Bay County RESTORE Act Direct Component Proposals
16 February 2015

Proj #	Project Name	Project description (abbreviated)	Est RESTORE proj cost	Est Other proj cost	Tot. est proj cost	Tot Est ongo cost County	Tot Est ongo cost Other	Tot. est ongo cost
Bay PRP 2014 - 001	Restoring Bay County's Recreational Fishing Industry through Artificial Reef Construction and Monitoring	A series of artificial reefs will be constructed of secondary use materials that are stable and durable, lasting at least 30 years. Reef construction materials were donated to Bay County and will be used to create essential fish habitat benefiting fishing, diving, and other tourism businesses. Reefs will be located in state waters approximately 11 nm from the St Andrew's Bay Pass and 7-8 nm miles off the MB Miller County Pier and off Panama City Beach's Russell-Fields Pier. Near-shore reef locations provide fuel and time savings.	369,125	150,740	519,865	0	0	0
Bay PRP 2014 - 003	Mexico Beach - Beach Restoration Feasibility and Design Plan	A portion of the 2.0-mile Mexico Beach shoreline (FDEP R-mons 132-138) has been eroding and is threatening upland structures and infrastructure, coastal habitat, and recreational use. A feasibility study and beach management plan was completed in 2008 for the City of Mexico Beach. Following various coastal analyses, this study ultimately identified alternative beach restoration strategies with cost-estimates, including a less expensive alternative to relocate inlet-dredged sand (sand bypass) from just west of the Mexico Beach inlet (FDEP R-mon 127) to the state designated critically eroded shoreline between FDEP R-mons 132-138. The proposed project seeks to update the dated beach management feasibility study in terms of shoreline and volume changes based on an updated beach survey that will also be conducted as part of this project. Other components to the feasibility study that will be updated include beach restoration cost estimates. The updated feasibility report will be the basis for the design strategy to be developed as a part of this project. The design study will evaluate beach restoration alternatives including the sand bypassing project. Preliminary design of, construction cost-estimates for, and permitting efforts for the recommended alternative will be included. Finally, as part of this phase of the proposed project, Mexico Beach will seek an initial federal determination from the US Army Corps of Engineers as to whether there may be federal interest in pursuing a federal feasibility study - the first step in establishing a federal shore protection project. With permitting and design complete, Mexico Beach will be able to bypass inlet-dredged sand to the critically-eroded portion of the beach to the east - the project becomes "shovel-ready."	135,000	0	135,000	0	0	0
Bay PRP 2014-006	Bettering Bay through Environmental Science and Policy: Postsecondary partnership between Gulf Coast State College and Florida State University Panama City	Environmental Science is a field that continues to grow and according to the Department of Labor Statistics, this field is growing at a rate of 15%, faster than average areas. Median pay for this field is $63,570. Bay County should be considered the poster child for the importance the environment plays on where and how "we live, work and play."(Bay County CofCslogan) Our residents seek the areas that are clean, beautiful and that offer the natural beauty that is so desirable. Our visitors flock to the beaches and fisheries to enjoy the bounty that our bays and Gulf provide. Our livelihood is impacted, positively or negatively, by the health and beauty of our natural resources. If these elements are so important to our lives and to our livelihoods, then is seems reasonable that we should be not only focusing on jobs, but also on supplying the professionals who will have the expertise for the jobs created. If there is to be a focus on the environment and on improving/maintaining/sustaining that environment, then there should also be a focus on developing the expertise in our current workforce and on creating an interest in our future workforce for the same. This project proposes to do just that. For the jobs that are being created in fields relating to environment and the health of our Gulf, FSU Panama City and Gulf Coast State College will offer either a certificate or a Minor in Environmental Science and Policy. The science portion relates to the chemistry, biology, physics of our environment from stormwater management to waste reduction. The policy portion relates to assisting policymakers in developing legislation that supports a healthy environment and preserves our local economy through that support. Gulf Coast State College will supply personnel and curriculum that leads to a certificate in Environmental Science and Policy. The certificate targets people currently employed by various