

**APPENDIX G: PUBLIC AND AGENCY
COMMENTS AND RESPONSE SUMMARY MATRIX**

Reviewer	#	Date	Comment	Preparer's Response
NMFS	1/4	12/6/19	The NMFS Habitat Conservation Division has reviewed Draft Supplemental Environmental Assessment 543a.... NMFS does not object to hurricane protection to reduce risk to life or property, nor do we object to the proposed levee alignments. The proposed brackish marsh mitigation is acceptable, but we do have some concerns and offer solutions to ensure the mitigation is scaled, designed, constructed, and performance is monitored to ensure adequate habitat compensation.	Thank you for your review and comment.

Reviewer	#	Date	Comment	Preparer's Response
NMFS	2/4	12/6/19	<p>In general, the mitigation plan for the tentatively selected project is acceptable. A specific concern related to the conceptual construction design of the Fritchie Marsh mitigation project is the potential to adversely intercept drainage and cause unintended wetland loss by ponding water on the marsh surface. Design measures during Preliminary Engineering and Design (PED) should be included for resource agency review to ensure drainage from the North to the South across the Fritchie Marsh, around the mitigation project areas, and out to Lake Pontchartrain through Salt Bayou. Specifically, the limits of the creation area should offset the existing marsh, and borrow for earthen containment should be excavated from the exterior of the marsh creation area which should not be backfilled. Although this approach will increase direct habitat impacts to submerged aquatic vegetation, water column, and water bottoms, those impacts are vastly outweighed by avoiding secondary impacts to wetlands and waters by restricting drainage. Also, the layout of the marsh creation should offset the New Zydeco mitigation site under construction to maintain drainage to Salt Bayou. Furthermore, spill boxes for dewatering the marsh creation area could be sited in a manner to nourish existing marsh and avoid siltation of planned drainage routes and existing Salt Bayou tributaries.</p>	<p>The Interagency team will be included in PED discussions and future reviews of plans and specifications. During PED, CEMVN will review existing and available hydrologic information as well as collect site specific data (borings, water elevations, etc.) to confirm assumptions made for the Fritchie Marsh mitigation project and adjust the final design as necessary to maintain drainage. Any unintended wetland loss was accounted for in the WVA as well as including a buffer (~10% additional acreage) of brackish marsh in the project design. In response to your comment the project description in the SEA section 2.4.1 Common Elements in the Corps Constructed Project Description (p. 22) has been adjusted to read as follows:</p> <p>“Elements common to all mitigation projects constructed from open water unless otherwise stated within the specific description are:</p> <ul style="list-style-type: none"> • Earthen retention dikes would be mechanically constructed along the perimeter of the proposed mitigation feature. • The retention dike borrow would be obtained from within or exterior to the mitigation project footprint. Trenasses and dike borrow canals would be constructed to help maintain drainage.”

Reviewer	#	Date	Comment	Preparer's Response
NMFS	3/4	12/6/19	The design goal for the Fritchie Marsh mitigation should be to construct intertidal wetlands as early as possible, and for as long as possible, during the period of analysis. To ensure this functionality and necessary acreage are met, the target construction elevation should be informed during PED with elevation and geotechnical surveys within the mitigation fill and borrow areas. Settlement curves should be provided for interagency review with mean low and high water level adjusted for sea level rise over the period of analysis plotted on them in order to assess project performance, cross check the benefit analysis, and adjust mitigation acreage if needed.	Concur.

	4/4	<p>The following are NMFS technical recommendations for this marsh mitigation project:</p> <ol style="list-style-type: none"> 1. The USACE should continue to coordinate with NMFS and other natural resource agencies between the draft and final SEA, or signing of the FONSI, as well as during PED and construction. 2. During PED, settlement curves based on elevation and geotechnical survey data from both the fill and borrow areas should be used to inform the target fill elevations. At a minimum, mean low and high water adjusted for sea level rise over the period of analysis should be plotted on those curves. This information should be coordinated with NMFS and other interested natural resource agencies to determine the final sizing of the mitigation meets the project needs. 3. The USACE should develop, evaluate, and incorporate design measures to ensure there is not intercepted drainage impacts on the Fritchie Marsh. Measures suggested to be considered and coordinated with NMFS include: <ol style="list-style-type: none"> a. Exterior borrow for earthen containment that will not be backfilled b. Offsetting the New Zydeco mitigation to maintain a gap for sheet and channel flow c. To the extent practicable, siting and management of spill boxes to maximize nourishment of existing adjacent marsh and maintenance of drainage pathways d. Pre and post construction surveying of the exterior borrow, the offset between the Fritchie and New Zydeco mitigation areas as well as the Salt Bayou tributaries to assess the need for cleanout prior demobilization of the construction contractor 4. Measures suggested to be considered and coordinated with NMFS also include the incorporation of the latest revisions of the mitigation performance and monitoring criteria developed from HSDRRS. This information has been developed over the last two years through interagency adaptive management reviews, and thus should be required and tailored specifically for the project-specific mitigation. 	<p>Concur, please see the response to your comments above (NMFS 2/4 and 3/4)</p>
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Reviewer	#	Date	Comment	Preparer's Response
EPA	1/1	12/6/19	The U.S. Environmental Protection Agency (EPA) has reviewed the U.S. Army Corps of Engineers Supplemental Environmental Assessment (SEA) 543a.... Based upon our review of the environmental analysis provided in the SEA, EPA has no comments on the proposed action.	Thank you for your review and comment.
PPG	1/4	12/5/19	Plaquemines Parish Government, as co-local sponsor of the New Orleans to Venice Hurricane Risk Reduction project (NOV/NFL), appreciates the effort of the Project Delivery Team (PDT) toward finding appropriate mitigation solutions for wetland impacts associated with the project. The habitats impacted by this project are valuable wetland ecosystems and it is important that these impacts be mitigated through the creation of similar habitat in commensurate quality and quantity.	Thank you for your review and comment. As part of the planning process for Plaquemines NOV/NFL mitigation, all alternatives were formulated to replace the lost functions and services of the impacted habitat types. The Tentatively Selected Plans (TSPs) proposed for each habitat type to mitigate the remaining NFL NOV mitigation need of 33.9 swamp AAHUs and 106.9 open water, intermediate, brackish and saline marsh AAHUs could be satisfied through the purchase of swamp mitigation bank credits and the construction of the Fritchie Brackish Marsh project.
PPG	2/4	12/5/19	Plaquemines concurs with the planned mitigation effort in all habitat types except as to the determination of the Tentatively Selected Alternative for the brackish and saline marsh impacts, located in the Fritchie Marsh in St. Tammany Parish. Plaquemines is unable to support this option, as the physical location of the project will likely cause Plaquemines to devote employees time, money and effort to a project located outside the boundaries of the Parish. It has been our firm position throughout the mitigation planning effort that any construction associated with the mitigation for the NOV/NFL project must be located within Plaquemines Parish in order for the Parish to fulfill its local sponsor obligation to monitor and maintain the required project success criteria and duration. For this and other reasons, we are unable to support a plan which establishes a Tentatively Selected Alternative project in a parish other than Plaquemines.	During consultation with other agencies and the NFS representatives, throughout the mitigation planning effort and in the selection of the TSP, PPG's position as stated in the comment was known and taken into consideration. Alternatives within the boundaries of the Parish and within the Deltaic plain service area were evaluated during the plan formulation process. However, the Fritchie Brackish Marsh Corps constructed alternative received the highest score in the Alternative Evaluation Process (AEP) and as a result was designated the TSP.

Reviewer	#	Date	Comment	Preparer's Response
PPG	3/4	12/5/19	Additionally, it is our position that a constructed project should be located in proximity to the levee to afford an additional measure of buffering and energy reduction in the area of the levee itself, would shift the monitoring and maintenance burden to the operator of the bank, and away from Plaquemines Parish. Either of these options is superior to constructing a project in another parish with no benefit to the improved levees, and for which Plaquemines will bear the burden of maintenance.	The Fritchie Brackish Marsh Corps constructed alternative received the highest score in the AEP when evaluating the criteria of Risk and Reliability, Environmental, Watershed and Ecological Site Considerations, Time and Schedule, Cost Effectiveness, and Other Cost Considerations and as result was designated as the TSP for this habitat type. A sensitivity analysis was also conducted to assess how changes in the weighting of the evaluation criteria would affect selection of the TSP, however the sensitivity analysis did not result in a change in the TSP selected for the brackish marsh habitat.
PPG	4/4	12/5/19	Plaquemines Parish Government looks forward to working with the PDT members, and its US Army Corps of Engineers and Coastal Protection and Restoration Authority partners to evaluate other acceptable options for brackish marsh mitigation for the NOV/NFL levee improvement project. It is our hope that the principal parties to this project and the PDT are able to confer and agree to a mitigation option that does not involve a constructed project outside the boundaries of Plaquemines Parish.	The Fritchie Marsh Mitigation project is the current TSP, if any of the TSPs cannot be implemented, CEMVN may re-examine the AEP results and may consider moving to the next ranked project for that habitat type; or would explore other options to mitigate these impacts in coordination with the resource agencies and the non-Federal sponsor.
EIP	1/8	12/5/19	The USACE utilized an inaccurate mitigation potential score when evaluating the Chef Menteur Pass Wetland Mitigation Bank, the only mitigation bank able to provide brackish marsh credits within the deltaic basin, and therefore the cost comparison which is stated to have made the "biggest impact" in the selection of Fritchie Marsh might be inaccurate.	Thank you for your comment. USACE uses certified WVA models in accordance with USACE guidance EC 1105-2-412 (https://cw-environment.erdc.dren.mil/model-library.cfm?CoP=Restore&Option=View&Id=1 and Kitch, 2012) to evaluate the impacts and benefits of potential projects. CEMVN's assessment of a mitigation bank's mitigation potential uses information provided by the bank in conjunction with an evaluation performed by an interagency team.

