RESUME OF MINUTES

Escambia County Restore Act Advisory Committee Meeting
April 22, 2013 – 4:00 p.m.
Escambia County Central Office Complex
3363 West Park Place
Pensacola, FL 32505

Members Present:

Bentina Terry, Chairperson	City of Pensacola
Alan McMillan, Vice-Chair	District 1/Commissioner Wilson Robertson
Al Coby	District 3/Commissioner Lumon May
Tammy Bohannon	District 4/Commissioner Grover Robinson
Gregg Beck	District 5/Commissioner Steven Barry
Christian Wagley	Environmental Advocacy Group
Harlan Butler	At-large Citizen
Michelle Inere	At-large Citizen

Members Absent:

Donnie McMahon	District 2/Commissioner Gene Valentino

County Staff in Attendance:
Commissioner Grover C. Robinson, IV, District 4
George Touart, County Administrator
Keith Wilkins, Director, Community & Environment Department
David Musselwhite, Director, Information Technology Department
Ryan Ross, Assistant County Attorney
Kathleen Dough-Castro, Manager, Public Information Office (PIO)
Pat Chunn, Director's Aide, Community & Environment Department

1. April 22, 2013 meeting called to order at 4:04 p.m.

2. The meeting was advertised in the Pensacola News Journal on April 13 and April 20, 2013.

3. Attendance – See above.

4. **After amendment, a motion was made by Tammy Bohannon to approve the April 08, 2013 minutes. Al Coby seconded. Motion carried unanimously**.

   Senate Bill 1024 - Commissioner Robinson addressed the committee regarding Senate Bill 1024 which could take local governments out of the decision-making loop for RESTORE money. He plans to address the Senate Appropriations Committee on Wednesday, April 24, and ask that a portion of the bill language which refers to funds being controlled by a 5-member board be stricken.

5. Gulf Council Project Submittal (Keith Wilkins)
   Keith presented the Department of Environmental Protection's (DEP) "Florida Gulf Of Mexico Restoration Project Submittal Form" (Attachment 1) which is open to all to submit projects. DEP is the clearinghouse for these projects.

6. Project Flow Chart (Keith Wilkins)
Keith presented "Projects Relative to RESTORE Funding Pots" (Attachment 2). He showed examples of different projects and how they qualify or not qualify for each funding pot. Funding allocations are pretty broad. The county's pot includes education and job creation, infrastructure, and economic development projects. Pot #1 (local/county) is very flexible.

7. Project Lists (Keith Wilkins)

a. Water Management District - Keith presented the "Florida Gulf Coast Watersheds" (Attachment 3) which lists projects proposed by DEP (Pot #2) and the "RESTORE Act Implementation Participants Worksheet" (Attachment 4).

b. Natural Resource Damage Assessment (NRDA) – "Natural Resource Damage Assessment Projects Submitted to NOAA for Deepwater Horizon Oil Spill Damages" (Attachment 5) chart and "Natural Resources Damage Assessment Proposed Restoration Projects" (Attachment 6) were presented which list and explain in detail county projects totaling $200,810,000.

8. Selection Criteria – BCC Suggestions
The committee agreed that they would like to hear recommendations from other counties on criteria and also get input from the community to include health and social issues. They asked to hear from five to six experts, beginning with economic development, at the next meeting, May 6. The invitation should also be extended to other chambers.

9. Public Information Office Suggestions (Kathleen Dough-Castro and George Touart)
The committee requested that the next meeting, May 6, be held in the BCC Chambers. Mr. Touart agreed. The Public Information Office (PIO) offered to get the change of location information out to the public. The meeting will be broadcasted. Chairperson Terry suggested contacting PIO before and/or after speaking to the press.

10. Old Business – None

11. New Business – None

12. Public Comment (limit 3 minutes each)

Jim Cox, 229 Sabine Drive, Gulf Breeze, FL
Barbara Albrecht, 1528 E. Brainerd Street, Pensacola, FL
Jessica Koelsch, 611 Royce Street, Pensacola, FL
Tony R. McCray, Jr., 1402 E. Leonard Street
Andrew Blewer, 6101 Midas Place, Pensacola, FL
Gary Sansing, 1517 E. Jackson Street, Pensacola, FL
David McGhee, 107 Ariola Drive, Gulf Breeze, FL
Admiral LeRoy, 801 Violet Avenue, Pensacola, FL
Eleanor Johnson, 728 N. 17th Avenue, Pensacola, FL

13. Meeting adjourned at 5:45 p.m.

FLORIDA GULF OF MEXICO RESTORATION

PROJECT SUBMITTAL FORM

Form Purpose and Instructions:

- To assist the project proposal and review process, please complete this Submittal Form. Completion of the Form will contribute to the appropriate information being completely and accurately submitted for each project.
- Take as much space as needed for each question, but please keep responses as focused as possible. It may assist you to review all the questions before addressing any one question.
- Please submit one Form per project, if you have multiple projects - please submit one Form for each project.
- Please submit completed Forms to Restoration.Projects@dep.state.fl.us. Once your Form is successfully submitted, you will receive a confirmation email from the Florida Department of Environmental Protection.

Project Name:

Contact Information *(Include at least one name, phone number, email address, and organization name if applicable)***:**

Project Location *(Include a map, if possible, and the city, county, longitude/latitude, and watershed)***:**

Project Description *(Describe all aspects of the project)***:**

Estimated Project Costs *(Describe the estimated costs of the project, including any assumptions for contingency and ongoing operations/maintenance. Identify other secured funding sources such as matching funds, in-kind contributions or state/federal dollars. In addition, if possible, complete and submit the Cost Appendix Sheet associated with this Form)***:**

Other Funding *(Indicate if the project is submitted for any potential funding or if it may be used to leverage additional funding, if so please describe the funding source [e.g. State/Federal Grants])***:**

Technical Feasibility *(Describe the technologies involved and any relevant past experience or proven success with similar projects)***:**

Environmental Benefits *(Describe the nature, magnitude, and timing of any environmental benefits attributable to the project. If possible, describe potential environmental performance measures [e.g. pollutant reduction]. Please address any potential environmental impacts associated with implementing or maintaining the project [e.g. loss of a habitat or conversion of habitat from one type to another during implementation])***:**

Economic and Social Benefits *(Describe the economic and social benefits including those related to the project's improved ecosystem services and any estimates on jobs created or preserved)***:**

Community Resilience *(Describe if the project assists Florida's ability to anticipate, withstand, or recover from hazards or threats [e.g. hurricane preparedness, establishing living shorelines])***:**