local organizations and agencies that need employees with specific expertise that enhances the ability of the business to serve the needs of Bay County. This does not in itself lead to a degree, but rather to additional credentials that make the employee more valuable. Florida State University Panama City will provide the program of studies that lead to a Minor in Environmental Science and Policy. For example, a Civil Engineer may desire additional coursework that allows him/her to become involved in legislative action and to lobby for local environmental action. It may also serve as a stepping stone to a more advanced degree as a student gains a more thorough understanding of the field and of ways to preserve and protect our local environment.	234,600	121,500	356,100	0	0	0
Bay PRP 2014 - 008	Panama City Beach Sports Village - Phase 1: The Sporting Grounds (Rectangular Athletic Fields)	The Sporting Grounds will expand existing athletic facilities by adding eight (8) rectangular fields large enough to accommodate regulation-sized soccer fields. One (1) field will be upgraded to a Championship Field with expanded seating and other amenities suitable for tournament championships and other marquee games. This is a stand-alone component of a three-phase Panama City Beach Sports Village Project planned by the Bay County Tourist Development Council (TDC).	2,000,000	4,400,000	6,400,000	0	0	0

Bay PRP 2014-011	City of Panama City Beach and Bay County Continuous Outfall Sediment Reduction Projects	The City of Panama City Beach and Bay County are home to a thriving tourist destination for visitors from all over the United States and depend on this market for the local economies. The growth that has been experienced over the past 20 years has been significant and development has resulted in numerous stormwater outfalls that line the beaches with discharge structures, exposed pipes, and open box culverts. The City and County stormwater management systems that have been developed over the years has resulted in fifteen (15) continuous flow outfall structures that currently discharge onto the beach. The ponds and ditches that form on the beaches as a result of these discharges are often filled with trash, debris, and typically very high fecal coliform levels. The recent BEST study that was conducted by CDM for county wide watersheds found the Lower Coastal region where these fifteen (15) continuous outfalls are located to be impaired. There were four locations identified along the beaches that were found to be severely impaired including the outfalls at Lullwater Lake and Calypso Towers. The beach outfalls are unsightly, cause erosion of the natural beach, and transport approximately 1,934 lbs/ac/yr of pollutant load, including sediment, debris, oil, and nutrients, directly to the Gulf of Mexico. In addition, the stormwater transmits bacteria and viruses to the beach during and immediately after a rainfall event, exposing residents and tourists alike enjoying the near-shore area to harmful pathogens. The final issue that has required tremendous maintenance effort and funding by the City and County is reshaping the alignment of these outfall sweep areas to prevent shoreline impoundments. There are two items that are addressed in the proposal to improve the water quality and alignment of the outfalls that are outlined below: 1. Bay County and the City of Panama City Beach are seeking funds to survey, design, and permit a plan to restore, replace and enhance the fifteen (15) continuous outfalls that currently discharge onto the beach. There are ten (10) continuous outfalls within the City limits and five (5) outfalls in the county that would be addressed within the plan. Each of the outfalls would be surveyed and evaluated for performance improvements including installation of upstream trash collectors, nutrient and oil reduction devices such as baffle boxes, pipe skimmers, inlet baskets, and inlet skimmers that would significantly enhance the downstream water quality that is discharging onto the beaches. In addition, the discharge structures would be designed and permitted to extend the seaward limits to a distance that would significantly reduce scour, erosion, and maintenance requirements. 2. The second phase of the plan includes the surveying and design for an off-shore stormwater outfall that would significantly reduce sediment, debris, oil and nutrients discharging directly into the near-shore surf zone. Within this plan, existing stormwater drainage basin that spans from Lullwater Lake to Calypso Towers will be retrofitted with underground junction boxes that would connect the two systems into one offshore discharge system. The installation of baffle boxes at the discharge location would allow for high levels of treatment and water quality improvements prior to release into the Gulf of Mexico. The discharge structure would include approximately 1300 linear feet of 72" reinforced concrete pipe that will discharge offshore. The system would potentially eliminate four (4) intermittent outfalls and the two continuous outfalls at Calypso Towers and Lullwater Lake. As a result of this project, unsightly beach outfalls responsible for shoreline erosion will be removed, regional flooding problems will be alleviated, oil, grease, trash, and sediment will be prevented from discharging directly onto the beach and surf zone. In addition, the risk of adverse bacteria and viruses in the swim zone will be greatly reduced.	1,000,000	100,000	1,100,000	200,000	0	200,000