Reviewer	#	Date	Comment	Preparer's Response
EIP	2/8	12/5/19	Similar, to the other four habitats impacted by the NOV-nfl, utilizing accurate information to perform the analysis would likely result in selecting to offset impacts to brackish/saline marsh through mitigation banks instead of constructing the proposed Fritchie Marsh project as currently included in the Tentatively Selected Alternative.	Thank you for your comment.
EIP	3/8	12/5/19	As requested in 2016, 2017, 2018 and 2019 EIP requests a meeting to understand how the mitigation potential score assigned to the Chef Bank utilized by the District to evaluate mitigation for Civil Works projects so drastically differs from the mitigation potential score utilized by Department of Natural Resources Office of Coastal Management (DNR) or the score derived through the Louisiana Rapid Assessment Methodology (LRAM).	Thank you for your comment. The Federal Acquisition Regulations prohibit sharing information regarding potential contracts with potential contractors such as EIP. The LRAM is not a certified model and it is not used for USACE water resource projects.
EIP	4/8	12/5/19	As articulated in the October 28, 2019 letter to Col. Murphy (Attachment 2); USACE District, Headquarters and ASA personnel were made aware of the potential error in the analysis, the document should be revised and reposted for public comment.	Thank you for your comment.
EIP	5/8	12/5/19	The brackish/saline marsh cost comparison performed utilized to justify the selection of Fritchie Marsh does not appear to utilize data from the District's actual attempts to construct successful marsh mitigation projects in the Deltaic Plain or the actual costs of acquiring mitigation from the Chef Bank. While not yet deemed successful, the District should utilize costs associated with recent attempts to construct the adjacent New Zydeco Ridge project as the basis for costing the Fritchie Marsh.	Thank you for your comment. USACE possesses the best information regarding its costs to construct its projects. The Federal Acquisition Regulations prohibit sharing information, including cost information, regarding potential contracts with potential contractors such as EIP.
EIP	6/8	12/5/19	If the District plans to utilize contracting regimes similar to previous mitigation efforts to design and construct Fritchie Marsh, then similar to previous marsh mitigation projects attempted by the District cost estimates should include awarding multiple construction contracts over multiple years to achieve success. Based on actual work performed by the Corps and its contractors (Attachment 3) at New Zydeco Ridge a cost estimate of more than \$115,000 per acre should be anticipated for the District to successfully construct Fritchie Marsh.	Thank you for your comment. USACE possesses the best information regarding its costs to construct its projects. The Federal Acquisition Regulations prohibit sharing information, including cost information, regarding potential contracts with potential contractors such as EIP.

Reviewer	#	Date	Comment	Preparer's Response
EIP	7/8	12/5/19	As previously presented to the District the cost of obtaining mitigation from the Chef Bank is directly associated with the mitigation potential score provided to the project. Utilizing the current 0.20 aahu score assigned to the Chef Bank, the cost of acquiring mitigation is significantly greater than if an accurate score likely equal or greater to the 0.32 assigned to Fritchie Marsh is utilized. Therefore, similar to the other four habitats included in the mitigation plan for the NOV-nfl project, once the aahu score associated with the Chef bank is corrected, the District should inquire as to the cost of acquiring brackish/saline mitigation from qualified banks before selecting to construct a permittee responsible mitigation project.	Thank you for your comment.
EIP	8/8	12/5/19	Fish and Wildlife Service Policy does not allow utilizing Fritchie Marsh for mitigation as included in the Tentatively Selected Alternative. Therefore the Fritchie Marsh project should not be included in the Tentatively Selected Alternative.	Thank you for your comment. The Government obtains relevant real estate rights, rights of entry, special use permits, and/or other access rights or permissions as appropriate prior to construction of its projects.
LDWF	1/1	12/4/19	LDWF Ecological Studies has reviewed and concurs with the Corps' findings in Environmental Assessment #543 and has no further comment concerning the New Orleans to Venice Hurricane Risk Reduction Project at this time. Levee construction shall occur simultaneously with mitigation.	Thank you for your review and comment.
EIP	1/4	11/4/19	Please accept this as a request to withdraw the public notice of the document entitled "Clean Water Act, Section 404 Public Notice: Brackish Marsh and Swamp Mitigation for the New Orleans to Venice Hurricane Risk Reduction Project: Incorporation of Non-Federal Levees from Oakville to St. Jude and New Orleans to Venice Federal Hurricane Protection Levee, Plaquemines and St. Tammany Parishes, Louisiana" posted by the on October 23, 2019.	Thank you for your comment.

Reviewer	#	Date	Comment	Preparer's Response
EIP	2/4	11/4/19	The noticed document compares our bank, The Chef Menteur Pass Wetland Mitigation Bank (the only bank eligible for comparison), with an Army Corps led project to be constructed on a nearby National Wildlife Refuge. We believe the assumptions for the comparison and therefore the basis of the presented Tentatively Selected Alternative are false. On 10/23/19 and 10/28/19 we supplied Mark Wingate, Deputy District Engineer for Project Management, additional survey information regarding the pre construction conditions of our site. If reviewed properly, the provided information would significantly modify the analysis utilized to justify the Tentatively Selected Alternative.	Thank you for your comment. Please see the responses to your comments above (EIP comments 1/8, 2/8, and 3/8).
EIP	3/4	11/4/19	From the information made available, it appears the USACE staff utilized poor aerial imagery to evaluate pre-construction conditions of the Chef Menteur Pass Wetlands Mitigation Bank, and therefore erroneously determined 66% of our project was marsh prior to restoration. The information submitted to the district on 10/23/2019 and 10/28/2019 includes actual pre construction field survey data and photographs taken in the field prior to construction this data indicates approximately 10% of the area was pre-existing marsh which is consistent with analysis utilized by District Regulatory staff when permitting the mitigation bank.	Thank you for your comment. Please see the responses to your comments above (EIP comments 3/8 and 4/8).
EIP	4/4	11/4/19	This correction would have a significant effect on the alternative comparison performed in the noticed documents. We therefore formally request the public notice be withdrawn allowing staff time to reanalyze the alternatives utilizing the best available information. The public should be afforded the right to comment on a document that is based on accurate analysis.	Thank you for your comment. Please see the responses to your comments above (EIP comments 1/8, 2/8, 3/8 and 4/8).
LDHH	1/3	10/29/19	LDHH has no objection to the SEA 543a project at this time. The applicant shall be aware of and comply with any and all applicable Louisiana State Sanitary Code Regulations (LAC 51, as applicable).	All approvals and environmental permits associated with these projects have been included in the Final SEA 543a.
LDHH	2/3	10/29/19	Should additional project data that amends the information upon which this office's response has been based, we reserve the right of additional comments on SEA 543a.	Acknowledged.

Reviewer	#	Date	Comment	Preparer's Response
LDHH	3/3	10/29/19	In the event of any future discovery of evidence of non-compliance with LAC 51 (Public-Health Sanitary Code) and the Title 48 (Public Health-General) regulations or any applicable public health laws or statutes, please be advised that this offices's preliminary determination on this Solicitation of View of the project(s) shall not be construed as absolving the applicant responsibility, if any, with respect to LAC 51 and Title 51 regulations or any other applicable public health laws or statutes.	Acknowledged. The implementation of the Tentatively Selected Plan would not result in non-compliance with LAC 51, Title 48 or any other applicable public health laws or statutes.

From: [Craig Gothreaux - NOAA Federal](#)
To: [Wilkinson Wolfson, Laura L CIV USARMY CEMVN \(USA\)](#)
Cc: [Patrick Williams - NOAA Federal](#); [Behrens, Elizabeth H CIV USARMY CEMVN \(USA\)](#); [NMFS ser HCDconsultations](#); [Swafford, Rusty](#); [Walther, David](#); [Raul Gutierrez](#); [Charles Reulet](#); [kbalkum@wlf.la.gov](#)
Subject: [Non-DoD Source] SEA 543a
Date: Friday, December 06, 2019 6:48:37 PM

Laura Lee,

The NMFS Habitat Conservation Division has reviewed Draft Supplemental Environmental Assessment 543a (SEA 543a) entitled "Brackish Marsh and Swamp Mitigation for the New Orleans to Venice Hurricane Risk Reduction Project: Incorporation of Non-Federal Levees from Oakville to St. Jude and New Orleans to Venice Federal Hurricane Protection Levee, Plaquemines and St. Tammany Parishes, Louisiana" and a draft Finding of No Significant Impact (FONSI). NMFS does not object to hurricane protection to reduce risk to life or property, nor do we object to the proposed levee alignments. The proposed brackish marsh mitigation is acceptable, but we do have some concerns and offer solutions to ensure the mitigation is scaled, designed, constructed, and performance is monitored to ensure adequate habitat compensation.

