 Walton County Boardwalks and Dune Crossovers: Project Description D (Dothan Beach Access Boardwalk Improvements)

12.48.1 Project Summary

The proposed Walton County Dothan Beach Access Boardwalk Improvements project would improve the Dothan Beach Access Boardwalk in Walton County. The proposed improvements include replacing the dune walkover allowing beach visitors to access the beach. The total estimated cost of the project is $188,909.

12.48.2 Background and Project Description

The Trustees propose to improve facilities at the Dothan Beach access boardwalk in Walton County, FL (see Figure 12-4 for general location). The objective of the Walton County Dothan Beach Access Boardwalk Improvement project is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving access to the beach. The restoration work proposed includes replacing the dune walkover allowing beach visitors to access the beach.

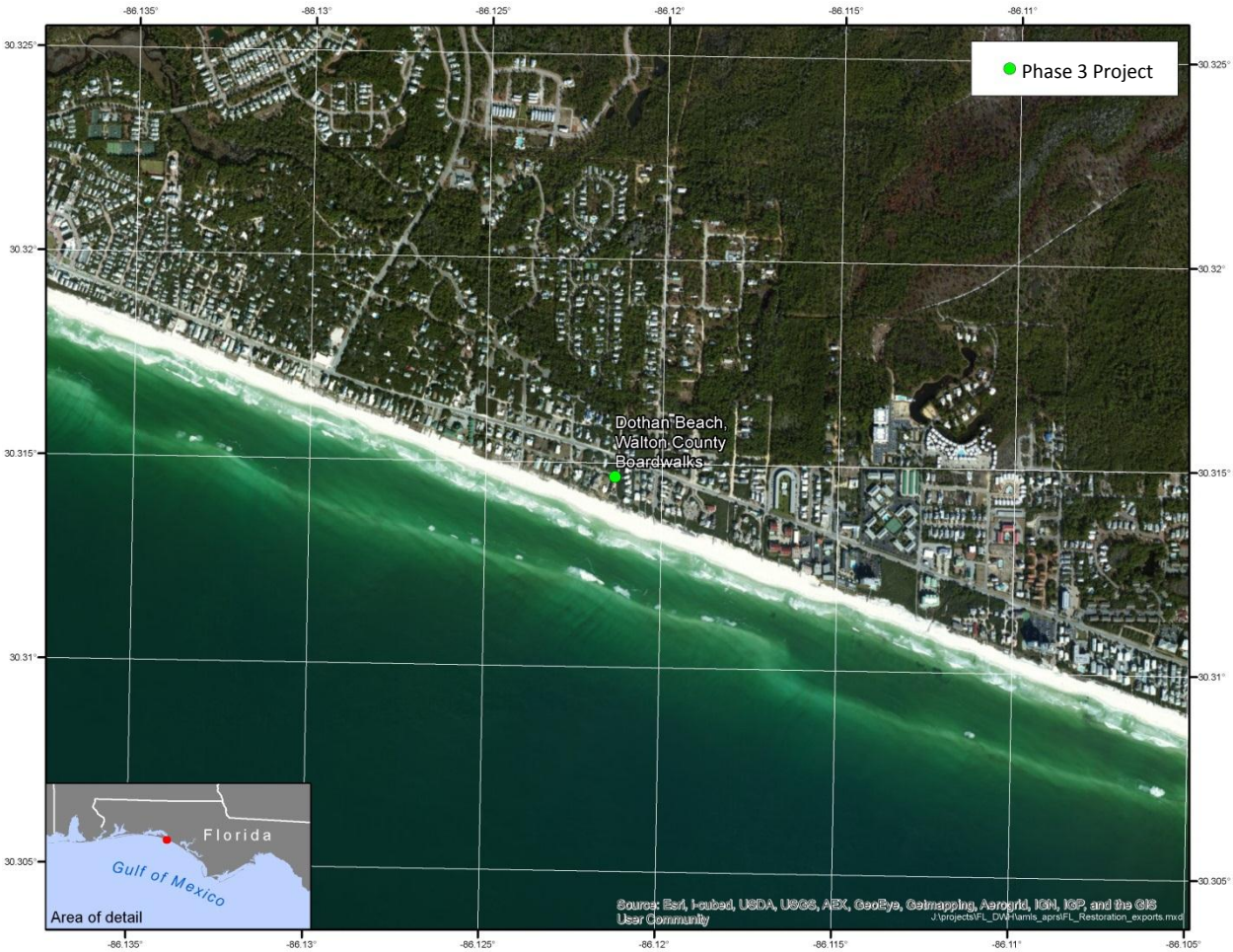


Figure 12-4. Location of Walton County Boardwalks and Dune Crossovers: Dothan Beach Access Improvements Project.

12.48.3 Evaluation Criteria

This proposed project meets the evaluation criteria established for OPA and the Framework Agreement. As a result of the Deepwater Horizon oil spill and related response actions, the public's access to and enjoyment of their natural resources along Florida's Panhandle was denied or severely restricted. This project would enhance and/or increase the public's use and/or enjoyment of natural resources, helping to offset adverse impacts to such uses caused by the Spill and related response actions. Thus, the nexus to resources injured by the Spill is clear. See 15 C.F.R. § 990.54(a)(2); and Sections 6a-6c of the Framework Agreement.

The project is technically feasible and uses proven techniques with established methods and documented results. Further, the project can be implemented with minimal delay. Florida counties have successfully completed projects of similar scope throughout Florida over many years. For these reasons, the project has a high likelihood of success. See 15 C.F.R. § 990.54(a)(3); and Section 6e of the Framework Agreement. Additionally, the cost estimates are based on similar past projects and therefore the project can be conducted at a reasonable cost. See 15 C.F.R. § 990.54(a)(1); and Section 6e of the Framework Agreement. Finally, this proposed project is not anticipated to negatively affect regional ecological restoration and is therefore not inconsistent with the long-term restoration needs of the State of Florida. See Section 6d of the Framework Agreement.

Many recreational use projects, including ones similar to this project, have been submitted as restoration projects on the NOAA website (http://www.gulfspillrestoration.noaa.gov) and to the State of Florida (http://www.deepwaterhorizonflorida.com). In addition to meeting the criteria for the Framework Agreement and OPA, the Walton County Boardwalks and Dune Crossovers – Dothan Beach Access Boardwalk Improvements project also meets the State of Florida's additional criteria that Early Restoration projects occur in the 8-county panhandle area in which boom was deployed and that was impacted by response and SCAT activities for the Spill.

12.48.4 Performance Criteria, Monitoring and Maintenance

As part of the project cost, monitoring will be conducted to ensure project plans and designs were correctly implemented. Monitoring has been designed around the project goals and objectives. The project objective is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving beach access. Performance monitoring will evaluate the replacement of the dune walkovers. Specific performance criteria include: 1) completion of the construction as designed and permitted, and 2) enhanced and/or increased access is provided to natural resources, which will be determined by observation that the dune walkovers are open and available.

Long term monitoring and maintenance of the improved facilities will be completed by Walton County as part of their regular public facilities maintenance activities. Funding for this post-construction maintenance is not included in the previously provided value for the project cost and will be assumed by Walton County.

During the one year construction performance monitoring period, the Florida Trustees' Project Manager will go out twice to the site to record the number of users. Following the one year construction performance monitoring period, Walton County will monitor the recreational use activity at the site.

Walton County staff will visit the site twice a year to count the number of users at the beach access point and boardwalk. The visitation numbers will then be provided to the Florida Department ofEnvironmental Protection.

12.48.5 Offsets

The Trustees and BP negotiated a BCR of 2.0 for the proposed recreational use project. NRD Offsets for the entire Walton County Boardwalks and Dune Crossovers project, of which this is a component, are $1,486,552 expressed in present value 2013 dollars to be applied against the monetized value of lost recreational use provided by natural resources injured in Florida, which will be determined by the Trustees' assessment of lost recreational use for the Oil Spill. Please see Chapter 7 of this document (Section 7.2.2) for a description of the methodology used to develop monetized Offsets.[4]

12.48.6 Costs

The total estimated cost to implement this project is $188,909. This cost reflects current cost estimates developed from the most current information available to the Trustees at the time of the project negotiation. The cost includes provisions for planning, engineering and design, construction, monitoring, and contingencies.

[4] For the purposes of applying the NRD Offsets to the calculation of injury after the Trustees' assessment of lost recreational use for the Spill, the Trustees and BP agree as follows:

- The Trustees agree to restate the NRD Offsets in the present value year used in the Trustees' assessment of lost recreational use for the Spill.
- The discount rate and method used to restate the present value of the NRD Offsets will be the same as that used to express the present value of the damages.

12.49 Walton County Boardwalks and Dune Crossovers: Project Description E (Palms of Dune Allen West Beach Access Improvements)

12.49.1 Project Summary

The proposed Walton County Palms of Dune Allen West Beach Access Improvements project would improve the Palms of Dune Allen West beach access facility in Walton County. The proposed improvements include constructing a dune walkover, allowing beach visitors to access the beach. The total estimated cost of the project is $112,109.

12.49.2 Background and Project Description

The Trustees propose to improve facilities at the Palms of Dune Allen West beach access facility in Walton County, FL (see Figure 12-5 for general location). The objective of the Walton County Palms of Dune Allen West Beach Access Improvement project is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving beach access. The restoration work proposed includes constructing a dune walkover, allowing beach visitors to access the beach.

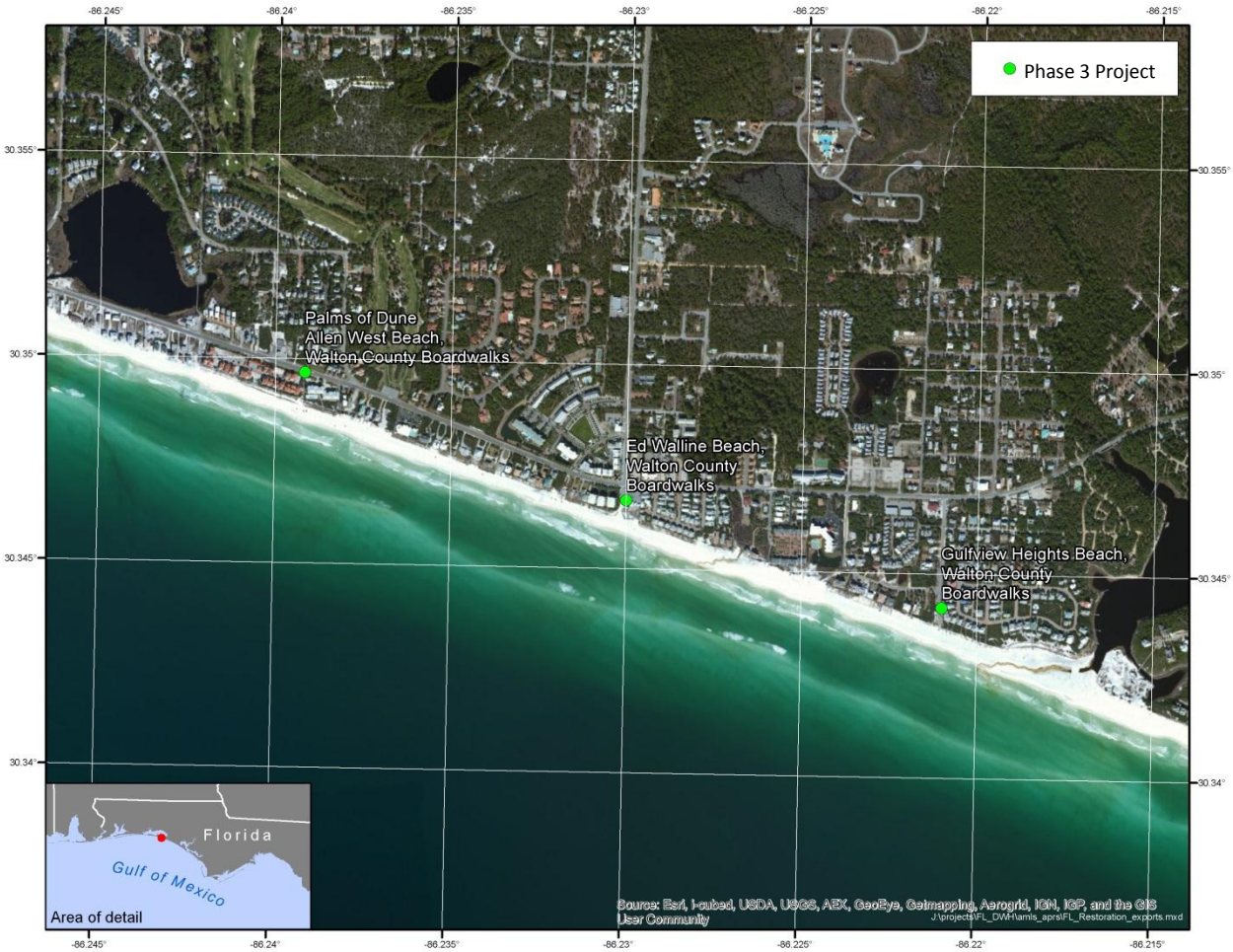


Figure 12-5. Location of Walton County Boardwalks and Dune Crossovers: Palms of Dune Allen West Beach Access Improvements Project.

12.49.3 Evaluation Criteria

This proposed project meets the evaluation criteria established for OPA and the Framework Agreement. As a result of the Deepwater Horizon oil spill and related response actions, the public's access to and enjoyment of their natural resources along Florida's Panhandle was denied or severely restricted. This project would enhance and/or increase the public's use and/or enjoyment of natural resources, helping to offset adverse impacts to such uses caused by the Spill and related response actions. Thus, the nexus to resources injured by the Spill is clear. See 15 C.F.R. § 990.54(a)(2); and Sections 6a-6c of the Framework Agreement.

The project is technically feasible and uses proven techniques with established methods and documented results. Further, the project can be implemented with minimal delay. Florida counties have successfully completed projects of similar scope throughout Florida over many years. For these reasons, the project has a high likelihood of success. See 15 C.F.R. § 990.54(a)(3); and Section 6e of the Framework Agreement. Additionally, the cost estimates are based on similar past projects and therefore the project can be conducted at a reasonable cost. See 15 C.F.R. § 990.54(a)(1); and Section 6e of the Framework Agreement. Finally, this proposed project is not anticipated to negatively affect regional ecological restoration and is therefore not inconsistent with the long-term restoration needs of the State of Florida. See Section 6d of the Framework Agreement.

Many recreational use projects, including ones similar to this project, have been submitted as restoration projects on the NOAA website (http://www.gulfspillrestoration.noaa.gov) and to the State of Florida (http://www.deepwaterhorizonflorida.com). In addition to meeting the criteria for the Framework Agreement and OPA, the Walton County Boardwalks and Dune Crossovers – Palms of Dune Allen West Beach Access Improvements project also meets the State of Florida's additional criteria that Early Restoration projects occur in the 8-county panhandle area in which boom was deployed and that was impacted by response and SCAT activities for the Spill.

12.49.4 Performance Criteria, Monitoring and Maintenance

As part of the project cost, monitoring will be conducted to ensure project plans and designs were correctly implemented. Monitoring has been designed around the project goals and objectives. The project objective is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving beach access. Performance monitoring will evaluate construction of the dune walkovers. Specific performance criteria include: 1) completion of the construction as designed and permitted, and 2) enhanced and/or increased access is provided to natural resources, which will be determined by observation that the dune walkover is open and available

Long-term monitoring and maintenance of the improved facilities will be completed by Walton County as part of their regular public facilities maintenance activities. Funding for this post-construction maintenance is not included in the previously provided value for the project cost and will be accomplished by Walton County.

During the one year construction performance monitoring period, the Florida Trustees' Project Manager will go out twice to the site to record the number of users. Following the one year construction performance monitoring period, Walton County will monitor the recreational use activity at the site.

Walton County staff will visit the site twice a year to count the number of users at the beach access point. The visitation numbers will then be provided to the Florida Department of Environmental Protection.

12.49.5 Offsets

The Trustees and BP negotiated a BCR of 2.0 for the proposed recreational use project. NRD Offsets for the entire Walton County Boardwalks and Dune Crossovers project, of which this is a component, are $1,486,552 expressed in present value 2013 dollars to be applied against the monetized value of lost recreational use provided by natural resources injured in Florida, which will be determined by the Trustees' assessment of lost recreational use for the Oil Spill. Please see Chapter 7 of this document (Section 7.2.2) for a description of the methodology used to develop monetized Offsets.[5]

12.49.6 Costs

The total estimated cost to implement this project is $112,109. This cost reflects current cost estimates developed from the most current information available to the Trustees at the time of the project negotiation. The cost includes provisions for planning, engineering and design, construction, monitoring, and contingencies.

[5] For the purposes of applying the NRD Offsets to the calculation of injury after the Trustees' assessment of lost recreational use for the Spill, the Trustees and BP agree as follows:

- The Trustees agree to restate the NRD Offsets in the present value year used in the Trustees' assessment of lost recreational use for the Spill.
- The discount rate and method used to restate the present value of the NRD Offsets will be the same as that used to express the present value of the damages.

12.50 Walton County Boardwalks and Dune Crossovers: Project Description F (Bayside Ranchettes Park Improvements)

12.50.1 Project Summary

The proposed Walton County Bayside Ranchettes Park Improvements project would improve the Bayside Ranchettes Park in Walton County. The proposed improvements include constructing a parking area, a picnic table, a dock, and steps into the water allowing access to the bay. The total estimated cost of the project is $68,501.

12.50.2 Background and Project Description

The Trustees propose to improve facilities at the Bayside Ranchettes Park in Walton County, FL (see Figure 12-6 for general location). The objective of the Walton County Bayside Ranchettes Park Improvement project is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving recreational opportunities at the park. The restoration work proposed includes constructing a parking area, a picnic table, a dock, and steps into the water allowing access to the bay.

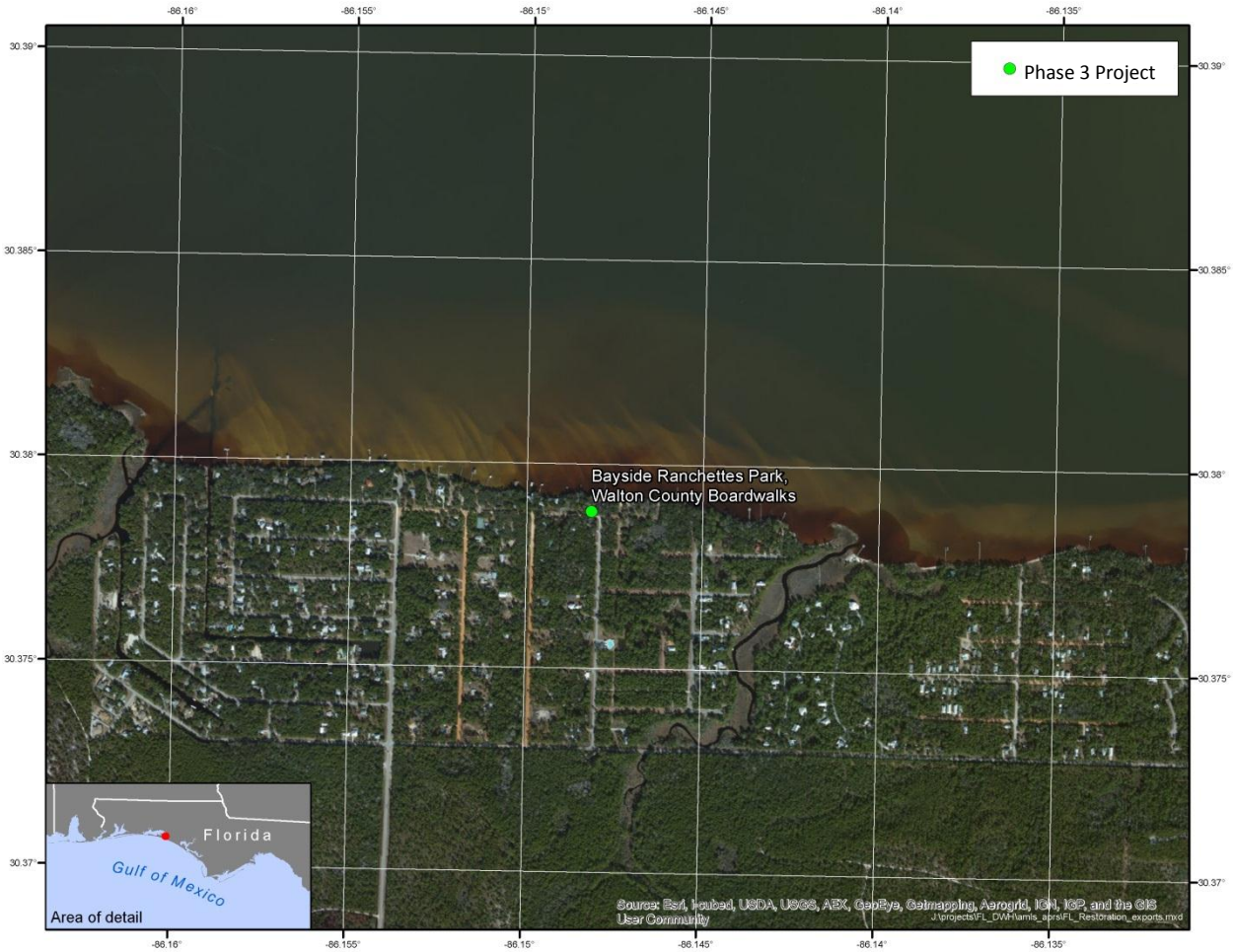


Figure 12-6. Location of Walton County Boardwalks and Dune Crossovers: Bayside Ranchettes Park Improvements Project.

12.50.3 Evaluation Criteria

This proposed project satisfies the evaluation criteria established for OPA and the Framework Agreement. As a result of the Deepwater Horizon oil spill and related response actions, the public's access to and enjoyment of their natural resources along Florida's Panhandle was denied or severely restricted. This project would enhance and/or increase the public's use and/or enjoyment of natural resources, helping to offset adverse impacts to such uses caused by the Spill and related response actions. Thus, the nexus to resources injured by the Spill is clear. See 15 C.F.R. § 990.54(a)(2); and Sections 6a-6c of the Framework Agreement.

The project is technically feasible and uses proven techniques with established methods and documented results. Further, the project can be implemented with minimal delay. Florida counties have successfully completed projects of similar scope throughout Florida over many years. For these reasons, the project has a high likelihood of success. See 15 C.F.R. § 990.54(a)(3); and Section 6e of the Framework Agreement. Additionally, the cost estimates are based on similar past projects and therefore the project can be conducted at a reasonable cost. See 15 C.F.R. § 990.54(a)(1); and Section 6e of the Framework Agreement. Finally, this proposed project is not anticipated to negatively affect regional ecological restoration and is therefore not inconsistent with the long-term restoration needs of the State of Florida. See Section 6d of the Framework Agreement.

Many recreational use projects, including ones similar to this project, have been submitted as restoration projects on the NOAA website (http://www.gulfspillrestoration.noaa.gov) and to the State of Florida (http://www.deepwaterhorizonflorida.com). In addition to meeting the criteria for the Framework Agreement and OPA, the Walton County Boardwalks and Dune Crossovers – Bayside Ranchettes Park Improvements project also meets the State of Florida's additional criteria that Early Restoration projects occur in the 8-county panhandle area in which boom was deployed and that was impacted by response and SCAT activities for the Spill.

12.50.4 Performance Criteria, Monitoring and Maintenance

As part of the project cost, monitoring will be conducted to ensure project plans and designs were correctly implemented. Monitoring has been designed around the project goals and objectives. Project objective is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving recreational opportunities at the park. Performance monitoring will evaluate: 1) the construction of a parking area; 2) the construction of a picnic table; 3) the construction of a dock; and 4) the construction of steps into the water allowing access to the bay. Specific performance criteria include: 1) completion of the construction as designed and permitted, and 2) enhanced and/or increased access is provided to natural resources, which will be determined by observation that the park is open and available.

Long term monitoring and maintenance of the improved facilities will be completed by Walton County as part of their regular public facilities maintenance activities. Funding for this post-construction maintenance is not included in the previously provided value for the project cost and will be assumed by Walton County.

During the one year construction performance monitoring period, the Florida Trustees' Project Manager will go out twice to the site to record the number of users. Following the one year construction performance monitoring period, Walton County will monitor the recreational use activity at the site. Walton County staff will visit the site twice a year to count the number of users at the park. The visitation numbers will then be provided to the Florida Department of Environmental Protection.

12.50.5 Offsets

The Trustees and BP negotiated a BCR of 2.0 for the proposed recreational use project. NRD Offsets for the entire Walton County Boardwalks and Dune Crossovers project, of which this is a component, are $1,486,552 expressed in present value 2013 dollars to be applied against the monetized value of lost recreational use provided by natural resources injured in Florida, which will be determined by the Trustees' assessment of lost recreational use for the Oil Spill. Please see Chapter 7 of this document (Section 7.2.2) for a description of the methodology used to develop monetized Offsets.[6]

12.50.6 Costs

The total estimated cost to implement this project is $68,501. This cost reflects current cost estimates developed from the most current information available to the Trustees at the time of the project negotiation. The cost includes provisions for planning, engineering and design, construction, monitoring, and contingencies.

[6] For the purposes of applying the NRD Offsets to the calculation of injury after the Trustees' assessment of lost recreational use for the Spill, the Trustees and BP agree as follows:

- The Trustees agree to restate the NRD Offsets in the present value year used in the Trustees' assessment of lost recreational use for the Spill.
- The discount rate and method used to restate the present value of the NRD Offsets will be the same as that used to express the present value of the damages.

12.51 Walton County Boardwalks and Dune Crossovers: Environmental Review

The proposed Walton County Boardwalks and Dune Crossovers projects would construct and restore infrastructure to increase and improve opportunities for the public to safely access coastal resources affected by the Deepwater Horizon Oil Spill.

12.51.1 Introduction and Background

In April 2011, the Natural Resource Trustees (Trustees) and BP Exploration and Production, Inc. (BP) entered into the *Framework Agreement for Early Restoration Addressing Injuries Resulting from the* Deepwater Horizon *Oil Spill* (Framework Agreement). Under the Framework Agreement, BP agreed to make $1 billion available for Early Restoration project implementation. The Trustees' key objective in pursuing Early Restoration is to achieve tangible recovery of natural resources and natural resource services for the public's benefit while the longer-term injury and damage assessment is underway. The Framework Agreement is intended to expedite the start of restoration in the Gulf of Mexico in advance of the completion of the injury assessment process. Early restoration is not intended to, and does not, fully address all injuries caused by the Spill. Restoration beyond Early Restoration projects would be required to fully compensate the public for natural resource losses from the Spill.

Pursuant to the process articulated in the Framework Agreement, the Trustees released a Phase I Early Restoration Plan (ERP) in April 2012, after public review of a draft. In December 2012, after public review of a draft, the Trustees released a Phase II ERP. On May 6, 2013, the National Oceanic and Atmospheric Administration (NOAA) issued a public notice in the *Federal Register* on behalf of the Trustees announcing the development of additional future Early Restoration projects for a Draft Phase III ERP. This park improvement project was submitted as an ERP on the NOAA website (http://www.gulfspillrestoration.noaa.gov) and submitted to the State of Florida. In addition to meeting the evaluation criteria for the Framework Agreement and Oil Pollution Act (OPA), the project meets Florida's criteria that ERPs occur in the eight-county Florida panhandle area that deployed boom and was impacted by the Spill.

With loss of recreational opportunities for both local residents and tourists affected by the Oil Spill, the projects presented here would provide enhancements of current public access to the beach by protecting dunes and improving infrastructure at six beach access locations in Walton County, Florida.

12.51.2 Project Location

The proposed projects are in the State of Florida, Walton County. All sites are approximately 17–25 miles east of Eglin Air Force Base and 21–29 miles west of Panama City Beach, Florida. Five of the sites are on the Gulf Coast, and one site (Bayside Ranchettes Park) is on Choctawhatchee Bay, approximately 4 miles north over land of the Gulf Coast. The six projects and their specific locations are summarized below and are on Figure 12-7.

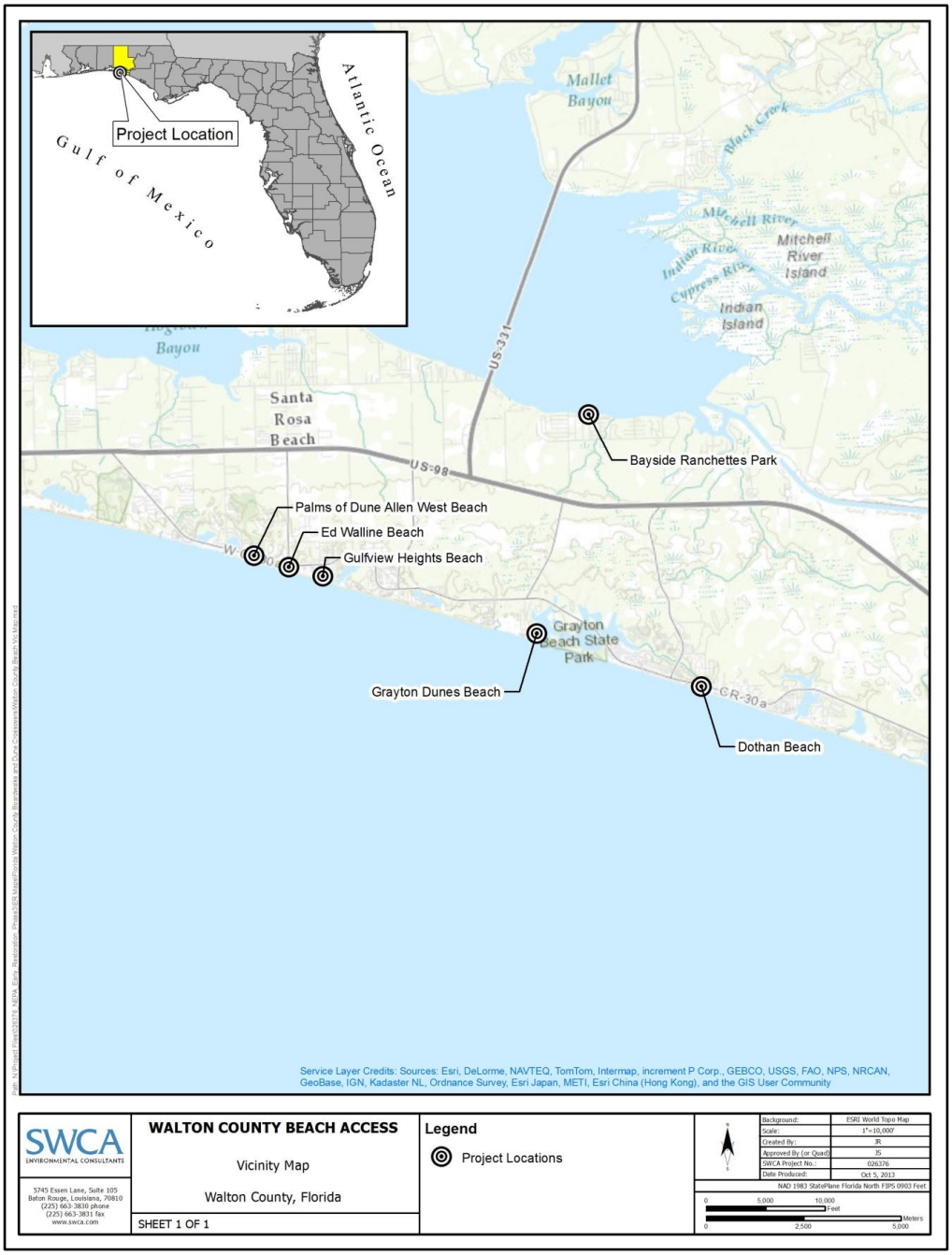


Figure 12-7. Location of Palms of Dune Allen West Beach, Ed Walline Beach, Gulfview Heights Beach, Bayside Ranchettes Park, Grayton Dunes Beach, and Dothan Beach access and infrastructure improvement projects.

12.51.2.1 Palms of Dune Allen West Beach Access Improvements

This parcel is approximately 0.5 acre of beach and dunes. It is owned by Walton County but remains undeveloped at this time. Improvement of this beach access would provide a dune walkover allowing beach visitors to access the beach. The Palms of Dune Allen site is approximately 1,300 feet east of Oyster Lake, a coastal dune lake (see Figure 12-7).

12.51.2.2 Ed Walline Beach Access Improvements

This is a regional beach access with restroom facilities and picnic pavilions. Improvement of this beach access would provide enhanced facilities by replacing the pavilions, replacing restroom fixtures, and updating all interior plumbing (see Figure 12-7).

12.51.2.3 Gulfview Heights Beach Access Improvements

This is a regional beach access with restroom facilities and picnic pavilions. Improvement of this beach access would provide enhanced facilities by replacing restroom fixtures, updating all interior plumbing, and repairing all soffits on pavilions. The Gulfview Heights site is approximately 1,500 feet west of Draper Lake, a coastal dune lake (see Figure 12-7).

12.51.2.4 Grayton Dunes Beach Access Boardwalk Improvements

This is a regional beach access with parking and a 400-foot boardwalk. Improvement of this beach access would provide enhanced facilities by replacing the dune walkover, allowing beach visitors to access the beach. The project originates from a beachside residential area at the end of the pavement on Garfield Street and is approximately 400 feet west of the border of Grayton Beach State Park and Western Lake, a coastal dune lake (see Figure 12-7).

12.51.2.5 Dothan Beach Access Boardwalk Improvements

This is a pedestrian beach access with a boardwalk. Improvement of this beach access would provide enhanced facilities by replacing the dune walkover, allowing beach visitors to access the beach (see Figure 12-7).

12.51.2.6 Bayside Ranchettes Park Improvements

This parcel is approximately 0.25 acre on the Choctawhatchee Bay. It is owned by Walton County but remains undeveloped at this time. Improvement of this beach access would provide parking, a picnic table, a dock, and steps into the water allowing access to the bay. The proposed Bayside Ranchettes Park project is on the Choctawhatchee Bay, a coastal inlet that is connected to the Gulf of Mexico by Destin Pass near Destin, Florida. The Choctawhatchee River flows into the bay, along with several other small rivers and streams. The bay has a surface area of 130 square miles and also connects to the Santa Rosa Sound. In addition, the Mid-Bay Bridge crosses the bay, connecting the cities of Destin and Niceville, Florida (see Figure 12-7. Location of Palms of Dune Allen West Beach, Ed Walline Beach, Gulfview Heights Beach, Bayside Ranchettes Park, Grayton Dunes Beach, and Dothan Beach access and infrastructure improvement projects.).

12.51.3 Construction and Installation

Detailed construction methods and plans have not yet been developed for the new facilities, construction, and improvements to infrastructure described below. Table 12-1 summarizes each project's proposed improvements. Most of the project would be on-beach construction and improvements to existing facilities. Standard best management practices (BMP) for this type of construction would be used to minimize impacts, and are described below.

Table 12-1. Walton County Beach access infrastructure improvements detail.

PROJECT	EXISTING FACILITIES DESCRIPTION	PROPOSED IMPROVEMENTS DESCRIPTION
Ed Walline Beach Access	Restroom facilities and picnic pavilion	Replacing the pavilion, replacing restroom fixtures, and updating all interior plumbing
Gulfview Heights Beach Access	Restroom facilities and picnic pavilions	Replacing restroom fixtures, updating all interior plumbing, and repairing all soffits on pavilions
Grayton Dunes Beach Access	Parking and a 400-foot boardwalk	Replacing the existing dune walkover
Dothan Beach Access Boardwalk	Boardwalk	Replacing existing dune walkover
Palms of Dune Allen West Beach Access	N/A - Undeveloped	Constructing new dune walkover
Bayside Ranchettes Park	N/A - Undeveloped	Creating a new parking area, adding a picnic table, and constructing a dock and steps into the waters of Choctawhatchee Bay

A range of hand tools and mechanized equipment would likely be used to complete these construction projects. This project would likely include small tools for restroom repairs. Larger equipment such as backhoes, graders, or other earthmoving equipment may be required for plumbing repairs and for enhancing dune walkover structures. Construction of parking areas and recreational facilities, as well as repairs to existing facilities, may also require use of heavy construction equipment. Activities would include grading and paving the new parking area and mechanical and manual excavation for the steps, dock, and parking areas. Excavation and construction may involve equipment such as excavators/track hoes, bulldozers, backhoes, graders, compacting equipment (roller), dump trucks, bobcats, a paving machine, rollers, forklifts, and pickup trucks; some additional hand digging may also occur. Assumed equipment usage and manpower requirements are detailed in Table 12-2.

Table 12-2. Assumed equipment usage and worker needs.

EQUIPMENT	NUMBER OF DAYS USED	NUMBER OF WORKER DAYS	ASSUMPTION
Dump truck	5	5	One week total for paving and excavation associated with parking, steps, and dock
Flatbed truck	8	8	One trip per week for two months to deliver materials for pavilion, dock, boardwalks, restrooms, etc.
Concrete Truck	2	2	Two days for pilings, steps, and boat dock
Pickup truck	88	88	Two pickups per day for two months
Bobcat	10	10	One week excavation and paving; one week auger use.
Grader	2	2	Two days grading
Paving machine	2	2	Two days paving
Roller	2	2	Two days paving
Track hoe	3	3	Three days excavation
Dozer	5	5	One week and grading
Forklift	8	8	One delivery per week for six months

The footprint of construction activities at most sites would remain within the footprint of existing facilities. Restroom repairs and improvements, as well as repairs or improvements to facilities such as pavilions, would likely require little or no disturbance outside of the existing public facilities. Repair and construction of dune walkover areas may require some minimal disturbance outside the footprint of existing facilities, but would be limited to the extent possible to existing developed areas. One parcel (Bayside Ranchettes Park) is currently undeveloped. Construction of public facilities, including parking, picnic area, and a dock would require disturbance of several feet of soil; the final footprint is not known. The projects would install and maintain sturdy animal-proof garbage containers to prevent the invasion of house mice and predators (cats, raccoons, fox, and coyotes) while providing a place for visitors to dispose of refuse.

Materials to be removed include old plumbing fixtures and other old restroom material, and other debris removed as part of facilities improvements. Old boardwalk and pavilion materials would be removed from areas where repairs are required. Soil would likely be removed from most sites.

Posts may be required for some repairs, including pavilion and boardwalk repairs. Pilings would likely be placed by mechanically auguring holes (with an auger mounted to a bobcat) to place pre-formed pilings or to place forms that would be filled with pumped concrete to create new pilings. The holes for the pilings would likely be approximately 1–2 feet in diameter (this is an estimate, final sizes would depend on final design requirements).

In addition, as work proceeds, the project area could be isolated by construction fencing to prevent incidental access. This fencing material would be placed by hand driving (e.g., with a sledge hammer or post driver) stakes as necessary. These stakes would likely be less than 2 inches in diameter and driven to a depth of 1–2 feet to secure the fencing.

The dune walkovers would be constructed at a height (minimum 3 feet above grade) to accommodate natural dune growth and associated vegetation. No storage of equipment or materials would occur on the beach or dunes throughout construction. No activity, except as needed to remove old walkovers, construct the new walkovers, and repair/maintain the walkovers (in subsequent years), would occur on existing healthy dunes during any time of the year.

If dunes are impacted during the proposed projects, they would be restored by planting the appropriate vegetation or installing sand fence. All dune vegetation to be used in dune restoration would be native to the specific Walton County dunes and grown from northwest Florida plant stock. If seedlings are planted, they would be at least 1 × 1 inch with a 2.5-inch pot. Vegetation would be planted with an appropriate amount of fertilizer and anti-desiccant material, as appropriate, for the plant size. Planting must be on 18-inch centers throughout the created dune; however, 24-inch centers may be acceptable depending on the area to be planted. No irrigation lines or pipes would be installed.

12.51.3.1 Best Management Practices and Conservation Measures

The following conservation measures for dune walkover construction would be implemented at each site:

- **Boardwalks**: A dune walkover would be constructed at a height (minimum 3 feet above grade) to accommodate natural dune growth and associated vegetation.
- **Equipment storage**: No storage of equipment or materials would occur on the beach or dunes throughout the entire year.
- **Dune protection**: No activity, except as needed to repair/replace/construct the walkovers, would occur on existing healthy dunes during any time of the year. Activities in this area would be limited to maintenance and restoration of the habitat. If dunes are impacted, they would be restored by planting the appropriate vegetation or installing sand fence. Appropriate signs would be used to designate and indicate the purpose of the conservation area, if necessary.
- **Sand fence**: Minimal use of sand fence would be encouraged. When used, the fence would be used for restoration of dune blowouts. Post and rope are preferred for beach visitor access, pedestrian traffic control, and wildlife exclusion zones (e.g., bird wintering areas). If used for dune restoration, the fence would be placed in a sea turtle–compatible design and be made of biodegradable material.
- **Native landscaping**: The habitat quality of all non-developed areas would be maximized and the habitats would be connected by landscaping with native dune plants. The landscaping plan would be reviewed and approved by the U.S. Fish and Wildlife Service.
- **Dune vegetation**: All dune vegetation used in dune restoration would be native to the specific Walton County dunes and grown from northwest Florida plant stock. Vegetation would be planted with an appropriate amount of fertilizer and anti-desiccant material, as appropriate, for the plant size. Planting must be on 18-inch centers throughout the created dune; however, 24-inch centers may be acceptable depending on the area to be planted. No irrigation lines or pipes would be installed.
- **Refuse**: Sturdy animal-proof garbage containers would be installed and maintained to prevent the invasion of house mice and predators (cats, raccoons, fox, and coyotes).
- **Lighting**: No lighting would be used on the dune walkover. Any lighting for pavilions or other features would be wildlife friendly.

In addition, Rule 62B-41.007, Fla. Admin. Code, which is titled Design, Siting, and Other Requirements, requires additional measures to protect beaches and dunes, which would be adhered to in the development of this project, as described below.

To protect the environmental functions of Florida's beaches, only beach compatible fill would be placed on the beach or in any associated dune system. Beach compatible fill is material that maintains the general character and functionality of the material occurring on the beach and in the adjacent dune and coastal system. Such material would be predominately composed of carbonate, quartz, or similar material with a particle size distribution ranging from 0.062 millimeters (mm) (4.0^{ϕ}) to 4.76 mm (-2.25^{ϕ}) (classified as sand by the Unified Soils or the Wentworth classification). The material should be similar in color and grain size distribution (sand grain frequency, mean and median grain size and sorting coefficient) to the material in the existing coastal system at the disposal site, should not result in cementation of the beach, and should not contain the following:

- Greater than 5%, by weight, silt, clay, or colloids passing the #230 sieve (4.0^{ϕ})

- Greater than 5%, by weight, fine gravel retained on the #4 sieve (2.25$^{\phi}$)
- Coarse gravel, cobbles, or material retained on the 3/4-inch sieve in a percentage or size greater than what is found on the native beach
- Construction debris, toxic material, or other foreign matter

If rocks or other non-specified materials appear on the surface of the filled beach in excess of 50% of background in any 10,000-square-foot area, then surface rock should be removed from those areas. These areas would also be tested for subsurface rock percentage and remediated as required. If the natural beach exceeds any of the limiting parameters listed above, then the fill material would not exceed the naturally occurring level for that parameter (Florida Administrative Rule 62B-41.007).

In addition to construction BMPs and dune walkover conservation measures, four of the sites (Grayton Dunes, Dothan Beach, Palms of Dune Allen West, and Bayside Ranchettes) are within the Coastal Construction Control Line (CCCL). An essential part of Florida's coastal management program, the CCCL program is designed to protect the coastal system from improperly sited and designed structures that can erode, destabilize, or destroy the beach and dune system, with the overall goal of balancing development and the health of these natural systems (FDEP 2013a). The CCCL is defined as "that portion of the beach-dune system subject to severe fluctuations based on a 100-year storm surge, storm waves, or other forces such as wind, wave, or water level changes" (FDEP 2012a). The following environmental-related permit obligations/best practices would be followed for the above referenced projects:

1. The contractor would use extreme care to prevent any impacts to the beach and dune system, marine turtles, their nests and habitat, or adjacent property and structures.
2. The construction would not result in removal or destruction of native vegetation, which would either destabilize a frontal, primary, or significant dune or cause a significant impact to the beach and dune system from increased erosion by wind or water.
3. The construction would not direct discharges of water or other fluids in a seaward direction and in a manner that would result in significant impacts. For the purposes of this rule section, construction would be designed to minimize erosion-induced surface-water runoff within the beach and dune system and to prevent additional seaward or off-site discharges associated with a coastal storm event.
4. Construction traffic would not occur and building materials would not be stored on vegetated areas seaward of the control line unless specifically authorized by the permit.
5. The contractor would not disturb existing beach and dune topography and vegetation except as expressly authorized in the permit, and would restore any disturbed topography or vegetation prior to completing the project.
6. All fill material placed seaward of the control line would be sand, which is similar to that already existing on the site in both coloration and grain size.
7. The construction would not result in removal or disturbance of in situ sandy soils of the beach and dune system to such a degree that a significant impact to the beach and dune system would result from either a) reducing the existing ability of the system to resist erosion during a storm or b) lowering existing levels of storm protection to upland properties and structures.

8. If not specifically authorized elsewhere in the permit, no operation, transportation, or storage of equipment or materials are authorized seaward of the dune crest or rigid coastal structure during the marine turtle nesting season. The marine turtle nesting season is May 1 through October 31 (FDEP 2012b).

Lastly, Standard Manatee Conditions for In-Water Work (USFWS 2011) would apply to the Bayside Ranchettes Park project, which includes building a dock and steps into the water. The permittee would comply with the following conditions intended to protect manatees from direct project effects:

- All personnel associated with the project would be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and impact to manatees. The permittee would advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees that are protected under the Marine Mammal Protection Act, the Endangered Species Act (ESA), and the Florida Manatee Sanctuary Act.
- All vessels associated with the construction project would operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a 4-foot clearance from the bottom. All vessels would follow routes of deep water whenever possible.
- Siltation or turbidity barriers would be made of material in which manatees cannot become entangled, would be properly secured, and would be regularly monitored to avoid manatee entanglement or entrapment. Barriers would not impede manatee movement.
- All on-site project personnel would be responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, would be shut down if a manatee(s) comes within 50 feet of the operation. Activities would not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapse if the manatee(s) has not reappeared within 50 feet of the operation. Animals would not be herded away or harassed into leaving.
- Any collision with or harm to a manatee would be reported immediately to the FWC Hotline at 1-888-404-3922.
- Collision and/or harm would also be reported to the U.S. Fish and Wildlife Service (USFWS) in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida, and to FWC at ImperiledSpecies@myFWC.com.
- Temporary signs concerning manatees would be posted before and during any in-water project activities. All signs would be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC would be used. One sign that reads "Caution: Boaters" would be posted. A second sign measuring at least 8 ½ × 11 inches explaining the requirements for "Idle Speed/No Wake" and the shutdown of in-water operations would be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at MyFWC.com/manatee.
- The project would adhere to all applicable permit conditions and federal, state, and local requirements for the protection of marine mammals during construction (FWC 2011b).

12.51.3.2 Construction Timeframe

Proposed construction work is expected to take 2–3 months to start and 2 months to complete. The following proposed schedule is planned:

- Design Complete: Summer 2014
- Permitting Complete: DEP permits would be obtained once funding is secured. FDEP permits would not be required for Gulfview Heights, and Ed Walline sites, because they are landward of the CCCL.
- Contract Bid: Summer 2014
- Construction Start: Summer 2014
- Construction Compete: Fall 2014

12.51.4 Operations and Maintenance

Long-term monitoring and maintenance of the improved facilities would be completed by Walton County as part of their regular public facilities maintenance activities. Funding for this post construction maintenance is not included in the value for the project cost and would be accomplished by Walton County.

As part of the project cost, monitoring would be conducted to ensure project plans and designs are correctly implemented. Performance monitoring would evaluate the construction of the boardwalks, dune walkovers, dock and steps, restrooms, and picnic pavilion to ensure successful completion as designed and permitted. Following the construction performance monitoring period, human use and activity at the site would be monitored through the local government's regular maintenance activities. This assessment would not be directly undertaken by the Florida Trustees.

12.51.5 Affected Environment and Environmental Consequences

Under the National Environmental Policy Act, federal agencies must consider environmental effects of their actions that include, among others, impacts on social, cultural, and economic resources, as well as natural resources. The following sections describe the affected environment and environmental consequences of the project.

12.51.5.1 No Action

Both OPA and NEPA require consideration of the No Action alternative. For this Draft Phase III ERP proposed project, the No Action alternative assumes that the Trustees would not pursue this project as part of Phase III Early Restoration.

Under No Action, the existing conditions described for the project site in the affected environment subsection would prevail. Restoration benefits associated with this project would not be achieved at this time.

12.51.5.2 Physical Environment

12.51.5.2.1 Geology and Substrates

Affected Resources6

According to the *Geologic Map of Florida*, the Ed Walline, Gulfview Heights, Grayton Dunes, Dothan Beach, and Palms of Dune Allen West sites are on the Quaternary system, Holocene series, Holocene Sediments stratigraphic unit. This stratigraphic unit consists of quartz sands, carbonate sands and muds, and organics. These sediments occur near the present coastline, typically at elevation 5 feet above mean sea level or lower (FDEP 2013b; FDEP 2013c).

The Bayside Ranchettes Park site is on the Quaternary system, Pleistocene/Holocene series, Undifferentiated Quaternary Sediments stratigraphic unit. This stratigraphic unit consists of siliciclastics, organics, and freshwater carbonates. The siliciclastics are light gray, tan, brown to black, unconsolidated to poorly consolidated, clean to clayey, silty, unfossiliferous, variably organic-bearing sands to blue green to olive green, poorly to moderately consolidated, sandy, silty clays. Gravel is occasionally present. Organics occur as plant debris, roots, disseminated organic matrix, and beds of peat. Freshwater carbonates, or marls, are buff-colored to tan, unconsolidated to poorly consolidated, fossiliferous carbonate muds. Sand, silt, and clay may be present in limited quantities, and these carbonates often contain organics. The dominant fossils in the freshwater carbonates are mollusks (FDEP 2013b).

The Department of Environmental Protection, Bureau of Beaches and Coastal Systems identifies and manages beaches of the state that are critically eroding. The Ed Walline, Gulfview Heights, Grayton Dunes, Dothan Beach, and Palms of Dune Allen West sites are all along these state-designated, critically eroded beaches. A critically eroded area is a “segment of the shoreline where natural processes or human activity have caused or contributed to erosion and recession of the beach or dune system to such a degree that upland development, recreational interests, wildlife habitat, or important cultural resources are threatened or lost” (FDEP 2012a). The critically eroded areas at the Palms of Dune Allen West, Ed Walline, and Gulfview Heights sites threaten development and County Road 30A, whereas those at Grayton Dunes and Dothan Beach only threaten development (FDEP 2012a).

A sinkhole is a closed depression in the land surface that is formed by surficial solution or by subsidence or collapse of surficial materials from the solution of near-surface limestone or other soluble rocks. Sinkholes are a natural and common geologic feature in areas underlain by limestone and other rock types soluble in natural water; they are one of the predominant landform features of Florida. The state has been classified into four areas of sinkhole occurrence. Coastal Walton County is categorized as Area IV with a carbonate rock cover more than 200 feet thick. Area IV consists of cohesive sediments interlayered with discontinuous carbonate beds. Sinkholes are very few, but several large-diameter, deep sinkholes occur. Cover-collapse sinkholes dominate in Area IV, which occur when a solution cavity develops in limestone to such a size that the overlying cover material can no longer support its own weight. Activities that promote sinkholes include over-withdrawal of groundwater, drilling water wells, and creating artificial surface water ponds (FDEP 2013d).

Environmental Consequences

Mechanized equipment and hand tools would be used to complete the repairs to current infrastructure and to construct the restroom facility, dune walkovers, and expansion of parking at the sites. Permit-required erosion control measures would be implemented at all of the proposed sites, and contractors would use BMPs to control erosion and minimize compaction.

Some excavation of soils would occur; however, adverse impacts to geology and substrates in the form of erosion and/or compaction would be minor because disturbance would be detectable. Impacts would also be short term and localized because of the limited construction period and footprint and due to adherence to the construction BMPs outlined in the Construction and Installation section above. There would be no long-term changes to local geology, soils, and sediments due to erosion and/or compaction associated with each project because of the limited construction period and footprint. Erosion and/or compaction may occur in localized areas, but would be minimized by the erosion control BMPs specified in the Construction and Installation section. Sinkholes are not expected to be an issue during project construction based on the Area IV classification.

12.51.5.2.2 Hydrology and Water Quality

Affected Resources

Watersheds

Northwest Florida has seven major watersheds, all of which have been identified as priorities under the Surface Water Management and Improvement (SWIM) program. Water quality protection is the underlying goal of SWIM, along with the preservation and restoration of natural systems and associated public uses and benefits (NWFWMD 2011). According to the Northwest Florida Water Management District, the Ed Walline, Gulfview Heights, Palms of Dune Allen West, and Bayside Ranchettes Park (on Choctawhatchee Bay) sites are part of the Choctawhatchee River and Bay watershed system, whereas the Grayton Dunes and Dothan Beach sites are part of the St. Andrew Bay watershed system. The Bayside Ranchettes Park sits on the shoreline adjacent to Choctawhatchee Bay.

The Choctawhatchee River and Bay watershed system encompasses approximately 3.5 million acres, 42% of which are in the state of Florida (the rest is in Alabama). Walton County is dominated by this watershed, aside from a small portion in the northeast part of the county. Made up primarily of the Choctawhatchee River, its tributaries, and the bay, the watershed system provides an array of aquatic, wetland, environmental, and human benefits over diverse ecological systems. Major tributaries of the Choctawhatchee River include the Pea River and Little Choctawhatchee River, as well as Holmes, Wrights, Bruce, and Pine Log Creeks. The waterways are primarily used for transportation, fishing, military uses, outdoor recreation, tourism, aesthetic qualities, and waste disposal. The system has one direct opening from its bay to the Gulf of Mexico at East Pass near Destin, Florida. Broad issues for the Choctawhatchee River and Bay system include urban stormwater runoff and other nonpoint sources of pollution, widespread sedimentation, domestic and industrial wastewater discharges, and habitat loss and degradation. Cumulatively, these impacts have degraded the productivity of the river and bay system and diminished the benefits it provides (NWFWMD 2002).

The St. Andrew Bay watershed system is the only major estuarine drainage basin entirely within the Florida panhandle; it encompasses approximately 750,000 acres in six Florida counties. The watershed contains St. Andrew Bay (east, west, and north bays), St. Joseph Bay, Deer Point Reservoir, and their respective surface water basins. Only 4% of the watershed is in Walton County. This part of the watershed drains into several coastal dune drainages. The residential population in this area has grown in the past two decades, with the resulting challenge of increased human land use, non-point source pollution, and habitat loss and degradation. Land development tends to cause stream channelization, increase in impervious surface area, erosion, and habitat loss. Resulting hydrologic effects include increased frequency and severity of flooding, lowered water tables, and reduced streamflow in dry weather (NWFWMD 2000).

Coastal Dune Lakes

Walton County's 26-mile coastline is home to 15 named coastal dune lakes. Coastal dune lakes are extremely rare around the world and only occur along the Gulf Coast and in the state of Oregon in the United States. These unique geographic features share an intermittent connection with the Gulf of Mexico, acting as outfalls into the Gulf during periods of overflow/flooding while allowing saltwater and marine life in during high tides and storm surges. Walton County maintains protection of their coastal dune lakes through monitoring partnerships, cooperation with state and federal agencies, and via meetings of the Coastal Dune Lakes Advisory Board (Walton County 2013a). The Palms of Dune Allen West, Gulfview Heights, and Grayton Dunes sites are all within 1,500 feet of a coastal dune lake. The Palms of Dune Allen site is approximately 1,300 feet east of Oyster Lake, Gulfview Heights is approximately 1,500 feet west of Draper Lake, and Grayton Dunes is approximately 500 feet west of Western Lake.

Impaired Waters

Impaired waters are waters that are too polluted or otherwise degraded to meet the water quality standards set by states, territories, or authorized tribes. In 2002, 32% of Florida's lakes and 84% of its bays were impaired. The Choctawhatchee Bay is listed as impaired by the EPA for fecal coliform and mercury in fish tissue in its lower segment, and for mercury in fish tissue for its middle and upper segments. The Bayside Ranchettes Park site is in the upper segment. Total maximum daily loads (TMDLs) have not yet been adopted for these locations. No other lakes in the project sites are impaired (EPA 2010).

Wetlands

According to the National Wetland Inventory, the six proposed project sites do not appear to overlap any wetlands, but they are surrounded by various types of wetlands, mainly freshwater forested/shrub wetlands upland of the proposed sites (Figure 12-8, Figure 12-9, Figure 12-10).

Floodplains

According to Federal Emergency Management Agency (FEMA) flood information, all six proposed project sites are in a Special Flood Hazard Areas inundated by 100-year floods (Walton County 2013c).

Environmental Consequences6

With required mitigation in place, anticipated impacts to water quality, such as erosion caused by construction, would be minimal and short in duration at all proposed project sites. This project would use the construction BMPs outlined in the Construction and Installation section to minimize erosion-related construction impacts as well as impacts to surface water, groundwater, and wetlands. Contractors would take special precautions when working within the CCCL and around coastal dune lake habitats. Floodplain status would not be affected. Adverse impacts to hydrology and water quality would therefore be minor and short term.

12.51.5.2.3 Air Quality and Greenhouse Gas Emissions

Affected Resources

The Clean Air Act requires the EPA to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. NAAQS have been set for six common air pollutants (also known as criteria pollutants), consisting of particle pollution or particulate matter, ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, and lead. Particulate matter is defined as fine particulates with a diameter of 10 micrometers or less (PM_{10}) and fine particulates with a diameter of 2.5 or less ($PM_{2.5}$). When a designated air quality area or airshed in a state exceeds a NAAQS, that area may be designated as a “nonattainment” area. Areas with levels of pollutants below the health-based standard are designated as “attainment” areas. To determine whether an area meets the NAAQS, air monitoring networks have been established and are used to measure ambient air quality. The EPA also regulates 187 hazardous air pollutants (HAPs) that are known or suspected to cause cancer or other serious health effects.

Air quality within the Florida panhandle is in attainment with the NAAQS (EPA 2013).

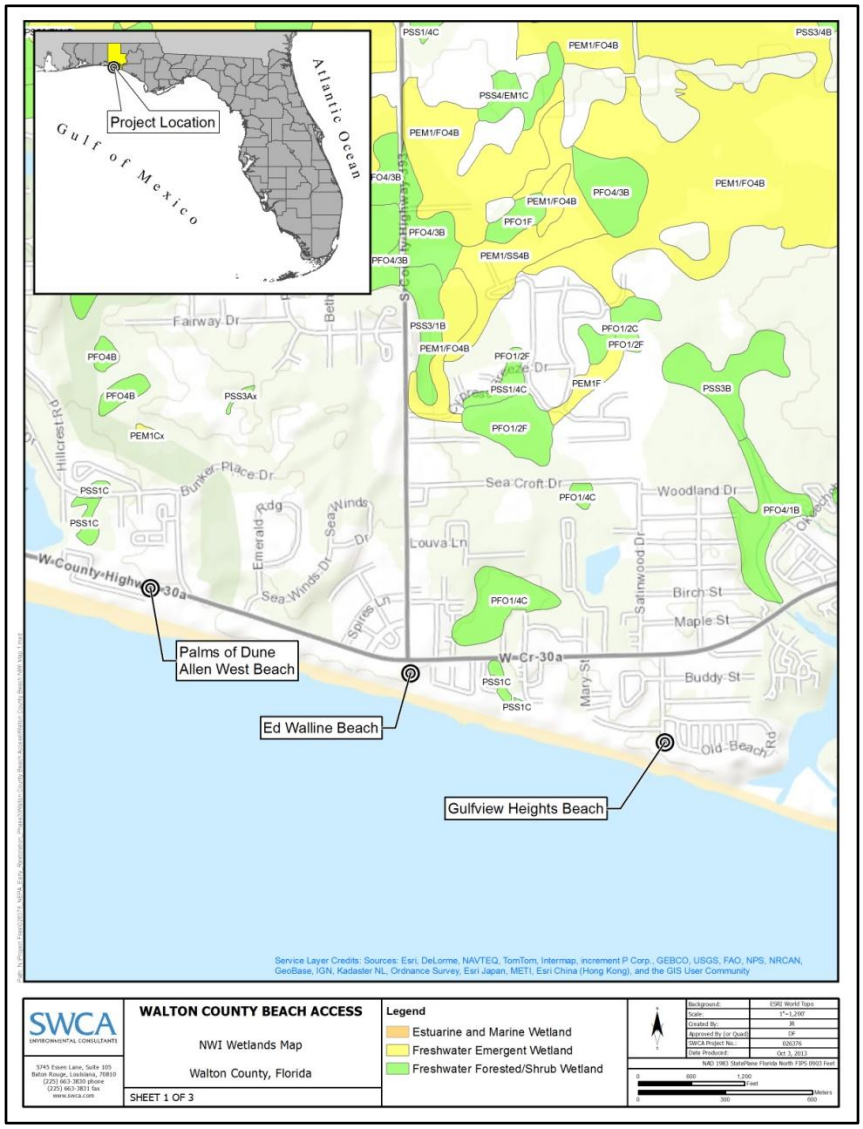


Figure 12-8. Wetlands near Palms of Dune Allen West, Ed Walline, and Gulfview Heights project sites.

Figure 12-9. Wetlands near Grayton Dunes Beach and Dothan Beach project sites.

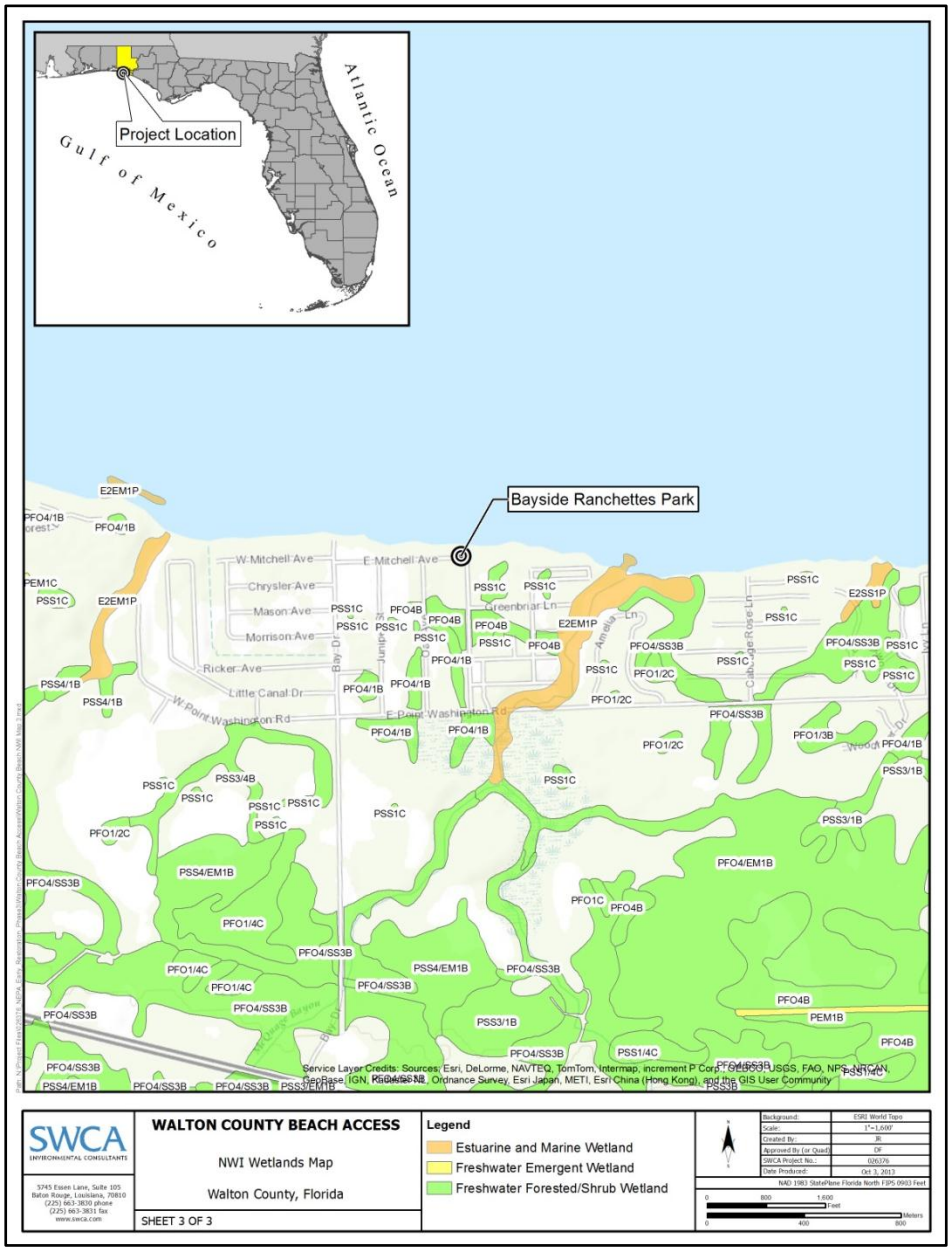


Figure 12-10. Wetlands near Bayside Ranchettes Park project site.

Greenhouse Gases

Gases that trap heat in the air are called greenhouse gases (GHGs). The primary GHGs are carbon dioxide (CO_2), methane, nitrous oxide, and fluorinated gases. Over the past century, human activities have released into the atmosphere large amounts of GHGs, which are contributing to global warming. Global warming is defined as the ongoing rise in global average temperature near the Earth's surface. Global warming is causing climate patterns to change.

According to the EPA, the average annual temperature in the southeast portion of the United States has increased by approximately 2.0°F since 1970. Winters, in particular, are getting warmer, and the average number of freezing days has decreased by 4–7 days per year since the mid-1970s. Most areas are getting

wetter; autumn precipitation has increased by 30% since 1901 (EPA 2013). In many parts of the region, the number of heavy downpours has increased. Despite the increases in fall precipitation, the area affected by moderate and severe drought has increased since the mid-1970s (EPA 2013).

Average annual temperatures in the region are projected to increase from 4°F to 9°F by 2080. Hurricane-related rainfall is projected to continue to increase. Models suggest that rainfall will arrive in heavier downpours with increased dry periods between storms. These changes would increase the risk of both flooding and drought. The coasts will likely experience stronger hurricanes and sea level rise. Storm surge could present problems for coastal communities and ecosystems (EPA 2013).

Total GHG emissions in the state of Florida from 1990 to 2007 have increased at an average rate of 2.1% per year. Total GHG emissions in 2007 were 290 million metric tons of CO_2 equivalent ($MMTCO_2E$). In 2007, 91% of GHG emissions in Florida were CO_2 emissions (FDEP 2010).

Environmental Consequences

Project implementation would require the use of heavy mechanized equipment which would lead to temporary emissions (e.g., criteria pollutants, HAPs, GHGs) from the operation of construction vehicles and equipment. Any air quality impacts that occur would be measurable but minor due their localized nature, short-term duration, and the small size of the project. BMPs would be employed to prevent, mitigate, and control potential air pollutants during project implementation, such as following speed limits and prohibiting idling unless necessary to run equipment. No air quality–related permits would be required because of the minimal levels of emissions.

The major pieces of construction equipment that would contribute to GHG emissions for these projects are listed in Table 12-3, along with their estimated emissions. GHG emissions from the remaining (hand) equipment would be negligible. The emissions estimates are based on the operating assumptions in Table 12-2, and include emissions from all of the sic proposed projects.

Based on the estimates in Table 12-3, the project would generate approximately 75 metric tons of GHGs over the duration of all phases. The following mitigation measures have been identified to reduce or eliminate GHG emissions from the project:

- Shut down idling construction equipment, if feasible.
- Locate staging areas as close to construction sites as practicable to minimize driving distances between staging areas and construction sites.
- Encourage the use of the proper size of equipment for the job to maximize energy efficiency.
- Encourage the use of alternative fuels for generators at construction sites, such as propane or solar, or use electrical power where practicable.

The project would have short-term, minor impacts but no long-term impacts on GHG emissions. Mitigation measures would minimize GHG emissions.

Table 12-3. Estimated greenhouse gas impacts of the proposed projects for major construction equipment.

EQUIPMENT DESCRIPTION	TOTAL HOURS USED	CO_2 FACTOR-MT/100 HOURS	CO_2 (MT)	CH_4 FACTOR-MT/100HRS	CH_4 (MT)	N_2O FACTOR-MT/100 HOURS	N_2O (MT)	TOTAL CO_2 (MT)
Dump trucks/flatbed truck	104	1.70	1.8	0.50	0.5	7.20	7.5	9.8
Concrete trucks	16	1.70	0.3	0.50	0.1	7.20	1.2	1.5
Pickup trucks	704	1.10	7.7	0.35	2.5	4.40	31.0	41.2
Bobcat (bare and with auger mount)	80	2.65	2.1	0.90	0.7	10.60	8.5	11.3
Moto grader	16	2.25	0.4	0.65	0.1	1.08	0.2	0.6
Paving machine	16	2.00	0.3	0.50	0.1	8.00	1.3	1.7
Rollers	16	2.00	0.3	0.5	0.1	8.00	1.3	1.7
Track hoe (w/ bucket/ thumb or vibratory attachments)	24	2.55	0.6	0.85	0.2	10.20	2.4	3.3
Dozer	40	2.25	0.9	0.65	0.3	1.08	0.4	1.6
Forklift	64	2.25	1.4	0.65	0.4	1.08	0.7	2.5
Total	**1,080**							**75**

mt = metric tonnes

At the completion of the project, visitor use (and therefore vehicle use) could increase due to the improved access and facilities. Increased exhaust emissions could affect air quality over the long term. However, impacts to air quality are expected to be minor because 1) management actions could be taken if necessary to limit park visits, 2) they would be negligible in the context of the total number of miles travelled in the regional airshed, and 3) because vehicles would likely be parked for the duration of their visit and therefore only producing emissions when coming and going from the site.

12.51.5.3 Noise

Affected Resources

Noise can be defined as unwanted or nuisance sound. The Noise Control Act of 1972 (42 USC 4901 to 4918) was enacted to establish noise control standards and to regulate noise emissions from commercial products such as transportation and construction equipment. Amplitude is the magnitude of a sound and is usually expressed in decibels (dB), a dimensionless ratio of sound pressure to that of a reference pressure. The A-weighted decibel (dBA) is the adjusted unit of sound used to describe the human response to noise from industrial and transportation sources. The threshold of human hearing is 0 dBA. A 3-dBA increase is equivalent to doubling the sound pressure level, but is barely perceptible to the human ear. Table 12-4 shows typical noise levels for common sources expressed in dBA. Noise exposure depends on how much time an individual spends in different locations.

Table 12-4. Typical noise levels for common sources.

NOISE SOURCE OR EFFECT	SOUND LEVEL (DBA)
Jet take-off (at 25 meters)	150
Rock-and-roll band	110
Jet flyover at 1000 feet	100
Truck at 50 feet	80
Gas lawn mower at 100 feet	70
Normal conversation indoors	60
Moderate rainfall on foliage	50
Refrigerator	40
Bedroom at night	25

Source: Adapted from U.S. Department of Energy (1986); Purdue 2013.

Noise levels in the project area vary depending on the season, time of day, number and types of noise sources, and the distance of the receptor from noise sources. Existing sources of noise in the project area are from nearby residential activities (e.g., lawn care), traffic on nearby roads and highways, overhead aircraft, and ambient natural sounds such as wind, waves, and wildlife.

Noise-sensitive receptors include sensitive land uses and those individuals and/or wildlife that could be affected by changes in noise sources or levels due to the project. Sources of noise in the project sites include flight activity coming out of Eglin Air Force Base, which sits on the west edge of Choctawhatchee Bay, residences located around the sites, boats and other watercraft on the Gulf of Mexico and in Choctawhatchee Bay, and car and truck traffic. Noise-sensitive receptors in the project sites include residences around the sites, recreational users, and wildlife. There are currently residences in and around each of the sites, some as close as 25 feet.

Environmental Consequences

Instances of increased noise would occur during the project and construction activities at each of the six sites. Construction activities, including use of heavy equipment such as graders and backhoes and smaller hand-held tools such as saws and nail guns, would cause an increase in noise during the day for the duration of construction when heard at noise-sensitive receptors near the sites. Construction equipment noise is known to disturb fish, marine mammals, and nesting shorebirds. Construction noise would also negatively affect local residents in areas near project construction activities.