Conflicts or Complements to Existing Efforts *(Describe any ongoing activities in the project implementation area, if the project is part of another plan, and why the project does or does not interfere with that work. Please consider how the project may complement existing local, regional, and state efforts/plans/objectives)***:**

Complies with Federal, State, Local, and Tribal Laws/Regulations *(Describe any concerns or potential conflicts)***:**

Readiness for Implementation *(Describe if the project has had any design or permitting work started or completed [attach permits or design work]. Please address any issues that may delay start or finish of the project)***:**

Public Acceptance *(Describe any known or potential public approval or opposition to the project)***:**

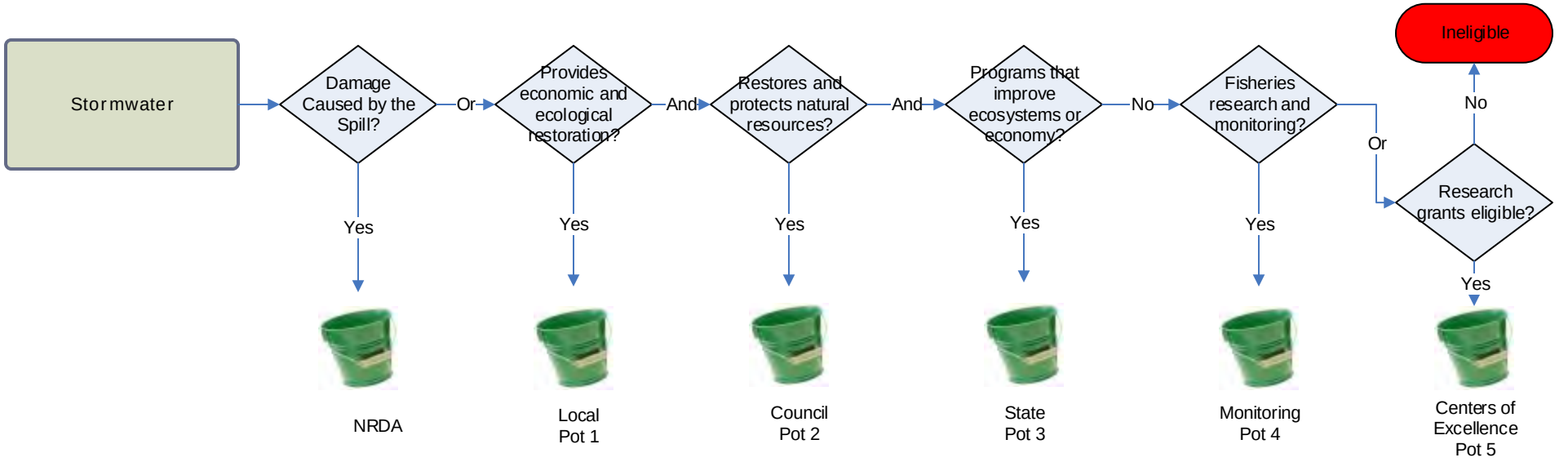
Additional Information you wish to provide *(Please include any maps, designs, drawings, photos, or background resources that may assist in completely and accurately understanding the project)***:**

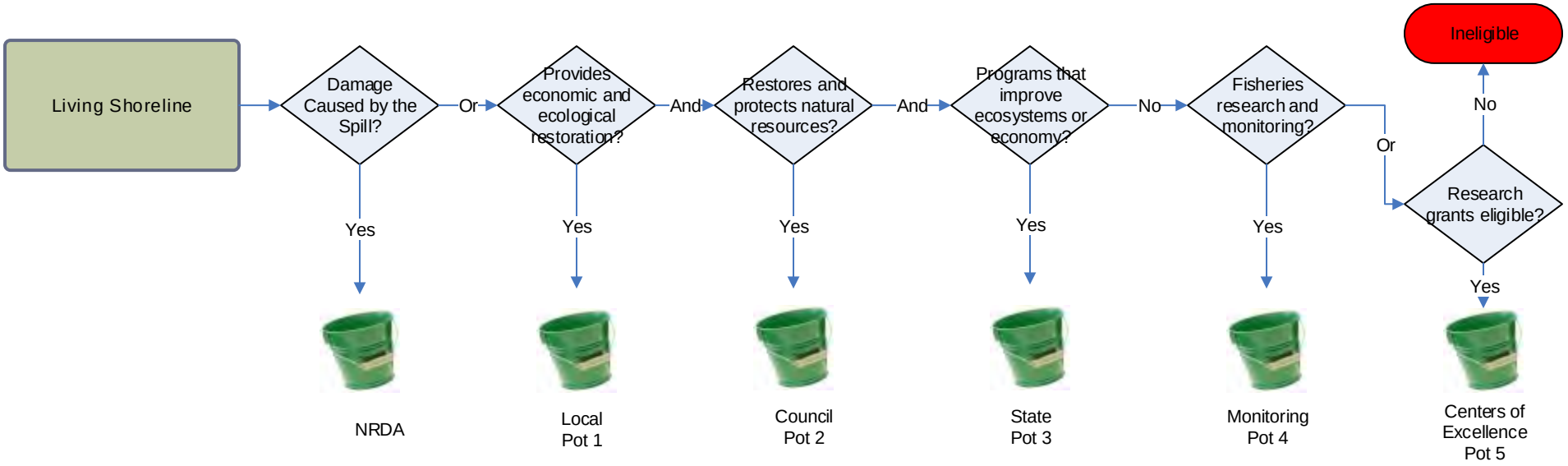
Cost Appendix Sheet

Cost Item	Cost Estimate
Planning	
Contracts	
Feasibility	
Engineering, Design, Land Rights, & Bid Prep	
Restoration Plan	
Site Visits & Cost of Site Selection	
Administration, Overhead, and Indirect	
Other	
Planning Subtotal:	$0.00
Construction	
Contracts	
Administration & Mobilization/Demobilization	
Other	
Construction Subtotal:	$0.00
Monitoring	
Contracts	
Data Collection	
Monitoring Administration	
Other	
Monitoring Subtotal:	$0.00
Project Cost	
Supervision	
Subtotal:	$0.00
Contingency	
TOTAL:	$0.00