The Fritchie Marsh is a unique area bounded by development and roads along its borders with substantial runoff from Slidell through the W-14 Canal and inlet and outlet exchange from Salt Bayou. The Fritchie Marsh is administratively and ecologically sensitive due to a significant percentage being publicly owned as part of the Big Branch National Wildlife Refuge. Previous investments of restoration funds have been used to help restore wetlands lost through substantial storm-induced wetland losses, including a large investment in ongoing mitigation construction (New Zydeco project) for habitat losses associated with the construction of the Greater New Orleans Hurricane Surge Damage Risk Reduction System. The Fritchie Marsh provides high quality habitat for fish and wildlife resources as well as storm buffer protection for adjacent developed areas.

In general, the mitigation plan for the tentatively selected project is acceptable. A specific concern related to the conceptual construction design of the Fritchie Marsh mitigation project is the potential to adversely intercept drainage and cause unintended wetland loss by ponding water on the marsh surface. Design measures during Preliminary Engineering and Design (PED) should be included for resource agency review to ensure drainage from the North to the South across the Fritchie Marsh, around the mitigation project areas, and out to Lake Pontchartrain through Salt Bayou. Specifically, the limits of the creation area should offset the existing marsh, and borrow for earthen containment should be excavated from the exterior of the marsh creation area which should not be backfilled. Although this approach will increase direct habitat impacts to submerged aquatic vegetation, water column, and water bottoms, those impacts are vastly outweighed by avoiding secondary impacts to wetlands and waters by restricting drainage. Also, the layout of the marsh creation should offset the New Zydeco mitigation site under construction to maintain drainage to Salt Bayou. Furthermore, spill boxes for dewatering the marsh creation area could be sited in a manner to nourish existing marsh and avoid siltation of planned drainage routes and existing Salt Bayou tributaries.

The design goal for the Fritchie Marsh mitigation should be to construct intertidal wetlands as early as possible, and for as long as possible, during the period of analysis. To ensure this functionality and necessary acreage are met, the target construction elevation should be informed during PED with elevation and geotechnical surveys within the mitigation fill and borrow areas. Settlement curves should be provided for interagency review with mean low and high water level adjusted for sea level rise over the period of analysis plotted on them in order to assess project performance, cross check the benefit analysis, and adjust mitigation acreage if needed.

The following are NMFS technical recommendations for this marsh mitigation project:

1. The USACE should continue to coordinate with NMFS and other natural resource agencies between the draft and final SEA, or signing of the FONSI, as well as during PED and construction.
2. During PED, settlement curves based on elevation and geotechnical survey data from both the fill and borrow areas should be used to inform the target fill elevations. At a minimum, mean low and high water adjusted for sea level rise over the period of analysis should be plotted on those curves. This information should be coordinated with NMFS and other interested natural resource agencies to determine the final sizing of the mitigation meets the project needs.
3. The USACE should develop, evaluate, and incorporate design measures to ensure there is not intercepted drainage impacts on the Fritchie Marsh. Measures suggested to be considered and coordinated with NMFS include:
 - a. Exterior borrow for earthen containment that will not be backfilled.
 - b. Offsetting the New Zydeco mitigation to maintain a gap for sheet and channel flow.
 - c. To the extent practicable, siting and management of spill boxes to maximize nourishment of existing adjacent marsh and maintenance of drainage pathways.
 - d. Pre and post construction surveying of the exterior borrow, the offset between the Fritchie and New Zydeco mitigation areas as well as the Salt Bayou tributaries to assess the need for cleanout prior to demobilization of the construction contractor.
4. Measures suggested to be considered and coordinated with NMFS also include the incorporation of the latest revisions of the mitigation performance and monitoring criteria developed from HSDRRS. This information has been developed over the last two years through interagency adaptive management reviews, and thus should be required and tailored specifically for the project-specific mitigation.

Thank you for your coordination and please let us know if you have any questions,
Craig

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1201 ELM STREET, SUITE 500
DALLAS, TEXAS 75270-2102

December 6, 2019

Ms. Laura Wilkinson
U.S. Army Corps of Engineers
Regional Planning and Environment Division
New Orleans Environmental Branch
CEMVN-PDS-C
7400 Leake Avenue
New Orleans, LA 70118

Dear Ms. Wilkinson:

The U.S. Environmental Protection Agency (EPA) has reviewed the U.S. Army Corps of Engineers Supplemental Environmental Assessment (SEA) 543a. SEA 543a evaluated the potential impacts associated with construction of the approved New Orleans to Venice (NOV) Non-Federal Levees (NFL) and the New Orleans to Venice Federal Hurricane Protection Levee projects pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality regulations (40 CFR Parts 1500 – 1508), and our NEPA review authority under Section 309 of the Clean Air Act.

SEA 543a evaluated impacts associated with compensating wetland impacts from construction of the NOV Levees as well as improvements to the NFL in order to incorporate the NFL into the Federal Hurricane Protection Levee projects. The construction of the NOV is incurring unavoidable impacts to brackish and saline marsh, open water and swamp habitats in the Batataria Basin that requires compensatory mitigation. The mitigation plan in SEA 543a will compensate for these impacts. The proposed action will replace the lost functions and services of the impacted habitat through restoration activities designed to create, increase and improve the habitat functions and services at specific mitigation sites. Based upon our review of the environmental analysis provided in the SEA, EPA has no comments on the proposed action.

We appreciate the opportunity to review this document. If you have any questions, please contact Gabe Gruta, the lead contact for this project, at (214) 665-2174 or gruta.gabriel@epa.gov.

Sincerely,

Arturo J. Blanco

Director

Office of Communities, Tribes and
Environmental Assessment

From: [Krista Clark](#) on behalf of [John Helmers](#)
To: [Wilkinson Wolfson, Laura L CIV USARMY CEMVN \(USA\)](#)
Cc: [Kirk M. Lepine](#)
Subject: [Non-DoD Source] SEA Response - NOV/NFL
Date: Monday, December 09, 2019 12:52:30 PM
Attachments: [SEA Response for NOV-NFL.pdf](#)

Please find attached, the response for the SEA, NOV/NFL.

Respectfully, John Helmers

Coastal Restoration Director

Plaquemines Parish Government

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Plaquemines Parish Government

Directors

Administration - Crystal M Taylor
Operations - Scott Rousselle
Public Service - Todd Epley
Coastal Restoration - John Helmers

PARISH PRESIDENT

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Council Members

District 1 - John L Barthelemy Jr.
District 2 - William "Beau" Black
District 3 - Corey Arbourgh
District 4 - Dr. Stuart J Guey Jr.
District 5 - Benedict "Benny" Rousselle
District 6 - Trudy Newberry
District 7 - Carlton M LaFrance Sr.
District 8 - Richie Blink
District 9 - Mark "Hobbo" Cognevich

December 5, 2019

US Army Corps of Engineers
P.O. 60267
New Orleans, LA 70160-0267

Attn: Ms. Laura Lee Wilkinson
Environmental Coordinator

Re: *New Orleans to Venice/Non-Federal Hurricane Risk Reduction Project
Supplemental Environmental Assessment 543a (Brackish Marsh and Swamp Mitigation)*

Ms. Wilkinson:

Plaquemines Parish Government, as co-local sponsor of the New Orleans to Venice Hurricane Risk Reduction project (NOV/NFL), appreciates the effort of the Project Delivery Team (PDT) toward finding appropriate mitigation solutions for wetland impacts associated with the project. The habitats impacted by this project are valuable wetland ecosystems and it is important that these impacts be mitigated through the creation of similar habitat in commensurate quality and quantity.

Plaquemines Parish concurs with the planned mitigation effort in all habitat types except as to the determination of the Tentatively Selected Alternative for the brackish and saline marsh impacts, located in the Fritchie Marsh in St. Tammany Parish. Plaquemines Parish is unable to support this option, as the physical location of the project will likely cause Plaquemines to devote employees, time, money and effort to a project located outside the boundaries of the Parish. It has been our firm position throughout the mitigation planning effort that any construction associated with the mitigation for the NOV/NFL project must be located within Plaquemines Parish in order for the Parish to fulfill its local sponsor obligation to monitor and maintain the required project success criteria and duration. For this and other reasons, we are unable to support a plan which establishes a Tentatively Selected Alternative project in a parish other than Plaquemines.

Additionally, it is our position that a constructed project should be located in proximity to the levee to afford an additional measure of buffering and energy reduction in the area of the levee itself. This bolsters the function and integrity of the levee, and provides the Parish with a project toward which it can appropriately devote its resources for the maintenance requirement. A commercial mitigation bank, while it may provide little in the way of support for the levee itself, would shift the monitoring and maintenance burden to the operator of the bank, and away from Plaquemines Parish. Either of these options is superior to constructing a project in another parish with no benefit to the improved levees, and for which Plaquemines will bear the burden of maintenance.

Plaquemines Parish Government looks forward to working with the PDT members, and its US Army Corps of Engineers and Coastal Protection and Restoration Authority partners to evaluate other acceptable options for brackish marsh mitigation for the NOV/NFL levee improvement project. It is our hope that the principal parties to this project and the PDT are able to confer and agree to a mitigation option that does not involve a constructed project outside of the boundaries of Plaquemines Parish.

Very Respectfully,

A large black rectangular redaction box covering the signature of Kirk Lepine.