Standard state contract provisions include restricting work to weekdays from normally 7am to 7pm unless in a hospital or strictly residential area. Contractors are normally not allowed to work outside these limits unless it is for safety, traffic, or highly restricted schedules, and then it must be by permission. In addition, state contracts require that all equipment used on-site must be properly muffled and in good repair. As a result, noise impacts are expected to be minor and short term. The noise impacts would be short term because the construction period is not anticipated to last more than 2 months at each site and minor because of the temporary nature of the construction noise and state-required construction BMPs. Negative impacts to the soundscape would be of a level that is likely to attract visitor and neighbor attention but not cause changes in visitor or resident activities.

After completion of the project, the soundscape would return to pre-project levels. The potential for increased vehicle traffic exists due to the improved access and facilities at each site, which would result in a slight increase in noise levels in the vicinity. Overall, long-term noise effects from traffic, beach use, picnicking, and other recreational activities would remain minor due to the small footprint of each site.

12.51.5.4 Biological Environment

12.51.5.4.1 Living Coastal and Marine Resources

The Gulf of Mexico is one of the nation's most valuable ecosystems. Florida's barrier islands, estuaries, coral reefs, beaches, seagrass meadows, coastal wetlands, and mangrove forests are world-renowned natural resources and attractions. These habitats provide a range of ecosystem services, including fisheries, wildlife-related activities, food production, energy production, infrastructure protection, and recreational opportunities (Gulf Coast Ecosystem Restoration Task Force 2011). In Walton County, beach and dune systems are an integral part of the coastal system and represent one of the most valuable natural resources in Florida, providing protection to adjacent upland properties, recreational areas, and habitat for wildlife.

Affected Resources

The Florida Gap Project uses the recently enacted U.S. National Vegetation Classification System to classify its vegetation map of the state of Florida. The land cover mapping technique developed by the Florida Fish and Wildlife Cooperative Unit synergizes existing geospatial information with current Landsat imagery and ground-truthed data (Florida Fish and Wildlife Cooperative Unit 2000).

According to Florida's GAP Land Cover GIS data, the Palms of Dune Allen West, Ed Walline, and Gulfview Heights sites are dominated by a mix of sand/beach and urban land cover classes (a mix of urban, open, and residential land types). Additional land cover classes that are identified as existing in these project sites, though less prevalent, include cover classes such as gallberry/saw palmetto shrubland compositional group, swamp forest ecological complex, sand pine forest, and coastal strand. The Palms of Dune Allen West and Ed Walline sites sit on the sand/beach, which is dominant, with urban complex immediately to the north; whereas the Gulfview Heights site sits on dry prairie (xeric-mesic) ecological complex with urban complex immediately to the north.

The Grayton Dunes site sits on open land surrounded by urban residential, sand/beach, and a small amount of bay/gum/cypress ecological cover, and coastal strand.

The Dothan Beach site sits on urban residential land surrounded by sand/beach and coastal strand.

Finally, nearly the entire parcel proposed for development at the Bayside Ranchettes Park site sits on pasture/agricultural/grassland. This parcel is surrounded by a less dominant mix gallberry/saw palmetto shrubland compositional group, xeric-mesic mixed pine/oak forest ecological complex, swamp forest ecological complex, mesic-hydric pine forest compositional group, and urban land cover. Table 12-5 describes the characteristics of these land cover class types in detail.

Table 12-5. Landcover class descriptions.

LANDCOVER CLASS	DESCRIPTION
Urban	This class represents predominantly commercial urban areas.
Sand/beach	This class represents unvegetated sand and beach
Pasture/grassland/agriculture	This class represents pasture, grassland, and some agriculture. The difficulty of differentiating grassland and some forms of agriculture (e.g., hay) from pasture using spectral data has resulted in this lumped class. The class appears to be primarily pasture, although some overlap with sandhill and other open, graminoid type communities may have occurred.
Coastal strand	This is a coastal dune- and shrub-dominated community. Dominance in north Florida by saw palmetto (*Serenoa repens*) and yaupon holly (*Ilex vomitoria*) is common. In southern Florida, saw palmetto (*Serenoa repens*) remains common and sea grape (*Coccoloba uvifera*) becomes a more prominent community member.
Dry prairie ecological complex	In Florida, dry prairies are sparsely wooded savannas with dominance by a mosaic of saw palmetto (*Serenoa repens*) and grasses (*Aristida* spp., *Sporobolus* spp., and *Andropogon* spp.)
Gallberry/saw palmetto compositional group	This class represents shrub and graminoid communities found in association with wet flatwoods. Although similar to the dry prairie class, it tends to be wetter and have a greater dominance by shrubs. Gallberry (*Ilex glabra* and *I. coriacea*), fetterbush (*Lyonia lucida*), sweet pepperbush (*Clethra alnifolia*), and titi (*Cyrilla racemosa* and *Cliftonia monophylla*) are representative species. This community may be an early phase of pine regeneration or it may have a more permanent status.
Swamp forest compositional group	This class represents deciduous and evergreen swamp forests of north and central Florida.
Sand pine forest	Forest dominated by sand pine (*Pinus clausa*). These forests are found on dry, sand ridges in the interior and along the coast.
Bay/gum/cypress ecological complex	This class represents forested communities containing combinations of bay (*Gordonia lasianthus*, *Magnolia virginiana*, *Persea palustris*), gum (*Nyssa* spp.), and cypress (*Taxodium* spp.).
Xeric-mesic mixed pine/oak forest ecological complex	This complex represents mesic to xeric mixed pine/oak forest. The dominant species may include varying levels of *Pinus elliottii*, *P. palustris*, *P. taeda*, *Quercus falcata*, *Q. hemisphaerica*, *Q. virginiana*, *Carya glabra*, and *C. tomentosa*.

Environmental Consequences

Impacts to living coastal and marine resources would be minor. Impacts on native vegetation would be detectable but would not alter overall natural conditions and would be limited to localized areas. Infrequent disturbance and destruction of some individual plants would be expected, but would not affect local or rangewide population stability. The opportunity for the increased spread of non-native species would be temporary and localized and is not anticipated to displace native species populations and distributions. Infrequent or one-time disturbance to locally suitable habitat could occur, but sufficient habitat would remain functional at both the local and regional scales to maintain the viability of the species.

Five of the projects would be at existing coastal access sites to the Gulf of Mexico, with one site (Bayside Ranchettes Park) providing a new access point to Choctawhatchee Bay. The proposed improvements at

Palms of Dune Allen West and Ed Walline sites would have no impact to vegetation because they sit on the sand/beach land cover class, which represents unvegetated sand and beach. The Grayton Dunes site would also experience no impact to vegetation because it sits on open land, which has no vegetation. The Dothan Beach site sits on urban residential, so there would also be no impact to vegetation. The Gulfview Heights site sits on dry prairie (xeric-mesic) ecological complex with urban complex immediately to the north and sand/beach to the south. Plants such as saw palmetto and grasses (see Table 12-4) could be impacted by crushing or trampling during the proposed repairing of soffits on pavilions and updates to existing infrastructure, but this impact would be minor and short in duration due to the adherence to construction BPMs, the small footprint of the project, and the fact that no substrate excavation would take place. Lastly, the Bayside Ranchettes Park site sits on the pasture/grassland/agriculture land cover class, which is composed primarily of pasture with some overlap of sandhill and other open, graminoid type communities. The impacts to vegetation at this site would be moderate because of the vegetation removal associated with construction of a parking area, a picnic table, a dock, but short term in duration due to the 2-month construction timeframe.

At the sites with existing vegetation, there is potential for the introduction of invasive plant species due to the introduction of vehicles and equipment that may spread seeds or plants; however, BMPs (HACCP planning and implementation) to prevent introduction and spread have been incorporated into the project. Collectively, the proposed sites would have minor and short-term impacts to vegetation, because of the general lack of vegetation at the sites and the 2-month construction timeframe at each site.

12.51.5.5 Wildlife Habitat

Affected Resources

The Gulf Coast Beaches host a variety of resident and migratory animals. Dune and beach habitat in the project areas provide habitat and important services for 1) nesting and hatching sea turtles, 2) overwintering piping plovers, 3) nesting, resting and foraging migratory birds, and 4) beach mice (Walton County 2011). In addition, migratory butterflies can also be viewed along the coastline. Walton County has adopted a Wildlife Lighting Ordinance (No. 2009-03), which provides guidelines for proper light management to minimize disturbances to nesting sea turtles, their hatchlings, and other coastal wildlife. All new construction within the Wildlife Conservation Zone (750 feet from the mean high water line of the Gulf of Mexico) must comply with the ordinance (Walton County 2013d). All five southern projects are within this zone, but project activities would occur during daylight hours.

Environmental Consequences

Construction and operations would cause only minimal damage to habitats because of the small construction footprints and already existing access footprint at the sites. Although common wildlife may be disturbed from construction activities, these species live in an urban environment where ambient noise levels are high. Habitat conditions after construction would be similar to the existing ones, and no effects to common wildlife would be anticipated. Construction and operations would cause only minimal alteration and/or damage to habitats, and therefore a minor, short-term impact. The dune habitat in the project sites would be moderately improved over the long term as a result of dune restoration and walkover construction. The FDEP Wetland and Environmental Resource Field permits would require the

implementation of BMPs for turbidity and erosion control. This would help minimize the damage and loss of habitats through the same mitigation measures mentioned in the Construction and Installation section.

12.51.5.5.1 Marine and Estuarine Fauna

Affected Resources

The Choctawhatchee Bay and Gulf of Mexico provide habitat for numerous fish and other marine species. The value of marine habitats at the project sites has been affected by population growth, development, and wastewater disposal. Increased coastal development, in particular, has contributed to displaced habitats, loss of wetlands, and greater amounts of stormwater runoff entering the bay and its tributaries (NWFWMD 2011). Nonetheless, the marine environment at the project sites provides habitat to an array of aquatic species, including redfish, speckled trout (*Cynoscion nebulosus*), shrimp, oysters, gulf menhaden (*Brevoortia patronus*), blue crab, flounder, striped mullet (*Mugil cephalus*), white mullet (*Mugil curema*), and dolphins. Offshore saltwater fish in South Walton include speckled trout, redfish, Spanish mackerel (*Scomberomorus maculates*), flounder, bluefish (*Pomatomus saltatrix*) and cobia (*Rachycentron canadum*) (South Walton 2013; FWC 2013). Benthic organisms such as bivalves, gastropods, and other mollusks, anemones, amphipods, annelids, crustaceans, and echinoderms, and are also abundant in these waters (FWC 2001).

Environmental Consequences

Fish and benthic organisms are not expected to be impacted by the Gulfside projects because construction would take place only in upland areas and because BMPs listed in the Construction and Installation section would be adhered to. Construction on the Bayside Ranchettes Park, however, would include building a dock onto the water. Construction activities are expected to have a minor, short-term impact on fish due to the small project footprint and short (two-month) temporal timescale, in addition to adhering to BMPs listed in the Construction and Installation section. Over the long term, increases in recreational swimmers, canoers, and kayakers at all sites may occur due to the improved access and facilities at the sites. These recreational activities are generally low impact for fish and are expected to have a negligible impact on fish populations.

12.51.5.5.2 Protected Species

Protected species and their habitats include ESA-listed species and designated critical habitats, which are regulated by either the USFWS or the NMFS. Protected species also include marine mammals protected under the Marine Mammal Protection Act, essential fish habitat (EFH) protected under the Magnuson-Stevens Fishery Conservation and Management Act, migratory birds protected under the Migratory Bird Treaty Act (MBTA) and bald eagles protected under the Bald and Golden Eagle Protection Act (BGEPA).

Affected Resources

The Grayson site is within critical habitat for the Choctawhatchee beach mouse (Figure 12-11). In addition, both the Gulf Coast and the Choctawhatchee Bay are considered critical habitat for the Gulf sturgeon (Figure 12-11).

Protected species with potential to occur in the project area are listed in Table 12-6, along with their federal and state status designations and habitat descriptions.

Sea Turtles and Marine Mammals

There are five species of endangered or threatened sea turtles that may occur or have potential to occur within the project sites. These include green turtle, hawksbill turtle, Kemp's ridley turtle, leatherback turtle, and loggerhead turtle. Sea turtles forage in the waters of the coastal Florida panhandle region and have potential to occur within the waters where in-water work is proposed. All of the Gulfside project sites contain suitable sea turtle nesting habitat along the sandy beach.

Twenty-two marine mammals are native to the Gulf of Mexico: 21 pelagic species of whales and dolphins, and the West Indian manatee (see Chapter 3). Of these species, the endangered West Indian manatee has the potential to occur in the project area waters. Manatees typically seek out shallow seagrass areas as preferred feeding habitat. Additionally, bottlenose dolphin (*Tursiops*) populations are known to migrate into bays, estuaries, and river mouths and could be located in the proposed project area (NMFS 2013a). Bottlenose dolphins have been observed entering and leaving nearshore coastal waters (NMFS 2012).

The endangered West Indian manatee has the potential to occur in the adjacent project area waters. Manatees typically seek out shallow seagrass areas as preferred feeding habitat. Additionally, populations of bottlenose dolphins (*Tursiops*) are known to migrate into bays, estuaries, and river mouths and could be in any of the proposed project sites (NMFS 2013).

Gulf Sturgeon

Both the Gulf Coast and Choctawhatchee Bay are considered critical habitat for the Gulf Sturgeon (see Figure 12-11) in the project sites. Gulf sturgeons are restricted to the Gulf of Mexico and its drainages, occurring primarily from the Pearl River, Louisiana to the Suwannee River, Florida (NMFS 2009). Adult fish reside in rivers 8–9 months each year and in estuarine or Gulf waters during the 3–4 cooler months of each year (NMFS 2009). Important marine habitats include seagrass beds with sand and mud substrates (Mason and Clugston 1993).

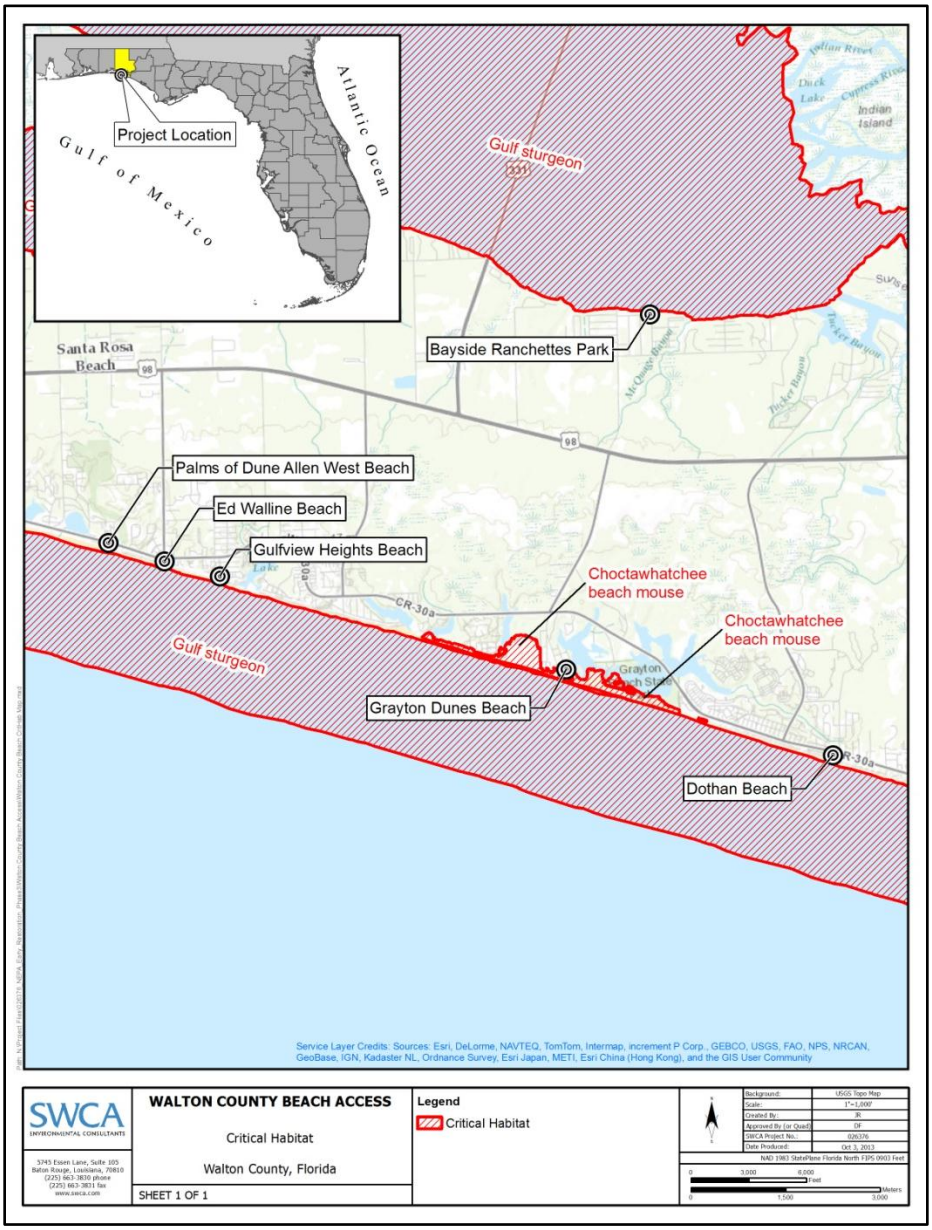
Gulf sturgeon critical habitat was jointly designated by the NMFS and USFWS on April 18, 2003 (50 Code of Federal Regulations [C.F.R.] 226.214). The Bayside Ranchettes Park site is in designated Gulf sturgeon critical habitat Unit 12 (NOAA 2012). Unit 12 is the Choctawhatchee Bay unit in Walton County, which is fed by unit 5, the Choctawhatchee River unit. Critical habitat provides feeding, resting, and sheltering, habitat necessary for maintaining the natural processes that support reproduction, migration, and survival (50 C.F.R. 226.214). These units provide critical winter feeding and migration habitat for Gulf sturgeon. Critical habitat was designated based on seven primary constituent elements (PCEs) essential for its conservation, as defined in the 2003 *Federal Register* 67:39107, as follows:

Table 12-6. Protected species with potential to occur in the project area.

RESOURCE CATEGORY	COMMON NAME	SCIENTIFIC NAME	USFWS STATUS	STATE STATUS	NATURAL COMMUNITIES
Birds	Bald eagle	*Haliaeetus leucocephalus*	BGEPA		• Estuarine: marsh edges, tidal swamp, open water • Lacustrine: swamp lakes, edges • Palustrine: swamp, floodplain • Riverine: shoreline, open water • Terrestrial: pine and hardwood forests, clearings **No potential habitat present**
	Piping plover	*Charadrius melodus*	T (CH)	T	• Estuarine and marine: exposed unconsolidated substrate • Terrestrial: dunes, sandy beaches, and inlet areas. Mostly wintering and migrants. **Habitat present at all sites except Bayside Ranchettes**
	Red knot	*Calidris canutusrufa*	P		• Estuarine and marine: exposed unconsolidated substrate • Terrestrial: dunes, sandy beaches, and inlet areas. Mostly wintering and migrants. **Habitat present at all sites except Bayside Ranchettes**
Fish	Gulf sturgeon	*Acipenser oxyrinchus desotoi*	T (CH)	T	• Anadromous, spending part of its life in saltwater but travelling upstream in freshwater rivers to spawn. Winters in the Gulf of Mexico in sandy bottom habitats 6–100 feet deep. • **Critical habitat present at Bayside Ranchettes and adjacent to all other sites.**
Mammals	Choctawhatchee beach mouse	*Peromyscus polionotus allophrys*	E (CH)	E	• Terrestrial: beach dune, coastal scrub • Present at the Grayton Beach State Park adjacent to the Grayton Dunes site after being reintroduced to the park. **Habitat present at all sites except Bayside Ranchettes, and Critical habitat present at Grayton**
	West Indian manatee	*Trichechus manatus latirostris*	E	E	• Estuarine: submerged vegetation, open water • Marine: open water, submerged vegetation • Riverine: alluvial stream, blackwater stream, spring-run stream **Potential habitat present at Bayside Ranchettes and adjacent to all other sites**
Reptiles	Green sea turtle	*Chelonia mydas*	E	E	• Terrestrial: sandy beaches; nesting **Habitat present**
	Hawksbill seat turtle	*Eretmochelys imbricata*	E	E	• Marine: open water; no nesting **Habitat present**
	Kemp's ridley sea turtle	*Lepidochelys kempii*	E	E	• Terrestrial: sandy beaches; nesting **Habitat present**
	Leatherback sea turtle	*Dermochelys coriacea*	E	E	• Terrestrial: sandy beaches; nesting **Habitat present**
	Loggerhead sea turtle	*Caretta caretta*	T	T	• Terrestrial: sandy beaches; nesting **Habitat present**

Source: USFWS (2013a)

E = Endangered; T = Threatened; CH = Critical Habitat; P = Proposed; BGEPA = Bald and Golden Eagle Protection Act; MBTA = Migratory Bird Treaty Act



Source: NOAA Habitat Conservation (2013).

Figure 12-11. Gulf Sturgeon and Choctawhatchee Beach Mouse critical habitat in relation to the project sites.

1. Abundant food items, such as detritus, aquatic insects, worms, and/or mollusks, within riverine habitats for larval and juvenile life stages; and abundant prey items, such as amphipods, lancelets, polychaetes, gastropods, ghost shrimp, isopods, mollusks, and/or crustaceans, within estuarine and marine habitats and substrates for subadult and adult life stages;
2. Riverine spawning sites with substrates suitable for egg deposition and development, such as limestone outcrops and cut limestone banks, bedrock, large gravel or cobble beds, marl, soapstone, or hard clay;
3. Riverine aggregation areas, also referred to as resting, holding, and staging areas, used by adult, subadult, and/or juveniles, generally, but not always, located in holes below normal riverbed depths; these are believed necessary for minimizing energy expenditure during freshwater residency and possibly for osmoregulatory functions;
4. A flow regime (i.e., the magnitude, frequency, duration, seasonality, and rate-of-change of freshwater discharge over time) necessary for normal behavior, growth, and survival of all life stages in the riverine environment, including migration, breeding site selection, courtship, egg fertilization, resting, and staging, and for maintaining spawning sites in suitable condition for egg attachment, egg sheltering, resting, and larval staging;
5. Water quality, including temperature, salinity, pH, hardness, turbidity, oxygen content, and other chemical characteristics necessary for normal behavior, growth, and viability of all life stages;
6. Sediment quality, including texture and chemical characteristics, necessary for normal behavior, growth, and viability of all life stages; and
7. Safe and unobstructed migratory pathways necessary for passage within and between riverine, estuarine, and marine habitats (e.g., an unobstructed river or a dammed river that still allows for passage). (*Federal Register* 67:39107)

Choctawhatchee Beach Mouse and Its Critical Habitat

The Choctawhatchee beach mouse, like other beach mice, uses the dune systems for sheltering, breeding, and foraging. Choctawhatchee beach mouse habitat consists of coastal sand dunes (high primary and secondary, lower interior) with sparse vegetation, including sea oats, bluestem, and bunch grass on the primary and secondary dunes, and scrubby oaks, dwarfed magnolia, and rosemary on the older dunes. The diet of the Choctawhatchee beach mouse primarily consists of seeds and fruit of dune plants, and insects. Beach mice are nocturnal and disperse out of their burrows at night to forage. Beach mice breeding peaks in the winter but can occur year-round if there is enough food available. The foremost threat facing the Choctawhatchee beach mouse is beach development. Development along beaches can cause destruction or degradation to dunes and dune habitat. For the beach mouse, this leads to increased habitat fragmentation and potential population isolation (Florida Natural Areas Inventory 2001). The Choctawhatchee beach mouse could be present at all sites except Bayside Ranchettes. The Grayton Dunes Beach site is within critical habitat for the Choctawhatchee beach mouse (see Figure 12-11).

Essential Fish Habitat

EFH is defined in the Magnuson-Stevens Fishery Conservation and Management Act as "those waters and substrates necessary to fish for spawning, breeding, feeding or growth to maturity." The designation

and conservation of EFH seeks to minimize adverse effects on habitat caused by fishing and non-fishing activities. The NMFS has identified EFH habitats for the Gulf of Mexico in its Fishery Management Plan Amendments. These habitats include estuarine emergent wetlands, seagrass beds, algal flats, mud, sand, shell, and rock substrates, and the estuarine water column. Ed Walline Beach Access, Dothan Beach Access, Grayton Dunes, Gulfview Heights Beach Access, and Palms of Dune Allen are located in uplands above the mean high- tide line, therefore no EFH is located within the project footprint.

The area also provides habitat for prey species (e.g. Gulf menhaden, shad, croaker and spot) that are consumed by larger commercially important species. In addition, the area provides habitat for spotted seatrout, striped mullet, southern flounder, Atlantic croaker, and Gulf menhaden. Table 12-7 provides a list of the species that NMFS manages under the federally Implemented Fishery Management Plan in the vicinity of the Walton County Bayside Ranchettes Park site and Choctawhatchee Bay.

Table 12-7. List of species managed by NMFS in vicinity of the project study area (NMFS EFH mapper, 2013).

MANAGEMENT UNIT / SPECIES	LIFESTAGE(S) FOUND AT LOCATION	FMP
Red Drum (Sciaenops ocellatus)	ALL	Red Drum
Highly Migratory Species Bull Shark Nurse Shark Sandbar Shark Scalloped Hammerhead Shark Tiger Shark	 All Juvenile All Neonate, Juvenile Juvenile	Highly Migratory Species
Shrimp Brown shrimp (*Penaeus aztecus*) White shrimp (*Penaeus setiferus*) Pink shrimp (*Penaeus duararum*) Royal red shrimp (*Pleoticus robustus*)	ALL	Shrimp
Coastal Migratory Pelagics King mackerel (*Scomberomorus cavalla)* Spanish mackerel (*Scomberomorus maculatus*) Cobia (*Rachycentron canadum*) Dolphin (*Coryphaena hippurus*)	ALL	Coastal Migratory Pelagics
Reef Fish **Balistidae - Triggerfishes** Gray triggerfish (Balistes capriscus) **Carangidae - Jacks** Greater amberjack (Seriola dumerili) Lesser amberjack (Seriola fasciata) Almaco jack (Seriola rivoliana) Banded rudderfish (Seriola zonata) **Labridae - Wrasses** Hogfish (Lachnolaimus maximus) **Lutjanidae - Snappers** Queen snapper (Etelis oculatus) Mutton snapper (Lutjanus analis)	ALL	Reef Fish

MANAGEMENT UNIT / SPECIES	LIFESTAGE(S) FOUND AT LOCATION	FMP
Blackfin snapper (Lutjanus buccanella)		
Red snapper (Lutjanus campechanus)		
Cubera snapper (Lutjanus cyanopterus)		
Gray (mangrove) snapper (Lutjanus griseus)		
Lane snapper (Lutjanus synagris)		
Silk snapper (Lutjanus vivanus)		
Wenchman (Pristipomoides aquilonaris)		
Vermilion snapper (Rhomboplites aurorubens)		
Malacanthidae – Tilefishes		
Goldface tilefish (Caulolatilus chrysops)		
Blueline tilefish (Caulolatilus microps)		
Serranidae – Groupers		
Speckled hind (Epinephelus drummondhayi)		
Yellowedge grouper (Epinephelus flavolimbatus)		
Red grouper (Epinephelus morio)		
Warsaw grouper (Epinephelus nigritus)		
Snowy grouper (Epinephelus niveatus)		
Nassau grouper (Epinephelus striatus)		
Black grouper (Mycteroperca bonaci)		
Yellowmouth grouper (Mycteroperca interstitialis)		
Gag (Mycteroperca microlepis)		
Scamp (Mycteroperca phenax)		
Yellowfin grouper (Mycteroperca venenosa)		

Red Knot

The red knot, a federal proposed species, uses the state of Florida both for wintering habitat and migration stopover habitat for those that continue to migrate down to specific wintering locations in South America (Niles et al. 2008). Wintering and migrating red knots forage along sandy beaches, tidal mudflats, salt marshes, and peat banks (Harrington 2001). Observations indicate that red knots also forage on oyster reef and exposed bay bottoms and roost on high sand flats, reefs, and other sites protected from high tides (Niles et al. 2008). In wintering and migration habitats, red knots commonly forage on bivalves, gastropods, and crustaceans. Threats to wintering and stopover habitat in Florida include shoreline development, hardening, dredging, deposition, and beach raking (Niles et al. 2008).

Piping Plover

The sandy beaches and shorelines adjacent to the project sites offer suitable foraging and resting habitat for the piping plover during the winter migratory season, and piping plover may forage in the shallow waters of the project sites. Natural shorelines in the proposed project vicinity provide suitable winter migration resting habitat for the piping plover. Piping plover wintering habitat includes beaches, mudflats, and sandflats, as well as barrier island beaches and spoil islands (Haig 1992, as cited by USFWS 2013). On the Gulf Coast, preferred foraging areas were associated with wider beaches, mudflats, and small inlets (USFWS 2013b).

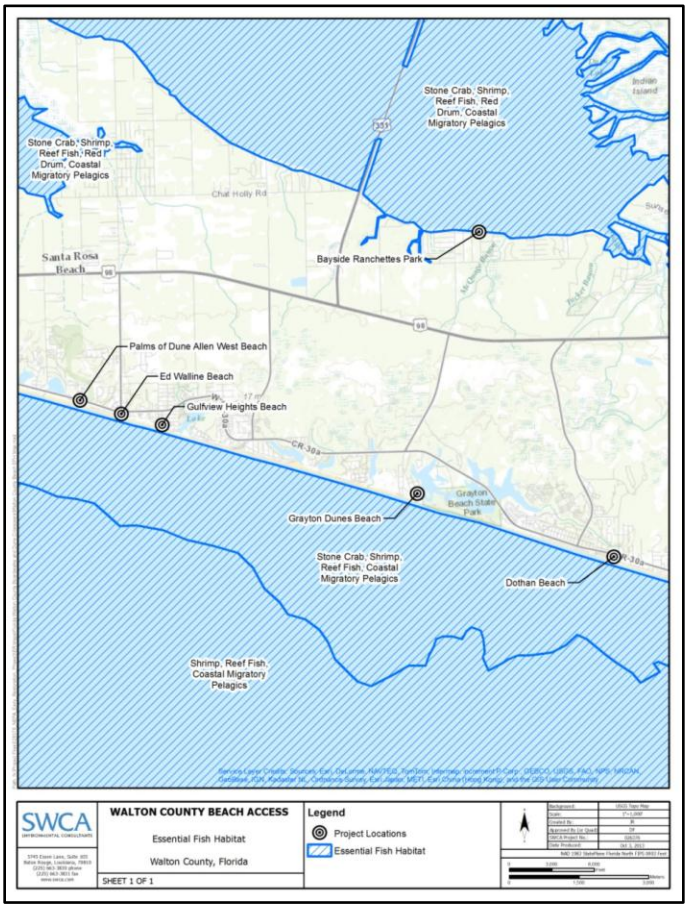


Figure 12-12. Essential fish habitat near the project sites.

Migratory Birds and Bald Eagles

All migratory bird species are protected under the MBTA. There are numerous State of Florida–listed bird species with potential to occur in and around the project sites. These include Arctic peregrine falcon (*Falco peregrinus tundrius*), least tern (*Sterna antillarum*), southeastern American kestrel (*Falco sparverius paulus*), Florida sandhill crane (*Grus canadensis pratensis*), American oystercatcher (*Haematopus palliates*), and southeastern/Cuban snowy plover (*Charadrius alexandrinus tenuirostris*). The nesting season in Florida is from March 1 to August 1.

There are four eagles nests in Walton County, all spaced near the shoreline in the western portion of the Choctawhatchee Bay, all of which are more than 2 miles away from any of the project sites.

No bald eagles are known or are likely to use the project sites, due to the lack of wooded areas surrounding most of the sites. The bald eagle was delisted by the USFWS and is not listed as threatened or endangered by the FWC. The bald eagle is, however, protected by state law pursuant to 68A-16, Fla. Admin. Code and by the U.S. government under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. Bald eagles feed on fish and other readily available mammalian and avian species and are dependent on large, open expanses of water for foraging habitat. In Florida, conservation measures to protect active nest sites during nesting season must be considered to reduce potential disturbances of certain project activities. If bald eagles are found nesting within 660 feet of a

proposed construction area, then activities would need to occur outside of nesting season or coordination with the USFWS would occur to determine if a permit is needed, and Florida's Bald Eagle Management Plan guidelines would be followed (FWC 2008).

Environmental Consequences

The proposed project has been evaluated for potential short- and long-term impacts to state and federally protected species that may occur in and adjacent to the project sites based on available suitable habitat and restoration goals. Descriptions of these evaluations are provided below.

Sea Turtles and Marine Mammals

For projects in waters accessible to sea turtles, NFMFS has developed standardized *Sea Turtle and Smalltooth Sawfish Construction Conditions* (NMFS 2006). These conditions are typically applied to projects as part of the USACE CWA Section 404 permit issued for in-water work. It is unlikely the area at the project sites contains submerged aquatic vegetation (FWC 2011a), which is the preferred foraging habitat of sea turtles, but it cannot be ruled out entirely.

If sea turtles are present in the in-water work area at Bayside Ranchettes, short-term disturbances from noise and turbidity would occur. Sea turtles are a highly mobile species and would be expected to move away during in-water activities. Additionally, should a sea turtle be encountered during installation of the project, the crews would allow these species to exit from the project vicinity before commencing with groin placement activities. Therefore, potential impacts or disturbances to listed sea turtles would be short term and minor.

Noise and other activity associated with proposed in-water construction may temporarily disturb manatees and dolphin species near the project area through temporary impacts on prey abundance, water quality (turbidity), and underwater noise. Manatees and dolphins are highly mobile species and would be expected to move away from the construction area during in-water activities. In addition, the Standard Manatee Conditions for In-Water Work (USFWS 2011) would be implemented at Bayside Ranchettes. These conditions would be implemented and adhered to during project construction. The permittee must comply with these conditions and it is anticipated that these conservation measures would significantly reduce risk of impacts to manatees which are expected to avoid and minimize impacts to manatees and other marine mammals such that any impacts are only short-term and minor.

While it is not anticipated that any incidental harassment of marine mammals will occur as a result of this proposed project, the Trustees are conducting an evaluation of the expected magnitude and duration of underwater noise from the proposed construction techniques and their potential impacts on protected species, including marine mammals. The results of this analysis will be coordinated with NOAA's Office of Protected Resources to develop best management practices (e.g., avoidance measures, monitoring, alternate equipment) to avoid incidental harassment, or to seek incidental harassment authorization under the Marine Mammal Protection Act as appropriate. Additional coordination with NOAA under the Endangered Species Act would be conducted if any potential effects to sea turtles or other listed species are identified.

Gulf Sturgeon

The Gulf sturgeon uses Choctawhatchee Bay as a migratory corridor from breeding grounds to winter foraging grounds. Minor, short-term disturbances may occur as a result of in-water work associated with the proposed project. Disturbances to the water column from in-water work would temporarily affect certain Gulf sturgeon critical habitat PCE's due to turbidity, dispersal of potential prey, and substrate disturbance. These would be limited to area immediately surrounding the work area and would occur only during construction. Therefore, impacts to Gulf sturgeon critical habitat would be short term and minor.

Choctawhatchee Beach Mouse

The proposed project at Bayside Ranchettes Park would have no impacts on Choctawhatchee beach mouse due to the lack of potential habitat. This site lacks sand beaches and dunes typically associated with potential habitat. Proposed projects at Ed Walline Beach and Gulfview Heights would have short-term, minor impacts on Choctawhatchee beach mouse during the renovation of facilities due to noise disturbance associated with restroom renovations and pavilion replacement or repair.

Impacts to Choctawhatchee beach mouse would be short-term and minor at Dothan Beach, Palms of Dune Allen West Beach, and Grayton Dunes beach. At each location the construction footprint would be located in the existing footprint or existing foot path, so little new ground disturbance is necessary. Existing walkovers would be removed in such a way that the adjacent dune structure is not damaged. In addition, installation of the new walkovers and any repairs would follow the most recent version of the *Conservation Measures for Dune Walkover Construction* to minimize impacts to habitat. Prior to any construction, a survey will be conducted to document and flag burrows and tracks by an experienced biologist for avoidance.

The proposed dune walkover project at Grayton Dunes Beach would have a short-term, minor impact on Choctawhatchee beach mouse critical habitat though no modification of critical habitat would occur. The existing walkover would be removed in such a way that the adjacent and underlying dune structure is not damaged. Guidelines provided in the most recent version of the *Conservation Measures for Dune Walkover Constructi*on will further keep PCE's intact.

Piping Plover and Red Knot

The main risk to piping plovers and red knot would be from human disturbance during resting and foraging in habitats adjacent to work areas and increased visitor use. The proposed project would result in short-term increases in noise, which could startle individuals, though normal activity is expected to resume within minutes. Alternatively, the noise is expected to cause the piping plovers and red knots to move to a nearby area as alternate available habitat is abundant. Piping plovers and red knots are highly mobile species; if disturbed by construction activities, they may be temporarily displaced from foraging and resting areas within normal movement patterns. However, to minimize these impacts, surveys for piping plover, red knot, and other species will be conducted prior to the onset of work. Work will avoid these species by at least 150 feet. These effects would be considered short term and minor.

Essential Fish Habitat

EFH considerations would be coordinated with the NMFS Habitat Conservation Division through a formal EFH assessment process. If necessary, species specific measures would be recommended by NMFS and would be incorporated into the project construction plan. The project would not result in adverse, direct impacts to emergent wetlands, existing oyster reefs, or Submerged Aquatic Vegetation (SAV). Most motile fauna such as crab, shrimp, and finfish will likely avoid the area of potential effect during the construction process. The project may result in minor, adverse short term impacts to benthic organisms and temporarily affect habitat utilization by individuals considered under EFH fishery management plans.

The proposed work in the EFH area reflects new construction of proposed structures (dock and steps). As a result, disturbance to species will be limited in their spatial extent, minor in scope, and brief in duration. Construction activities will be conducted at the site of existing structures and may have a minor, short term impact on habitat. Construction of the new dock would convert a small area of potential habitat to a less favorable condition, however, the location is currently actively used as a boat launch facility, and therefore it is unlikely that the project location currently provides high-quality habitat. During construction, all appropriate BMPs will be followed to minimize the potential impacts of construction activities on EFH and species in the area. During construction, adjacent areas with equivalent or better habitat will be available and undisturbed and organisms could move away from disturbed areas. Therefore, the project is not likely to adversely affect EFH.

State-Listed Birds, MBTA, and BGEPA

State-listed birds such as oystercatchers or least terns may nest on beaches or mudflats near the project sites, and all migratory birds are protected under the MBTA. If restoration activities occur during the nesting season (March 1 to August 1), birds could be disturbed by noise generated by in-water activities. In such circumstances, FWC nesting shorebird avoidance measures will be followed. These measures generally call for surveys within 300 feet and an avoidance buffer of 300 feet for nesting birds.

In recent years, the bald eagle has been removed from the endangered species list under ESA. All activities (staging, demolition, construction, cleanup, use of equipment, machinery, vehicles including utility terrain vehicle [UTV] and all-terrain vehicle [ATV], or boat/vessels) should avoid a bald eagle nest by a minimum of 660 feet.

Consultation with FWC concerning the proposed project and anticipated construction schedule relative to known bald eagle nest sites within the project vicinity and relative to the nesting season in Florida (October 1 to May 15) would be required prior to commencement of restoration activities. To minimize potential for impacts to nesting bald eagles, the consultation protection measures may include 1) addressing prescribed nest tree protection zones and 2) preparing a bald eagle nest protection plan (including nesting behavior disturbance monitoring). Bald eagles have been known to tolerate certain potential disturbances within their breeding territories. Should these conservation measures be implemented for active nest sites adjacent to enhancement activities in the project sites, potential impacts to the bald eagle would be short term and minor.

Section 7 and Essential Fish Habitat Consultations

Section 7 ESA consultations with the USFWS and NMFS will be initiated for the proposed projects. An EFH consultation under the Magnuson-Stevens Fishery Conservation and Management Act also would be completed to address any situations where proposed project activities may affect EFH habitat. The projects would incorporate any additional conservation recommendations provided by the NMFS and the USFWS during the consultation to avoid, minimize, mitigate, or otherwise offset the adverse effects of the proposed project on listed and proposed species, critical habitat or EFH.

12.51.5.5.3 Invasive Species

Affected Resources

Non-native invasive species could alter the existing terrestrial or aquatic ecosystem within, and possible expand out into adjacent areas after the initial introduction. The invasive species threat, once realized, could result in economic damages. Prevention is ecologically responsible and economically sound. Chapter 3 described more about the regulations addressing invasive species, pathways, impacts, and prevention. At this time specific invasive species that may be present on the project site or could be introduced through the project have not yet been identified.

Environmental Consequences

Best Management Practices (BMPs) to control the spread of any invasive species present, and prevent the introduction of new invasive species due to the project will be implemented. In general, best management practices would primarily address risk associated with vectors (e.g., construction equipment, personal protective equipment, delivery services, foot traffic, vehicles/ vessels, shipping material). There are many resources that provide procedures for disinfection, pest-free storage, monitoring methods, evaluation techniques, and general guidelines for integrated pest management that can be prescribed based upon specific site conditions and vectors anticipated. In addition, to best management practices, outreach and educational materials may be provided to project workers and potential users/visitors. Other measures that could be implemented are identified in Chapter 12 Appendix A. Due to the implementation of BMPs, we expect risk from invasive species introduction and spread to be short term and minor.

12.51.5.6 Human Uses and Socioeconomics

12.51.5.6.1 Socioeconomics and Environmental Justice

Affected Resources

The proposed project would be in Walton County, Florida. Data and characteristics on the population of Walton County are summarized and compared to those same measures for the population of the state as a whole (Table 12-8).

Environmental Consequences

The proposed projects would create approximately 91 worker days of employment during construction. The improved beach access and facilities at the various sites would result in a minor increase in visitation to the sites, which could benefit the local economy for multiple years. The projects would not create a benefit for any specific group or individual, but rather would produce benefits realized by the

local community and visitors. Also, there are no indications that the public improvements would be contrary to the goals of Executive Order 12898, or would create disproportionate, adverse human health or environmental impacts on minority or low-income populations of the surrounding community. Therefore no environmental justice issues would be anticipated in the short term or long term.

Table 12-8. Population characteristics of Santa Rosa County are compared with State of Florida data.

PEOPLE QUICKFACTS	WALTON COUNTY	FLORIDA
Population, 2012 estimate	57,582	19,317,568
Population, 2010 (April 1) estimates base	55,043	18,802,690
Population, percentage change, April 1, 2010 to July 1, 2012	4.6%	2.7%
Population, 2010	55,043	18,801,310
Persons under 5 years, percentage, 2012	5.6%	5.5%
Persons under 18 years, percentage, 2012	20.1%	20.7%
Persons 65 years and over, percentage, 2012	17.5%	18.2%
Female persons, percentage, 2012	48.9%	51.1%
White alone, percentage, 2012 (a)	89.6%	78.3%
Black or African American alone, percentage, 2012 (a)	6.0%	16.6%
American Indian and Alaska Native alone, percentage, 2012 (a)	0.9%	0.5%
Asian alone, percentage, 2012 (a)	1.0%	2.7%
Native Hawaiian and Other Pacific Islander alone, percentage, 2012 (a)	0.2%	0.1%
Two or More Races, percentage, 2012	2.3%	1.9%
Hispanic or Latino, percentage, 2012 (b)	5.9%	23.2%
White alone, not Hispanic or Latino, percentage, 2012	84.4%	57.0%
Homeownership rate, 2007–2011	74.0%	69.0%
Median household income, 2007–2011	$46,926	$47,827
Persons below poverty level, percentage, 2007–2011	14.9%	14.7%
Manufacturers' shipments, 2007 ($1,000)	0	104,832,907
Merchant wholesaler sales, 2007 ($1,000)	205,148	221,641,518
Retail sales, 2007 ($1,000)	705,008	262,341,127

Source: U.S. Census Bureau State & County QuickFacts 2013
(a) Includes persons reporting only one race.
(b) Hispanics may be of any race, so also are included in applicable race categories.
FN: Footnote on this item for this area in place of data
NA: Not available
D: Suppressed to avoid disclosure of confidential information
X: Not applicable
S: Suppressed; does not meet publication standards
Z: Value greater than zero but less than half unit of measure shown
F: Fewer than 100 firms

12.51.5.6.2 Cultural Resources

Affected Resources

There are multiple project sites associated with the beach improvements. Because the sites are geographically separated, they are discussed individually below. A review of Florida Master Site Files was conducted for each of the beach locations.

Bayside Ranchettes Park

There are at least eight previously recorded archaeological sites within 1 mile of the Bayside Ranchettes Beach site. All of these sites are prehistoric, and all of them with the exception of 8WL543A are of unknown eligibility at this time. Site 8WL543A, a prehistoric scatter, was recommended ineligible for the National Register of Historic Places (NRHP). Site 8WL33, which is approximately 0.4 mile to the southwest, is reported to contain human remains.

A review of the project site indicates that there are no previously recorded sites within the area where construction would take place. However, given the concentration of prehistoric sites in the immediate area, it is likely that additional resources may be present.

Dothan Beach

There are at least two previously recorded archaeological sites within 1 mile of the Dothan Beach site. These sites consist of a single prehistoric site (8WL74) and a shipwreck (8WL1359). Neither of these sites has a recommendation for the NRHP.

Although there are no sites in the immediate project site, it is possible that there may be other resources or historic standing structures present in the project vicinity.

Grayton Dunes Beach

A review of the Florida Master Site File indicates that there are at least 23 previously recorded sites within and just outside the park. Sites 8WL434-440 and 8WL491 are historic standing structures outside the park. Site 8WL483 is the listing for the park itself; sites 8WL2573-2579 are standing structures present within the park. The remaining sites (8WL29, 69, 82, 24/47, 83, 876, and 1069) are all prehistoric in nature.

Given the number of previously recorded cultural resources within the park, and given that many of these are on the beach area, it is likely that additional cultural resources would be present within the project site.

Gulfview Heights Beach

There is one previously recorded archaeological site within 1 mile of the project site. This site, 8WL982, is along the beach and is a prehistoric site of unknown eligibility. Although this site is not in the project site, sites have been found along the beach in similar contexts

Ed Walline Beach
There is a single site near this project site; it is a prehistoric scatter of material identified near Draper Lake. Although this site is not in the project site, sites have been found along the beach in similar contexts.

This site is not along the beach; however, it is likely that additional cultural resources would be present in the project site.

Palms of Dune Allen West Beach
There are at least three archaeological sites recorded near this project site. Of these, two are prehistoric scatters near Oyster Lake and one is a historic-era cemetery (the Gulf Cemetery, 8WL2631) that is still in use.

None of these sites are along the beach; however, it is likely that additional cultural resources would be present within the project site.

Environmental Consequences
A complete review of this project under Section 106 of the NHPA would be completed as environmental review continues. This project would be implemented in accordance with all applicable laws and regulations concerning the protection of cultural and historic resources.

One of the proposed projects, the Grayton Beach, is in a state park owned and operated by the State of Florida. As such, there are some additional requirements associated with construction within the park. A Phase I cultural resources survey would be conducted. Based on the results of the survey, project plans would be altered to avoid any historic properties that would be adversely affected by the project work (ground disturbance and construction).

12.51.5.6.3 Infrastructure

Affected Resources
The existing infrastructure at certain sites would be improved, whereas at others, new infrastructure would be added.

Environmental Consequences
The projects would not have an adverse impact on infrastructure in the area, because all infrastructure at the proposed project sites would either be improved or replaced with new infrastructure.

12.51.5.6.4 Land and Marine Management

Affected Resources
The surrounding land-use characteristics at the five Gulfside sites consist of public beaches along the Gulf shorelines surrounded by residential areas. The Bayside Ranchettes Park site is in a wooded, bayside, residential area with several adjacent and nearby docks with steps into the water. The Gulfside site projects would be in a coastal area that is regulated by the federal Coastal Zone Management Act (CZMA) of 1972 and the Florida Coastal Management Act of 1978.

Environmental Consequences
The projects would be consistent with current land use and would have no adverse impact on land use or marine management in the area.

Pursuant to the Coastal Zone Management Act of 1972, federal activities must be consistent to the maximum extent practicable with the federally-approved coastal management programs for states where the activities would affect a coastal use or resource. Federal Trustees are submitting consistency determinations for state review coincident with public review of this document.

12.51.5.6.5 Aesthetics and Visual Resources

Affected Resources
Existing aesthetics and visual resources are views of a heavily developed sandy shorelines, residential areas, hotels, and beachside towns.

Environmental Consequences
Aesthetics would be reduced in the project sites during construction due to the presence of equipment and materials. However, these impacts would be minor, temporary changes to visual resources because they would be limited to the immediate vicinity of the sites and would be limited to the 2-month construction period. Placement of dune walkovers in areas where there currently are none may result in a change in the visual character of the dune areas. However, design standards as discussed in the Construction and Installation section above are intended to minimize visual effects and maintain a natural environment that allows people access, but also protects valuable dune resources. Although dune walkovers would be visible to users of the facilities, it is not anticipated that these walkovers would detract significantly from the existing viewshed and result in a long-term, adverse effect.

12.51.5.6.6 Tourism and Recreational Use

Affected Resources
Walton County's 16 premier sandy beaches are visited by tourists each year to fish, dive, swim, and view wildlife. Recreation at these sites includes swimming, beach-going, picnicking, wildlife viewing, fishing, hiking, canoeing, kayaking, and bicycling (Walton County 2013b).

Environmental Consequences
During the construction period, the visitor recreational experience at certain sites would be negatively impacted by noise and visual disturbances associated with the use of construction equipment. The construction process would also limit recreational activities near construction areas for a short time to protect public safety. The impact would be short term and minor because there are numerous other sites along these beaches in Walton County to obtain the same or similar recreational experiences. These alternate beach access locations may experience a temporary spike in use during the 2-month construction period. Over the long term, minor, beneficial impacts to tourism and recreational use would be expected due to the enhancement of recreational opportunities associated with improved facilities and accessibility.

12.51.5.6.7 Public Health and Safety and Shoreline Protection

Affected Resources

There are no known hazardous waste generation or disposal sites near the project sites. Erosion at the proposed project sites are typical of a barrier island shoreline, but would be mitigated through construction BMPs discussed in the Construction and Installation section.

Environmental Consequences

Overall, the project would have a minor, beneficial impact on public health and safety and shoreline protection because the projects would provide organized public access to the beach, concentrating shoreline access impacts and providing limited public facilities, and would have no negative impacts on these resources.

12.51.6 Summary and Next Steps

Per the Purpose and Need of the Draft Phase III ERP/PEIS, four alternatives are considered, including a no action (Alternative 1), selection of project types emphasizing habitat and living coastal and marine resources (Alternative 2), project types emphasizing recreational opportunities (Alternative 3), or a combination of both habitat and living coastal and marine resources and recreational opportunities (Alternative 4). As proposed, the Walton County Boardwalks and Dune Crossovers projects implement restoration techniques within Alternatives 3 and 4.

The proposed Walton County Boardwalks and Dune Crossovers: Grayton Dunes Beach Access Boardwalk Improvements project would improve the Grayton Dunes beach access and boardwalk facility in Walton County. The proposed improvements include replacing the dune walkover allowing beach visitors to access the beach. The proposed Walton County Boardwalks and Dune Crossovers: Ed Walline Beach Access Improvements project would improve the Ed Walline regional beach access facility in Walton County. The proposed improvements include replacing pavilions and restroom fixtures and upgrading all interior plumbing. The proposed Walton County Boardwalks and Dune Crossovers: Dothan Beach Access Boardwalk Improvements project would improve the Dothan Beach Access Boardwalk in Walton County. The proposed improvements include replacing the dune walkover allowing beach visitors to access the beach. The proposed Walton County Boardwalks and Dune Crossovers: Bayside Ranchettes Park Improvements project would improve the Bayside Ranchettes Park in Walton County. The proposed improvements include constructing a parking area, a picnic table, a dock, and steps into the water allowing access to the bay. The proposed Walton County Boardwalks and Dune Crossovers: Palms of Dune Allen West Beach Access Improvements project would improve the Palms of Dune Allen West beach access facility in Walton County. The proposed improvements include constructing a dune walkover, allowing beach visitors to access the beach. The proposed Walton County Boardwalks and Dune Crossovers: Gulfview Heights Beach Access Improvements project would improve the Gulfview Heights beach access facility in Walton County. The proposed improvements include replacing restroom fixtures, updating all interior plumbing, and repairing all soffits on pavilions. These projects are consistent with Alternative 3 (Contribute to Providing and Enhancing Recreational Opportunities) and Alternative 4 (Preferred Alternative).

Draft NEPA analysis of the environmental consequences suggests that while minor adverse impacts may occur to some resource categories, no moderate to major adverse impacts are anticipated to result. These projects would enhance and/or increase the public's use and/or enjoyment of natural resources by improving beach access and beach access facilities, and by improving recreational opportunities at parks. The Trustees have started coordination and reviews under the Endangered Species Act, the Magnuson-Stevens Fishery Conservation and Management Act, the Historic Preservation Act, the Marine Mammal Protection Act, the Bald and Golden Eagle Protection Act, Coastal Zone Management Act, and other federal statutes. The Trustees will consider public comment and information relevant to environmental concerns bearing on the proposed actions or their impacts. Final determination on these projects will be included in the final Phase III ERP/PEIS and Record of Decision.

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12.52 Gulf County Recreation Project: Project Description A (Highland View Boat Ramp)

12.52.1 Project Summary

The proposed Gulf County Highland View Boat Ramp project would improve the existing Highland View boat ramp in Gulf County. The proposed improvements include repairing and enhancing the existing boat ramp, replacing existing access and termination piers, and improving the parking to provide better facilities. The total estimated cost of the project is $176,550.

12.52.2 Background and Project Description

The Trustees propose to improve and enhance the existing Highland View boat ramp in Gulf County (see Figure 12-13 for general project location). The objective of the Gulf County Highland View Boat Ramp project is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving the boat ramp area. The restoration work proposed includes repairing and enhancing the existing boat ramp, replacing existing access and termination piers, and improving the parking to provide better facilities.

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G-8 BOAT RAMP RESTORATIONS

Highland Boat Ramp
2010 Aerial Imagery

Gulf County, Florida

SHEET 1 OF 1

Legend

Project Location

Background:	ESRI World Imagery
Scale:	1"=1,000'
Created By:	JR
Approved By (or Quad):	JS
SWCA Project No.:	026376
Date Produced:	Oct 5, 2013

NAD 1983 StatePlane Florida North FIPS 0903 Feet

0 500 1,000 Feet

0 250 500 Meters

Figure 12-13. Location of Gulf County Recreation Project –Highland View Boat Ramp Project.

12.52.3 Evaluation Criteria

This proposed project satisfies the evaluation criteria established for OPA and the Framework Agreement. As a result of the Deepwater Horizon oil spill and related response actions, the public's access to and enjoyment of their natural resources along Florida's Panhandle was denied or severely restricted. This project would enhance and/or increase the public's use and/or enjoyment of natural resources, helping to offset adverse impacts to such uses caused by the Spill and related response actions. Thus, the nexus to resources injured by the Spill is clear. See 15 C.F.R. § 990.54(a)(2); and Sections 6a-6c of the Framework Agreement.

The project is technically feasible and uses proven techniques with established methods and documented results. Further, the project can be implemented with minimal delay. Agencies have successfully completed projects of similar scope throughout Florida over many years, including similar types of actions in earlier phases of the Deepwater Horizon Early Restoration. For these reasons, the project has a high likelihood of success. See 15 C.F.R. § 990.54(a)(3); and Section 6e of the Framework Agreement. Additionally, the cost estimates are based on similar past projects and therefore the project can be conducted at a reasonable cost. See 15 C.F.R. § 990.54(a)(1); and Section 6e of the Framework Agreement. Finally, this proposed project is not anticipated to negatively affect regional ecological restoration and is therefore not inconsistent with the long-term restoration needs of the State of Florida. See Section 6d of the Framework Agreement.

Many recreational use projects, including ones similar to this project, have been submitted as restoration projects on the NOAA website (http://www.gulfspillrestoration.noaa.gov) and to the State of Florida (http://www.deepwaterhorizonflorida.com). In addition to meeting the criteria for the Framework Agreement and OPA, the Gulf County Recreation Project – Highland View Boat Ramp project also meets the State of Florida's additional criteria that Early Restoration projects occur in the 8-county panhandle area in which boom was deployed and that was impacted by response and SCAT activities for the Spill.

12.52.4 Performance Criteria, Monitoring and Maintenance

As part of the project cost, monitoring will be conducted to ensure project plans and designs were correctly implemented. Monitoring has been designed around the project goals and objectives. The project objective is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving the boat ramp area. Performance monitoring will evaluate: 1) the repair and enhancement of the existing boat ramp; 2) the replacement of the existing access and termination piers; and 3) the improvement of the parking to provide better facilities for the public and safer launch conditions for a wider variety of vessels. Specific performance criteria include: 1) the completion of the construction as designed and permitted, and 2) enhanced and/or increased access is provided to natural resources, which will be determined by observation that the boat ramp is open and available.

Long-term monitoring and maintenance of the improved facilities will be completed by Gulf County as part of their regular public facilities maintenance activities. Funding for this post-construction maintenance is not included in the previously provided value for the project cost and will be accomplished by Gulf County.

During the one year construction performance monitoring period, the Florida Trustees' Project Manager will go out twice to the site to record the number of users. Following the one year construction performance monitoring period, Gulf County will monitor the human use activity at the site. Gulf County staff will visit the site twice a year to count the number of users at the boat ramp. The visitation numbers will then be provided to the Florida Department of Environmental Protection.

12.52.5 Offsets

The Trustees and BP negotiated a BCR of 2.0 for the proposed recreational use project. Combined NRD Offsets for the Gulf County Recreation Projects, of which this is a component, are $4,237,200 expressed in present value 2013 dollars to be applied against the monetized value of lost recreational use provided by natural resources injured in Florida, which will be determined by the Trustees' assessment of lost recreational use for the Oil Spill. Please see Chapter 7 of this document (Section 7.2.2) for a description of the methodology used to develop monetized Offsets.[7]

12.52.6 Costs

The total estimated cost to implement this project is $176,550. This cost reflects current cost estimates developed from the most current information available to the Trustees at the time of the project negotiation. The cost includes provisions for planning, engineering and design, construction, monitoring, and contingencies.

[7] For the purposes of applying the NRD Offsets to the calculation of injury after the Trustees' assessment of lost recreational use for the Spill, the Trustees and BP agree as follows:

- The Trustees agree to restate the NRD Offsets in the present value year used in the Trustees' assessment of lost recreational use for the Spill.
- The discount rate and method used to restate the present value of the NRD Offsets will be the same as that used to express the present value of the damages.

12.53 Gulf County Recreation Projects: Project Description B (Indian Pass Boat Ramp)

12.53.1 Project Summary

The proposed Gulf County Indian Pass Boat Ramp would improve the existing Indian Pass boat ramp in Gulf County. The proposed improvements include repairing and enhancing the existing boat ramp and replacing existing access and termination piers to provide better facilities for the public. The total estimated cost of the project is $176,550.

12.53.2 Background and Project Description

The Trustees propose to improve and enhance the existing Indian Pass boat ramp in Gulf County (see Figure 12-14 for general project location). The objective of the Gulf County Indian Pass Boat Ramp project is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving the boat ramp area. The restoration work proposed includes repairing and enhancing the existing boat ramp and replacing existing access and termination piers to provide better facilities for the public.

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G-8 BOAT RAMP RESTORATIONS

Indian Pass Boat Ramp
2010 Aerial Imagery

Gulf County, Florida

SHEET 1 OF 1

Legend

Project Location

Background:	ESRI World Imagery
Scale:	1"=1,000'
Created By::	JR
Approved By (or Quad):	JS
SWCA Project No.:	026376
Date Produced:	Oct 5, 2013

NAD 1983 StatePlane Florida North FIPS 0903 Feet

0 500 1,000 Feet

0 250 500 Meters

Figure 12-14. Location of Gulf County Recreation Project – Indian Pass Boat Ramp Project.

12.53.3 Evaluation Criteria

This proposed project satisfies the evaluation criteria established for OPA and the Framework Agreement. As a result of the Deepwater Horizon oil spill and related response actions, the public's access to and enjoyment of their natural resources along Florida's Panhandle was denied or severely restricted. This project would enhance and/or increase the public's use and/or enjoyment of natural resources, helping to offset adverse impacts to such uses caused by the Spill and related response actions. Thus, the nexus to resources injured by the Spill is clear. See 15 C.F.R. § 990.54(a)(2); and Sections 6a-6c of the Framework Agreement.

The project is technically feasible and uses proven techniques with established methods and documented results. Further, the project can be implemented with minimal delay. Agencies have successfully completed projects of similar scope throughout Florida over many years, including similar types of actions in earlier phases of the Deepwater Horizon Early Restoration. For these reasons, the project has a high likelihood of success. See 15 C.F.R. § 990.54(a)(3); and Section 6e of the Framework Agreement. Additionally, the cost estimates are based on similar past projects and therefore the project can be conducted at a reasonable cost. See 15 C.F.R. § 990.54(a)(1); and Section 6e of the Framework Agreement. Finally, this proposed project is not anticipated to negatively affect regional ecological restoration and is therefore not inconsistent with the long-term restoration needs of the State of Florida. See Section 6d of the Framework Agreement.

Many recreational use projects, including ones similar to this project, have been submitted as restoration projects on the NOAA website (http://www.gulfspillrestoration.noaa.gov) and to the State of Florida (http://www.deepwaterhorizonflorida.com). In addition to meeting the criteria for the Framework Agreement and OPA, the Gulf County Recreation Project – Indian Pass Boat Ramp project also meets the State of Florida's additional criteria that Early Restoration projects occur in the 8-county panhandle area in which boom was deployed and that was impacted by response and SCAT activities for the Spill.

12.53.4 Performance Criteria, Monitoring and Maintenance

As part of the project cost, monitoring will be conducted to ensure project plans and designs were correctly implemented. Monitoring has been designed around the project goals and objectives. The project objective is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving the boat ramp area. Performance monitoring will evaluate: 1) repair and enhancement of the existing boat ramp, and 2) replacement of the existing access and termination piers to provide better facilities for the public. Specific performance criteria include: 1) the completion of the construction as designed and permitted, and 2) enhanced and/or increased access is provided to natural resources, which will be determined by observation that the boat ramp area is open and available.

Long-term monitoring and maintenance of the improved facilities will be completed by Gulf County as part of their regular public facilities maintenance activities. Funding for this post-construction maintenance is not included in the previously provided value for the project cost and will be accomplished by Gulf County.

During the one year construction performance monitoring period, the Florida Trustees' Project Manager will go out twice to the site to record the number of users. Following the one year construction performance monitoring period, Gulf County will monitor the human use activity at the site. Gulf County staff will visit the site twice a year to count the number of users at the boat ramp. The visitation numbers will then be provided to the Florida Department of Environmental Protection.

12.53.5 Offsets

The Trustees and BP negotiated a BCR of 2.0 for the proposed recreational use project. Combined NRD Offsets for the Gulf County Recreation Projects, of which this is a component, are $4,237,200 expressed in present value 2013 dollars to be applied against the monetized value of lost recreational use provided by natural resources injured in Florida, which will be determined by the Trustees' assessment of lost recreational use for the Oil Spill. Please see Chapter 7 of this document (Section 7.2.2) for a description of the methodology used to develop monetized Offsets.[8]

12.53.6 Costs

The total estimated cost to implement this project is $176,550. This cost reflects current cost estimates developed from the most current information available to the Trustees at the time of the project negotiation. The cost includes provisions for planning, engineering and design, construction, monitoring, and contingencies.

[8] For the purposes of applying the NRD Offsets to the calculation of injury after the Trustees' assessment of lost recreational use for the Spill, the Trustees and BP agree as follows:

- The Trustees agree to restate the NRD Offsets in the present value year used in the Trustees' assessment of lost recreational use for the Spill.
- The discount rate and method used to restate the present value of the NRD Offsets will be the same as that used to express the present value of the damages.

12.54 Gulf County Recreation Projects: Environmental Review A & B (Indian Pass and Highland View Boat Ramps)

The purpose of this project is to improve the quality and safety of recreational boating in Florida's St. Joseph Bay and Apalachicola Bay systems.

12.54.1 Introduction and Background

In April 2011, the Natural Resource Trustees (Trustees) and BP Exploration and Production, Inc. (BP) entered into the Framework Agreement for Early Restoration Addressing Injuries Resulting from the *Deepwater Horizon* Oil Spill (Framework Agreement). Under the Framework Agreement, BP agreed to make $1 billion available for Early Restoration project implementation. The Trustees' key objective in pursuing Early Restoration is to achieve tangible recovery of natural resources and natural resource services for the public's benefit while the longer-term injury and damage assessment is underway. The Framework Agreement is intended to expedite the start of restoration in the Gulf in advance of the completion of the injury assessment process. Early restoration is not intended to, and does not fully address all injuries caused by the Spill. Restoration beyond Early Restoration projects would be required to fully compensate the public for natural resource losses from the Spill.

Pursuant to the process articulated in the Framework Agreement for Early Restoration Addressing Injuries Resulting from the *Deepwater Horizon* Oil Spill (Framework Agreement), the Trustees released, after public review of a draft, a Phase I Early Restoration Plan (ERP) in April 2012. In December 2012, after public review of a draft, the Trustees released a Phase II ERP. On May 6, 2013, the National Oceanic and Atmospheric Administration (NOAA) issued a public notice in the *Federal Register* on behalf of the Trustees announcing the development of additional future Early Restoration projects for a Draft Phase III Early Restoration Plan (ERP). This boat ramp project was submitted as an Early Restoration project on the NOAA website (http://www.gulfspillrestoration.noaa.gov) and submitted to the State of Florida. In addition to meeting the evaluation criteria for the Framework Agreement and the Oil Pollution Act (OPA), the project meets Florida's criteria that Early Restoration projects occur in the eight-county Florida panhandle area that deployed boom and was impacted by the Spill.

Public boat ramps provide local boaters with access to public waterways. Boating access provides the primary infrastructure upon which many types of secondary activities may be enjoyed. A myriad of water-dependent activities provide recreational values and include fishing, scalloping, SCUBA diving, water skiing, swimming, or simply cruising local waterways under power of sail.

This project would involve replacing and enhancing two existing boat ramps in Gulf County, Florida, to provide better facilities for the public and safer launch conditions for a wider variety of vessels. This project is part of the Florida Department of Environmental Protection (FDEP) Gulf County Recreation Project.

12.54.2 Project Location

The Highland View boat ramp is located in Port St. Joe, Gulf County, Florida, under the Tapper Bridge on Highway 98 (Figure 12-13 and Figure 12-15). The coordinates in decimal degrees are 29.832N 85.313W. This boat ramp is a single-lane concrete ramp on the Gulf County Canal providing access to St. Joseph Bay. The boat ramp area consists of an L-shaped boarding dock, parking for more than 40 vehicles with trailers, and restroom facilities and trash cans.

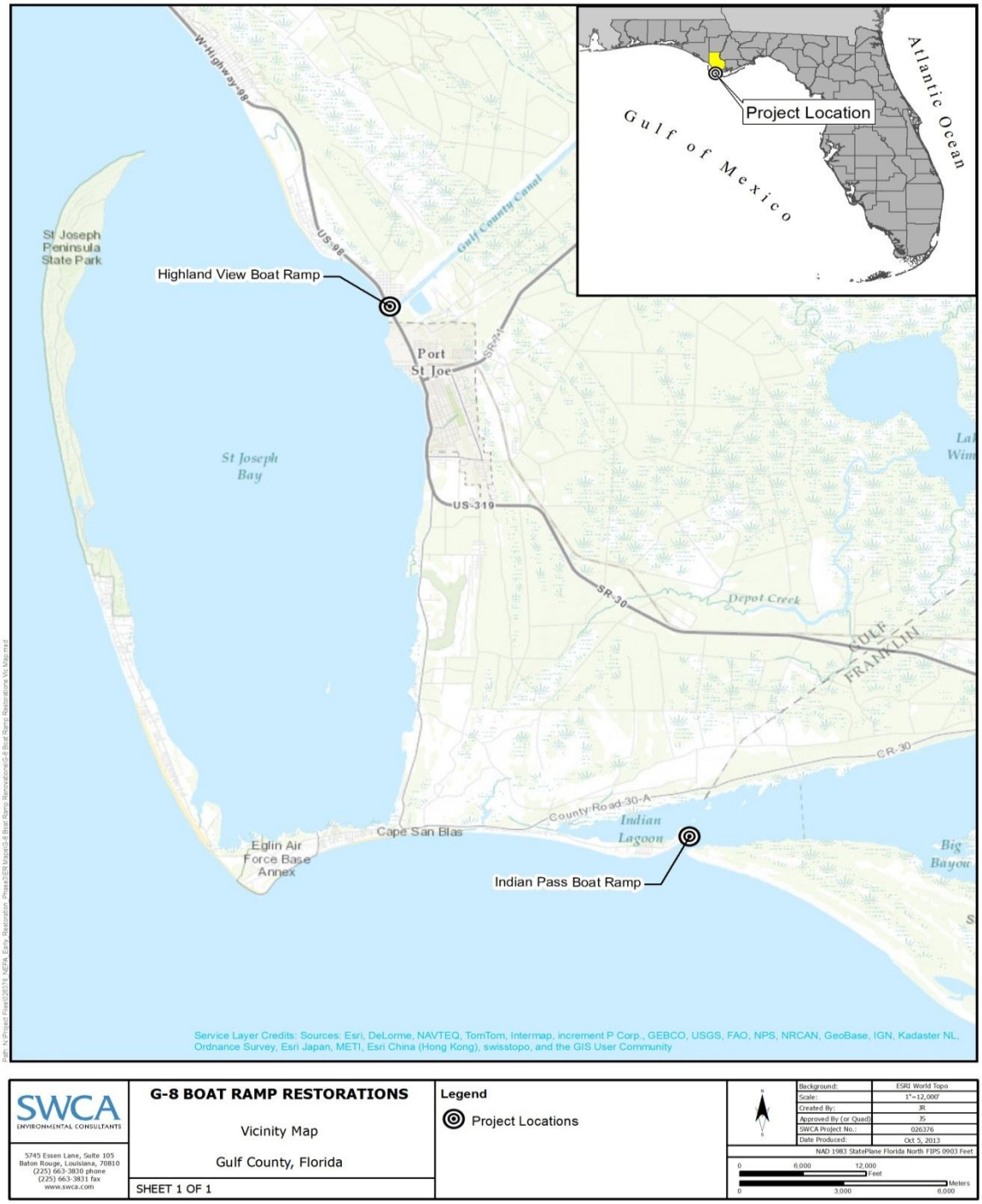


Figure 12-15. Vicinity Map of the Highland View and Indian Pass Boat Ramps in Gulf County Florida.

The Indian Pass boat ramp is located across from the Indian Pass Campground at the end of Highway 30A between Port St. Joe and Apalachicola, Gulf County, Florida (Figure 12-15). The coordinates in decimal degrees are 29.683N 85.222W. Facilities at the private Indian Pass Campground include four cabins, forty-four campsites, ten primitive campsites, a store, and boat storage. The campgrounds have beach access on the Gulf of Mexico, St. Vincent Sound, and Indian Lagoon. St. Vincent Island, a U.S. Fish and Wildlife Service (USFWS) National Wildlife Refuge, is located 1,700 feet across the St. Vincent Sound channel from the boat ramp. St. Vincent Island is a barrier island that provides wildlife and plant habitat.

12.54.3 Construction and Installation

Detailed construction methods and plans have not yet been developed for the boat ramps and would be subject to the construction final design and contractor approach. The majority of the project would be upland construction. Standard best management practices (BMPs) for this type of construction with limited in-water work would be used to minimize impacts (e.g., silt fencing, refueling and storing equipment away from waterways).

Both the Highland View and Indian Pass boat ramps contain a single boat ramp that would be replaced and improved. Renovation of these boat ramps would require demolition or debris removal of the existing structures. Materials removed could include old concrete, asphalt, or other paving materials, vegetation, and soil. All removed debris would be disposed of appropriately at licensed facilities that are in compliance with state and local laws and regulations regarding waste disposal. Paving material such as concrete, asphalt, or gravel would be permanently placed on the ground surface for boat ramp repairs. Construction materials would be staged in the project area during work.