Estimated Costs by Year	
Year 1	
Year 2	
Year 3	
Year 4	
Year 5	
Year 6	

Projects Relative to RESTORE Funding Pots

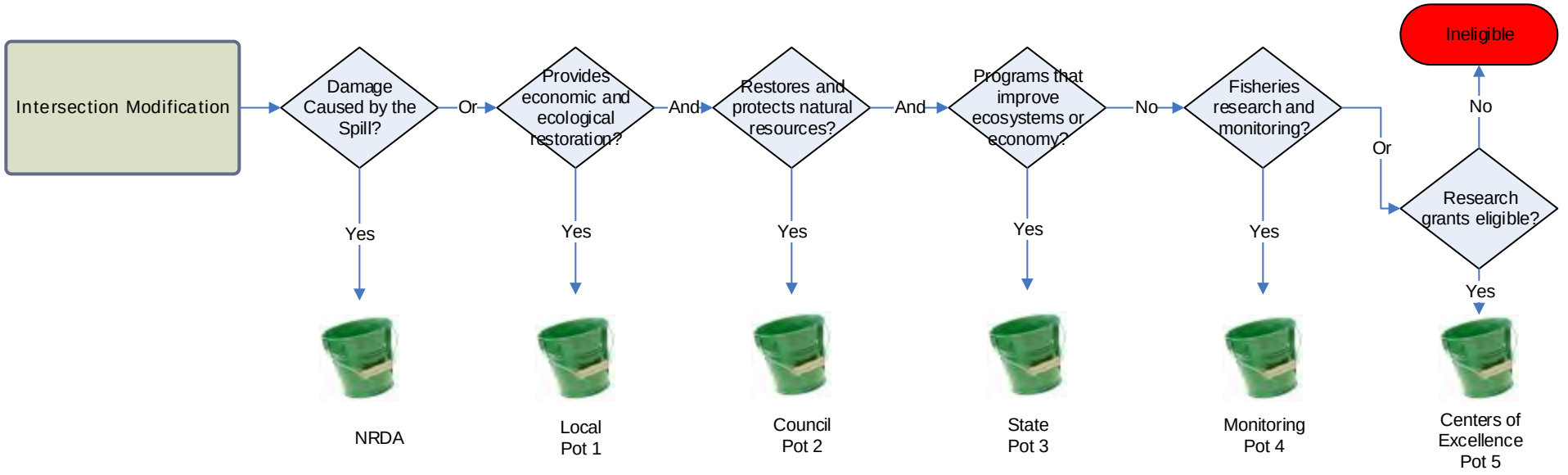


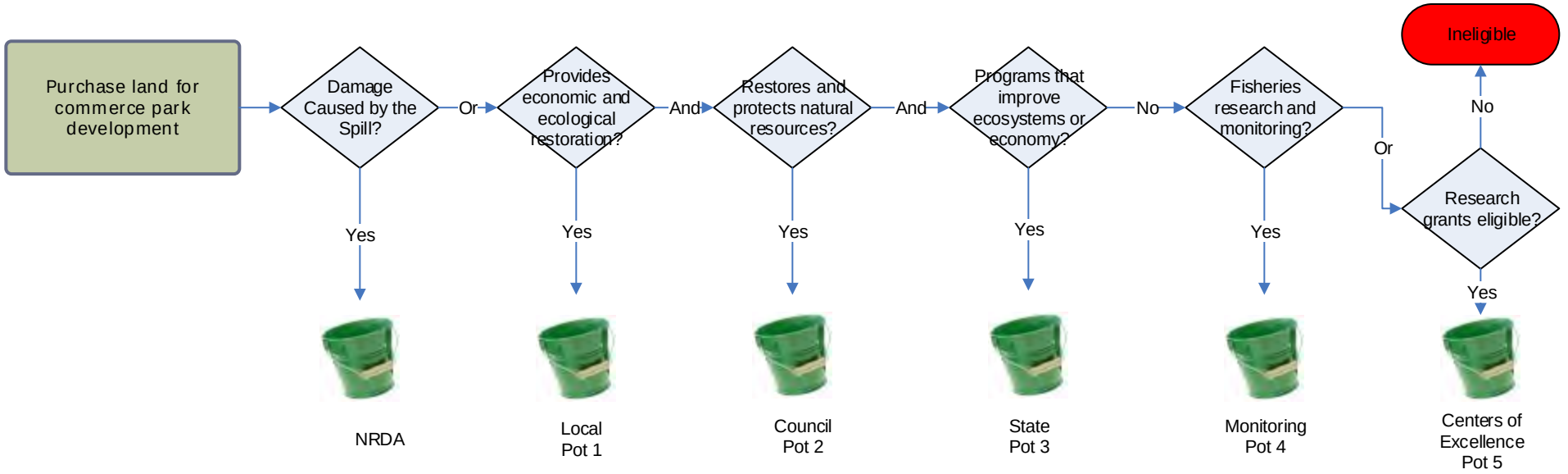


Notes:

Each funding pot has individual preference criteria more specific than above generalizations.

Projects Relative to RESTORE Funding Pots





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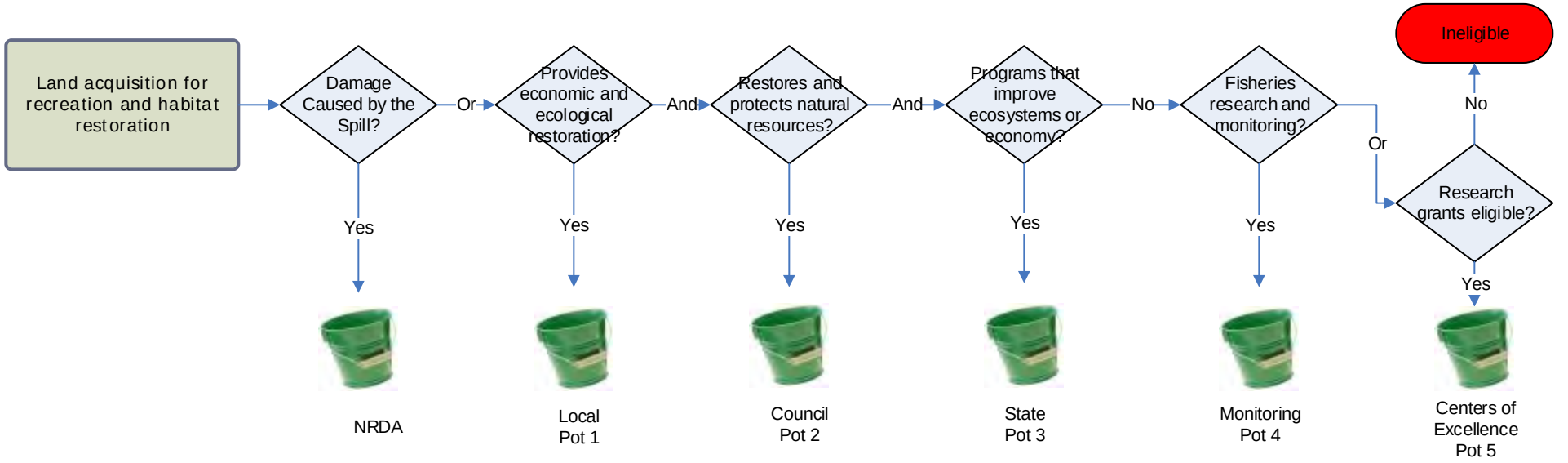