Kirk Lepine, Parish President
Plaquemines Parish Government

Via E-mail

12/5/2019

Ms. Laura Lee Wilkinson
US Army Corps of Engineers
Regional Planning and Environmental Division South
PDN-CEP
7400 Leake Avenue
New Orleans, LA 70118-3651
Laura.L.Wilkinson@usace.army.mil

Re: The Draft Supplemental Environmental Assessment titled “CLEAN WATER ACT, SECTION 404 PUBLIC NOTICE: BRACKISH MARSH AND SWAMP MITIGATION FOR THE NEW ORLEANS TO VENICE HURRICANE RISK REDUCTION PROJECT: INCORPORATION OF NON-FEDERAL LEVEES FROM OAKVILLE TO ST. JUDE AND NEW ORELANS TO VENICE FEDERAL HURRICANE PROTECTION LEVEE, PLAQUEMINES AND ST. TAMMANY PARISHES, LOUISIANA” (Draft Supplemental EA) posted by the New Orleans District on October 23, 2019 .

Ms. Wilkinson

Please accept these comments on behalf of Ecosystem Investment Partners (EIP) the owners/operators of the Chef Menteur Pass Wetland Mitigation Bank (Chef Bank).

Unfortunately, the posted document is comprised of inaccurate analysis, erroneous assumptions and the selection of a project prohibited by Federal Policy.

COMMENT #1: The USACE utilized an inaccurate mitigation potential score when evaluating the Chef Menteur Pass Wetland Mitigation Bank, the only mitigation bank able to provide brackish marsh credits within the deltaic basin, and therefore the cost comparison which is stated to have made the “biggest impact” in the selection of Fritchie Marsh might be inaccurate.

As outlined in the powerpoint presentations submitted to the District on 10/23/2019, 10/28/2019 and 11/13/2019 and confirmed in a series of conversations with US Fish and Wildlife Service (FWS) in October of 2019, the District continues to utilize an inaccurate interpretation of site conditions prior to construction as the basis for the Wetland Value Assessment for Phase 2 of the Chef Menteur Pass Wetland Bank (Chef Bank). The incorrect information may have originated from documents prepared for and submitted by EIP dated April 25, 2013. Corrections to the documents were submitted by EIP to the District on 3/12/2015 and again 4/8/2016. The error was highlighted in a memo submitted to Mr. Lowery Crook, Principal Deputy Assistant Secretary of the Army for Civil Works on May 18, 2016 (Attachment 1) as well as in meetings with Headquarters personnel including MG Jackson and Mr. James Dalton on 10/30/2017. On three occurrences 2/9/2017, 12/13/2017, and 11/14/2019, District leadership agreed to a technical meeting with FWS and USACE planning team to discuss the discrepancy. However, the District canceled all three meetings.

Since 2015 on multiple occasions the District requested confirmation of the Wetland Value Assessment performed for the Chef Bank. However, as described in the submitted documents the issue is with the existing conditions documents upon which the Wetland Value Assessment was performed. This information does not appear to have been communicated with FWS and therefore each time FWS utilized the flawed background data and therefore resulted in similar mitigation potential scores.

Utilization of the inaccurate Wetland Value Assessment decreases credit yield per acre. Resulting in an inaccurate Cost Effectiveness score assigned to the Chef Bank - the score driving the selection of Fritchie Marsh over alternatives.

COMMENT #2: Similar, to the other four habitats impacted by the NOV-nfl, utilizing accurate information to perform the analysis would likely result in selecting to offset impacts to brackish/saline marsh through mitigation banks instead of constructing the proposed Fritchie Marsh project as currently included in the Tentatively Selected Alternative.

COMMENT #3: As requested in 2016, 2017, 2018 and 2019 EIP requests a meeting to understand how the mitigation potential score assigned to the Chef Bank utilized by the District to evaluate mitigation for Civil Works projects so drastically differs from the mitigation potential score utilized by Department of Natural Resources Office of Coastal Management (DNR) or the score derived through the Louisiana Rapid Assessment Methodology (LRAM).

We understand the means to derive the scores vary. We don't understand how through the DNR and LRAM programs the Chef Bank scores among the highest projects evaluated while the score derived through the District's Civil Works process is among the lowest of all projects evaluated. To date, the score has been utilized for multiple analysis performed by the District, we anticipate it may be utilized for many more in the future. The situation needs to be remedied.

COMMENT #4: As articulated in the October 28, 2019 letter to Col. Murphy (Attachment 2); USACE District, Headquarters and ASA personnel were made aware of the potential error well prior to posting the Draft Supplemental EA. If as anticipated there is an error in the analysis, the document should be revised and reposted for public comment.

COMMENT #5: The brackish/saline marsh cost comparison performed and utilized to justify the selection of Fritchie Marsh does not appear to utilize data from the District's actual attempts to construct successful marsh mitigation projects in the Deltaic Plain or the actual cost of acquiring mitigation from the Chef Bank. While not yet deemed successful, the District should utilize costs associated with recent attempts to construct the adjacent New Zydeco Ridge project as the basis for costing Fritchie Marsh.

The posted document indicates Cost Effectiveness as the "biggest impact" for selecting to construct the Fritchie Marsh project over the mitigation bank/in lieu fee/Corps constructed alternative. The only cost information included indicates the selected alternate is ~60% cheaper. The basis for this analysis is not included in the posted documents. However, the District utilizes Design Bid Build

contracting to develop, construct and monitor mitigation projects with lowest bid driving contractor selection. This process has resulted in multiple failed and/or costly attempted marsh mitigation projects implemented by the District. The recently attempted New Zydeco Ridge project adjacent to the proposed Fritchie Marsh project is the most recent example, it is a direct analog to the Fritchie Marsh project and therefore should be utilized to formulate anticipated cost for the District to construct Fritchie Marsh.

Efficiently constructing successful marsh mitigation projects in the Deltaic Plain often requires a dynamic relationship between designers and contractors. The District's contracting practices are based on the successful implementation of a design not the success of the project. In the Deltaic Plain, designs often need to be modified during or post construction to meet success, the District's cost do not appear to include the change orders or additional contracts needed to achieve success with District contracting practices. We are not aware of a marsh mitigation project successfully implemented by the District on the Deltaic Plain that did not require modifications during or after construction.

COMMENT #6: If the District plans to utilize contracting regimes similar to previous mitigation efforts to design and construct Fritchie Marsh, then similar to previous marsh mitigation projects attempted by the District cost estimates should include awarding multiple construction contracts over multiple years to achieve success. Based on actual work performed by the Corps and its contractors (Attachment 3) at New Zydeco Ridge a cost estimate of more than \$115,000 per acre should be anticipated for the District to successfully construct Fritchie Marsh.

The New Zydeco Ridge project includes approximately 365 acres of habitat restoration (Marsh and Bottomland Hardwoods). An initial construction contract of ~\$13.1M was awarded on 11/18/2016 to Crosby Dredge, a second contract of ~\$29M was awarded to Weeks Marine to reconstruct in 12/2018. The construction contracts equate to ~\$115,000 per acre. Additionally costs associated with engineering and design, redesign, construction management, and monitoring further increase the monitoring cost.

COMMENT #7: As previously presented to the District the cost of obtaining mitigation from the Chef Bank is directly associated with the mitigation potential score provided to the project. Utilizing the current 0.20 aahu score assigned to the Chef Bank, the cost of acquiring mitigation is significantly greater than if an accurate score likely equal or greater to the 0.32 assigned to Fritchie Marsh is utilized. Therefore, similar to the other four habitats included in the mitigation plan for the NOV-nfl project, once the aahu score associated with the Chef bank is corrected, the District should inquire as to the cost of acquiring brackish/saline mitigation from qualified banks before selecting to construct a permittee responsible mitigation project.

In addition to the mitigation potential score, the cost of purchasing mitigation from a mitigation bank are driven by competition, quantity of mitigation needed and supply of mitigation available. Costs fluctuate and vary significantly over time especially for sales of large quantity.

COMMENT #8: Fish and Wildlife Service Policy does not allow utilizing Fritchie Marsh for mitigation as included in the Tentatively Selected Alternative. Therefore the Fritchie Marsh project should not be included in the Tentatively Selected Alternative.

Fish and Wildlife Service's Final Policy on the National Wildlife Refuge System and Compensatory Mitigation Under the Section 10/404 Program published in Federal Register Vol. 64, No. 175 on September 10, 1999 (Attachment 3) in general does not allow compensatory mitigation on National Wildlife Refuge Systems lands. The policy does recognize that under some limited and exceptional circumstances, compensatory mitigation on a National Wildlife Refuge may be appropriate.

An October 2007 Fish and Wildlife Service Memo on "Request for an exception to the Service's Final Policy on the National Wildlife Refuge System and Compensatory Mitigation under Section 10/404 Program" (Attachment 4) identifies limited and exceptional circumstances that would allow compensatory mitigation to be implemented on National Wildlife Refuge lands in coastal Louisiana.

The memo includes "Criteria for Assessment and Acceptance of Compensatory Mitigation on Coastal National Wildlife Refuge Lands" which states:

1) *The proposal must be approved by the Regional Director*

- It is unclear if the Regional Director has approved the proposed project, an exemption letter was not included in the posted documents.