In addition, as work proceeds, the project area would be isolated by construction fencing to prevent incidental access. This fencing material would be emplaced by hand driving (e.g., with a sledge hammer or post driver) stakes as necessary. These stakes would likely be less than 2 inches in diameter and driven to a depth of 1 to 2 feet to secure the fencing. No piles would be driven for these boat ramp renovations.

Equipment for the replacement and enhancement of the boat ramp would be expected to consist of the following:

- Three tractor-trailers for material delivery
- Six small power tools (nail guns, saws, drills)
- One generator for the small tools

Construction could occur at any time but would ideally take place during the time of year when recreation use is lowest to minimize impacts to boat ramp users. Construction work and permitting is expected to take up to 2 years to complete. Currently, development and completion of the design is anticipated for summer 2015 and construction would begin in the summer or fall of 2015.

12.54.4 Operations and Maintenance

Gulf County operates a variety of parks for outdoor recreation and leisure facilities, including the Highland View and Indian Pass boat ramps. Maintenance would fall under the purview of the Gulf

County Maintenance Department, which would include tasks such as restroom checks and cleaning, as well as removing debris and trash from the boat ramps and boat trailer parking areas.

Literature reviews indicate that several federally listed plants and listed wildlife species may occur in or adjacent to the project area (see Section 3.2). The project area is also adjacent to designated critical habitat for one wildlife species and contains critical habitat for a second (see Section 3.2).

12.54.5 Affected Environment and Environmental Consequences

Under the National Environmental Policy Act, federal agencies must consider environmental effects of their actions that include, among others, impacts on social, cultural, and economic resources, as well as natural resources. The following sections describe the affected environment and environmental consequences of the project.

12.54.5.1 No Action

Both OPA and NEPA require consideration of the No Action alternative. For this Draft Phase III ERP proposed project, the No Action alternative assumes that the Trustees would not pursue this project as part of Phase III Early Restoration.

Under No Action, the existing conditions described for the project site in the affected environment subsection would prevail. Restoration benefits associated with this project would not be achieved at this time.

12.54.5.2 Physical Environment

12.54.5.2.1 Geology and Substrates

Affected Resources

According to the Geologic Map of Florida, the ramps are likely located on the Quaternary system, Holocene series stratigraphic unit. This stratigraphic unit consists of quartz sands, carbonate sands, muds, and organics occurring near the present coastline at elevations generally less than 5 feet (Scott 2001).

The Highland View boat ramp is built on Corolla fine sand, 1 to 5 percent slopes, soil map unit. This soil is moderately well drained and somewhat poorly drained on nearly level flats, small dunes, and swales on large dunes along the Gulf Coast beaches. Homesites may be built on this soil, but it is not suited for cultivated crops, pasture, or woodlands. The Indian Creek boat ramp occurs on the Newhan-Corolla complex, rolling soil map unit, which is found on marine terraces and dunes. This complex is very deep, excessively drained and somewhat poorly drained on remnant coastal dunes and swales. Homesites, commercial development, or recreational development can be built on these soils; however, they are not suited for cultivated crops, pasture, or woodland (Schuster et al. 2001).

A sinkhole is a closed depression in the land surface that is formed by surficial solution or by subsidence or collapse of surficial materials due to the solution of near-surface limestone or other soluble rocks. Sinkholes are a natural and common geologic feature in areas underlain by limestone and other rock types soluble in natural water; they are one of the predominant landform features of Florida. The state has been classified into four areas of sinkhole occurrence. Gulf County is categorized as Area IV with a

carbonate rock cover more than 200 feet thick. Area IV consists of cohesive sediments interlayered with discontinuous carbonate beds. Sinkholes are very few, but several large-diameter, deep sinkholes occur. Cover-collapse sinkholes dominate in Area IV, which occur when a solution cavity develops in limestone to such a size that the overlying cover material can no longer support its own weight (FDEP 2013).

Environmental Consequences

Mechanized equipment and hand tools would be used to complete the construction of the boat ramps. Some excavation of soils would occur; however, adverse impacts to geology and substrates would be minor. Disturbance would be detectable, but would be short term, small, and localized. There would be no long-term changes to local geologic features or soil characteristics. Erosion and/or compaction may occur in localized areas.

12.54.5.2.2 Hydrology and Water Quality

Affected Resources

Northwest Florida has seven major watersheds, all of which have been identified as priorities under the Surface Water Management and Improvement (SWIM) program. Water quality protection is the underlying goal of SWIM, along with the preservation and restoration of natural systems and associated public uses and benefits (Northwest Florida Water Management District [NWFWMD] 2011).

The Highland View boat ramp is on the Gulf County Canal, which flows into St. Joseph Bay. St. Joseph Bay is separated from the Gulf of Mexico by St. Joseph Peninsula and is considered the only body of water in the eastern Gulf that is not influenced by freshwater inflows (FDEP 2008a). The bay has a surface area of 42,826 acres and connects to the Intracoastal Waterway by the Gulf County Canal (Thorpe 2000).

St. Joseph Bay is part of the St. Andrews Bay watershed system, which includes St. Andrews, West, East, and North bays; St. Joseph Bay; and Deer Point Reservoir, as well as the respective surface water basins of each of these waterbodies. The waterways are primarily used for transportation, seafood harvesting, recreation, and waste disposal. Broad issues for the St. Andrews Bay system include degradation through point and nonpoint pollution sources, habitat quality that is threatened by and degraded through sedimentation and deposition, and public education and awareness (Thorpe 2000).

The Indian Pass boat ramp is located on the St. Vincent Sound, which is part of the Apalachicola Bay watershed system. The Apalachicola Bay system includes the Apalachicola Bay, East Bay, Apalachicola River, Chipola River, St. George Sound, and St. Vincent Sound. The area of the Apalachicola Bay estuary is 212 square miles and is bordered by four barrier islands: St. Vincent Island, St. George Island, Cape St. George, and Dog Island. This system is different from most river influenced systems in that the long axis of the bay is perpendicular to the direction of the major inflow point of the river causing a slightly stratified horizontal salinity gradient (Tonsmeire 1996). Tidal influence comes from the breaks in the barrier islands and in some areas salinity can be as high as 30 particles per thousand. The water quality in the bay system is good due to the undeveloped nature of the basin, retention of pollutants in upstream reservoirs acting as settling ponds, and the sedimentary nature of the river bottom (Tonsmeire 1996).

Floodplains

Based on Federal Emergency Management Agency (FEMA) flood insurance rate maps (12045C0461F and 12045C0329F), the Indian Pass boat ramp appears to be within Zone VE, or an area subject to inundation by the 1 percent annual chance flood event with additional hazards due to storm-induced velocity wave action. The Highland View boat ramp appears to be within Zone A, or an area subject to inundation by the 1 percent annual chance flood event and no base flood elevations or flood depths (FEMA 2002).

Environmental Consequences

Hydrology would be affected only if water is channeled or otherwise controlled around the boat ramp area during construction. Water quality could be impacted during construction by leaks or spills from equipment and disturbance of sediments that affect siltation, turbidity, and the release of chemicals from sediments. If the disturbed sediments are anoxic, the biological oxygen demand in the water column would increase. Erosion should not occur due to the presence of docks and bulkheads; however, if these structures were altered or damaged during construction such that erosion could occur it would also affect water quality. With required mitigation in place, the effect on hydrology and water quality would be measurable or detectable but it would be small, short term, and localized. Water quality impacts would quickly become undetectable, and the area's hydrology would be only temporarily altered during construction.

All permit conditions, including mitigation measures for siltation, erosion, turbidity, and release of chemicals, would be strictly adhered to. During construction, BMPs and boom placement along with other avoidance and mitigation measures required by state and federal regulatory agencies would be employed to minimize any water quality and sedimentation impacts. FDEP permit conditions require erosion and turbidity mitigation measures, which may include the following:

- Installation of floating turbidity barriers.
- Installation of erosion control measures along the perimeter of all work areas.
- Stabilization of all filled areas with sod, mats, barriers, or a combination.
- Stoppage of work if turbidity thresholds are exceeded. The soils would then be stabilized, work procedures modified, and the FDEP would be notified.

The FDEP permit also constitutes a Certification of Compliance with State Water Quality Standards under Section 401 of the CWA, which indicates that the project would comply with state water quality standards and other aquatic resource protection requirements.

After construction, increased boat traffic at the two boat ramps could result in minimal impacts to surface water quality. Boat wakes created by additional boat traffic that could increase shoreline erosion would be controlled through no-wake or speed zones to mitigate shoreline erosion.

Impacts from chemicals that could be released from sources such as construction equipment and boats are expected to be negligible. Required spill containment measures would be implemented for applicable construction activities. FDEP permit conditions typically spill containment protection and mitigation measures such as:

- Prohibiting boat repair or fueling facilities over the water.
- Prohibiting vessels from being removed from the water for the purposes of maintenance or repair.
- Prohibited activities include hull cleaning and painting, discharges or release of oils or greases, and related metal-based bottom paints associated with hull scraping, cleaning, and painting.

This project would not impact groundwater.

12.54.5.2.3 Air Quality and Greenhouse Gas Emissions

Affected Resources

The Clean Air Act (CAA) requires the Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. NAAQS have been set for six common air pollutants (also known as criteria pollutants), consisting of particle pollution or particulate matter, ozone, carbon monoxide, sulfur dioxide (SO_2), nitrogen dioxide, and lead. Particulate matter is defined as fine particulates with a diameter of 10 micrometers or less (PM_{10}) and fine particulates with a diameter of 2.5 or less ($PM_{2.5}$). When a designated air quality area or airshed within a state exceeds a NAAQS, that area may be designated as a "nonattainment" area. Areas with levels of pollutants below the health-based standard are designated as "attainment" areas. To determine whether an area meets the NAAQS, air monitoring networks have been established and are used to measure ambient air quality. The EPA also regulates 187 hazardous air pollutants (HAPs) that are known or suspected to cause cancer or other serious health effects. Air quality in the Florida panhandle is in attainment with the NAAQs (EPA 2013a).

Greenhouse Gases

Gases that trap heat in the air are called greenhouse gases (GHGs). The primary GHGs are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (NO_x), and fluorinated gases. Over the past century, human activities have released large amounts of GHGs into the atmosphere, which are contributing to global warming. Global warming is defined as the ongoing rise in global average temperature near the Earth's surface and is known to cause changes in climate patterns.

According to the EPA, the average annual temperature in the southeast portion of the United States has increased by approximately 2.0 degrees Fahrenheit (°F) since 1970. Winters, in particular, are getting warmer, and the average number of freezing days has decreased by 4 to 7 days per year since the mid-1970s. Most areas are getting wetter; autumn precipitation has increased by 30% since 1901 (EPA 2013b). In many parts of the region, the number of heavy downpours has increased. Despite the increases in fall precipitation, the area affected by moderate and severe drought has increased since the mid-1970s (EPA 2013b).

Average annual temperatures in the region are projected to increase from 4°F to 9°F by 2080. Hurricane-related rainfall is projected to continue to increase. Models suggest that rainfall will arrive in heavier downpours, with increased dry periods between storms. These changes would increase the risk of both flooding and drought. The coasts will likely experience stronger hurricanes and sea level rise. Storm surge could present problems for coastal communities and ecosystems (EPA 2013b).

Total GHG emissions in the state of Florida from 1990 to 2007 have increased at an average rate of 2.1% per year. Total GHG emissions in 2007 were 290 million metric tons of CO_2 equivalent ($MMTCO_2E$). In 2007, 91% of GHG emissions in Florida were CO_2 emissions (FDEP 2010).

Environmental Consequences

Project implementation would require the use of heavy mechanized equipment, which would lead to temporary air pollution (e.g., criteria pollutants, HAPs, GHGs) due to emissions from the operation of construction vehicles and equipment. Any air quality impacts that occur would be minor due to their localized nature, short-term duration and the small size of the project. Available BMPs would be employed to prevent, mitigate, and control potential air pollutants during project implementation. No air quality-related permits would be required.

In terms of construction equipment, a bulldozer and grader would likely contribute most of the GHG emissions; GHG emissions from the remaining equipment would be negligible. Using the operating assumption of 8 hours per day and 5 days per week for 4 months, GHG emissions from the bulldozer and grader have been estimated (Table 12-9).

At the completion of the project, visitor use (and therefore vehicle and boat use) could increase due to the improved access. Increased exhaust emissions could affect air quality over the long term. However, adverse impacts to air quality are expected to be minor because management actions could be taken to limit boat use.

12.54.5.3 Noise

Affected Resources

Noise can be defined as unwanted or nuisance sound. The Noise Control Act of 1972 (42 USC 4901–4918) was enacted to establish noise control standards and regulate noise emissions from commercial products such as transportation and construction equipment. Amplitude is the magnitude of a sound and is usually expressed in decibels (dB), a dimensionless ratio of sound pressure to that of a reference pressure. The A-weighted decibel (dBA) is the adjusted unit of sound used to describe the human response to noise from industrial and transportation sources. The threshold of hearing is 0 dB. A 3-dB increase is equivalent to doubling the sound pressure level, but is barely perceptible to the human ear.

Table 12-9. Estimated generation of greenhouse gas emissions during a 2-year construction period for the Indian Pass and Highland View boat ramp.

EQUIPMENT [1]	NUMBER OF 8-HOUR DAYS	CO_2 (METRIC TONS)[2]	CH_4 (CO2E) (METRIC TONS)[3]	NO_X (CO_2E) (METRIC TONS)	TOTAL CO_2E (METRIC TONS)
Grader	40	0.39	0.0003	0.003	15.6
Bulldozer	160	0.38	0.0002	0.002	60.8
Track hoe	160	0.35	0.0002	0.002	76
Tractor trailer	18	0.34	0.0002	0.002	6.12
Pickup truck[4]	320	0.16	0.0001	0.001	51.2
Concrete trucks	20	0.136	0.04	0.576	15.04
TOTAL					224.76

[1] Emissions assumptions for all equipment based on 8 hours of operation.
[2] CO_2 emissions assumptions for diesel and gasoline engines based on EPA (2009).
[3] CH_4 and NO_x emissions assumptions and CO_2e calculations based on EPA (2011).
[4] Emissions assumptions for an 8-cylinder, 6.2-liter gasoline engine Ford F150 pickup and 18 gallon (half-tank) daily fuel consumption (U.S. Department of Energy 2013).

Table 12-10 shows typical noise levels for common sources expressed in dBA. Noise exposure depends on how much time an individual spends in different locations.

Table 12-10. Typical noise levels for common sources.

NOISE SOURCE OR EFFECT	SOUND LEVEL (DBA)
Rock-and-roll band	110
Truck at 50 feet	80
Gas lawn mower at 100 feet	70
Normal conversation indoors	60
Moderate rainfall on foliage	50
Refrigerator	40
Bedroom at night	25

Source: Adapted from U.S. Department of Energy and Bonneville Power Administration (1986).

Noise levels in the project area vary depending on the season, time of day, number and types of noise sources, and the distance of the receptor from noise sources. Existing sources of noise in the project area are from recreational boating, traffic on nearby roads and highways, overhead aircraft, and ambient natural sounds such as wind, waves, and wildlife.

Noise-sensitive receptors include sensitive land uses and those individuals and/or wildlife that could be affected by changes in noise sources or levels due to the project. Noise-sensitive receptors in the project area include recreational users, nearby residences, and wildlife. There are residential and commercial properties directly adjacent to the Highland View boat ramp location. It is also located under the Tapper Bridge on Highway 98, which is the major road into Port St. Joe and on the Gulf County Canal that connects the waterway at White City, Florida, with St. Joseph Bay. There is also a large seafood processing facility nearby on the Gulf County canal. There is residential housing/vacation rentals

approximately 700 feet from the Indian Pass boat ramp. The Indian Pass Campground, which includes cabins and recreation vehicle (RV) and tent campsites, is directly adjacent to the Indian Pass boat ramp.

Environmental Consequences

Instances of increased noise would occur during the project. Equipment and vehicles used during the replacement and enhancement of the boat ramps would generate noise. Construction equipment noise is known to disturb fish, marine mammals, and nesting shorebirds. Construction noise would also negatively affect the experience of visitors to the Indian Pass Campground, as it would attract attention and contribute to the soundscape, including local areas and those adjacent to the action, but would not dominate. Since these campgrounds are in a remote and quiet area, user activities would be moderately affected during the construction period, particularly those campsites that are closest to the boat ramp. The Highland View boat ramp is already subject to traffic noise; therefore, the short-term noise increases due to the construction could attract attention, but its contribution to the soundscape would be localized and not of consequence, nor would it affect current user activities.

After completion of the project, the soundscape would return to pre-project levels. The potential for increased vehicle and boat traffic exists due to the improved boat ramps, which would result in a slight increase in noise levels in the vicinity. Overall, long-term noise effects from boating and other recreational activities would remain minor.

12.54.5.4 Biological Environment

12.54.5.4.1 Living Coastal and Marine Resources

Vegetation

Affected Resources

According to the Natural Vegetation of Florida, the Indian Pass boat ramp is located on a coastal strand (Davis 1967). Vegetation on costal strands is typically zoned, with pioneer herbs and shrubs present near-shore and scrub and forest present inshore. The existing Indian Pass boat ramp is adjacent to a paved parking lot and is located on an unvegetated sandy beach. The leeward or eastern side of the boat ramp is sparsely vegetated by ruderal grass species. Due to the existing boat ramp's regular usage and the shallow extent of its reach relative to the width of St. Vincent Sound, it is unlikely that submerged aquatic vegetation is present near the boat ramp. No listed plant species have the potential to occur within the project area.

The Highland View boat ramp is located in a highly disturbed and industrial area. The existing boat ramp is adjacent to a paved parking lot and is surrounded by ruderal grasses. Based on aerial reviews, the project site appears to contain sparse palm trees (*Arecaceae* spp.) north of the site. Due to the disturbed nature of the Gulf County Canal, and the shallow extent of the existing ramp's reach relative to the width of the canal, it is unlikely that submerged aquatic vegetation is present near the boat ramp. No listed plant species have the potential to occur within the project site.

Environmental Consequences

Construction of the potential projects would require the permanent removal of ruderal vegetation within the affected areas. The use of equipment and the disturbance of soil and existing vegetation

would also introduce a risk of noxious weed or invasive vegetation species introduction. Due to the lack of vegetation present at both sites, impacts on native vegetation would not be expected.

Wildlife Habitat

Affected Resources

Both project sites are expected to support ruderal species such as raccoon, opossum, gray squirrel (*Sciurus carolinensis*), and other non-game mammals would be present in upland areas within the vicinity of each project.

St. Joseph Bay is a designated Important Bird Area of over 8,500 acres that is made up of several parcels: Black's Island, Eglin Air Force Base Test Site, Palm Point, St. Joseph Bay Buffer, T.H. Stone Memorial Park, and St. Joseph Peninsula State Park. These five sites that surround and form St. Joseph Bay are regionally important for breeding brown pelicans (*Pelecanus occidentalis*) (Black's Island), breeding snowy plovers (*Charadrius alexandrinus*) (Palm Point), wintering shorebirds, migrant raptors (St. Joseph Peninsula State Park), neotropical migrants (St. Joseph Peninsula State Park), and other species (National Audubon Society, Inc. 2002). The Highland View boat ramp is located within the St. Joseph Bay and, thus, the Important Bird Area. However, due to the highly disturbed nature of the habitat surrounding the Highland View boat ramp, it is unlikely that migratory birds would utilize the project area as nesting habitat.

The Indian Pass boat ramp is located adjacent to the Apalachicola Bay Important Bird Area. The unconsolidated substrate surrounding the Indian Pass boat ramp contains stopover habitat for non-listed migratory birds. Common migratory birds include willet (*Tringa semipalmata*), American oystercatcher (*Haematopus palliates*), sanderling (*Calidris alba*), ruddy turnstone (*Arenaria interpres*), and black-bellied plover (*Pluvialis squatarola*) (Edminston 2008). At this time, no terrestrial wildlife (non-bird) surveys have been conducted in either of the project areas.

Environmental Consequences

Although common wildlife may be impacted, these species live in an area where regular use of boat ramps creates ambient noise levels similar to that of the project. Habitat conditions after construction would be similar to the existing conditions, and no long-term effects to common wildlife would be anticipated.

The Highland View and Indian Pass boat ramp enhancement activities would include in-water work that would disturb foraging birds or other wildlife due to turbidity, acoustical vibration, and noise impacts during the removal efforts of existing infrastructure. This would be a short-term, minor impact and any wildlife or birds in the immediate project area would be expected to move away. Additionally, foraging habitat is abundant in the areas adjacent to the project areas. Activities for both projects would take place in only a small portion of these areas. Therefore, foraging birds or other wildlife would not be impacted as a result of the proposed projects.

Marine and Estuarine Fauna (fish, shell beds, and benthic organisms)

Affected Resources

The lack of infrastructure surrounding the Indian Pass boat ramp allows for a natural habitat that supports numerous fish and marine species. Over 140 species of fish have been collected within Apalachicola Bay, including transient species and inhabitants of the bay. Dominant fish species in the bay include Engraulidae species, Atlantic croaker (*Micropogonias undulatus*), sand sea trout (*Cynoscion arenarius*), spot, silver perch (*Bidyanus bidyanus*), menhaden (*Brevoortia tyrannus*), pinfish (*Lagodon rhomboides*), and pigfish (*Bodianus unimaculatus*) (Edmiston 2008).

The value of marine habitats adjacent to the Highland View boat ramp has been impacted by population growth and development. Unconsolidated substrate surrounding the boat ramp supports infaunal organism, as well as a transient phytoplankton and pelagic organisms (e.g., tube worms, sand dollars, mollusks, isopods, amphipods, burrowing shrimp, and an assortment of crabs) (FDEP 2008a). This unconsolidated substrate serves as feeding grounds for bottom feeding fish such as redfish (*Sciaenops ocellatus*), flounder, spot, and sheepshead. Common fish near the Highland View boat ramp include spotted seatrout (*Cynoscion nebulosus*), king mackerel (*Scomberomorus cavalla*), Spanish mackerel (*Scomberomorus macalatus*), red drum (*Scienops ocellatus*), southern flounder (*Paralichthys lethostigma*), red fish, tarpon (*Megalops atlanticus*), mullet (*Mugi cephalus, Mugil curema*) and bay scallops (*Argopecten irradians*) (FDEP 2008a).

Environmental Consequences

Infaunal organisms and transient and pelagic organisms supported by the unconsolidated substrate surrounding the boat ramps would potentially be impacted by compaction associated with vehicular traffic and disturbances associated with construction. This in turn, could have impacts on bottom-feeding fish. These impacts would be temporary and limited to construction. Infaunal organisms and transient and pelagic organisms would be able to recolonize disturbed areas quickly and return the community to its original state. Therefore, impacts to these species would be short term and minor.

Protected Species

Protected species and their habitats include ESA-listed species and designated critical habitats, which are regulated by either the USFWS or the NMFS. Protected species also include marine mammals protected under the Marine Mammal Protection Act, essential fish habitat (EFH) protected under the Magnuson-Stevens Fishery Conservation and Management Act, migratory birds protected under the Migratory Bird Treaty Act (MBTA) and bald eagles protected under the Bald and Golden Eagle Protection Act (BGEPA).

Affected Resources

The federally listed threatened and endangered species reported for the project area in Gulf County include five sea turtles, West Indian manatee (*Trichechus manatus latirostris*), Gulf sturgeon(*Acipenser oxyrinchus desotoi*), piping plover (*Charadrius melodus*), and St. Andrews beach mouse (*Peromyscus polionotus peninsularis*), as well as one proposed species, the red knot (*Calidris canutus rufa*). State-listed threatened species reported to occur within the project areas are addressed below, under State-Listed Species.

A list of federal and state designated threatened, endangered, and candidate wildlife species known or believed to occur in the project areas is below in Table 12-11.

Sea Turtles and Marine Mammals

There are five species of endangered or threatened sea turtles that may occur or have the potential to occur within the project areas: green sea turtle (*Chelonia mydas*), hawksbill sea turtle (*Eretmochelys imbricata imbricata*), Kemp's ridley sea turtle (*Lepidochelys kempii*), leatherback sea turtle (*Caretta caretta*), and loggerhead sea turtle (*Caretta caretta*). Sea turtles forage in the waters of the coastal Florida panhandle region and have the potential to occur within the waters where in-water work is proposed. The Indian Pass and Highland boat ramp sites contain or are adjacent to suitable sea turtle nesting habitat along the sandy beach surrounding the sites. In fact, the surrounding beach is proposed as critical habitat for the loggerhead sea turtle. In addition, sea turtles are known to nest on St. Vincent Island, which is 0.23 miles southeast of the boat ramp (Edmiston 2008).

Gulf County is not listed as one of the 36 Florida coastal and inland counties in which manatees regularly occur (2011 Manatee Key, USFWS 2011); however, manatees could be present at the project site

The Standard Manatee Conditions for In-Water Work (USFWS 2011) will be implemented:

- All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and impact to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees that are protected under the Marine Mammal Protection Act, the ESA, and the Florida Manatee Sanctuary Act.
- All vessels associated with the construction project shall operate at "idle speed/no wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a 4-foot clearance from the bottom. All vessels shall follow routes of deep water whenever possible.
- Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.
- All on-site project personnel shall be responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shut down if a manatee(s) comes within 50 feet of the operation. Activities shall not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals shall not be herded away or harassed into leaving.
- Any collision with or harm to a manatee shall be reported immediately to the Florida Fish and Wildlife Commission (FWC) Hotline at 1-888-404-3922.
- Collision and/or harm should also be reported to the USFWS in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida, and to the FWC at ImperiledSpecies@myFWC.com.
- Temporary signs concerning manatees shall be posted before and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project.

Temporary signs that have already been approved for this use by the FWC must be used. One sign reads: "Caution: Boaters must be posted." A second sign measuring at least 8.5 × 11 inches explaining the requirements for idle speed/no wake and the shutdown of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at MyFWC.com/manatee.

- The Indian Pass and the Highland View boat ramp projects will adhere to all applicable permit conditions, federal, state, and local requirements for the protection of marine mammals during construction.

Gulf Sturgeon and Gulf Sturgeon Critical Habitat

Gulf sturgeons are restricted to the Gulf of Mexico and its drainages, occurring primarily from the Pearl River, Louisiana to the Suwannee River in Florida (NMFS 2009). Adult fish reside in rivers 8 to 9 months each year and in estuarine or Gulf waters during the 3 to 4 cooler months of each year (NMFS 2009). Important marine habitats include seagrass beds with sand and mud substrates (Mason and Clugston 1993).

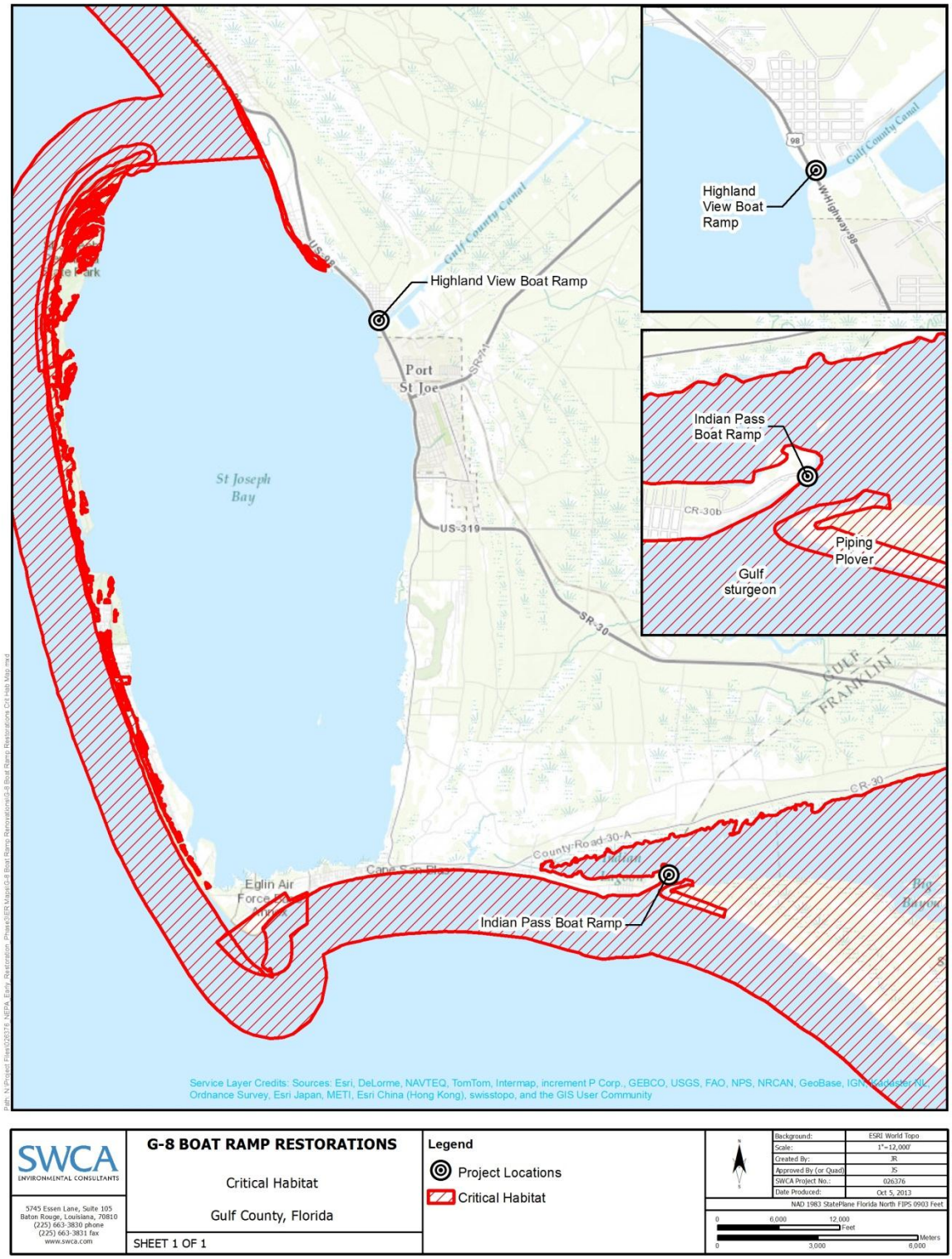
Gulf sturgeon critical habitat was jointly designated by the NMFS and the USFWS on April 18, 2003 (50 Code of Federal Regulations [C.F.R.] 226.214). The Indian Pass boat ramp is located within the Florida Nearshore Gulf of Mexico Critical Habitat Unit 11, which contains winter feeding and migration habitat for Gulf sturgeon. The Highland View boat ramp is located within the St. Joseph's Bay System Unit 13, which also contains winter feeding and migration habitat for Gulf sturgeon (NMFS 2009). See Figure 12-16 for a map of critical habitat in the project area. Critical habitat was designated based on seven primary constituent elements (PCEs) essential for its conservation, as defined in the 2003 *Federal Register*:

- Abundant food items, such as detritus, aquatic insects, worms, and/or mollusks, within riverine habitats for larval and juvenile life stages; and abundant prey items, such as amphipods, lancelets, polychaetes, gastropods, ghost shrimp, isopods, mollusks, and/or crustaceans, within estuarine and marine habitats and substrates for subadult and adult life stages;
- Riverine spawning sites with substrates suitable for egg deposition and development, such as limestone outcrops and cut limestone banks, bedrock, large gravel or cobble beds, marl, soapstone, or hard clay;
- Riverine aggregation areas, also referred to as resting, holding, and staging areas, used by adult, subadult, and/or juveniles, generally, but not always, located in holes below normal riverbed depths; these are believed necessary for minimizing energy expenditure during freshwater residency and possibly for osmoregulatory functions;
- A flow regime (i.e., the magnitude, frequency, duration, seasonality, and rate-of-change of freshwater discharge over time) necessary for normal behavior, growth, and survival of all life stages in the riverine environment, including migration, breeding site selection, courtship, egg fertilization, resting, and staging, and for maintaining spawning sites in suitable condition for egg attachment, egg sheltering, resting, and larval staging;

Table 12-11. Protected species with potential to occur in the project area.

Resource Category	Common Name	Scientific Name	FWS Status	State Status	Natural Communities
Bird	Bald eagle	*Haliaeetus leucocephalus*	BGEPA		• Estuarine: marsh edges, tidal swamp, open water; • Lacustrine: swamp lakes, edges; Palustrine: swamp, floodplain; • Riverine: shoreline, open water; • Terrestrial: pine and hardwood forests, clearings **Potential habitat present**
Bird	Piping plover	*Charadrius melodus*	T (CH)	T	• Estuarine: exposed unconsolidated substrate; • Marine: exposed unconsolidated substrate; • Terrestrial: dunes, sandy beaches, and inlet areas; mostly wintering and migrants **Potential habitat present**
Bird	Red knot	*Calidris canutus rufa*	P		• Estuarine: exposed unconsolidated substrate; • Marine: exposed unconsolidated substrate; • Terrestrial: dunes, sandy beaches, and inlet areas; mostly wintering and migrants. **Potential habitat present**
Fish	Gulf sturgeon	*Acipenser oxyrinchus desotoi*	T (CH)	SSC	• Estuarine: various; • Marine: various habitats; • Riverine: alluvial and blackwater streams **Potential habitat present**
Mammal	West Indian manatee	*Trichechus manatus latirostris*	E	E	• Estuarine: submerged vegetation, open water; • Marine: open water, submerged vegetation; • Riverine: alluvial streams, blackwater streams, spring-run streams **Potential habitat present**
Mammal	St. Andrews beach mouse	*Peromyscus polionotus peninsularis*	E	E	• Terrestrial: sand dune, scrub dunes **Potential habitat present at the Highland View boat ramp**
Reptile	Green sea turtle	*Chelonia mydas*	E	E	• Terrestrial: sandy beaches; nesting **Potential habitat present**
Reptile	Hawksbill sea turtle	*Eretmochelys imbricata imbricata*	E	E	• Marine: open water; no nesting **Potential habitat present**
Reptile	Kemp's ridley sea turtle	*Lepidochelys kempii*	E	E	• Terrestrial: sandy beaches; nesting **Potential habitat present**
Reptile	Leatherback sea turtle	*Dermochelys coriacea*	E	E	• Terrestrial: sandy beaches; nesting **Potential habitat present**
Reptile	Loggerhead sea turtle	*Caretta caretta*	T	T	• Terrestrial: sandy beaches; nesting **Potential habitat present**

E=endangered, T=threatened, P=proposed, SSC=species of special concern, CH=Critical Habitat, BGEPA=Bald and Golden Eagle Protection Act. MBTA=Migratory Bird Treaty Act.



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G-8 BOAT RAMP RESTORATIONS

Critical Habitat

Gulf County, Florida

SHEET 1 OF 1

Legend

Project Locations

Critical Habitat

Background:	ESRI World Topo
Scale:	1"=12,000'
Created By:	JR
Approved By (or Quad):	JS
SWCA Project No.:	026376
Date Produced:	Oct 5, 2013

NAD 1983 StatePlane Florida North FIPS 0903 Feet

0 6,000 12,000 Feet

0 3,000 6,000 Meters

Figure 12-16. Gulf sturgeon critical habitat map.

- Water quality, including temperature, salinity, pH, hardness, turbidity, oxygen content, and other chemical characteristics necessary for normal behavior, growth, and viability of all life stages;
- Sediment quality, including texture and chemical characteristics, necessary for normal behavior, growth, and viability of all life stages; and
- Safe and unobstructed migratory pathways necessary for passage within and between riverine, estuarine, and marine habitats (e.g., an unobstructed river or a dammed river that still allows for passage).

St. Andrews Beach Mouse and St. Andrews Beach Mouse Critical Habitat

Primary, secondary, and occasionally tertiary sand dunes with moderate cover of grasses and forbs, including sea oats (*Uniola paniculata*), bitter panicum (*Panicum amarum*), Gulf bluestem (*Schizachyrium maritimum*), beach dropseed (*Sporobolus virginicus*), and telegraph weed (*Heterotheca subaxillaris*) are considered preferred habitat of the St. Andrews beach mouse (Florida Natural Areas Inventory 2001). High, stable areas supporting sand live oak (*Quercus geminata*) may be important following hurricanes that remove substantial dune habitat. Although the Highland View boat ramp occurs adjacent to critical habitat for the St. Andrews beach mouse, the boat ramp is entirely within an industrial area that lacks suitable habitat for the beach mouse. Critical habitat for the beach mouse is located west of the boat ramp, on the opposite side of Highway 98.

Essential Fish Habitat

EFH is defined in the Magnuson-Stevens Fishery Conservation and Management Act as "those waters and substrates necessary to fish for spawning, breeding, feeding or growth to maturity." The designation and conservation of EFH seeks to minimize adverse effects on habitat caused by fishing and non-fishing activities. The NMFS has identified EFH habitats for the Gulf of Mexico in its Fishery Management Plan Amendments. These habitats include estuarine emergent wetlands, seagrass beds, algal flats, mud, sand, shell, and rock substrates, and the estuarine water column. The EFH within the project area include emergent wetlands, mud substrate, and estuarine water columns for species of fish, such as red drum, brown shrimp, pink shrimp, and white shrimp.

The area also provides habitat for prey species (e.g. Gulf menhaden, shad, croaker and spot) that are consumed by larger commercially important species. In addition, the area provides habitat for spotted seatrout, striped mullet, southern flounder, Atlantic croaker, and Gulf menhaden. Table 12-12 provides a list of the species that NMFS manages under the federally Implemented Fishery Management Plan in the vicinity of the Highland View and Indian Pass sites and St. Josephs Bay, St. Vincent Sound, Indian Lagoon, and the Gulf of Mexico.

Table 12-12. List of species managed by NMFS in vicinity of the project study area (NMFS EFH mapper, 2013).

MANAGEMENT UNIT / SPECIES	LIFESTAGE(S) FOUND AT LOCATION	FMP
Red Drum (Sciaenops ocellatus)	ALL	Red Drum
Highly Migratory Species		
Atlantic Sharpnose Shark	All	Highly Migratory Species
Blacknose Shark	All	
Blacktip Shark	All	
Bonhead Shark	All	
Bull Shark	Juvenile, Adult	
Finetooth Shark	All	
Great Hammerhead Shark	All	
Lemon Shark	All	
Nurse Shark	Juvenile, Adult	
Scalloped Hammerhead Shark	All	
Spinner Shark	All	
Tiger Shark	Juvenile	
Shrimp		
Brown shrimp (*Penaeus aztecus*)	ALL	Shrimp
White shrimp (*Penaeus setiferus*)		
Pink shrimp (*Penaeus duararum*)		
Royal red shrimp (*Pleoticus robustus*)		
Coastal Migratory Pelagics		
King mackerel (*Scomberomorus cavalla)*	ALL	Coastal Migratory Pelagics
Spanish mackerel (*Scomberomorus maculatus*)		
Cobia (*Rachycentron canadum*)		
Dolphin (*Coryphaena hippurus*)		
Reef Fish		
Balistidae - Triggerfishes	ALL	Reef Fish
Gray triggerfish (Balistes capriscus)		
Carangidae - Jacks		
Greater amberjack (Seriola dumerili)		
Lesser amberjack (Seriola fasciata)		
Almaco jack (Seriola rivoliana)		
Banded rudderfish (Seriola zonata)		
Labridae - Wrasses		
Hogfish (Lachnolaimus maximus)		
Lutjanidae - Snappers		
Queen snapper (Etelis oculatus)		
Mutton snapper (Lutjanus analis)		
Blackfin snapper (Lutjanus buccanella)		
Red snapper (Lutjanus campechanus)		
Cubera snapper (Lutjanus cyanopterus)		
Gray (mangrove) snapper (Lutjanus griseus)		
Lane snapper (Lutjanus synagris)		
Silk snapper (Lutjanus vivanus)		

MANAGEMENT UNIT / SPECIES	LIFESTAGE(S) FOUND AT LOCATION	FMP
Wenchman (Pristipomoides aquilonaris) Vermilion snapper (Rhomboplites aurorubens) **Malacanthidae – Tilefishes** Goldface tilefish (Caulolatilus chrysops) Blueline tilefish (Caulolatilus microps) **Serranidae – Groupers** Speckled hind (Epinephelus drummondhayi) Yellowedge grouper (Epinephelus flavolimbatus) Red grouper (Epinephelus morio) Warsaw grouper (Epinephelus nigritus) Snowy grouper (Epinephelus niveatus) Nassau grouper (Epinephelus striatus) Black grouper (Mycteroperca bonaci) Yellowmouth grouper (Mycteroperca interstitialis) Gag (Mycteroperca microlepis) Scamp (Mycteroperca phenax) Yellowfin grouper (Mycteroperca venenosa)		

Piping Plover

The sandy beaches and shorelines adjacent to the Indian Pass boat ramp offer suitable foraging and resting habitat for the piping plover during the winter migratory season, and piping plover may forage in the shallow waters of the project areas. Natural shorelines in the proposed project vicinity provide suitable winter migration resting habitat for the piping plover. Piping plover wintering habitat includes beaches, mudflats, and sandflats, as well as barrier island beaches and spoil islands (Haig 1992, as cited by USFWS 2013c). On the Gulf Coast, preferred foraging areas were associated with wider beaches, mudflats, and small inlets (USFWS 2013). While no piping plover critical habitat is located within the project sites, critical habitat is located 1,154 feet away from the Indian Pass boat ramp.

Red Knot

The red knot, a federal candidate species, uses the state of Florida both for wintering habitat and migration stopover habitat for those that continue to migrate down to specific wintering locations in South America (Niles et al. 2008). Wintering and migrating red knots forage along sandy beaches, tidal mudflats, salt marshes, and peat banks (Harrington 2001). Observations indicate that red knots also forage on oyster reef and exposed bay bottoms, and roost on high sand flats, reefs, and other sites protected from high tides (Niles et al. 2008). In wintering and migration habitats, red knots commonly forage on bivalves, gastropods, and crustaceans. Threats to wintering and stopover habitat in Florida include shoreline development, hardening, dredging, deposition, and beach raking (Niles et al. 2008).

Figure 12-17. EFH map.

State-Listed Birds, MBTA, and BGEPA

All migratory bird species are protected under the MBTA. The nesting season in Florida is from March 1 to August 1.

According to the FWC Bald Eagle Nest Locater, there are five bald eagle nests within 5 miles of the Indian Pass boat ramp. The distance between the project site and the eagle nests ranges from 1.75 to 4.92 miles away (FWC 2012). There are two bald eagle nests within 5 miles of the Highland View boat ramp, one 3.23 miles away and the other 3.48 miles away. The bald eagle was delisted by the USFWS and is not listed as threatened or endangered by the FWC. The bald eagle is, however, protected by state law pursuant to 68A-16, Fla. Admin. Code and by the U.S. government under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. Bald eagles feed on fish and other readily available mammalian and avian species and are dependent on large, open expanses of water for foraging habitat. In Florida, conservation measures to protect active nest sites during nesting season must be considered to reduce potential disturbances of certain project activities. If bald eagles are found nesting within 660 feet of a proposed construction area, then activities would need to occur outside of nesting season or coordination with the USFWS would occur to determine if a permit is needed, and Florida's Bald Eagle Management Plan guidelines would be followed (FWC 2008).

Wildlife and Wildlife Habitat

Primary, secondary, and occasionally tertiary sand dunes with moderate cover of grasses and forbs, including sea oats, bitter panicum, Gulf bluestem, beach dropseed, and telegraph weed are considered preferred habitat of the St. Andrews beach mouse (Florida Natural Areas Inventory 2001). High, stable areas supporting sand live oak may be important following hurricanes that remove substantial dune habitat. The sand dune area within the Highland View boat ramp offers habitat suitable for the St. Andrews beach mouse.

Environmental Consequences

The proposed project has been evaluated for potential short- and long-term impacts to state and federally listed threatened and endangered species that may occur within and adjacent to the project areas based on available suitable habitat and restoration goals. Descriptions of these evaluations are provided below.

Sea Turtles and Marine Mammals8

For projects in waters accessible to sea turtles, the NMFS has developed standardized Sea Turtle and Smalltooth Sawfish Construction Conditions (NMFS 2006). These conditions are typically applied to projects as part of the USACE CWA Section 404 permit issued for in-water work. It is unlikely that the project sites contain submerged aquatic vegetation, which is the preferred foraging habitat of sea turtles, but it cannot be ruled out entirely.

If sea turtles are present in the in-water work areas, short-term disturbances from noise and turbidity would occur. Sea turtles are a highly mobile species and would be expected to move away during in-water activities. Additionally, should a sea turtle be encountered during installation of the project, the crews would allow these species to exit from the project vicinity before commencing with construction

activities. Therefore, potential impacts or disturbances to listed sea turtles would be short term and minor.

Noise and other activity associated with proposed in-water construction may temporarily disturb manatee species in the vicinity of the project area through temporary impacts on prey abundance, water quality (turbidity), and underwater noise. Manatees are not anticipated to be attracted to the boat ramp areas due to the probable lack of submerged vegetation for foraging in the vicinity. The conditions stated in Standard Manatee Conditions for In-Water Work (USFWS 2011) would be implemented and adhered to during the construction activity for both projects. It is anticipated that these conservation measures would significantly reduce risk of impacts to manatees from the proposed project. The Indian Pass and Highland View boat ramp projects would adhere to all applicable federal, state, and local permit conditions for the protection of marine mammals and would not be expected to impact West Indian manatee or other marine mammals during construction.

While it is not anticipated that any incidental harassment of marine mammals will occur as a result of this proposed project, the Trustees are conducting an evaluation of the expected magnitude and duration of underwater noise from the proposed construction techniques and their potential impacts on protected species, including marine mammals. The results of this analysis will be coordinated with NOAA's Office of Protected Resources to develop best management practices (e.g., avoidance measures, monitoring, alternate equipment) to avoid incidental harassment, or to seek incidental harassment authorization under the Marine Mammal Protection Act as appropriate. Additional coordination with NOAA under the Endangered Species Act would be conducted if any potential effects to sea turtles or other listed species are identified.

Gulf Sturgeon and Critical Habitat

Both the Apalachicola Bay and the St. Joseph Bay are utilized by the Gulf sturgeon as a migratory corridor from breeding grounds to winter foraging grounds and are, thus, critical habitat. Disturbances to the water column from in-water work would temporarily affect certain Gulf sturgeon critical habitat due to increased turbidity, dispersal of potential prey, and substrate disturbance (NMFS 2006). These would be limited to area immediately surrounding the work area and would occur only during construction. Therefore, impacts to Gulf sturgeon critical habitat would be short term and minor.

St. Andrews Beach Mouse and Critical Habitat

The St. Andrews beach mouse has specific habitat requirements based on food availability from grasses and forbs of beach dune and maritime forest habitat. Potential habitat consisting of beach dunes occurs west of the proposed construction limits but is not located within the project area. The PCEs of St. Andrews beach mouse critical habitat are absent at the proposed construction site. The current habitat at the proposed project site consists of a gravel parking lot with an adjacent riprap embankment located on either side of the existing boat ramp. There is likely to be noise disturbance associated with project implementation, but it is likely to be a negligible increase when compared with existing highway and boat ramp use. Due to the location of suitable habitat outside the project area, it is not expected that the St. Andrews beach mouse would utilize the project area. Therefore, impacts to this species would be short term and minor and impacts to critical habitat would be absent.

EFH Environmental Consequences

An EFH assessment will be coordinated with the NMFS Habitat Conservation Division through a formal EFH assessment process. If necessary, species specific measures would be recommended by NMFS and would be incorporated into the project construction plan. The project would not result in adverse, direct impacts to emergent wetlands, existing oyster reefs, or Submerged Aquatic Vegetation (SAV). Most motile fauna such as crab, shrimp, and finfish will likely avoid the area of potential effect during the construction process. The project may result in minor, adverse short term impacts to benthic organisms and temporarily affect habitat utilization by individuals considered under EFH fishery management plans.

The proposed work in the EFH area reflects replacement and enhancement of the existing boat ramps at both the Highland View and Indian Pass sites. As a result, disturbance to species will be limited in their spatial extent, minor in scope, and brief in duration. Construction activities will be conducted at the site of existing structures and may have a minor, short term impact on habitat. During construction, all appropriate BMPs will be followed to minimize the potential impacts of construction activities on EFH and species in the area. During construction, adjacent areas with equivalent or better habitat will be available and undisturbed and organisms could move away from disturbed areas. Therefore, the project is not likely to adversely affect EFH.

Piping Plover and Red Knot

The main risk to piping plover and red knot would be from human disturbance during nesting and foraging in habitats adjacent to work areas. The proposed projects would result in short-term increases in noise, which could startle individuals, though normal activity is expected to resume within minutes; alternatively, the noise is expected to cause plovers or red knots to move to a nearby area as alternate available habitat is abundant. Piping plovers and red knots are highly mobile and if disturbed by construction activities may be temporarily displaced from foraging and resting areas within normal movement patterns. Indirect impacts from vistor use to nearby areas will be minimized through the use of educational signs posted at both ramps. These effects would be considered short term and minor.

State-Listed Birds, MBTA, and BGEPA

Migratory birds may nest in beaches in the vicinity of the Indian Pass and Highland View boat ramp project areas. If restoration activities occurs during the nesting season (March 1–August 1), they could be disturbed by noise generated by in-water activities. In such circumstances, FWC nesting shorebird avoidance measures will be followed. These measures generally call for surveys within 300 feet and an avoidance buffer of 300 feet for nesting birds.

Due to the disturbed nature of the habitat surrounding the Highland View and Indian Pass boat ramps, it is unlikely that any migratory birds would utilize the project area for nesting. However, nesting is common in areas that visitors may use after launching from the improved ramps. Indirect impacts from vistor use to nearby areas will be minimized through the use of educational signs posted at both ramps.

All activities (staging, demolition, construction, cleanup, use of equipment, machinery, vehicles including utility terrain vehicle [UTV] and all-terrain vehicle [ATV], or boat/vessels) should avoid a bald eagle nest by a minimum of 660 feet.

Consultation with the FWC concerning the proposed projects and anticipated construction schedule relative to known bald eagle nest sites within the project vicinity and the nesting season in Florida (October 1–May 15) would be required prior to commencement of restoration activities. To minimize potential for impacts to nesting bald eagles, the consultation protection measures may include 1) addressing prescribed nest tree protection zones and 2) preparation of a bald eagle nest protection plan (including nesting behavior disturbance monitoring). Bald eagles have been known to tolerate certain potential disturbances within their breeding territories. Should these conservation measures be implemented for active nest sites adjacent to enhancement activities in the project areas, potential impacts to the bald eagle would be short term and minor.

Invasive Species

Affected Resources

Non-native invasive species could alter the existing terrestrial or aquatic ecosystem within, and possible expand out into adjacent areas after the initial introduction. The invasive species threat, once realized, could result in economic damages. Prevention is ecologically responsible and economically sound. Chapter 3 described more about the regulations addressing invasive species, pathways, impacts, and prevention. At this time specific invasive species that may be present on the project site or could be introduced through the project have not yet been identified.

Environmental Consequences

Best Management Practices (BMPs) to control the spread of any invasive species present, and prevent the introduction of new invasive species due to the project will be implemented. In general, best management practices would primarily address risk associated with vectors (e.g., construction equipment, personal protective equipment, delivery services, foot traffic, vehicles/ vessels, shipping material). There are many resources that provide procedures for disinfection, pest-free storage, monitoring methods, evaluation techniques, and general guidelines for integrated pest management that can be prescribed based upon specific site conditions and vectors anticipated. In addition, to best management practices, outreach and educational materials may be provided to project workers and potential users/visitors. Other measures that could be implemented are identified in Chapter 12 Appendix A. Due to the implementation of BMPs, we expect risk from invasive species introduction and spread to be short term and minor.

12.54.5.5 Human Uses and Socioeconomics

12.54.5.5.1 Socioeconomics and Environmental Justice

Affected Resources

The proposed projects are in Gulf County, which is Florida's fifty-ninth most populous county (Table 12-13). Gulf County contains 0.084% of Florida's population (Florida Office of Economic and Demographic Research 2013). Home to approximately 15,863 residents, Gulf County has an average density of 28.1 individuals per square mile. White represents the largest group, comprising approximately 78% of the population of Gulf County. The second largest group was the Hispanic or Latino, representing 23.2%.

Table 12-13. Population characteristics for Gulf County compared to the State of Florida (U.S. Census 2010).

TOPIC	FLORIDA		GULF	
Population, 2010	18,801,310		15,863	
White alone	14,721,426	78.3%	12,405	78.2%
Black or African American	3,121,017	16.6%	3,030	19.1%
American Indian and Alaska Native alone	94,007	0.5%	79	0.5%
Asian alone	507,635	2.7%	63	0.4%
Native Hawaiian and Other Pacific Islander alone	18,801	0.1%	0	0%
Two or more races	357,225	1.9%	286	1.8%
Hispanic or Latino	4,361,904	23.2%	730	4.6%
White alone, not Hispanic or Latino	10,716,747	57.0%	11,723	73.9%
Homeownership rate, 2007–2011	69%		74.8%	
Median household income, 2007–2011	$47,827		$41,291	
Persons below poverty level, percent, 2007–2011	14.7%		17.5%	

Environmental Consequences

These projects would have a short-term, moderate, impact through the disruption of localized fishing, access to the St. Vincent National Wildlife Refuge, and the local retail sales (food, gasoline, or similar items). A few individuals, groups, businesses, properties, or institutions would be impacted. Impacts would be small and localized. These impacts are not expected to substantively alter social and/or economic conditions. Actions would not disproportionately affect minority populations and low-income populations.

Direct, short-term, moderate benefits through local job creation would result from construction activities. Long-term, indirect, moderate benefits would result from increasing recreational and fishing value of the area. Greater fishing success may increase the number of fishing trips in the area that could generate ancillary purchases such as license fees, fuel, equipment, or other ancillary purchases.

This project is not designated to create a benefit for any group or individual, but would provide benefits to a local and regional basis. Because the project occurs in an area that is not disproportionately minority or low income, there are no indications that the proposed living shoreline project would be contrary to the goals of Executive Order 12898 or would create disproportionate, adverse human health or environmental impacts on minority or low-income populations of the surrounding community.

12.54.5.5.2 Cultural Resources

Affected Resources

A review of the Florida Master Site File (FMSF) indicates that there is one previously recorded archaeological site located within the immediate vicinity of the proposed Highland View project area (FDHR 2013). This site, 8GU202, is the Gulf County Canal. As recorded, the site area begins at St. Joe Bay and terminates at the Intercostal Waterway, approximately 5.8 miles to the northeast. The canal was constructed in 1938 by Gulf County to aid in the development of the region. In 1943, the canal was incorporated into a Federal waterway project (FDHR 2013). While surveys have been completed in the

vicinity of the canal, the canal itself has not yet formally been evaluated for listing on the National Register of Historic Places.

A review of the Indian Pass boat ramp project indicates that there at least five previously recorded archaeological sites located within 1 mile of the project area. One site, 8FR352, is located on St. Vincent's Island, which is separated from the project area by Indian Pass. The remaining sites are located on the peninsula with the boat ramp. Site 8GU1 is located to the south and west of the existing boat ramp; this site is prehistoric mound that contains human burials. Site 8GU17 is also a prehistoric mound; it is located to the west of the existing boat ramp. Neither of these sites is in the boat ramp project area. Site 8GU231 (historic-era barrel well) was identified to the north of the project area; the site is well away from the existing boat ramp. Site 8GU221 is a surface scatter of prehistoric ceramics that was identified to the south of the existing boat ramp (FDHR 2013).

Environmental Consequences
The Highland View boat ramp does not have any previously recorded historic resources located in the immediate vicinity of the proposed work.

The Indian Pass boat ramp is located in the immediate vicinity of site 8GU221. While this site was recorded as a surface scatter, no shovel testing or other subsurface examination took place within the site area. As there are ground-disturbing activities associated with the project, a cultural resources survey may need to be conducted prior to the imitation of the excavation.

A complete review of these projects under Section 106 of the NHPA would be completed as enivornmental review continues. Tribal Consultations with all federally recognized tribes will be part of the Section 106 process. This project would be implemented in accordance with all applicable laws and regulations concerning the protection of the cultural and historic resources.

Infrastructure

Affected Resources
The Indian Pass boat ramp is an existing single-lane boat ramp that is approximately 20 feet wide and 100 feet long. It is bordered by two boarding docks and a parking area with a seven-vehicle/trailer capacity. The Highland View boat ramp is an existing, single-lane boat ramp and is surrounded by an L-shaped boarding dock and parking with a 20-vehicle/trailer capacity.

Environmental Consequences
The replacement and enhancement of the boat ramps will have short-term and minor effects on the existing infrastructure. Improvements to the existing infrastructure would improve the experience of boaters.

12.54.5.5.3 Land and Marine Management

Affected Resources
The landward side of the Indian Pass boat ramp has a variety of land uses that includes recreational, commercial, and residential land uses (FDEP 2012). Land uses surrounding the Highland View boat ramp

include commercial, industrial, and residential land uses (FDEP 2008b). The projects would be located in a coastal area that is regulated by the federal CZMA and the Florida Coastal Management Act of 1978.

Environmental Consequences

Due to the existing Indian Pass and Highland View boat ramps, zoning changes, amendment to land-use area, or comprehensive management plans would not be required. The long-term impact of the project would be minor because it would not affect overall use and management beyond the local project area. It would be consistent with current land use.

Pursuant to the Coastal Zone Management Act of 1972, federal activities must be consistent to the maximum extent practicable with the federally-approved coastal management programs for states where the activities would affect a coastal use or resource. Federal Trustees are submitting consistency determinations for state review coincident with public review of this document.

12.54.5.5.4 Aesthetics and Visual Resources

Affected Resources

Land use surrounding the landward side of the Indian Pass boat ramp is residential and commercial. The boat ramp is adjacent to the Indian Pass Campground with campsites and cabins within 150 feet of the boat ramp. Directly east and west are public and private beaches that offer unobstructed views of the Gulf of Mexico and St. Vincent Island. The land use surrounding the Highland View boat ramp is commercial, industrial and residential (FDEP 2008b). The boat ramp is adjacent to the Highway 98 Bridge.

Environmental Consequences

Temporary impacts to visual resources would result from implementation of the proposed enhancement activities. Construction equipment would be temporarily visible to visitors and recreational users at the project access points (i.e., boat ramps and launch areas) and the surrounding area. Construction equipment at the Indian Pass boat ramp would cause major impacts to the visual resources of the surrounding beaches and would potentially impact the surrounding businesses. These impacts would be short term and limited to when construction is taking place, as the boat ramp is already and existing facility.

Due to the Highland View boat ramp's position along the Highway 98 bridge and location within an industrial area, impacts to visual resources at this site would be minor and short term because the boat ramp is an existing facility.

12.54.5.5.5 Tourism and Recreational Use

Affected Environment

Tourism and recreation are common activities throughout the Florida panhandle region. The St. Vincent National Wildlife Refuge, located on St. Vincent Island, is located 1,700 feet across St. Vincent Sound from the Indian Pass boat ramp. The refuge draws in tourists throughout the year for recreational activities such as hiking, biking, kayaking, hunting, birding, and fishing. The refuge is exclusively

accessible by boat. The St. Vincent Island Shuttle and Fishing Charters ferries tourists to and from St. Vincent Island year round from Indian Pass boat ramp to St. Vincent Island.

The Indian Pass Campground is located adjacent to the Indian Pass boat ramp. The campground is dependent on fishermen and boaters who use the boat ramp, and beach goers who use the adjacent beaches.

The Highland View boat ramp is one of many boat ramps that offer access to the Gulf County Canal and St. Joseph Bay.

Environmental Consequences

Adverse impacts to the recreational experience of the use of the adjacent beach to Indian Pass would be minor as a result of noise and visual disturbances. Public access to the beach would be maintained and there would be no beach restrictions other than those prohibiting human entry into the project construction area. While temporary inconveniences would result in short-term minor to moderate negative impacts to tourism, recreational use of the beach for fishing and swimming would remain available. Negative impacts to boaters who utilize the boat ramp would be moderate since free, public boat ramps are located in Apalachicola, 9 miles away. Over the long term the project would not result in adverse effects to tourism and recreational use. Opportunities for recreational activity in the project waters would be enhanced as a result of improved fishing and bird-watching opportunities. Enhancement of the visual and solidarity experiences offered by the open water environmental of St. Joseph Bay and Apalachicola Bay would provide additional beneficial community use. Over the long term, the project would result in minor beneficial impacts to tourism and recreational uses.

The duration of the boat ramp construction projects is approximately 2 years. Closure of the Highland View boat ramp would have minor impacts on tourist and recreation because of the plethora of boat ramps in proximity to the site.

12.54.5.5.6 Public Health and Safety and Shoreline Protection

Affected Resources

The management of hazardous materials is regulated under various federal and state environmental and transportation laws and regulations, including the Resource Conservation and Recovery Act (RCRA); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); the Emergency Planning and Community Right-to-Know Act; and the Hazardous Materials Transportation Act. The purpose of the regulatory requirements set forth under these laws is to ensure the protection of human health and the environment through proper management (identification, use, storage, treatment, transport, and disposal) of these materials. Some of these laws provide for the investigation and cleanup of sites that have already been contaminated by releases of hazardous materials, wastes, or substances.

A review of the EPA's EnviroMapper revealed that there is one RCRA sites adjacent to the Highland View boat ramp (EPA 2013c).

Environmental Consequences

Project construction would require mechanical equipment that uses oil, lubricants, and fuels. The contractor would be required to take appropriate actions to prevent, minimize, and control the spill of construction-related hazardous materials such as vehicle fuels, oil, hydraulic fluid, and other vehicle maintenance fluids. Because the project would repair an existing boat ramp, no effects related to the existing RCRA site would be anticipated.

12.54.6 Summary and Next Steps

Per the Purpose and Need of the Draft Phase III ERP/PEIS, four alternatives are considered, including a no action (Alternative 1), selection of project types emphasizing habitat and living coastal and marine resources (Alternative 2), project types emphasizing recreational opportunities (Alternative 3), or a combination of both habitat and living coastal and marine resources and recreational opportunities (Alternative 4). As proposed, the Gulf County Recreation Project – Indian Pass Boat Ramp project and the Gulf County Recreation Project – Highland View Boat Ramp project implement restoration techniques within Alternatives 3 and 4.

The proposed Gulf County Recreation Project – Indian Pass Boat Ramp project would improve the existing Indian Pass boat ramp in Gulf County. The proposed improvements include repairing and enhancing the existing boat ramp and replacing existing access and termination piers to provide better facilities for the public. The proposed Gulf County Recreation Project – Highland View Boat Ramp project would improve the existing Highland View boat ramp in Gulf County. The proposed improvements include repairing and enhancing the existing boat ramp, replacing existing access and termination piers, and improving the parking to provide better facilities. These projects are consistent with Alternative 3 (Contribute to Providing and Enhancing Recreational Opportunities) and Alternative 4 (Preferred Alternative).

Draft NEPA analysis of the environmental consequences suggests that while minor adverse impacts may occur to some resource categories, no moderate to major adverse impacts are anticipated to result. These projects would enhance and/or increase the public's use and/or enjoyment of the natural resources by improving the boat ramp areas. The Trustees have started coordination and reviews under the Endangered Species Act, the Magnuson-Stevens Fishery Conservation and Management Act, the Historic Preservation Act, the Marine Mammal Protection Act, the Bald and Golden Eagle Protection Act, Coastal Zone Management Act, and other federal statutes. The Trustees will consider public comment and information relevant to environmental concerns bearing on the proposed actions or their impacts. Final determination on these projects will be included in the final Phase III ERP/PEIS and Record of Decision.

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12.55 Gulf County Recreation Projects: Project Description C (Improvements at Beacon Hill Veterans' Memorial Park)

12.55.1 Project Summary

The proposed Gulf County Beacon Hill Veterans' Memorial Park Improvements project would improve and enhance the existing facilities at the Beacon Hill Veterans' Memorial Park Gulf County. The proposed improvements include building, pavilions, restrooms, a nature trail, a parking area, and a small amphitheater. The total estimated cost of the project is $588,500.

12.55.2 Background and Project Description

The Trustees propose to improve and enhance an existing recreational area at the Beacon Hill Veterans' Memorial Park (see Figure 12-18 for general project location). The objective of the Gulf County Beacon Hill Veterans' Memorial Park Improvement project is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving the park. The restoration work proposed includes building pavilions, restrooms, a nature trail, a parking area, and a small amphitheater.

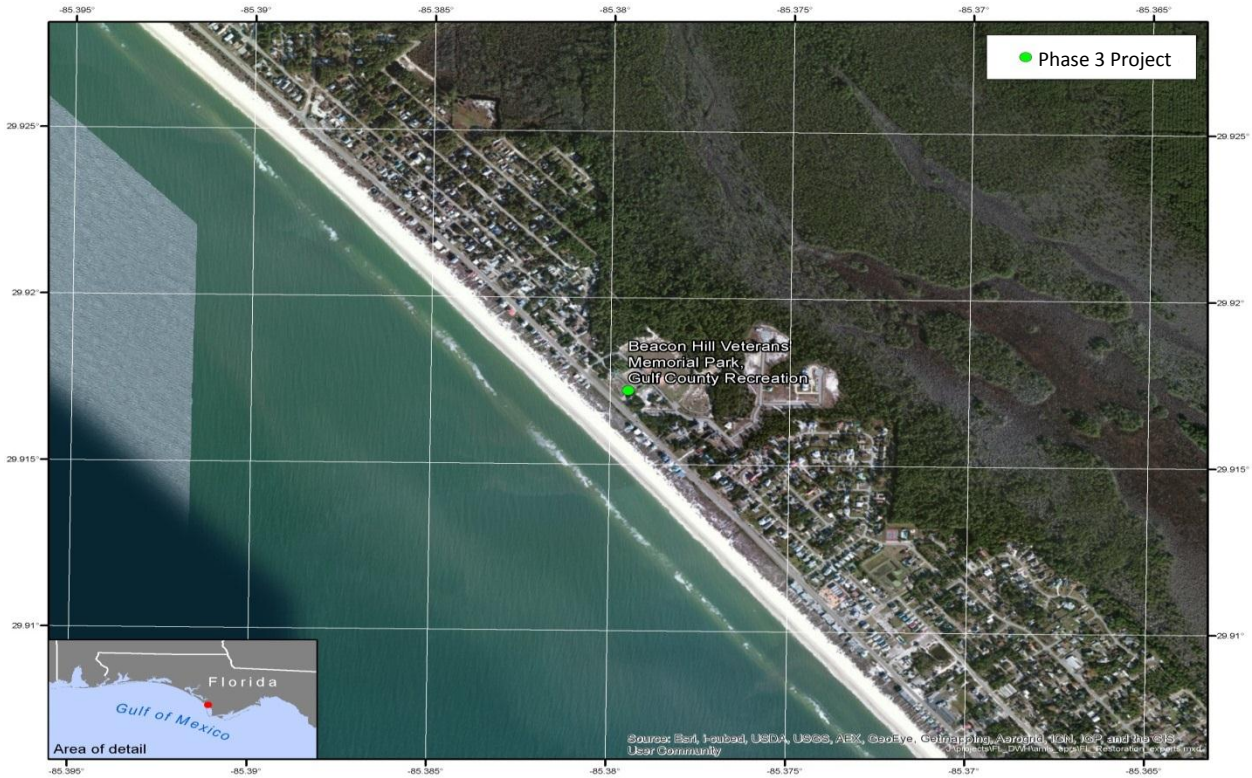


Figure 12-18. Location of Gulf County recreation project – improvements at Beacon Hill Veterans' Memorial Park.

12.55.3 Evaluation Criteria

This proposed project meets the evaluation criteria established for OPA and the Framework Agreement. As a result of the Deepwater Horizon oil spill and related response actions, the public's access to and enjoyment of their natural resources along Florida's Panhandle was denied or severely restricted. This project would enhance and/or increase the public's use and/or enjoyment of natural resources, helping

to offset adverse impacts to such uses caused by the Spill and related response actions. Thus, the nexus to resources injured by the Spill is clear. See 15 C.F.R. § 990.54(a)(2); and Sections 6a-6c of the Framework Agreement.

The project is technically feasible and uses proven techniques with established methods and documented results. Further, the project can be implemented with minimal delay. Agencies have successfully completed projects of similar scope throughout Florida over many years, including similar types of actions in earlier phases of the Deepwater Horizon Early Restoration. For these reasons, the project has a high likelihood of success. See 15 C.F.R. § 990.54(a)(3); and Section 6e of the Framework Agreement. Additionally, the cost estimates are based on similar past projects and therefore the project can be conducted at a reasonable cost. See 15 C.F.R. § 990.54(a)(1); and Section 6e of the Framework Agreement. Finally, this proposed project is not anticipated to negatively affect regional ecological restoration and is therefore not inconsistent with the long-term restoration needs of the State of Florida. See Section 6d of the Framework Agreement.

Many recreational use projects, including ones similar to this project, have been submitted as restoration projects on the NOAA website (http://www.gulfspillrestoration.noaa.gov) and to the State of Florida (http://www.deepwaterhorizonflorida.com). In addition to meeting the criteria for the Framework Agreement and OPA, the Gulf County Recreation Project – Improvements at Beacon Hill Veterans' Memorial Park project also meets the State of Florida's additional criteria that Early Restoration projects occur in the 8-county panhandle area in which boom was deployed and that was impacted by response and SCAT activities for the Spill.

12.55.4 Performance Criteria, Monitoring and Maintenance

As part of the project cost, monitoring will be conducted to ensure project plans and designs were correctly implemented. Monitoring has been designed around the project goals and objectives. The project objective is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving the Beacon Hill Veterans' Memorial Park. Performance monitoring will evaluate: 1) the construction of pavilions; 2) the construction of restrooms; 3) the building of a nature trail; 4) the construction of a new parking area; and 5) the construction of a small amphitheater. Specific performance criteria include: 1) the completion of the construction as designed and permitted, and 2) enhanced and/or increased access is provided to natural resources, which will be determined by observation that the park is open and available.

Long-term monitoring and maintenance of the improved facilities will be completed by Gulf County as part of their regular public facilities maintenance activities. Funding for this post-construction maintenance is not included in the previously provided value for the project cost and will be accomplished by Gulf County.

During the one year construction performance monitoring period, the Florida Trustees' Project Manager will go out twice to the site to record the number of users. Following the one year construction performance monitoring period, Gulf County will monitor the recreational use activity at the site. Gulf County staff will visit the site twice a year to count the number of users at the park. The visitation numbers will then be provided to the Florida Department of Environmental Protection.

12.55.5 Offsets

The Trustees and BP negotiated a BCR of 2.0 for the proposed recreational use project. Combined NRD Offsets for the Gulf County Recreation Projects, of which this is a component, are $4,237,200 expressed in present value 2013 dollars to be applied against the monetized value of lost recreational use provided by natural resources injured in Florida, which will be determined by the Trustees' assessment of lost recreational use for the Oil Spill. Please see Chapter 7 of this document (Section 7.2.2) for a description of the methodology used to develop monetized Offsets.[9]

12.55.6 Costs

The total estimated cost to implement this project is $588,500. This cost reflects current cost estimates developed from the most current information available to the Trustees at the time of the project negotiation. The cost includes provisions for planning, engineering and design, construction, monitoring, and contingencies.

[9] For the purposes of applying the NRD Offsets to the calculation of injury after the Trustees' assessment of lost recreational use for the Spill, the Trustees and BP agree as follows:

- The Trustees agree to restate the NRD Offsets in the present value year used in the Trustees' assessment of lost recreational use for the Spill.
- The discount rate and method used to restate the present value of the NRD Offsets will be the same as that used to express the present value of the damages.