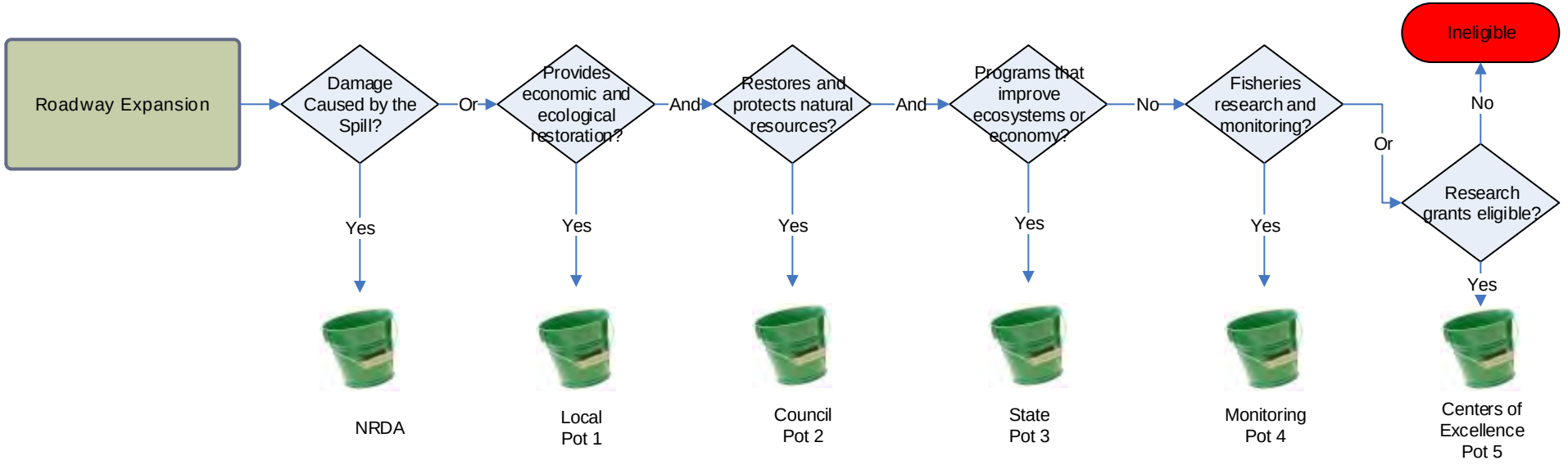

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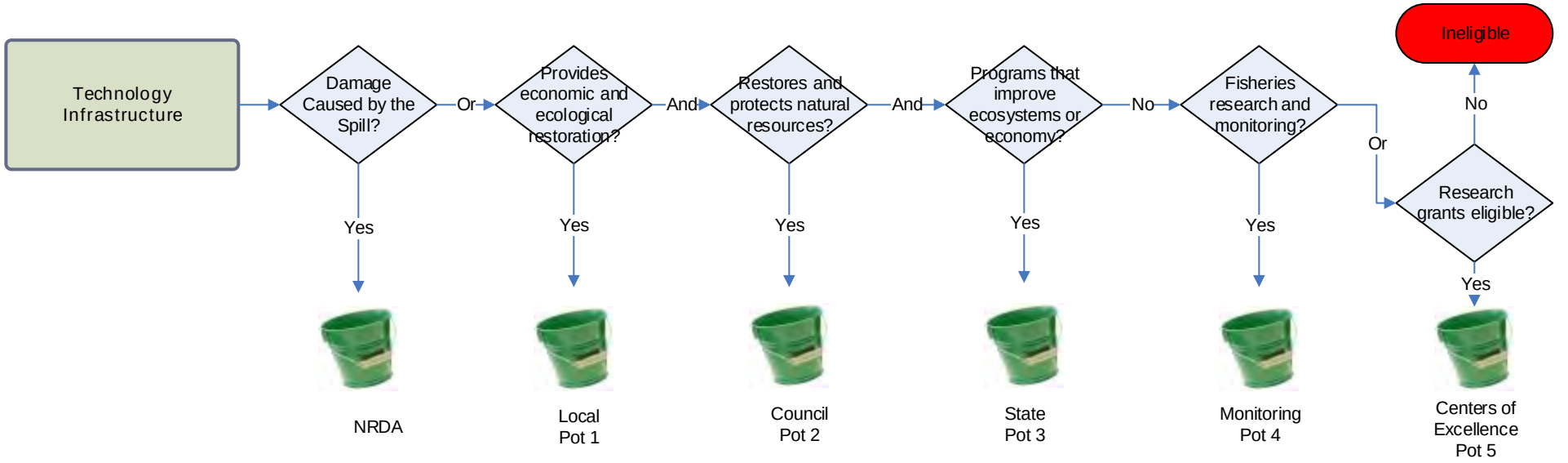