Bay PRP 2014-016	Bay County Master Plan and Capital Improvement Strategic Plan Update	The Stormwater Master Plan and Stormwater Strategic Plan will update the previous plans done early in 1990. The plans will serve as a tool for integrated planning and implementation process which will address 3 primary goals: Protection of County's surface waters from water quality degradation, protection of potable water supply and protection from severe flooding. It is anticipated that the plan will incorporate at a minimum the following components: Review of Regulatory requirements to include new TMDL requirements, Data Compilations and Assessment, Local Level of Service, Comprehensive Plan and Ordinance Review, Best Management Practice Concepts (BMP's) both structural BMP's and Non-Structural BMP's, Stormwater Facilities Operation and Maintenance Review,Problem Area Identification, a Strategic Plan for infrastructure and funding option review. The plans will review all existing data and make recommendations for improvements.	300,000	0	300,000	0	0	0
Bay PRP 2014-017	AMIkids Panama City Marine Institute Dock Repair	This project will complete a renovation of the plumbing, electrical, mechanical and structural components of the AMIkids Panama City Marine Institute dock. The dock is used for storing boats which are used for community environmental service projects and recreational access to St. Andrews Bay and the surrounding waters.	250,000	0	250,000	0	37,500	37,500
Bay PRP 2014-022	Bay County East Pass Environmental Impact Statement (EIS)	Conduct an Environmental Impact Study (EIS) and Inlet and Beach Management Plan (IBMP) for a proposed project to re-open the East Pass along the path of the historic channel linking St. Andrew Bay to the Gulf of Mexico. Due to the sensitive location and the size of the proposed project, conducting an EIP and IBMP are required to address required compliance with all Federal and State agencies regulation with the goal to produce a National Environmental Policy Act (NEPA document in accordance with Presidents Council of Environmental Quality Rules and Regulations. In addition, an Inlet and Beach Management Plan for FDEP's Bureau of Beaches and Coastal Systems. These plans are required by the Corp of Engineers and FDEP as the first steps in the initiative to re-open the historical East Pass.	1,000,000	0	1,000,000	0	0	0
Bay PRP 2014-023	Laguna Beach Sanitary Sewer Project	This project will provide sanitary sewer service in older beach communities that predate the City's municipal sewer system. In excess of 1,000 residential lots are located within the Laguna Beach Sanitary Sewer project service area and existing homes are currently relying on septic tanks for sewer treatment and disposal. The area lies within three stormwater drainage basins that flow to dune lakes north of Front Beach Road (FBR), ultimately crossing FBR via drain pipes to the gulf beaches.	1,500,000	1,500,000	3,000,000	0	500,000	500,000
Bay PRP 2014-026	Bay Technology Initiative	Project will expand high speed data infrastructure to Bay County by installing conduit/fiber and hardware, which will result in economical, ultra high speed broadband connection that will enhance economic development while benefiting Bay County's military installations, education, healthcare and local governments. A final report for the project, as well as final plan and permitting from Bruce, Florida to Bay County users such as NSA PC, GCSC, FSUPC and Bay District Schools is complete.	1,000,000	500,000	1,500,000	0	0	0
Bay PRP 2014-027	Marine Animal Stranding, Rehabilitation and Necropsy	Construction of a new facility to enhance and expand existing response and rehabilitation capabilities and new public education and research programs for stranded marine animals (turtles and mammals) and other marine life in Bay County and the eastern Gulf of Mexico.	750,000	500,000	1,250,000	0	0	0
Bay PRP 2014-028	Porter Park Improvements 2014	The project consists of making improvements to the existing aged boat ramp and installing a new sea wall to replace the existing failing wall. The planned improvements are to replace the ramp with the correct slope boat ramp, install fixed staging docks and a floating dock for smaller vessels like waverunners, canoes, and kayaks. The failing seawall will be replaced with a new PVC (non-cca) seawall.	450,000	424,500	874,500	0	0	0