12.56 Gulf County Recreation Projects: Environmental Review C (Beacon Hill Veteran's Memorial Park)

12.56.1 Introduction and Background

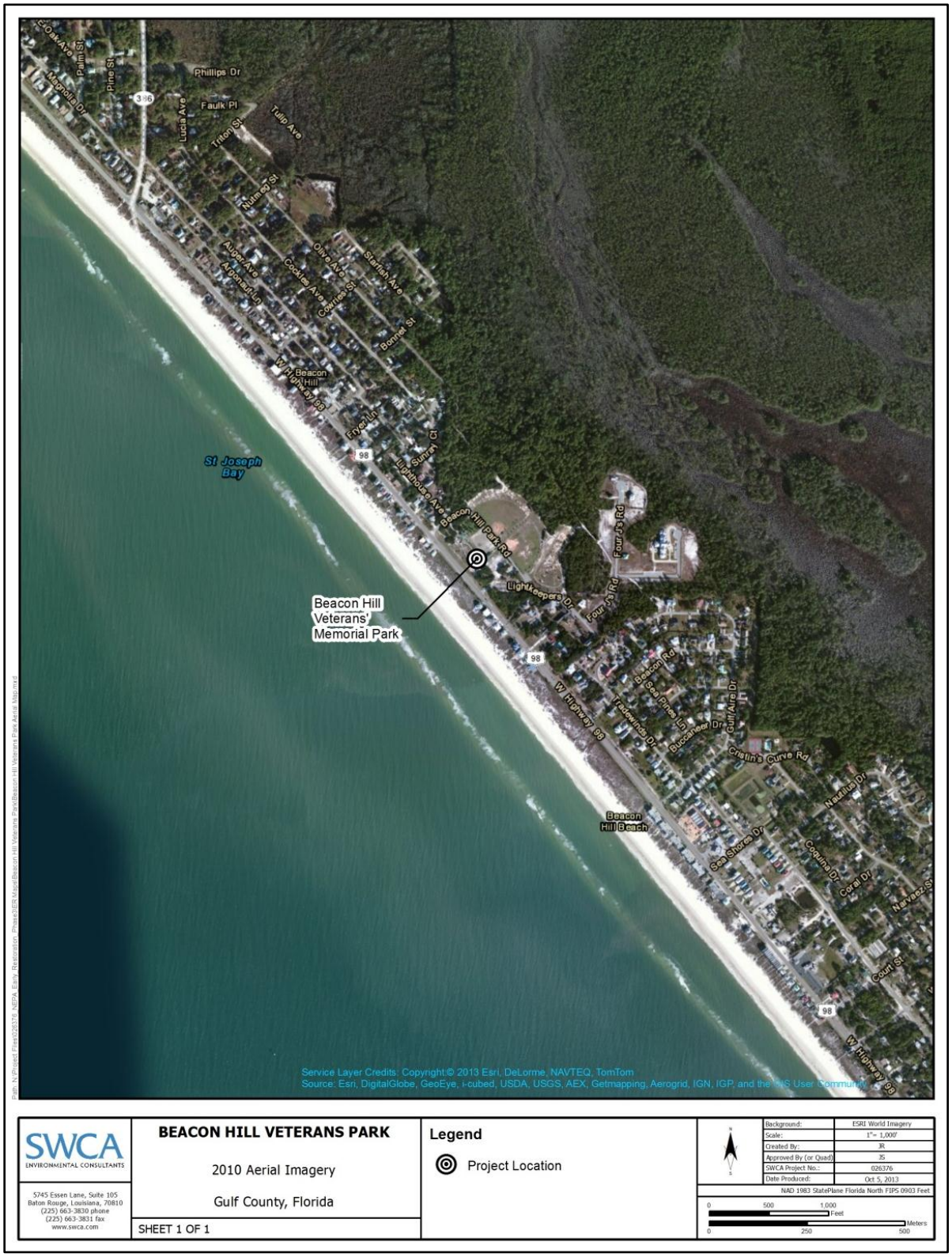
Beacon Hill Veterans' Memorial Park is located in Gulf County, Florida. The proposed project involves improvements to the park, which include the construction of a small amphitheater, pavilions, restrooms, a nature trail, and a parking area.

In April 2011, the Natural Resource Trustees (Trustees) and BP Exploration and Production, Inc. (BP) entered into the Framework Agreement for Early Restoration Addressing Injuries Resulting from the *Deepwater Horizon* Oil Spill (Framework Agreement). Under the Framework Agreement, BP agreed to make $1 billion available for Early Restoration project implementation. The Trustees' key objective in pursuing Early Restoration is to achieve tangible recovery of natural resources and natural resource services for the public's benefit while the longer-term injury and damage assessment is underway. The Framework Agreement is intended to expedite the start of restoration in the Gulf Coast in advance of the completion of the injury assessment process. Early restoration is not intended to and does not fully address all injuries caused by the Spill. Restoration beyond Early Restoration projects would be required to fully compensate the public for natural resource losses from the Spill.

Pursuant to the process articulated in the Framework Agreement, the Trustees released, after public review of a draft, a Phase I Early Restoration Plan (ERP) in April 2012. In December 2012, after public review of a draft, the Trustees released a Phase II ERP. On May 6, 2013, the National Oceanic and Atmospheric Administration (NOAA) issued a public notice in the *Federal Register* on behalf of the Trustees announcing the development of additional future Early Restoration projects for a Draft Phase III Early Restoration Plan (ERP). This project in Gulf County was submitted as an Early Restoration project on the NOAA website (http://www.gulfspillrestoration.noaa.gov) and submitted to the State of Florida. In addition to meeting the evaluation criteria for the Framework Agreement and the requirements of the Oil Pollution Act (OPA), the project meets Florida criteria that Early Restoration projects occur in the eight-county panhandle area that deployed boom and was impacted by the Spill.

12.56.2 Project Location

Beacon Hill Veteran's Memorial Park is located off U.S. Highway 98 (US-98) south of Mexico Beach and north of Port St. Joe. The park consists of approximately 39.93 acres of land. Although a portion of the park is developed as facilities and baseball diamonds, the rest is undeveloped. Figure 12-19 and Figure 12-20 illustrate the project area.



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BEACON HILL VETERANS PARK

2010 Aerial Imagery

Gulf County, Florida

SHEET 1 OF 1

Legend

Project Location

Background:	ESRI World Imagery
Scale:	1"= 1,000'
Created By:	JR
Approved By (or Quad):	JS
SWCA Project No.:	026376
Date Produced:	Oct 5, 2013

NAD 1983 StatePlane Florida North FIPS 0903 Feet

0 500 1,000 Feet

0 250 500 Meters

Figure 12-19. Illustration of the project area.

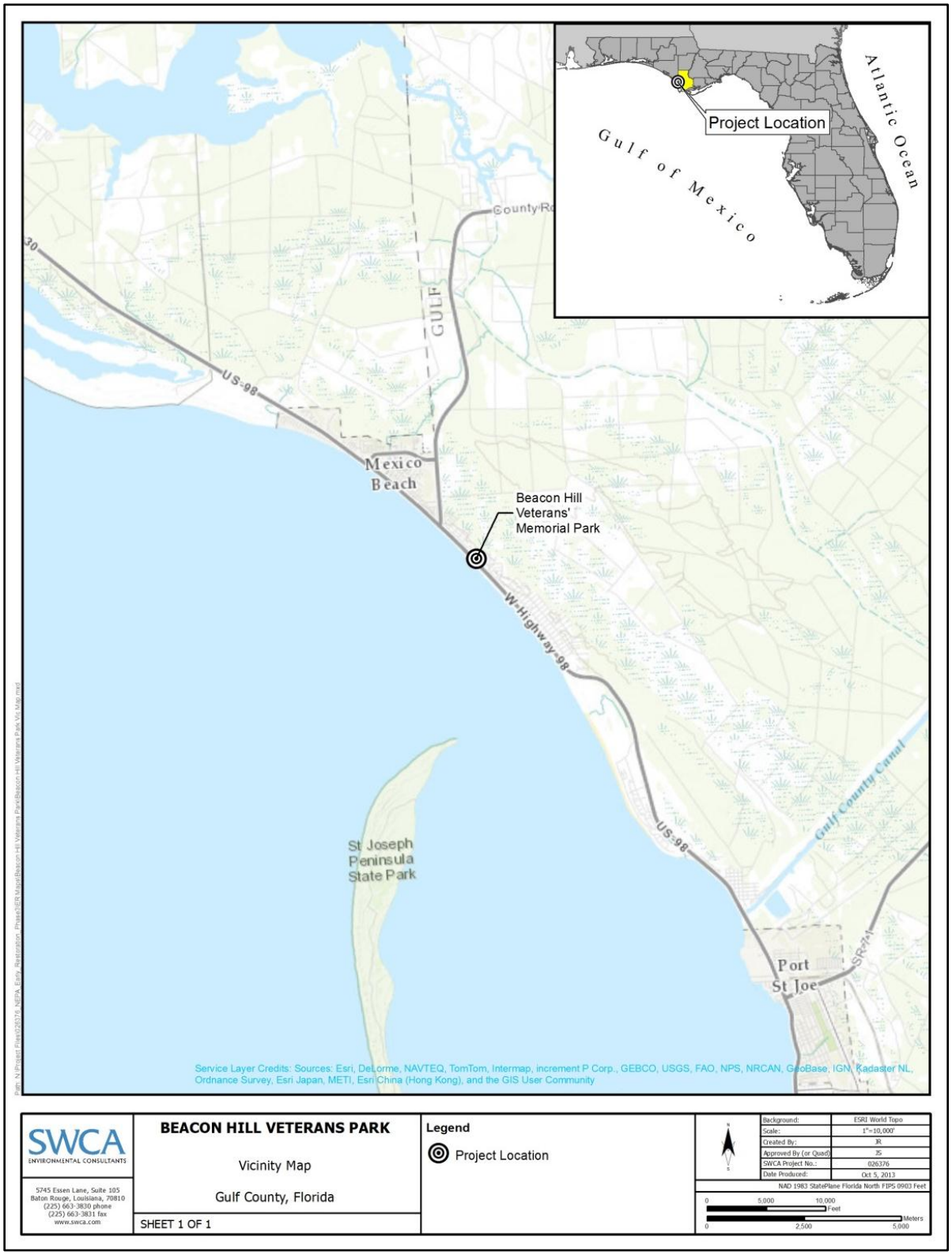

Figure 12-20. Project location map.

12.56.3 Construction and Installation

The proposed project involves the construction of park amenities at Beacon Hill Veterans' Memorial Park. Facilities would include an amphitheater, pavilions, restrooms, a nature trail, and a parking area.

Detailed construction methods and plans have not yet been developed for the construction of the proposed project and would be subject to the final design and contractor approach. All of the project work is in upland areas. A range of heavy construction equipment and tools would be required for construction of this project. The specific equipment used would vary with the different phases of the project.

Up to several feet of ground would be disturbed during construction. In the area where land would be added, sediment and other material would be placed. The area to be covered would be determined by final design. Ground would need to be graded and in some cases removed as part of the construction activities. Material planned for removal includes soil, rubble, and vegetation in the area where facilities, trails, and the parking area would be built.

The timing of proposed construction has not been finalized. The selected contractor would provide a construction schedule prior to beginning work.

12.56.4 Operations and Maintenance

The Gulf County Parks Department operates a variety of parks for outdoor recreation and leisure activities, including Beacon Hill Veterans' Memorial Park. Maintenance would fall under the purview of the Gulf County Parks Department, and would include tasks such as restroom checks and cleaning as well as removing debris and trash from the parking areas. No data are available at this time regarding any park-monitoring activities, such as tracking visitor usage.

12.56.5 Affected Environment and Environmental Consequences

Under the National Environmental Policy Act, federal agencies must consider environmental effects of their actions that include, among others, impacts on social, cultural, and economic resources, as well as natural resources. The following sections describe the affected environment and environmental consequences of the project.

12.56.5.1 No action

Both OPA and NEPA require consideration of the No Action alternative. For this Draft Phase III ERP proposed project, the No Action alternative assumes that the Trustees would not pursue this project as part of Phase III Early Restoration.

Under No Action, the existing conditions described for the project site in the affected environment subsection would prevail. Restoration benefits associated with this project would not be achieved at this time.

12.56.5.2 Physical Environment

12.56.5.2.1 Geology and Substrates

Affected Resources

The park is located in the Gulf Coast Lowlands physiographic unit. Specifically, the park is located within the Apalachicola Coastal Lowlands. The topography of the area is mostly flat, but there are some areas with moderate rolling dunes and high rolling hills (FDEP 2006). The entirety of Bald Point State Park is classified as Beach Ridge and Dune (Qdb) deposits of the Pleistocene and Holocene eras (Scott 2001). Table 12-14 identifies soils found with in the park (NRCS 2004).

Table 12-14. Soils identified in the park.

SOIL NAME
Leon sand
Mandarin fine sand
Resota fine sand, 0%–5% slopes
Pickney-Pamlico Complex, depressional
Water

A sinkhole is a closed depression in the land surface that is formed by surficial solution or by subsidence or collapse of surficial materials due to the solution of near-surface limestone or other soluble rocks. Sinkholes are a natural and common geologic feature in areas underlain by limestone and other rock types soluble in natural water; they are one of the predominant landform features of Florida. The state has been classified into four areas of sinkhole occurrence. Gulf County is categorized as Area IV with a carbonate rock cover more than 200 feet thick. Area IV consists of cohesive sediments interlayered with discontinuous carbonate beds. Sinkholes are very rare, but several large-diameter, deep sinkholes do exist. Cover-collapse sinkholes dominate in Area IV; these occur when a solution cavity develops in limestone to such a size that the overlying cover material can no longer support its own weight (FDEP 2013b).

Environmental Consequences

Mechanized equipment and hand tools would be used to complete the construction of the project. Some excavation of soils would occur; however, adverse impacts to geology and substrates would be minor. Disturbance would be detectable, but would be short term, small, and localized. There would be no long-term changes to local geologic features or soil characteristics. Erosion and/or compaction may occur in localized areas.

12.56.5.2.2 Hydrology and Water Quality

Affected Resources

Northwest Florida has seven major watersheds, all of which have been identified as priorities under the Surface Water Improvement and Management (SWIM) program. Water quality protection is the underlying goal of SWIM, along with the preservation and restoration of natural systems and associated public uses and benefits (Northwest Florida Water Management District [NWFWMD] 2011). The park is part of the St. Andrews Bay watershed system, which includes St. Andrews, West, East, and North bays; St. Joseph Bay; and Deer Point Reservoir; as well as the respective surface water basins of each of these waterbodies. The total drainage area covers nearly 749,663 acres. The waterways are primarily used for transportation, seafood harvesting, recreation, and waste disposal. Broad issues for the St. Andrews Bay system include degradation through point and nonpoint pollution sources, habitat quality that is threatened by and degraded through sedimentation and deposition, and public education and awareness (Thorpe 2000).

There are no designated Outstanding Florida Waters (OFWs) by the State of Florida (Rule 62-302.700, Fla. Admin. Code) in the project area. Surface waters in the project area have been classified as Class III waters by the FDEP (FDEP 2006). Class III waters have the designated uses of fish consumption, recreation, and propagation and maintenance of a healthy, well-balanced population of fish and wildlife.

Impaired waters are waters that are too polluted or otherwise degraded to meet the water quality standards set by states, territories, or authorized tribes. St. Andrews Bay has been listed as an impaired waterbody for mercury in fish tissue and fecal coliform; however, total maximum daily loads (TMDLs) have not yet been adopted (Environmental Protection Agency [EPA] 2010).

Wetlands

Based on the National Wetland Inventory data, there are freshwater forested/shrub wetlands in the project area (USFWS 2013).

Floodplains

Based on Federal Emergency Management Agency (FEMA) flood insurance rate maps (Panel 12045C0217G), the project appears to be in Zone X and Zone A. Zone X is defined as other flood areas, consisting of areas with a 0.2% chance of flood, or a 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile, or areas protected by levees from a 1% annual chance flood. Zone A has no defined base flood elevations, and is an area of special flood hazard (FEMA 2009).

Environmental Consequences

The project plans for the park improvements have not yet been finalized. However, careful consideration would be given to the design of the park improvements to have the least effect on waters and wetlands within the park.

The effect on hydrology would be measurable but small and localized. Because project plans are not yet finalized, all efforts would be made to design the project elements to have the least possible effect on

the local hydrology, and best management practices (BMPs) would be implemented. BMPs that may be implemented and would help avoid potential adverse impacts to water quality include:

- All construction would be performed in accordance with all local, state, and federal requirements and all permit requirements to protect the surrounding vegetation and natural condition.
- The contractor would submit a plan for control of surface water runoff in accordance with all local, state, and federal requirements and all permit requirements to protect the surrounding vegetation and natural condition.
- All construction adjacent to open water would be separated and confined by appropriate siltation screens and turbidity barriers to protect the quality of open water. However, for this project, no construction would occur adjacent to open water.
- Upon completion of construction, the site would be cleared of all construction materials and restored to its natural state as shown on the plan drawings.
- The contractor would be responsible for assuring compliance with all permit requirements.

In addition to construction BMPs, the contractor would implement BMPs for adequate erosion control. Erosion control is necessary to prevent damage to adjacent property, natural features, site property, and work in progress. Erosion control measures would be in place prior to any land alteration, and would be used throughout the construction process until soils are stabilized. Erosion control BMPs are as follows:

1. To protect against wind and stormwater runoff erosion, the contactor would place as appropriate hay bales and silt fencing with wire fence reinforcement, with sediment to be removed when it reaches approximately one-half the height of the barrier (see Figure 12-21).
2. Silt fences would be of optimal design and materials for adequate sediment control.
3. Side slopes created during construction would be stabilized at the earliest possible date to avoid erosion with adequate use of compacted soil and staked hay bales.
4. Any disturbed area not to be paved, sodded, or built upon would have a minimum vegetative cover of 80% and be mature enough to control soil erosion and survive severe weather conditions prior to final inspection.
5. Sod would be sufficiently grown and maintained to secure a dense stand of live grass.
6. The proposed road surface at the entrance would require a maintained condition of slope to prevent tracking or flow of mud onto the existing public roadway.

A wetlands permit would be required for the project and would stipulate appropriate BMPs and mitigation.

The project area is classified as multiple floodplain zones; these include the A and X zones. Impacts may result in a detectable change to natural and beneficial floodplain values, but the change would be expected to be small and localized. There would be no appreciable increased risk of flood loss, including impacts on human safety, health, and welfare.

12.56.5.2.3 Air Quality and Greenhouse Gas Emissions

Affected Resources

The Clean Air Act (CAA) requires that the Environmental Protection Agency (EPA) set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. NAAQS have been set for six common air pollutants (also known as criteria pollutants), consisting of particle pollution or particulate matter, ozone, carbon monoxide, sulfur dioxide (SO_2), nitrogen dioxide, and lead. Particulate matter is defined as fine particulates with a diameter of 10 micrometers or less (PM_{10}), and fine particulates with a diameter of 2.5 micrometers or less ($PM_{2.5}$). When a designated air quality area or airshed in a state exceeds the NAAQS, that area may be designated as a "nonattainment" area. Areas with levels of pollutants below the health-based standard are designated as "attainment" areas. To determine whether an area meets the NAAQS, air monitoring networks have been established and are used to measure ambient air quality. The EPA also regulates 187 hazardous air pollutants (HAPs) that are known or suspected to cause cancer or other serious health effects. Air quality in the Florida panhandle is in attainment with the NAAQs (EPA 2013a).

Greenhouse Gases

Gases that trap heat in the air are called greenhouse gases (GHGs). The primary GHGs are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (NO_x), and fluorinated gases. Over the past century, human activities have released large amounts of GHGs into the atmosphere, which are contributing to global warming. Global warming is defined as the ongoing rise in global average temperature near the Earth's surface, and is known to cause changes in climate patterns.

According to the EPA, the average annual temperature in the southeast portion of the United States has increased by approximately 2.0 degree Fahrenheit (°F) since 1970. Winters, in particular, are getting warmer, and the average number of freezing days has decreased by 4 to 7 days per year since the mid-1970s. Most areas are getting wetter; autumn precipitation has increased by 30% since 1901 (EPA 2013b). In many parts of the region, the number of heavy downpours has increased. Despite the increases in fall precipitation, the area affected by moderate and severe drought has increased since the mid-1970s (EPA 2013b).

Average annual temperatures in the region are projected to increase from 4°F to 9°F by 2080. Hurricane-related rainfall is projected to continue to increase. Models suggest that rainfall will arrive in heavier downpours, with increased dry periods between storms. These changes would increase the risk of both flooding and drought. The coasts will likely experience stronger hurricanes and sea level rise. Storm surge could present problems for coastal communities and ecosystems (EPA 2013b).

Total GHG emissions in Florida from 1990 to 2007 have increased at an average rate of 2.1% per year. Total GHG emissions in 2007 were 290 million metric tons of CO_2 equivalent ($MMTCO_2E$). In 2007, 91% of GHG emissions in Florida were CO_2 emissions (FDEP 2010).

Environmental Consequences

Project implementation would require the use of heavy mechanized equipment, which would lead to temporary air pollution (e.g., criteria pollutants, HAPs, GHGs) due to emissions from the operation of construction vehicles and equipment. Any air quality impacts that occur would be minor due to their

localized nature, short-term duration, and the small size of the project. Available BMPs would be employed to prevent, mitigate, and control potential air pollutants during project implementation. No air quality–related permits would be required. The project area is currently in attainment with NAAQS parameters. The proposed action would not affect the attainment status of the project area or region. A State Implementation Plan conformity determination (42 USC 7506 (c) is not required because the project area is in attainment for all criteria pollutants.

Project plans have not been finalized for this project. As such, it is unclear what equipment would be used and the duration of use for that equipment. The following table provides GHG emissions estimates for a range of construction and transportation equipment types that may be used during proposed construction of park improvements. Each of these emissions is based on use of the heavy equipment over an 8-hour day (Table 12-15).

Based on the assumptions described in Table 12-15 below, GHG emissions would not exceed 25,000 metric tons per year. Given the projected construction-phase GHG emissions, the small scale and short duration of the project, and increased park use, predicted impacts on air quality from GHGs emissions would be anticipated to be minor for both the short and long term.

At the completion of the project, visitor use could increase due to the improved access. Increased exhaust emissions could affect air quality over the long term. However, adverse impacts to air quality would be expected to be minor because management actions could be taken to limit boat use.

Table 12-15. Greenhouse gas emissions for various types of mechanized equipment.

EQUIPMENT DESCRIPTION[1]	TOTAL HOURS USED	CO_2 FACTOR-MT/100HRS*	CO_2 (MT)[2]	CH_4 FACTOR-MT/100HRS[3]	CH_4 (MT)	N_2O FACTOR-MT/100HRS	N_2O (MT)	TOTAL CO_2 (MT)
Dump trucks/ flatbed trucks	216	1.7	3.762	0.5	1.08	7.2	15.55	20.304
Concrete trucks	24	1.7	0.408	0.5	0.12	7.2	1.728	2.256
Pickup trucks[4]	2,304	1.1	25.344	0.35	8.064	4.4	101.376	134.784
Bobcat (bare and with auger mount)	480	2.65	12.72	0.9	4.32	10.6	50.88	67.92
Trackhoe (w/bucket/ thumb or vibratory attachments)	24	2.55	0.612	0.85	0.204	10.2	2.448	3.264
Dozer	24	2.25	0.54	0.65	0.156	1.08	0.2592	0.9552
Total	**3,072**							**229.48**

*mt = metric tons

[1] Emissions assumptions for all equipment types are based on 8 hours of operation.

[2] CO2 emissions assumptions for diesel and gasoline engines are based on EPA 2009.

[3] CH4 and NOx emissions assumptions and CO2e calculations are based on EPA 2011.

[4] Emissions assumptions for an 8-cylinder, 6.2-liter gasoline-engine Ford F150 pickup are based on DOE 2013 and 18-gallon (half-tank) daily fuel consumption.

12.56.5.3 Noise

Affected Resources

Noise can be defined as unwanted sound and noise levels, and its effects are interpreted in relation to effects on nearby visitors to the recreational areas and wildlife in the project vicinity. The Noise Control Act of 1972 (42 USC 4901–4918) was enacted to establish noise control standards and to regulate noise emissions from commercial products such as transportation and construction equipment. The standard measurement unit of noise is the decibel (dB), which represents the acoustical energy present. Noise levels are measured in A-weighted decibels (dBA), a logarithmic scale that approaches the sensitivity of the human ear across the frequency spectrum. A 3-dB increase is equivalent to doubling the sound pressure level, but is barely perceptible to the human ear. Table 12-16 shows typical noise levels for common sources expressed in dBA. Noise exposure depends on how much time an individual spends in different locations.

Table 12-16. Common noise levels.

NOISE SOURCE OR EFFECT	SOUND LEVEL (DBA)
Rock-and-roll band	110
Truck at 50 feet	80
Gas lawnmower at 100 feet	70
Normal conversation indoors	60
Moderate rainfall on foliage	50
Refrigerator	40
Bedroom at night	25

Source: Adapted from U.S. Department of Energy (1986).

Noise levels in the project area vary depending on the season, time of day, number and types of noise sources, and distance from noise sources. Existing sources of noise in the project area are mainly from commercial traffic, with occasional overhead aircraft. Ambient natural sounds such as wind, waves, and wildlife also contribute to existing noise levels. Existing ambient noise levels in the project area would be generally low and predominantly result from daily boating activities.

Noise-sensitive receptors include sensitive land uses as well as individuals and/or wildlife that could be affected by changes in noise sources or levels due to the proposed project. Noise-sensitive receptors in the project vicinity include beach and park recreational use and wildlife. The project area is, for the most part, consistent with a developed urban environment. The shoreline of the project area supports a variety of residential and industrial developed areas, and the Gulf of Mexico supports commercial and recreational boat traffic.

Environmental Consequences
Machinery and equipment used during construction would generate noise. This noise may disturb wildlife and humans using the area, but would be kept to a minimum via BMPs such as working only during daytime hours, turning equipment off when idling, etc. Once constructed, the proposed project would not cause long-term noise impacts. Adverse impacts from noise would be minor and short term.

12.56.5.3.1 Biological Environment

Living Coastal and Marine Resources

Vegetation

Affected Resources
According to the Natural Vegetation of Florida, the project area is located on pine flatwoods vegetation type. This vegetation type is characterized by open woodlands of one of three species of pine: longleaf, slash, and pond pines. Many herbs, saw palmetto, shrubs, and small trees form an understory. Included in general flatwoods are small hardwood forests, many kinds of cypress swamps, prairies, marshes, and bay tree swamps (Davis 1967).

A review of the Florida Department of Transportation's Efficient Transportation Decision Making tool (https://etdmpub.fla-etat.org/est/) indicates that although submerged aquatic vegetation (corals, seagrasses) are present off the coastline, they are not present in the proposed project area (FDOT 2013). Listed plant species with potential to occur in the project area include bent golden aster (*Pityopsis flexuosa*), Gulf Coast lupine (*Lupinus westinous*), Harper's beauty (*Harpero callisflava*), Panhandle spider lily (*Hymenocallis henryae*), white birds in a nest (*Macbridea alba*), and yellow butterwort (*Pinguicula lutea*).

Environmental Consequences
There would be multiple, discreet construction activities associated with this project. During construction of the amphitheater, pavilions, the restrooms, the nature trail, and the parking area, vegetation would be disturbed by grading, foundation placement, and building construction.

Construction of the facilities would require the permanent removal of vegetation in the affected areas. The use of equipment and disturbance of soil and existing vegetation would also introduce a risk of noxious weed or invasive vegetation species introduction. Overall, impacts on native vegetation from the construction effort may be detectable but would not alter natural conditions and would be limited to localized areas. Infrequent disturbance to individual plants could be expected, but without affecting local or range-wide population stability. Infrequent or insignificant one-time disturbance to locally suitable habitat could occur, but sufficient habitat would remain functional at both the local and regional scales to maintain the viability of the species.

Improvement to the park would likely bring in additional visitors. The additional human presence in the park may pose a long-term, minor effect to vegetation there. The more people that enter the park, the greater the likelihood that humans would trample, pick, or otherwise disturb plants. These events would occur in areas where new construction takes place. Impacts on native vegetation in the immediate

vicinity of the new park improvements would be measureable but limited to local and adjacent areas. Occasional disturbance to individual plants could be expected. These disturbances could affect local populations negatively, but would not be expected to affect regional population stability. Some impacts might occur in key habitats, but sufficient local habitat would retain functionality to maintain the viability of the species both locally and throughout its range.

Project plans for the park improvements have not yet been completed. Therefore, the presence of threatened or endangered plants would be considered during the design phase of the project. Care would be taken to site park improvements in areas that minimize disturbance to vegetation.

Soil disturbance may encourage the encroachment of invasive or nuisance species. Those undeveloped areas disturbed during construction would be monitored, and invasive species would be removed.

Wildlife Habitat

Affected Resources
All project work would take place in a terrestrial environment. Terrestrial species known to reside in the park include but are not limited to osprey, migration falcons, deer, bear, raccoon, opossums, bobcats, foxes, other migratory birds, reptiles, and amphibians.

Environmental Consequences
The proposed project would be constructed in an upland environment. The proposed action has been evaluated for potential short- and long-term impacts to state and federally listed threatened and endangered species that can occur in and adjacent to the project areas based on available suitable habitat and restoration goals.

Although common wildlife may be disturbed from construction activities, these species live in an urban environment where ambient noise levels are high. Habitat conditions after construction would be similar to existing conditions, and no effects to common wildlife would be anticipated.

Marine and Estuarine Fauna (Fish, Shell Beds, and Benthic Organisms)

Affected Resources
The proposed project would take place in upland environments. A small portion of the project area would be located adjacent to shoreline. It is unlikely that marine species occur in the project area. However, Gulf waters adjacent to the park provide habitat for a variety of marine species.

Environmental Consequences
There would be no in-water construction associated with this project. Therefore, there would be no impacts to marine and estuarine fauna.

Protected Species
Protected species and their habitats include ESA-listed species and designated critical habitats, which are regulated by either the USFWS or the NMFS. Protected species also include marine mammals protected under the Marine Mammal Protection Act, essential fish habitat (EFH) protected under the Magnuson-Stevens Fishery Conservation and Management Act, migratory birds protected under the

Migratory Bird Treaty Act (MBTA) and bald eagles protected under the Bald and Golden Eagle Protection Act (BGEPA).

Affected Resources

The federally listed threatened and endangered species reported for the project area in Gulf County include five species of sea turtles, West Indian manatee (*Trichechus manatus*), piping plover (*Charadrius melodus*), and Gulf sturgeon, and one proposed species, the red knot (C*alidris canutus rufa)* (USFWS 2013b). State-listed threatened species reported to occur in the project areas are addressed below, under State-Listed Species.

Federally designated threatened, endangered, and candidate wildlife species known or believed to occur in the project area are listed in Table 12-17.

Table 12-17. Protected species with potential to occur in the project area.

GROUP	COMMON NAME	SCIENTIFIC NAME	USFWS STATUS	STATE STATUS	NATURAL COMMUNITIES
Amphibians	Gopher frog	*Rana capito*	SSC	SSC	• Terrestrial: sandhill, scrub, scrubby flatwoods, xeric hammock (reproduces in ephemeral wetlands within these communities) **Potential habitat present**
Birds	Arctic peregrine falcon	*Falco peregrinus tundrius*	MBTA		• Estuarine: winters along coasts • Lacustrine: various • Palustrine: various Terrestrial: various, ruderal **Potential habitat present**
Birds	Bachman's sparrow	*Aimophila aestivalis*	MBTA	-	• Terrestrial: various, ruderal **Potential habitat present**
Birds	Bald eagle	*Haliaeetus leucocephalus*	BGEPA	-	• Estuarine: marsh edges, tidal swamp, open water • Lacustrine: swamp lakes, edges • Palustrine: swamp, floodplain • Riverine: shoreline, open water • Terrestrial: pine and hardwood forests, clearings **No potential habitat present**
Birds	Least tern	*Sterna antillarum*	MBTA	T	• Estuarine: various • Lacustrine: various • Riverine: various • Terrestrial: beach dune, ruderal. Nests common on rooftops. **Potential habitat present**

GROUP	COMMON NAME	SCIENTIFIC NAME	USFWS STATUS	STATE STATUS	NATURAL COMMUNITIES
Birds	Piping plover	*Charadrius melodus*	T (CH)	T	• Estuarine: exposed unconsolidated substrate • Marine: exposed unconsolidated substrate • Terrestrial: dunes, sandy beaches, and inlet areas. Mostly wintering and migrants. **Potential habitat present**
Birds	Red knot	*Calidris canutus rufa*	P		• Estuarine: exposed unconsolidated substrate • Marine: exposed unconsolidated substrate • Terrestrial: dunes, sandy beaches, and inlet areas. Mostly wintering and migrants. **Potential habitat present**
Birds	Red-cockaded woodpecker	*Picoides borealis*	E	E	• Terrestrial: mature pine forests **Potential habitat present**
Birds	Southeastern kestrel	*Falco sparverius paulus*	MBTA	T	• Estuarine: various habitats • Palustrine: various habitats • Terrestrial: open pine forests, clearings, ruderal, various **Potential habitat present**
Birds	Southeastern snowy plover	*Charadrius alexandrinus tenuirostris*	MBTA	T	• Estuarine: exposed unconsolidated substrate • Marine: exposed unconsolidated substrate • Terrestrial: dunes, sandy beaches, and inlet areas **Potential habitat present**
Birds	Wood stork	*Mycteria americana*	E	E	• Estuarine: marshes • Lacustrine: floodplain lakes, marshes (feeding),various • Palustrine: marshes, swamps, various **Potential habitat present**
Reptiles	Eastern indigo snake	*Drymarchon couperi*	T	T	• Estuarine: tidal swamp • Palustrine: hydric hammock, wet flatwoods • Terrestrial: mesic flatwoods, upland pine forest, sand hills, scrub, scrubby flatwoods, rockland hammock, ruderal **Potential habitat present**
Reptiles	Gopher tortoise	*Gopherus polyphemus*	C	T	• Terrestrial: sandhills, scrub, scrubby flatwoods, xeric hammocks, coastal strand, ruderal **Potential habitat present**

GROUP	COMMON NAME	SCIENTIFIC NAME	USFWS STATUS	STATE STATUS	NATURAL COMMUNITIES
Reptiles	Green turtle	*Chelonia mydas*	E	E	• Terrestrial: sandy beaches; nesting **Potential habitat present**
Reptiles	Hawksbill turtle	*Eretmochely simbricata imbricata*	E	E	• Marine: open water; no nesting **Potential habitat present**
Reptiles	Kemp's ridley turtle	*Lepidochely skempii*	E	E	• Terrestrial: sandy beaches; nesting **Potential habitat present**
Reptiles	Leatherback turtle	*Dermochely scoriacea*	E	E	• Terrestrial: sandy beaches; nesting **Potential habitat present**
Reptiles	Loggerhead turtle	*Caretta caretta*	T	T	• Terrestrial: sandy beaches; nesting **Potential habitat present**

BGEPA=Bald and Golden Eagle Protection Act, C=candidate, ce=consideration encouraged, CH=critical habitat, E=endangered, P=proposed, SSC=species of special concern, T-threatened, MBTA=Migratory Bird Treaty Act.

Sea Turtles and Marine Mammals

There are five species of endangered or threatened sea turtles that may occur or have potential to occur in the project area. These are the green turtle (*Chelonia mydas)*, hawksbill turtle (*Eretmochely simbricata imbricata)*, Kemp's ridley turtle (*Lepidochely skempii)*, leatherback turtle (*Dermochely scoriacea)*, and loggerhead turtle (*Caretta caretta)*. Sea turtles forage in the waters of the coastal Florida panhandle region and have potential to occur in the adjacent waters where work is proposed. The project site contains suitable sea turtle nesting habitat along the sandy beach which is proposed as critical habitat for the loggerhead sea turtle. Additionally, construction activities would occur in upland areas of the project area.

The endangered West Indian manatee has the potential to occur in the waters adjacent to the project area. Manatee typically seek out shallow seagrass areas as preferred feeding habitat. Additionally, bottlenose dolphin (*Tursiops*) populations are known to migrate into bays, estuaries, and river mouths and could be located in the water adjacent to the proposed project area (NMFS 2013).Bottlenose dolphins have been observed on nearshore coastal waters (NMFS 2012).

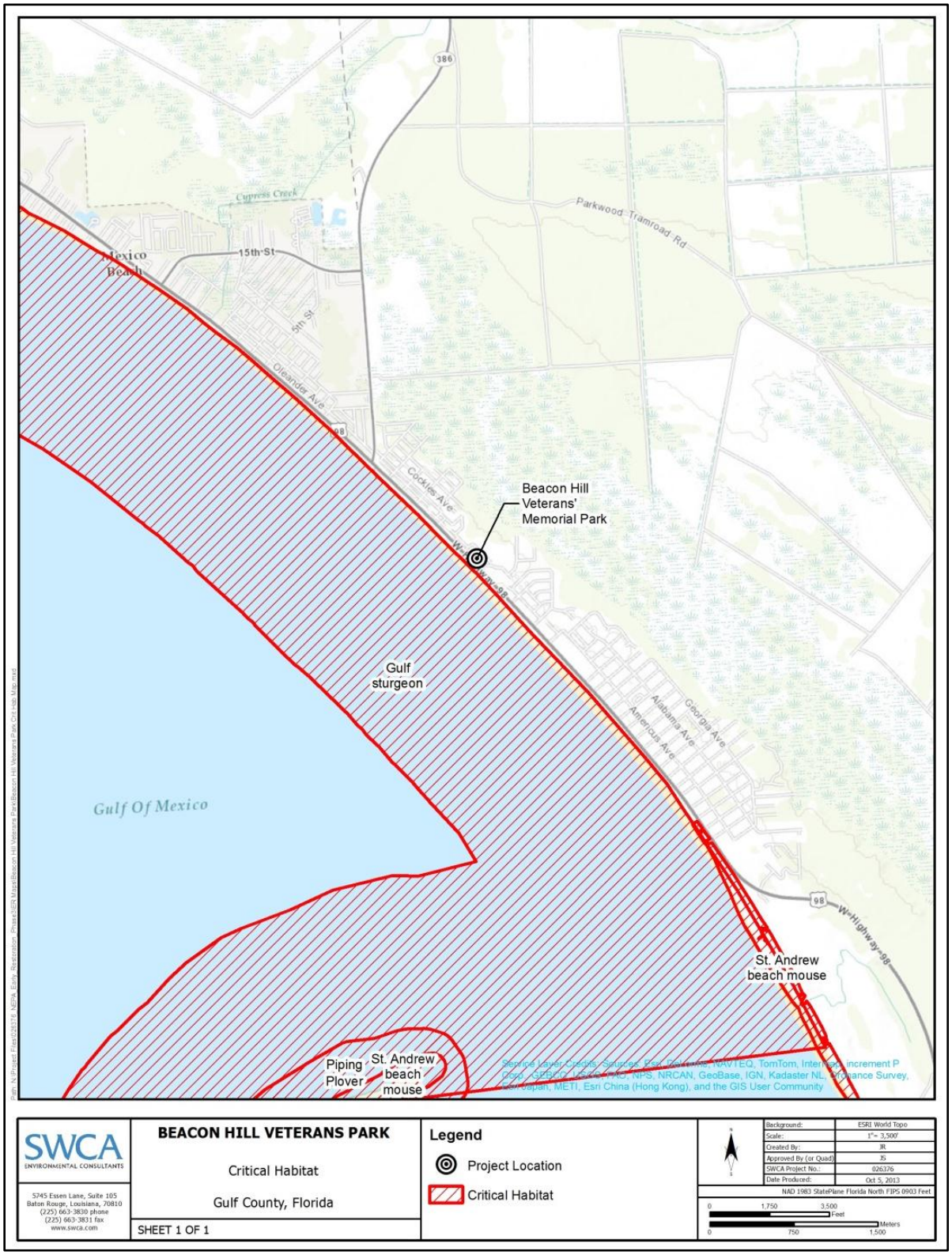

Figure 12-21. Critical habitat in the project area.

Smalltooth sawfish, Gulf Sturgeon and Gulf Sturgeon Critical Habitat

Smalltooth sawfish do not typically utilize northern Gulf waters (NMFS 2013b). Gulf sturgeon are restricted to the Gulf of Mexico and its drainages, occurring primarily from the Mississippi River to the Suwannee River, in Louisiana, Mississippi, Alabama, and Florida (NMFS 2009). Adult fish reside in rivers 8 to 9 months each year, and in estuarine or Gulf waters during the 3 to 4 cooler months of each year (NMFS 2009). Important marine habitats include seagrass beds with sand and mud substrates (Mason and Clugston 1993).

Gulf sturgeon critical habitat was jointly designated by the NMFS and USFWS on April 18, 2003 (50 Code of Federal Regulations [C.F.R.] 226.214). The proposed project site is located adjacent to the Florida Nearshore Gulf of Mexico Critical Habitat Unit 11, which contains winter feeding and migration habitat for Gulf sturgeon. See Figure 12-21 for a critical habitat map. Critical habitat was designated based on seven primary constituent elements (PCEs) essential for its conservation, as defined in the 2003 *Federal Register*.

These seven elements are as follows:

1. Abundant food items such as detritus, aquatic insects, worms, and/or mollusks, within riverine habitats for larval and juvenile life stages; and abundant prey items such as amphipods, lancelets, polychaetes, gastropods, ghost shrimp, isopods, mollusks, and/or crustaceans within estuarine and marine habitats and substrates for subadult and adult life stages.
2. Riverine spawning sites with substrates suitable for egg deposition and development, such as limestone outcrops and cut limestone banks, bedrock, large gravel or cobble beds, marl, soapstone, or hard clay.
3. Riverine aggregation areas, also referred to as resting, holding, and staging areas, used by adult, subadult, and/or juveniles, and generally but not always located in holes below normal riverbed depths; these are believed necessary for minimizing energy expenditure during freshwater residency and possibly for osmoregulatory functions.
4. A flow regime (i.e., the magnitude, frequency, duration, seasonality, and rate-of-change of freshwater discharge over time) necessary for normal behavior, growth, and survival of all life stages in the riverine environment, including migration, breeding site selection, courtship, egg fertilization, resting, and staging, and for maintaining spawning sites in suitable condition for egg attachment, egg sheltering, resting, and larval staging.
5. Water quality, including temperature, salinity, pH, hardness, turbidity, oxygen content, and other chemical characteristics necessary for normal behavior, growth, and viability of all life stages.
6. Sediment quality, including texture and chemical characteristics necessary for normal behavior, growth, and viability of all life stages.
7. Safe and unobstructed migratory pathways necessary for passage within and between riverine, estuarine, and marine habitats (e.g., an unobstructed river or a dammed river that still allows for passage).

Essential Fish Habitat

EFH is defined in the Magnuson-Stevens Fishery Conservation and Management Act as "those waters and substrates necessary to fish for spawning, breeding, feeding or growth to maturity." The designation and conservation of EFH seeks to minimize adverse effects on habitat caused by fishing and non-fishing activities. The NMFS has identified EFH habitats for the Gulf of Mexico in its Fishery Management Plan Amendments. These habitats include estuarine emergent wetlands, seagrass beds, algal flats, mud, sand, shell, and rock substrates, and the estuarine water column. The project is located in uplands above the mean high- tide line, therefore no EFH is located within the project footprint.

Piping Plover

The sandy beaches and shorelines adjacent to the project areas offer suitable foraging and resting habitat for the piping plover during the winter migratory season, and piping plover may forage in the shallow waters of the project areas. Natural shorelines in the proposed project vicinity provide suitable winter migration resting habitat for the piping plover. Piping plover wintering habitat includes beaches, mudflats, and sandflats, as well as barrier island beaches and spoil islands (Haig 1992, as cited by USFWS 2013c). On the Gulf Coast, preferred foraging areas are associated with wider beaches, mudflats, and small inlets (USFWS 2013).

Red Knot

The red knot (*Calidris canutus rufa*), a federal proposed species, uses Florida both for wintering habitat and migration stopover habitat for those migrating down to specific wintering locations in South America (Niles et al. 2008). Wintering and migrating red knots forage along sandy beaches, tidal mudflats, salt marshes, and peat banks (Harrington 2001). Observations indicate that red knots also forage on oyster reef and exposed bay bottoms, and roost on high sand flats, reefs, and other sites protected from high tides (Niles et al. 2008). In wintering and migration habitats, red knots commonly forage on bivalves, gastropods, and crustaceans. Threats to wintering and stopover habitat in Florida include shoreline development, hardening, dredging, deposition, and beach raking (Niles et al. 2008).

State-Listed Birds, MBTA, and BGEPA

There are numerous State of Florida–listed bird species with potential to occur in and around the park. These include Arctic peregrine falcon (*Falco peregrinus tundrius*), least tern (*Sterna antillarum*), southeastern American kestrel (*Falco sparverius paulus*), southeastern/Cuban snowy plover (*Charadrius alexandrinus tenuirostris*), piping plover (discussed above), and wood stork (*Mycteria Americana*). All migratory bird species are protected under the MBTA. The nesting season in Florida is from March 1 to August 1.

The bald eagle was delisted by the USFWS and is not listed as threatened or endangered by the FWC. The bald eagle is, however, protected by state law pursuant to 68A-16, Fla. Admin. Code and by the U.S. government under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. Bald eagles feed on fish and other readily available mammalian and avian species and are dependent on large, open expanses of water for foraging habitat. In Florida, conservation measures to protect active nest sites during nesting season must be considered to reduce potential disturbances of certain project activities. If bald eagles are found nesting within 660 feet of a proposed construction area, then activities would need to occur outside of nesting season or coordination with the USFWS would occur to

determine if a permit is needed, and Florida's Bald Eagle Management Plan guidelines would be followed (FWC 2008).

State-Listed Wildlife

Although there are several state-listed wildlife species that have potential to occur in the project area, there is marginal habitat present in the project area. The majority of the project area is located in upland environments.

Environmental Consequences

The proposed project has been evaluated for potential short- and long-term impacts to state and federally listed threatened and endangered species that may occur in and adjacent to the project areas based on available suitable habitat and restoration goals. Descriptions of these evaluations are provided below.

Sea Turtles and Marine Mammals

The park improvements are anticipated to be constructed in upland areas, not in the beach areas. However, if project elements were constructed beach areas accessible to sea turtles that may also provide suitable nesting habitat, impacts may occur. If construction is proposed in potentially suitable sea turtle nesting habitat, the project could avoid impacts by constructing outside the turtle nesting period (May to November).

Assuming project activities avoid beach areas that may provide suitable sea turtle nesting habitat, there would be no effect to sea turtles.

While it is not anticipated that any incidental harassment of marine mammals will occur as a result of this proposed project, the Trustees are conducting an evaluation of the expected magnitude and duration of underwater noise from the proposed construction techniques and their potential impacts on protected species, including marine mammals. The results of this analysis will be coordinated with NOAA's Office of Protected Resources to develop best management practices (e.g., avoidance measures, monitoring, alternate equipment) to avoid incidental harassment, or to seek incidental harassment authorization under the Marine Mammal Protection Act as appropriate. Additional coordination with NOAA under the Endangered Species Act would be conducted if any potential effects to sea turtles or other listed species are identified.

Smalltooth Sawfish, Gulf Sturgeon, and Gulf Sturgeon Critical Habitat

The smalltooth sawfish is a mobile species and relatively rare in northern Gulf waters and the immediate project area. Although the waters adjacent to the park contain critical habitat for Gulf sturgeon, the project work would take place in the upland areas. Therefore, there would be no effect to Gulf sturgeon or Gulf sturgeon critical habitat.

Essential Fish Habitat

Although the waters adjacent to the park contain EFH, the project work would take place in the upland areas. Therefore, there would be no effect to EFH.

Piping Plover and Red Knot

The main risk to piping plovers and red knot would be from human disturbance during resting and foraging in habitats adjacent to marine work areas. The proposed project would result in short-term increases in noise, which could startle individuals, though normal activity is expected to resume within minutes; alternatively the noise is expected to cause the plovers or red knot to move to a nearby area as alternate available habitat is abundant. Piping Plovers and red knots are highly mobile species and if disturbed by construction activities may be temporarily displaced from foraging and resting areas within normal movement patterns. These effects would be considered short term and minor.

State-Listed Birds, MBTA, and BGEPA

State-listed birds such least terns may nest on beaches or mudflats in the vicinity of the project areas, and all nesting birds are protected under the MBTA. If project activities occurs during the nesting season (March 1 to August 1), these birds could be disturbed by noise generated by in-water activities. In such circumstances, FWC nesting shorebird avoidance measures will be followed. These measures generally call for surveys within 300 feet and an avoidance buffer of 300 feet for nesting birds.

In recent years, the bald eagle has been removed from the endangered species list under the ESA. All activities (staging, demolition, construction, cleanup, use of equipment, machinery, vehicles including utility terrain vehicle [UTV] and all-terrain vehicle [ATV], or boat/vessels) should avoid a bald eagle nest by a minimum of 660 feet.

Consultation with the FWC concerning the proposed project and anticipated construction schedule relative to known bald eagle nest sites within the project vicinity and the nesting season in Florida (October 1 to May 15) would be required prior to commencement of restoration activities. To minimize potential for impacts to nesting bald eagles, the consultation protection measures may include 1) addressing prescribed nest tree protection zones, and 2) preparation of a bald eagle nest protection plan (including nesting behavior disturbance monitoring). Bald eagles have been known to tolerate certain potential disturbances within their breeding territories. Should these conservation measures be implemented for active nest sites adjacent to enhancement activities in the project areas, potential impacts to the bald eagle would be short term and minor.

State-Listed Wildlife

Although there are several state-listed wildlife species that have potential to occur in the project area, there is marginal habitat present there. There would be short-term minor effects during construction of the proposed project if species were traversing the construction area or had burrows near the proposed park improvements.

Section 7 and Essential Fish Habitat Consultations

Section 7 ESA consultations with the USFWS and NMFS will be initiated for the proposed project. An EFH consultation under the Magnuson-Stevens Fishery Conservation and Management Act also would be completed to address any situations where proposed project activities may affect EFH habitat. The projects would incorporate any additional conservation recommendations provided by the NMFS and USFWS during the consultation to avoid, minimize, mitigate, or otherwise offset the adverse effects of the proposed project on listed species or EFH.

Invasive Species

Affected Resources

Non-native invasive species could alter the existing terrestrial or aquatic ecosystem within, and possible expand out into adjacent areas after the initial introduction. The invasive species threat, once realized, could result in economic damages. Prevention is ecologically responsible and economically sound. Chapter 3 described more about the regulations addressing invasive species, pathways, impacts, and prevention. At this time specific invasive species that may be present on the project site or could be introduced through the project have not yet been identified.

Environmental Consequences

Best Management Practices (BMPs) to control the spread of any invasive species present, and prevent the introduction of new invasive species due to the project will be implemented. In general, best management practices would primarily address risk associated with vectors (e.g., construction equipment, personal protective equipment, delivery services, foot traffic, vehicles/ vessels, shipping material). There are many resources that provide procedures for disinfection, pest-free storage, monitoring methods, evaluation techniques, and general guidelines for integrated pest management that can be prescribed based upon specific site conditions and vectors anticipated. In addition, to best management practices, outreach and educational materials may be provided to project workers and potential users/visitors. Other measures that could be implemented are identified in Chapter 12 Appendix A. Due to the implementation of BMPs, we expect risk from invasive species introduction and spread to be short term and minor.

12.56.5.3.2 Human Uses and Socioeconomics

Socioeconomics and Environmental Justice

Affected Resources

The population of Gulf County is 15,863. Table 12-18 contains population/minority data for Gulf County and Florida (U.S. Bureau of the Census 2010).

Environmental Consequences

Improvements to the park would have a direct, beneficial effect for people that live near the area. Improvements would encourage more people to visit the park and participate in outdoor activities. This benefit the health and wellbeing of the local population. The proposed improvements to the park would draw more visitors to the county. Long-term, indirect, moderate benefits would result from increasing recreational value of the area.

Direct, short-term, moderate benefits through local job creation would result from construction activities. This project is not designed to create a benefit for any group or individual, but rather would provide benefits to a local and regional basis. Because the proposed project would occur in an area that is not disproportionately minority or low income (see Table 12-18), there are no indications that it would be contrary to the goals of Executive Order 12898, or would create disproportionate, adverse human health or environmental impacts on minority or low-income populations of the surrounding community.

Table 12-18. Populations of Florida and project area county.

POPULATION	FLORIDA		GULF COUNTY	
2010 total population	18,688,787		15,863	
White alone	14,270,053	76.4%	12,384	78.1%
Black or African American alone	2,946,899	15.8%	2,962	18.7%
American Indian and Alaska Native alone	58,192	0.3%	63	0.4%
Asian alone	455,403	2.4%	46	0.3%
Native Hawaiian and Other Pacific Islander alone	11,005	0.1%	4	0.0%
Some other race alone	564,351	3.0%	119	0.8%
Two or more races	382,884	2.0%	285	1.8%
Median household income, 2007–2011	$47,827		$41,291	
Persons below poverty level, 2007–2011	14.7%		17.5%	

Cultural Resources

Affected Resources

A review of the Florida Master Site File (FMSF) shows no previously recorded archaeological sites or other historic properties present in the project area at this time.

Environmental Consequences

A complete review of this project under Section 106 of the NHPA would be completed as environmental review continues. This project would be implemented in accordance with all applicable laws and regulations concerning the protection of cultural and historic resources.

Land and Marine Management

Affected Resources

The park is maintained and operated by Gulf County Department of Maintenance. The land use surrounding the park is primarily public/semi-public (FDOT 2013). The proposed project would be located in a coastal area that is regulated by the federal CZMA and the Florida Coastal Management Act of 1978.

Environmental Consequences

Although the action would require several permits for the short-term construction period, it would not require a variance, zoning change, or amendment to a land-use area or comprehensive management plan. Improvements to the park would be consistent with current Gulf County land use. The long-term effects from the project would be minor because they would not affect overall use and management beyond the local project area.

Pursuant to the Coastal Zone Management Act of 1972, federal activities must be consistent to the maximum extent practicable with the federally-approved coastal management programs for states where the activities would affect a coastal use or resource. Federal Trustees are submitting consistency determinations for state review coincident with public review of this document.

Tourism and Recreational Use

The park is situated along the coast with beach access. The park is used for swimming, sunbathing, and picnicking, and has paved parking lots. Numerous restaurants and bars are located near the park, with access to the beach. There is also opportunity for bird watching and nature appreciation.

Environmental Consequences

During the construction period, the visitor recreational experience would be adversely impacted by noise and visual disturbances associated with the use of construction equipment. The impact would be short term and minor because it would only affect some recreationalists in the areas where construction would be taking place. Users would likely be aware of the construction, but changes in use would be slight. The construction process would also limit recreational activities near construction areas for a short time to protect public safety. These limitations would be a minor inconvenience to visitors. Over the long term, minor beneficial impacts to tourism and recreational use would be expected due to the enhancement of recreational opportunities associated with improved facilities and accessibility.

Aesthetics and Visual Resources

Affected Resources

Existing aesthetics and visual resources from the project site are views of the beach, the trees, and the existing park facilities.

Environmental Consequences

Short-term impacts would occur to visual resources during construction activities due to the presence of equipment and materials. These impacts would be minor because they would only be visible from a small portion of the park, would not dominate the viewshed, or would not detract from current visitor activities. Long-term changes to visual resources would occur from the addition of an amphitheater, pavilions, restrooms, nature trail, and parking area. These changes would be readily apparent but minor because they are consistent with other park facilities and would not attract attention, dominate the view, or detract from visitor experiences.

Infrastructure

Affected Resources

Currently, the park has limited infrastructure. Although a portion of the park is developed as facilities and baseball diamonds, the rest is undeveloped. The park can be accessed by Beacon Hill Park Road. Utilities and public infrastructure facilities are currently available within the park.

Environmental Consequences

Because there is limited infrastructure at the park, adding to the facilities through construction of an amphitheater, pavilions, restrooms, nature trail, and parking area is anticipated to hook up to existing

utilities and public infrastructure. Sewer lines or power lines may need to be extended to reach proposed new facilities. It is not anticipated that the proposed facilities would require an expansion of utilities that service the park. The improvements would have a beneficial, long-term impact because they would improve the visitor experience.

Public Health and Safety and Shoreline Protection

Affected Resources

The management of hazardous materials is regulated under various federal and state environmental and transportation laws and regulations, including the Resource Conservation and Recovery Act (RCRA); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); the Emergency Planning and Community Right-to-Know Act; and the Hazardous Materials Transportation Act. The purpose of the regulatory requirements set forth under these laws is to ensure the protection of human health and the environment through proper management (identification, use, storage, treatment, transport, and disposal) of these materials. Some of these laws provide for the investigation and cleanup of sites that have already been contaminated by releases of hazardous materials, wastes, or substances.

A review of the EPA's EnviroMapper revealed that there are no CERCLA, RCRA, or Permit Compliance System (PCS) sites on or immediately adjacent to the park (EPA 2013c).

Environmental Consequences

Project construction would require mechanical equipment that uses oil, lubricants, and fuels. The contractor would be required to take appropriate actions to prevent, minimize, and control the spill of construction-related hazardous materials such as vehicle fuels, oil, hydraulic fluid, and other vehicle maintenance fluids, and to avoid releases and spills.

12.56.6 Summary and Next Steps

Per the Purpose and Need of the Draft Phase III ERP/PEIS, four alternatives are considered, including a no action (Alternative 1), selection of project types emphasizing habitat and living coastal and marine resources (Alternative 2), project types emphasizing recreational opportunities (Alternative 3), or a combination of both habitat and living coastal and marine resources and recreational opportunities (Alternative 4). As proposed, the Gulf County Recreation Project – Improvements at Beacon Hill Veterans' Memorial Park project implements restoration techniques within Alternatives 3 and 4.

The proposed Gulf County Recreation Project – Improvements at Beacon Hill Veterans' Memorial Park project would improve and enhance the existing facilities at the Beacon Hill Veterans' Memorial Park Gulf County. The proposed improvements include building, pavilions, restrooms, a nature trail, a parking area, and a small amphitheater. The project is consistent with Alternative 3 (Contribute to Providing and Enhancing Recreational Opportunities) and Alternative 4 (Preferred Alternative).

Draft NEPA analysis of the environmental consequences suggests that while minor adverse impacts may occur to some resource categories, no moderate to major adverse impacts are anticipated to result. The project would enhance and/or increase the public's use and/or enjoyment of the natural resources by improving the park. The Trustees have started coordination and reviews under the Endangered Species Act, the Magnuson-Stevens Fishery Conservation and Management Act, the Historic Preservation Act,

the Marine Mammal Protection Act, the Bald and Golden Eagle Protection Act, Coastal Zone Management Act, and other federal statutes. The Trustees will consider public comment and information relevant to environmental concerns bearing on the proposed actions or their impacts. Final determination on this project will be included in the final Phase III ERP/PEIS and Record of Decision.

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12.57 Gulf County Recreation Projects: Project Description D (Windmark Beach Fishing Pier Improvements)

12.57.1 Project Summary

The proposed Gulf County Windmark Beach Fishing Pier Improvements project would construct a fishing pier at Windmark Beach in Gulf County. The proposed improvements include constructing a fishing pier into the Gulf of Mexico. The total estimated cost of the project is $1,177,000.

12.57.2 Background and Project Description

The Trustees propose to construct a large fishing pier at Windmark Beach in Gulf County (see Figure 12-22 for general project location). The objective of the Windmark Beach Fishing Pier Improvement project is to enhance and/or increase the public's use and/or enjoyment of the natural resources by constructing a fishing pier. The restoration work proposed includes constructing a large fishing pier into the Gulf of Mexico.

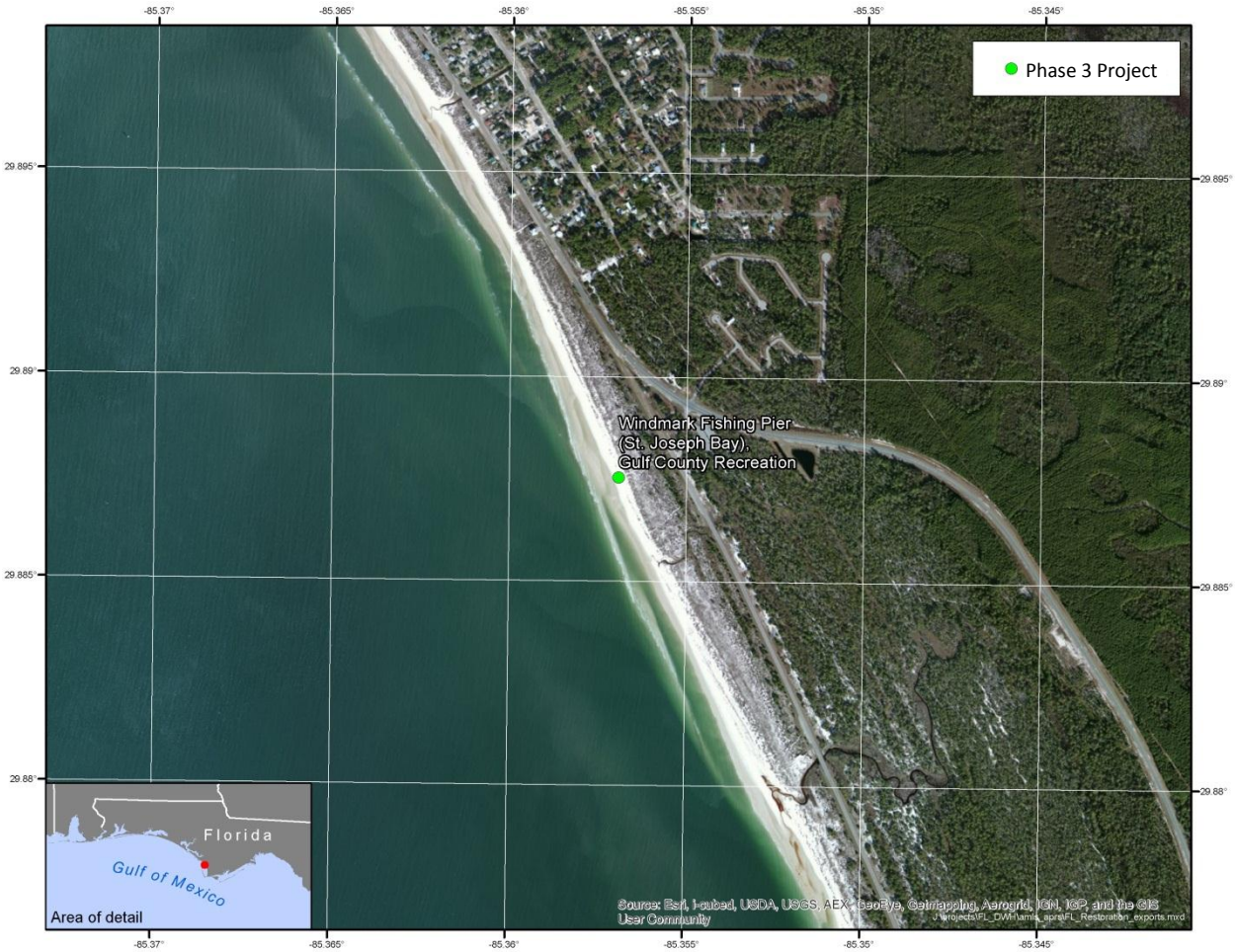

Figure 12-22. Location of Gulf County Recreation Project – Windmark Beach Fishing Pier Improvements.

12.57.3 Evaluation Criteria

This proposed project meets the evaluation criteria established for OPA and the Framework Agreement. As a result of the Deepwater Horizon oil spill and related response actions, the public's access to and enjoyment of their natural resources along Florida's Panhandle was denied or severely restricted. This project would enhance and/or increase the public's use and/or enjoyment of natural resources, helping to offset adverse impacts to such uses caused by the Spill and related response actions. Thus, the nexus to resources injured by the Spill is clear. See 15 C.F.R. § 990.54(a)(2); and Sections 6a-6c of the Framework Agreement.

The project is technically feasible and uses proven techniques with established methods and documented results. Further, the project can be implemented with minimal delay. Florida counties have successfully completed projects of similar scope throughout Florida over many years. For these reasons, the project has a high likelihood of success. See 15 C.F.R. § 990.54(a)(3); and Section 6e of the Framework Agreement. Additionally, the cost estimates are based on similar past projects and therefore the project can be conducted at a reasonable cost. See 15 C.F.R. § 990.54(a)(1); and Section 6e of the Framework Agreement. Finally, this proposed project is not anticipated to negatively affect regional ecological restoration and is therefore not inconsistent with the long-term restoration needs of the State of Florida. See Section 6d of the Framework Agreement.

Many recreational use projects, including ones similar to this project, have been submitted as restoration projects on the NOAA website (http://www.gulfspillrestoration.noaa.gov) and to the State of Florida (http://www.deepwaterhorizonflorida.com). In addition to meeting the criteria for the Framework Agreement and OPA, the Gulf County Recreation Project – Windmark Beach Fishing Pier Improvements project also meets the State of Florida's additional criteria that Early Restoration projects occur in the 8-county panhandle area in which boom was deployed and that was impacted by response and SCAT activities for the Spill.

12.57.4 Performance Criteria, Monitoring and Maintenance

As part of the project cost, monitoring will be conducted to ensure project plans and designs were correctly implemented. Monitoring has been designed around the project goals and objectives. The project objective is to enhance and/or increase the public's use and/or enjoyment of the natural resources by constructing a fishing pier at Windmark Beach. Performance monitoring will evaluate the construction of the fishing pier. Specific performance criteria include: 1) completion of the construction as designed and permitted, and 2) enhanced and/or increased access is provided to natural resources, which will be determined by observation that the fishing pier is open and available.

Long-term monitoring and maintenance of the improved facilities will be completed by Gulf County as part of their regular public facilities maintenance activities. Funding for this post-construction maintenance is not included in the previously provided value for the project cost and will be accomplished by Gulf County.

During the one year construction performance monitoring period, the Florida Trustees' Project Manager will go out twice to the site to record the number of users. Following the one year construction performance monitoring period, Gulf County will monitor the recreational use activity at the site. Gulf

County staff will visit the site twice a year to count the number of users at the fishing pier. The visitation numbers will then be provided to the Florida Department of Environmental Protection.

12.57.5 Offsets

The Trustees and BP negotiated a BCR of 2.0 for the proposed recreational use project. Combined NRD Offsets for the Gulf County Recreation Projects, of which this is a component, are $4,237,200 expressed in present value 2013 dollars to be applied against the monetized value of lost recreational use provided by natural resources injured in Florida, which will be determined by the Trustees' assessment of lost recreational use for the Oil Spill. Please see Chapter 7 of this document (Section 7.2.2) for a description of the methodology used to develop monetized Offsets.[10]

12.57.6 Costs

The total estimated cost to implement this project is $1,177,000. This cost reflects current cost estimates developed from the most current information available to the Trustees at the time of the project negotiation. The cost includes provisions for planning, engineering and design, construction, monitoring, and contingencies.

[10] For the purposes of applying the NRD Offsets to the calculation of injury after the Trustees' assessment of lost recreational use for the Spill, the Trustees and BP agree as follows:

- The Trustees agree to restate the NRD Offsets in the present value year used in the Trustees' assessment of lost recreational use for the Spill.
- The discount rate and method used to restate the present value of the NRD Offsets will be the same as that used to express the present value of the damages.

12.58 Gulf County Recreation Projects: Environmental Review D (Windmark Beach Fishing Pier Improvements)

The purpose of this proposed project is to construct a new recreational fishing pier at Gulf County Windmark Beach Park at West Highway 98 (US-98) in Port St. Joe, Gulf County, Florida. The proposed project would provide improved public recreation fishing opportunities along the eastern shoreline of St. Joseph Bay.

12.58.1 Introduction and Background

In April 2011, the Trustees and BP Exploration and Production, Inc. (BP) entered into the Framework Agreement for Early Restoration Addressing Injuries Resulting from the *Deepwater Horizon* Oil Spill (Framework Agreement). Under the Framework Agreement, BP agreed to make $1 billion available for Early Restoration project implementation. The Trustees' key objective in pursuing Early Restoration is to achieve tangible recovery of natural resources and natural resource services for the public's benefit while the longer-term injury and damage assessment is underway. The Framework Agreement is intended to expedite the start of restoration in the Gulf in advance of the completion of the injury assessment process. Early restoration is not intended to and does not fully address all injuries caused by the Spill. Restoration beyond Early Restoration projects would be required to fully compensate the public for natural resource losses from the Spill.

Pursuant to the process articulated in the Framework Agreement, the Trustees released, after public review of a draft, a Phase I Early Restoration Plan (ERP) in April 2012. In December 2012, after public review of a draft, the Trustees released a Phase II ERP. On May 6, 2013, the National Oceanic and Atmospheric Administration (NOAA) issued a public notice in the *Federal Register* on behalf of the Trustees announcing the development of additional future Early Restoration projects for a Draft Phase III ERP (ERP). This project in St. Joseph Bay within Gulf County was submitted as an Early Restoration project on the NOAA website and submitted to the State of Florida. In addition to meeting the evaluation criteria for the Framework Agreement and the Oil Pollution Act (OPA), the project meets Florida's criteria that Early Restoration projects occur in the 8-county panhandle area that deployed boom and was impacted by the Spill.

The Florida Department of Environmental Protection (FDEP) proposes to construct a public fishing pier to provide Windmark Park visitors with recreational fishing opportunities. The proposed project would be located in St. Joseph Bay, Gulf County. The park currently does not have an over-water fishing facility. Surf fishing from the shoreline is currently offered to park visitors. Currently, visitors park their vehicles in the park's parking facility, which is located west of US-98, and visitors use an existing wooded boardwalk to access an existing restroom and to cross the backdune areas east of old US-98 to access the beach. There is no existing dune cross-over west of old US-98. Currently, an established unimproved pathway though the beach dune area is used by visitors to access the beach. The existing parking lot consists of an impervious paved surface with approximately 75 parking spaces and vegetated median dividers.

12.58.2 Project Location

The proposed project would be located in St. Joseph Bay, a natural sound separated from the Gulf of Mexico by St. Joseph Peninsula in the Florida panhandle region. The specific project site would be located immediately south of St. Joe Beach at Windmark Beach Park, West U.S. Highway 98 (27° 42’ 58 N; 80° 15’ 6 W), Port St. Joe, Class III Waters of St. Joseph Bay (Non-Aquatic Preserve), Gulf County, Florida (see Figure 12-23).

12.58.3 Construction and Installation

The proposed project would be constructed from both upland and water using a barge and crane to install support pilings, stringers, and the pier deck. The walkway deck would be gently inclined, sloped from the park’s shoreline to the final deck elevation. In addition, the pier would be constructed in a manner to conform to the Americans with Disabilities Act. Handrails would be constructed to prevent accidental falls from the structure and to discourage mooring of vessels. Receptacles for waste and recyclable materials (such as monofilament) would be provided to encourage proper waste disposal and a recycling program as part of the proposed project.

Standard construction procedures would be used to construct a large fishing pier with turtle friendly lighting. Some excavation of sediment and sand would be required to construct the structure; however, project construction descriptions do not specify where the proposed excavation would occur. Should excavation be proposed waterward of mean high water (MHW) limits of the shoreline, appropriate federal, state and local permits would be obtained prior to construction. Final structure design, including all locations of the proposed excavation, would be completed upon project funding and provided with the appropriate permit applications. Grading design, manufacturer information, type of decking material, deck plank spacing, deck elevation above MHW, water depths, pier orientation, piling number, type, installation procedure, and final size (terminus and accessway overwater square footage) would be determined in the final project design.

Fixed signs with instructions on what to do in the event of hooking a listed species (i.e., sea turtle) would be placed at the entrance of the proposed pier and strategically at fixed intervals along its length. The proposed project also includes the addition of a new kiosk to be located at the pier’s accessway landing that would provide best management practices (BMPs) information to users on catch and release as well as other fishing practices to limit potential adverse impacts to marine wildlife and habitat.

Project duration, including permitting and construction, would be approximately 2 years following commencement. No mitigation efforts to offset potential adverse impacts to biological resources and waters of the United States are being proposed at this time pending outcome of Section 7 consultation. Any mitigation required to secure the appropriate environmental permits would be developed during the project’s permitting phase. The conceptual construction layout representing the construction area is shown in Figure 12-24.