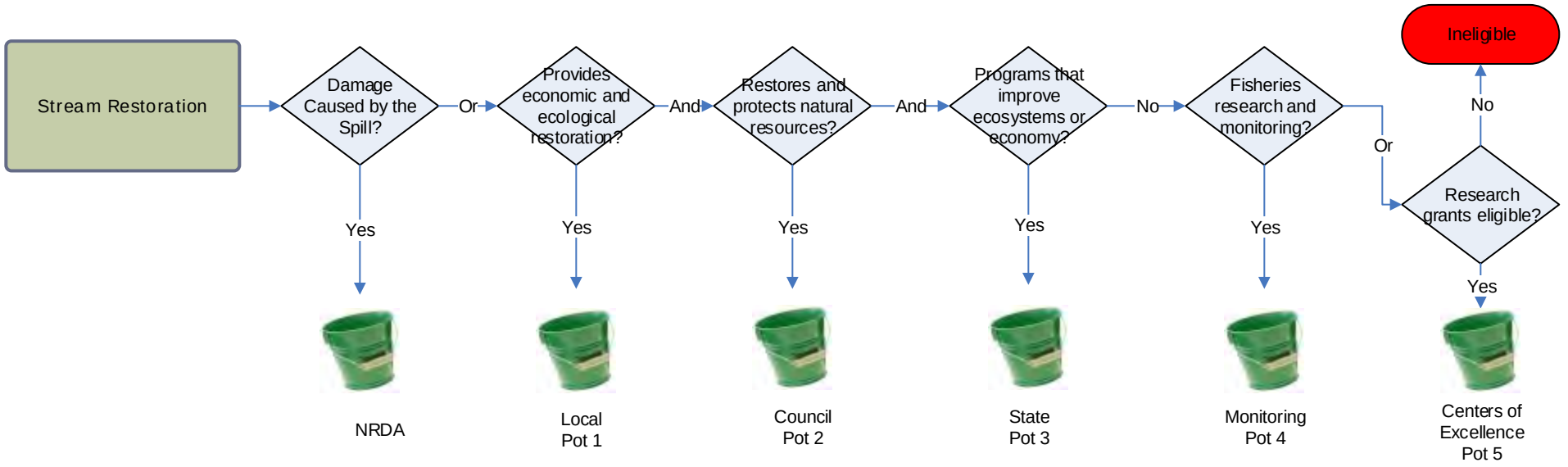

Draft - This spreadsheet is being offered as a strawman guidance tool to help organize watershed information and to start discussions for planning purposes.

Florida Gulf Coast Watersheds

Watershed Issues/Challenges	Perdido River and Bay	Pensacola Bay		Choctawhatchee River and Bay	St Andrew Bay	Apalachicola River		Ochlockonee River		St. Marks River	Ocklawaha River	Suwannee River	Santa Fe River		Coastal Rivers	Withlacoochee River				Charlotte Harbor	Springs Coast		Tampa Bay		St. Joseph Sound	Clearwater Harbor		Sarasota Bay	Caloosahatchee River		Lake Hicpochee				Everglades West Coast	Potential Solutions to Watershed Issues/Challenges
	Northwest/Panhandle											Suwannee/ Big Bend								Southwest										South								
Stormwater/wastewater discharge *Degradation of water quality in rivers, bays, and estuaries, impacts to fisheries*																																					
Untreated or uncontrolled stormwater runoff and nonpoint source pollution																																					• Improve existing wastewater treatment infrastructure or facilities • Eliminate septic systems by providing connections to sewer systems • Improve natural or constructed stormwater retention features to improve management of stormwater runoff, e.g. - installation of rain gardens, rain barrels, and permeable pavement • Implement BMPs for agricultural and urban stormwater management to reduce nutrient and pesticide/herbicide loading • Construct wet detention facility • Installation of stormwater catchment area and an under drain system to capture silt laden runoff
Excess nutrients (N&P) and bacteria due to coastal community and rural wastewater management																																				
Excess nutrients from treated wastewater discharges																																				
Untreated discharges from mosquito control and/or drainage ditches																																				
Nutrient loading from agricultural land																																				
Coastal tributary freshwater quality and quantity - surface water, springs, and groundwater *Degradation of freshwater quality and reduced quantity*																																				
Need to protect flow and quality of freshwater to support diversity and abundance of natural resources, including marine aquaculture (clams)																																					• Retrofit water distribution systems to allow use of reclaimed water in residential, commercial, and public areas • Improve efficiency of irrigation and water distribution systems to reduce water loss • Retrofit agricultural irrigation and fertilization systems to conserve water and protect or improve water quality in freshwater sources such as springs • Improve water treatment and retention to protect and improve groundwater quality and increase quantity of water recharging to groundwater • Construct offline reservoirs to manage surface water and ensure adequate baseflow during low-flow conditions • Implement stormwater management and treatment actions (described above) • Acquire and protect high-quality habitat that supports natural freshwater systems • Replace, restore, or protect bulkheads near freshwater features to prevent sedimentation and maintain or improve water quality • Address erosion issues (e.g., excess sedimentation, reduced habitat quality) affecting freshwater sources and habitats (see next section for more detailed solutions) • Develop a regional water supply system for parks or other consumptive water uses to remove the effects of local withdrawals on springs
Need for conservations, capture, distribution, and use of reclaimed water																																				
Need to improve irrigation systems to increase efficiency, reduce ground water withdrawal, and reduce nutrient loading to surface water and ground water																																				
Need for protection of groundwater quality and quantity																																				
Need to increase water distribution system efficiency to reduce losses																																				
Need to protect natural springs, streams, and associated habitat																																				
Need to restore spring and stream habitat and wetland and riparian habitat to protect water quality																																				

Erosion and sedimentation of streams *Degraded water quality, loss of fish and wildlife habitat*																																			
Erosion-induced habitat loss, including channelized, incised, or eroding stream banks																																			• Pave dirt roads that are sources of erosion near waterways • Install permeable pavement to reduce erosion and allow infiltration of runoff • Restore channelized and degraded stream and spring banks to reduce erosion and restore natural stream function • Targeted dredging to remove sediment affecting water quality and hydraulics • Construct stormwater treatment structures to replace old ditches that exacerbate erosion and sedimentation problems
Sedimentation and turbidity from erosion sites and unpaved roads, habitat smothering, loading of sediments and suspended solids into riverine and estuarine waters																																			
Coastal habitat degradation *Coastal shoreline, estuarine, embayment and bayou habitat degradation*																																			
Loss and degradation of bayou and estuarine shoreline, embayments, and littoral habitat due to shoreline alteration, erosion, and sedimentation																																			• Restore living shorelines, including actions such as establishing emergent marsh vegetation and submerged aquatic vegetation and oyster reef restoration • Preserve and protect high-quality wetland habitat and adjacent upland habitat through conservation easements or land acquisition • Restore degraded coastal habitat • Implement/support oyster shell recycling programs • Establish/support plant nursery infrastructure and facilities to support restoration projects throughout the region • Restore natural hydrologic conditions by installing retention basins in degraded areas, and bridges, culverts, and low water crossings to reduce impacts of human uses on wetland habitats • Vegetation planting/enhancement • Implement stormwater management and treatment actions • Implement stormwater management and treatment actions (see above for more detailed description) • Reduce or moderate the volume of sheetflow and associated harmful inputs of freshwater into estuaries • Restore and/or enhance historic wetland hydroperiods
Need for coastal habitat protection or preservation																																			
Degradation of estuarine water quality																																			
Degradation of coastal dune lake water quality and habitat																																			
Coastal and tributary floodplain alteration and habitat loss																																			
Hydrologic impacts to coastal wetlands - loss of hydrologic connection between wetlands and tributaries, bays, or estuaries																																			
Need for coastal habitat restoration or enhancement																																			
Marine habitat degradation																																			
Degraded seagrass habitat, prop scar damage to seagrass beds																																			• Restore degraded seagrass habitat • Map seagrass habitat, track changes in condition and location following disturbance (natural and anthropogenic) • Review and improve seagrass habitat management plans • Develop community-based water quality and seagrass monitoring initiative
Invasive species																																			
Presence of marine invasive species in bays and estuaries																																			• Control invasive species in natural habitats • Control invasive species in urban/developed areas to improve vegetation and reduce the need for use of fertilizers and herbicides that may negatively affect water quality
Presence of freshwater invasive species																																			
Presence of terrestrial invasive species in floodplain, wetland, and upland habitats																																			
Fisheries management																																			
Fish population management																																			• Develop and maintain a fish hatchery
Oyster bed management																																			
Upland habitat																																			
Need to protect and preserve in-tact upland habitat																																			• Protect high-quality, in-tact, upland habitat through land acquisition, conservation easements, or other land protection mechanisms