Bay PRP 2014-033	Mid City Stormwater Project	Increasing and restoring wetlands in mid city Robinson Bayou Basin. Area involved was historically wetland. Ditching, road building, construction, etc. have impacted the area, making this remaining undeveloped area all the more important for stormwater treatment, flood prevention (especially on Highway 231 and heavily developed mall area just north), filtering runoff before it enters the Bay. Project will: 1) increase acreage of the property to add area for water retention and to prevent additional flooding from occurring as a result of development. 2) insert one or more equalizer pipes into the berm beside a large drainage ditch to funnel stormwater runoff into the swamp to bring it back to historic seasonal flooding, and 3) clear invasive exotic plants that destroy value of the habitat for native wildlife and cause drying of the swamp through evapo-transpiration.	228,190	10,000	238,190	0	5,000	5,000
Bay PRP 2014-035	St. Andrew Bay Water Quality Report Card	The St. Andrew Bay Resource Management Association (RMA) proposes to create a report card for St. Andrew Bay. This report card would feature a water quality analysis of the bay similar to those completed for Chesapeake Bay. Information would be distributed to community leaders and the public and it would be placed online for anyone to see. Information would also be disseminated to officials from the NWFWMD, FDEP, FWCC, NOAA, USACE, TAFB, NSA, USFWS and any other entities interested in this information.	100,000	50,000	150,000	0	0	0

Bay PRP 2014-038	RESTORE Jobs	RESTORE Jobs is a 3D modeling and manufacturing program that will train 120 area artists, building contractors, crafts/trades people, displaced workers seeking new skills, new entrants to the workforce, start-up entrepreneurs and retired military in the design and fabrication of art pieces, architectural and structural components, furniture, house wares, machine parts, signs and dozens of other economically necessary three-dimensional products in metals, plastics or wood composites. RESTORE Jobs will provide trainees with the computer-based design and fabrication knowledge and skills necessary to respond to the area's growing economic demands for (custom and standard) three-dimensional products, through the use of multi-axis, computer-controlled routers for manufacturing. Gulf Coast State College is a recognized statewide leader in computer-based fabrication and advanced manufacturing technologies, and established the Florida's first certificate in "digital manufacturing." The RESTORE Jobs 3D-modeling and manufacturing project will develop a core group of high-skill/high-wage jobs including: Computer-Aided Drafting and Design Manufacturing, CNC Machinist, Rapid Prototyping Specialist. The knowledge and skills in these fields are readily transferable to other occupations such as: architecture, arts and design, building (e.g., Drafting), and fabrication/manufacturing (e.g., Digital Design and Modeling). These skills can also lead to jobs in Computer Numerical Control (CNC) Machine Programmers, or to degree programs including Engineering Technology Associate of Science (AS) degree with an Advanced Manufacturing specialization. Trainees will receive 48 hours of digital 3D design/modeling instruction in: Computer-Aided Drafting and Design Manufacturing, CNC Machining, and Rapid Prototyping using multiple software platforms. In conjunction with the software instruction, trainees will also receive 48 hours of digital 3D fabrication/manufacturing training to produce 3D objects based on their original 3D designs/models through computer-controlled router systems. The fabrication/ manufacturing training will utilize both small (shop-sized) and industrial-capacity 3D router systems. To support these primary knowledge and skills training components, participants will also receive hands-on instruction in the assembly and use of small (shop-sized) Do-It-Yourself (buy and build) 3D CNC routers to provide the knowledge and skills necessary to acquire and utilize the affordable 3D CNC router units most appropriate for individual crafts/trades people and/or small businesses with 3-5 employees. Gulf Coast State College is seeking supplemental foundation and government grant funding to provide tuition support (full or partial) for trainees who are individuals in need of new skills (e.g., displaced workers or retired military), newly entering the workforce and/or seeking to start a business.	400,000	333,610	733,610	0	344,740	344,740