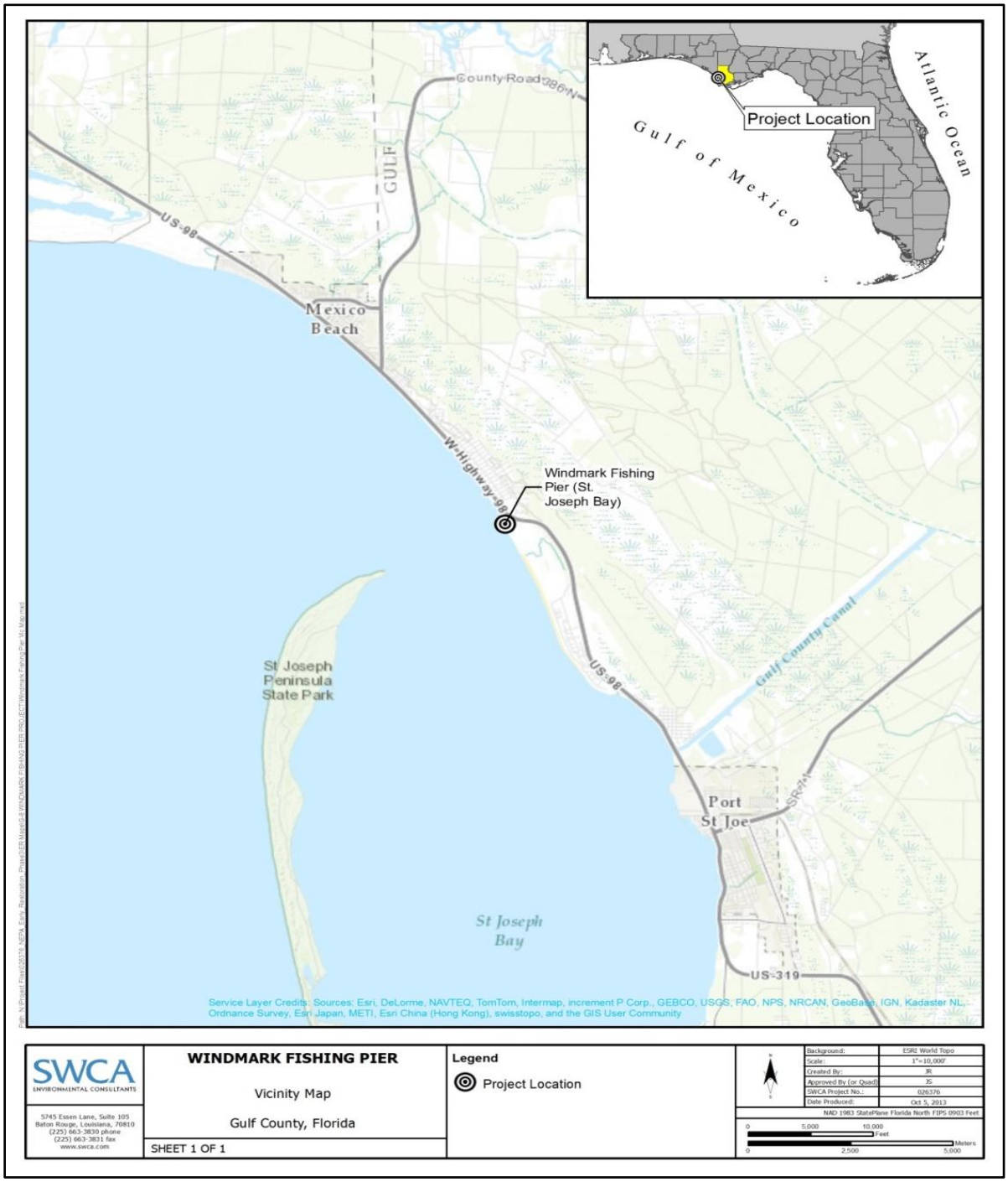

Figure 12-23. Windmark Fishing Pier, Windmark Park, St. Joseph Bay, Gulf County, Florida.

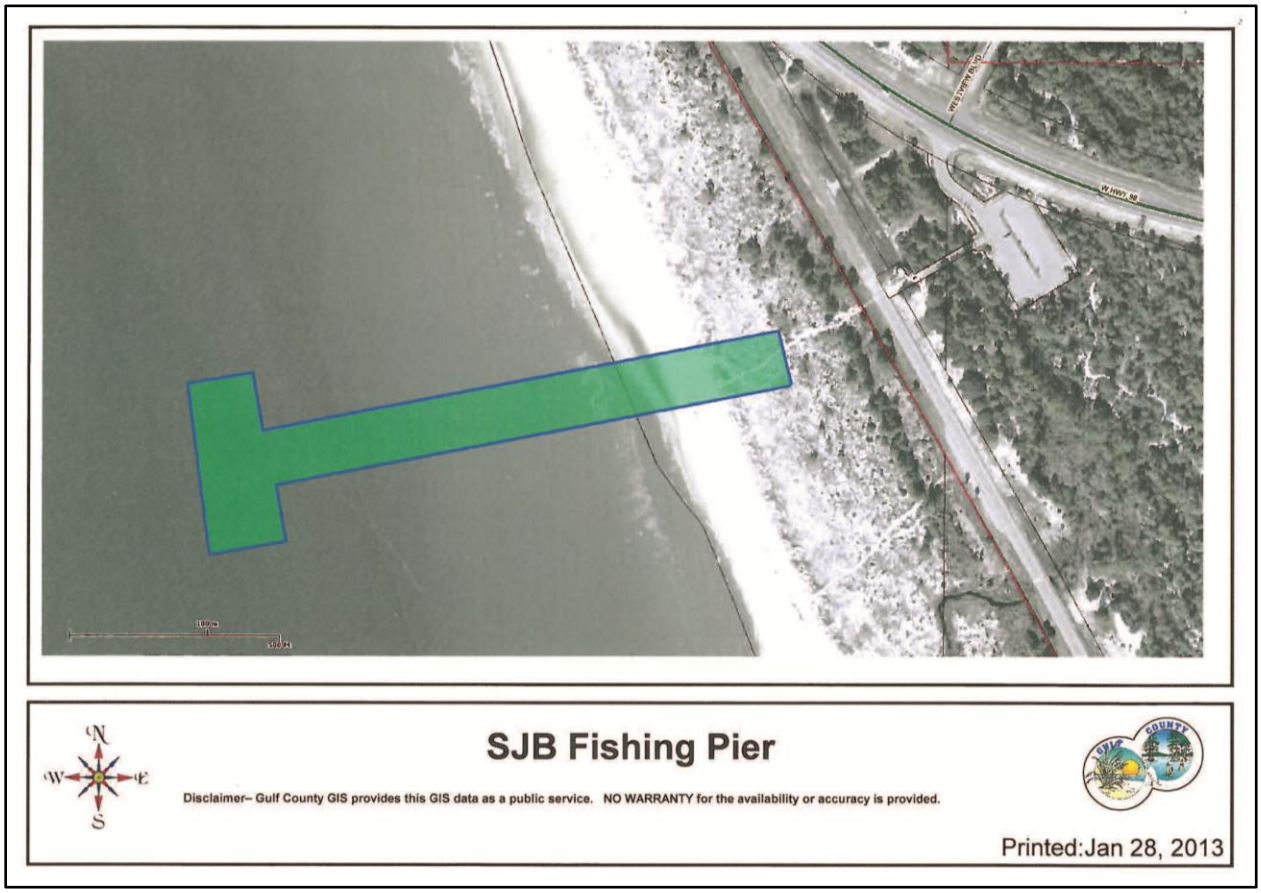

Figure 12-24. Proposed fishing pier conceptual construction location map.

12.58.4 Operations and Maintenance

This project would incorporate a mix of monitoring efforts to ensure that project designs and BMPs are correctly implemented during construction, and, in a subsequent period defined by contract, where corrective actions may be required.

BMPs, including those to prevent degradation of ambient water quality parameters, would be used throughout construction activities. These may include monitoring the integrity of turbidity control screens and/or other devices to control erosion, sedimentation, and turbidity during piling installation and any proposed excavation activities required for pier construction. Other water quality parameters that may be monitored during construction include greases and oils, dissolved oxygen, pH, salinity, and temperature. In addition, the project contractor and permittee would comply with the U.S. Army Corps of Engineers (USACE) and FDEP Standard Sea Turtle and Smalltooth Sawfish Construction Conditions and the Standard Manatee Conditions for In-Water Work (USFWS 2011) throughout construction to prevent accidental harm to these and other protected species that may enter the immediate project area. These standards require monitoring the construction area to prevent harm to manatees, sea turtles, and smalltooth sawfish should these species enter or be observed within the immediate project limits.

Post-construction performance monitoring of the actual levels of use of the proposed pier would be proposed by FDEP and implemented by Gulf County. Gulf County Parks and Recreation staff would be responsible for monitoring and maintenance of the proposed project during construction and post-construction phases.

Literature reviews indicate that several federally listed plants and that listed wildlife species may also occur in or adjacent to the project area (see Section 12.58.5.3). The project area is also adjacent to designated critical habitat for one wildlife species, and contains critical habitat for a second (see Section 12.58.5.3).

12.58.5 Affected Environment and Environmental Consequences

Under the National Environmental Policy Act, federal agencies must consider environmental effects of their actions that include, among others, impacts on social, cultural, and economic resources, as well as natural resources. The following sections describe the affected environment and environmental consequences of the project.

12.58.5.1 No action

Both OPA and NEPA require consideration of the No Action alternative. For this Draft Phase III ERP proposed project, the No Action alternative assumes that the Trustees would not pursue this project as part of Phase III Early Restoration.

Under No Action, the existing conditions described for the project site in the affected environment subsection would prevail. Restoration benefits associated with this project would not be achieved at this time.

12.58.5.2 Physical Environment

12.58.5.2.1 Geology and Substrates

Affected Resources

The proposed project site would be located on relic Younger Pleistocene – Holocene Beach Ridges of northeast Port St. Joe (Florida Department of Natural Resources 1991). St. Joseph Bay is a non-estuarine lagoon formed between St. Joseph Spit and the mainland of Gulf County. In addition, part of St. Joseph Bay is designated as a Florida Aquatic Preserve, meaning that the intent of the State of Florida is to preserve the bay in its natural state. The proposed project would be located in the northern portion of the mainland side of the bay, outside of the Aquatic Preserve. Water depths within St. Joseph Bay range from less than 5 feet at the southern, enclosed end to approximately 30 feet near the northern tip of the spit. Bottom sediments are predominantly sand, with localized areas of clayey silt, silty sand, and clay sand and gravel-sand mixtures.

The following soil associations (NRCS 2013) for Gulf County, Florida, were identified within the proposed project area:

- Lakeland-Eustis-Blanton: This association is described as well-drained to moderately well-drained soils with predominantly thick to moderately thick acid sands.

- Lakeland-Eustis-Norfolk: This association is described as well-drained to moderately well-drained soils with predominantly thick to moderately thick acid sands.
- Blanton-Klej: This association is described as well-drained to moderately well-drained soils with predominantly thick to thin acid sands, some of which overlie finer textured subsoils.
- Norfolk-Ruston-Orangeburg: This association is described as well-drained, undulating, upland soils with loamy fine sand surface soils and sandy clay loam subsoils.
- Magnolia-Faceville-Tifton: This association is described as well-drained, undulating, upland soils with loamy sand surface soils and fine sand to clay loam to fine sand clay subsoils.
- Shubuta-Cuthbert-Lakeland: This association is described as excessively drained to moderately well-drained, sloping to very-steep coarse sands, loamy sands, and sandy clay loams of the uplands that have a sandy clay to clay subsoil.
- Leon-Blanton-Plummer: This association is described as somewhat poorly drained soils, soil with predominantly thick acid sands with organic pans, interspersed with soil without pan formation.
- Scranton-Ona: This association includes somewhat poorly drained soils with predominantly thick acid sands with dark surface soils.
- Goldsboro-Lynchburg: This association includes well-drained to moderately well-drained soils with predominantly thick to thin acid sands, some of which overlie finer textured subsoils.
- Plummer-Rullege: This association includes poorly to very poorly drained soils, and soils with predominantly thick to thin sandy loam surface soils overlying finer textured subsoils.
- Tidal Marsh-Coastal Beach-Coastal Dune: This association is described as regularly flooded organic and mineral deposits and unstable sands along the seashore.
- Freshwater Swamp-Marsh: This association includes regularly flooded, very poorly drained soils with high organic and mineral deposits.

Environmental Consequences

Construction activities would involve ground disturbance, such as foundations and piles or piers placed in the upland portion of the project site. Submerged substrates would also be disturbed from placement of piles and riprap, which may be required for securing the pier to the shoreline. There would be short-term effects to submerged sediments that were disturbed during construction. These sediments would settle back onto the sea floor shortly after construction was completed. Upland soils would be disturbed during construction as well, but those would be re-contoured and stabilized after construction was complete. Where infrastructure was placed, soils would be permanently removed or converted to hard substrate or features. This would be a long-term minor effect limited to the discreet areas where hard structures were placed.

12.58.5.2.2 Hydrology and Water Quality

Affected Resources

The proposed project area is located in Class III waters of the State, approximately 2 miles east-northeast of the St. Joseph Bay Aquatic Preserve as designated by the State of Florida. Nonetheless, the proposed project area has good ambient water quality conditions to promote public welfare and safety to those who use the waterbody for recreational purposes and to maintain natural resource

enhancement. St. Joseph Bay is not markedly influenced by the inflow of freshwater, with salinity levels similar to those of the Gulf of Mexico.

Water depths, depending on tidal phases, within the project vicinity range from 5 to 30 feet deep. However, specific soundings within the immediate project area have not been collected to date. MHW and mean low water (MLW) depth soundings would be collected during the design phase of the project to determine whether water depths were adequate for barge access to the project area to prevent prop dredging of the submerged lands. In addition, water depths will be needed to design the pier walkway and terminus orientation and dimensions.

Environmental Consequences

Project installation activities would use BMPs, including impact avoidance of existing ambient water quality parameters. The timing of installation would depend on the timing of funding availability and the contract award along with any permit constraints required as a result of listed species considerations. Adverse impacts to hydrology and water quality would be minor because support pilings would be driven into place and dredging would not be proposed. Short-term turbidity levels above background may be expected as a result of sediment disturbance during piling installation. However, BMPs would be employed to contain suspended solids and as conditioned by state and federal permits, and all areas potentially disturbed by construction must be contained using turbidity screens or similar devices to protect ambient water quality parameters. Furthermore, the contractor would monitor water quality during construction to ensure that state water quality standards were being maintained. Long-term adverse effects to water quality would not be expected as a result of the proposed project. Short- and long-term adverse effects to the hydrology of the proposed project area as a result of structure installation would be expected to be minor.

In-water work would require authorization from the USACE and FDEP. Prior to construction, the proposed project would require a Clean Water Act Section 404 permit from the USACE to construct the pier over waters of the U.S. and for any proposed excavation waterward of MHW limits. Also, in accordance with Chapter 373 Florida Statutes (FS) and Rule 62-346, Florida Administrative Code (FAC), the project would require an ERP from the FDEP, and in accordance with Chapter 258, Fla. Stat., a Letter of Consent or State Submerged Lands Lease (SSL) would be required from the Board of Trustees of the Internal Improvement Trust Fund prior to construction to construct and operate the proposed fishing pier.

12.58.5.2.3 Air Quality and Greenhouse Gas Emissions

Affected Resources

The Clean Air Act (CAA) requires the Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. NAAQS have been set for six common air pollutants (also known as criteria pollutants), consisting of particle pollution or particulate matter, ozone, carbon monoxide, sulfur dioxide (SO_2), nitrogen dioxide, and lead. Particulate matter is defined as fine particulates with a diameter of 10 micrometers or less (PM_{10}), and fine particulates with a diameter of 2.5 micrometers or less ($PM_{2.5}$). When a designated air quality area or airshed in a state exceeds the NAAQS, that area may be designated as a “nonattainment”

area. Areas with levels of pollutants below the health-based standard are designated as "attainment" areas. To determine whether an area meets the NAAQS, air monitoring networks have been established and are used to measure ambient air quality. The EPA also regulates 187 hazardous air pollutants (HAPs) that are known or suspected to cause cancer or other serious health effects.

Air quality in the Florida panhandle is in attainment with the NAAQS (EPA 2013a). The St. Andrew State Park, Bay County, is the closest Northwest District Air Program (NDAP) air monitor site currently operating near the proposed project area. The St. Andrew State Park monitor in Panama City records ozone and $PM_{2.5}$ concentrations. Readings at this monitor for the last 3 years show attainment with the NAAQS for ozone and $PM_{2.5}$ (FDEP 2013). SO_2 attainment data were not available (EPA 2013c).

Greenhouse Gases

Gases that trap heat in the air are called greenhouse gases (GHGs). The primary GHGs are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (NO_x), and fluorinated gases. Over the past century, human activities have released large amounts of GHGs into the atmosphere, which are contributing to global warming. Global warming is defined as the ongoing rise in global average temperature near the Earth's surface, and is known to cause changes in climate patterns.

According to the EPA, the average annual temperature in the southeast portion of the United States has increased by approximately 2.0 degree Fahrenheit (°F) since 1970. Winters, in particular, are getting warmer, and the average number of freezing days has decreased by 4 to 7 days per year since the mid-1970s. Most areas are getting wetter; autumn precipitation has increased by 30% since 1901 (EPA 2013b). In many parts of the region, the number of heavy downpours has increased. Despite the increases in fall precipitation, the area affected by moderate and severe drought has increased since the mid-1970s (EPA 2013b).

Average annual temperatures in the region are projected to increase from 4°F to 9°F by 2080. Hurricane-related rainfall is projected to continue to increase. Models suggest that rainfall will arrive in heavier downpours, with increased dry periods between storms. These changes would increase the risk of both flooding and drought. The coasts will likely experience stronger hurricanes and sea level rise. Storm surges could present problems for coastal communities and ecosystems (EPA 2013b).

Total GHG emissions in Florida from 1990 to 2007 have increased at an average rate of 2.1% per year. Total GHG emissions in 2007 were 290 million metric tons of CO_2 equivalent ($MMTCO_2E$). In 2007, 91% of GHG emissions in Florida were CO_2 emissions (FDEP 2010).

Environmental Consequences

The proposed project would include use of a barge supporting a crane to conduct in-water construction. In addition, a Bobcat or track hoe and dump truck would be used for shoreline excavations to accommodate the structure. A boat would be used to deploy construction workers to the in-water construction areas and for safety operations. Construction of the project would be anticipated to take approximately 2 years to complete. Given that the project location would be on the coastal shoreline of the Gulf of Mexico, onshore winds can be expected to dissipate emissions from heavy equipment and barge engines. Based on the estimated 1,400 days of combined equipment operation, the project would be estimated to contribute approximately 658.6 metric tons of total CO_2 equivalent emissions (see Table

12-19); well below the EPA threshold of 25,000 metric tons per year for GHG emissions. Therefore, the proposed project would result in a minor impact to ambient air quality.

Table 12-19. Estimated greenhouse gas emissions during the 2-year construction period for the Windmark Fishing Pier.

CONSTRUCTION EQUIPMENT	NO. OF DAYS OPERATED[1]	CO_2 (METRIC TONS)[2]	CH_4 (CO_2E) (METRIC TONS)[3]	NO_X (CO_2E) (METRIC TONS)	TOTAL CO_2E (METRIC TONS)
Barge/crane	400	116.0	0.04	0.4	116.44
Tractor trailer	400	140.0	0.08	0.8	140.88
Track hoe	200	70.0	0.04	0.4	70.44
Dump truck	200	68.0	0.04	0.4	68.44
Boat	200	260.0	0.4	2.0	262.4
Total					**658.6**

[1] Emissions assumptions for all equipment are based on 8-hour days (5 days per week) of operation per piece of equipment over a 6-month construction period.

[2] CO_2 emissions assumptions for diesel and gasoline engines are based on EPA (2009).

[3] CH_4 and NO_X emissions assumptions and CO_2e calculations are based on EPA (2011).

12.58.5.2.4 Noise

Affected Resources

Noise levels in the proposed project areas vary depending on the season, time of day, number and types of noise sources, and distance from noise sources. The project vicinity would be mostly rural with private residential and retail commercial areas (Port St. Joe). Existing sources of noise in the project area are local traffic associated with Highway 98, recreational boating, and occasional overhead aircraft. Ambient natural sounds such as wind, waves, and wildlife also contribute to existing noise levels. Existing ambient noise levels in the Aquatic Preserve are generally low and predominantly result from daily boating activities.

Table 12-20. Typical noise levels for common sources.

NOISE SOURCE OR EFFECT	SOUND LEVEL (DBA)
Rock-and-roll band	110
Truck at 50 feet	80
Gas lawnmower at 100 feet	70
Normal conversation indoors	60
Moderate rainfall on foliage	50
Refrigerator	40
Bedroom at night	25

Source: Adapted from U.S. Department of Energy (1986).

Noise-sensitive receptors include sensitive land uses as well as individuals and/or wildlife that could be affected by changes in noise sources or levels due to the proposed project. Noise-sensitive receptors in the project vicinity include beach and park recreational use and wildlife. The project area would be, for the most part, remotely located.

Environmental Consequences

Instances of increased noise would be expected during the construction phases associated with the barge transport deliveries and in-water pier construction. The proposed project would generate construction noise associated with equipment used to drive piles into place and move stringer lumber for pier deck and terminus construction, shoreline excavation (if necessary), and use of watercraft for construction crew and materials transport. In the short term, machinery and equipment used during construction to deliver material and construct the pier would generate noise, which may disturb wildlife and humans using the area. These noise levels would be kept to a minimum by BMPs such as turning boats off during idling and working only during daylight hours. Noise generated from outboard motors and vessel maneuvering to transport and install the decking material and pilings would be no more than that of commercial watercraft in the general work area. Noise from driving pilings into place is expected to be the loudest during construction, and may be heard several miles away from the project site. Adverse impacts from noise during the construction phase would be temporary but may occur for up to 2 years with periods of temporary shut-down due to inclement weather, holiday seasons, weekends, etc. Port St. Joe is located approximately 1 mile north of the project area. Some housing developments and commercial retail areas (i.e., Highland View) are located within 5 miles south of the proposed project site. Considering the relatively open landscape of the immediate project vicinity, noise generated from the proposed project would be expected to be minor to moderate relative to the open landscape, and anticipated moderate noise levels, as a result of pile driving, would be short-term for the duration of the project. Once built, the proposed project would not cause any long-term noise impacts.

12.58.5.3 Biological Environment

12.58.5.3.1 Living Coastal and Marine Resources

Vegetation

Affected Resources

According to Ecosystems of Florida, the project area would be located on Dunes and Maritime Forests habitat. This habitat type is mostly on excessively drained deep quartz sands deposited by waves to form beaches fringing barrier islands and the mainland, which have been reworked by shore drift and wind forming partially vegetated sandy dunes (Myers and Ewel 1991). Based on aerial reviews, the proposed project site appears to contain mainly unvegetated sandy beach and coastal dunes.

The specific project site would be located on the mainland shoreline of St. Joseph Bay, north of the Aquatic Preserve limits. Waterward of MHW limits, the project area would consist of a gradually sloped, intertidal sandy bottom that is periodically exposed during extreme low tides. The intertidal and submerged lands habitat provides favorable conditions to support the occurrence of submerged aquatic vegetation (SAV).

The estuarine environment and shallow water conditions nearby may contain surveyed SAV habitat. Based on project site conditions, two state and federally listed plant species have the potential to occur in the project area: Gulf Coast lupine (*Lupinus westinous*) and Johnson's seagrass (*Halophila johnsonii*).

Environmental Consequences

Based on the preliminary site plan proposed by Gulf County, the project area would not involve clearing of vegetation from the beach dunes. Some minor excavation is proposed on the non-vegetated areas of the beach shoreline to accommodate project construction. The proposed project's in-water construction area would occur in intertidal and submerged areas of the coastline. Project impacts resulting from construction of the proposed action would be localized and not involve disturbances of existing dune vegetation. BMPs would include installation of protective barrier fencing to prevent construction disturbances (limited land clearing for project site access and work staging areas) to the existing dune systems. As a result, sufficient dune habitat would remain functional throughout and following completion of the proposed project construction. However, should project construction take place in SAV habitat, the project would be designed in a manner sensitive to seagrasses. Design modifications to reduce potential impacts to SAV habitat would include minimum 1-inch deck plank spacing, raising deck and pier terminus elevation to 5 feet above MHW, and aligning the main accessway in a manner to allow maximum sunlight penetration through the water column to reach SAV. Therefore, any potential impacts to dune vegetation and seagrasses within the project area would be considered minor.

The FDEP would require permits and impose reasonable conditions to assure that the construction would comply with the provisions of Chapter 62-346.050 (3), Fla. Admin. Code, which states in part that dredging and filling in, on, or over surface waters of the State remain subject to the requirements of Chapter 62-312, Fla. Admin. Code, including the need to obtain a separate permit under that chapter until the effective date of the rules adopted under Section 373.4145(1)(b), F.S. The FDEP permit also grants state-owned Submerged Lands Authorization from the Board of Trustees of the Internal Improvement Trust Fund, pursuant to Article X, Section 11 of the Florida Constitution, Section 253.77, F.S., and Chapter 258, F.S.

Wildlife Habitat

Affected Resources

The beach and dune communities in the proposed project area provide forage habitat for many species of wildlife, including marine and estuarine invertebrates, wading birds (herons and egrets), shoreline birds (gulls, terns, sandpipers), brown pelicans (*Pelecanus occidentalis*), and birds of prey that feed on juvenile and adult fish (FDEP 2008). Urban and open vacant land adjacent to the project vicinity may serve as a refuge and staging area for many common passerine birds during migration, and large concentrations of shorebirds are sometimes observed feeding on the shoreline and exposed intertidal areas during low tide. Protected wildlife (such as sea turtles and manatee, discussed in detail below) also forage on or within seagrass communities occurring in the vicinity of the proposed project.

St. Joseph Bay is a designated Important Bird Area of more than 8,500 acres that is made up of several parcels: Black's Island, Eglin Air Force Base Test Site, Palm Point, St. Joseph Bay Buffer, T.H. Stone Memorial Park, and St. Joseph Peninsula State Park. These six sites that surround and form St. Joseph

Bay are regionally important for breeding brown pelicans (Black's Island), breeding snowy plovers (*Charadrius alexandrinus*) (Palm Point), wintering shorebirds, migrant raptors (St. Joseph Peninsula State Park), neotropical migrants (St. Joseph Peninsula State Park), and other species (National Audubon Society 2002). Wintering piping plovers occasionally visit the site, but do not nest on-site. No terrestrial wildlife (non-bird) surveys have been conducted in the project area; however, based on the types of habitat present, elevation, and location, it would be expected that ruderal species such as raccoon (*Procyon lotor*), opossum (*Didelphimorphia*), gray squirrel (*Sciurus carolinensis*), and other non-game mammals may be present in upland areas of the project vicinity.

Environmental Consequences

The proposed project would occur over water near the shoreline and at the beach within the existing park boundaries. The proposed construction activities would include in-water work that would likely disturb foraging birds or other wildlife due to turbidity, acoustical vibration, and noise impacts during barge/crane operation, pile driving, pier deck construction, construction crew and equipment transport by small draft vessels, outboard engine operation, and shoreline excavation activities to accommodate pier construction. The proposed operation plans of the fishing pier include use of waste and recycling materials receptacles to encourage users to properly dispose of non-recyclable waste and recyclable waste such as monofilament and plastic bottles to reduce potential impacts to wildlife. Although construction of the pier may take up to 2 years to complete, potential impacts would be short-term and minor. Wildlife and birds would be expected to temporarily move away during construction phases, but would be expected to return after completion of the proposed project. Therefore, foraging birds or other wildlife would not be impacted as a result of the proposed fishing pier construction.

Placement of signage at the proposed kiosk at the foot of the main accessway of the pier would alert beach goers and fisherman to the types of wildlife in the project vicinity. This signage would provide guidance to pier users in the event of hooking wildlife, including listed species, with additional information on catch-and-release practices designed to limit potential impacts to wildlife. These construction measures and public outreach materials would be a moderate, long-term benefit to the overall ecosystem.

Marine and Estuarine Fauna (Fish, Shell Beds, Benthic Organisms)

Affected Resources

There are a number of aquatic species found in the proposed project area. Fish species are abundant and include sea trout (*Salmo trutta*), red drum (*Sciaenops ocellatus*), sea robins (*Triglidae*), flounders (*Paralichthys*), porgys (*Sparidae*), and a host of other estuarine and juvenile marine fish (FDEP 2008). Benthic organisms are also abundant in these waters, and include bivalves, gastropods and other mollusks, anemones, amphipods, annelids, crustaceans, and echinoderms.

Environmental Consequences

The proposed project would likely result in short-term, minor impacts due to placement of the pilings where invertebrates or sessile organisms may have established themselves. Small fish that may migrate through the intertidal zone and submerged shallows are highly mobile and would be displaced to more suitable habitat within the project vicinity. In addition, sessile invertebrates occupying the submerged

substrate and fish may be disturbed or displaced from the project area in the short term. However, these species are typically numerous in Gulf waters and typically recolonize quickly. No long-term impacts would be expected as a result of implementation of the proposed project.

Protected Species

Protected species and their habitats include ESA-listed species and designated critical habitats, which are regulated by either the USFWS or the NMFS. Protected species also include marine mammals protected under the Marine Mammal Protection Act, essential fish habitat (EFH) protected under the Magnuson-Stevens Fishery Conservation and Management Act, migratory birds protected under the Migratory Bird Treaty Act (MBTA) and bald eagles protected under the Bald and Golden Eagle Protection Act (BGEPA).

Affected Resources

The federally listed threatened and endangered faunal and floral species reported for the project areas in Gulf County include five species of sea turtles, West Indian manatee, piping plover, red knot, Gulf sturgeon, Gulf coast lupine, and Johnson's seagrass (USFWS 2013b). State-listed threatened species reported to occur in the project area are addressed in Table 12-21.

Federally designated threatened, endangered, and candidate wildlife species known or believed to occur in the project area are listed below in Table 12-21.

Sea Turtles and Marine Mammals

There are five species of endangered or threatened sea turtles that may occur or have potential to occur in the project area. These include green turtle, hawksbill turtle, Kemp's ridley turtle, leatherback turtle, and loggerhead turtle. Sea turtles forage in the waters of the coastal Florida panhandle region, and have potential to occur within the waters where in-water work is proposed. The project site contains suitable sea turtle nesting habitat along the sandy beach, and the area surrounding the project site is relatively open (undeveloped), which is preferred by nesting sea turtles to areas surrounded by urban development. It is proposed as critical habitat for the NWADPS of loggerhead.

The endangered West Indian manatee has the potential to occur in the project area waters. Manatees typically seek out shallow seagrass areas as preferred feeding habitat. Additionally, bottlenose dolphin (*Tursiops*) populations are known to migrate into bays, estuaries, and river mouths, and could be located in any of the proposed project areas (NMFS 2013b). Due to the project site proximity to the Gulf of Mexico, bottlenose dolphins are expected to occur in St. Joseph Bay.

Smalltooth Saw, Gulf Sturgeon, and Gulf Sturgeon Critical Habitat

Smalltooth sawfish (*Pristis pectinata*) do not typically utilize northern Gulf waters (NMFS 2013a). Gulf sturgeon (*Acipenser oxyrinchus*) are restricted to the Gulf of Mexico and its drainages, occurring primarily from the Mississippi River to the Suwannee River, in Louisiana, Mississippi, Alabama, and Florida (NMFS 2009). Adult fish reside in rivers 8 to 9 months each year and in estuarine or Gulf waters during the 3 to 4 cooler months of each year (NMFS 2009). Important marine habitats include seagrass beds with sand and mud substrates (Mason and Clugston 1993).

Table 12-21. Protected species with potential to occur in the project area.

RESOURCE CATEGORY	COMMON NAME	SCIENTIFIC NAME	USFWS STATUS	STATE STATUS	NATURAL COMMUNITIES
Birds	Arctic peregrine falcon	*Falco peregrinus tundrius*	MBTA		• Estuarine: winters along coasts • Lacustrine: various • Palustrine: various • Terrestrial: various, ruderal **Potential habitat present**
Birds	Bachman's sparrow	*Aimophila aestivalis*	MBTA		• Terrestrial: various, ruderal **Potential habitat present**
Birds	Bald eagle	*Haliaeetus leucocephalus*	BGEPA		• Estuarine: marsh edges, tidal swamp, open water • Lacustrine: swamp lakes, edges • Palustrine: swamp, floodplain • Riverine: shoreline, open water • Terrestrial: pine and hardwood forests, clearings **No potential habitat present**
Birds	Least tern	*Sterna antillarum*	MBTA	T	• Estuarine: various • Lacustrine: various • Riverine: various • Terrestrial: beach dune, ruderal. Nests common on rooftops. **Potential habitat present**
Birds	Piping plover	*Charadrius melodus*	T (CH)	T	• Estuarine: exposed unconsolidated substrate • Marine: exposed unconsolidated substrate • Terrestrial: dunes, sandy beaches, and inlet areas. Mostly wintering and migrants. **Potential habitat present**
Birds	Red knot	*Calidris canutus rufa*	P		• Estuarine: exposed unconsolidated substrate • Marine: exposed unconsolidated substrate • Terrestrial: dunes, sandy beaches, and inlet areas. Mostly wintering and migrants. **Potential habitat present**
Birds	Southeastern kestrel	*Falco sparveriuspaulus*	MBTA	T	• Estuarine: various habitats • Palustrine: various habitats • Terrestrial: open pine forests, clearings, ruderal, various **Potential habitat present**

RESOURCE CATEGORY	COMMON NAME	SCIENTIFIC NAME	USFWS STATUS	STATE STATUS	NATURAL COMMUNITIES
Birds	Southeastern snowy plover	*Charadrius alexandrines tenuirostris*	MBTA	T	• Estuarine: exposed unconsolidated substrate • Marine: exposed unconsolidated substrate • Terrestrial: dunes, sandy beaches, and inlet areas **Potential habitat present**
Birds	Wood stork	*Mycteria americana*	E	E	• Estuarine: marshes • Lacustrine: floodplain lakes, marshes (feeding), various • Palustrine: marshes, swamps, various **Potential habitat present**
Fish	Gulf sturgeon	*Acipenser oxyrinchus desotoi*	T (CH)	T	• Estuarine: various • Marine: various habitats • Riverine: alluvial and blackwater streams **Potential habitat present**
Mammals	West Indian manatee	*Trichechus manatus latirostris*	E	E	• Estuarine: submerged vegetation, open water • Marine: open water, submerged vegetation • Riverine: alluvial stream, blackwater stream, spring-run stream **Potential habitat present**
Reptiles	Green turtle	*Chelonia mydas*	E	E	• Terrestrial: sandy beaches • Nesting habitat present **Potential marine habitat present**
Reptiles	Hawksbill turtle	*Eretmochelys imbricata*	E	E	• Marine: open water • Nesting habitat present **Potential marine habitat present**
Reptiles	Kemp's ridley turtle	*Lepidochelys kempii*	E	E	• Terrestrial: sandy beaches • Nesting habitat present **Potential marine habitat present**
Reptiles	Leatherback turtle	*Dermochelys coriacea*	E	E	• Terrestrial: sandy beaches • Nesting habitat present **Potential marine habitat present**
Reptiles	Loggerhead turtle	*Caretta caretta*	T	T	• Terrestrial: sandy beaches • Nesting habitat present; proposed critical habitat **Potential marine habitat present**

BGEPA=Bald and Golden Eagle Protection Act, ce=consideration encouraged, CH=Critical Habitat, E=endangered, SSC=species of special concern, T-threatened, MBTA=Migratory Bird Treaty Act.

Gulf sturgeon critical habitat was jointly designated by the NMFS and USFWS on April 18, 2003 (50 Code of Federal Regulations [C.F.R.] 226.214). The proposed project site is located within the Florida Nearshore Gulf of Mexico Critical Habitat Unit 11, which contains winter feeding and migration habitat

for Gulf sturgeon. Critical habitat was designated based on seven primary constituent elements essential for its conservation, as defined in the 2003 *Federal Register*.

These seven elements are as follows:

1. Abundant food items such as detritus, aquatic insects, worms, and/or mollusks, within riverine habitats for larval and juvenile life stages; and abundant prey items such as amphipods, lancelets, polychaetes, gastropods, ghost shrimp, isopods, mollusks, and/or crustaceans within estuarine and marine habitats and substrates for subadult and adult life stages.
2. Riverine spawning sites with substrates suitable for egg deposition and development, such as limestone outcrops and cut limestone banks, bedrock, large gravel or cobble beds, marl, soapstone, or hard clay.
3. Riverine aggregation areas, also referred to as resting, holding, and staging areas, used by adult, subadult, and/or juveniles, and generally but not always located in holes below normal riverbed depths believed necessary for minimizing energy expenditures during freshwater residency and possibly for osmoregulatory functions.
4. A flow regime (i.e., the magnitude, frequency, duration, seasonality, and rate-of-change of freshwater discharge over time) necessary for normal behavior, growth, and survival of all life stages in the riverine environment, including migration, breeding site selection, courtship, egg fertilization, resting, and staging, and for maintaining spawning sites in suitable condition for egg attachment, egg sheltering, resting, and larval staging.
5. Water quality, including temperature, salinity, pH, hardness, turbidity, oxygen content, and other chemical characteristics necessary for normal behavior, growth, and viability of all life stages.
6. Sediment quality, including texture and chemical characteristics necessary for normal behavior, growth, and viability of all life stages.
7. Safe and unobstructed migratory pathways necessary for passage within and between riverine, estuarine, and marine habitats (e.g., an unobstructed river or a dammed river that still allows for passage).

Essential Fish Habitat (EFH)

EFH is defined in the Magnuson-Stevens Fishery Conservation and Management Act as "those waters and substrates necessary to fish for spawning, breeding, feeding or growth to maturity." The designation and conservation of EFH seeks to minimize adverse effects on habitat caused by fishing and non-fishing activities. The NMFS has identified EFH habitats for the Gulf of Mexico in its Fishery Management Plan Amendments. These habitats include estuarine emergent wetlands, seagrass beds, algal flats, mud, sand, shell, and rock substrates, and the estuarine water column. The EFH within the project area include emergent wetlands, mud substrate, and estuarine water columns for species of fish, such as red drum, brown shrimp, pink shrimp, and white shrimp. There are no marine components of EFH in the vicinity of the project site.

The area also provides habitat for prey species (e.g. Gulf menhaden, shad, croaker and spot) that are consumed by larger commercially important species. In addition, the area provides habitat for spotted seatrout, striped mullet, southern flounder, Atlantic croaker, and Gulf menhaden. Table 12-22 provides

a list of the species that NMFS manages under the federally Implemented Fishery Management Plan in the vicinity of the Gulf County Windmark Beach Park Fishing Pier site and St. Joseph's Bay.

Table 12-22. List of the species that NMFS manages under the federally Implemented Fishery Management Plan.

MANAGEMENT UNIT / SPECIES	LIFESTAGE(S) FOUND AT LOCATION	FMP
Red Drum (Sciaenops ocellatus)	ALL	Red Drum
Highly Migratory Species		
Atlantic Sharpnose Shark	All	Highly Migratory Species
Blacknose Shark	All	
Blacktip Shark	All	
Bonhead Shark	All	
Bull Shark	Juvenile, Adult	
Finetooth Shark	All	
Great Hammerhead Shark	All	
Lemon Shark	All	
Nurse Shark	Juvenile, Adult	
Scalloped Hammerhead Shark	All	
Spinner Shark	All	
Tiger Shark	Juvenile	
Shrimp		
Brown shrimp (*Penaeus aztecus*)	ALL	Shrimp
White shrimp (*Penaeus setiferus*)		
Pink shrimp (*Penaeus duararum*)		
Royal red shrimp (*Pleoticus robustus*)		
Rock Shrimp (*Sicyonia brevirostris*)		
Seabob Shrimp (*Xiphopenaeus kroyeri*))		
Coastal Migratory Pelagics		
King mackerel (*Scomberomorus cavalla)*	ALL	Coastal Migratory Pelagics
Spanish mackerel (*Scomberomorus maculatus*)		
Cobia (*Rachycentron canadum*)		
Dolphin (*Coryphaena hippurus*)		
Reef Fish		
Balistidae - Triggerfishes	ALL	Reef Fish
Gray triggerfish (Balistes capriscus)		
Carangidae - Jacks		
Greater amberjack (Seriola dumerili)		
Lesser amberjack (Seriola fasciata)		
Almaco jack (Seriola rivoliana)		
Banded rudderfish (Seriola zonata)		
Labridae - Wrasses		
Hogfish (Lachnolaimus maximus)		
Lutjanidae - Snappers		
Queen snapper (Etelis oculatus)		
Mutton snapper (Lutjanus analis)		
Blackfin snapper (Lutjanus buccanella)		
Red snapper (Lutjanus campechanus)		
Cubera snapper (Lutjanus cyanopterus)		
Gray (mangrove) snapper (Lutjanus griseus)		
Lane snapper (Lutjanus synagris)		
Silk snapper (Lutjanus vivanus)		
Wenchman (Pristipomoides aquilonaris)		
Vermilion snapper (Rhomboplites aurorubens)		

MANAGEMENT UNIT / SPECIES	LIFESTAGE(S) FOUND AT LOCATION	FMP
Malacanthidae – Tilefishes Goldface tilefish (Caulolatilus chrysops) Blueline tilefish (Caulolatilus microps) **Serranidae – Groupers** Speckled hind (Epinephelus drummondhayi) Yellowedge grouper (Epinephelus flavolimbatus) Red grouper (Epinephelus morio) Warsaw grouper (Epinephelus nigritus) Snowy grouper (Epinephelus niveatus) Nassau grouper (Epinephelus striatus) Black grouper (Mycteroperca bonaci) Yellowmouth grouper (Mycteroperca interstitialis) Gag (Mycteroperca microlepis) Scamp (Mycteroperca phenax) Yellowfin grouper (Mycteroperca venenosa)		

St. Andrews Beach Mouse

Primary, secondary, and occasionally tertiary sand dunes with moderate cover of grasses and forbes, including sea oats, bitter panicum (*Panicum amarum*), Gulf bluestem, beach dropseed, and telegraph weed (*Heterotheca subaxillaris*) are considered preferred habitat of the St. Andrews beach mouse (*Peromyscus polionotus peninsularis*) (Hipes et al 2001). High, stable areas supporting sand live oak (*Q. geminata*) may be important following hurricanes that remove substantial dune habitat. The sand dune area within the project vicinity is designated critical habitat for the St. Andrews beach mouse. In addition, the maritime forest areas landward of the beach dunes provides suitable habitat for this species as well.

Piping Plover

The sandy beaches and shorelines adjacent to the project areas offer suitable foraging and resting habitat for the piping plover during the winter migratory season, and piping plover may forage in the shallow waters of the project area. Natural shorelines in the proposed project vicinity provide suitable winter migration resting habitat for the piping plover. Piping plover wintering habitat includes beaches, mudflats, and sandflats, as well as barrier island beaches and spoil islands (Haig 1992). On the Gulf Coast, preferred foraging areas are associated with wider beaches, mudflats, and small inlets (USFWS 2013a).

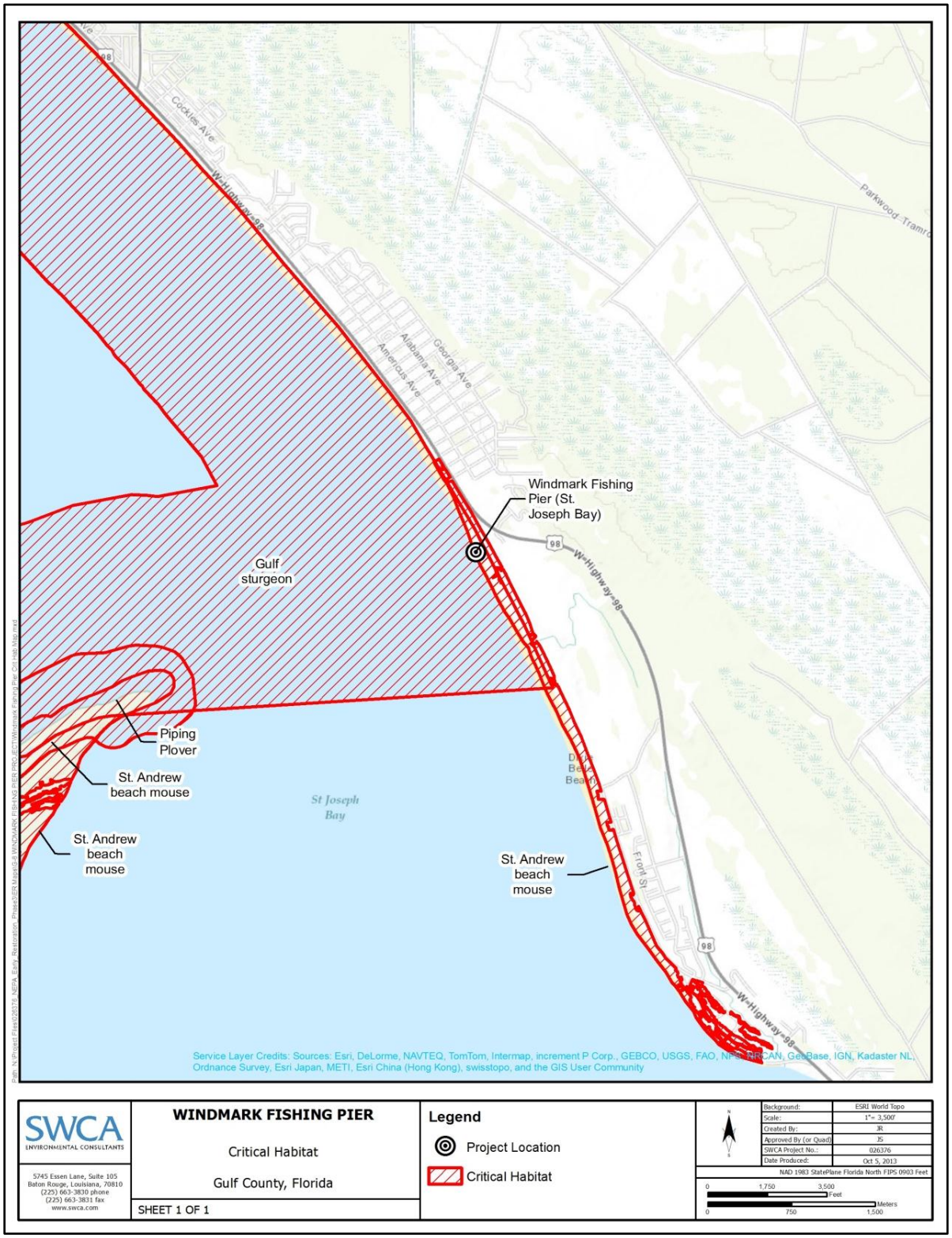

Figure 12-25. Gulf sturgeon critical habitat in the Windmark Fishing Pier project area, St. Joseph Bay.

Red Knot

The red knot (*Calidris canutus rufa*), a federal proposed species, uses Florida both for wintering habitat and migration stopover habitat for those migrating down to specific wintering locations in South America (Niles et al. 2008). Wintering and migrating red knots forage along sandy beaches, tidal mudflats, salt marshes, and peat banks (Harrington 2001). Observations indicate that red knots also forage on oyster reef and exposed bay bottoms, and roost on high sand flats, reefs, and other sites protected from high tides (Niles et al. 2008). In wintering and migration habitats, red knots commonly forage on bivalves, gastropods, and crustaceans. Threats to wintering and stopover habitat in Florida include shoreline development, hardening, dredging, deposition, and beach raking (Niles et al. 2008).

State-Listed Birds, MBTA, and BGEPA

There are numerous State of Florida–listed bird species with potential to occur in and around the Norriego Point Restoration Site. These include Arctic peregrine falcon (*Falco peregrinus tundrius*), least tern (*Sterna antillarum*), southeastern American kestrel (*Falco sparverius paulus*), Florida sandhill crane (*Grus canadensis pratensis*), American oystercatcher (*Haematopus palliates*), Southeastern/Cuban snowy plover (*Charadrius alexandrinus tenuirostris*), piping plover (discussed above), and wood stork (*Mycteria Americana*). All migratory bird species are protected under the MBTA. The nesting season in Florida is from March 1 to August 1.

The bald eagle was delisted by the USFWS and is not listed as threatened or endangered by the FWC. The bald eagle is, however, protected by state law pursuant to 68A-16, Fla. Admin. Code and by the U.S. government under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. Bald eagles feed on fish and other readily available mammalian and avian species and are dependent on large, open expanses of water for foraging habitat. In Florida, conservation measures to protect active nest sites during nesting season must be considered to reduce potential disturbances of certain project activities. If bald eagles are found nesting within 660 feet of a proposed construction area, then activities would need to occur outside of nesting season or coordination with the USFWS would occur to determine if a permit is needed, and Florida's Bald Eagle Management Plan guidelines would be followed (FWC 2008).

Environmental Consequences

The proposed project has been evaluated for potential short- and long-term impacts to state and federally listed threatened and endangered species that may occur in and adjacent to the project areas based on available suitable habitat and restoration goals. Descriptions of these evaluations are provided below.

Sea Turtles and Marine Mammals

For projects in waters accessible to sea turtles, the NFMFS has developed standardized sea turtle and smalltooth sawfish construction conditions (NMFS 2006). These conditions are typically applied to projects as part of the Clean Water Act Section 404 permit issued for in-water work. It is unlikely that the project site contains SAV, which is the preferred foraging habitat of sea turtles, but it cannot be ruled out entirely.

If sea turtles are present in the in-water work area, short-term disturbances from noise and turbidity would occur. Sea turtles are a highly mobile species and would be expected to move away during in-water activities. Additionally, should a sea turtle be encountered during implementation of the project, the crews would allow these species to exit the project vicinity before commencing with pier construction activities. Therefore, potential impacts or disturbances to listed sea turtles would be short term and minor.

Noise and other activity associated with proposed in-water construction may temporarily disturb manatees and dolphin species in the vicinity of the project area through temporary impacts on prey abundance, water quality (turbidity), and underwater noise. The Clean Water Act Section 404 permit that would be issued for the in-water work proposed as part of the project would include Standard Manatee Conditions for In-Water Work (USFWS 2011). These conditions would be implemented and adhered to during project construction. The permittee would be required comply with these conditions, and it is anticipated that these conservation measures would significantly reduce the risk of impacts to manatees from the proposed project. Dolphins are highly mobile species and would be expected to move away from the construction area during in-water activities. The Windmark Fishing Pier project would adhere to all applicable federal, state, and local permit conditions for the protection of marine mammals, and impacts to marine mammals during construction are expected to be short term and minor.

While it is not anticipated that any incidental harassment of marine mammals will occur as a result of this proposed project, the Trustees are conducting an evaluation of the expected magnitude and duration of underwater noise from the proposed construction techniques and their potential impacts on protected species, including marine mammals. The results of this analysis will be coordinated with NOAA's Office of Protected Resources to develop best management practices (e.g., avoidance measures, monitoring, alternate equipment) to avoid incidental harassment, or to seek incidental harassment authorization under the Marine Mammal Protection Act as appropriate. Additional coordination with NOAA under the Endangered Species Act would be conducted if any potential effects to sea turtles or other listed species are identified.

Smalltooth Sawfish, Gulf Sturgeon, and Gulf Sturgeon Critical Habitat

The smalltooth sawfish is a mobile species and relatively rare in northern Gulf waters and the immediate project area. The Gulf sturgeon utilizes St. Joseph Bay and surrounding waters as a migratory corridor from breeding grounds to winter foraging grounds. Minor short-term disturbances may occur as a result of in-water work associated with the proposed project. Projects in waters accessible to the smalltooth sawfish and Gulf sturgeon would comply with NMFS smalltooth sawfish construction conditions (NMFS 2006).

Disturbances to the water column from in-water work would temporarily affect certain Gulf sturgeon critical habitat primary constituent elements due to turbidity, dispersal of potential prey, and substrate disturbance. These would be limited to areas immediately surrounding the work area and would occur only during construction. Therefore, impacts to Gulf sturgeon critical habitat would be short term and minor.

Essential Fish Habitat

An EFH assessment will be coordinated with the NMFS Habitat Conservation Division. If necessary, species specific measures would be recommended by NMFS and would be incorporated into the project construction plan. The project would not result in adverse, direct impacts to emergent wetlands, existing oyster reefs, or Submerged Aquatic Vegetation (SAV). Most motile fauna such as crab, shrimp, and finfish will likely avoid the area of potential effect during the construction process. The project may result in minor, adverse short term impacts to benthic organisms and temporarily affect habitat utilization by individuals considered under EFH fishery management plans.

The proposed work in the EFH area reflects construction of a new, large, recreational fishing pier adjacent to the Windmark Beach Park. A small area of sub tidal habitat would be converted with the placing of pilings for the new pier, however, this area would be a relatively small compared with the surrounding habitat and would not completely convert or block habitat in the area where the pier is constructed. As a result, disturbance to species will be limited in their spatial extent, minor in scope, and brief in duration. Should the pre-construction survey identify areas of submerged aquatic vegetation where the pier is planned, design adjustments (e.g., spacing of deck planking, pier height over water) would be incorporated to minimize impacts and continue to support SAV growth. All appropriate BMPs will be followed to minimize the potential impacts of construction activities on EFH and species in the area. During construction, adjacent areas with equivalent or better habitat will be available and undisturbed and organisms could move away from disturbed areas. Therefore, the project is not likely to adversely affect EFH.

St. Andrews Beach Mouse

The St. Andrews Beach Mouse has specific habitat requirements based on food availability from grasses and forbes of beach dune and maritime forest habitat. Beach dune and maritime forest habitat occurs landward (west of) of the proposed construction limits. Although funding for final structure design is not available, it would be reasonable to assume (based on construction observations of similar beachfront fishing piers). Any proposed excavation necessary to accommodate construction of the structure would be restricted to the mid-to-upper sandy beach area. Therefore, the construction footprint of pier structure would not be anticipated to occur within the sand dune and maritime forest habitat preferred by the St. Andrews beach mouse. Should construction crews need access to the proposed project site from the existing parks parking area and boardwalk, BMPs would include installation of construction barricade fences with signage notifying beach users and crews to stay off the dunes along the existing beach access trail in order to prevent disturbance to the dunes. Therefore, by implementation of BMPs, and given that the project area would not be located directly in dune habitat, potential impacts to the St. Andrews beach mouse from the proposed project would be expected to be short term and minor.

Piping Plover and Red Knot

The main risk to piping plovers and red knot would be from human disturbance during resting and foraging in habitats adjacent to marine work areas. The proposed project would result in short-term increases in noise, which could startle individuals, though normal activity is expected to resume within minutes; alternatively the noise is expected to cause the plovers or red knot to move to a nearby area as alternate available habitat is abundant. Plovers are a highly mobile species and, if disturbed by

construction activities, may be temporarily displaced from foraging and resting areas to other areas of suitable habitat that are nearby and within normal movement patterns. These effects would be considered short term and minor.

State-Listed Birds, MBTA, and BGEPA

State-listed birds such as oystercatchers or least terns (*Sternula antillarum*) may nest on beaches or mudflats in the vicinity of the project areas, and all migratory birds are protected under the MBTA. If restoration activities occur during the nesting season (March 1 to August 1), these birds could be disturbed by noise generated by in-water activities. In such circumstances, FWC nesting shorebird avoidance measures will be followed. These measures generally call for surveys within 300 feet and an avoidance buffer of 300 feet for nesting birds.

In recent years, the bald eagle has been removed from the endangered species list under the ESA. All activities (staging, demolition, construction, cleanup, use of equipment, machinery, vehicles including utility terrain vehicle [UTV] and all-terrain vehicle [ATV], or boat/vessels) should avoid a bald eagle nest by a minimum of 660 feet.

Consultation with the FWC concerning the proposed project and anticipated construction schedule relative to known bald eagle nest sites within the project vicinity and the nesting season in Florida (October 1 to May 15) would be required prior to commencement of restoration activities. To minimize potential for impacts to nesting bald eagles, the consultation protection measures may include 1) addressing prescribed nest tree protection zones, and 2) preparation of a bald eagle nest protection plan (including nesting behavior disturbance monitoring). Bald eagles have been known to tolerate certain potential disturbances within their breeding territories. Should these conservation measures be implemented for active nest sites adjacent to enhancement activities in the project areas, potential impacts to the bald eagle would be short term and minor.

Section 7 and Essential Fish Habitat Consultations

Section 7 ESA consultations with the USFWS and NMFS will be initiated for the proposed project. An EFH consultation under the Magnuson-Stevens Fishery Conservation and Management Act also would be completed to address any situations where proposed project activities may affect EFH habitat. The projects would incorporate any additional conservation recommendations provided by the NMFS and USFWS during the consultation to avoid, minimize, mitigate, or otherwise offset the adverse effects of the proposed project on listed species or EFH.

Invasive Species

Affected Resources

Non-native invasive species could alter the existing terrestrial or aquatic ecosystem within, and possible expand out into adjacent areas after the initial introduction. The invasive species threat, once realized, could result in economic damages. Prevention is ecologically responsible and economically sound. Chapter 3 described more about the regulations addressing invasive species, pathways, impacts, and prevention. At this time specific invasive species that may be present on the project site or could be introduced through the project have not yet been identified.

Environmental Consequences

Best Management Practices (BMPs) to control the spread of any invasive species present, and prevent the introduction of new invasive species due to the project will be implemented. In general, best management practices would primarily address risk associated with vectors (e.g., construction equipment, personal protective equipment, delivery services, foot traffic, vehicles/ vessels, shipping material). There are many resources that provide procedures for disinfection, pest-free storage, monitoring methods, evaluation techniques, and general guidelines for integrated pest management that can be prescribed based upon specific site conditions and vectors anticipated. In addition, to best management practices, outreach and educational materials may be provided to project workers and potential users/visitors. Other measures that could be implemented are identified in Chapter 12 Appendix A. Due to the implementation of BMPs, we expect risk from invasive species introduction and spread to be short term and minor.

12.58.5.4 Human Uses and Socioeconomics

12.58.5.4.1 Socioeconomics and Environmental Justice

Affected Resources

The population of Gulf County is 15,863.Table 12-23 contains population/minority data for Gulf County and Florida (U.S. Bureau of the Census 2010).

Table 12-23. Population of Florida and Bay, Gulf, and Franklin Counties.

POPULATION	FLORIDA		GULF COUNTY	
2010 total population	18,688,787		15,863	
White alone	14,270,053	76.4%	12,384	78.1%
Black or African American alone	2,946,899	15.8%	2,962	18.7%
American Indian and Alaska Native alone	58,192	0.3%	63	0.4%
Asian alone	455,403	2.4%	46	0.3%
Native Hawaiian and Other Pacific Islander alone	11,005	0.1%	4	0.0%
Some other race alone	564,351	3.0%	119	0.8%
Two or more races	382,884	2.0%	285	1.8%
Median household income, 2007–2011	$47,827		$41,291	
Persons below poverty level, 2007–2011	14.7%		17.5%	

Environmental Consequences

There are no indications that the proposed fishing pier construction project would be contrary to the goals of Executive Order 12898, or would create disproportionate, adverse human health or environmental impacts on minority or low-income populations of the surrounding community. Therefore, no adverse impacts to the socioeconomics of the regional population in Bay, Gulf, or Franklin Counties would be anticipated as a result of the proposed project.

The proposed fishing pier construction project would potentially provide indirect minor beneficial effects to the local economy due to increased recreational activity in response to fishing and bird-watching opportunities provided by the restoration effort. Furthermore, it is estimated that approximately 15 construction positions would be generated by providing construction crews including marine contractors and heavy equipment and barge operators needed to construct the project.

12.58.5.4.2 Cultural Resources

Affected Resources

A review of the Florida Master Site Files indicates that there are four previously recorded archaeological sites located within 1 mile of the project area. However, none of these sites are located within the proposed project area. There are archaeological sites located in similar contexts in the region.3.3.2.2.

Environmental Consequences

A complete review of this project under Section 106 of the NHPA would be completed as environmental review continues. This project would be implemented in accordance with all applicable laws and regulations concerning the protection of cultural and historic resources.

12.58.5.4.3 Infrastructure

Affected Resources

Port St. Joe, which is located on St. Joseph Bay, is one of three state-designated deep-water ports on North Florida's Gulf Coast. Access to the Gulf of Mexico is accomplished by an approximate 7-mile channel from the Port to the north end of the bay. The Port has two bulkheads and can accommodate ships with a 27-foot draft. Ships can directly access the Intracoastal Waterway from the Port. St. Joseph Peninsula State Park maintains a marina and boat ramp on the west side of St. Joseph Bay.

St. Joseph Bay is a relatively remote natural estuarine system with no services or infrastructure. The project waters are not located within the immediate vicinity of urban service centers. St. Joe Beach and Highland View are relatively small urbanized service centers located approximately 1 mile north and 3.5 miles south of Windmark Park, respectively. US-98 follows the shoreline of St. Joseph Bay and the Gulf of Mexico both north and south of Windmark Park.

Environmental Consequences

Port St. Joe is located approximately 5 miles south of the proposed project area. Since the Port would be outside the proposed project area, traffic from the Port would not affect the users of Windmark Park (project site), nor would construction activities pertaining to the project have any adverse impacts to the Port. Additionally, the proposed project would not be designed to attract boaters to moor to the fishing pier; therefore, the proposed project would not be expected to impose navigational hazards. In addition, the proposed project would not be expected to impact transportation, utilities, or any or other infrastructure.

12.58.5.4.4 Land and Marine Management

Affected Resources

The proposed Windmark Fishing Pier project area would be located in and over sovereign submerged lands (SSL) owned and governed by the State of Florida; therefore, any projects undertaken on those lands must receive authorization from the Board of Trustees of the Internal Improvement Trust Fund, pursuant to Article X, Section 11 of the Florida Constitution as well as Section 253.77, F.S., and Chapter 258, F.S. An Environmental Resource Permit to construct the fishing pier and a Letter of Consent to use SSL lands must be attained from FDEP.

Environmental Consequences

Under the proposed project, no changes would occur to the current land use at the St. Joseph Bay and Windmark Park. Land use and management authority of Windmark Park would remain under the purview of Gulf County with cooperation from the FDEP, and no development at the project site would occur. The proposed project would be consistent with existing management and plans of Windmark Park. Ultimately, the proposed project would continue to provide public recreational fishing opportunities and maintain essential fisheries habitat and sanctuary for wildlife, including threatened and endangered species dependent on the beach and dune habitat available in the park for much of their life cycle. The proposed fishing pier construction would be conducted and maintained in accordance with state and federal permits for the project area in Gulf County. All permit conditions and requirements would be implemented. Therefore, potential adverse impacts to land and marine management resources would not be expected.

Pursuant to the Coastal Zone Management Act of 1972, federal activities must be consistent to the maximum extent practicable with the federally-approved coastal management programs for states where the activities would affect a coastal use or resource. Federal Trustees are submitting consistency determinations for state review coincident with public review of this document.

12.58.5.4.5 Aesthetics and Visual Resources

Affected Resources

The land use of the proposed project site and vicinity would be either county park land, sparsely populated residential areas, or retail commercial. The general visual character of Windmark Park and immediate surrounding natural areas can be described as undeveloped or open space consisting of native upland terrestrial, wetland, and estuarine habitat separated from the Gulf of Mexico by barrier islands. Unobstructed views of open water characterizing the project area exist from the existing park and surrounding uplands at higher land elevations.

Environmental Consequences

Temporary impacts to visual resources would result throughout the duration of the proposed fishing pier construction activities. Construction equipment would be visible to visitors and recreational users at the project access points (i.e., beach) for approximately 2 years. These construction-related impacts to visual resources would be minor to moderate to park and beach users until construction is completed. Although the proposed fishing pier construction would be anticipated to result in relatively minor to

moderate minor visual impacts to beach and park users, the recreational fishing opportunities to access available fisheries would be enhanced in the long term. Nonetheless, the proposed project would be expected to result in temporary minor to moderate impacts to current aesthetics or visual resources.

12.58.5.4.6 Tourism and Recreational Use

Affected Resources

According to the economic development organization Enterprise Florida (2013), the primary recreational opportunities in Gulf County are boating, fishing, swimming, diving, snorkeling, and golfing. St. Joseph Peninsula State Park is located west of the project area (opposite the shoreline of the bay), and the proposed project site is Windmark Park, a public facility owned and operated by Gulf County.

Environmental Consequences

The duration of the proposed fishing pier construction project would be approximately 2 years. Therefore, adverse impacts to recreational experience of the use of the beach would be minor and short term as a result of noise and visual disturbances. Public access to the beach would be maintained and there would be no beach restrictions other than those prohibiting human entry into the project construction area. While temporary inconveniences would result in short-term minor to moderate negative impacts to tourism, recreational use of the beach for fishing and swimming would remain available. Over the long term, the project would not result in adverse effects to tourism and recreational use. Opportunities for recreational activity in the project waters would be enhanced as a result of improved fishing and bird-watching opportunities. Enhancement of the visual and solidarity experiences offered by the open water environment of St. Joseph Bay would provide additional beneficial community use. Over the long term, the project would result in minor beneficial impacts to tourism and recreational uses.

12.58.5.4.7 Public Health and Safety and Shoreline Protection

Affected Resources

There are no known hazardous waste disposal facilities or active water discharge sites permitted in the proposed project vicinity.

Environmental Consequences

The project would have no impact on public health and safety in the area. The project would incorporate solid waste and recyclable material collection receptacles to enhance or encourage proper solid waste disposal practices to prevent pollution of the waters located in the project area.

12.58.6 Summary and Next Steps

Per the Purpose and Need of the Draft Phase III ERP/PEIS, four alternatives are considered, including a no action (Alternative 1), selection of project types emphasizing habitat and living coastal and marine resources (Alternative 2), project types emphasizing recreational opportunities (Alternative 3), or a combination of both habitat and living coastal and marine resources and recreational opportunities (Alternative 4). As proposed, the Gulf County Recreation Project –Windmark Beach Fishing Pier Improvements project implements restoration techniques within Alternatives 3 and 4.

The proposed Gulf County Recreation Project – Windmark Beach Fishing Pier Improvements project would construct a fishing pier at Windmark Beach in Gulf County. The proposed improvements include constructing a fishing pier into the Gulf of Mexico. The project is consistent with Alternative 3 (Contribute to Providing and Enhancing Recreational Opportunities) and Alternative 4 (Preferred Alternative).

Draft NEPA analysis of the environmental consequences suggests that while minor adverse impacts may occur to some resource categories, no moderate to major adverse impacts are anticipated to result. The project would enhance and/or increase the public's use and/or enjoyment of the natural resources by constructing a fishing pier. The Trustees have started coordination and reviews under the Endangered Species Act, the Magnuson-Stevens Fishery Conservation and Management Act, the Historic Preservation Act, the Marine Mammal Protection Act, the Bald and Golden Eagle Protection Act, Coastal Zone Management Act, and other federal statutes. The Trustees will consider public comment and information relevant to environmental concerns bearing on the proposed actions or their impacts. Final determination on this project will be included in the final Phase III ERP/PEIS and Record of Decision.

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12.59 Bald Point State Park Recreation Areas: Project Description

12.59.1 Project Summary

The proposed Bald Point State Park Recreation Areas project would improve the existing visitor areas at Bald Point State Park in Franklin County. The proposed improvements would include construction of picnic pavilions, boardwalks, restroom and aerobic treatment system and drainfield, and a boardwalk and floating dock for use as a canoe/kayak launch. The total estimated cost of the project is $470,800.

12.59.2 Background and Project Description

The Trustees propose to improve the visitor use areas at Bald Point State Park in Franklin County (See Figure 12-26 for general project location). The objective of the Bald Point State Park project is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving the existing visitor areas. The restoration work proposed includes construction of a visitor day-use area with picnic pavilions, boardwalks, restroom and aerobic treatment system and drainfield, and a boardwalk and floating dock for use as a canoe/kayak launch.

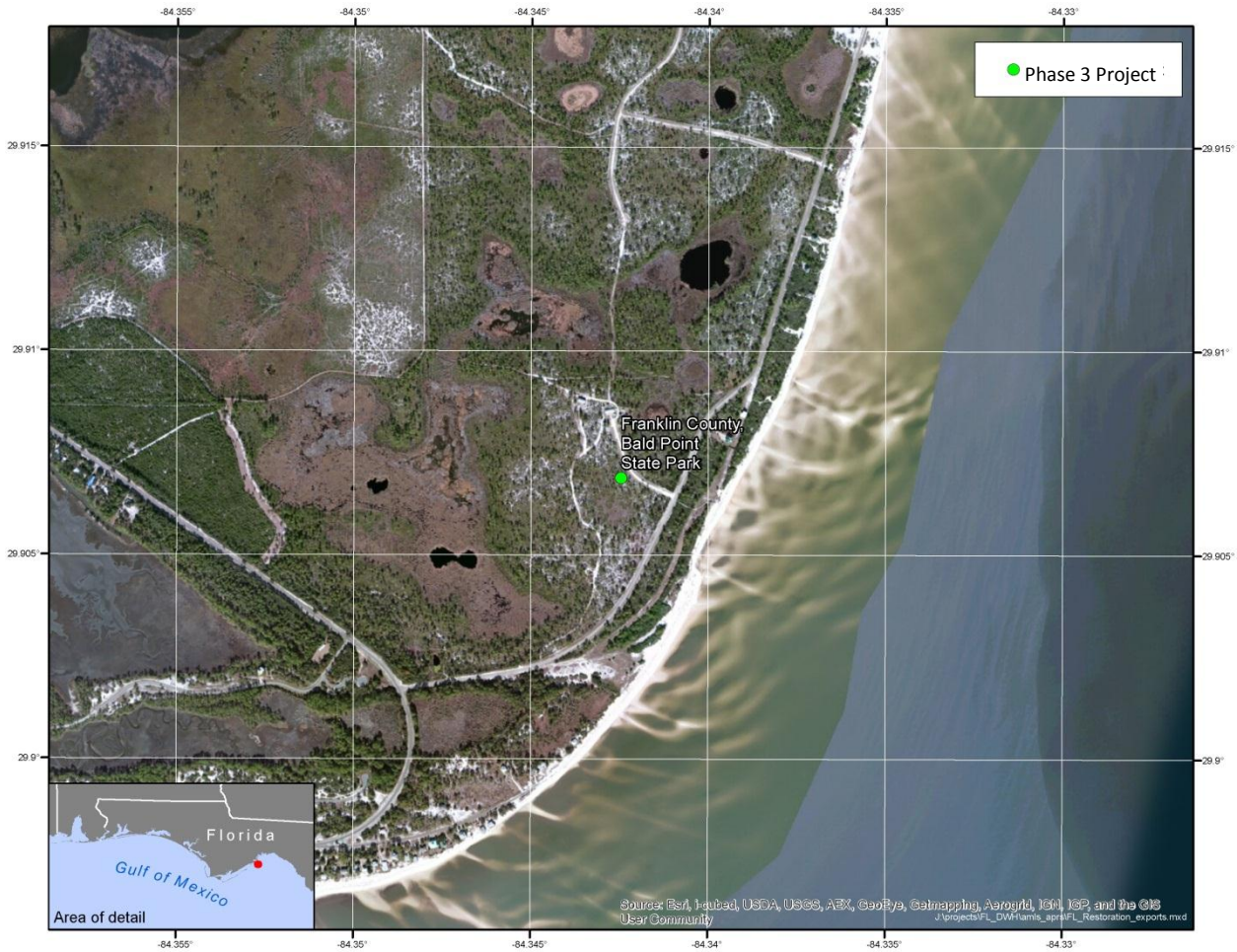

Figure 12-26. Location of Bald Point State Park Recreation Areas Project.

12.59.3 Evaluation Criteria

This proposed project meets the evaluation criteria established for OPA and the Framework Agreement. As a result of the Deepwater Horizon oil spill and related response actions, the public's access to and enjoyment of their natural resources along Florida's Panhandle was denied or severely restricted. The project would enhance and/or increase the public's use and/or enjoyment of natural resources, helping to offset adverse impacts to such uses caused by the Spill and related response activities. Thus, the nexus to resources injured by the Spill is clear. See 15 C.F.R. § 990.54(a)(2); and Sections 6a-6c of the Framework Agreement.

The project is technically feasible and uses proven techniques with established methods and documented results and can be implemented with minimal delay. Florida agencies have successfully completed projects of similar scope throughout Florida over many years. For these reasons, the project has a high likelihood of success. See 15 C.F.R. § 990.54(a)(3); and Section 6e of the Framework Agreement. Additionally, the cost estimates are based on similar past projects and therefore the project can be conducted at a reasonable cost. See 15 C.F.R. § 990.54(a)(1); and Section 6e of the Framework Agreement. Finally, this proposed project is not anticipated to negatively affect regional ecological restoration and is therefore not inconsistent with the long-term restoration needs of the State of Florida. See Section 6d of the Framework Agreement.

Many recreational use projects, including ones similar to this project have been submitted as restoration projects on the NOAA website (http://www.gulfspillrestoration.noaa.gov) and to the State of Florida (http://www.deepwaterhorizonflorida.com). In addition to meeting the evaluation criteria for the Framework Agreement and OPA, the Bald Point State Park Recreation Areas project also meets the State of Florida's additional criteria that Early Restoration projects occur in the 8-county panhandle area that was impacted by SCAT and response activities, including boom deployment.