2) *Project impacts are within close proximity to a refuge or within the same watershed/basin where indirect or cumulative impacts to refuge habitat values or resources may occur.*

- According to posted documents, all of the saline/brackish marsh impacts are within the Barataria Basin, the proposed Fritchie Marsh project is located in the Pontchartrain Basin.
- None of the NOV-nfl impacts are on a Refuge, or within the same watershed/basin where indirect or cumulative impacts to a refuge habitat values or resources may occur.

3) *Suitable/feasible off-refuge mitigation sites which will retain public use functions as well as ecological functions are not available within the same watershed for in-kind mitigation.*

- Suitable/feasible off-refuge mitigation can be acquired from the Chef Bank approximately 10 miles from the proposed on Refuge mitigation site.

The impacts are not in the same basin/watershed as the Refuge and suitable off-refuge sites are available. Therefore under Federal Policy, mitigation on the Refuge is not allowed.

Thank you for the opportunity to comment. Please let us know if there are questions or if additional information is needed.



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Kyle Graham
Ecosystem Investment Partners
828-243-2674

Cc: Lawrence Selzer, CEO, the Conservation Fund

Attachment 1: Memo submitted to Mr. Lowery Crook 5/18/2016

Attachment 2: Letter submitted to Col. Murphy 10/28/2019

Attachment 3: Fish and Wildlife Service's Final Policy on the National Wildlife Refuge System and Compensatory Mitigation Under the Section 10/404 Program published in Federal Register Vol. 64, No. 175 on September 10, 1999

Attachment 4: Fish and Wildlife Service Memo on "Request for an exception to the Service's Final Policy on the National Wildlife Refuge System and Compensatory Mitigation under Section 10/404 Program" October 2007



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Attachment 1: Memo submitted to Mr. Lowery Crook 5/18/2016

May 18, 2016

Mr. Lowry Crook
Principal Deputy Assistant Secretary of the Army (Civil Works)
Pentagon 3E446

Lowry:

I'm writing to follow up on one of the topics we covered during our recent meeting of May 3rd – mitigation for the Hurricane Storm Damage Risk Reduction System (HSDRRS). The mitigation for this project will be one of the first to be implemented after issuance of the November 3, 2015 Presidential Memorandum: *Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment*. As you know, Ecosystem Investment Partners (EIP) is trying to work with USACE to provide a high quality, cost-effective mitigation option for this project.

Our primary concern is that the scoring methods used to determine the number of credits that are available from the Chef Menteur Pass Wetland Mitigation Bank ("Chef Bank") do not accurately compare this private option with the actual cost and delivery risk of Corps-constructed projects being proposed by the New Orleans District.

EIP believes that a fair and objective scoring of the environmental benefits ("AAHU credits") from its Chef Bank will show that:

- The difference between the credit score that the New Orleans District (MVN) has assigned to its own projects now under consideration versus the Chef Bank must have erroneous assumptions applied to the Chef Bank scored based on the following:
 - If the MVN/USFWS scored the Chef Bank Phase II using an assumption that 66% of the Chef Bank restoration site was 'marsh cover' rather than open water at the time before restoration started (TY0), it would have achieved a score comparable to Corps-constructed projects (0.31+/- AAHUs per acre restored)
 - Aerial photographs of the Chef Bank site Phase II pre-construction clearly show only about 25% of the restoration site was 'marsh cover' rather than open water (which would generate 0.48+/- AAHUs per acre restored)
 - In fact, the MVN/USFWS score for Chef Bank Phase II is believed by MNV/USFWS to be in the area of 0.17 AAHUs/acre – a lower score than even the most conservative model could produce, and one that EIP and its expert consultants cannot account for under any logical scoring scenario

Please see Table A for a summary of the scoring of the Chef Bank vs. Corps-constructed projects.

If even the lowest likely score was used for the Chef Bank (resulting in 0.31+/- AAHUs per acre):

- By 2018, the Chef Bank will have 100% of the 118 AAHU credits needed by the HSDRRS project to offset non-Refuge impacts.
- The Chef Bank has 38 AAHU credits available for use now – enough to cover all 27 AAHUs that the Corps has identified as a shortfall between Corps-constructed options and the total non-Refuge need.

Please see Table B for a summary of the AAHU needs of HSDRRS and the availability of AAHU's at the Chef Bank.

As a private sector provider of restoration intended to meet public mitigation and restoration objectives, we must remain neutral as to which method USACE chooses to use to evaluate options. However, if USACE is to be able to take advantage of private investment in restoration to meet its own mitigation needs, it is essential that whatever method used is consistent, fair and transparent.

The November 3, 2015 Presidential Memorandum states, in part, that Agencies, including DOD, "shall each adopt a clear and consistent approach for avoidance and minimization of, and compensatory mitigation for, the impacts of their activities and the projects they approve." And: "...agency policies should seek to encourage advance compensation, including mitigation bank-based approaches, in order to provide resource gains before harmful impacts occur. The design and implementation of those policies should be crafted to result in predictability sufficient to provide incentives for the private and non-governmental investments often needed to produce successful advance compensation."

We respectfully request your assistance in resolving these issues so that the HSDRRS project has complete and accurate information about mitigation options available, and that USACE has full access to cost-competitive mitigation solutions that fulfill the objectives of the Presidential Memorandum and other legislative objectives. Specifically, we request that the Office of the Assistant Secretary of the Army (Civil Works) facilitate a meeting between EIP and MVN/USFWS team intended to:

- Arrange a meeting between EIP and the MVN/USFWS team intended to:
 - Determine which method and inputs are being used to compare mitigation options for HSDRRS in terms of AAHU yield per acre restored.
 - Discuss how the scoring for the Chef Bank was determined – in particular the assumptions about percent of 'marsh cover' on the site prior to construction
 - Assist in establishing a businesslike basis for the private sector to be able to provide options for USACE civil works mitigation.

The document that follows provides you with background and evidence on the following topics:

1. An explanation of why there are more than sufficient AAHU credits available at the Chef Bank to service the HSDRRS Civil Works project.
2. The methods used by MVN to evaluate its own “BSFS-4” and “BSFS-5” proposed projects and the Chef Bank and a comparison of the scoring results of the different projects under the various methods used.
3. A detailed description of how the Wetland Value Assessment (WVA) model works.
4. A detailed description of the Chef Bank and BSFS-4 and BSFS-5 WVA scoring

As we have discussed, we very much appreciate your time and attention on this matter, and want to emphasize that the timely and fair resolution of the HSDRRS mitigation issue is important not only in its own right, but because it has major implications for the broader national conversation about the role of private investment in meeting public restoration objectives. For example, Civil Works projects in the region like the Morganza to the Gulf and New Orleans to Venice projects have expressed interest in buying AAHU’s for their mitigation and are affected by decisions on scoring.

We believe that the Presidential Memorandum incorporates many of the lessons and structures of the mitigation banking program that USACE deserves full credit for developing, and that its rigorous implementation will serve to provide new financial resources and high quality options for Civil Works project mitigation needs. This can only happen, however, if the approaches that USACE uses to evaluate and purchase private mitigation solutions provide a true ‘apples to apples’ comparison with the costs and delivery risks of ‘Corps constructed’ mitigation options.

Sincerely,

Adam I. Davis

Adam Davis
Partner

Table A

AAHU Score comparison of Chef Menteur Mitigation Bank vs. proposed Corps-constructed self-mitigation
Based on Different Variable 1 (V1) Methods in the WVA Analysis (different bases for percent cover starting marsh)