RESTORE Act Implementation
Stakeholders Meeting
December 15, 2012
E.O. Wilson Center
Participants Worksheets

Watershed	**Kinds Of Projects**	**Multi-County /Regional Ecological Restoration Projects**
Perdido and Pensacola Bay Watershed	• Land acquisition • Stormwater runoff and treatment; • Waste Treatment • Sea grasses • Water quality monitoring • Habitat assessment and river/ stream quality • Brownfield redevelopment • Beach nourishment • Shoreline mitigation • Beach dune enhancement • Living shoreline/ marsh restoration • Oyster reef/ artificial reef projects • New sewer lines/ septic tanks abatement	• Erosion control, • Native plant replanting, • Shoreline stabilization • Watershed BMP's • removal of septic tanks • Oyster reef restoration • create walkable communities that reduce energy use/ help avoid sprawl • Different projects may be better suited for different pots of RESTORE dollars depending on opportunities for partnerships with regional /state /federal parties and projects (big picture watersheds).

Watershed	Kinds Of Projects	Multi-County /Regional Ecological Restoration Projects
Santa Rosa/Blackwater	• Land acquisition • Stormwater runoff and treatment • Waste Treatment • Sea grasses • Erosion Control/Riparian zone restoration • Invasive species monitoring and control • Public access control and management along rivers, creeks, bays • Local education centers (like EO Wilson) •	• Land protection in key watersheds, such as Wolfe Creek Forest • Along major river corridors. • military base buffering component. • projects that have other matches • Yellow River Ravines (managed by Florida Forest Service) in Santa Rosa and Okaloosa Counties). • PSA's on how to be a good steward to wetlands, rivers, creeks, and the gulf

Watershed	Kinds Of Projects	Multi-County /Regional Ecological Restoration Projects
Choctawhatchee	• Land acquisition • Projects that directly benefit listed species and rare species • Stormwater runoff and treatment; • Waste Treatment • Sea grasses • Coastal lake preservation • Land acquisition for west Bay to Apalachicola National Forest • Saving the entire Choctawhatchee drainage system • Enhancement of recreational access • Treatment of unstable gullies and unpaved roads especially stream crossing to reduce sediment loads • Increase cost-share $ available to get livestock out of and away from waterways to reduce nutrients. • Upgrading of WWT facilities to reduce nutrient loading to river system and Bay. • Long-term support for protection/ restoration depends upon people connecting with the resource – water access is poor in upper watershed – improvement needed. • Knight Trust Choct. River and Bay Watershed • Removal/ remediation of illegal sea walls and/ or exposed structures forward of CCC Line • Protection for fisheries – Destin Harbor • Purchase of land to provide buffer zones for FL Black Bear • Connect the protected lands with Eglin AFB with wildlife connector's (ex. Nokusee) • A middle school program to teach young adolescents about programs like the South Walton Conservation and Development Plan	• Bay restoration and land acquisition to connect with West Bay and Apalachicola National Forest. • Choctawhatchee-West Bay Conservation Area (~85,000 acres) would protect both Choctawhatchee Bay and West Bay/ St. Andrews Bay watersheds and estuaries (a West Bay NWR); • West Bay to Apalachicola River/ Estuary – large conservation area (~200,000 acres); and • Flint Rock Tract 22,000 acres Wakulla/ Jefferson Counties/ St. Marks NWR Addition • Septic tank conversion to sewer in waterfront communities/ properties • Restoration of native fish population • Preservation of bird nesting areas • Create an environmental forensics lab for local environmental non-profits to utilize (to include equipment, lab techs, water soil and air sampling units, and consultation services). • Restoration begins with education, so this should be first priority, then water quality, land and wildlife conservation, sustainable building • Active monitoring of the health of the coastal lakes and measures to retain their good health. • Discourage or prohibit seawalls – go to more living shorelines • Heavy metals analysis – formulate solution (e.g. mercury) • Shoreline restoration – upland buffers • ferry system to connect coastal communities to a jitney system to run along beach roads and to ferry landings could reduce congestion and carbon foot • Research Institute, particularly in biology and in ecosystem protection and restoration.

Watershed	Kinds Of Projects	Multi-County /Regional Ecological Restoration Projects
St. Andrews Bay	• Land acquisition/ beach access • Stormwater runoff and treatment • Waste Treatment/ replace septic tanks with sewer • Sea grasses/ oysters/ scallops/ sea turtles – species specific projects • Water Quality monitoring • Shoreline restoration • Air Quality – replace coal with natural gas • Education – k-16, outreach, state and county parks • Ecosystem monitoring and restoration – fisheries, SAV, shoreline restoration, etc. • Trails – build pedestrian and bike trails – FL trails, along bays and rivers, in state/ county parks • Watershed species counts on populations monitoring and reporting systems • Public school education programs on importance of watershed and Gulf systems (incorporating trial systems and "hands on" sampling experiences)	• Land acquisition in West Bay Sector • Land acquisition in East Bay Sector • Seagrass Restoration and monitoring • Stormwater Plan development and implementation • removal of septic tanks • Living shoreline/ oyster restoration • Erosion control • oysters/ scallops/ sea turtles – species specific projects • Regional WQ monitoring council that guides communication and analyzes samples and data and writes reports. • Regional trail system the links Escambia County to Wakulla County and creates corridors along bays and river and inland waters for conservation. • Convert coal power plants to natural gas from Pensacola to Tallahassee. • Counties put $ into trust fund to fund long term ecological monitoring – this would be regional citizen – science institutes in each county.