12.59.4 Performance Criteria, Monitoring and Maintenance

As part of the project cost, monitoring will be conducted to ensure project plans and designs were correctly implemented. Monitoring has been designed around the project goals and objectives. The project objective is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving the existing visitor areas. Performance monitoring will evaluate: 1) the construction of the picnic pavilions; 2) the construction of the boardwalks; 3) the construction of a restroom and aerobic treatment system and drainfield; and 4) the construction of a boardwalk and floating dock for use as a canoe/kayak launch. Specific success criteria include: 1) the completion of the construction as designed and permitted, and 2) enhanced and/or increased access is provided to natural resources, which will be determined by observation that the visitor area is open and available.

Long term maintenance of the improved facilities will be completed by Bald Point State Park staff as part of their regular public facilities maintenance activities. Corrective actions necessary after completion and signoff of the project will also be undertaken by park staff. Funding for this post-construction maintenance is not included in the project cost estimate and will be assumed by Bald Point State Park.

During and following the post construction performance monitoring period, the State of Florida park staff will monitor the recreational use activity at the site. Park staff keeps track of visitation and usage at the park and will provide visitation numbers by the month. This use information is kept by the Florida Department of Environmental Protection.

12.59.5 Offsets

The Trustees and BP negotiated a BCR of 2.0 for the proposed recreational use project. NRD Offsets are $941,600 expressed in present value 2013 dollars to be applied against the monetized value of lost recreational use provided by natural resources injured in Florida, which will be determined by the Trustees' assessment of lost recreational use for the Oil Spill. Please see Chapter 7 of this document (Section 7.2.2) for a description of the methodology used to develop monetized Offsets.[11]

12.59.6 Costs

The total estimated cost to implement this project is $470,800. This cost reflects current cost estimates developed from the most current information available to the Trustees at the time of the project negotiation. The cost includes provisions for planning, engineering and design, construction, monitoring, and contingencies.

[11] For the purposes of applying the NRD Offsets to the calculation of injury after the Trustees' assessment of lost recreational use for the Spill, the Trustees and BP agree as follows:

- The Trustees agree to restate the NRD Offsets in the present value year used in the Trustees' assessment of lost recreational use for the Spill.
- The discount rate and method used to restate the present value of the NRD Offsets will be the same as that used to express the present value of the damages.

12.60 Bald Point State Park Recreation Areas: Environmental Review

The Florida Park Service (FPS) and the Florida Department of Environmental Protection (FDEP) propose to install improvements to the currently existing and utilized Bald Point State Park located in Franklin County, Florida. The park features waterfront access for swimming, sunbathing, fishing, canoeing, kayaking, and upland activities such as hiking and wildlife viewing.

The proposed project would provide improvements to visitor recreation areas within the park. The project would feature construction of a visitor day-use area that includes picnic pavilions, boardwalks, a restroom, an aerobic treatment system and associated septic system drainfield, a floating dock, and a canoe/kayak launch. The placement of these items would be determined once the project has final design plans.

12.60.1 Introduction and Background

In April 2011, the Natural Resource Trustees (Trustees) and BP Exploration and Production, Inc. (BP) entered into the Framework Agreement for Early Restoration Addressing Injuries Resulting from the *Deepwater Horizon* Oil Spill (Framework Agreement). Under the Framework Agreement, BP agreed to make $1 billion available for Early Restoration project implementation. The Trustees' key objective in pursuing Early Restoration is to achieve tangible recovery of natural resources and natural resource services for the public's benefit while the longer-term injury and damage assessment is under way. The Framework Agreement is intended to expedite the start of restoration in the Gulf of Mexico in advance of the completion of the injury assessment process. Early restoration is not intended to, and does not fully address all injuries caused by the Spill. Restoration beyond Early Restoration projects would be required to fully compensate the public for natural resource losses from the Spill.

Pursuant to the process articulated in the Framework Agreement, after public review of a draft, the Trustees released a Phase I Early Restoration Plan (ERP) in April 2012. In December 2012, after public review of a draft, the Trustees released a Phase II ERP. On May 6, 2013, NOAA issued a public notice in the Federal Register on behalf of the Trustees, announcing the development of additional future Early Restoration projects for a Draft Phase III Early Restoration Plan (ERP).

This park improvement in Franklin County was submitted as an Early Restoration project on the NOAA website (http://www.gulfspillrestoration.noaa.gov) and submitted to the State of Florida. In addition to meeting the evaluation criteria for the Framework Agreement and Oil Pollution Act (OPA), the project meets Florida's criteria that Early Restoration projects occur in the eight-county panhandle area that deployed boom and was affected by the Spill.

12.60.2 Project Location

Bald Point State Park is located on the east end of St. James Island. The park can be accessed from County Road 370 via US Highway 98 (FDEP 2006) (Figure 12-27).

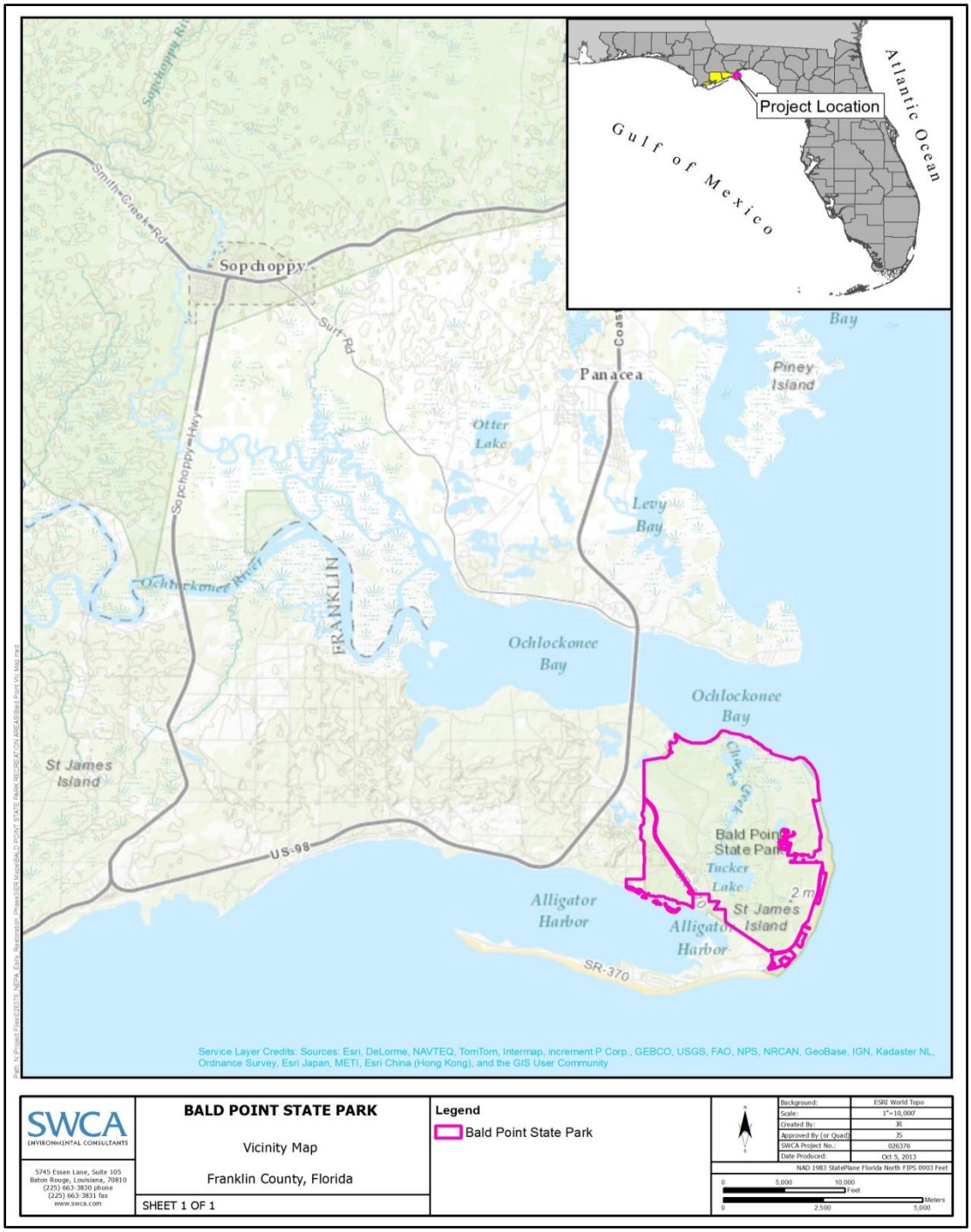

Figure 12-27. Bald Point State Park is located in Franklin County, Florida.

12.60.3 Construction and Installation

There are multiple project components associated with the park improvements that would be spread out within the park, generally in upland areas. There would be multiple picnic pavilions installed and the locations of these installations would be determined once the final project plans are approved. Factors that would be taken into account during the design process include the avoidance of sensitive or protected habitat, sensitive or protected species, and cultural resources. The same holds true for the construction of a restroom and associated installation of the aerobic treatment system and drainage field, and the boardwalks.

The floating dock and boat/kayak launch would be located along Chaires Creek. The conceptual project plans call for an L-shaped structure constructed of approved materials. All aspects of the floating dock and boardwalk, including the spacing of the boards, would be reviewed as part of the project plans. The floating portion of the dock would run from southwest to northeast; the upland portion of the dock/boardwalk would run from northwest to southeast. The design for the pilings would be delineated in the final project design as would the piling size, material, and number of pilings. In total, the floating portion of the dock would encompass 520 square feet.

In order to install the piers that support the floating dock and associated boardwalk, approximately 23 cubic yards of material would be excavated from Chaires Creek. The in-water work is limited to the installation of the floating dock and piers. It is planned that this work would take approximately 12 to 18 months. This time period would encompass all aspects of the project work, from the initiation of the permit application to the completion of the construction. The actual time spent working in the water would be limited.

12.60.4 Operations and Maintenance

Long-term maintenance of the various park improvements would be performed by Bald Point State Park staff and the Florida Park Service. During the construction process, areas may be monitored and subjected to site visits as needed.

12.60.5 Affected Environment and Environmental Consequences

Under the National Environmental Policy Act, federal agencies must consider environmental effects of their actions that include, among others, impacts on social, cultural, and economic resources, as well as natural resources. The following sections describe the affected environment and environmental consequences of the project.

12.60.5.1 No action

Both OPA and NEPA require consideration of the No Action alternative. For this Draft Phase III ERP proposed project, the No Action alternative assumes that the Trustees would not pursue this project as part of Phase III Early Restoration.

Under No Action, the existing conditions described for the project site in the affected environment subsection would prevail. Restoration benefits associated with this project would not be achieved at this time.

12.60.5.2 Physical Environment

12.60.5.2.1 Geology and Substrates

Affected Resources

The park is located in the Gulf Coast Lowlands physiographic unit. Specifically, the park is located within the Apalachicola Coastal Lowlands. The topography of the area is mostly flat, but there are some areas with moderate rolling dunes and high rolling hills (FDEP 2006). The entirety of Bald Point State Park is classified as beach ridge and dune (Qdb) deposits of the Pleistocene and Holocene eras.

There are 16 soil types that have been identified within the park. These are identified in Table 12-24. These areas are composed of Spodosols and Entisols. Briefly, Spodosols are soils that are composed of mixtures of organic matter and aluminum, with or without iron. Entisols are soils that have little or no evidence of soil horizons (i.e., they lack stratigraphy).

Table 12-24. Soils identified within Bald Point State Park (from FDEP 2006).

SOIL NAME	
Beaches	Mandarin fine sand
Dirego and Bayvi soils, tidal	Duckston sand, occasionally flooded
Ridgewood sand, 0-5% slopes	Resota fine sand, 0-5% slopes
Corolla Sand, 0-5% slopes	Rutlege loamy fine sand, depressional
Dorovan-Pamlico complex, depressional	Rutlege fine sand
Hurricane sand	Scanton fine sand
Ortega fine sand, 0-5% slopes	Pickney-Pamlico complex, depressional
Kershaw sand, 5-12% slopes	Water
Leon sand	

Environmental Consequences

A range of hand tools and mechanized equipment would likely be used to complete construction and improvements to the state park. There are ground disturbing activities associated with each of the project components; these activities are local and specific to the particular project elements (such as the installation of a picnic pavilion or restroom). Furthermore, with the exception of the removal of soils from Chaires Creek (which would be permitted separately by USACE), the ground disturbance would be limited to the upper soils and would not likely exceed 3 to 5 feet in depth. Once construction is complete in a particular area, there would no longer be any disturbance to soils or geology in the area.

The effect to soils and geology would be minor and short term with no known adverse impacts. Disturbance to geologic features or soils would be detectable, but would be small and localized. There would be no changes to local geologic features or soil characteristics. Erosion and/or compaction would occur in localized areas.

12.60.5.2.2 Hydrology and Water Quality

Affected Resources

The waters surrounding the park area located on Bald Point.

Hydrology

The project area is situated on Bald Point, which is surrounded by water. These waters are designated as the Ochlockonee Bay, Apalachee Bay, Alligator Harbor, and the Gulf of Mexico. In addition to these waterbodies, there are several smaller creeks, drainages, and lakes within the park.

The park is underlain by the Floridian Aquifer; this aquifer is the source of most of the public water for Franklin County. In addition to the large, named waterbodies, there are numerous natural wetlands and drainages located in the park. These include estuarine tidal marsh, flatwoods lakes, depressional marsh, and marsh lakes. Chaires Creek is nearly 7 miles in length and is connected to an extensive estuarine tidal system. The largest lake in the park is Tucker Lake. Tucker Lake is drained by Chaires Creek. Chaires Creek was dredged in the past to connect it to Lake Tucker. This dredged area is narrow and shallow. Additional small-scale dredging was conducted to connect Little Tucker Lake to the western portion of Chaires Creek. Little Tucker Lake is very deep, nearly 60 feet, and has a sharp drop-off (FDEP 2006).

Water Quality

The waters surrounding Bald Point are designated as a Class II Shellfish Harvesting Area. They have excellent water quality and the waters of the bay are tested regularly. The Alligator Harbor Aquatic Preserve is designated as an Outstanding Florida Water; this area is located just southwest of the park.

Floodplains

The project is located in multiple flood zones. Portions of the park are located in the 100-year floodplain (Zones A and AE), the 500-year floodplain (Zone X), and high velocity flood zone (VE) (FIRM Nos. 12037C0305E, 12037C0292E, 12037C0311E, 12037C0312E, 12037C0313E, 12037C0312E). The base flood elevations range from 10 to 17 feet above mean sea level (AMSL). Project plans are not yet finalized, so it is unclear which facilities would be constructed in the various flood zones.

Wetlands

Within Bald Point State Park there are multiple and various types of wetlands. The National Wetlands Inventory Mapper shows that there are areas of freshwater emergent wetlands, freshwater forested/shrub wetlands, estuarine and marine wetlands, and estuarine and marine deep waters present within the park (USFWS 2013).

Environmental Consequences

The project plans for the park improvements have not yet been finalized. However, careful consideration would be given to the design of the park improvements to have the least effect on waters and wetlands within the park.

The effect on hydrology would be measurable, but it would be small and localized. As the project plans are not yet finalized, all efforts would be made to design the project elements to have the least effect possible on the local hydrology.

Most of the project elements would be constructed in upland areas away from beaches and water bodies. The exception is the floating boat/kayak launch. The final project plans for the floating dock have not been completed; therefore the size of the pilings and method of installation have not yet been determined. During the construction of the floating dock, sandy soils would be disturbed as the

piers/pilings were placed in the water. Additionally, there would be approximately 23 cubic yards of soils removed from the area where the dock would be constructed. A USACE permit for the construction of the floating dock and associated soil removal is required; all conditions of this permit would be followed during the in-water construction period. After the floating dock is installed, there would be additional human activity in Chaires Creek. There would be a long-term, minor effect to water quality in the area as there would be some minor turbidity associated with the launching of human-powered kayaks or canoes. This would result in a detectable change to water quality, but the change would be expected to be small and localized. Impacts would quickly become undetectable. State water quality standards as required by the Clean Water Act would not be exceeded. The FDEP Wetland and Environmental Resource Field permits require the implementation of best management practices for turbidity and erosion.

All dredging activities would be done in compliance with FDEP and USACE permit conditions. These would typically include the following:

- Taking measures to prevent spoil material from entering waters of the state
- Monitoring turbidity at the dredge and spoil disposal sites
- Taking immediate corrective actions if a disposal site leaks or breaks
- After recontouring, replanting vegetation of the size, densities, and species as is present in the adjacent areas if the area dredged is vegetated

The project area is classified as multiple floodplain zones; these include the A, AE, VE, and X zones. Impacts may result in a detectable change to natural and beneficial floodplain values, but the change would be expected to be small and localized. There would be no appreciable increased risk of flood loss, including impacts on human safety, health, and welfare.

There are multiple wetland areas throughout Bald Point State Park. The construction of the floating dock and associated boardwalk is a previously permitted project and all construction activities associated with the dock would comply with the appropriate federal laws. The remaining project elements (picnic pavilions, restroom, aerobic treatment system and drainfield) have not been permitted. During the construction of these project elements, the effect on wetlands would be measurable but small in terms of area and the nature of the impact. A small impact on the size, integrity, or connectivity would occur; however, wetland function would not be affected and natural restoration would occur if left undisturbed. Final design plans have not yet been completed for these project elements. Consideration would be given to the location of wetlands and the siting of project elements during the design process.

Construction activities would use best management practices and are anticipated to last 12 to 18 months from the time the permit process is initiated to the completion of construction. The calendar year timing would depend on the timing of funding availability and the contract award along with any permit constraints required as a result of listed species considerations. BMPS may include, but would not necessarily be limited to the following:

- Installation of floating turbidity barriers
- Installation of erosion control measures along the perimeter of all work areas

- Stabilization of all filled areas with sod, mats, barriers, or a combination
- Storing and fueling vehicles away from aquatic areas
- Re-vegetation of exposed soils when construction activities are complete

12.60.5.2.3 Air Quality and Greenhouse Gas Emissions

Affected Resources

The current air quality index in the project area is good in terms of both National Ambient Air Quality Standards and CO_2 emissions. Air quality within the Florida panhandle is in attainment with the National Ambient Air Quality Standards (http://www.epa.gov/airquality/urbanair/sipstatus/reports/fl_areabypoll.html).

Project plans have not been finalized for this project. As such, it is unclear what equipment would be used and the duration of use for that equipment. The following table provides greenhouse gas emissions estimates for a variety of construction and transportation equipment that may be used for the construction of park improvements. Each of these emissions is based on use of the heavy equipment over an 8-hour day (Table 12-25).

Table 12-25. Greenhouse gas emissions for various mechanized equipment.

EQUIPMENT DESCRIPTION[1]	TOTAL HOURS USED	CO_2 FACTOR: MT*/ 100HRS	CO_2 (MT)[2]	CH_4 FACTOR-MT/100HRS	CH_4 (MT)[3]	N_2O FACTOR-MT/100HRS	N_2O (MT)	TOTAL CO_2 (MT)
Dump Tucks / Flatbed Truck[4]	216	1.7	3.70	0.5	1.08	7.2	15.55	20.336
Concrete Trucks	24	1.7	0.40	0.5	0.12	7.2	1.72	2.248
Pickup Trucks[5]	2304	1.1	25.34	0.35	8.06	4.4	10.13	43.53
Bobcat (bare and w/ auger mount)	480	2.65	12.72	0.9	4.32	10.6	50.88	67.92
Trackhoe (w/ Bucket/ Thumb or Vibratory Attachments)	24	2.55	0.61	0.85	0.2	10.2	2.44	3.252
Dozer	24	2.25	0.54	0.65	0.16	1.08	0.26	0.96
Total	**4131**							**138.24**

*mt = metric tons

[1] Emissions assumptions for all equipment based on 8 hours of operation

[2] CO_2 emissions assumptions for diesel and gasoline engines based on EPA 2009

[3] CH_4 and NOx emissions assumptions and CO_2e calculations based on EPA 2011

[4] Construction equipment emission factors based on USEPA NONROAD emission factors for 250hp pieces of equipment. Data was accessed through the California Environmental Quality Act Roadway Construction Emissions Model

[5] Emissions assumptions for an 8-cylinder, 6.2-liter gasoline engine Ford F150 pickup based on DOE 2013 and 18 gallon (half-tank) daily fuel consumption.

Environmental Consequences

Project implementation would require the use of some mechanized equipment that could temporarily lead to air pollution from equipment exhaust. Project plans have not yet been finalized for the various park improvements. However, available best management practices would be employed to prevent, mitigate, and control potential air pollutants during project implementation. Any minor pollution that does occur would be localized and short in duration. No air quality related permits would be required. Adverse impacts to air quality would be minor.

12.60.5.2.4 Noise

Affected Resources

Existing ambient noise levels within the park are generally low and predominantly result from daily recreational activities. Noise can be defined as unwanted sound and noise levels, and its effects are interpreted in relationship to effects on nearby visitors to the recreational areas and wildlife in the project vicinity. The Noise Control Act of 1972 (42 U.S.C. 4901 to 4918) was enacted to establish noise control standards and to regulate noise emissions from commercial products such as transportation and construction equipment. The standard measurement unit of noise is the decibel (dB), which represents the acoustical energy present. Noise levels are measured in A-weighted decibels (dBA), a logarithmic scale which approaches the sensitivity of the human ear across the frequency spectrum. A 3-dB increase is equivalent to doubling the sound pressure level, but is barely perceptible to the human ear. Table 12-26 shows typical noise levels for common sources expressed in dBA. Noise exposure depends on how much time an individual spends in different locations.

Table 12-26. Common noise levels.

NOISE SOURCE OR EFFECT	SOUND LEVEL (DBA)
Rock-and-roll band	110
Truck at 50 feet	80
Gas lawnmower at 100 feet	70
Normal conversation indoors	60
Moderate rainfall on foliage	50
Refrigerator	40
Bedroom at night	25

Source: Adapted from BPA 1986, 1996

Noise levels in the project areas vary depending on the season, time of day, number, types of noise sources, and distance from noise sources. Existing sources of noise in the project area are from vehicles, recreational boating, overhead aircraft, and ambient natural sounds such as wind, waves, and wildlife.

Environmental Consequences

Machinery and equipment used during construction would generate noise. This noise may disturb wildlife and humans using the area but would be kept to a minimum using best management practices. Once built, the proposed project would not cause long-term noise impacts. Adverse impacts from noise would be minor and short term.

12.60.5.3 Biological Environment

There are 13 distinct natural communities along with ruderal and developed areas located within the park (FDEP 2006). Each of these natural communities hosts a variety of animal and plant species.

Living Coastal and Marine Resources

Wildlife Habitat

Affected Resources

All of the project work with the exception of the floating boat dock would take place in a terrestrial environment. Terrestrial species known to reside in the park include, but are not limited to bald eagles, osprey, migrating falcons, deer, bear, raccoon, opossums, bobcats, foxes, other migrating birds, reptiles, and amphibians (FDEP n.d.).

Environmental Consequences

Most of the proposed project would be constructed within an upland environment. Only one project element would be constructed in the water, i.e., the floating boat dock. The proposed action has been evaluated for potential short- and long-term impacts to state and federally listed threatened and endangered species that can occur within and adjacent to the project areas, based on available suitable habitat and restoration goals.

A floating dock and associated boardwalk is planned that has in-water work associated with it. However, there is an existing USACE permit for this portion of the project; all conditions and mitigation measures contained in the permit would be followed for installation of the floating boat dock/kayak launch. No submerged aquatic vegetation, which is habitat for species such as manatees, sea turtles, or invertebrates, is present at the site and it was determined that fish and wildlife resources would most likely be only minimally impacted (FDEP 2006)

Vegetation

Affected Resources

Within Bald Point State Park, there are more than 360 varieties of plants (FDEP n.d.). A review of the General Map of Natural Vegetation (Davis 1967) shows that the park has both Sand Pine (*Pinus clausa*) scrub forests and forests of Long leaf pine (*Pinus palustris*) and Xerophhytic oaks. The park is described has having coastal marshes, pine flat woods, and oak thickets. A list of natural communities is found in Table 12-27. A list of federally designated threatened, endangered, and candidate plant species known or believed to occur in Franklin County can be found in Table 12-28.

There are four listed plant species that occur within the park as described in the park's management plan (FDEP 2006). These include Geoffrey's blazing star (Liatris provincialis), large-leaved jointweed (Polygonella macrophylla), spoon-leaf sundew (Drosera spatulata), and bent golden aster (Pityopsis flexuosa).

Table 12-27. Natural communities within Bald Point State Park (FEDP 2006).

NATURAL COMMUNITIES	ACRES
Beach Dune	57.59
Maritime Hammock	15.43
Mesic Flatwoods	1553.25
Scrub	163.05
Scrubby Flatwoods	935.54
Basin Marsh	245.48
Basin Swamp	319.5
Baygall	44.28
Depression Marsh	68.31
Wet Flatwoods	447.83
Flatwood/Prairie Lake	255.03
Marsh Lake	21.9
Estuarine Tidal Marsh	707.32
Ruderal	3.35
Developed	21.42

Geoffrey's blazing star is an endangered plant known to be present within the park (park brochure). This plant is a flowering aster that is limited to Wakulla and Franklin Counties; its habitat is limited to the areas between Lighthouse Point and Peninsular Point. The plant grows in scrub and sandhill environments and prefers open space. As the species is rare and limited to coastal dunes, habitat would be protected by limited disturbance in areas where the plant grows (NatureServe Explorer 2013).

Large-leaved jointweed is found in both Florida and Alabama. It is a slender perennial with a woody base and herbaceous stems. Its preferred habitat includes open, unshaded sand dunes and scrub ridges near the coast (NatureServe Explorer 2013b).

Spoon-leaf sundew is a carnivorous plant that grows in bogs and wet, sandy shorelines. This plant can survive long periods of submersion (USDA 2013).

Table 12-28. Protected plant species within Bald Point State Park (from FDEP 2006).

RESOURCE CATEGORY	COMMON NAME	SCIENTIFIC NAME	USFWS STATUS	STATE STATUS	NATURAL COMMUNITIES
Plants	Bent golden aster	*Pityopsis flexuosa*		E	• Terrestrial: sandhill, upland pine forest, ruderal
Plants	Florida beargrass	*Nolina atopocarpa*		T	• Terrestrial: mesic flatwoods grassy areas
Plants	Florida skullcap	*Scutellaria floridana*	T	E	• Palustrine: seepage slope, wet flatwoods, grassy openings • Terrestrial: mesic flatwoods
Plants	Godfrey's (violet) butterwort	*Pinguicula ionantha*	T	E	• Palustrine: wet flatwoods, wet prairie, bog; in shallow water • Riverine: seepage slope; in shallow water. • Also, roadside ditches and similar habitat.
Plants	Geoffrey's blazing star	*Liatris provincialis*		E	• Terrestrial: sandhill, scrub, coastal grassland; disturbed areas
Plants	Gulf coast lupine	*Lupinus westianus*		T	• Terrestrial: beach dune, scrub, disturbed areas, roadsides, blowouts in dunes
Plants	Harper's beauty	*Harperocallis flava*	E	E	• Palustrine: wet prairie, seepage slope, roadsides, edges of titi swamps
Plants	Harper's grooved yellow flax	*Linum sulcatum var. harperi*		T	• Palustrine: wet flatwoods • Terrestrial: mesic flatwoods; in site-prepped areas
Plants	Harper's yellow-eyed grass	*Xyris scabrifolia*		T	• Palustrine: seepage slope, wet prairie, bogs
Plants	Hooded pitcher plant	*Sarracenia minor*		T	• Palustrine: wet flatwoods, wet prairie, seepage slope
Plants	Hummingbird flower	*Macranthera flammea*		E	• Palustrine: seepage slope, dome swamp edges, floodplain swamps • Riverine: seepage stream banks • Terrestrial: seepage slopes
Plants	Large-flowered grass of parnassus	*Parnassia grandifolia*		E	• Palustrine: dome swamp margins, seepage slope • Riverine: spring-run stream edge • Terrestrial: mesic flatwoods
Plants	Large-leaved jointweed	*Polygonella macrophylla*		T	• Terrestrial: scrub, sandpine/oak scrub ridges
Plants	Meadowbeauty	*Rhexia parviflora*		E	• Palustrine: dome swamp margin, seepage slope, depression marsh; on slopes; with hypericum
Plants	Panhandle spiderlily	*Hymenocallis henryae*		E	• Palustrine: dome swamp edges, wet prairie, wet flatwoods, baygall edges, swamp edges • Terrestrial: wet prairies and flatwoods
Plants	Parrot pitcher plant	*Sarracenia psittacina*		T	• Palustrine: wet flatwoods, wet prairie, seepage slope
Plants	Pinewoods aster	*Eurybia spinulosus*		E	• Palustrine: seepage slope • Terrestrial: sandhill, scrubby and mesic flatwoods
Plants	Scare-weed	*Baptisia simplicifolia*		T	• Terrestrial: mesic flatwoods, sand hill; on disturbed sites

RESOURCE CATEGORY	COMMON NAME	SCIENTIFIC NAME	USFWS STATUS	STATE STATUS	NATURAL COMMUNITIES
Plants	Southern milkweed	*Asclepias viridula*		T	• Palustrine: wet prairie, seepage slope edges • Riverine: seepage stream banks • Terrestrial: mesic flatwoods, drainage ditches
Plants	Southern red lily	*Lilium catesbaei*		T	• Palustrine: wet prairie, wet flatwoods, seepage slope • Terrestrial: mesic flatwoods, seepage slope; usually with grasses
Plants	Spoon-leaved sundew	*Drosera spatulata*		T	• Lacustrine: sinkhole lake edges Palustrine: seepage slope, wet flatwoods, depression marsh • Riverine: seepage stream banks, drainage ditches
Plants	Sweet shrub	*Calycanthus floridus*		E	• Terrestrial: upland hardwood forest, slope forest, bluffs • Palustrine: bottomland forest, stream banks, floodplains
Plants	Telephus spurge	*Euphorbia telephioides*	T	E	• Terrestrial: mesic flatwoods; disturbed wiregrass (Aristida stricta) areas, coastal scrub. • All known sites are within 4 miles of Gulf of Mexico.
Plants	Thick-leaved water-willow	*Justicia crassifolia*		E	• Palustrine: dome swamp, seepage slope • Terrestrial: mesic flatwoods
Plants	Tropical waxweed	*Cuphea aspera*			• Palustrine: wet prairie, seepage slope • Terrestrial: mesic flatwoods
Plants	West's flax	*Linum westii*		E	• Palustrine: dome swamp, depression marsh, wet flatwoods, wet prairie, pond margins
Plants	White birds-in-a nest	*Macbridea alba*	T	E	• Palustrine: seepage slope • Terrestrial: grassy mesic pine flatwoods, savannahs, roadsides, and similar habitat
Plants	White-top pitcher plant	*Sarracenia leucophylla*		E	• Palustrine: wet prairie, seepage slope, baygall edges, ditches
Plants	Wiregrass gentian	*Gentiana pennelliana*		E	• Palustrine: seepage slope, wet prairie, roadside ditches • Terrestrial: mesic flatwoods, planted slash pine
Plants	Yellow butterwort	*Pinguicula lutea*		T	• Palustrine: flatwoods, bogs
Plants	Yellow fringeless orchid	*Platanthera integra*		E	• Palustrine: wet prairie, seepage slope • Terrestrial: mesic flatwoods

E=endangered, T=threatened

Bent golden aster is found in various places within the Florida panhandle and is a fibrous, rooted perennial with a flexible stem. Its habitat is threatened due to the expansion of residential homes and pine plantations (NatureServe Explorer 2013c).

A review of Florida's Efficient Transportation Decision Making tool indicates that while submerged marine aquatic vegetation (corals, seagrasses) are present off the coastline, they are not present within the park (FDOT 2013d). There is potential for other submerged aquatic vegetation to be present in some of the lakes within the park, notably Tucker Lake, Little Tucker Lake, Sand Pond, and Western Mullet Pond.

Environmental Consequences

There are multiple, small construction events associated with this project. During the construction of the various picnic pavilions, the restrooms, the aerobic treatment system/drainfield, and the boardwalks vegetation would be disturbed in order to complete the construction.

Construction of the facilities would require the permanent removal of vegetation within the affected areas. The use of equipment and disturbance of soil and existing vegetation would also introduce a risk of noxious weed or invasive vegetation species introduction. Over all, impacts on native vegetation from the construction effort may be detectable, but would not alter natural conditions and would be limited to localized areas. Infrequent disturbance to individual plants could be expected, but without affecting local or range-wide population stability. Infrequent or insignificant one-time disturbance to locally suitable habitat could occur, but sufficient habitat would remain functional at both the local and regional scales to maintain the viability of the species.

Improvement to the park would likely bring in additional visitors. The additional human presence in the park may pose a long-term, minor effect to vegetation in the park. The more people who enter the park, the greater the likelihood that humans would trample, pick, or otherwise disturb plants. These events would occur in areas where new construction takes place. Impacts on native vegetation in the immediate vicinity of the new park improvements would be measureable but limited to local and adjacent areas. Occasional disturbance to individual plants could be expected. These disturbances could affect local populations negatively, but would not be expected to affect regional population stability. Some impacts might occur in key habitats, but sufficient local habitat would retain functionality to maintain the viability of the species both locally and throughout its range.

Due to the prevalence of both weeds and rare plants in the park, preconstruction vegetation surveys and pre/post-construction weed treatments would likely be required. Precautions would be taken to avoid colonies of Geoffrey's blazing star plants, which are listed as endangered in Florida. Project plans for the park improvements have not yet been completed. Therefore, the presence of threatened or endangered plants would be considered during the design phase of the project, including avoidance and minimization of impacts wherever feasible. Care would be also be taken to site any park improvements where disturbance to vegetation would be minimized.

Soil disturbance may encourage the encroachment of invasive or nuisance species. Those undeveloped areas disturbed during construction would be monitored and invasive species removed.

Marine and Estuarine Fauna (fish, shell beds, and benthic organisms)

Affected Resources

As most of the project wor would take place in the uplands and because the passage between Chaires Creek and Tucker Lake is a very narrow and shallow freshwater lake, it is not likely that marine species occur in the project area. However, the Gulf and Bay waters that surround Bald Point Park provide habitat for a multitude of marine species. Tucker Lake provides habitat to a multitude of common wildlife species and common bird species.

Environmental Consequences

A floating dock and associated boardwalk is planned for Chaires Creek. In-water work associated with this aspect would result in short-term impacts to common wildlife or fish present in the lake. These effects would be short term and minor. However, there is an existing USACE permit for this portion of the project; all conditions and mitigation measures contained in the permit would be followed for installation of the floating boat dock/kayak launch.

Protected Species

Protected species and their habitats include ESA-listed species and designated critical habitats, which are regulated by either the USFWS or the NMFS. Protected species also include marine mammals protected under the Marine Mammal Protection Act, essential fish habitat (EFH) protected under the Magnuson-Stevens Fishery Conservation and Management Act, migratory birds protected under the Migratory Bird Treaty Act (MBTA) and bald eagles protected under the Bald and Golden Eagle Protection Act (BGEPA).

Affected Resources

The federally listed threatened and endangered species reported for the project area in Franklin County include five species of sea turtles, West Indian manatee, piping plover (*Charadrius melodus*), and one proposed species, the red knot (*Calidris canutus rufa*) (USFWS 2013). Other State-listed threatened species reported to occur within the project areas are addressed below, under State-Listed Species (Table 12-29).

Sea Turtles and Marine Mammals

There are five species of endangered or threatened sea turtles that may occur or have potential to occur within the project areas. These include green turtle, hawksbill turtle, Kemp's ridley turtle, leatherback turtle, and loggerhead turtle. Sea turtles forage in the waters of the coastal Florida panhandle region and have potential to occur within the waters where in-water work is proposed. The project site contains potentially suitable sea turtle nesting habitat along the sandy beaches on the edges of the park adjacent to the bays.

The endangered West Indian manatee has the potential to occur in the project area waters. Manatees typically seek out shallow seagrass areas as preferred feeding habitat. Additionally, bottlenose dolphins (*Tursiops*) populations are known to migrate into bays, estuaries, and river mouths and could be located in any of the proposed in-water project areas (NMFS 2013). Bottlenose dolphins have been observed entering and leaving Choctawhatchee Bay and on nearshore coastal waters (NMFS 2012).

Gulf Sturgeon

Gulf sturgeon are restricted to the Gulf of Mexico and its drainages, occurring primarily from the Mississippi River to the Suwannee River in Louisiana, Mississippi, Alabama, and Florida (NMFS 2009). Adult fish reside in rivers 8 to 9 months each year and in estuarine or Gulf waters during the 3 to 4 cooler months of each year (NMFS 2009). Important marine habitats include seagrass beds with sand and mud substrates (Mason and Clugston 1993).

Essential Fish Habitat

EFH is defined in the Magnuson-Stevens Fishery Conservation and Management Act as "those waters and substrates necessary to fish for spawning, breeding, feeding or growth to maturity." The designation and conservation of EFH seeks to minimize adverse effects on habitat caused by fishing and non-fishing activities. The NMFS has identified EFH habitats for the Gulf of Mexico in its Fishery Management Plan Amendments. These habitats include estuarine emergent wetlands, seagrass beds, algal flats, mud, sand, shell, and rock substrates, and the estuarine water column. The EFH within the project area include emergent wetlands, mud substrate, and estuarine water columns for species of fish, such as red drum, brown shrimp, pink shrimp, and white shrimp.

The area also provides habitat for prey species (e.g. Gulf menhaden, shad, croaker and spot) that are consumed by larger commercially important species. In addition, the area provides habitat for spotted seatrout, striped mullet, southern flounder, Atlantic croaker, and Gulf menhaden. Table 12-29 provides a list of the species that NMFS manages under the federally Implemented Fishery Management Plan in the vicinity of the Bald Point State Park site and Gulf of Mexico.

Piping Plover

The sandy beaches and shorelines adjacent to the project areas offer suitable foraging and resting habitat for the piping plover during the winter migratory season, and piping plover may forage in the shallow waters of the project areas. Natural shorelines in the proposed project vicinity provide suitable winter migration resting habitat for the piping plover. Piping plover wintering habitat includes beaches, mudflats, and sandflats, as well as barrier island beaches, and spoil islands (Haig 1992, as cited by USFWS 2013b). On the Gulf Coast, preferred foraging areas were associated with wider beaches, mudflats, and small inlets (USFWS 2013b).

No piping plover designated critical habitat is located within the park boundaries. However, piping plover critical habitat is located approximately 4 miles west, across Alligator Harbor (Figure 12-28).

Table 12-29. List of species managed by NMFS in vicinity of the project study area (NMFS EFH mapper, 2013).

MANAGEMENT UNIT / SPECIES	LIFESTAGE(S) FOUND AT LOCATION	FMP
Red Drum (*Sciaenops ocellatus*)	ALL	Red Drum
Highly Migratory Species		
Atlantic Sharpnose Shark	All	Highly Migratory Species
Blacktip Shark	All	
Bonnehead Shark	All	
Bull Shark	Juvenile, Adult	
Great Hammerhead Shark	All	
Lemon Shark	Adult	
Nurse Shark	Juvenile	
Scalloped Hammerhead Shark Bull Shark	Neonate, Juvenile	
Tiger Shark	Juvenile	
Shrimp		
Brown shrimp (*Penaeus aztecus*)	ALL	Shrimp
White shrimp (*Penaeus setiferus*)		
Pink shrimp (*Penaeus duararum*)		
Royal red shrimp (*Pleoticus robustus*)		
Rock Shrimp (*Sicyonia brevirostris*)		
Seabob Shrimp (*Xiphopenaeus kroyeri*)		
Coastal Migratory Pelagics		
King mackerel (*Scomberomorus cavalla)*	ALL	Coastal Migratory Pelagics
Spanish mackerel (*Scomberomorus maculatus*)		
Cobia (*Rachycentron canadum*)		
Dolphin (*Coryphaena hippurus*)		
Reef Fish		
Balistidae - Triggerfishes	ALL	Reef Fish
Gray triggerfish (Balistes capriscus)		
Carangidae - Jacks		
Greater amberjack (Seriola dumerili)		
Lesser amberjack (Seriola fasciata)		
Almaco jack (Seriola rivoliana)		
Banded rudderfish (Seriola zonata)		
Labridae - Wrasses		
Hogfish (Lachnolaimus maximus)		
Lutjanidae - Snappers		
Queen snapper (Etelis oculatus)		
Mutton snapper (Lutjanus analis)		
Blackfin snapper (Lutjanus buccanella)		
Red snapper (Lutjanus campechanus)		
Cubera snapper (Lutjanus cyanopterus)		
Gray (mangrove) snapper (Lutjanus griseus)		
Lane snapper (Lutjanus synagris)		
Silk snapper (Lutjanus vivanus)		
Wenchman (Pristipomoides aquilonaris)		
Vermilion snapper (Rhomboplites aurorubens)		
Malacanthidae – Tilefishes		
Goldface tilefish (Caulolatilus chrysops)		
Blueline tilefish (Caulolatilus microps)		

MANAGEMENT UNIT / SPECIES	LIFESTAGE(S) FOUND AT LOCATION	FMP
Golden Tilefish (Lopholatilus chamaeleonticeps)		
Serranidae – Groupers		
Speckled hind (Epinephelus drummondhayi)		
Yellowedge grouper (Epinephelus flavolimbatus)		
Red grouper (Epinephelus morio)		
Warsaw grouper (Epinephelus nigritus)		
Snowy grouper (Epinephelus niveatus)		
Nassau grouper (Epinephelus striatus)		
Black grouper (Mycteroperca bonaci)		
Yellowmouth grouper (Mycteroperca interstitialis)		
Gag (Mycteroperca microlepis)		
Scamp (Mycteroperca phenax)		
Yellowfin grouper (Mycteroperca venenosa)		

Table 12-30. Protected terrestrial species found in the area of Bald Point State Park.

RESOURCE CATEGORY	COMMON NAME	SCIENTIFIC NAME	USFWS STATUS	STATE STATUS	NATURAL COMMUNITIES
Amphibians	Frosted flatwoods salamander	*Ambystoma cingulatum*	T (CH)	T	• Palustrine: wet flatwoods, dome swamp, basin swamp • Terrestrial: mesic flatwoods (reproduces in ephemeral wetlands within this community)
Amphibians	Gopher frog	*Rana capito*		SSC	• Terrestrial: sandhill, scrub, scrubby flatwoods, xeric hammock (reproduces in ephemeral wetlands within these communities)
Birds	Arctic peregrine falcon	*Falco peregrinus tundrius*	MBTA		• Estuarine: winters along coasts Lacustrine: various • Palustrine: various • Terrestrial: various, ruderal
Birds	Bachman's sparrow	*Aimophila aestivalis*	MBTA		• Terrestrial: open pine-savannah, oak scrub, wet long leaf pine
Birds	Bald eagle	*Haliaeetus leucocephalus*	BGEPA		• Estuarine: marsh edges, tidal swamp, open water • Lacustrine: swamp lakes, edges Palustrine: swamp, floodplain Riverine: shoreline, open water • Terrestrial: pine and hardwood forests, clearings
Birds	Least tern	*Sterna antillarum*	MBTA	T	• Estuarine: various • Lacustrine: various • Riverine: various • Terrestrial: beach dune, ruderal. Nests commonly on rooftops.
Birds	Piping plover	*Charadrius melodus*	T (CH)	T	• Estuarine: exposed unconsolidated substrate • Marine: exposed unconsolidated substrate • Terrestrial: dunes, sandy beaches, and inlet areas. Mostly wintering and migrants.
Birds	Red knot	*Calidris canutus rufa*	P		• Estuarine: exposed unconsolidated substrate • Marine: exposed unconsolidated substrate • Terrestrial: dunes, sandy beaches, and inlet areas. Mostly wintering and migrants.
Birds	Red-cockaded woodpecker	*Picoides borealis*	E	E	• Terrestrial: mature pine forests
Birds	Reddish egret	*Egretta rufescens*	MBTA	SSC	• Estuarine: tidal swamp, coastal estuary • Marine: tidal flats, mud flats
Birds	Southeastern American kestrel	*Falco sparverius paulus*	MBTA	T	• Estuarine: various habitats • Palustrine: various habitats • Terrestrial: open pine forests, clearings, ruderal, various
Birds	Southeastern snowy plover	*Charadrius alexandrinus tenuirostris*	MBTA	T	• Estuarine: exposed unconsolidated substrate • Marine: exposed unconsolidated substrate • Terrestrial: dunes, sandy beaches, and inlet areas

RESOURCE CATEGORY	COMMON NAME	SCIENTIFIC NAME	USFWS STATUS	STATE STATUS	NATURAL COMMUNITIES
Birds	Wakulla seaside sparrow	*Ammodramus maritimus juncicolus*	MBTA	SSC	• Estuarine: tidal marsh • Marine: tidal marsh
Birds	Wood stork	*Mycteria Americana*	E	E	• Estuarine: marshes • Lacustrine: floodplain lakes, marshes (feeding),various Palustrine: marshes, swamps, various
Fish	Gulf sturgeon	*Acipenser oxyrinchus desotoi*	T (CH)	T	• Estuarine: various • Marine: various habitats Riverine: alluvial and blackwater streams
Mammals	Florida black bear	*Ursus americanus floridanus*			• Palustrine: titi swamps, floodplains Terrestrial: pine and hardwood forests
Mammals	Florida mouse	*Podomys floridanus*		SSC	• Terrestrial: scrub, sandhill, scrubby flatwoods
Mammals	Round-tailed muskrat	*Neofiber alleni*			• Estuarine: tidal marsh • Lacustrine: marsh lake, flatwoods/prairie lake • Palustrine: floodplain marsh, swale, depression marsh, basin marsh
Mammals	Southeastern big-eared bat	*Corynorhinus rafinesquii*			• Palustrine: various, floodplains • Terrestrial: pine and hardwood forests, ruderal, various
Reptiles	Alligator snapping turtle	*Macrochelys temminckii*		SSC	• Estuarine: tidal marsh • Lacustrine: river floodplain lake, swamp lake • Riverine: alluvial stream, black water stream
Reptiles	Barbour's map turtle	*Graptemys barbouri*		SSC	• Palustrine: floodplain stream, floodplain swamp • Riverine: alluvial stream
Reptiles	Eastern indigo snake	*Drymarchon couperi*	T	T	• Estuarine: tidal swamp • Palustrine: hydric hammock, wet flatwoods • Terrestrial: mesic flatwoods, upland pine forest, sand hills, scrub, scrubby flatwoods, rockland hammock, ruderal
Reptiles	Florida pinesnake	*Pituophis melanoleucus mugitus*		SSC	• Lacustrine: ruderal, sandhill upland lake • Terrestrial: flatwoods, xeric hammock, ruderal
Reptiles	Gopher tortoise	*Gopherus polyphemus*	C	T	• Terrestrial: sandhills, scrub, scrubby flatwoods, xeric hammocks, coastal strand, ruderal
Reptiles	Green turtle	*Chelonia mydas*	E	E	• Terrestrial: sandy beaches; nesting
Reptiles	Hawksbill turtle	*Eretmochelys imbricata*	E	E	• Marine: open water; no nesting
Reptiles	Kemp's ridley turtle	*Lepidochelys kempii*	E	E	• Terrestrial: sandy beaches; nesting
Reptiles	Leatherback turtle	*Dermochelys coriacea*	E	E	• Terrestrial: sandy beaches; nesting
Reptiles	Loggerhead sea turtle	*Caretta caretta*	T	T	• Terrestrial: sandy beaches; nesting

E=endangered, T-threatened, P=proposed, C=candidate, SSC=species of special concern, CH=Critical Habitat, BGEPA=Bald and Golden Eagle Protection Act, MBTA=Migratory Bird Treaty Act

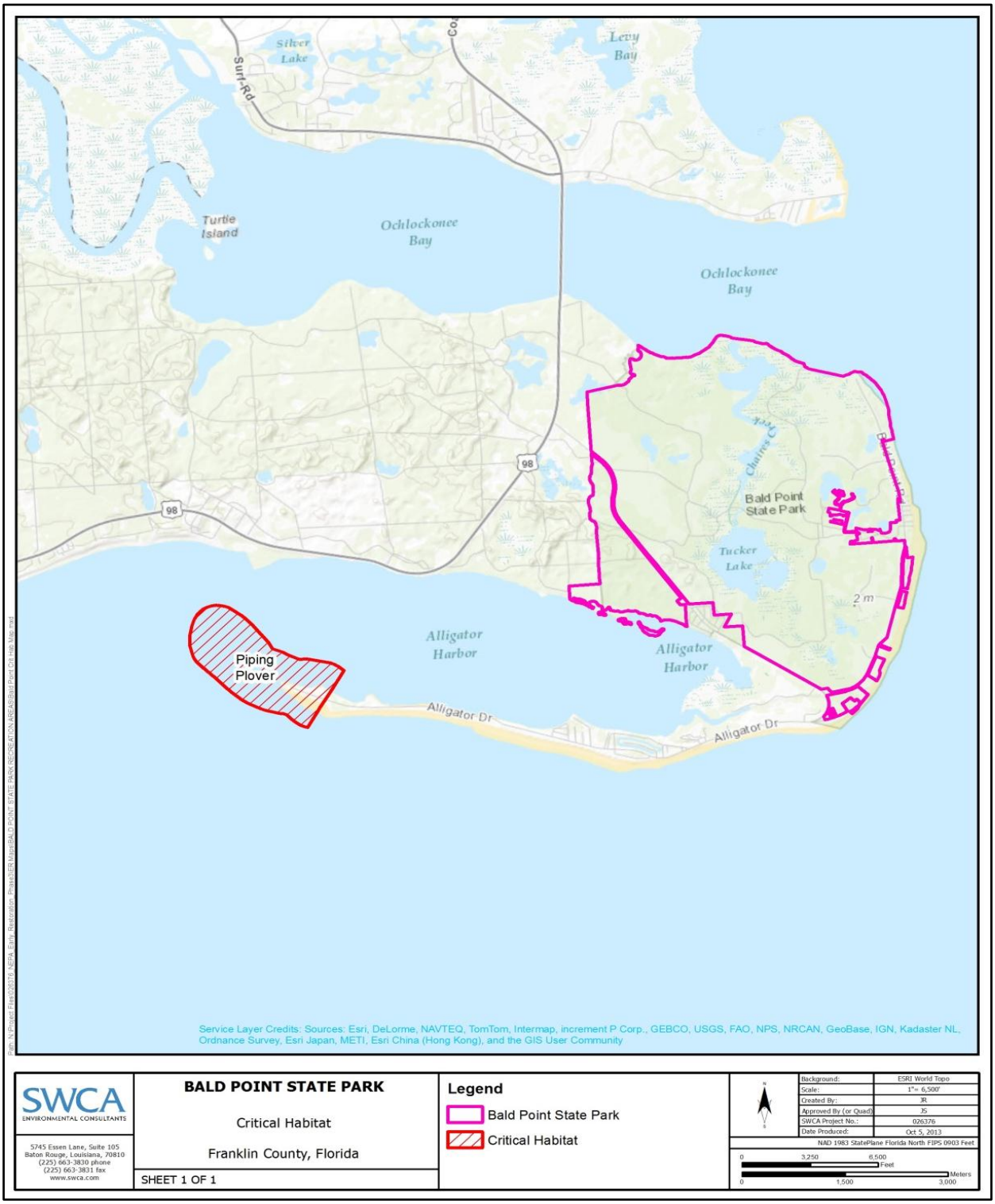

Figure 12-28. Essential habitat for Piping plover; habitat is outside of project area.

Eastern Indigo Snake (Federally listed)
The park also reports the presence of the Eastern indigo snake (*Drymarchon couperi*) (FDEP 2006). In north and central Florida, indigo snakes are found primarily in dry vegetation communities including scrub and pine flatwoods, where they utilize gopher tortoise burrows (Charlotte County, 2013). Although gopher tortoise burrows are especially important in northern Florida, where they are used by the indigo snake to keep warm during the winter and to keep cool and prevent dehydration in the summer. In wetter areas, and those areas that lack gopher tortoise burrows, indigo snakes use armadillo holes, hollow logs, or other holes for dens. Areas that have been cleared, including agricultural areas, are sometimes used by the indigo snake as long as debris piles are available.

Gopher Tortoise (Federal Candidate)
Gopher tortoises have been observed within the park (FDEP 2006). Gopher tortoises prefer upland environments with sandy soils and abundant vegetation, which is consistent with the higher elevation areas within the park. Both the animals and their burrows are protected (FWC 2012).

Red Knot
The red knot (*Calidris canutus rufa*), a federal proposed species, uses the State of Florida both for wintering habitat and migration stopover habitat for those individuals that continue to migrate down to specific wintering locations in South America (Niles et al. 2008). Wintering and migrating red knots forage along sandy beaches, tidal mudflats, salt marshes, and peat banks (Harrington 2001). Observations indicate that red knots also forage on oyster reef and exposed bay bottoms and roost on high sand flats, reefs, and other sites protected from high tides (Niles et al. 2008). In wintering and migration habitats, red knots commonly forage on bivalves, gastropods, and crustaceans. Threats to wintering and stopover habitat in Florida include shoreline development, hardening, dredging, deposition, and beach raking (Niles et al. 2008). Multiple red knots (including groups of 22 to 25 individuals) have been observed using habitat within the Park on several occasions (ebird.org).

State-Listed Birds, MTBA, and BGEPA
There are numerous Florida-listed bird species with potential for occurrence in and around the Bald Point State Park site. These include Arctic peregrine falcon (*Falco peregrinus tundrius*), least tern (*Sterna antillarum*), southeastern American kestrel (*Falco sparverius paulus*), Florida sandhill crane (*Grus canadensis pratensis*), American oystercatcher (*Haematopus palliates*), southeastern/Cuban snowy plover (*Charadrius alexandrinus tenuirostris*), piping plover (discussed above), and wood stork (*Mycteria Americana*). All migratory bird species are protected under the MBTA. The nesting season in Florida is from March 1 to August 1.

According to the Florida Fish and Wildlife Conservation Commission (FWC) Bald Eagle Nest Locater, there are two bald eagle nests within 5 miles of the project site. One is approximately 2 miles away and the other is just over 4 miles away (FWC 2012). The bald eagle was delisted by the USFWS and is not listed as threatened or endangered by the FWC. The bald eagle is, however, protected by state law pursuant to 68A-16, Fla. Admin. Code and by the U.S. government under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. Bald eagles feed on fish and other readily available

mammalian and avian species and are dependent on large, open expanses of water for foraging habitat. In Florida, conservation measures to protect active nest sites during nesting season must be considered to reduce potential disturbances of certain project activities. If bald eagles are found nesting within 660 feet of a proposed construction area, then activities would need to occur outside of nesting season or coordination with the USFWS would occur to determine if a permit is needed, and Florida's Bald Eagle Management Plan guidelines would be followed (FWC 2008).

State-Listed Wildlife

Florida Black Bear

The park provides habitat for the Florida black bear (*Ursus americanus floridanus*), which is a state threatened species (FDEP 2012b). The Florida black bear is a subspecies of the American black bear (Ursus americanus) that historically is present within most of Florida, Alabama, and Georgia. Bears are mainly solitary, however they congregate during mating season, which runs from June to August and cubs are born around late January or early February. The bears' preferred habitat includes sand-pine scrub, oak scrub, upland hardwood forests, and forested wetlands (FDEP 2006).

Environmental Consequences

The proposed project has been evaluated for potential short- and long-term impacts to state and federally listed threatened and endangered species that may occur within and adjacent to the project areas based on available suitable habitat and restoration goals. Descriptions of these evaluations are provided below.

Sea Turtles and Marine Mammals

Most of the park improvements are anticipated to be constructed in upland areas, not in the beach areas. However, if project elements were constructed in beach areas accessible to sea turtles that may also provide suitable nesting habitat, effects may occur. If construction or related activities is proposed in potentially suitable sea turtle nesting habitat, the project could avoid effects by limiting construction to outside the turtle nesting time (March to October). Assuming that project activities avoid beach areas that may provide suitable sea turtle nesting habitat, there would be no effect to sea turtles.

While it is not anticipated that any incidental harassment of marine mammals will occur as a result of this proposed project, the Trustees are conducting an evaluation of the expected magnitude and duration of underwater noise from the proposed construction techniques and their potential impacts on protected species, including marine mammals. The results of this analysis will be coordinated with NOAA's Office of Protected Resources to develop best management practices (e.g., avoidance measures, monitoring, alternate equipment) to avoid incidental harassment, or to seek incidental harassment authorization under the Marine Mammal Protection Act as appropriate. Additional coordination with NOAA under the Endangered Species Act would be conducted if any potential effects to sea turtles or other listed species are identified.

Essential Fish Habitat

Section 7 ESA consultations with the USFWS and NMFS will be initiated for the proposed project. EFH considerations would be coordinated with the NMFS Habitat Conservation Division through a formal EFH assessment process. If necessary, species specific measures would be recommended by NMFS and would be incorporated into the project construction plan. The project would not result in adverse, direct impacts to emergent wetlands, existing oyster reefs, or Submerged Aquatic Vegetation (SAV). Most motile fauna such as crab, shrimp, and finfish will likely avoid the area of potential effect during the construction process

The proposed canoe/kayak launch will be relatively small. A very small area of sub tidal habitat may be converted by constructing the new canoe/kayak launch; however, this will take place where recreational activities are already common and where the habitat is already likely to be disturbed as a result of those activities. The canoe/kayak launch construction may reduce shoreline habitat disturbance by providing a designated location for launching boats. All appropriate BMPs will be followed to minimize the potential impacts of construction activities on EFH and species in the area. During construction, adjacent areas with equivalent or better habitat will be available and undisturbed and organisms could move away from disturbed areas. Therefore, the project is not likely to adversely affect EFH.

Gopher Tortoise

The park provides appropriate habitat for the gopher tortoise. There would be short-term, minor effects to the gopher tortoise during the construction events if the tortoises were traversing the construction area or had burrows near the proposed park improvements. If gopher tortoises were found to be present, the best management practices as described in Florida's *Gopher Tortoise Management Plan* (FWC 2012) would be followed to avoid or minimize the effects to the gopher tortoise.

Eastern Indigo Snake

Project construction activities that occur in pine flatwoods, hardwood forests, moist hammocks, and areas that surround cypress swamp habitats in the project area would potentially affect eastern indigo snake that may be present within the park. Additionally, eastern indigo snakes using gopher tortoise burrows would be affected if ground disturbance affected this habitat. Short-term, minor effects to eastern indigo snake nesting, foraging, and movement behavior would be impacted during project activities. Although the species is highly mobile, potential exists that short-term, minor effects would occur.

Piping Plover and Red Knot

The main risk to piping plovers and red knots would be from human disturbance during resting and foraging in habitats adjacent to marine work areas. The proposed project would result in short-term increases in noise, which could startle individuals, though normal activity is expected to resume within minutes; alternatively, the noise is expected to cause the plovers or red knots to move to a nearby area as alternate available habitat is abundant. Both species are highly mobile and, if disturbed by construction activities, may be temporarily displaced from foraging and resting areas. Since available, suitable foraging and resting habitat is present within two miles of the project area, we would consider

temporary displacement within normal movement patterns. These effects would be considered short term and minor.

Florida Black Bear

The park provides habitat for the Florida black bear, which is a state-threatened species. There would be short-term, minor effects to Florida black bears if the bears were foraging within the proposed park improvements or traversing the construction areas during the construction events. If bears were found to be present, the best management practices as described in *Florida's Black Bear Management Plan* (FWC 2012b) would be followed to avoid or minimize effects to the bear.

State-listed Birds, MBTA, and BGEPA

State-listed birds such as oystercatchers or least terns (*Sternula antillarum*) may nest on beaches or mudflats in the vicinity of the project areas and all migratory birds are protected under the MBTA. If restoration activities occur during the nesting season (March 1 to August 1), they could be disturbed by noise generated by in-water activities. This would be a short-term, minor effect. If construction cannot avoid the nesting season, Nesting seabirds and shorebird protection conditions from FWC would be implemented. These conditions include: a preconstruction survey would be conducted by a qualified biologist and if nesting birds were to be identified within 300 feet of project activities, the FWC and USFWS would be contacted regarding setting up appropriate buffers to ensure no effects to nesting birds would occur. Contractors would be required to be aware of and comply with applicable laws prohibiting harm to migratory birds and endangered species and ensuring that appropriate wildlife permits are obtained if needed.

In recent years, the bald eagle has been removed from the endangered species list under ESA. All activities (staging, demolition, construction, cleanup, use of equipment, machinery, vehicles including utility terrain vehicle [UTV] and all-terrain vehicle [ATV], or boat/vessels) should avoid a bald eagle nest by a minimum of 660 feet.

Consultation with FWC concerning the proposed project and anticipated construction schedule relative to known bald eagle nest sites within the project vicinity, and the nesting season in Florida (October 1 to May 15) would be required prior to commencement of restoration activities. To minimize potential for impacts to nesting bald eagles, the consultation protection measures may include 1) addressing prescribed nest tree protection zones, and 2) preparation of a bald eagle nest protection plan (including nesting behavior disturbance monitoring). Bald eagles have been known to tolerate certain potential disturbances within their breeding territories. Should these conservation measures be implemented for active nest sites adjacent to enhancement activities in the project areas, potential effects to the bald eagle would be short term and minor.

12.60.5.3.1 Invasive Species

Affected Resources

Non-native invasive species could alter the existing terrestrial or aquatic ecosystem within, and possible expand out into adjacent areas after the initial introduction. The invasive species threat, once realized,

could result in economic damages. Prevention is ecologically responsible and economically sound. Chapter 3 described more about the regulations addressing invasive species, pathways, impacts, and prevention. At this time specific invasive species that may be present on the project site or could be introduced through the project have not yet been identified.

Environmental Consequences

Best Management Practices (BMPs) to control the spread of any invasive species present, and prevent the introduction of new invasive species due to the project will be implemented. In general, best management practices would primarily address risk associated with vectors (e.g., construction equipment, personal protective equipment, delivery services, foot traffic, vehicles/ vessels, shipping material). There are many resources that provide procedures for disinfection, pest-free storage, monitoring methods, evaluation techniques, and general guidelines for integrated pest management that can be prescribed based upon specific site conditions and vectors anticipated. In addition, to best management practices, outreach and educational materials may be provided to project workers and potential users/visitors. Other measures that could be implemented are identified in Chapter 12 Appendix A. Due to the implementation of BMPs, we expect risk from invasive species introduction and spread to be short term and minor.

12.60.5.4 Human Uses and Socioeconomics

12.60.5.4.1 Socioeconomics and Environmental Justice

Affected Resources

The population of Franklin County is approximately 11,686. The following table shows population data for Franklin County and Florida (Table 12-31). There are no human residents that live in the park.

Table 12-31. Census data for Franklin County and the State of Florida.

PEOPLE QUICKFACTS	FRANKLIN COUNTY	FLORIDA
Population, 2012 estimate	11,686	19,317,568
Population, 2010 (April 1) estimates base	11,549	18,802,690
Population, percent change, April 1, 2010 to July 1, 2012	1.2%	2.7%
Population, 2010	11,549	18,801,310
Persons under 5 years, percent, 2012	4.6%	5.5%
Persons under 18 years, percent, 2012	16.5%	20.7%
Persons 65 years and over, percent, 2012	18.9%	18.2%
Female persons, percent, 2012	42.4%	51.1%

Environmental Consequences

Improvements to Bald Point State Park would have a direct, beneficial effect for people that live near the park. Park improvements would encourage more people to visit the park and participate in outdoor activities, which might benefit the health and wellbeing of the local population. Improvements to the park would draw more visitors to the county. Long-term, indirect, moderate benefits would result from increasing recreational and fishing value of the area. Greater fishing success may increase the number of

fishing trips in the area, which could generate ancillary purchases such as license fees, fuel, equipment, or other ancillary purchases.

Direct, short-term, moderate benefits through local job creation would result from construction activities. This project is not designed to create a benefit for any group or individual, but rather would provide benefits on a local and regional basis. Because the project occurs in an area that is not disproportionately minority or low income (see Table 12-31), there are no indications that the proposed living shoreline project would be contrary to the goals of Executive Order 12898, or would create disproportionate, adverse human health or environmental impacts on minority or low income populations of the surrounding community.

12.60.5.4.2 Cultural Resources

Affected Resources

A review of the Florida Master Site File's online information for the park area shows that there are numerous previously recorded archaeological sites that are located within or immediately adjacent to the park. There are prehistoric, historic-era, and multicomponent sites represented. Of note are two prehistoric shell middens that contain multiple human internments (8FR4 and 8FR5) that are located immediately adjacent to the park and may extend into the western portion of the park. Site 8FR5 (Yent Mound) is listed on the NRHP. In addition to the prehistoric resources, there are historic era (mid-1800s to late 1900s) fishing camps/siene yards to repair fishing nets. There is also evidence of twentieth-century turpentine activity, as pine trees in the park have been marked with the *cat face* scars that were placed to collect sap. Based on the presence of multiple, previously recorded archaeological sites within the park and extended use of the park and park areas by historic-era groups, it is likely that additional resources are present in similar contexts throughout the park (FDEP 2006).

Site 8FR900 (Camp Gordon Johnston) encompasses a large area along Alligator Harbor and the entire Bald Point State Park. Camp Gordon Johnston served as an amphibious training base for World War II soldiers from 1941 to 1946. As many as 30,000 troops were trained at the camp. This site is in the process of becoming listed on the NRHP as an archaeological district.

Environmental Consequences

The area currently occupied by Bald Point State Park has been used by humans for thousands of years. The area is culturally rich and has a diversity of previously recorded archaeological sites that range from prehistoric to modern era. As the entire park is part of the Camp Gordon Johnston Archaeological District (8FR900), any ground-disturbing activities that take place within the district (e.g., the park) would have the potential for moderate to severe adverse effect to historic properties listed on the NRHP (FDEP 2006).

The proposed project includes multiple construction events throughout the park that involve ground disturbing activities. Project plans for the park improvements have not been finalized and the exact location of the project facilities has not been designated. Once the locations of the various park improvements are selected, the area(s) would be subjected to a Phase I cultural resources survey. Based

on the results of the survey, project plans would be altered to avoid any historic properties that would be adversely affected by the project work (ground disturbance and construction).

A complete review of this project under Section 106 of the NHPA would be completed as environmental review continues. This project would be implemented in accordance with all applicable laws and regulations concerning the protection of cultural and historic resources.

12.60.5.4.3 Infrastructure

Affected Resources

Currently, Bald Point State Park has limited infrastructure and is not serviced by utilities except at the entryway. The park can be accessed by County Road 370 (Alligator Road) and Bald Point. Currently the park has the following facilities:

North Point Beach Access

- Paved Parking
- Paved Cul-de-sac and Loading Zone
- Marsh Boardwalk and Overlook
- Small Picnic Shelters (2)
- Fishing Pier
- Canoe/Kayak Launch
- Interpretive Sign

Sunrise Beach Access

- Stabilized Parking
- Small Picnic Shelter
- Beach Boardwalk

Maritime Beach Access

- Paved Parking
- Restroom
- Self-service fee Collection Station
- Universally Accessible Walkway
- Small picnic shelters (2)
- Beach Boardwalk

Shop and Maintenance Area

- Staff Residence
- Pole Barns (2)
- Storage Buildings (4)
- Volunteer Host Sites

Environmental Consequences

Construction of facilities such as picnic pavilions, a restroom, a floating dock and boardwalks, and an aerobic treatment system/drainfield would have no adverse effect on utilities or existing infrastructure. The improvements would have a beneficial, long-term impact because they would enhance the visitor experience.

12.60.5.4.4 Land and Marine Management

Affected Resources

The park is managed by the FDRP, Florida Division of Recreation and Parks, under the 2006 Bald Point State Park Unit Management Plan. Under the plan, public outdoor recreation is the designated single use of the property. Major emphasis is placed on maximizing the recreational potential of the area; however, preservation of resources is also important (FDEP 2006).

To the east and south of the park, there are single-family residences and small subdivisions. There is a marina and additional homes along Alligator Harbor to the southwest of the park. The park is also part of a regional network of conservation lands.

The project area would be located in a coastal area that is regulated by the federal Coastal Zone Management Act (CZMA) of 1972 and the Florida Coastal Management Act of 1978.

Environmental Consequences

Although the action would require several permits for the short-term construction period, it would not require a variance, zoning change, or amendment to a land-use area or comprehensive management plan. The long-term impact of the project would be minor because it would not affect overall use and management beyond the local park area. It would be consistent with current land use and would be consistent with and support the *Bald Point State Park Unit Management Plan*.

Pursuant to the Coastal Zone Management Act of 1972, federal activities must be consistent to the maximum extent practicable with the federally-approved coastal management programs for states where the activities would affect a coastal use or resource. Federal Trustees are submitting consistency determinations for state review coincident with public review of this document.

12.60.5.4.5 Aesthetics and Visual Resources

Affected Resources

Existing aesthetics and visual resources from the project site are views of a minimally developed area. Views include those of a sandy shoreline, park vegetation such as trees, the bays, an access road, and park facilities.

Environmental Consequences

Short-term impacts would occur to visual resources during construction activities due to the presence of equipment and materials. These impacts would be minor because they would only be visible from a small portion of the park, would not dominate the viewshed, or would not detract from current visitor activities. Long-term changes to visual resources would occur from the addition of a boat ramp, restroom, and the expansion of boat trailer parking. These changes would be readily apparent but minor because they are consistent with other park facilities and would not attract attention, dominate the view, or detract from visitor experiences.

12.60.5.4.6 Tourism and Recreational Use

Affected Environment

Recreation at the park includes boating, swimming, fishing, canoeing/kayaking, hiking, camping, picnicking, wildlife viewing, and nature appreciation. There are hiking trails throughout the park that are used by both hikers and cyclists. The park has a series of interpretive programs focusing on birds, sea turtles, and natural communities (FDEP 2006). Brochures and kiosks with information are placed in strategic places in the park.

Environmental Consequences

During the construction period, the visitor's recreational experience would be negatively affected by noise and visual disturbances associated with the use of construction equipment. The impact would be short term and minor because it would only affect some recreationalists in the discreet areas where construction is taking place. Users would likely be aware of the construction, but changes in use would be slight. The construction process would also limit recreational activities near construction areas for a short time to protect public safety. These limitations would be a minor inconvenience to visitors. Over the long term, minor beneficial impacts to tourism and recreational use would be expected due to the enhancement of recreational opportunities associated with improved facilities and accessibility.

12.60.5.4.7 Public Health and Safety and Shoreline Protection

Affected Resources

The management of hazardous materials is regulated under various federal and state environmental and transportation laws and regulations, including the Resource Conservation and Recovery Act (RCRA); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); the Emergency Planning and Community Right-to-Know Act; and the Hazardous Materials Transportation Act. The purpose of the regulatory requirements set forth under these laws is to ensure the protection of human health and the environment through proper management (identification, use, storage, treatment, transport, and disposal) of these materials. Some of these laws provide for the investigation and cleanup of sites that have already been contaminated by releases of hazardous materials, wastes, or substances.

A review of the EPA's EnviroMapper revealed that there are no CERCLA sites on or immediately adjacent to the park. There is one RCRA site and one permit compliance system (PCS) site; both are located at the park's entrance.

Environmental Consequences

Project construction would require mechanical equipment that uses oil, lubricants, and fuels. The contractor would be required to take appropriate actions to prevent, minimize, and control the spill of construction-related hazardous materials such as vehicle fuels, oil, hydraulic fluid, and other vehicle maintenance fluids, and to avoid releases and spills. If a release should occur, it would be contained and cleaned up promptly in accordance with all applicable regulations and the incident would be reported to appropriate agencies. As a result, no impacts associated with construction-related hazardous materials would be anticipated. The period of time during which a release could occur from construction activities would be short term and any release would be expected to be minor.

12.60.6 Summary and Next Steps

Per the Purpose and Need of the Draft Phase III ERP/PEIS, four alternatives are considered, including a no action (Alternative 1), selection of project types emphasizing habitat and living coastal and marine resources (Alternative 2), project types emphasizing recreational opportunities (Alternative 3), or a combination of both habitat and living coastal and marine resources and recreational opportunities (Alternative 4). As proposed, the Bald Point State Park Recreation Areas project implements restoration techniques within Alternatives 3 and 4.

The proposed Bald Point State Park Recreation Areas project would improve the existing visitor areas at Bald Point State Park in Franklin County. The proposed improvements would include construction of picnic pavilions, boardwalks, restroom and aerobic treatment system and drainfield, and a boardwalk and floating dock for use as a canoe/kayak launch. The project is consistent with Alternative 3 (Contribute to Providing and Enhancing Recreational Opportunities) and Alternative 4 (Preferred Alternative).