Bay PRP 2014-040	Identifying the cause of beach swimming advisories at Carl Gray Park in Bay County, FL	The St. Andrew Bay Resource Management Association will work with the Florida Department of Health in Bay County and the Florida Department of Environmental Protection to perform microbial source tracking to identify why Carl Gray Park has frequent swimming advisories due to elevated fecal bacteria. Carl Gray Park has the most advisories of any designated swimming beach in Bay County. Results of the study would be disseminated to community leaders, state agencies, and the public to make informed decisions about how to correct the problem and reduce the number of advisories.	320,888	69,200	390,088	0	0	0
Bay PRP 2014-041	Carl Gray Park Boat Ramp	The project consists of making improvements to the existing boat ramp. The planned improvements are to replace the ramp with the correct slope boat ramp, install fixed staging docks and a floating dock for smaller vessels like waverunners and canoes. The project will require a 50 ft wide dredged channel and an overflow stormwater box to the existing stormwater ditch outfall basin to prevent future sedimentation runoff into St. Andrews Bay. The new overflow box is considered a mitigation project.	500,000	302,010	802,010	0	0	0
Bay PRP 2014-042	Restoration of St. Andrew Bay Submerged Grass Beds	Restoration of St. Andrew Bay submerged grass beds relating to existing and extensive, outboard motor propeller scarring (prop scarring) of the Bay's submerged grass beds. Project will entail restoration by planting of several acres of submerged grass beds on the Bay side of Shell Island in the vicinity of St. Andrew State Park. In addition, restored areas will be demarcated (posted) with shoal grass bed warning signs utilizing floating buoys that will caution the boating community of the presence of submerged grass beds (sea grasses).	250,000	0	250,000	0	0	0
Bay PRP 2014-043	Port Adventure	Port Adventure will be a series of interactive exhibits showcasing Port Panama City and its partners as well as other high-tech industries in Bay County. Experiences will be highly engaging for children and adults. Port Adventure will create another attraction for tourists and local residents while highlighting Port Panama City and Port partners as well as other high-tech industries in Bay County. Port Adventure will provide an additional recreational and educational destination for tourists from the beaches. Applying the NOAA Ocean Literacy Principle that there is one big ocean, the exhibits will stress the interconnectedness of our Gulf to the waters of the world. Exhibits will particularly focus on our relationship with other port cities around the world and a link will be made to our special relationship with Panama City, Panama. Port Adventure will engender interest in jobs related to our Gulf including commercial, marine biology, recreational fishing, shipbuilding, forestry, ecotourism, marine architecture, recreational boating and much more. Children will work in teams to manipulate cranes to load cargo onto barges and container ships in a port simulation exhibit. Related exhibits will allow children and adults to simulate docking ships and navigating out through the pass, loading and unloading ships, trucks and trains with model cranes, conveyor belts and screw drives to move cargo representative of our local trade commodities (timber, paper, pipe, etc.) from one type of transportation to another. Visitors may move from one part of the exhibit to another via climbing cargo nets, docks and bridges. Murals depicting everyday action at Port Panama City and informative text will bring meaning the experience for visitors.	274,735		0	0	760,000	760,000

Bay PRP 2014-044	Framework for project prioritization to maximize environmental and economic benefits	We propose to develop a framework for evaluation and comparison of the available approaches to water quality and habitat needs for Bay County, to identify those that can provide the highest, broadest, and longest-lasting suite of benefits to residents and visitors impacting the local economy. A 2009 study provides extensive biophysical and engineering data as a starting point to consider the needs and options, expanding to consider green infrastructure, low impact development, and ecosystem services. We will identify the effects of the types of projects eligible under RESTORE Act funding that have final goods and services of value and economic impact to Bay County residents and businesses. This will be based on our work elsewhere and literature, combined with local interviews, and using the 2009 St. Andrew Bay Stormwater Management Plan as a starting point. We will then identify those effects that align with particular socioeconomic scarcities for the region, and measures of per-unit, and total potential benefit by benefit category. We will take a systematic approach that centers on the steps: 1. Identify local environmental problems that need to be addressed under mitigation funding requirements; 2. Identify and categorize available approaches to addressing these problems; 3. Identify and describe benefits available under each approach (or portfolio approach); 