	<div>Scoring Method A: WVA <u>without</u> alteration (using prescribed land loss tables)</div>	<div>Scoring Method B: WVA <u>with</u> alteration (using aerial imagery analysis)</div>	<div>Scoring Method ?</div>																																				
Corps-constructed site scores	<div>Corps site BSFS4 using Method A conducted by Corps</div> <div>starting point percent marsh cover 0%, per USGS / USFWS -supplied land loss table</div> <table><thead><tr><th></th><th>acres (*)</th><th>AAHU's per acre</th></tr></thead><tbody><tr><td>Corps BSFS 4</td><td>59.0</td><td>0.31</td></tr><tr><td>overall</td><td>59.0</td><td>0.31</td></tr></tbody></table> <div>▲●★</div>		acres (*)	AAHU's per acre	Corps BSFS 4	59.0	0.31	overall	59.0	0.31	<div>Corps site BSFS5 using Method B conducted by Corps</div> <div>starting point percent marsh cover 30%, per aerial image analysis of 2011 image</div> <table><thead><tr><th></th><th>acres</th><th>AAHU's per acre</th></tr></thead><tbody><tr><td>Corps BSFS 5</td><td>283.3</td><td>0.30</td></tr><tr><td>overall</td><td>283.3</td><td>0.30</td></tr></tbody></table> <div>●★★▲</div>		acres	AAHU's per acre	Corps BSFS 5	283.3	0.30	overall	283.3	0.30																			
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Chef Mitigation Bank scores	<div>Chef Mitigation Bank using Method A conducted by Brown and Caldwell for EIP</div> <div>starting point percent marsh cover 17.49% for Phase I and 65.9% for Phase II, per USGS / USFWS - supplied land loss table</div> <table><thead><tr><th></th><th>acres</th><th>AAHU's per acre</th></tr></thead><tbody><tr><td>Chef Phase I</td><td>68.5</td><td>0.48</td></tr><tr><td>Chef Phase II</td><td>448.4</td><td>0.28</td></tr><tr><td>overall</td><td>516.9</td><td>0.31</td></tr></tbody></table> <div>★★▲■</div>		acres	AAHU's per acre	Chef Phase I	68.5	0.48	Chef Phase II	448.4	0.28	overall	516.9	0.31	<div>Chef Mitigation Bank using Method B conducted by Brown and Caldwell for EIP</div> <div>starting point percent marsh cover 24.5%, per aerial image analysis of 2009 image (Phase II only; Phase I per Method A)</div> <table><thead><tr><th></th><th>acres</th><th>AAHU's per acre</th></tr></thead><tbody><tr><td>Chef Phase I</td><td>68.5</td><td>0.48</td></tr><tr><td>Chef Phase II</td><td>448.4</td><td>0.46</td></tr><tr><td>overall</td><td>516.9</td><td>0.46</td></tr></tbody></table> <div>★★■</div>		acres	AAHU's per acre	Chef Phase I	68.5	0.48	Chef Phase II	448.4	0.46	overall	516.9	0.46	<div>Chef Mitigation Bank using Method ? conducted by USFWS for Corps informally reported to EIP by Corps</div> <div>staring point percent marsh cover ?, per ? data</div> <table><thead><tr><th></th><th>acres</th><th>AAHU's per acre</th></tr></thead><tbody><tr><td>Chef Phase I</td><td>68.5</td><td></td></tr><tr><td>Chef Phase II</td><td>448.4</td><td></td></tr><tr><td>overall</td><td>516.9</td><td>0.17</td></tr></tbody></table> <div>★★</div>		acres	AAHU's per acre	Chef Phase I	68.5		Chef Phase II	448.4		overall	516.9	0.17
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Method ? vs. Method A and B: the Corps-reported score (informally) of the Chef Mitigation Bank is considerably lower (0.17) than the EIP-reported score of the Chef Mitigation Bank using Method A (0.31); than the EIP-reported score of the Chef Mitigation Bank using Method B (0.46); AND than the Corps-reported score of Corps-constructed BSFS4 and BSFS 5 (0.31 and 0.30, respectively). EIP does not know how Corps arrived at a Corps-reported score of 0.17 for the Chef Bank. EIP desires to meet with Corps / USFWS to understand what method they used for Method ?, and how they arrived at the Chef Mitigation Bank score of 0.17.



Method A vs Method B: The Corps used two different methodologies across its two proposed Corp-constructed sites. Corps applied Method A only to BSFS4 (0.31), and Method B only to BSFS5 (0.30). The Corps augmented Method A (by using aerial image analysis to determine marsh cover starting percentage in lieu of the WVA-prescribed land loss tables) to arrive at Method B. We cannot calculate exactly what the score of BSFS 5 would have been using Method A (because the Corps has not supplied us with the tables).

While EIP believes Method B (using aerial image analysis to determine ACTUAL starting point percent marsh, in lieu of using tables that show THEORETICAL MODELED starting point percent marsh) is a valid method- regardless of what method is used - EIP believes CONSISTENT METHODS SHOULD BE USED to assess ecological uplift a) across Corps mitigation sites and b) at private mitigation sites vs. at Corps-constructed mitigation sites.



Method A: EIP's self-conducted Chef Mitigation Bank score of 0.31 is identical to the Corps-reported score of Corps-constructed proposed BSFS4 of 0.31. EIP believes this validates that EIP applied the WVA Method A correctly. Also, EIP applied Method A to perform EIP's own calculations for BSFS4 and Method B to perform EIP's own calculations for BSFS5, and came up with the SAME AAHU scores that the Corps did, further validating that EIP applied both methods correctly to its own Chef Bank because we had access to the actual WVA scoring spreadsheet for BSFS5 and we arrived at the same scoring outcome for BSFS5 as did the Corps.



Method A vs. Method B: When EIP applies Method B to the Chef Mitigation Bank Phase II, the score increases significantly (from 0.31 to 0.46 overall, and from 0.28 to 0.26 for

* while the WVA analysis lists BSFS4 as 59 acres the July 2014 PIER lists it as 49 acres with a yield of 14.2 AAHU's

Draft Individual Environmental Report. Prepared to Supplement Programmatic Individual Environmental Report 36: Bayou Sauvage Turtle Bayou & New Zydeco Ridge Restoration
Projects St. Tammany and Orleans Parishes Louisiana. Pier 36 Supplement 1. July 2014.

Table B
HSDRRS Credit Needs vs. Chef Mitigation Bank Credit Availability

HSDRRS AAHU Credit Needs

HSDRRS AAHU Need (a)	
total AAHU's needed Refuge	8.8
total AAHU's needed non-Refuge	118.1
total AAHU's needed	126.9

The Corps needs 118.1 AAHU's to offset HSDRRS non-Refuge impacts. EIP proposes to supply only non-refuge mitigation, acknowledging that Refuge impacts will be mitigated on-Refuge.

Proposed Corps constructed AAHU Yield (b)	
BSFS 4	14.2
BSFS 5	81.19
non EFH NZR BM	18.3
total AAHU's from proposed Corps constructed	113.7

BSFS 4 is owned by EIP

AAHU shortfall from proposed Corps constructed	
delta between HSDRRS need and proposed Corps constructed (d)	13.2
BSFS 4 (owned by EIP)	14.2
total AAHU's from proposed Corps constructed	27.4

The Corps needs a minimum of 27.4 AAHU's JUST to meet proposed Corps-constructed AAHU shortfall

(a) as outlined in Draft Individual Environmental Report. Prepared to Supplement Programmatic Individual Environmental Report 36 Bayou Sauvage, Turtle Bayou & New Zedco Ridge Restoration Projects, St. Tammany and Orleans Parishes, Louisiana. Pier 36, Supplement 1. July, 2014.
 (b) *Ibid*
 (d) *Ibid*

Chef Menteur Pass Wetland Mitigation Bank AAHU Credit Availability (f)
this table uses Method A, with Chef WVA score of 0.31 AAHU's per acre

	acres (e)	AAHU's (i)	AAHU's available to HSDRRS	cumulative AAHU's available to HSDRRS
acres previously sold	30.7	9.4	0.0	0.0
acres in inventory now	124.3	38.1	38.1	38.1
acres to be released by Corps imminently	27.5	8.4	8.4	46.5
agreed-to acreage return from Plaquemines Parish Government	89.0	27.3	27.3	73.8
projected end of 2016 release	90.0	27.6	27.6	101.4
projected end of 2017 release	19.0	5.8	5.8	107.2
projected end of 2018 release	134.0	41.1	41.1	148.3
total Chef acres / AAHU's	514.5	157.7	148.3	148.3

Chef can deliver the 118 AAHU's required for HSDRRS by the end of 2018

Chef can deliver 148 total AAHU's to HSDRRS

(f) Release Schedule approved by Corps Regulatory in Chef Menteur Mitigation Bank's Mitigation Banking Instrument (MBI), approved by Corps in September, 2010
 (g) credit-acres are the currency tracked in the Corps RIBTS ledger, used by Corps regulatory
 (i) This table assumes a weighted average credit score of 0.30 AAHU's per acre

Civil Works Projects Mitigation Scoring: HSDRRS As Opportunity To Utilize Fair, Consistent and Transparent Methods

1. An explanation of why there are more than sufficient AAHU credits available to service the HSDRRS Civil Works project.

The Chef Bank is a fully approved and compliant MVN Regulatory wetland mitigation bank in the service area of the HSDRRS project. The Chef Bank has enough credits released and in inventory today to service the combined 27 AAHU shortfall of HSDRRS brackish marsh mitigation: a) the 13.2 AAHU MVN-reported shortfall in the planned Corps-constructed brackish marsh mitigation for the HSDRRS project¹ plus b) the 14.2 AAHU shortfall related to the approximately 49 acre Audubon Tract, identified by MVN as a component of the 325-acre Bayou Sauvage Project mitigation site, known as Feature BSFS4.² Chef has a total of 38 AAHU's in inventory now.

Furthermore, Chef Bank will have 100% of the required 118 AAHUs to offset all of the non-refuge HSDRRS impacts by the end of 2018 when the credits in inventory, plus the permitted but not yet released credits, are considered.

2. The methods used by MVN to evaluate its own “BSFS-4” and “BSFS-5” proposed projects and the Chef Bank and a comparison of the scoring results of the different projects under the various methods used.

The # of AAHUs for a site is determined using WVA, regardless of the project proponent. The MVN Civil Works program is using the WVA method to assess and compare wetland functions of proposed HSDRRS impact and potential mitigation sites and options. Thus, to prepare to service Corps civil works projects including HSDRRS, EIP conducted a WVA analysis using the WVA versions supplied by MVN Planning staff in October 2012 and strictly followed MVN and USFWS protocol on applying the methodology.³ It is EIP's understanding that MVN/USFWS has also done analyses of EIP sites which EIP has not been

¹ 13.16 AAHU reported shortfall on Page 17, Draft Individual Environmental Report. Prepared to Supplement Programmatic Individual Environmental Report 36: Bayou Sauvage, Turtle Bayou & New Zydeco Ridge Restoration Projects, St. Tammany and Orleans Parishes, Louisiana. Pier 36, Supplement 1. July, 2014.