Watershed	Kinds Of Projects	Multi-County /Regional Ecological Restoration Projects
St. Marks and Wakulla	• Land acquisition • Stormwater runoff and treatment • Waste Treatment • Sea grass restoration • Plug drainage ditches and re-establish wetlands • Reduce strormwater discharge to watershed • More freshwater discharge in Bay and Estuaries from Apalachicola River. Conduct more studies of low flow effect and funding lawsuits • Effects of low flows in river on fish, shrimp, oysters, grass, etc. • Tallahassee/ Leon/ Wakulla comprehensive waste water treatment management in Wakulla Springs watershed. • Beach Restoration in Franklin County particularly Alligator Point and Bald Pt.	• Land acquisition • Expansion of St. Marks's National Wildlife Refuge with willing sellers • St. Marks NWR 16,000+ acres. Boundary Expansion Plan, • Unit Management Plan, (already approved). Only need money • Acquisition would include Longleaf Pine Forest Restoration • Convert outdated inefficient septic systems to modern state of the art municipal/ county waste water treatment systems. • Stormwater runoff and treatment • Waste Treatment • Sea grass restoration • Dixie Co.: 46,500 Acres-WMD-State-Fed Ranked project- this is CE/ working forest project developed with Dixie Co BOCC • Shorebird and turtle nest habitat / nest protection – • Cleaning old dock, boats, buildings from coast line area, old storm damaged properties are still not cleaned up. • Develop a coastal conservation management plan that becomes an adopted part of the coastal element under CH 163 (would give legal authority to their plan). • Adopt a public participation plan for input on the selected projects recommended by the state.

Natural Resource Damage Assessment Projects Submitted to NOAA for Deepwater Horizon Oil Spill Damages

TOTAL REQUEST $ 200,810,000

Beach Nourishment (Pensacola Beach & Perdido Key)	$ 56,000,000
Water Quality/Marine Species Monitoring	$ 2,000,000
Artificial Reef Projects	$ 10,000,000
Oyster Reef Restoration (Pensacola Bay)	$ 4,000,000
Wetland Restoration Projects	$ 20,000,000
Marine Turtle Protection	$ 500,000
Dune Restoration (Pensacola Beach & Perdido Key)	$ 3,000,000
Perdido Key Dune Crossovers	$ 210,000
Benthic Organisms Restoration Projects	$ 20,000,000
Stormwater Retrofit Projects	$ 20,000,000
Stream Restoration Projects	$ 20,000,000
Shorebird Habitat Restoration Projects	$ 2,000,000
Public Boat Ramps (Escambia & Perdido Bays)	$ 2,500,000
Passenger Ferry Service (City/NAS/Beach)	$ 4,000,000
Boat Mooring Field	$ 100,000
Municipal Marina	$ 2,500,000
Perdido Key Land Acquisition (Public Access)	$ 34,000,000

Natural Resources Damage Assessment
Proposed Restoration Projects

(to be conducted by Federal, State and Local Agencies)

1. Gulf Beach Nourishment

Escambia County beaches (Pensacola Beach and Perdido Key) have been subject to continual impacts from vehicular traffic and sand manipulation to locate and remove oil and tar that has washed ashore from the Deepwater Horizon Oil Spill. Continued national media has degraded the perceived aesthetic value of Escambia County beaches. This proposal is intended to restore the natural, functional, and aesthetic value of Escambia County beaches and establish a Beach Renourishment Trust Fund for Escambia County's cost share portion for future renourishment events.

2. Seagrass bed and sand dune monitoring and restoration

Seagrass beds (SAV – submerged aquatic vegetation) – Local seagrass meadows have been directly impacted from the Deepwater Horizon Oil Spill through decrease in ambient light penetration, increase in turbidity, prop scarring from response vessels, increase of nutrients, and boom deployment/anchoring. This proposal is intended to evaluate extent of seagrass damages and restore/create seagrass beds to mitigate these impacts.

Sand dunes – Sand dunes were directly impacted from the Deepwater Horizon Oil Spill from direct coating of oil mist, increased foot traffic in dune areas, vehicular traffic on seaward edge precluding pioneer species, and the creation of new access points utilizing a bulldozer through the dune system. This proposal is to evaluate the extent of sand dune damages and restore/enhance dune systems on Escambia County barrier islands.

3. Water quality and inland waters investigation, monitoring and restoration

In the days following the Deepwater Horizon Oil Spill, Escambia County established 34 pre-oil spill monitoring stations and collected water and sediment samples from each of these stations to document pre-oil spill baseline conditions. This proposal is to re-monitor these 34 stations bi-annually for five years to determine potential post-oil spill impacts to water and sediment quality.

4. Recreation Loss Projects

a. Land Acquisition

During the Deepwater Horizon Oil Spill response effort, all County public accesses on Perdido Key and one of three major parking areas on Pensacola Beach were utilized. This resulted in substantially less direct beach access in the form of available public parking as well as beach patrons having to periodically relocate to accommodate beach cleaning operations. Additionally, entire sections of beach were effectively closed for days at a time to facilitate heavy response equipment of large numbers of manual labor. With loss of recreational opportunity for both local residents and tourists, this proposal is made to offset that loss and provide for future public access through the purchase of additional public access areas and enhancement of current public access to the beaches.

b. Boat ramps

Escambia County public boat ramps provide local boaters with access to public waterways. Many public boat ramps were used to stage and deploy oil spill response resources during the Deepwater Horizon oil spill. This proposal seeks funding to repair two existing boat ramps, and construct a new boat ramp facility to restore the past condition of our ramps and to offset the lost opportunity of boating access.

c. Boardwalks and dune crossovers

During the Deepwater Horizon Oil Spill response effort, all County public accesses on Perdido Key and one of three major parking areas on Pensacola Beach were continuously utilized. On Pensacola Beach this resulted in unavoidable soiling of boardwalks with oil and tar from foot traffic. On Perdido Key, the greatly enhanced utilization of opportunistic unimproved access points by manual labor and response vehicles had degraded these areas. This proposal is to repair soiled crossovers increase the number of crossover points on both islands and restore/enhance the access points.

d. Transient Marina/Ferry Service

Escambia County boaters, marine dealers and water-dependent businesses were impacted by the loss of the 2010 boating season due to the Deepwater Horizon Oil Spill. This proposal seeks to mitigate those losses via construction of a transient marina to stimulate and support increased boating and boating tourism upon local waterways, and to provide non-boating public access to waterways and water-dependent businesses.

e. Mooring field

Escambia County boaters, marine dealers and water-dependent businesses were impacted by the loss of the 2010 boating season due to the Deepwater Horizon Oil Spill.