Draft NEPA analysis of the environmental consequences suggests that while minor adverse impacts may occur to some resource categories, no moderate to major adverse impacts are anticipated to result. The project would enhance and/or increase the public's use and/or enjoyment of the natural resources by improving the existing visitor areas. The Trustees have started coordination and reviews under the Endangered Species Act, the Magnuson-Stevens Fishery Conservation and Management Act, the Historic Preservation Act, the Marine Mammal Protection Act, the Bald and Golden Eagle Protection Act, Coastal Zone Management Act, and other federal statutes. The Trustees will consider public comment and information relevant to environmental concerns bearing on the proposed actions or their impacts. Final determination on this project will be included in the final Phase III ERP/PEIS and Record of Decision.

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12.61 Enhancement of Franklin County Parks and Boat Ramps: Project Description A (Abercrombie Boat Ramp Project)

12.61.1 Project Summary

The proposed Franklin County Abercrombie Boat Ramp project would improve the existing Abercrombie boat launch facility in Franklin County. The proposed improvements include constructing additional docks to enhance water access. The total estimated cost of the project is $176,550.

12.61.2 Background and Project Description

The Trustees propose to improve and enhance the Abercrombie boat ramp in Franklin County (see Figure 12-29 for project location information). The objective of the Franklin County Abercrombie Boat Ramp project is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving the existing boat ramp. The restoration work proposed includes constructing additional docks at an existing boat ramp to enhance water access.

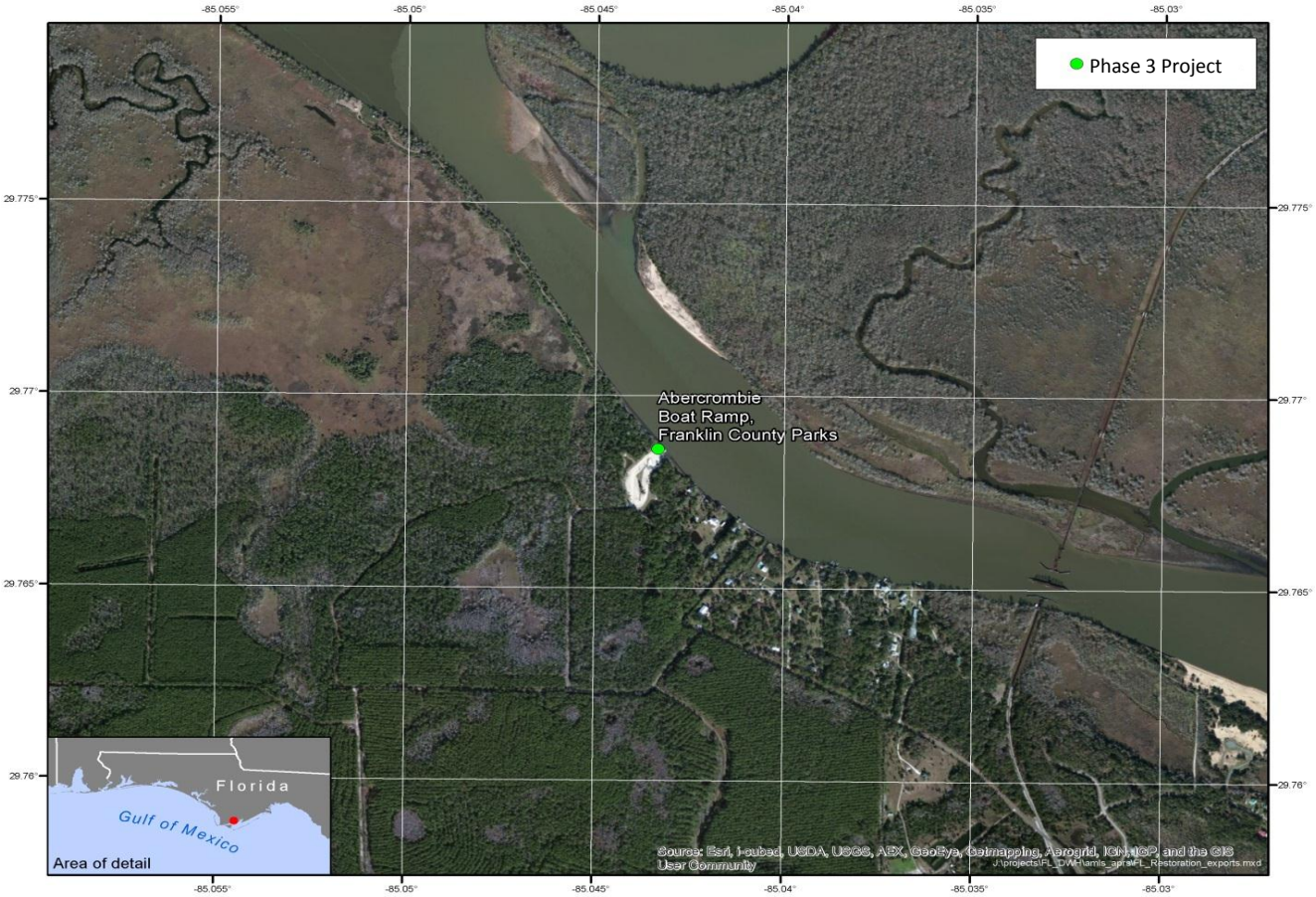

Figure 12-29. Location of enhancement of Franklin County parks and boat ramps – Abercrombie Boat Ramp project.

12.61.3 Evaluation Criteria

This proposed project meets the evaluation criteria established for OPA and the Framework Agreement. As a result of the Deepwater Horizon oil spill and related response actions, the public's access to and enjoyment of their natural resources along Florida's Panhandle was denied or severely restricted. The project would enhance and/or increase the public's use and/or enjoyment of natural resources, helping to offset adverse impacts to such uses caused by the Spill and related response actions. Thus, the nexus to resources injured by the Spill is clear. See 15 C.F.R. § 990.54(a)(2); and Sections 6a-6c of the Framework Agreement.

The project is technically feasible and uses proven techniques with established methods and documented results. Further, the project can be implemented with minimal delay. Agencies have successfully completed projects of similar scope throughout Florida over many years, including in earlier phases of the Deepwater Horizon Early Restoration. For these reasons, the project has a high likelihood of success. See 15 C.F.R. § 990.54(a)(3); and Section 6e of the Framework Agreement. Additionally, the cost estimates are based on similar past projects and therefore the project can be conducted at a reasonable cost. See 15 C.F.R. § 990.54(a)(1); and Section 6e of the Framework Agreement. Finally, this proposed project is not anticipated to negatively affect regional ecological restoration and is therefore not inconsistent with the long-term restoration needs of the State of Florida. See Section 6d of the Framework Agreement.

Many recreational use projects, including ones similar to this project have been submitted as restoration projects on the NOAA website (http://www.gulfspillrestoration.noaa.gov) and to the State of Florida (http://www.deepwaterhorizonflorida.com). In addition to meeting the evaluation criteria for the Framework Agreement and OPA, the Enhancement of Franklin County Parks and Boat Ramps – Abercrombie Boat Ramp project also meets Florida's additional criteria that Early Restoration projects occur in the 8-county panhandle area in which boom was deployed and that was impacted by response and SCAT activities for the Spill.

12.61.4 Performance Criteria, Monitoring and Maintenance

As part of the project cost, monitoring will be conducted to ensure project plans and designs were correctly implemented. Monitoring has been designed around the project goals and objectives. The project objective is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving an existing boat ramp. Performance monitoring will evaluate the construction of the new docks. Specific success criteria include: 1) completion of the construction as designed and permitted, and 2) enhanced and/or increased access is provided to natural resources, which will be determined by observation that the boat ramp facility is open and available.

Long-term monitoring and maintenance of the improved facilities, after completion of the project, will be undertaken by Franklin County as part of their regular public facilities maintenance activities. Funding for this post-construction maintenance is not included in the previously provided value for the project cost and will be assumed by Franklin County.

During the one year construction performance monitoring period, the Florida Trustees' Project Manager will go out twice to the sire to record the number of users. Following the one year construction performance monitoring period, Franklin County will monitor the recreational use activity at the site. Franklin County will visit the site twice a year to count the number of users at the boat ramp. The visitation numbers will then be provided to the Florida Department of Environmental Protection.

12.61.5 Offsets

The Trustees and BP negotiated a BCR of 2.0 for the proposed recreational use project. NRD Offsets for the entire Enhancement of Franklin County Parks and Boat Ramps project, of which this is a component, are $3,542,770 expressed in present value 2013 dollars to be applied against the monetized value of lost recreational use provided by natural resources injured in Florida, which will be determined by the Trustees' assessment of lost recreational use for the Oil Spill. Please see Chapter 7 of this document (Section 7.2.2) for a description of the methodology used to develop monetized Offsets.[12]

12.61.6 Costs

The total estimated cost to implement this project is $176,550. This cost reflects current cost estimates developed from the most current information available to the Trustees at the time of the project negotiation. The cost includes provisions for planning, engineering and design, construction, construction monitoring, and contingencies.

[12] For the purposes of applying the NRD Offsets to the calculation of injury after the Trustees' assessment of lost recreational use for the Spill, the Trustees and BP agree as follows:

- The Trustees agree to restate the NRD Offsets in the present value year used in the Trustees' assessment of lost recreational use for the Spill.
- The discount rate and method used to restate the present value of the NRD Offsets will be the same as that used to express the present value of the damages.

12.62 Enhancement of Franklin County Parks and Boat Ramps: Project Description B (Waterfront Park)

12.62.1 Project Summary

The proposed Franklin County Waterfront Park project would improve the existing Waterfront Park in Apalachicola. The proposed improvements include enhancing existing parking and adjacent tie-up docks to enhance water access. In addition an existing onsite building would be enhanced to serve as an information center and dockmaster office. The total estimated cost of the project is $294,250.

12.62.2 Background and Project Description

The Trustees propose to improve and enhance the Apalachicola Waterfront Park in Franklin County (see Figure 12-30 for project location information). The objective of the proposed Franklin County Waterfront Park project is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving the waterfront park. The restoration work proposed includes enhancing the existing parking and tie-up docks. In addition an existing onsite building would be enhanced to serve as an information center and dockmaster office. Finally, a kiosk describing fishing ethics, litter control, and the important resources surrounding the area (primarily commercial oyster bars and coastal marshes) would also be added.

12.62.3 Evaluation Criteria

This proposed project meets the evaluation criteria established for OPA and the Framework Agreement. As a result of the Deepwater Horizon oil spill and related response actions, the public's access to and enjoyment of their natural resources along Florida's Panhandle was denied or severely restricted. The project would enhance and/or increase the public's use and/or enjoyment of natural resources, helping to offset adverse impacts to such uses caused by the Spill and related response actions. Thus, the nexus to resources injured by the Spill is clear. See 15 C.F.R. § 990.54(a)(2); and Sections 6a-6c of the Framework Agreement.

The project is technically feasible and uses proven techniques with established methods and documented results. Further, the project can be implemented with minimal delay. Agencies have successfully completed projects of similar scope throughout Florida over many years, including in earlier phases of the Deepwater Horizon Early Restoration. For these reasons, the project has a high likelihood of success. See 15 C.F.R. § 990.54(a)(3); and Section 6e of the Framework Agreement. Additionally, the cost estimates are based on similar past projects and therefore the project can be conducted at a reasonable cost. See 15 C.F.R. § 990.54(a)(1); and Section 6e of the Framework Agreement. Finally, this project is not anticipated to negatively affect regional ecological restoration and is therefore not inconsistent with the long-term restoration needs of the State of Florida. See Section 6d of the Framework Agreement.

Figure 12-30. Location of enhancement of Franklin County parks and boat ramps – Waterfront Park facilities improvements.

Many recreational use projects, including ones similar to this project, have been submitted as restoration projects on the NOAA website (http://www.gulfspillrestoration.noaa.gov) and to the State of Florida (http://www.deepwaterhorizonflorida.com). In addition to meeting the evaluation criteria for the Framework Agreement and OPA, the Enhancement of Franklin County Parks and Boat Ramps – Waterfront Park project also meets Florida's additional criteria that Early Restoration projects occur in the 8-county panhandle area in which boom was deployed and that was impacted by response and SCAT activities for the Spill.

12.62.4 Performance Criteria, Monitoring and Maintenance

As part of the project cost, monitoring will be conducted to ensure project plans and designs were correctly implemented. Monitoring has been designed around the project goals and objectives. The project objective is to enhance and/or improve the public's use and/or enjoyment of the natural resources by improving the waterfront park. Performance monitoring will evaluate: 1) the improvements to the existing parking area and tie-up docks; 2) the enhancement of an existing building onsite to serve as an information area and dockmaster office at Waterfront Park; and 3) the construction of the kiosk. Specific success criteria include: 1) completion of the construction as designed

and permitted, and 2) enhanced and/or increased access is provided to natural resources, which will be determined by observation that the waterfront park is open and available.

Long-term monitoring and maintenance of the improved facilities, after completion of the project, will be undertaken by Franklin County as part of their regular public facilities maintenance activities. Franklin County will also be responsible for long-term maintenance of parking area, docks, and enhanced facility and will inspect them regularly. Franklin County will also be responsible for contracting for or control of garbage pick-up and litter control at the site. Funding for this post-construction maintenance is not included in the previously provided value for the project cost and will be assumed by Franklin County.

During the one year construction performance monitoring period, the Florida Trustees' Project Manager will go out twice to the site to record the number of users. Following the one year construction performance monitoring period, Franklin County will monitor the recreational use activity at the site. Franklin County will visit the site twice a year to count the number of users at the boat ramp. The visitation numbers will then be provided to the Florida Department of Environmental Protection.

12.62.5 Offsets

The Trustees and BP negotiated a BCR of 2.0 for the proposed recreational use project. NRD Offsets for the entire Enhancement of Franklin County Parks and Boat Ramps project, of which this is a component, are $3,542,770 expressed in present value 2013 dollars to be applied against the monetized value of lost recreational use provided by natural resources injured in Florida, which will be determined by the Trustees' assessment of lost recreational use for the Oil Spill. Please see Chapter 7 of this document (Section 7.2.2) for a description of the methodology used to develop monetized Offsets.[13]

12.62.6 Costs

The total estimated cost to implement this project is $294,250. This cost reflects current cost estimates developed from the most current information available to the Trustees at the time of the project negotiation. The cost includes provisions for planning, engineering and design, construction, monitoring, and contingencies.

[13] For the purposes of applying the NRD Offsets to the calculation of injury after the Trustees' assessment of lost recreational use for the Spill, the Trustees and BP agree as follows:

- The Trustees agree to restate the NRD Offsets in the present value year used in the Trustees' assessment of lost recreational use for the Spill.
- The discount rate and method used to restate the present value of the NRD Offsets will be the same as that used to express the present value of the damages.

12.63 Enhancement of Franklin County Parks and Boat Ramps: Project Description C (Indian Creek Park)

12.63.1 Project Summary

The proposed Franklin County Indian Creek Park project would improve the existing Indian Creek Park boat launch facility in Franklin County. The proposed improvements include constructing restroom facilities, connecting them to an existing central wastewater facility nearby, and renovating the existing boat ramp, bulkhead, and parking area to enhance water access. The total estimated cost of the project is $353,100.

12.63.2 Background and Project Description

The Trustees propose to improve and enhance the existing Indian Creek Park Boat launch facility in Franklin County (see Figure 12-31 for project location information). The objective of the Franklin County Indian Creek Park project is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving the existing boat launch facility. The restoration work proposed includes constructing restroom facilities, connecting them to an existing central wastewater facility nearby, and renovating an existing boat ramp and bulkhead that is currently deteriorating and revamping the parking area to enhance water access. Furthermore, a kiosk describing fishing ethics, litter control, and the important resources surrounding the area (primarily commercial oyster bars, submerged aquatic vegetation and marshes) would also be added.

Figure 12-31. Location of enhancement of Franklin County parks and boat ramps – Indian Creek Park facilities improvements.

12.63.3 Evaluation Criteria

This proposed project meets the evaluation criteria established for OPA and the Framework Agreement. As a result of the Deepwater Horizon oil spill and related response actions, the public's access to and enjoyment of their natural resources along Florida's Panhandle was denied or severely restricted. The project would enhance and/or increase the public's use and/or enjoyment of natural resources, helping to offset adverse impacts to such uses caused by the Spill and related response actions. Thus, the nexus to resources injured by the Spill is clear. See 15 C.F.R. § 990.54(a)(2); and Sections 6a-6c of the Framework Agreement.

The project is technically feasible and uses proven techniques with established methods and documented results. Further, the project can be implemented with minimal delay. Agencies have successfully completed projects of similar scope throughout Florida over many years, including in earlier phases of the Deepwater Horizon Early Restoration. For these reasons, the project has a high likelihood of success. See 15 C.F.R. § 990.54(a)(3); and Section 6e of the Framework Agreement. Additionally, the cost estimates are based on similar past projects, and therefore the project can be conducted at a reasonable cost. See 15 C.F.R. § 990.54(a)(1); and Section 6e of the Framework Agreement. Finally, this proposed project is not anticipated to negatively affect regional ecological restoration and is therefore not inconsistent with the long-term restoration needs of the State of Florida. See Section 6d of the Framework Agreement.

Many recreational use projects, including ones similar to this project have been submitted as restoration projects on the NOAA website (http://www.gulfspillrestoration.noaa.gov) and to the State of Florida (http://www.deepwaterhorizonflorida.com). In addition to meeting the evaluation criteria for the Framework Agreement and OPA, the Enhancement of Franklin County Parks and Boat Ramps – Indian Creek Park Boat Ramp project also meets Florida's additional criteria that Early Restoration projects occur in the 8-county panhandle area in which boom was deployed and that was impacted by response and SCAT activities for the Spill.

12.63.4 Performance Criteria, Monitoring and Maintenance

As part of the project cost, monitoring will be conducted to ensure project plans and designs were correctly implemented. Monitoring has been designed around the project goals and objectives. The project objective is to enhance and/or improve the public's use and/or enjoyment of the natural resources by improving the existing boat ramp. Performance monitoring will evaluate: 1) the construction of the new restrooms and connecting them to a nearby existing central wastewater facility; 2) the renovation of the existing boat ramp and bulkhead; 3) the renovation of the existing parking area to enhance access and use; and 4) the construction of the kiosk. Specific success criteria include: 1) the completion of the construction as designed and permitted, and 2) enhanced and/or increased access is provided to natural resources, which will be determined by observation that the boat ramp facility is open and available.

Long-term monitoring and maintenance of the improved facilities, after completion of the project, will be undertaken by Franklin County as part of their regular public facilities maintenance activities. Franklin County will also be responsible for long-term maintenance of boat ramp and its restored

bulkhead associated with the boat ramp and will inspect it regularly. Franklin County will also be responsible for contracting for or control of garbage pick-up and litter control at the site. Funding for this post-construction maintenance is not included in the previously provided value for the project cost and will be assumed by Franklin County.

During the one year construction performance monitoring period, the Florida Trustees' Project Manager will go out twice to the site to record the number of users. Following the one year construction performance monitoring period, Franklin County will monitor the recreational use activity at the site. Franklin County staff will visit the site twice a year to count the number of users at the boat ramp. The visitation numbers will then be provided to the Florida Department of Environmental Protection.

12.63.5 Offsets

The Trustees and BP negotiated a BCR of 2.0 for the proposed recreational use project. NRD Offsets for the entire Enhancement of Franklin County Parks and Boat Ramps project, of which this is a component, are $3,542,770 expressed in present value 2013 dollars to be applied against the monetized value of lost recreational use provided by natural resources injured in Florida, which will be determined by the Trustees' assessment of lost recreational use for the Oil Spill. Please see Chapter 7 of this document (Section 7.2.2) for a description of the methodology used to develop monetized Offsets.[14]

12.63.6 Costs

The total estimated cost to implement this project is $353,100. This cost reflects current cost estimates developed from the most current information available to the Trustees at the time of the project negotiation. The cost includes provisions for planning, engineering and design, construction, monitoring, and contingencies.

[14] For the purposes of applying the NRD Offsets to the calculation of injury after the Trustees' assessment of lost recreational use for the Spill, the Trustees and BP agree as follows:

- The Trustees agree to restate the NRD Offsets in the present value year used in the Trustees' assessment of lost recreational use for the Spill.
- The discount rate and method used to restate the present value of the NRD Offsets will be the same as that used to express the present value of the damages.

12.64 Enhancement of Franklin County Parks and Boat Ramps: Project Description D (Eastpoint Fishing Pier Improvements)

12.64.1 Project Summary

The proposed Franklin County Eastpoint Fishing Pier Improvement project would add restroom facilities to the base of the existing public East Point Fishing Pier in Franklin County. The proposed improvements include not only constructing new restrooms, but a holding tank that would be pumped out regularly. The total estimated cost of the project is $294,250.

12.64.2 Background and Project Description

The Trustees propose to improve and enhance the Eastpoint Fishing Pier in Franklin County (see Figure 12-32 for project location information). The objective of the Franklin County Eastpoint Fishing Pier Improvement project is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving the fishing pier. The restoration work proposed includes constructing a restroom facility at the base of the public fishing pier. A Kiosk describing fishing ethics, litter control, and the important resources surrounding the pier (primarily commercial oyster bars) would also be added.

12.64.3 Evaluation Criteria

This proposed project meets the evaluation criteria established for OPA and the Framework Agreement. As a result of the Deepwater Horizon oil spill and related response actions, the public's access to and enjoyment of their natural resources along Florida's Panhandle was denied or severely restricted. The project would enhance and/or increase the public's use and/or enjoyment of natural resources, helping to offset adverse impacts to such uses caused by the Spill and related response actions. Thus, the nexus to resources injured by the Spill is clear. See 15 C.F.R. § 990.54(a)(2); and Sections 6a-6c of the Framework Agreement.

The project is technically feasible and uses proven techniques with established methods and documented results. Further, the project can be implemented with minimal delay. Agencies have successfully completed projects of similar scope throughout Florida over many years, including in earlier phases of the Deepwater Horizon Early Restoration. For these reasons, the project has a high likelihood of success. See 15 C.F.R. § 990.54(a)(3); and Section 6e of the Framework Agreement. Additionally, the cost estimates are based on similar past projects and therefore the project can be conducted at a reasonable cost. See 15 C.F.R. § 990.54(a)(1); and Section 6e of the Framework Agreement. Finally, this proposed project is not anticipated to negatively affect regional ecological restoration and is therefore not inconsistent with the long-term restoration needs of the State of Florida. See Section 6d of the Framework Agreement.

Figure 12-32. Location of enhancement of Franklin County parks and boat ramps – Eastpoint Fishing Pier improvements.

Many recreational use projects, including ones similar to this project, have been submitted as restoration projects on the NOAA website (http://www.gulfspillrestoration.noaa.gov) and to the State of Florida (http://www.deepwaterhorizonflorida.com). In addition to meeting the evaluation criteria for the Framework Agreement and OPA, the Enhancement of Franklin County Parks and Boat Ramps – Eastpoint Fishing Pier Improvements project also meets Florida's additional criteria that Early Restoration projects occur in the 8-county panhandle area in which boom was deployed and that was impacted by response and SCAT activities for the Spill.

12.64.4 Performance Criteria, Monitoring and Maintenance

As part of the project cost, monitoring will be conducted to ensure project plans and designs were correctly implemented. Monitoring has been designed around the project goals and objectives. The project objective is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving the public fishing pier. Performance monitoring will evaluate: 1) the construction of the new restrooms and holding tank, and 2) construction of the kiosk. Specific success

criteria include: 1) the completion of the construction as designed and permitted, and 2) enhanced and/or increased access is provided to natural resources, which will be determined by observation that the visitor area is open and available.

Long-term monitoring and maintenance of the improved facilities, after completion of the project, will be undertaken by Franklin County as part of their regular public facilities maintenance activities. Regular pump-out of the holding tank will be contracted out and paid for by Franklin County. In addition in the event of a tropical storm or hurricane the facility's holding tank will be pumped out and the restrooms closed to public use to prevent discharge of sewage into the bay. Franklin County will also be responsible for contracting for garbage pick-up and litter control at the site. Funding for this post-construction maintenance is not included in the previously provided value for the project cost and will be assumed by Franklin County.

During the one year construction performance monitoring period, the Florida Trustees' Project Manager will go out twice to the site to record the number of users. Following the one year construction performance monitoring period, Franklin County will monitor the recreational use activity at the site. Franklin County will visit the site twice a year to count the number of users at the pier. The visitation numbers will then be provided to the Florida Department of Environmental Protection.

12.64.5 Offsets

The Trustees and BP negotiated a BCR of 2.0 for the proposed recreational use project. NRD Offsets for the entire Enhancement of Franklin County Parks and Boat Ramps project, of which this is a component, are $3,542,770 expressed in present value 2013 dollars to be applied against the monetized value of lost recreational use provided by natural resources injured in Florida, which will be determined by the Trustees' assessment of lost recreational use for the Oil Spill. Please see Chapter 7 of this document (Section 7.2.2) for a description of the methodology used to develop monetized Offsets.[15]

12.64.6 Costs

The total estimated cost to implement this project is $294,250. This cost reflects current cost estimates developed from the most current information available to the Trustees at the time of the project negotiation. The cost includes provisions for planning, engineering and design, construction, monitoring, and contingencies.

[15] For the purposes of applying the NRD Offsets to the calculation of injury after the Trustees' assessment of lost recreational use for the Spill, the Trustees and BP agree as follows:

- The Trustees agree to restate the NRD Offsets in the present value year used in the Trustees' assessment of lost recreational use for the Spill.
- The discount rate and method used to restate the present value of the NRD Offsets will be the same as that used to express the present value of the damages.

12.65 Enhancement of Franklin County Parks and Boat Ramps: Project Description E (St. George Island Fishing Pier Improvements)

12.65.1 Project Summary

The proposed Franklin County St. George Island Fishing Pier Improvements project would enhance the existing public St. George Island public Fishing Pier in Franklin County. The proposed improvements include constructing restrooms and a holding tank that would be pumped out regularly since there is no central wastewater facility on the island. The proposed improvements also include renovating the existing bulkhead that leads up to the pier and protects the road to the pier. The total estimated cost of the project is $653,235.

12.65.2 Background and Project Description

The Trustees propose to enhance the St. George Island Fishing Pier in Franklin County (see Figure 12-33 for project location information). The objective of the Franklin County St. George Island Fishing Pier Improvements project is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving the fishing pier. The restoration work proposed includes constructing a restroom facility and holding tank at the base of the public fishing pier and repairing the bulkhead to maintain access. A Kiosk describing fishing ethics, litter control, and the important resources surrounding the pier (primarily commercial oyster bars) would also be added.

12.65.3 Evaluation Criteria

This proposed project meets the evaluation criteria established for OPA and the Framework Agreement. As a result of the Deepwater Horizon oil spill and related response actions, the public's access to and enjoyment of their natural resources along Florida's Panhandle was denied or severely restricted. The project would enhance and/or increase the public's use and/or enjoyment of natural resources, helping to offset adverse impacts to such uses caused by the Spill and related response actions. Thus, the nexus to resources injured by the Spill is clear. See 15 C.F.R. § 990.54(a)(2); and Sections 6a-6c of the Framework Agreement.

The project is technically feasible and uses proven techniques with established methods and documented results. Further, the project can be implemented with minimal delay. Agencies have successfully completed projects of similar scope throughout Florida over many years, including in earlier phases of the Deepwater Horizon Early Restoration. For these reasons, the project has a high likelihood of success. See 15 C.F.R. § 990.54(a)(3); and Section 6e of the Framework Agreement. Additionally, the cost estimates are based on similar past projects and therefore the project can be conducted at a reasonable cost. See 15 C.F.R. § 990.54(a)(1); and Section 6e of the Framework Agreement. Finally, this proposed project is not anticipated to negatively affect regional ecological restoration and is therefore not inconsistent with the long-term restoration needs of the State of Florida. See Section 6d of the Framework Agreement.

Many recreational use projects, including ones similar to this project, have been submitted as restoration projects on the NOAA website (http://www.gulfspillrestoration.noaa.gov) and to the State of Florida (http://www.deepwaterhorizonflorida.com). In addition to meeting the evaluation criteria for

the Framework Agreement and OPA, the Enhancement of Franklin County Parks and Boat Ramps – St. George Island Fishing Pier Improvements project also meets Florida's additional criteria that Early Restoration projects occur in the 8-county panhandle area in which boom was deployed and that was impacted by response and SCAT activities for the Spill.

Figure 12-33. Location of Enhancement of Franklin County Parks and Boat Ramps – St. George Island Fishing Pier Improvements.

12.65.4 Performance Criteria, Monitoring and Maintenance

As part of the project cost, monitoring will be conducted to ensure project plans and designs were correctly implemented. Monitoring has been designed around the project goals and objectives. The project objective is to enhance and/or improve the public's use and/or enjoyment of the natural resources by improving the existing fishing pier. Performance monitoring will evaluate: 1) the construction of the restrooms and holding tank; 2) the renovation of the bulkhead; and 3) the construction of the kiosk. Specific success criteria include: 1) the completion of the construction as

designed and permitted, 2) and enhanced and/or increased access is provided to natural resources, which will be determined by observation that the fishing pier is open and available.

Long-term monitoring and maintenance of the improved facilities, after completion of the project, will be undertaken by Franklin County as part of their regular public facilities maintenance activities. Franklin County will also be responsible for long-term maintenance of the restored bulkhead and will inspect it regularly. Regular pump-out of the holding tank will be contracted out and paid for by Franklin County. In addition in the event of a tropical storm or hurricane the facility's holding tank will be pumped out and the restrooms closed to public use to prevent discharge of sewage into the bay. Franklin County will also be responsible for contracting for or control of garbage pick-up and litter control at the site. Funding for this post-construction maintenance is not included in the previously provided value for the project cost and will be assumed by Franklin County.

During the one year construction performance monitoring period, the Florida Trustees' Project Manager will go out twice to the sire to record the number of users. Following the one year construction performance monitoring period, Franklin County will monitor the recreational use activity at the site. Franklin County staff will visit the site twice a year to count the number of users at the fishing pier. The visitation numbers will then be provided to the Florida Department of Environmental Protection.

12.65.5 Offsets

The Trustees and BP negotiated a BCR of 2.0 for the proposed recreational use project. NRD Offsets for the entire Enhancement of Franklin County Parks and Boat Ramps project, of which this is a component, are $3,542,770 expressed in present value 2013 dollars to be applied against the monetized value of lost recreational use provided by natural resources injured in Florida, which will be determined by the Trustees' assessment of lost recreational use for the Oil Spill. Please see Chapter 7 of this document (Section 7.2.2) for a description of the methodology used to develop monetized Offsets.[16]

12.65.6 Costs

The total estimated cost to implement this project is $653,235. This cost reflects current cost estimates developed from the most current information available to the Trustees at the time of the project negotiation. The cost includes provisions for planning, engineering and design, construction, monitoring, and contingencies.

[16] For the purposes of applying the NRD Offsets to the calculation of injury after the Trustees' assessment of lost recreational use for the Spill, the Trustees and BP agree as follows:

- The Trustees agree to restate the NRD Offsets in the present value year used in the Trustees' assessment of lost recreational use for the Spill.
- The discount rate and method used to restate the present value of the NRD Offsets will be the same as that used to express the present value of the damages.

12.66 Enhancement of Franklin County Parks and Boat Ramps: Environmental Review

The project consists of construction activities at five existing recreation areas within Franklin County, Florida, that provide water-based recreation opportunities. The five parks where the proposed improvements would occur include:

- Abercrombie Boat Ramp
- Franklin County Waterfront Park
- Indian Creek Park
- Eastpoint Fishing Pier
- St. George Island Fishing Pier

12.66.1 Introduction and Background

In April 2011, the Natural Resource Trustees (Trustees) and BP Exploration and Production, Inc. (BP) entered into the Framework Agreement for Early Restoration Addressing Injuries Resulting from the Deepwater Horizon Oil Spill (Framework Agreement). Under the Framework Agreement, BP agreed to make $1 billion available for Early Restoration project implementation. The Trustees' key objective in pursuing Early Restoration is to achieve tangible recovery of natural resources and natural resource services for the public's benefit while the longer-term injury and damage assessment is underway. The Framework Agreement is intended to expedite the start of restoration in the Gulf in advance of the completion of the injury assessment process. Early restoration is not intended to, and does not fully address all injuries caused by the Spill. Restoration beyond Early Restoration projects would be required to fully compensate the public for natural resource losses from the Spill.

Pursuant to the process articulated in the Framework Agreement for Early Restoration Addressing Injuries Resulting from the Deepwater Horizon Oil Spill (Framework Agreement), the Trustees released, after public review of a draft, a Phase I Early Restoration Plan (ERP) in April 2012. In December 2012, after public review of a draft, the Trustees released a Phase II ERP. On May 6, 2013, the National Oceanic and Atmospheric Administration (NOAA) issued a public notice in the Federal Register on behalf of the Trustees announcing the development of additional future Early Restoration projects for a Draft Phase III Early Restoration Plan (ERP). This boat ramp project was submitted as an Early Restoration project on the NOAA website (http://www.gulfspillrestoration.noaa.gov) and submitted to the State of Florida. In addition to meeting the evaluation criteria for the Framework Agreement and the Oil Pollution Act (OPA), the project meets Florida's criteria that Early Restoration projects occur in the eight-county Florida panhandle area that deployed boom and was impacted by the Spill.

The proposed project is part of that larger effort to address the impacts of the DWH oil spill and its effects on damaged natural resources and human uses of those resources within the Gulf of Mexico. The project consists of construction activities at five existing recreation areas within Franklin County, Florida, that provide water-based recreation opportunities. The five parks and the proposed improvements include:

- Abercrombie Boat Ramp— Improve the existing Abercrombie boat launch facility in Franklin County. The proposed improvements include constructing additional docks to enhance water access. The total estimated cost of the project is $176,550.
- Waterfront Park— Improve the existing Waterfront Park in Apalachicola. The proposed improvements include enhancing existing parking and adjacent tie-up docks to enhance water access. In addition an existing onsite building would be enhanced to serve as an information center and dockmaster office. The total estimated cost of the project is $294,250.
- Indian Creek Park— Improve the existing Indian Creek Park boat launch facility in Franklin County. The proposed improvements include constructing restroom facilities, connecting them to an existing central wastewater facility nearby, and renovating the existing boat ramp, bulkhead, and parking area to enhance water access. The total estimated cost of the project is $353,100.
- Eastpoint Fishing Pier— Add restroom facilities to the base of the existing public Eastpoint Fishing Pier in Franklin County. The proposed improvements include not only constructing new restrooms, but a holding tank that would be pumped out regularly. The total estimated cost of the project is $294,250.
- St. George Island Fishing Pier— Enhance the existing public St. George Island public Fishing Pier in Franklin County. The proposed improvements include constructing new restrooms and a holding tank that would be pumped out regularly since there is no central wastewater facility on the island. The proposed improvements also include renovating the existing bulkhead that leads up to the pier and protects the road to the pier. The total estimated cost of the project is $653,235.

The proposed projects would enhance recreation access (through specific site improvements); improve parking at existing sites; improve visitor comfort with the addition of new restrooms, enhance visitor amenities; and protect existing public recreation infrastructure into the future.

12.66.2 Project Location

The five proposed project sites are located in Franklin County, Florida, and provide water based recreational access and opportunities to Apalachicola Bay, St. George Sound, and the Gulf of Mexico. The sites include: Abercrombie Boat Ramp, Franklin County Waterfront Park, Indian Creek Park, Eastpoint Fishing Pier, and St. George Island Fishing Pier. The five Franklin County sites are all located within the Apalachicola National Estuarine Research Reserve (ANERR). The National Estuarine Research Reserve System is administered by the National Oceanic and Atmospheric Administration (NOAA) and the coastal states. The ANERR was designated in 1979 because of its pristine nature and valued habitat for commercially and recreationally important species. Public lands within the ANERR include the St. Vincent Island National Wildlife Refuge, St. George Island State Park, Apalachicola River Wildlife and Environmental Area, Apalachicola River Water Management Area, and Little St. George Island. The Florida Department of Environmental Protection (FDEP) Office of Coastal and Aquatic Managed Areas administers the ANERR. Figure 12-34 shows the ANERR boundary and the locations of the five proposed project sites.

12.66.3 Construction and Installation

12.66.3.1 Courtesy Docks

Courtesy docks would be reconstructed at two sites to enhance boater access conditions at existing boat ramps. The docks would be reconstructed at Abercrombie boat ramp and Franklin County Waterfront Park.

The Abercrombie boat ramp currently has a boat launch and small dock. The upland area includes an access road and parking area. The surrounding area is mostly vegetated and undeveloped. The existing boat ramp consists of a two-lane, paved boat launch; each lane is approximately 20 feet wide, and there is a small dock between the two lanes, extending approximately 10 feet into the water (Figure 12-35).

Franklin County Waterfront Park has a parking lot, boat ramp, and docks. The existing dock is L-shaped, running perpendicular to the shoreline over the shallow-water/shoreline area and parallel to the shoreline over the water. The total length is approximately 120 feet, and the width is approximately 10 feet, with a total area of approximately 1,200 feet. Approximately 60 feet of the dock extends over open water, the rest crosses shoreline habitat (Figure 12-36).

12.66.3.1.1 Construction

Construction would include the demolition and removal of the existing courtesy docks and installation of new Americans with Disabilities Act (ADA)-compliant courtesy docks at the Abercrombie Boat Ramp and enhancement of the docks at the Franklin County Waterfront Park. Pilings for the courtesy docks would be installed from the land at Abercrombie boat ramp by augering into the existing soils and setting new pilings. Some in-water work may be required to finalize the placement of the dock pilings.

Mechanically auguring holes to place pre-formed pilings or to place forms that would be filled with pumped concrete to create new pilings would occur primarily from the upland areas. The holes for the pilings would likely be about 1 to 2 feet in diameter. Any in-water construction would take place within silt curtains designed to minimize potential impacts to turbidity from the activities. Construction fencing would be erected to isolate the area of construction so as to maintain public access to the boat ramp lanes not affected by construction. Materials would be staged on site in the parking lots or other nearby areas that are already developed. Docks would incorporate ADA design requirements as standards for slopes, widths, and other barriers to access.

To protect the existing marsh habitat between the parking area and the water, pilings for the enhanced docks at Franklin County Waterfront Park inaccessible from upland areas would be installed from a barge. Construction fencing would be installed to prevent incidental access. Old dock materials and soils excavated from the augering of new holes would be removed from the site.

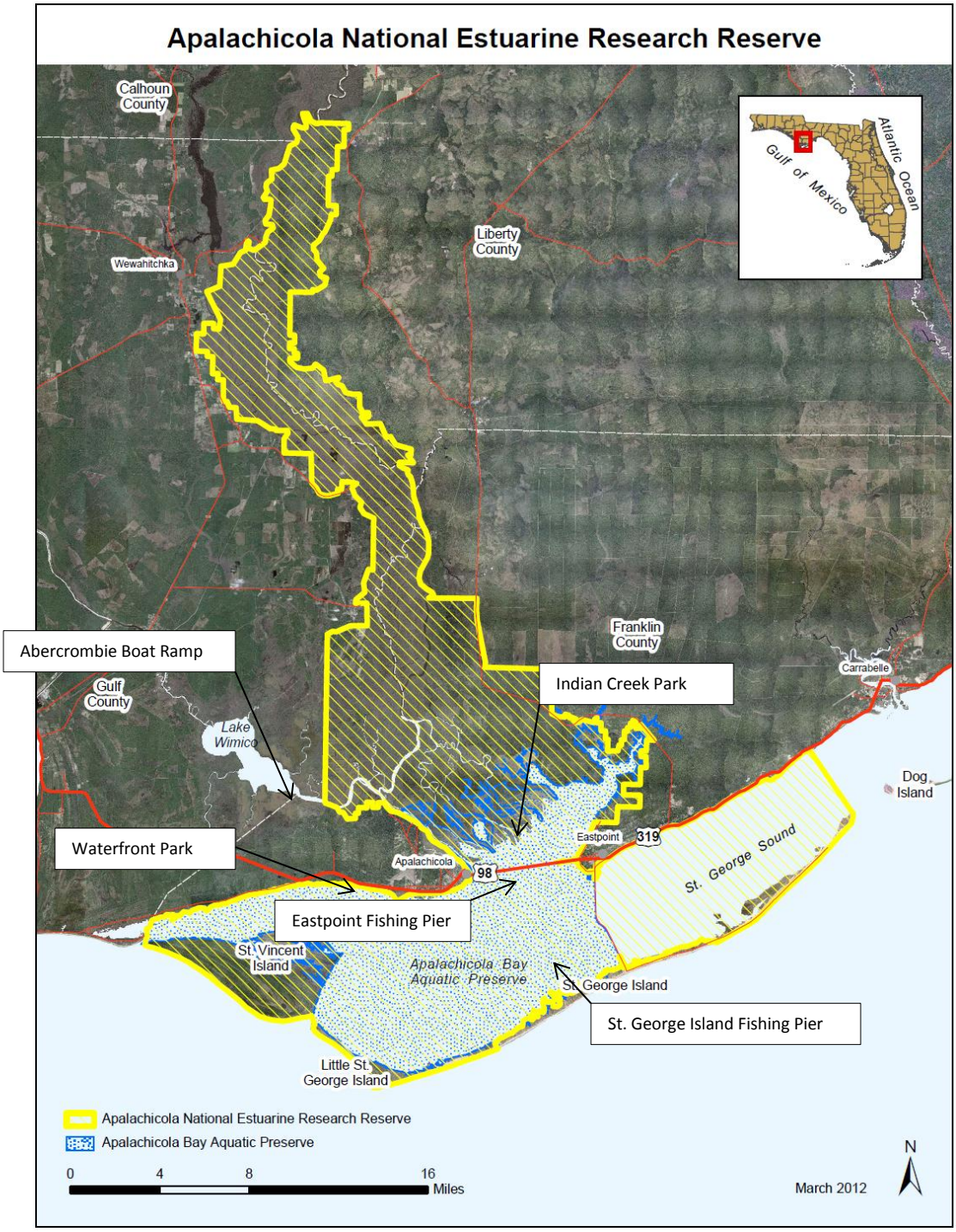

Figure 12-34. Map of Apalachicola National Estuarine Research Reserve.

Source: ANERR 2013

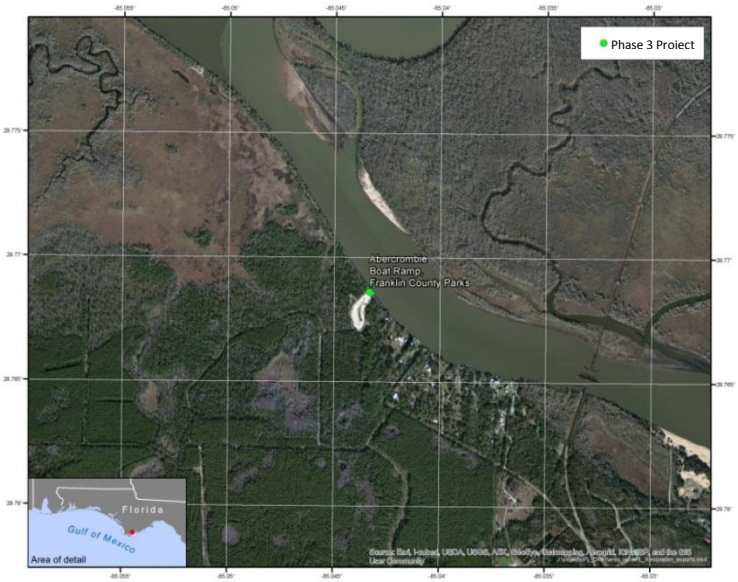

Figure 12-35. Abercrombie Boat Ramp Location.

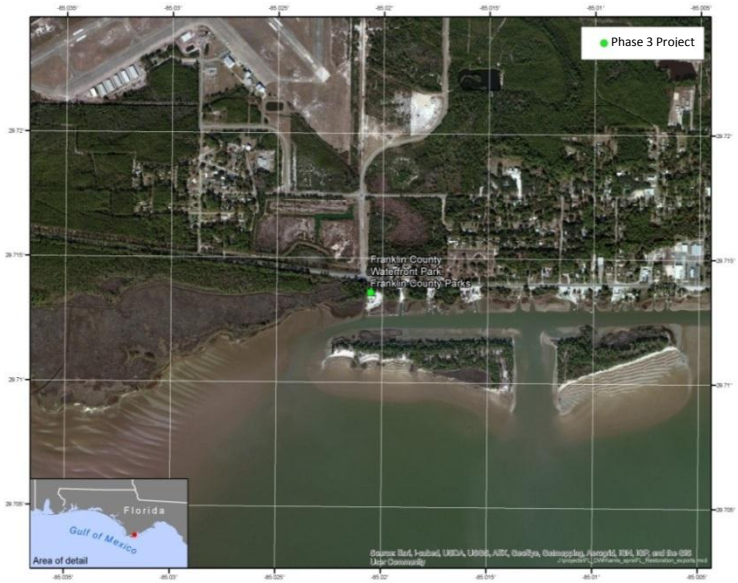

Figure 12-36. Franklin County Waterfront Park Location.

12.66.3.1.2 Mobilization, Staging, and Stockpiling

The main material storage and staging area for the project would be located in the existing parking lots of both sites. The total number of parking spaces used for project purposes would be kept to a minimum allowing public access to areas of the access sites that would not receive enhancements. The existing parking area surfaces are pervious (e.g., gravel) and would be regraded on project completion.

The proposed project would improve parking conditions at Franklin County Waterfront Park and Indian Creek Park to maximize the number of spaces available to users and enhance the launching experience at those sites.

Franklin County Waterfront Park includes a parking lot, boat ramp, and docks. The existing parking area is approximately 50,000 square feet with unmarked spaces for trailer parking. The native surfaced parking area is bounded by a tidally influenced creek on the west and the marsh habitat to the south. Review of recent aerial photographs suggests the parking area could accommodate approximately 20 vehicles with trailers at one time.

The Indian Creek Park boat launch parking area is a natural surface/grass covered lot with approximately 20 concrete parking blocks for spaces. The parking area is about 20,000 square feet (Figure 12-37).

12.66.3.1.3 Construction

Improvements would maintain the existing pervious surface while reconfiguring the layout at the sites to provide larger turn-arounds at the ramps to increase the launching efficiency. Existing surface materials would be re-graded and leveled, overgrowth would be trimmed back to reclaim parking spaces, and parking spaces and staging areas would be clearly identified. Any new surface material would be stored on site until it is applied. Temporary silt fences would be installed around the perimeter of the site using hand tools.

Figure 12-37. Improved parking conditions.

Existing parking areas at Franklin County Waterfront Park and the Indian Creek Park would be improved to enhancing the parking and traffic flow patterns around the boat ramps. Construction would include the expansion of the Franklin County Waterfront Park area to provide a wider turnaround at the head of the boat ramp for vehicles with trailers and relocate parking further away from the ramp. Heavy

machinery would be used to expand the gravel parking areas away from the ramp by re-grading and compacting the area. These improvements would provide more area around the ramps shortening the launch/retrieval times. Similar improvements would be made at Indian Creek Park. Both sites would maintain the existing pervious surface (e.g., gravel, sand).

12.66.3.1.4 Mobilization, Staging, and Stockpiling

The main staging area for the project would be located in the existing parking lots. Heavy machinery and new parking surface materials would be stored in a corner of the parking area to minimize the amount of spaces taken.

12.66.3.2 Renovated Boat Ramp

The proposed project would renovate the existing boat ramp at Indian Creek Park on the northern shore. The existing boat ramp is paved and includes a boarding dock; however, review of recent aerial photographs indicates the ramp is silted in and currently unusable. The shoreline adjacent to the boat ramp is armored with large boulders. The single-lane boat ramp is approximately 20 feet wide and runs perpendicular to the shoreline. The boat launch is located along the East Bay portion of the Apalachicola Bay shoreline. The in-water habitat adjacent to the ramp is shallow nearshore habitat with a sandy bottom. The boat ramp is near a large bridge crossing the Apalachicola Bay and the shoreline nearby is frequently interrupted with developed structures associated with the residential neighborhood.

12.66.3.2.1 Construction

Improvements would proceed by removing the existing cracked concrete surface and any associated work on the adjacent bulkhead materials and install a new concrete boat ramp. The new ramp would be in the same location as the existing ramp. Construction materials would be stored on site in the parking area for the duration of the project. Due to the nature of the work, the boat ramp would be temporarily closed to public use until the improvement project is complete; however, there is another paved boat ramp in the park on the western shore.

The initial work would require the removal of the existing cracked concrete boat ramp and disposal of material. Heavy machinery would be used to break up the concrete ramp and bulkhead and load into large dump trucks for removal. New subgrade material would be compacted and prepared for the new concrete. Concrete forms for new bulkheads and ramp surface would be constructed and poured using hand-held and small mechanical tools. All work would be performed behind a silt curtain to isolate the construction activities from the water. Safety fencing would be constructed to prevent incidental access. The footprint of the finished ramp and bulkhead would be the same as the existing facility.

12.66.3.2.2 Disposal

All cleared brush, concrete, and other waste associated with the ramp project would be transported offsite via trucks and disposed of at an approved disposal site, depending on the type of material.

12.66.3.2.3 Mobilization, Staging, and Stockpiling

The main staging area for the project would be located in the existing parking area. The total number of parking spaces utilized for project purposes would be kept to a minimum allowing public access to areas of the access sites that would not receive enhancements.

12.66.3.3 Construct Restrooms

Construction of three new restrooms would impact about 800 square feet at each site. The restrooms would be stick built and accommodate two stalls in each men and women partitions. Utilities would connect to the site through existing buried lines. Restroom construction would utilize standard building equipment, including excavating equipment to install holding tanks or make sewer connections. The Indian Creek Park restroom would be connected to sewer lines currently within close proximity to the parks. Heavy machinery would be used to excavate the material for the restroom foundations and trench for the sewer connections. The restrooms at the Eastpoint and St. George Island fishing piers would require excavation for placement of a 1,500 gallon primary septic and 1,050 gallon overflow tank underneath the buildings. The approximately 21 foot long by 18 foot wide restrooms would be built from pressure treated lumber, with Hardiplank select Cedar Mill style siding (frosted green) with white trim, galvanized welded wire screen ventilation system, and a galvanized metal roof and cupola. The ADA restrooms would be sited level with the existing grade.

12.66.3.3.1 Mobilization, Staging, and Stockpiling

The main staging area for the project would be located in the existing paved parking lot. The total number of parking spaces utilized for project purposes would be kept to a minimum allowing public access to areas of the access sites that would not receive enhancements.

Construction crews would consist of two to three persons working with small excavators to clear and prep the restroom foundations and storage tank areas. Carpenter crews would build the restrooms and utility company or contractors would install the electric and water utility lines with backhoes or trenching machinery.

12.66.3.4 Renovate Bulkhead

Repair of the 275 foot long bulkhead would be performed by a combination of hand-held and mechanical tools from upland and barge locations. Existing sections of bulkhead would be removed using machinery to lift the materials. All in-water work would be performed behind silt curtains to isolate the work area from the open water. After bulkhead installation, construction crews of two to three persons would install 99 feet of rubber bumpers to the open water side using hand held tools from a barge. Best management practices (BMPs) for erosion control would be implemented and maintained at all times during construction to prevent siltation and turbid discharges into waters of the state. Silt and sedimentation control measures would be installed and properly maintained at all points where runoff from disturbed areas could result in water quality violations of Chapter 62-302, Fla. Admin. Code. This may include the use of filter fences (staked or floating), sedimentation screens, erosion control blankets or other appropriate erosion and turbidity control measures. The project is anticipated to begin in early 2014 and completed by fall of 2019 unless severe weather delays construction. Work would begin with final designs and permitting followed by construction of the amenities. Construction is

anticipated to begin in June 2014 and completed by October 2019 with the majority of construction activity taking place during the recreation off season to minimize any disruption to public access. Work would be conducted from 7:00 a.m. to 6:00 p.m., Monday through Friday.

12.66.3.4.1 Mobilization, Staging, and Stockpiling

The temporary staging area for the project materials, supplies, and equipment during construction would be located within the existing paved parking lot and material would be loaded directly onto the barge.

12.66.3.5 Informational Kiosk

A kiosk describing fishing ethics, litter control, and the important resources surrounding the area (primarily commercial oyster bars, submerged aquatic vegetation, and marshes) would also be added to Waterfront Park, Indian Creek Park, East Point Fishing Pier, and St. George Island Fishing Pier access areas. The kiosk may be installed on pressure treated wood support posts augered into the ground and set in concrete or, alternatively, constructed to the exterior walls of on-site buildings. This could be the exterior of the new restrooms or the enhanced dock master's office at Waterfront Park.

12.66.4 Operations and Maintenance

Franklin County would be responsible for operation and maintenance of the new amenities and enhancements within the parks consistent with their existing park management maintenance schedules.

12.66.5 Affected Environment and Environmental Consequences

Under the National Environmental Policy Act, federal agencies must consider environmental effects of their actions that include, among others, impacts on social, cultural, and economic resources, as well as natural resources. The following sections describe the affected environment and environmental consequences of the project.

12.66.5.1 No action

Both OPA and NEPA require consideration of the No Action alternative. For this Draft Phase III ERP proposed project, the No Action alternative assumes that the Trustees would not pursue this project as part of Phase III Early Restoration.

Under No Action, the existing conditions described for the project site in the affected environment subsection would prevail. Restoration benefits associated with this project would not be achieved at this time.

12.66.5.2 Physical Environment

12.66.5.2.1 Geology and Substrates

Affected Resources

The project area is located within the Gulf Coastal Plain physiographic region. The basic geomorphology surrounding the project area has been primarily determined by geologic processes which ended about 15,000 years before present. Landforms throughout Franklin County are predominantly comprised of

Holocene sediments, alluvium, or beach ridge and dune geology (USGS 2013). The Florida Geological Survey Open Report (No. 80) recognizes the characteristic landscape of Florida is relatively to extremely flat resulting in few large, natural exposures and limited smaller exposures that geologists can investigate.

Soils in the area are classified within the Apalachicola Delta physiographic subdivision (University of Florida 2013). Located in the south-central portion of the Panhandle, this district is built with sediments deposited by the Apalachicola River. Landscapes range from relic deltas, ridges, and lagoons to river terraces, delta plains, and barrier islands. Karst topography is absent and soil materials are sandy to loamy. The Eastpoint Fishing Pier and the St. George Island Fishing Pier make use of the historic causeway across Apalachicola Bay and comprise impervious surfaces of asphalt, concrete, and stacked rip-rap.

Apalachicola Bay has a sandy/soft-sediment bottom with numerous oyster bars throughout. Almost all of the soils in the project area present high water tables and instability due to wind and water activity. The substrates present along the shorelines comprise stable slopes containing fine sand and beach sediment, while substrates in the submerged off-shore portions include soft sediments and hard reef substrates.

Environmental Consequences

Project enhancements would involve minor modifications to soils. The depth of ground disturbance would depend on final construction design and repairs required; however all construction activities would require at least some ground disturbances up to several feet deep. Soils would be excavated for new pilings for courtesy docks and foundations and septic tanks associated with new restrooms including any excavation to install sewer or utility lines. These activities would be temporary, localized in a footprint a fraction of each park, and any in-water piling work would be performed behind silt curtains to isolate construction impacts. Given that there would be no substantial change in uses at the project sites following implementation of the proposed enhancement activities, it is anticipated there would be no long-term negative impacts to soils. The implementation of the proposed project would therefore result in short-term minor negative and long-term beneficial impacts on soils.

12.66.5.2.2 Hydrology and Water Quality

Affected Resources

Hydrology

Project sites are located on the lower Apalachicola River (Abercrombie Boat Launch) and within the Apalachicola Bay. The Apalachicola River is the largest in Florida and ranks 21st in the United States, in terms of volume of flow (FDEP 2013). The Apalachicola River is formed by the confluence of the Chattahoochee and Flint Rivers at the Jim Woodruff Dam and flows 106 miles to Apalachicola Bay. The Apalachicola River can be classified as a large, alluvial river characterized by heavy sediment loads, turbid water, large watersheds, sustained periods of high flow, and substantial annual flooding (FDEP 2013). The mean annual discharge at Sumatra, Florida (River Mile 21), is approximately 25,000 cubic feet

per second (cfs).Edmiston (2008) reporting the findings of McNulty et al. (1972) estimates that the Apalachicola River discharge accounts for 35 percent of the total freshwater runoff on the west coast of Florida. The Apalachicola River is tidally influenced up to approximately (RM) 25.

The Apalachicola Bay has a watershed surface area of about 32,000 square miles while the surface area of the estuarine portion is approximately 368 square miles. The Apalachicola Bay has an average depth of about 7.5 feet and a tidal range of about 2 feet. The mean water residence time varies between 6 to 8.5 days.

Water Quality

The Apalachicola River is designated by Florida Surface Water Quality Standards Rule 62-302.530, Fla. Admin. Code, as "Class III: Recreation, Propagation and Maintenance of a Healthy, Well-Balanced Population of Fish and Wildlife" (FDEP 1996) while Apalachicola Bay is a Class II waterbody (approved for shellfish harvesting). The Bay has been designated as an Outstanding Florida Water (OFW), a National Estuarine Research Reserve, a Florida Aquatic Preserve, a U.S. Environmental Protection Agency (USEPA) Gulf of Mexico Ecological Management Site (GEM), and a United Nations Educational, Scientific and Cultural Organization (UNESCO) Biosphere Reserve. The draft ANERR management plan (2013) classifies the surface waters for shellfish harvesting or propagation or recreation and wildlife.

Although tidal influence in the Apalachicola River extends up past Sumatra (RM 21), salinity is not thought to affect the lower river past RM 6.6 (Edmiston 2008). Salinities throughout the Apalachicola Bay are dependent upon river flow, local rainfall, basin configuration, wind speed and direction, and water currents. They can range from 0 to 33 ppt. Dissolved oxygen values usually range from 4 to 14 mg/L, but most fall between 5 and 12 mg/L (Edmiston 2008).

Water quality concerns have also resulted in the listing of Apalachicola Bay on the 303(d) list of impaired waters under the CWA. States are required to identify waters that do not meet requirements of their designated use. With the exception of one chlorophyll listing for one segment of the Apalachicola Bay, all of the listings are related to mercury in fish or coliforms.

Environmental Consequences

Section 404 of the CWA requires U.S. Army Corps of Engineers (Corps) authorization prior to discharging dredged or fill material into waters of the United States. Section 10 of the Rivers and Harbors Act requires Corps authorization prior to any work in, under or over navigable waters of the United States, or which affects the course, location, condition or capacity of such waters. For proposed Natural Resource Damage Assessment (NRDA) Early Restoration projects with activities which might be subject to either CWA Section 404 or RHA Section 10, project sponsors are coordinating with the appropriate Corps of Engineers District office responsible for authorizing such activities. Early coordination helps facilitate information-sharing and communication, thus maximizing available efficiencies in the permitting process. For example, this coordination is helpful in identifying early on whether a Corps permit is needed and, if so, what type. Early coordination also allows for advance discussion of measures to avoid and minimize potential project impacts and helps inform sponsors on additional factors the Corps considers in its decision-making process. For several Early Restoration projects considered in this

Draft Phase III ERP/PEIS, Corps authorization under CWA Section 404 or RHA Section 10 has been completed. For those Early Restoration projects still requiring authorization, coordination between project sponsors and the Corps is ongoing and authorization will ultimately be completed prior to project implementation.

The proposed projects would not increase the amount of impervious surfaces at the parks above existing conditions resulting in minor changes to water resources. BMPs along with other avoidance and mitigation measures required by state and federal regulatory agencies would be employed to minimize any water quality and sedimentation impacts associated with construction activities. BMPs for erosion control would be implemented and maintained at all times during construction to prevent siltation and turbid discharges into waters of the state. Silt and sedimentation control measures would be installed and properly maintained to protect water quality resources. Given that there would be no substantial change in uses at the project sites following implementation of the proposed enhancement activities, it is anticipated that there would be no long-term negative impacts to water resources. The implementation of the proposed project would result in short-term minor negative and long-term beneficial impacts on water resources.

12.66.5.2.3 Air Quality and Greenhouse Gas Emissions

Affected Resources

The USEPA calculates the Air Quality Index (AQI) for five major air pollutants regulated by the Clean Air Act: ground-level ozone, particle pollution (also known as particulate matter), carbon monoxide, sulfur dioxide, and nitrogen dioxide. The AQI is an index for reporting daily air quality. AQI values are divided into six categories: Good, Moderate, Unhealthy for Sensitive Groups, Unhealthy, Very Unhealthy, and Hazardous. AQI values for Apalachicola, Florida (centrally located in Franklin County where the Apalachicola River meets the Apalachicola Bay) recorded for the past 5 years show air quality is very good. During 2012, the last full year on record at the time of writing, 97.5 percent of the days were reported as 'Good' with the remainder as 'Moderate'. Within the AQI values in these categories represent pollutant levels below the national air quality standard for the pollutants.

Implementation of the project would include transportation and heavy construction equipment, which may include bulldozer, barge, truck, backhoe, tractor trailer, crane, small trucks, and hand tools.

Environmental Consequences

Project implementation would require the use of heavy equipment which would temporarily affect air quality in the project vicinity due to construction vehicle emissions. Demolition and excavation associated with the removal and construction of existing courtesy dock pilings may produce fine particulate matter. BMPs would be employed to prevent, mitigate, and control potential air pollutants during project implementation. Any air quality impacts that would occur would be localized and short in duration. Therefore, any adverse impacts to air quality would be short-term and minor.

Engine exhaust from bulldozers, excavators, trucks, backhoes and other vehicles would contribute to an increase in greenhouse gases (GHG). Table 12-32 describes the likely GHG emission scenario for the implementation of this project.

Based on the assumptions described in Table 12-32 below, and the small scale and short duration of the construction portion of the project, predicted GHG emissions would be short-term and minor and would not exceed 25,000 metric tons per year. Available BMPs would be employed to reduce the release of GHGs during implementation. Based on the small scale and short duration of the project, GHG emissions in the project staging and deployment areas would be minimal. Therefore, any increase in GHG emissions would be short-term and minor.

Table 12-32. Greenhouse gas emission estimates.

PROJECT ACTIVITY	CONSTRUCTION EQUIPMENT	NO. OF HOURS OPERATED	NO. FOR PROJECT	TOTAL CO2E EMISSION RATE[1] (METRIC TONS)
Courtesy Docks, Boat Ramp, and Bulkhead Repair	Small barge w/ crane (pile driving)	8 hours/day, 5 days/week, 1 month	4	23.2 (used crane .29equipment for calculating total)
	tractor trailer (material delivery)	3 trips	4	4.1 (used dump truck .34)
	small power tools (nail guns, saws, drills	8 hr/day, 5 day/week, 4 month	4	51.2 (used pickup truck .16)
	generator (small tools)	8 hr/day, 5 day/week, 4 month	4	64 (used .8 as conversion)
Parking Improvements & Restrooms	Small tools (nail guns, saws, drills)	8 hr/day, 5 day/week, 6 months	3	14.4
	Tractor trailer (material delivery)	1 trip / week, 6 months	3	24.5
	generator (small tools)	8 hr/day, 5 day/week, 6 months	3	96
Total				277.4
Note: 1. Includes CO2, CH4, and NOx				

12.66.5.2.4 Noise

Affected Resources

The primary sources of ambient (background) noise in the project area are operation of vehicles, humans, recreational vessels, and natural sounds such as wind and wildlife. City noise is mainly from vehicles and also occasional human activities. The levels of noise in the project area vary, depending on the season, and/or the time of day, the number and types of sources of noise, and distance from the sources of noise.

Environmental Consequences

Park visitors and wildlife may be sensitive to changes in noise sources or levels due to the project construction. The proposed project would generate construction noise associated with equipment during construction of the boat docks, parking areas, restrooms, and other amenities. Construction equipment and pile driving noise is known to disturb nesting shorebirds. Construction noise can also be a nuisance to residents living on the shorelines adjacent to project construction activities or to park visitors.

Mitigation measures that serve to limit noise during construction include: limiting activity at project sites to daytime hours; limiting truck traffic ingress/egress to the site to daytime hours; promoting awareness that producing prominent discrete tones and periodic noises (e.g., excessive dump truck gate banging) should be avoided as much as possible; and requiring that work crews seek pre-approval for any weekend activities, or activities outside of daytime hours. Because construction noise is temporary, any negative impacts to the human environment during construction activities would be short-term and minor.

Once facilities are constructed, noise can be generated from facility operations and the vehicles associated with these facilities. However, these noise levels would be representative of existing levels and similar in nature to those generated prior to construction of the project. Overall, long-term noise effects from personal vehicle use, boating, fishing, and other recreational activities would be minor.

12.66.5.3 Biological Environment

12.66.5.3.1 Living Coastal and Marine Resources

Affected Resources

The ANERR habitats include barrier island, estuarine, riverine, floodplain, and upland environments. Major estuarine habitats found within the ANERR include oyster bars, submerged vegetation, tidal flats, soft sediment, marshes and open water. Upland habitats include sandhills, coastal scrub, pine flatwoods, and mixed hardwood communities. Wetland habitats include freshwater marsh, salt marsh, riverine, lacustrine, palustrine, open bay, and the Gulf of Mexico.

Flora

More than 1,500 plant species have been identified within the Apalachicola drainage basin with 107 of them listed as protected under State or Federal law. A variety of vegetative communities, such as coastal scrub, dunes, pine flatwoods, oak hammocks, marshes, ponds, and sloughs are found on the ANERR islands. Vegetation in the salt marshes is made up primarily of black needlerush, smooth cordgrass, and saltgrass.

Fauna

The area is also home to 308 species of birds, 186 species of fish, 57 species of mammals, and it boasts the highest species density of amphibians and reptiles in all of North America, north of Mexico (ANERR 1998). Among the many species of reptiles and amphibians are the southern dusky salamander, the

gopher frog, Barbour's map turtle (which is endemic to the Apalachicola River), loggerhead turtle northwest Atlantic distinct population segment, Apalachicola kingsnake, and eastern indigo snake. More than 50 species of mammals found within the Apalachicola basin. Opossum, bats, shrews, mice, moles, voles, rabbits, and other small mammals are plentiful in the ANERR. Other mammals sighted include foxes, weasels, black bears, mink, bobcats, coyotes, deer, feral pigs, bottlenose dolphin, and the West Indian manatee.

Protected Species

Protected species and their habitats include ESA-listed species and designated critical habitats, which are regulated by either the USFWS or the NMFS. Protected species also include marine mammals protected under the Marine Mammal Protection Act, essential fish habitat (EFH) protected under the Magnuson-Stevens Fishery Conservation and Management Act, migratory birds protected under the Migratory Bird Treaty Act (MBTA) and bald eagles protected under the Bald and Golden Eagle Protection Act (BGEPA).

Section 7 and Essential Fish Habitat Consultations

Section 7 ESA consultations with the USFWS and NMFS will be initiated for the proposed projects. An EFH consultation under the Magnuson-Stevens Fishery Conservation and Management Act also would be completed to address any situations where proposed project activities may affect EFH habitat. The projects would incorporate any additional conservation recommendations provided by the NMFS and the USFWS during the consultation to avoid, minimize, mitigate, or otherwise offset the adverse effects of the proposed project on listed and proposed species, critical habitat or EFH.

Endangered Species Act

The West Indian manatee, the Indiana bat, and the gray bat are listed as endangered species and have been found within the ANERR.

The Georgia blind salamander is a species of special concern, as well as the gopher frog, the gopher tortoise, Barbour's map turtle and the alligator snapping turtle. Three sea turtles, the Kemp’s Ridley, the green and the leatherback, are listed as endangered, and the Gulf Sturgeon, Northwest Atlantic Distinct Population Segment of the loggerhead sea turtle and the eastern indigo snake are both listed as threatened species.

Marine Mammal Protection Act

The proposed project includes fishing pier, upland facilities that would be renovated approximately 4,500 feet from the Gulf shoreline. No activities associated with this proposed project would occur within the Gulf of Mexico and therefore there should be no impacts to marine mammals.

Submerged Habitats and Vegetation

Oyster bars cover more than 10,600 acres of submerged bottom within the ANERR boundaries. The American oyster is the dominant component on the bars which cover approximately 10 percent of the Bay bottom. Important associated organisms include oyster predators such as southern oyster drills, stone crabs, blue crabs, crown conchs, flatworms, and boring clams. Other organisms which inhabit

oyster bars include mussels, mud crabs, flat crabs, blennies, toadfish, gastropods, and many other transitory organisms that are commercially important species (Menzel et al. 1966, as summarized by ANERR 1998). St. George Island fishing pier and Eastpoint Fishing pier are in proximity to these oyster bars.

According to the Draft Apalachicola Reserve Management Plan (2013), submerged vegetation found in the Apalachicola Bay includes fresh water, brackish, and marine species. Their distribution is confined to the shallow perimeters of the system because of high turbidity which limits the depth of the photic zone. The shallow bayside regions of St. George and the mainland areas of St. George Sound support seagrasses with shoal grass the dominant species. Turtle-grass and manatee-grass are found in deeper, higher salinity waters in the eastern reaches of the Bay. Widgeon-grass and tapegrass are found near the mouth of the river and in the upper reaches of the Bay.

Tidal marshes are extensive along the East Bay and along the lower reaches of the Apalachicola River. The marshes in the higher salinity regions in proximity to the open Bay are dominated by black needlerush, cordgrasses, and saltgrass (ANERR 2013, modified from Livingston 1984). Marshes fed by tidal creeks and bayous northward of the Bay support predominantly fresh to brackish water vegetation consisting primarily of sawgrass, cattails, and bulrushes.

Essential Fish Habitat (EFH)

EFH is defined in the Magnuson-Stevens Fishery Conservation and Management Act as "those waters and substrates necessary to fish for spawning, breeding, feeding or growth to maturity." The designation and conservation of EFH seeks to minimize adverse effects on habitat caused by fishing and non-fishing activities. The NMFS has identified EFH habitats for the Gulf of Mexico in its Fishery Management Plan Amendments. These habitats include estuarine emergent wetlands, seagrass beds, algal flats, mud, sand, shell, and rock substrates, and the estuarine water column. The EFH within the project area include emergent wetlands, mud substrate, and estuarine water columns for species of fish, such as red drum, brown shrimp, pink shrimp, and white shrimp. There are no marine components of EFH in the vicinity of the project site.

The area also provides habitat for prey species (e.g. Gulf menhaden, shad, croaker and spot) that are consumed by larger commercially important species. In addition, the area provides habitat for spotted seatrout, striped mullet, southern flounder, Atlantic croaker, and Gulf menhaden. Table 12-33 provides a list of the species that NMFS manages under the federally Implemented Fishery Management Plan in the vicinity of the Franklin County, Abercrombie Boat Ramp, Franklin County Waterfront Park, Indian Creek Park, and St. George Island Fishing Pier sites which are all located within the Apalachicola National Estuarine Research Reserve (ANERR).

Table 12-33. List of species managed by NMFS in vicinity of the project study area (NMFS EFH mapper, 2013).