² MVN has identified this marsh for planned acquisition by the local sponsor and identified it in mitigation plans as BSFS4; however, EIP owns this property, otherwise known as the Audubon Tract. 14.2 AAHU shortfall due to fact that EIP owns BSFS4, from which MVN estimates it will generate 14.2 AAHU's of Corps-constructed mitigation.

³ In accordance with Corps requirements, if purchase of mitigation bank credits is to be included as mitigation for a Civil Works impact, mitigation banks would be required to run the same version of the WVA model as was used to assess the impacts from constructing the project, to ensure that the assessment of the functions and services provided by the mitigation bank match the assessment of the lost functions and services at the impacted site.

granted access to, but has been told the scores are VERY LOW (0.17+/- AAHUs per acre). The methods EIP used, together with the resultant scores, are detailed below.

The significance of a lower AAHU per acre score is that a lower score will increase the number of acres HSDRRS would need to procure in order to meet the AAHU's incurred by the impact, which the Corps assumes will increase the cost of the mitigation and thus make the Chef Bank non-competitive with Corps-constructed options.

We have great respect for the MVN / USFWS expertise in this area but we believe we have conducted an unbiased professional analysis and we have confidence in our numbers which are significantly higher. The MVN/USFWS team has provided us with essentially the complete details of its analysis and scoring for its' planned mitigation sites, BSFS-4 and BSFS-5.

Confidence in our numbers is derived from an independent analysis performed by Brown and Caldwell, an environmental consulting firm with extensive expertise in coastal Louisiana wetlands evaluations, who used the modeling method and results from the MVN / USFWS scoring for the MVN planned BSFS-4 and BSFS-5 mitigation sites, verified its formulas by inputting the same MVN / USFWS data and arrived at the exact same scores for the MVN sites as MVN /USFWS team did.

2.1 Why was MVN/USFWS's Team analyses of Chef Bank Phase II site SO LOW?

We believe that the divergent scoring result is due to the use of improper and/or inconsistent use of WVA scoring data input for Variable 1 (V1) Percent Wetland Area Covered by Emergent Vegetation present in the restoration areas before restoration commenced. It is, however, impossible to determine without knowing the MVN/USFWS WVA scores for the Chef Bank.

Because the BSFS4 and BSFS5 WVA analyses were conducted using different approaches for setting the TY0 (starting point) value for V1, Brown and Caldwell evaluated this variable in both ways for Chef Phase II to establish whether it yielded a different result, which it did. Once the starting point was set for V1 the rest of the analysis was done exactly as for Chef Bank Phase I. **In neither scoring scenario could Brown & Caldwell arrive at a score as low as what we have been told Chef Bank received.**

2.2 What we did, step by step, to compare to what MVN/USFWS team did at similar, proximate sites. The goal was to verify that our approach really was consistent with the MVN/USFWS team's approach and ascertain how the MVN/USFWS team's scores for Chef Phase II could be so low.

First, Brown and Caldwell proceeded exactly as in Chef Bank Phase I and BSFS-4 using the USGS/USFWS habitat/land loss analysis supplied starting point of 65.9% marsh cover at TY0 (before restoration started). Because that percentage seemed quite high and not close to actual conditions when compared to aerials, Brown and Caldwell also completed a visual estimate of the percent cover of marsh vs. open water for Chef Bank Phase II in 2009 used that value (25:75) with a starting point of 24.5% marsh cover at TY0.

This use of aerial photography vs. the USFWS-supplied starting point percent marsh cover mimicked the approach used by the MVN for the BSFS-5 site. At BSFS-5, this alternative method was used by the MVN / USFWS to establish the percentages of marsh vs. open water at TY0, after which we believe the IER tables were used to predict the relative areas of marsh vs. open water through to TY50. **At BSFS-5, to determine the percent of marsh vs. open water for the starting point (known as “TY0”), imagery from 2011 was analyzed for the percent of marsh vs. water. The MVN / USFWS determined that 30% of the site was covered by emergent vegetation.** There was no explanation for why this method was used instead of the typically-used land loss tables in the documentation EIP received.

As a point of comparison, **for Chef Bank Phase II, the USGS / USFWS habitat/land loss analyses determined that 65.9% of the site was covered by emergent vegetation at TY0.** When we assess the percentage of marsh at Chef Phase II for TY0 using image analysis, **only about 25% of the site was covered by emergent vegetation at TY0.** For Chef Phase II, the image analysis provides a *significantly* more accurate view of the percent marsh vs. open water for Chef Phase II for TY0. Similarly, the use of image analysis at BSFS-5 provides a reasonable estimate of the percent of TY0 marsh cover. This method makes sense if the IER table doesn’t accurately reflect site conditions for TY0.

2.3 What we found for Chef Phase II and BSFS-5.

These two different approaches to setting the starting points (TY0) make a substantial difference in the end result of AAHU’s per acre for both the Chef Bank Phase II site; and may may also affect the end result at the BSFS-5 site. For Chef Bank Phase II, using the USGS /USFWS starting point of 65.9% marsh cover yields 0.31 AAHU’s/Acre vs. using an aerial interpretation starting point of 24.5% marsh cover which yields 0.46 AAHU’s/Acre.

For BSFS-5, using an aerial interpretation starting point of 30% marsh cover yields 0.30 AAHU’s/Acre. EIP would like to discuss the possibility of using this same method to re-set the TY0 percent of marsh at Chef Phase II because a visual analysis of aerial photography indicates that the 65.9% marsh cover value for TY0 is simply inaccurate. EIP requests that

we be allowed to complete an image analysis. We would prefer to discuss the parameters for the analysis with the MVN/USFWS team so there is no question as to our approach.

2.4 What we found for Chef Bank Phase I and BSFS-4.

Please note that for Chef Phase I and BSFS-4, the starting point (TY0) for marsh cover vs open water was completed using the USGS / USFWS land loss table. **For Chef Phase I, Brown and Caldwell arrived at a scoring of 0.48 AAHU's/Acre and the MVN / USFWS scoring for BSFS-4 resulted in 0.31 AAHU's/Acre.**

Table 1. WVA Scoring Comparison between Chef Bank Scored by Brown and Caldwell and MVN BSFS Sites Scored by MVN / USFWS Team	AAHU's/Acre
Chef Phase I Using IER Table to set TY0 values for V1	0.48
Chef Phase II Using IER Table w/65.9% Marsh Cover at TY0 for V1	0.28
Chef Phase II Using Imagery Estimate to establish TY0 at 24.5% Marsh Cover for V1	0.46
BSFS-4 Using IER Table to set TY0 values for V1	0.31
BSFS-5 Using IER Table (Note: we were not provided this Table so do not know the scoring result using this method to set V1 at TY0.)	UNKNOWN
BSFS-5 Using Imagery Estimate to establish TY0 at 30% Marsh Cover for V1	0.30

Scoring Results Comparison.

Table 2. AAHU Yield per Acre			
Chef Sites Analysis by Brown & Caldwell	AAHUs	Acres	AAHU's/Acre
Chef Phase I Using IER Table to set TY0 values for V1 ¹	32.8	68.5	0.48
Chef Phase II Using IER Table w/65.9% Marsh Cover at TY0 for V1	127.5	448.4	0.28
Chef Phase II Using Imagery to establish TY0 at 24.5% Marsh Cover ² for V1	204.8	448.4	0.46
BSFS Sites Analysis by MVN/USFWS			
BSFS-4 Using IER Table to set TY0 values for V1	17.1	59.0	0.31
BSFS-5 Using Imagery Estimate to establish TY0 of 30% Marsh Cover for V1	84.2	283.3	0.30

¹ The IER table is provided by the USFWS and used to establish the acres and percent cover by both marsh and water in the without and with project conditions. It's provided for all the three SLR.

² This is the version of Phase II scoring where the percent marsh vs open water starting point was a visual estimate of those conditions from a 2009 aerial, mimicking the approach used for scoring BSFS-5.

3. Explanation of how AAHU scoring works.

3.1 Overview. The WVA Coastal Marsh Community Model is a means to assess the relative functional quality of Louisiana's coastal marshes.

- 1) The WVA method scores existing (without project/baseline) and proposed (with project) conditions, with the advantage of comparing the two over time. For most projects a 20 yr. time horizon is used, but for HSDRSS projects a 50 yr. time horizon is used. In the case of proposed wetland impacts, one would assess pre-impact conditions (without project) and post impact conditions (with project); the pre-impact values will be higher overall, so the result will be a loss of AAHUs. For mitigation it's the opposite situation: one would assess pre-mitigation conditions (without project) and post mitigation conditions (with project); the pre-mitigation values will be lower overall, so the result will be a gain of AAHUs.
- 2) There are fresh/intermediate, brackish and saline marsh variations of the Coastal Marsh Community Model. The scoring for each varies somewhat, so it is important to use the scoring for the appropriate type.
- 3) The methodology addresses the selection of geographic scope and scale, project boundary, and target years without and with project for the comparisons. The first step is to establish these parameters in accordance with the method.
- 4) The next step is to perform the land loss assessment for the project area, which the USGS' National Wetlands Research Center completes. The land loss analysis is completed using data relating to historic vegetative community datasets, as well as other land vs. water imagery from the 1950's to 2006. These data are used to calculate net land losses or gains and to average annual loss rates for each of several time periods. In effect, the use of vegetative community extents that is used for the land loss analysis is a visual estimate of change; therefore, although neither has been directly measured it has accounted for both sea level rise (SLR) and subsidence.
- 5) The USGS's land loss data is provided to the USFWS who (for the marsh models only) runs a regression analysis for the rate of land loss over time for the project area. That rate is used for the 20 or 50 yr. time horizon predictions.
- 6) Due to the dynamic coastal environment and uncertainties associated with SLR, the land loss rates at the project area are then evaluated using three SLR scenarios using a mathematical model in relation to potentially low, moderate and high SLR. The low SLR scenario is simply an extrapolation based on the existing land loss trend.