4. Align these benefits with beneficiary groups and characterize scarcities; 5. Quantify major benefit categories in scalable terms and based on local demand and scarcity; 6. Articulate long-term strategy principles; 7. Highlight consistent and appropriate near-term actions This approach will rely on a combination of reviewing regional and local datasets and reports, combined with our understanding of benefits and results developed elsewhere. It will include extensive communication with local experts to properly understand options, benefits, and interactive effects. TASK 1: CONTEXT AND NEEDS - Describe ecological constraints for Bay County to be addressed with funding and the regional economic objectives. Identify primary actors and trends. TASK 2: OPTIONS AND CHARACTERISTICS - Identify and summarize the options for addressing past, ongoing, and emerging harms and threats to the target water and habitat resources. Review and summarize experiences with these techniques in Bay County and elsewhere, with emphasis on contexts similar to Bay County. Categorize effects of options, and metrics for these effects. TASK 3: BENEFITS AND BENEFICIARIES - Align the effects of options with demands and benefits in Bay County. Identify drivers of value such as availability and quality of substitutes and complements. Align beneficiary groups and consider pathways and manifestations of value. Consider group-specific values, and opportunities for beneficiaries to support and contribute. TASK 4: OPTION COMPARISON AND PORTFOLIO CONSIDERATION - Develop a matrix for comparison of options, and summarize build-out potential by approach. Consider portfolio implications for combinations of options, and categories of emergent benefits with long-term effects. TASK 5: STRATEGIC PRINCIPLES - Articulate insights and management principles that emerge from consideration of options and benefits available to Bay County from the various approaches that address water quality and habitat needs. Identify both general, long-term principles and guidance for near-term steps. Explain and quantify the benefits associated with successful implementation. ; TASK 6: NEAR-TERM ACTIONS - Identify, explain and describe the values attributable to at least one near-term project or program opportunity. Explain important factors involving partnering, communication, funding.	40,000	0	40,000	0	0	0
Bay PRP 2014-045	Continued Development of FL Sea Grant's Web-Based Emerald Coast Anchorage Guide - Bay County for Boaters as Safe Harbors and Destinations	Area boaters depend on a transportation network comparable in many ways to a road system that services land-based vehicular traffic. The most obvious components are the interconnected navigation channels found in Bay County coastal waters and its interior waterways that serve as a "road" network for boaters. Anchorages - often called the parking lots of the waterway transportation infrastructure – are an important component of the transportation network serving multiple purposes. The availability of an enhanced web-based Emerald Coast Boaters' Anchorage Guide - Bay County will allow resident and visiting boaters easy access to	25,000	13,600	38,600	0	1,800	1,800
Bay PRP 2014-046	Fostering Business and Econmomic Growth Through Business Incubation	Since August 2013, the Business Innovation Center (BIC) has mentored new, growth stage* and foothold* companies in admittedly limited facilities on the Florida State University-Panama City (FSU-PC) campus. With ten (10) clients, four (4) of whom are in actual residence in the current FSU-PC offices, the BIC has already exceeded its in-house capacity. In short, the BIC needs to expand its operation in an additional facility. Downtown Panama City offers the urban commercial environment our clients desire and an inventory of suitable buildings. Combining a downtown commercial facility to house clients with a successful campus-based location focused on non-resident business mentoring and counseling for FSU students and the general public, the BIC will be better positioned to serve Bay County and northwest Florida's entrepreneurial community. The BIC will use the $629,000.00 grant to fully fund the lease of an existing building in downtown Panama City for a five (5) year period, as well as leasehold improvements to provide appropriate business services for our current and new clients. * "Growth stage" is a term used to describe home-based businesses which need to move into an outside office but are not ready for the financial commitment of a standard commercial lease. * "Foothold" is the term used to describe existing commercially viable companies which require temporary fixed office space from which to operate as they "test" a market and can move out into a permanent location.	629,000	355,000	984,000	0	721,200	721,200
	TOTALS		**11,756,538**	**8,830,160**	**20,311,963**	**200,000**	**2,370,240**	**2,570,240**