This proposal seeks to mitigate those losses via construction of a mooring field to stimulate and support increased boating and tourism on local waterways. Escambia County has conducted a preliminary analysis to establish a mooring field to provide safe mooring of vessels. This proposal seeks funding to construct a mooring field in Bayou Chico.

5. Benthic invertebrate impact investigation, monitoring and restoration

In the days following the Deepwater Horizon Oil Spill, Escambia County collected and analyzed tissue samples from benthic invertebrates to document pre-oil spill baseline conditions. This proposal is to collect and analyze benthic invertebrate tissue samples bi-annually to determine potential post-oil spill impacts to benthic invertebrates

6. In-fauna impact investigation, monitoring and restoration

In the days following the Deepwater Horizon Oil Spill, Escambia County collected and analyzed tissue samples from benthic in-fauna to document pre-oil spill baseline conditions. This proposal is to collect and analyze benthic in-fauna tissue samples bi-annually to determine potential post-oil spill impacts to benthic in-fauna.

7. Infrastructure to offset water quality impacts

a. Stormwater upgrade retrofits

Stormwater runoff is one of the major sources of water quality impairment in Pensacola Bay and Perdido Bay. Restoring water quality is necessary to improve fishery habitat and improve estuary stability so that these water bodies are better able to withstand and recover from future accidents, spills, and other water quality impacts. To offset water quality impacts resulting from the Deepwater Horizon Oil Spill, this proposal is for the design and construction of major stormwater retrofit projects in Pensacola Bay and Perdido Bay

b. Stream and shoreline restoration

Stream and shoreline restoration projects improve water quality and wildlife/fishery habitat by reducing turbidity, improving water clarity, increasing dissolved oxygen, and reducing excess nutrients. To offset water quality impacts resulting from the Deepwater Horizon Oil Spill, this proposal is for the design and construction of stream and shoreline restoration projects in the Pensacola Bay and Perdido Bay Watersheds.

c. Wetland restoration for water quality improvement

Wetland restoration projects improve water quality and wildlife/fishery habitat by reducing turbidity, improving water clarity, increasing dissolved oxygen, and reducing excess nutrients. To offset water quality impacts from the Deepwater Horizon Oil Spill,

this proposal is for the design and construction of wetland restoration projects in the Pensacola and Perdido Bay Watersheds.

8. Marine turtle monitoring and population restoration

As a direct impact resulting from the Deepwater Horizon Oil Spill, all marine turtle nests on Escambia beaches (Gulf of Mexico) were relocated to east coast Florida beaches (Atlantic Ocean) resulting in the entire loss of 2010 recruitment for those marine turtle species. This proposal is to enhance monitoring, education, and night lighting reduction programs for marine turtles.

9. Seabird and barrier island nesting species monitoring and restoration of nesting areas and population.

As a direct impact resulting from the Deepwater Horizon Oil Spill response, nearly all documented shorebird nests failed to produce offspring due to the enhanced level of activity on our beaches, including lighted night operations. This has resulted in the near loss of the local 2010 recruitment for those shorebird species. This proposal is to acquire, restore, enhance and monitor habitat and to provide education programs for shorebirds.

10. Oyster reef monitoring and restoration

Oysters are keystone species in Escambia County estuaries, and support important recreational and commercial fisheries. Moreover, the ability of oysters to improve water quality makes oyster reef construction an important component of a successful restoration plan to mitigate impacts from the Deepwater Horizon Oil Spill. This proposal seeks funding to monitor existing oyster reefs and to construct new oyster reefs within Pensacola Bay and Escambia Bay.

11. Gulf Water quality, near shore and pelagic species monitoring and restoration

Escambia County has conducted Gulf water quality and marine life species monitoring for nearly a decade prior to the Deepwater Horizon Oil Spill. Escambia County presently monitors marine life species in an established partnership with Florida Fish and Wildlife Conservation Commission (FWC). These data, combined with other data obtained via FWC-funded research, are an important baseline upon which potential impacts of the recent oil spill may be measured. This proposal seeks funding to conduct additional monitoring for four years, and can be paired with enhanced artificial reef construction (see item #12, below) to document restoration of water quality and marine/estuarine species.

12. Offshore and inshore artificial reef construction

Escambia County's Artificial Reef Program is presently permitted (by US Army Corps of Engineers and Florida Department of Environmental Protection) to provide habitat for estuarine and marine life species across approximately 130 square miles of seafloor. Although nearly 200 artificial reefs have been constructed, much of the permitted sites remain open for new reef construction. Many species impacted, and presumed to have been impacted, by the Deepwater Horizon Oil Spill will benefit from construction of new artificial reefs. Moreover, existing data documenting the economic benefits of artificial reefs to the local economy strongly validates this proposal to construct new artificial reefs as a means to accelerate ecological and economic recovery from the Deepwater Horizon Oil Spill. This proposal seeks funding to construct twenty new artificial reefs.

13. Human health studies examining impacts to edible marine species and their consumption

Due to the Deepwater Horizon Oil Spill, human health concerns pertaining to the consumption of Florida seafood species have been devastating to the Florida seafood industry. To restore the integrity and health of the Florida seafood brand, this proposal is to conduct human health studies to ensure the public that there are no detrimental effects associated with Florida seafood consumption.

TOTAL ESTIMATED RECOVERY COST
$200,810,000

PROJECT	ESTIMATED RECOVERY COST ($)
Beach Nourishment (Pensacola Beach & Perdido Key)	56,000,000
Water Quality/Marine Species Monitoring	2,000,000
Artificial Reef Projects	10,000,000
Oyster Reef Restoration (Pensacola Bay)	4,000,000
Wetland Restoration Projects	20,000,000
Marine Turtle Protection	500,000
Dune Restoration (Pensacola Beach & Perdido Key)	3,000,000
Perdido Key Dune Crossovers	210,000
Benthic Organisms Restoration Projects	20,000,000
Stormwater Retrofit Projects	20,000,000
Stream Restoration Projects	20,000,000
Shorebird Habitat Restoration Projects	2,000,000
Public Boat Ramps (Escambia & Perdido Bays)	2,500,000
Passenger Ferry Service (City/NAS/Beach)	4,000,000
Boat Mooring Field	100,000
Municipal Marina	2,500,000
Perdido Key Land Acquisition (Public Access)	34,000,000