MANAGEMENT UNIT / SPECIES	LIFESTAGE(S) FOUND AT LOCATION	FMP
Red Drum (Sciaenops ocellatus)	ALL	Red Drum
Highly Migratory Species		
Atlantic Sharpnose Shark	All	
Blacknose Shark	All	Highly Migratory
Blacktip Shark	All	Species
Bonhead Shark	All	**(Indian Creek Park,**
Bull Shark	Juvenile, Adult	**Waterfront Park, St.**
Finetooth Shark	Juvenile, Adult	**George Fishing Pier)**
Great Hammerhead Shark	All	
Nurse Shark	Juvenile	
Scalloped Hammerhead Shark	Neonate, Juvenile	
Spinner Shark	All	
Shrimp		
Brown shrimp (*Penaeus aztecus*)		
White shrimp (*Penaeus setiferus*)	ALL	Shrimp
Pink shrimp (*Penaeus duararum*)		
Royal red shrimp (*Pleoticus robustus*)		
Rock Shrimp (*Sicyonia brevirostris*)		
Seabob Shrimp (*Xiphopenaeus kroyeri*))		
Coastal Migratory Pelagics		
King mackerel (*Scomberomorus cavalla)*		
Spanish mackerel (*Scomberomorus maculatus*)		
Cobia (*Rachycentron canadum*)	ALL	Coastal Migratory
Dolphin (*Coryphaena hippurus*)		Pelagics
Reef Fish		
Balistidae - Triggerfishes		
Gray triggerfish (Balistes capriscus)		
Carangidae - Jacks		
Greater amberjack (Seriola dumerili)		
Lesser amberjack (Seriola fasciata)		
Almaco jack (Seriola rivoliana)		
Banded rudderfish (Seriola zonata)		
Labridae - Wrasses	ALL	Reef Fish
Hogfish (Lachnolaimus maximus)		
Lutjanidae - Snappers		
Queen snapper (Etelis oculatus)		
Mutton snapper (Lutjanus analis)		
Blackfin snapper (Lutjanus buccanella)		
Red snapper (Lutjanus campechanus)		
Cubera snapper (Lutjanus cyanopterus)		
Gray (mangrove) snapper (Lutjanus griseus)		
Lane snapper (Lutjanus synagris)		
Silk snapper (Lutjanus vivanus)		
Wenchman (Pristipomoides aquilonaris)		

MANAGEMENT UNIT / SPECIES	LIFESTAGE(S) FOUND AT LOCATION	FMP
Vermilion snapper (Rhomboplites aurorubens)		
Malacanthidae – Tilefishes		
Goldface tilefish (Caulolatilus chrysops)		
Blueline tilefish (Caulolatilus microps)		
Serranidae – Groupers		
Speckled hind (Epinephelus drummondhayi)		
Yellowedge grouper (Epinephelus flavolimbatus)		
Red grouper (Epinephelus morio)		
Warsaw grouper (Epinephelus nigritus)		
Snowy grouper (Epinephelus niveatus)		
Nassau grouper (Epinephelus striatus)		
Black grouper (Mycteroperca bonaci)		
Yellowmouth grouper (Mycteroperca interstitialis)		
Gag (Mycteroperca microlepis)		
Scamp (Mycteroperca phenax)		
Yellowfin grouper (Mycteroperca venenosa)		

Environmental Consequences

ESA Section 7 checklist for NMFS reports no seagrass, mangrove, corals, or other marine vegetation present at the action areas proposed for this project. Impacts to protected species and their habitats may occur during construction of portions of the project, but would be localized. Disturbance to individual species would occur in the construction areas; however, there would be no change in the diversity or local populations of protected species. The FDEP would take appropriate actions (applicable BMPs and permit conditions) as required by the USFWS to minimize impacts to the endangered or threatened species that may be present in the project area. While the proposed projects would provide access directly to the ANERR, the construction of the amenities would be limited to the nearshore environment with only the pilings for renovated boat docks and bulkhead repairs occurring within the aquatic environment.

Potential effects to Gulf sturgeon and critical habitat include a slight increase in disturbance at the existing park sites, some increased turbidity, and noise during construction. Long-term impacts are expected to be negligent, as this project would add boarding docks, new ramp surfaces, and new bulkhead materials to already developed boat ramps with existing docks and bulkheads. All construction conditions identified in the Sea Turtle and Smalltooth Construction Conditions (NOAA 2006) would be implemented and adhered to during project construction to minimize the risk of collisions.

ESA Section 7 consultation will be initiated with the USFWS to determine if any listed species or critical habitats may be affected by the proposed project. If these projects may impact listed species or critical habitats, avoidance and minimization measures will be developed to reduce impacts such that they are short term and minor.

There could be an increase in public use (e.g., boat traffic, fishing) after the project is completed; however, no additional impacts related to public use are expected because the area is already open to the public and the proposed project would improve the amenities at the sites but not increase the amount of water access at each site.

With the incorporation of the mitigation measures referenced above, it is anticipated that the short-term and long-term impacts of the proposed project on sensitive, threatened, or endangered species or their proposed or designated critical habitat would be short-term and minor.

EFH considerations would be coordinated with the NMFS Habitat Conservation Division through a formal EFH assessment process. If necessary, species specific measures would be recommended by NMFS and would be incorporated into the project construction plan. The project would not result in adverse, direct impacts to emergent wetlands, existing oyster reefs, or Submerged Aquatic Vegetation (SAV). Most motile fauna such as crab, shrimp, and finfish will likely avoid the area of potential effect during the construction process. The project may result in minor, adverse short term impacts to benthic organisms and temporarily affect habitat utilization by individuals considered under EFH fishery management plans.

State-listed Birds, MBTA, and BGEPA

State-listed birds such as oystercatchers or least terns (*Sternula antillarum*) may nest on beaches or mudflats in the vicinity of the project areas and all migratory birds are protected under the MBTA. If restoration activities occur during the nesting season (March 1 to August 1), they could be disturbed by noise generated by in-water activities. This would be a short-term, minor effect. If construction cannot avoid the nesting season, Nesting seabirds and shorebird protection conditions from FWC would be implemented. These conditions include: a preconstruction survey would be conducted by a qualified biologist and if nesting birds were to be identified within 300 feet of project activities, the FWC and USFWS would be contacted regarding setting up appropriate buffers to ensure no effects to nesting birds would occur. Contractors would be required to be aware of and comply with applicable laws prohibiting harm to migratory birds and endangered species.

In recent years, the bald eagle has been removed from the endangered species list under ESA. All activities (staging, demolition, construction, cleanup, use of equipment, machinery, vehicles including utility terrain vehicle [UTV] and all-terrain vehicle [ATV], or boat/vessels) should avoid a bald eagle nest by a minimum of 660 feet.

Consultation with FWC concerning the proposed project and anticipated construction schedule relative to known bald eagle nest sites within the project vicinity, and the nesting season in Florida (October 1 to May 15) would be required prior to commencement of restoration activities. To minimize potential for impacts to nesting bald eagles, the consultation protection measures may include 1) addressing prescribed nest tree protection zones, and 2) preparation of a bald eagle nest protection plan (including nesting behavior disturbance monitoring). Bald eagles have been known to tolerate certain potential disturbances within their breeding territories. Should these conservation measures be implemented for

active nest sites adjacent to enhancement activities in the project areas, potential effects to the bald eagle would be short term and minor.

12.66.5.3.2 Invasive Species

Affected Resources

Non-native invasive species could alter the existing terrestrial or aquatic ecosystem within, and possible expand out into adjacent areas after the initial introduction. The invasive species threat, once realized, could result in economic damages. Prevention is ecologically responsible and economically sound. Chapter 3 described more about the regulations addressing invasive species, pathways, impacts, and prevention. At this time specific invasive species that may be present on the project site or could be introduced through the project have not yet been identified.

Environmental Consequences

Best Management Practices (BMPs) to control the spread of any invasive species present, and prevent the introduction of new invasive species due to the project will be implemented. In general, best management practices would primarily address risk associated with vectors (e.g., construction equipment, personal protective equipment, delivery services, foot traffic, vehicles/ vessels, shipping material). There are many resources that provide procedures for disinfection, pest-free storage, monitoring methods, evaluation techniques, and general guidelines for integrated pest management that can be prescribed based upon specific site conditions and vectors anticipated. In addition, to best management practices, outreach and educational materials may be provided to project workers and potential users/visitors. Other measures that could be implemented are identified in Chapter 12 Appendix A. Due to the implementation of BMPs, we expect risk from invasive species introduction and spread to be short term and minor.

12.66.5.4 Human Uses and Socioeconomics

12.66.5.4.1 Socioeconomics and Environmental Justice

Affected Resources

In 2012, the population of Franklin County was estimated at 11,686, which ranks 65th among Florida's 67 counties and accounts for less than one percent of the Florida population (US Census 2013). Approximately 79 percent of the population in Franklin County is white (not Hispanic or Latino), 14 percent is black or African American, 5 percent is Hispanic or Latino, and 1.6 percent consider themselves more than two races. Around 7 percent of the county speaks a language other than English at home. Median household income (2007-2011) in Franklin County and the state is $37,017 and $47,827, respectively with 24 percent of the county and 15 percent of the state living below the poverty level (Census 2012). Apalachicola and Carrabelle are the only municipalities within Franklin County.

Historically more than 65 percent of the Franklin County work force has been employed by the commercial fishing industry, although this has been changing with the increasing importance of tourism to the area (ANERR 2013). Oysters, shrimp, blue crab, and finfish continue to make up the bulk of the

catch with an estimated value of more than $134 million in economic output annually and an additional $71 million in value-added benefits (Crist 2007, as reported by ANERR 2013).

Environmental Consequences

The estimated cost to construct the proposed project at the five parks is just under $1.8M. There would be direct financial benefits to the contractors supplying the labor, oversight, project management, and monitoring to construct the new amenities as well as the material suppliers. Direct, short-term, moderate benefits through local job creation would result from construction activities. There would be minor indirect beneficial effects to the local economy due to possible increased recreational and activity in response to improvements at the Parks. These economic benefits would be concentrated in the service and retail industry sectors. Beneficial economic effects would accrue to local recreational supply retailers, restaurants, and hospitality providers. The proposed project would not adversely affect any low income or minority populations. Overall, no adverse impacts would occur to socioeconomics and environmental justice as a result of the proposed project.

12.66.5.4.2 Cultural Resources

Affected Resources

People have lived in the coastal region of the Gulf of Mexico for more than 10,000 years. Today many unique and diverse cultures call the Gulf coast home. These cultures, past and present, are often closely linked to the environmental and natural resources which comprise the Gulf Coast ecosystem and which this project seeks to restore.

The Franklin County Comprehensive Plan identifies the Indian Creek Park as a County Archaeological Site.

Environmental Consequences

A complete review of this project under Section 106 of the NHPA would be completed prior to project implementation. This project would be implemented in accordance with all applicable laws and regulations concerning the protection of cultural and historic resources.

12.66.5.4.3 Infrastructure

Affected Resources

Current facilities include parking, boat ramps, courtesy docks, and existing bulkheads. Temporary porta-john type facilities currently serve as restrooms for the recreating public.

Environmental Consequences

During the construction activities, there would be short-term disruptions of parking and public access to facilities within the Parks, but over the long-term the project would enhance public use of the facilities and recreational opportunities. Aside from improvements to basic sanitation facilities there would be no changes to infrastructure or additional public utility requirements under the proposed project. Construction waste would be removed by the contractor to an appropriate landfill using dump trucks, roll-off dumpsters, or trailers. The current closest landfill is the Franklin County Central Landfill located

in Eastpoint. The landfill capacity has not been reached. Any adverse impacts would be short-term and minor.

12.66.5.4.4 Land and Marine Management

Affected Resources

Land use characteristics influence runoff patterns, types of pollutants, water quality and quantity, and virtually all aspects of riverine and river-dominated estuarine systems. Franklin County is predominantly rural with 93 percent of the total county area of 348,800 acres zoned either forestry conservation, forestry agriculture, preservation, recreation, or submerged bottomlands (ANERR 1998**;** Table 12-34). Franklin County has a relatively sparse population density of 21 persons per square mile (US Census Bureau 2013).

Table 12-34. Franklin County land use.

LAND USE	TOTAL ACRES	PERCENTAGE OF COUNTY
Incorporated Areas	1,760	5
Residential	16,071	4.7
Commercial	840	0.2
Industrial	1,325	0.4
Public Facilities	560	0.2
Recreation	1,894	0.5
Conservation	40,608	11.6
Agricultural	265,347	76.0
Water	20,395	5.9
TOTAL	**348,800**	**100**

Source: ANERR 1998

All five project sites provide water access for the recreating public. Franklin County identifies the existing land use at the five parks as either residential, commercial, or conservation lands. Shoreline uses adjacent to the parks include residential access (e.g., private docks), armored shorelines (e.g., riprap or bulkhead), or undeveloped shorelines.

Environmental Consequences

The project would not change the current land use, zoning, or cause any amendments to management plans that relate to the project area. The action areas would remain zoned for recreational use, which allows for structures related to outdoor activities such as boating and fishing. Thus, no impacts would occur to Land Management under the proposed Project.

Pursuant to the Coastal Zone Management Act of 1972, federal activities must be consistent to the maximum extent practicable with the federally-approved coastal management programs for states where the activities would affect a coastal use or resource. Federal Trustees are submitting consistency determinations for state review coincident with public review of this document.

12.66.5.4.5 Aesthetics and Visual Resources

Affected Resources

The general visual character of the region can be described as semi-rural, with residential and commercial areas concentrated in Apalachicola, East Point and St. George Island and along major roads and highways in the area. Residential communities in this region are interspersed with commercial developments located along major roadways, with some larger areas remaining in agricultural use or as undeveloped open space. The topography is flat. Most recreational activities at the parks involve the use of the natural setting. For example, activities such bird watching and fishing benefit from the natural settings to enhance experiences. During the construction of the improvements, the materials, workers, and equipment would be staged adjacent to the worksites, on site within existing parking areas. The proposed construction is consistent with the surrounding structures and typical of amenities located within the neighboring areas.

Environmental Consequences

Temporary impacts to visual resources would result from construction of the proposed project. Large construction equipment such as backhoes for demolition and excavation would temporarily obstruct the shoreline views for visitors and recreational users at the site. The addition of the restrooms would change the sightlines at Indian Creek Park, Eastpoint Fishing Pier, and St. George Fishing Pier, but the construction would be consistent with neighboring land uses and structures. The structures would not negatively attract attention, dominate the view, or detract from the current user activities or experiences. Any adverse impacts to aesthetic and visual resources would be short-term and minor.

12.66.5.4.6 Tourism and Recreational Use

Affected Environment

The proposed project action areas provide recreational access for boaters and anglers to Apalachicola Bay and River. Recreation is an important activity within ANERR; however, the supply of recreation opportunities is provided by other entities such as Franklin County, State of Florida, or other federal agencies. These opportunities include boat and shoreline saltwater fishing, boat and shoreline fresh water fishing, hunting, hiking, camping, nature study, birding, canoeing, kayaking, boating, shelling, beach activities, swimming, and nature photography.

Abercrombie boat launch, Waterfront Park, and Indian Park provide boat launch opportunities in residential and light commercial type settings to Apalachicola Bay. Each ramp is designed to accommodate between 10-20 vehicles with trailers at one time. Given the limited amount of space annual visitation is modest compared to larger, multi-amenity, recreation opportunities in the region such as the St. George Island State Park. The Eastpoint and St. George Fishing Piers each provide more than 3,000 feet of pier for angling; however, the parking at each site is limited to between 20 to 30 spaces.

Environmental Consequences

During the construction period, recreational experience would be impacted from noise and visual disturbances associated with the use of heavy equipment. Access to certain areas could also be restricted or impacted to some degree during construction activities. During construction, it would be necessary to close portions of the parks to public access to ensure public safety. However, this would be limited to the amount of time necessary to complete the construction and would be reopened after completion. To the maximum extent practicable, parking lots would remain open to allow for public use during construction until the new parking areas are completed. The construction may have moderate impacts to public access and use of the boat ramps. While these temporary inconveniences would result in minor short-term impacts recreational use during the construction and rehabilitation activities at the shoreline, over the long term improved access and enhanced facilities would result in minor benefits to recreational use and enjoyment of the facilities. Overall, the implementation of the proposed project would contribute positively to visitor experience and public access. Any adverse impacts to tourism and recreational use would be short-term and minor.

12.66.5.4.7 Public Health and Safety and Shoreline Protection

Affected Resources

The project and its construction are not anticipated to generate hazardous waste or the need for disposal of hazardous waste. All waste generated during the construction of the amenities would be disposed in the appropriate waste or recycle collection receptacles in the park or hauled off to an approved waste disposal site. All occupational and safety regulations and laws would be followed to ensure safety of all workers and the public.

Environmental Consequences

No hazardous waste would be created during construction of the improvements. All hazardous materials handled during construction would be contained and appropriate barriers would be in place to ensure the protection of adjacent water resources from potential spills and leaks. BMPs in accordance with OSHA and state and local requirements would be incorporated into construction activities on site to ensure the proper handling, storage, transport and disposal of all hazardous materials. Personal protective equipment would be required for all construction personnel and authorized access zones would be established at the perimeter of the worksite during construction. Soil and sediment stabilization measures would be incorporated into project design as needed in areas where the potential exists for erosion to occur in order to protect resources and ensure public health and safety. No adverse effects to public health and safety and shoreline projection are expected as a result of this project.

New restroom facilities would have a beneficial impact to human exposure and sanitation issues as the public would be provided an upgrade to their sanitary facility options.

12.66.6 Summary and Next Steps

Per the Purpose and Need of the Draft Phase III ERP/PEIS, four alternatives are considered, including a no action (Alternative 1), selection of project types emphasizing habitat and living coastal and marine resources (Alternative 2), project types emphasizing recreational opportunities (Alternative 3), or a

combination of both habitat and living coastal and marine resources and recreational opportunities (Alternative 4). As proposed, the Enhancement of Franklin County Parks and Boat Ramps projects implement restoration techniques within Alternatives 3 and 4.

The proposed Enhancement of Franklin County Parks and Boat Ramps – Indian Creek Park project would improve the existing Indian Creek Park boat launch facility in Franklin County. The proposed improvements include constructing restroom facilities, connecting them to an existing central wastewater facility nearby, and renovating the existing boat ramp, bulkhead, and parking area to enhance water access. The proposed Enhancement of Franklin County Parks and Boat Ramps – Eastpoint Fishing Pier Improvement project would add restroom facilities to the base of the existing public East Point Fishing Pier in Franklin County. The proposed improvements include not only constructing new restrooms, but a holding tank that would be pumped out regularly. The proposed Enhancement of Franklin County Parks and Boat Ramps – Abercrombie Boat Ramp project would improve the existing Abercrombie boat launch facility in Franklin County. The proposed improvements include constructing additional docks to enhance water access. The proposed Enhancement of Franklin County Parks and Boat Ramps – Waterfront Park project would improve the existing Waterfront Park in Apalachicola. The proposed improvements include enhancing existing parking and adjacent tie-up docks to enhance water access. In addition an existing onsite building would be enhanced to serve as an information center and dockmaster office. The proposed Enhancement of Franklin County Parks and Boat Ramps – St. George Island Fishing Pier Improvements project would enhance the existing public St. George Island public Fishing Pier in Franklin County. The proposed improvements include constructing restrooms and a holding tank that would be pumped out regularly since there is no central wastewater facility on the island. The proposed improvements also include renovating the existing bulkhead that leads up to the pier and protects the road to the pier. These projects are consistent with Alternative 3 (Contribute to Providing and Enhancing Recreational Opportunities) and Alternative 4 (Preferred Alternative).

Draft NEPA analysis of the environmental consequences suggests that while minor adverse impacts may occur to some resource categories, no moderate to major adverse impacts are anticipated to result. These projects would enhance and/or increase the public's use and/or enjoyment of the natural resources by improving the existing boat ramp areas, fishing piers, and waterfront park. The Trustees have started coordination and reviews under the Endangered Species Act, the Magnuson-Stevens Fishery Conservation and Management Act, the Historic Preservation Act, the Marine Mammal Protection Act, the Bald and Golden Eagle Protection Act, Coastal Zone Management Act, and other federal statutes. The Trustees will consider public comment and information relevant to environmental concerns bearing on the proposed actions or their impacts. Final determination on these projects will be included in the final Phase III ERP/PEIS and Record of Decision.

12.66.7 References

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12.67 Apalachicola River Wildlife and Environmental Area Fishing and Wildlife Viewing Access Improvements: Project Description A (Cash Bayou)

12.67.1 Project Summary

The proposed Apalachicola River Wildlife and Environmental Area Fishing and Wildlife Viewing Access Improvements Cash Bayou project would improve public access at Cash Bayou in the Apalachicola River Wildlife and Environmental Area. The proposed improvements include constructing a fishing and wildlife observation structure and parking area. The total estimated cost of the project is $209,171.

12.67.2 Background and Project Description

The Trustees propose to improve public access at Cash Bayou in the Apalachicola River Wildlife and Environmental Area (see Figure 12-38 for project location). The objective of the Apalachicola Cash Bayou project is enhance and/or increase the public's use and/or enjoyment of the natural resources by improving access to the wildlife and environmental area. The restoration work proposed includes constructing a fishing and wildlife observation structure and parking area.

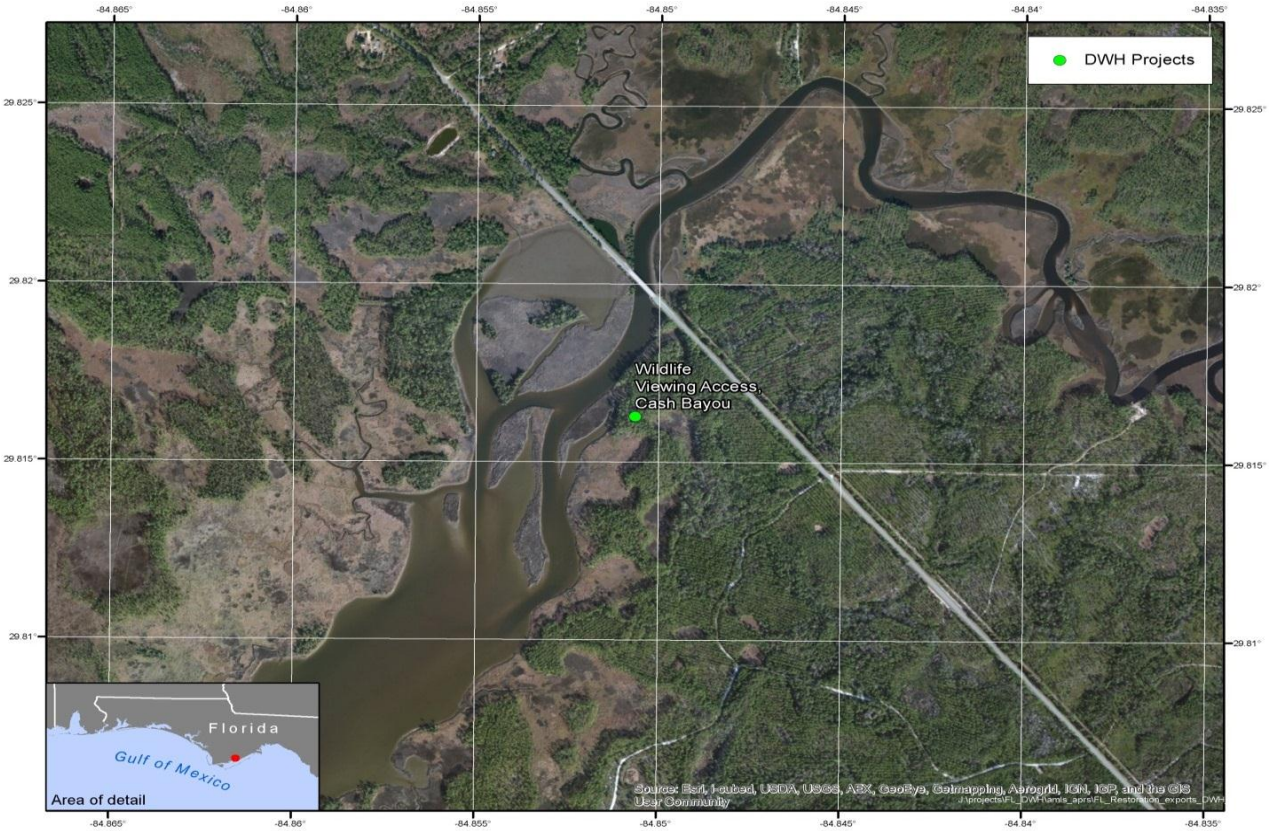

Figure 12-38. Location of Apalachicola River Wildlife and Environmental area fishing and wildlife viewing access improvements project, Cash Bayou location.

12.67.3 Evaluation Criteria

This proposed project meets the evaluation criteria established for OPA and the Framework Agreement. As a result of the Deepwater Horizon oil spill and related response actions, the public's access to and enjoyment of their natural resources along Florida's Panhandle was denied or severely restricted. This project would enhance and/or increase the public's use and/or enjoyment of natural resources, helping to offset adverse impacts to such uses caused by the Spill and related response actions. Thus, the nexus to resources injured by the Spill is clear. See 15 C.F.R. § 990.54(a)(2); and Sections 6a-6c of the Framework Agreement.

The project is technically feasible and uses proven techniques with established methods and documented. Further, the project can be implemented with minimal delay. The Florida Fish and Wildlife Conservation Commission's Wildlife Management Areas program has successfully completed projects of similar scope throughout Florida over many years. For these reasons, the project has a high likelihood of success. See 15 C.F.R. § 990.54(a)(3); and Section 6e of the Framework Agreement. Additionally, the cost estimates are based on similar past projects and therefore the project can be conducted at a reasonable cost. See 15 C.F.R. § 990.54(a)(1); and Section 6e of the Framework Agreement. Finally, this proposed project is not anticipated to negatively affect regional ecological restoration and is therefore not inconsistent with the long-term restoration needs of the State of Florida. See Section 6d of the Framework Agreement.

Many recreational use projects, including ones similar to this project, have been submitted as restoration projects on the NOAA website (http://www.gulfspillrestoration.noaa.gov) and to the State of Florida (http://www.deepwaterhorizonflorida.com). In addition to meeting the criteria for the Framework Agreement and OPA, the Apalachicola River Wildlife and Environmental Area Fishing and Wildlife Viewing Access Improvements, Cash Bayou Location project also meets the State of Florida's additional criteria that Early Restoration projects occur in the 8-county panhandle area in which boom was deployed and that was impacted by response and SCAT activities for the Spill.

12.67.4 Performance Criteria, Monitoring and Maintenance

As part of the project cost, monitoring will be conducted to ensure project plans and designs were correctly implemented. Monitoring has been designed around the project goals and objectives. The project objective is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving access to the Apalachicola River Wildlife and Environmental Area. Performance monitoring will evaluate: 1) the construction of a 700 square-foot fishing and wildlife observation structure, and 2) the construction of a parking area. Specific success criteria include: 1) the completion of the construction as designed and permitted, and 2) enhanced and/or increased access is provided to natural resources, which will be determined by observation that the facility is open and available.

Long-term monitoring and maintenance of the improved facilities will be completed by Florida Fish and Wildlife Conservation Commission (FWC) and Franklin County as part of their regular public facilities maintenance activities. FWC or Franklin County will also be responsible for contracting for or control of garbage pick-up and litter control at the site. Franklin County will also be responsible for long-term maintenance of the observation platform and parking area and will inspect them regularly. Funding for

this post-construction maintenance is not included in the previously provided value for the project cost and will be assumed by FWC and Franklin County.

During the one year construction performance monitoring period, the Florida Trustees' Project Manager will go out twice to the site to record the number of users. Following the one year construction performance monitoring period, FWC and Franklin County will monitor the recreational use activity at the site. FWC and Franklin County staff will visit the site twice a year to count the number of users at the new fishing and wildlife observation structure. The visitation numbers will then be provided to the Florida Department of Environmental Protection.

12.67.5 Offsets

The Trustees and BP negotiated a BCR of 2.0 for the proposed recreational use project. NRD Offsets for the entire Apalachicola River Wildlife and Environmental Area Fishing and Wildlife Viewing Access Improvements project, of which this is a component, are $525,978 expressed in present value 2013 dollars to be applied against the monetized value of lost recreational use provided by natural resources injured in Florida, which will be determined by the Trustees' assessment of lost recreational use for the Oil Spill. Please see Chapter 7 of this document (Section 7.2.2) for a description of the methodology used to develop monetized Offsets.[17]

12.67.6 Costs

The total estimated cost to implement this project is $209,171. This cost reflects current cost estimates developed from the most current information available to the Trustees at the time of the project negotiation. The cost includes provisions for planning, engineering and design, construction, monitoring, and contingencies.

[17] For the purposes of applying the NRD Offsets to the calculation of injury after the Trustees' assessment of lost recreational use for the Spill, the Trustees and BP agree as follows:

- The Trustees agree to restate the NRD Offsets in the present value year used in the Trustees' assessment of lost recreational use for the Spill.
- The discount rate and method used to restate the present value of the NRD Offsets will be the same as that used to express the present value of the damages.

12.68 Apalachicola River Wildlife and Environmental Area Fishing and Wildlife Viewing Access Improvements: Project Description B (Sand Beach)

12.68.1 Project Summary

The proposed Apalachicola River Wildlife and Environmental Area Fishing and Wildlife Viewing Access Improvements: Sand Beach project would improve public access at Sand Beach in the Apalachicola River Wildlife and Environmental Area. The proposed improvements include constructing a boardwalk. The total estimated cost of the project is $53,818.

12.68.2 Background and Project Description

The Trustees propose to improve public access at Sand Beach in the Apalachicola River Wildlife and Environmental Area (see Figure 12-39 for project location). The objective of the Apalachicola Sand Beach project is enhance and/or increase the public's use and/or enjoyment of the natural resources by improving access to the wildlife and environmental area. The restoration work proposed includes constructing a boardwalk.

12.68.3 Evaluation Criteria

This proposed project meets the evaluation criteria established for OPA and the Framework Agreement. As a result of the *Deepwater Horizon* oil spill and related response actions, the public's access to and enjoyment of their natural resources along Florida's Panhandle was denied or severely restricted. This project would enhance and/or increase the public's use and/or enjoyment of natural resources, helping to offset adverse impacts to such uses caused by the Spill and related response actions. Thus, the nexus to resources injured by the Spill is clear. See 15 C.F.R. § 990.54(a)(2); and Sections 6a-6c of the Framework Agreement.

Figure 12-39. Location of Apalachicola River Wildlife and Environmental area fishing and wildlife viewing access improvements project, Sand Beach location.

The project is technically feasible and uses proven techniques with established methods and documented results. Further, the project can be implemented with minimal delay. The Florida Fish and Wildlife Conservation Commission's Wildlife Management Areas program has successfully completed projects of similar scope throughout Florida over many years. For these reasons, the project has a high likelihood of success. See 15 C.F.R. § 990.54(a)(3); and Section 6e of the Framework Agreement. Additionally, the cost estimates are based on similar past projects and therefore the project can be conducted at a reasonable cost. See 15 C.F.R. § 990.54(a)(1); and Section 6e of the Framework Agreement. Finally, this proposed project is not anticipated to negatively affect regional ecological restoration and is therefore not inconsistent with the long-term restoration needs of the State of Florida. See Section 6d of the Framework Agreement.

Many recreational use projects, including ones similar to this project, have been submitted as restoration projects on the NOAA website (http://www.gulfspillrestoration.noaa.gov) and to the State of Florida (http://www.deepwaterhorizonflorida.com). In addition to meeting the criteria for the Framework Agreement and OPA, the Apalachicola River Wildlife and Environmental Area Fishing and Wildlife Viewing Access Improvements, Sand Beach Location project also meets the State of Florida's additional criteria that Early Restoration projects occur in the 8-county panhandle area in which boom was deployed and that was impacted by response and SCAT activities for the Spill.

12.68.4 Performance Criteria, Monitoring and Maintenance

As part of the project cost, monitoring will be conducted to ensure project plans and designs were correctly implemented. Monitoring has been designed around the project goals and objectives. The project objective is to enhance and/or increase the public's use and/or enjoyment of the natural resources by improving access to the wildlife and environmental area. Performance monitoring will evaluate the construction of a 6-foot-wide boardwalk on the periodically wet 1/4-mile Sand Beach interpretive trail. Specific success criteria include: 1) completion of the construction as designed and permitted, and 2) enhanced and/or increased access is provided to natural resources, which will be determined by observation that the boardwalk is open and available.

Long-term monitoring and maintenance of the improved facilities will be completed by Florida Fish and Wildlife Conservation Commission (FWC) and Franklin County as part of their regular public facilities maintenance activities. FWC or Franklin County will also be responsible for contracting for or control of garbage pick-up and litter control at the site. Franklin County will also be responsible for long-term maintenance of the boardwalk and will inspect it regularly. Funding for this post-construction maintenance is not included in the previously provided value for the project cost and will be assumed by FWC and Franklin County.

During the one year construction performance monitoring period, the Florida Trustees' Project Manager will go out twice to the site to record the number of users. Following the one year construction performance monitoring period, FWC and Franklin County will monitor the recreational use activity at the site. FWC and Franklin County staff will visit the site twice a year to count the number of users at the new boardwalk. The visitation numbers will then be provided to the Florida Department of Environmental Protection.

12.68.5 Offsets

The Trustees and BP negotiated a BCR of 2.0 for the proposed recreational use project. NRD Offsets for the entire Apalachicola River Wildlife and Environmental Area Fishing and Wildlife Viewing Access Improvements project, of which this is a component, are $525,978 expressed in present value 2013 dollars to be applied against the monetized value of lost recreational use provided by natural resources injured in Florida, which will be determined by the Trustees' assessment of lost recreational use for the

Oil Spill. Please see Chapter 7 of this document (Section 7.2.2) for a description of the methodology used to develop monetized Offsets.[18]

12.68.6 Costs

The total estimated cost to implement this project is $53,818. This cost reflects current cost estimates developed from the most current information available to the Trustees at the time of the project negotiation. The cost includes provisions for planning, engineering and design, construction, monitoring, and contingencies.

[18] For the purposes of applying the NRD Offsets to the calculation of injury after the Trustees' assessment of lost recreational use for the Spill, the Trustees and BP agree as follows:

- The Trustees agree to restate the NRD Offsets in the present value year used in the Trustees' assessment of lost recreational use for the Spill.
- The discount rate and method used to restate the present value of the NRD Offsets will be the same as that used to express the present value of the damages.

12.69 Apalachicola River Wildlife and Environmental Area Fishing and Wildlife Viewing Access Improvements: Environmental Review

The proposed Apalachicola Cash Bayou project would improve public access at Cash Bayou in the Apalachicola River Wildlife and Environmental Area. The proposed improvements include constructing a fishing and wildlife observation structure and parking area. The proposed Apalachicola Sand Beach project would improve public access at Sand Beach in the Apalachicola River Wildlife and Environmental Area. The proposed improvements here include constructing a boardwalk.

12.69.1 Introduction and Background

In April 2011, the Natural Resource Trustees (Trustees) and BP Exploration and Production, Inc. (BP) entered into the Framework Agreement for Early Restoration Addressing Injuries Resulting from the *Deepwater Horizon* Oil Spill (Framework Agreement). Under the Framework Agreement, BP agreed to make $1 billion available for Early Restoration project implementation. The Trustees' key objective in pursuing Early Restoration is to achieve tangible recovery of natural resources and natural resource services for the public's benefit while the longer-term injury and damage assessment is underway. The Framework Agreement is intended to expedite the start of restoration in the Gulf in advance of the completion of the injury assessment process. Early restoration is not intended to, and does not fully address all injuries caused by the Spill. Restoration beyond Early Restoration projects would be required to fully compensate the public for natural resource losses from the Spill.

Pursuant to the process articulated in the Framework Agreement for Early Restoration Addressing Injuries Resulting from the Deepwater Horizon Oil Spill (Framework Agreement), the Trustees released, after public review of a draft, a Phase I Early Restoration Plan (ERP) in April 2012. In December 2012, after public review of a draft, the Trustees released a Phase II ERP. On May 6, 2013, the National Oceanic and Atmospheric Administration (NOAA) issued a public notice in the Federal Register on behalf of the Trustees announcing the development of additional future Early Restoration projects for a Draft Phase III Early Restoration Plan (ERP). This public access improvement project was submitted as an Early Restoration project on the NOAA website (http://www.gulfspillrestoration.noaa.gov) and submitted to the State of Florida. In addition to meeting the evaluation criteria for the Framework Agreement and the Oil Pollution Act (OPA), the project meets Florida's criteria that Early Restoration projects occur in the eight-county Florida panhandle area that deployed boom and was impacted by the Spill.

The Trustees propose to:

- improve public access at Cash Bayou in the Apalachicola River Wildlife and Environmental Area (Figure 12-40). The objective of the Apalachicola Cash Bayou project is enhance and/or increase the public's use and/or enjoyment of the natural resources by improving access to the wildlife and environmental area. The restoration work proposed includes constructing a fishing and wildlife observation structure and parking area. The total estimated cost of the project is $209,171.
- improve public access at Sand Beach in the Apalachicola River Wildlife and Environmental Area (Figure 12-41). The objective of the Apalachicola Sand Beach project is enhance and/or increase

the public's use and/or enjoyment of the natural resources by improving access to the wildlife and environmental area. The restoration work proposed includes constructing a boardwalk. The total estimated cost of the project is $53,818.

12.69.2 Project Location

The proposed project is located in the State of Florida, Franklin County, in the Apalachicola River Wildlife and Environmental Area. The project area is located along the East Bay portion of Apalachicola Bay, with the main portion of Apalachicola Bay being located approximately 5 miles to the southwest. Figure 12-40 and Figure 12-41 illustrate the project location as well as the two main project sites, Cash Bayou and Sand Beach.

Figure 12-40. Cash Bayou Project location map.

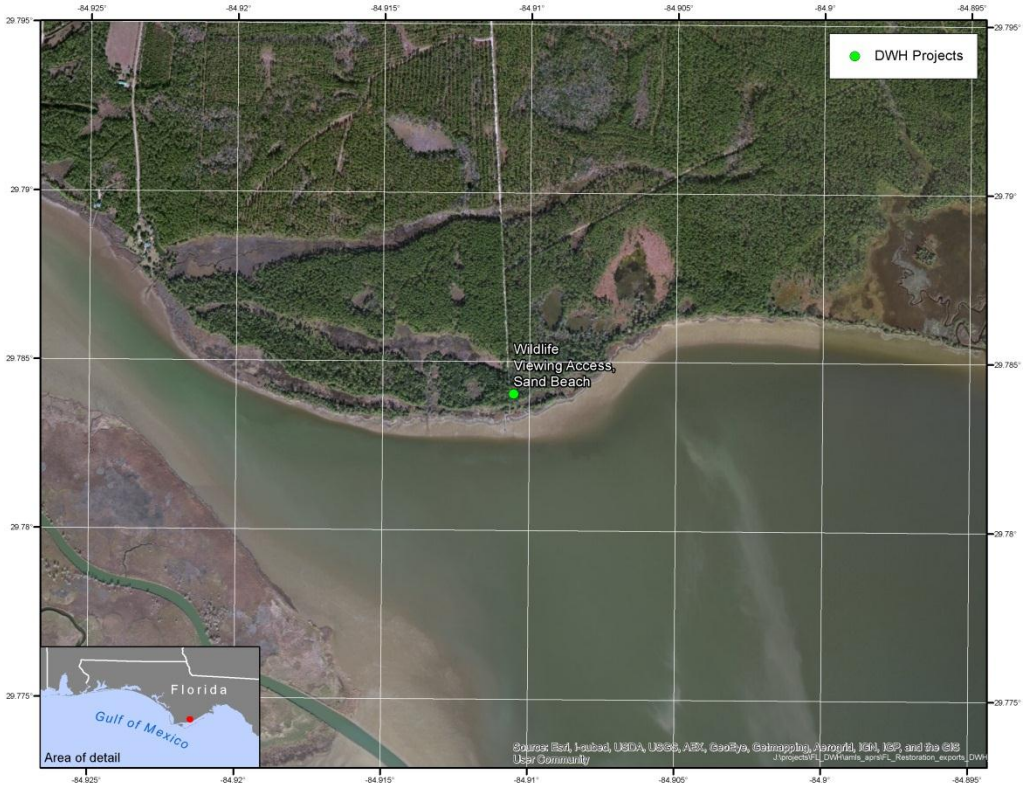

Figure 12-41. Sand Beach Project location map.

12.69.3 Construction and Installation

Proposed construction and installation associated with improved access for fishing and wildlife viewing opportunities include the following:

- Construction of an entrance kiosk, information station, and parking lot and facilities at Cash Bayou. While the design and exact location for each of the above-mentioned aspects is not yet known, the maximum footprint needed for the sum of all the projects is approximately 1.5 acres with the most likely location to be on a disturbed site off of Florida State Road (SR) 65. Figure 12-42 shows a prototypical design of a typical entrance package including a kiosk and sign. The proposed parking lot would be shell rock.
- The construction of fishing structure and elevated wildlife viewing structure would be sited along the bank of Cash Bayou based upon a wildlife viewing analysis of the site. The proposed structure is expected to disturb approximately 0.2 acre. While the design for the structure in currently unknown, it is likely to resemble either a wildlife viewing facility as seen in Figure 12-43 or a fishing dock as seen in Figure 12-44, both of which have been used at other Florida Wildlife Management Areas.

Figure 12-42. Entrance Package Example.

Figure 12-43. Wildlife Viewing Structure Example.

Figure 12-44. Fishing Dock Example.

Figure 12-45. Elevated Walkway Example.

- Construction of an elevated walkway at Sand Beach, to be constructed on an existing periodically wet interpretative trail. The walkway would be approximately 6 feet wide and located on approximately 6,000 to 11,000 square feet of existing trail, on portions of the trail that are frequently flooded or wet. Figure 12-45 shows an example of an existing elevated walk way used at other Florida Wildlife Management Areas.

Project construction is expected to begin 90 days after funding is received, with construction to start in summer/fall of 2014 and finish in the summer of 2016.

12.69.4 Operations and Maintenance

Long-term monitoring and maintenance of the improved facilities would be completed by Florida Fish and Wildlife Conservation Commission (FWC) and Franklin County as part of their regular public facilities maintenance activities. FWC or Franklin County would also be responsible for contracting for or control of garbage pick-up and litter control at the site. Franklin County would be responsible for long-term maintenance of the observation platform and parking area and inspect them regularly. Funding for this post-construction maintenance is not included in the previously provided value for the project cost and would be assumed by FWC and Franklin County. Following construction, FWC and Franklin County would monitor recreational use of the site and will conduct visitor counts of the boardwalk and at the fishing and wildlife viewing structure.

12.69.5 Affected Environment and Environmental Consequences

Under the National Environmental Policy Act, federal agencies must consider environmental effects of their actions that include, among others, impacts on social, cultural, and economic resources, as well as natural resources. The following sections describe the affected environment and environmental consequences of the project.

12.69.5.1 No action

Both OPA and NEPA require consideration of the No Action alternative. For this Draft Phase III ERP proposed project, the No Action alternative assumes that the Trustees would not pursue this project as part of Phase III Early Restoration.

Under No Action, the existing conditions described for the project site in the affected environment subsection would prevail. Restoration benefits associated with this project would not be achieved at this time.

12.69.5.2 Physical Environment

12.69.5.2.1 Geology and Substrates

Affected Resources

The project area is located in Franklin County, Florida, along the East Bay potion of Apalachicola Bay. The majority of project area is predominantly flat with project and adjacent area elevations ranging from sea level to 6 feet above sea level. The majority of the proposed project areas and soils have been previously disturbed, while much of the surrounding areas are void of development and are undisturbed. Soils in

the project area have been classified by Department of Agriculture Natural Resources Conservation Services (USDA NRCS) as Bohicket and Plummer soil types. Each of these soil groups are composed primarily of sand with some portions of clay, are flat with slight slopes, are poorly drained and have a low erosion potential. The Bohicket soil type found at the Sand beach site is flooded twice daily by sea water. Typical vegetation on the Bohicket soil type is smooth cordgrass with the Plummer soil type being covered by forest (FWC 2002).

Environmental Consequences

Construction and construction activities associated with the development of improved access and enhanced recreational activities would disturb modify and expose soils in the direct footprint of the project sites, approximately 2 acres. Construction activities would likely include the use of a backhoe, grader, skid steer, and tractors. Construction equipment and materials staging have not been identified but would likely be located on previously disturbed sites or sites that would be disturbed as a result of construction. Impacts to soils would occur primarily through the clearing and grading of sites, the removal of existing vegetation and the placement of structures including pilings and foundations. Soils in the direct footprint of structures, the parking area, and trails would lose all productivity; however, based on the relatively small amount of soils impacted and previous disturbances to the soils, impacts would be long-term, minor and adverse. Specific mitigation measures would be implemented during construction to minimize erosion and overall soil impacts. These would include following established best management practices (BMPs) such as the implementation of an erosion control and storm water management plan, the installation of sediment traps prior to commencement of construction activities; and ongoing construction monitoring to ensure compliance.

Given that there would likely be increased visitation to the area as a result of the proposed project, soils in the footprints of the project areas would see continued impacts; however, based on the nature of impacts (vehicle and foot traffic) and the relatively small area impacted, impacts would be long-term and negligible as a result of site use.

12.69.5.2.2 Hydrology and Water Quality

Affected Resources

The principal water bodies associated with the project area are the East Bay portion of Apalachicola Bay. Both bodies of water have been designated as outstanding Florida waters (OFWs), indicating these bodies of water are worthy of special protection due to natural attributes. An OFW is designated by the Florida Department of Environmental Protection after the Environmental Regulation Commission determines that the environmental, social, and economic benefits of the Special Water status outweigh the environmental, social, and economic costs (62- 302.700(5), Fla. Admin. Code). The Florida Department of Environmental Protection (FDEP) is granted the authority by Section 403.061(27), Florida Statutes, to establish rules for OFWs. The purpose of the designation as an OFW is to protect existing water quality and to preserve the exceptional ecological and recreational significance of the waterbody. The FDEP will not issue permits for direct pollutant discharges to OFWs, which would lower ambient (existing) water quality, or for indirect discharge, which would significantly degrade the OFW.

Previous silviculture use of the Sand Beach site as well as ditching, bedding, and tram or road development have worked as a point source of pollution to water quality in the area and in some instances have adversely impacted water quality in the localized area. Both project sites are located within a coastal floodplain.

Environmental Consequences

Based on construction activities on-land it is possible that some impacts via turbidity and the potential for increased sediment released into water could occur. It is anticipated that all potential impacts would be short-term in nature occurring only during construction resulting in short-term, negligible, adverse impacts to water quality. BMPs along with other avoidance and mitigation measures required by state and federal regulatory agencies would be employed to minimize any water quality and sedimentation impacts. It is not anticipated that based on the construction requirements of the proposed project that impacts to groundwater would occur.

Long-term, the planned enhancement of recreational opportunities could result in some in-water recreation, increasing turbidity of water in the project area, resulting in long-term, negligible adverse impacts. Based on the details and construction requirements of the proposed project, impacts to floodplains and groundwater are not anticipated.

12.69.5.2.3 Air Quality and Greenhouse Gas Emissions

Affected Resources

The U.S. Environmental Protection Agency (USEPA) defines ambient air in 40 C.F.R. Part 50 as “that portion of the atmosphere, external to buildings, to which the general public has access.” In compliance with the 1970 Clean Air Act (CAA) and the 1977 and 1990 Clean Air Act Amendments (CAAA), the USEPA has promulgated National Ambient Air Quality Standards (NAAQS). The NAAQS include primary standards which set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. To date, the USEPA has issued NAAQS for seven criteria pollutants: carbon monoxide (CO), sulfur dioxide (SO_2), particles with a diameter less than or equal to a nominal 10 micrometers (PM10), particles with a diameter less than or equal to a nominal 2.5 micrometers ($PM_{2.5}$), ozone (O_3), nitrogen dioxide (NO_2), and lead (Pb). Individual states may promulgate their own ambient air quality standards for these “criteria” pollutants, provided that they are at least as stringent as the federal standards. In Table 12-35, below, both State of Florida and federal primary ambient air quality standards for criteria air pollutants are presented.

The project is located in a primarily undeveloped area with few sources of emissions. In 2013, Franklin County was in attainment of the NAAQS for all criteria pollutants as designated by the USEPA.

Greenhouse gases (GHGs) are chemical compounds found in the Earth’s atmosphere that absorb and trap infrared radiation as heat. Global atmospheric GHG concentrations are a product of continuous emission (release) and removal (storage) of GHGs over time. In the natural environment, this release and storage is largely cyclical. For instance, through the process of photosynthesis, plants capture atmospheric carbon as they grow and store it in the form of sugars. Human activities such as

deforestation, soil disturbance, and burning of fossil fuels disrupt the natural cycle by increasing the GHG emission rate over the storage rate, which results in a net increase of GHGs in the atmosphere. The principal GHGs emitted into the atmosphere through human activities are CO2, methane, nitrous oxide, and fluorinated gases, such as hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. CO2 is the major GHG emitted, and the burning of fossil fuels accounts for 81 percent of all U.S. GHG emissions (USEPA 2010).

Table 12-35. State and Federal ambient standards for criteria air pollutants.

POLLUTANT	AVERAGING PERIOD	FEDERAL PRIMARY STANDARD	STATE OF FLORIDA STANDARD
Ozone	8-hour	0.075 ppm	Same as Federal
	1-hour (daily max.)	0.12 ppm	Same as Federal
PM2.5	Annual (arithmetic mean)	15.0 µg/m^3	Same as Federal
	24-hour	35 µg/m^3	Same as Federal
PM10	Annual (arithmetic mean)	NA	50 µg/m^3
	24-hour	150 µg/m^3	150 µg/m^3
Carbon Monoxide	8-hour	9 ppm	9 ppm
	1-hour	35 ppm	35 ppm
Nitrogen Dioxide	Annual (arithmetic mean)	0.053 ppm	0.05 ppm
	1-hour	0.100 ppm	Same as Federal
Sulfur Dioxide	Annual (arithmetic mean)	0.03 ppm	0.02 ppm
	24-hour	0.14 ppm	0.10 ppm
	1-hour (per annum)	NA	0.40 ppm
	1-hour (per 7 days)	NA	0.25 ppm
	5-minute	NA	0.80 ppm
Lead	Rolling 3-month average	0.15 µg/m^3	Same as Federal
	Quarterly average	1.5 µg/m^3	Same as Federal
Total Suspended Particulate	Annual (geometric mean)	NA	60 µg/m3
	24-hour	NA	150 µg/m3

Implementation of the proposed project would include transportation and heavy construction equipment which may include a backhoe, grader, skid steer, dump trucks, and tractors.

Environmental Consequences

Project implementation would require the use of heavy equipment which would temporarily affect air quality in the project vicinity due to construction vehicle emissions. Excavation activities associated with the construction portions of the project may produce fine particulate matter. Available BMPs would be employed to prevent, mitigate, and control potential air pollutants during project implementation. Any air quality impacts that would occur would be localized, short in duration and minimal based on the small scale of construction with overall impacts to air quality would be short-term and minor. Long-term, the site may experience some increase in use by the public potentially resulting in increased

emissions and impacts to air quality from visitors passenger vehicles; however, the increase in visitor use is not expected to be substantial enough to cause any evident impacts to air quality or GHG, with impacts being long-term, minor and adverse.

The use of gasoline and diesel-powered construction vehicles and equipment, including cars, trucks, bulldozers, dump trucks, and backhoes, would contribute to an increase in GHG emissions. Table 12-36 describes the high end of a potential likely GHG emission scenario for the implementation of this project.

Based on the assumptions described in Table 12-36 below, and the small scale and short duration of the construction portion of the proposed project, predicted GHG emissions would be short-term and minor and would not exceed 25,000 metric tons of CO_2e per year. Available BMPs would be employed to reduce the release of GHGs during implementation. Based on the small scale and short duration of the project, GHG emissions in the project staging and deployment areas would be minimal. Therefore, any increase in GHG emissions would be short-term and minor.

12.69.5.2.4 Noise

Affected Resources

Noise can be defined as unwanted sound and noise levels, and impacts are interpreted in relationship to its effects on nearby residents. Noise associated with visitors and recreational land uses, such as boating, can be of concern to surrounding communities. Noise also emanates from vehicular traffic associated with new facilities and from project sites during construction. Ambient noise (the existing background noise environment) can be generated by a number of noise sources, including mobile sources, such as airplanes, automobiles, trucks, and trains; and stationary sources such as construction sites, machinery, or industrial operations.

The Noise Control Act of 1972 (42 U.S.C. 4901 to 4918) was enacted to establish noise control standards and to regulate noise emissions from commercial products such as transportation and construction equipment. The standard measurement unit of noise is the decibel (dB), which represents the acoustical energy present. Noise levels are measured in A-weighted decibels (dBA), a logarithmic scale which approaches the sensitivity of the human ear across the frequency spectrum. A 3-dB increase is equivalent to doubling the sound pressure level, but is barely perceptible to the human ear. Table 12-37 presents some familiar sounds and their decibel levels.

The project area is primarily void of development with the primary sources of ambient (background) noise in the project area coming from the operation of vehicles, commercial and recreational vessels, the nearby SR 65 and the Apalachicola Regional Airport and natural sounds such as wind and wildlife. The levels of noise in the project area varies, depending on the season, and/or the time of day, the number and types of sources of noise, and distance from the sources of noise. Noise levels fluctuate with highest levels usually occurring during the spring and summer months due to the increased boating and coastal beach activities.

Table 12-36. Projected project GHG emissions.

VESSEL/CONSTRUCTION EQUIPMENT19	NO. OF HOURS OPERATED20	CO_2 (METRIC TONS)21	CH4 (CO_2E) (METRIC TONS)22	NOX (CO_2E) (METRIC TONS)	TOTAL CO_2E (METRIC TONS)
Trackhoe23	1,680	588	.34	3.36	591.70
Crane	720	209	.07	.72	209.79
Grader	720	281	.22	2.16	283.38
Dumptruck (2)2425	1,680	1,142	.67	6.72	1,215.72
TOTAL					**2,300.59**

Table 12-37. Familiar sounds and their decibel levels (dB).

SOUND	DECIBEL LEVEL (DB)
Whisper	30
Normal Conversation	50-65
Vacuum cleaner at 10 feet	70
Midtown Manhattan Traffic Noise	70-85
Lawnmower	85-90
Train	100
Nearby Jet Takeoff	130

Source: Occupational Health and Safety Administration 2012

Noise-sensitive receptors include sensitive land uses and those individuals and/or wildlife that could be affected by changes in noise sources or levels due to the project. Noise-sensitive land uses in the project area include visitors and wildlife to the area.

[19] Construction estimates from an email from the Florida Fish and Wildlife Conservation Commission on 9/30/2013

[20] Emissions assumptions for all equipment based on 240 10-hour days of operation per piece of equipment over a 12-month construction period.

[21] CO_2 emissions assumptions for diesel and gasoline engines based on USEPA 2009.

[22] CH_4 and NOx emissions assumptions and CO_2e calculations based on USEPA 2011.

[23] GHG emission estimates were not available for skid steers. In order to present the highest estimate, GHG emissions for a backhoe were used.

[24] GHG emission estimates were not available for a tractor trailer. In order to present the highest estimate, GHG estimates for a dumptruck were used.

[25] Construction equipment emission factors based on USEPA NONROAD emission factors for 250hp pieces of equipment. Data were accessed through the California Environmental Quality Act Roadway Construction Emissions Model.

Environmental Consequences

Project area visitors and wildlife may be sensitive to changes in noise sources or levels due to the project. Instances of increased noise are expected during construction of the project. The proposed project would generate construction noise associated with equipment during the construction period. Construction noise can also be a nuisance to those visitors and wildlife in the area.

Mitigation measures that serve to limit noise during construction include: limiting activity at project sites to daytime hours; limiting truck traffic ingress/egress to the site to daytime hours; promoting awareness that producing prominent discrete tones and periodic noises (e.g., excessive dump truck gate banging) should be avoided as much as possible; and requiring that work crews seek pre-approval for any weekend activities, or activities outside of daytime hours. Because construction noise is temporary, any negative impacts to the human environment during construction activities would be short-term and minor.

Once project components are constructed, noise can be generated from operations, the vehicles associated with site use and visitor use of the site. This would add a slight amount of noise and notably change the noise environment of the area. However, it is not anticipated that noise levels would be bothersome for visitors or wildlife in the area, with overall impacts being long-term, minor and adverse.

12.69.5.3 Biological Environment

12.69.5.3.1 Living Coastal and Marine Resources

Affected Resources

Coastal and marine resources at the site include open water habitat of the East Bay portion of the Apalachicola Bay, the existing coastline and the inward project areas. Vegetation in both project areas can be classified as pinelands and freshwater marsh. Freshwater marshes are some of the most productive systems and are vital habitats for a variety of species including sawgrasses *(Cladium jamaicense)*, bulrushes *(Scirpus ssp.)*, cattails *(Typha ssp.)*, cordgrasses *(Spartina ssp.)*, and needlerushses *(Juncus ssp.)*. Typical species occupying these environments include ducks, wading birds, shore birds, otters, mink, raccoon, alligators, turtles, snakes and frogs. Pinelands are characterized by an open canopy forest of widely spaced pine trees, with little or no understory and dense ground cover or herbs and shrubs. Based on existing literature and information obtained through the USFWS, the Bald eagle *(Haliaeetus leucocephalus)* has been noted to occur in the Cash Bayou project area. The only threatened or endangered species located in the project areas is the candidate species of unnamed beard grass also being located in Cash Bayou.

Environmental Consequences

Effects to living coastal and marine resources are expected to be short-term and minor. The proposed project is not anticipated to require any in-water work, and the project area already sees some recreational use. All appropriate conditions permit requirements, and BMPs would be followed. The development of the site would result in some short-term noise increased and increases in the human presence of the area. This could result in the displacement of some wildlife and the removal of existing

vegetation. However, based on the relatively small areas to be developed and the abundance of suitable habitat and vegetation in the vicinity of the project area, impacts are not expected to be substantial and would likely be long-term, minor and adverse. The continued use of the site by visitor as a result of construction could result in some long-term disturbances. However, it is expected that with the types of activities likely to occur at the site, previous interactions of wildlife with humans in the area and the relatively small area impacted, impacts are likely to be long-term, minor and adverse.

Affected Resources

Protected Species

Protected species and their habitats include ESA-listed species and designated critical habitats, which are regulated by either the USFWS or the NMFS. Protected species also include marine mammals protected under the Marine Mammal Protection Act, essential fish habitat (EFH) protected under the Magnuson-Stevens Fishery Conservation and Management Act, migratory birds protected under the Migratory Bird Treaty Act (MBTA) and bald eagles protected under the Bald and Golden Eagle Protection Act (BGEPA).

Environmental Consequences

ESA Section 7 consultation will be initiated with the USFWS to determine if any listed species or critical habitats may be affected by the proposed project. If these projects may impact listed species or critical habitats, avoidance and minimization measures will be developed to reduce impacts such that they are short term and minor.

Affected Resources

Essential Fish Habitat

EFH is defined in the Magnuson-Stevens Fishery Conservation and Management Act as "those waters and substrates necessary to fish for spawning, breeding, feeding or growth to maturity." The designation and conservation of EFH seeks to minimize adverse effects on habitat caused by fishing and non-fishing activities. The NMFS has identified EFH habitats for the Gulf of Mexico in its Fishery Management Plan Amendments. These habitats include estuarine emergent wetlands, seagrass beds, algal flats, mud, sand, shell, and rock substrates, and the estuarine water column. The Sand Beach project is located in uplands above the mean high- tide line, therefore no EFH is located within the project footprint.

Cash Bayou provides habitat for prey species (e.g. Gulf menhaden, shad, croaker and spot) that are consumed by larger commercially important species. In addition, the area provides habitat for spotted seatrout, striped mullet, southern flounder, Atlantic croaker, and Gulf menhaden. Table 12-38 provides a list of the species that NMFS manages under the federally Implemented Fishery Management Plan in the vicinity of the Apalachicola River Cash Bayou site and East Bay portion of Apalachicola Bay.

Table 12-38. List of species managed by NMFS in vicinity of the project study area (NMFS EFH mapper, 2013).

MANAGEMENT UNIT / SPECIES	LIFESTAGE(S) FOUND AT LOCATION	FMP
Red Drum (Sciaenops ocellatus)	ALL	Red Drum
Highly Migratory Species		
Atlantic Sharpnose Shark	All	
Blacknose Shark	All	Highly Migratory Species
Blacktip Shark	All	
Bonnethead Shark	Adult	
Bull Shark	Juvenile	
Finetooth Shark	Juvenile, Adult	
Great Hammerhead Shark	All	
Scalloped Hammerhead Shark	Neonate, Juvenile	
Spinner Shark	Neonate, Juvenile	
Shrimp		
Brown shrimp (*Penaeus aztecus*)		
White shrimp (*Penaeus setiferus*)	ALL	Shrimp
Pink shrimp (*Penaeus duararum*)		
Royal red shrimp (*Pleoticus robustus*)		
Rock Shrimp (*Sicyonia brevirostris*)		
Seabob Shrimp (*Xiphopenaeus kroyeri*))		
Coastal Migratory Pelagics		
King mackerel (*Scomberomorus cavalla)*		
Spanish mackerel (*Scomberomorus maculatus*)		
Cobia (*Rachycentron canadum*)	ALL	Coastal Migratory Pelagics
Dolphin (*Coryphaena hippurus*)		
Reef Fish		
Balistidae - Triggerfishes		
Gray triggerfish (Balistes capriscus)		
Carangidae - Jacks		
Greater amberjack (Seriola dumerili)		
Lesser amberjack (Seriola fasciata)		
Almaco jack (Seriola rivoliana)		
Banded rudderfish (Seriola zonata)		
Labridae - Wrasses	ALL	Reef Fish
Hogfish (Lachnolaimus maximus)		
Lutjanidae - Snappers		
Queen snapper (Etelis oculatus)		
Mutton snapper (Lutjanus analis)		
Blackfin snapper (Lutjanus buccanella)		
Red snapper (Lutjanus campechanus)		
Cubera snapper (Lutjanus cyanopterus)		
Gray (mangrove) snapper (Lutjanus griseus)		
Lane snapper (Lutjanus synagris)		
Silk snapper (Lutjanus vivanus)		
Wenchman (Pristipomoides aquilonaris)		
Vermilion snapper (Rhomboplites aurorubens)		
Malacanthidae – Tilefishes		
Goldface tilefish (Caulolatilus chrysops)		
Blueline tilefish (Caulolatilus microps)		

MANAGEMENT UNIT / SPECIES	LIFESTAGE(S) FOUND AT LOCATION	FMP
Serranidae – Groupers Speckled hind (Epinephelus drummondhayi) Yellowedge grouper (Epinephelus flavolimbatus) Red grouper (Epinephelus morio) Warsaw grouper (Epinephelus nigritus) Snowy grouper (Epinephelus niveatus) Nassau grouper (Epinephelus striatus) Black grouper (Mycteroperca bonaci) Yellowmouth grouper (Mycteroperca interstitialis) Gag (Mycteroperca microlepis) Scamp (Mycteroperca phenax) Yellowfin grouper (Mycteroperca venenosa)		

Environmental Consequences

Essential Fish Habitat

An EFH assessment will be coordinated the NMFS Habitat Conservation Division through a formal EFH assessment process. If necessary, species specific measures would be recommended by NMFS and would be incorporated into the project construction plan. The project would not result in adverse, direct impacts to emergent wetlands, existing oyster reefs, or Submerged Aquatic Vegetation (SAV). Most motile fauna such as crab, shrimp, and finfish will likely avoid the area of potential effect during the construction process. The project may result in minor, adverse short term impacts to benthic organisms and temporarily affect habitat utilization by individuals considered under EFH fishery management plans.

The proposed work in the EFH area reflects construction of new wildlife viewing and fishing area approximately 700 square feet in size. As a result, disturbance to species will be limited in their spatial extent, minor in scope, and brief in duration. During construction, all appropriate BMPs will be followed to minimize the potential impacts of construction activities on EFH and species in the area. During construction, adjacent areas with equivalent or better habitat will be available and undisturbed and organisms could move away from disturbed areas. Therefore, the project is not likely to adversely affect EFH.

12.69.5.3.2 Invasive Species

Affected Resources

Non-native invasive species could alter the existing terrestrial or aquatic ecosystem within, and possible expand out into adjacent areas after the initial introduction. The invasive species threat, once realized, could result in economic damages. Prevention is ecologically responsible and economically sound. Chapter 3 described more about the regulations addressing invasive species, pathways, impacts, and prevention. At this time specific invasive species that may be present on the project site or could be introduced through the project have not yet been identified.

Environmental Consequences

Best Management Practices (BMPs) to control the spread of any invasive species present, and prevent the introduction of new invasive species due to the project will be implemented. In general, best management practices would primarily address risk associated with vectors (e.g., construction equipment, personal protective equipment, delivery services, foot traffic, vehicles/ vessels, shipping material). There are many resources that provide procedures for disinfection, pest-free storage, monitoring methods, evaluation techniques, and general guidelines for integrated pest management that can be prescribed based upon specific site conditions and vectors anticipated. In addition, to best management practices, outreach and educational materials may be provided to project workers and potential users/visitors. Other measures that could be implemented are identified in Chapter 12 Appendix A. Due to the implementation of BMPs, we expect risk from invasive species introduction and spread to be short term and minor.

12.69.5.4 Human Uses and Socioeconomics

12.69.5.4.1 Socioeconomics and Environmental Justice

Affected Resources

The population of Franklin County was 11,596 in 2012, accounting for less than one percent of the state's total population. In 2013, median household income in Franklin County was $27,040, which was approximately 35 percent lower than median household income in the State of Florida. Franklin County contains both minority and low-income populations; however, no communities of environmental justice concern are located adjacent to the project area (Bureau of Labor Statistics 2013).

Environmental Consequences

Based on the relatively small scale of construction activities it is not anticipated that the proposed project would create jobs nor would it have substantial impacts to the socioeconomic environment as a result of construction. It is likely that there would be direct beneficial impacts to the local economy as a result of construction and from increased recreational and tourist activity in response to the project components. These economic benefits would be concentrated to the local economy as well as in the service and retail industry sectors. Beneficial economic effects would accrue to local recreational supply retailers, restaurants, and hospitality providers. The proposed project would not adversely affect any low income or minority populations. Overall, no adverse impacts would occur to socioeconomics and environmental justice as a result of the proposed project.

12.69.5.4.2 Cultural Resources

Affected Resources

The area of potential effect (APE) for reviews under Section 106 of the National Historic Preservation Act includes the areas of direct and indirect impact. For this component of the proposed project, the APE consists of the entire project areas as identified in Figure 12-41 and Figure 12-42.

Currently within the Apalachicola River Wildlife and Management Area there are 24 cultural sites, 13 historic and 11 prehistoric. However, none of the proposed sites occur within the project area (FWC 2002).

Environmental Consequences

A complete review of this project under Section 106 of the NHPA would be completed as environmental review continues. This project would be implemented in accordance with all applicable laws and regulations concerning the protection of cultural and historic resources.

12.69.5.4.3 Infrastructure

Affected Resources

Infrastructure for the purpose of this analysis includes both transportation and utility networks. Vehicle use (for both transportation and maintenance) constitutes the primary source of energy consumption in the vicinity of the proposed project area, primarily stemming from SR 65. The proposed project would not prevent access to any known energy resources in the project vicinity, such as coal, oil, or natural gas. The project would have no such impacts on the availability of these resources.

Environmental Consequences

Construction of parking lots and enhancements to existing trails would lead to long-term beneficial impacts to existing transportation infrastructure. Based on the nature of proposed improvements there would be no additional public utility requirements because project components would not require utilities. A construction phase solid waste management plan would be implemented to manage the collection, recycling, and disposal of all construction and demolition waste and non-construction related waste generated during construction activities.

12.69.5.4.4 Land and Marine Management

Affected Resources

The area surrounding the proposed project site is primarily void of development and consists of forests and shoreline. The proposed project area is currently used for recreational activities.

Pursuant to the Coastal Zone Management Act of 1972, federal activities must be consistent to the maximum extent practicable with the federally-approved coastal management programs for states where the activities would affect a coastal use or resource. Federal Trustees are submitting consistency determinations for state review coincident with public review of this document.

Environmental Consequences

Improvements to access and the enhancement of recreational activities at Cash Bayou would alter existing land management because the site would change from undeveloped to developed. However, the development of the site would not affect land and marine management because the site is already approved for recreational use; project plans would not change the nature of land use or management but would improve the function of the existing site, resulting in no impacts. Trail enhancements at Sand

Beach would not alter existing land use at the site because it already is used for recreational activities, and as a result no impacts would occur.

12.69.5.4.5 Aesthetics and Visual Resources

Affected Resources

The project area can be described as undeveloped and primarily consists of wetlands and existing vegetation. The topography of the area is flat to gently sloping and the existing landscape in the vicinity of the proposed project areas is characterized by a mosaic of marsh wetlands with patches of mature coastal forest. There are no designated protected viewsheds in the vicinity of the project site.

Environmental Consequences

Temporary impacts to visual resources would result from construction of the proposed project components. Large construction equipment such as backhoes removal would temporarily obstruct the views for visitors and recreational users at the site. These short-term construction-related impacts to visual resources would be minor.

12.69.5.4.6 Tourism and Recreational Use

Affected Resources

The proposed project area is a public site that provides opportunities for recreation, including use of the recreational path and fishing. While, the site is currently accessed by the public, exact visitation is not known because visitor counts and monitoring are not conducted (FWC 2002).

Environmental Consequences

During the construction period, recreational experience would be impacted from noise and visual disturbances associated with the use of heavy equipment. While these temporary inconveniences would result in minor short-term impacts on tourism and recreational use of the project area during the construction at the project areas, it is not anticipated that these impacts would be substantial because visitor use of the site as it currently exists is not substantive. Over the long-term, it is expected that the development of enhanced recreation activities would result in a long-term beneficial impact to overall visitor experience as a result of improved access to the sites, improved viewsheds, and an overall improved recreational experience.

12.69.5.4.7 Public Health and Safety and Shoreline Protection

Affected Resources

No hazardous materials currently exist at the project site where the potential for human exposure to natural or man-made hazards does not present a substantial risk. The project area is situated along an area of stable coastline not prone to significant shoreline erosion under normal conditions. Other natural hazards do not occur in any great abundance within the boundaries of the park.

Environmental Consequences

No hazardous wastes would be created during restoration and construction activities. All hazardous materials handled during construction including paints, solvents, chemicals, and petroleum products would be contained, and appropriate barriers would be in place to ensure the protection of adjacent water resources from potential spills and leaks. In the event of a discharge of oil or release of hazardous substances, all spills would be reported to the FDEP and all federal and state regulations would be followed during the cleanup. BMPs in accordance with the Occupational Safety and Health Administration (OSHA) and state and local requirements would be incorporated into construction activities to ensure proper handling, storage, transport and disposal of all hazardous materials. All waste generated during construction would be disposed of in the appropriate waste or recycling receptacles on-site would be taken off-site and disproved in an approved waste disposal site by the construction contractor. All occupational and safety regulations would be followed to ensure safety of all workers and the public. Construction and construction related activities would lead to the development of areas that are currently maintained as natural habitat. During construction, soil and sediment stabilization measures would be incorporated into project design as needed in areas where the potential for erosion exists in order to protect resources and public health and safety. No adverse effects to public health and safety are anticipated as a result of this construction of this project.

12.69.6 Summary and Next Steps

Per the Purpose and Need of the Draft Phase III ERP/PEIS, four alternatives are considered, including a no action (Alternative 1), selection of project types emphasizing habitat and living coastal and marine resources (Alternative 2), project types emphasizing recreational opportunities (Alternative 3), or a combination of both habitat and living coastal and marine resources and recreational opportunities (Alternative 4). As proposed, the Apalachicola River Wildlife and Environmental Area Fishing and Wildlife Viewing Access Improvements: Sand Beach project and the Apalachicola River Wildlife and Environmental Area Fishing and Wildlife Viewing Access Improvements Cash Bayou project implement restoration techniques within Alternatives 3 and 4.

The Apalachicola River Wildlife and Environmental Area Fishing and Wildlife Viewing Access Improvements: Sand Beach project would improve public access at Sand Beach in the Apalachicola River Wildlife and Environmental Area. The proposed improvements include constructing a boardwalk. The Apalachicola River Wildlife and Environmental Area Fishing and Wildlife Viewing Access Improvements Cash Bayou project would improve public access at Cash Bayou in the Apalachicola River Wildlife and Environmental Area. The proposed improvements include constructing a fishing and wildlife observation structure and parking area. These projects are consistent with Alternative 3 (Contribute to Providing and Enhancing Recreational Opportunities) and Alternative 4 (Preferred Alternative).

Draft NEPA analysis of the environmental consequences suggests that while minor adverse impacts may occur to some resource categories, no moderate to major adverse impacts are anticipated to result. These projects would enhance and/or increase the public's use and/or enjoyment of the natural resources by improving access to the wildlife and environmental area. The Trustees have started coordination and reviews under the Endangered Species Act, the Magnuson-Stevens Fishery

Conservation and Management Act, the Historic Preservation Act, the Marine Mammal Protection Act, the Bald and Golden Eagle Protection Act, Coastal Zone Management Act, and other federal statutes. The Trustees will consider public comment and information relevant to environmental concerns bearing on the proposed actions or their impacts. Final determination on these projects will be included in the final Phase III ERP/PEIS and Record of Decision.

12.69.7 References

Florida Fish and Wildlife Conservation Commission (FWC). 2002. A Conceptual Management Plan for the Apalachicola River Wildlife and Environmental Area 2002-2007.

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