The moderate and high SLR scenarios are calculated using accelerating rates of change as defined in the USACE EC-1162-2-211⁴.

- 7) As described above, the rate of land loss analysis estimates ongoing effects of both SLR and subsidence. These three distinct SLR scenarios, in combination with the land loss rates also account for local subsidence rates over the 20 or 50 yr. time horizon. The New Orleans District indicated that we should provide our scores using the moderate SLR scenario, consistent with the New Orleans District approach.
- 8) For each year from TY0 to TY50 a specific predicted acreage of marsh vs. open water is provided in a detailed tabular output from the USFWS for both without and with project conditions over 50 years.
- 9) Once this site documentation has occurred the Benefit Assessment is completed. Each variable is scored for the selected target years; the future without and with conditions; and low, medium and high SLR scenarios.
- 10) The individual variable scores are incorporated into the habitat-specific Habitat Suitability Index (HSI) equation. The equation for brackish marshes is used in our case.
- 11) The HSI's generated in the preceding step are then converted to habitat units by incorporating the acreage of the marsh vs. open water areas that is affected.
- 12) Then the cumulative number of HUs is tabulated.
- 13) The cumulative HUs for without and without project conditions are scored and the Average Annual HUs value is calculated for each from the cumulative HUs.
- 14) The final step is to simply summarize the results to list the net benefits (net AAHUs).

⁴ The 2012 WVA method refers to this method for SLR analyses: U.S. Army Corps of Engineers. 2009. Sea-Level Change Considerations for Civil Works Programs. Department of the Army, U.S. Army Corps of Engineers, Washington, DC. CECW-CE Circular No. 1165-2-211. The 2012 WVA method refers to this version of this method, although a newer version (EC No. 1165-2-212) was released in 2011. These have both been superseded by U.S. Army Corps of Engineers. 2014. Procedures to Evaluate Sea-Level Change: Impacts, Responses, and Adaptation. Department of the Army, U.S. Army Corps of Engineers, Washington, DC. CECW-CE Technical Letter No. 1100-2-1.

3.2 Variables/Components. (e.g., *how the depth of the water in one of the ‘pockets’ of open water would affect the AAHU score*). The model variables address several aspects of marsh ecology, which are independent, but do interrelate somewhat. The specific variables were chosen because they describe the habitat suitability for a series of important marsh-dependent species, such as shrimp, red drum, mottled duck, mink, red ear sunfish and alligator. Each variable is scored for both the without and with project conditions.

Except for Variable 3, each variable is scored using a formula. For example, V1 relates to percent of the wetland area that is covered by emergent vegetation and the Suitability Index (SI) formula ($SI = (0.009 * \% \text{ cover}) + 0.1$). According to the formula the higher the percent cover the higher the score.

- 1) V1 - Percent wetland area covered by emergent vegetation. The higher the percent cover by emergent vegetation, the higher the Suitability Index (SI) score for this variable. The greater the difference between without and with project conditions the higher the HUs. (Model automatically calculates using formula.)
- 2) V2 - Percent open water covered by submerged aquatic vegetation (SAV). The higher the percent cover by SAV, the higher the SI score for this variable. The greater the difference between without and with project conditions the higher the HUs. (Model automatically calculates using a formula.)
- 3) V3 – Marsh edge and interspersion. There are interpretive photos provided in the methodology publication to determine the quality of marsh vegetative cover, and indirectly the amount of marsh vs water. The more intact the marsh the higher the SI score for this variable. There is not a formula for this score, rather a value is listed for each type of marsh vegetative cover characteristics (ex.; natural/pristine marsh = 1.0, nearly 100% open water = 0.1) (Model automatically calculates using a formula.)
- 4) V4 – Percent of open water area ≤ 1.5 feet deep. Shallower water areas are assumed to be more biologically productive; although inclusion of some deeper water areas is assumed to be beneficial for certain species. Optimal open water conditions in a brackish marsh are assumed to occur when 70%-80% of the open water ≤ 1.5 feet deep and yield the highest SI scores for this variable. The greater the difference between without and with project conditions the higher the HUs. (Model automatically calculates using formula.)
- 5) V5 – Salinity. Salinity affects plant species and is a means to define the type of community that can survive and thrive in a given location. For brackish marshes average annual salinity values <10 ppt are optimum and higher salinity values

decrease the SI scores for this variable. (Model automatically calculates using formula.)

- 6) V6 – Aquatic Organism Access. Access to the marsh by fish and shellfish via the water column is a critical habitat component. The higher the degree of access the higher the SI score for this variable. There are specific guidelines in the methodology for assigning access value scores (ex.; open system = 1.0, open culvert = 0.5, fixed crest weir = 0.1). The greater the difference between without and with project condition the higher the HUs.

4. How Chef Menteur Mitigation Bank was Scored according to WVA process.

The scoring tables and explanatory text are attached as Attachments 1, 2 and 3.

Table 1. Chef Bank Scoring by Brown and Caldwell

Variable ¹	Chef Bank Phase I	Chef Bank Phase II
V1	The table described in section 1.a.vi-vii was used to determine the scoring values. As can be seen in the screenshot of the FWP worksheet (located at the end of this document) indicates the acres and percents of marsh and open water for every year from TY0 through TY50. It provides that information for both without project and with project conditions on this single sheet. For V1, the values were taken directly from this table.	This variable was addressed 2 ways with the starting point of percent cover marsh:water being varied. Once the starting point was set the analysis was done exactly as in Phase I. First we proceeded exactly as in Phase I using the USFWS-supplied starting point of 65.9% marsh (see table located at the end of this document). Because that percent seemed quite high when compared to aerials, we also completed a visual estimate of the percent cover of marsh vs water in 2009 and used those values (25:75) as the starting point. This mimicked the approach used by the Corps for the BSFS-5 site.
V2	For the Chef sites, no SAV was observed, so the initial value was set at zero. For the future without condition the value of zero was maintained. In the future with condition it was assumed that the shallow open water would be planted, so the values assumed that plantings would expand in the short term and then remain steady.	For the Chef sites, no SAV was observed, so the initial value was set at zero. For the future without condition the value of zero was maintained. In the future with condition it was assumed that the shallow open water would be planted, so the values assumed that plantings would expand in the short term and then remain steady.
V3	Data for "Marsh Edge and Interspersion" are based on photo-interpretation. Aerials of the project area are compared with a series of photos in the WVA methodology, pages 52-59. This is a simple comparison to make and score.	Data for "Marsh Edge and Interspersion" are based on photo-interpretation. Aerials of the project area are compared with a series of photos in the WVA methodology, pages 52-59. This is a simple comparison to make and score.
V4	This was estimated based on the initial shallow marsh coverage and then tied to the rate of marsh coverage change over time. For future without project condition the Phase I TY0 value was based on the original WVA conducted by the Corps. We assumed the amount of area in shallow water would decline at the same rate as the marsh.	This was estimated based on the initial shallow marsh coverage and then tied to the rate of marsh coverage change over time. For future without project condition in Phase II we were able to assess the relative amount of shallow open water using aerial photography. We assumed the amount of area in shallow water would decline at the same rate as the marsh.
V5	The TY0 salinity value was derived from McCorquodale et al. (2009). We assume brackish conditions prevail and average annual salinities >10 do not occur, assume Biloxi Marsh will remain and MRGO isn't re-opened.	The TY0 salinity value was derived from McCorquodale et al. (2009). We assume brackish conditions prevail and average annual salinities >10 do not occur, assume Biloxi Marsh will remain and MRGO isn't re-opened.
V6	Assume gapping of containment dikes will allow full access to property between TY01 and TY03 per Chef Menteur prospectus and standard CWPPRA practice.	Assume gapping of containment dikes will allow full access to property between TY01 and TY03 per Chef Menteur prospectus and standard CWPPRA practice.

- ¹
- V1 - Percent Wetland area covered by emergent vegetation
 - V2 - Percent open water covered by submerged aquatic vegetation (SAV)
 - V3 - Marsh Edge and Interspersion
 - V4 - Percent of open water area ≤ 1.5 feet deep
 - V5 - Salinity
 - V6 - Aquatic Organism Access

Scoring Results and Benefit Yields for Chef Bank.

A summary of the benefits yield for the Chef Phase I and II project sites illustrates the net benefits of each project. Using the typical approach of strictly adhering to the agency-generated land loss tables to establish the percent of marsh vs water at TY0 was used in previous WVA materials provided to MVN. When this team reviewed the June 25, 2015 WVA for BSFS-5 conducted by the USFWS, we realized that another reasonable approach to determining the appropriate TY0 values was available. That approach uses imagery analysis from the TY0 time period to assess the percent of marsh vs water and may be significantly more accurate in some cases. This is the case for Chef Phase II, as can be seen by the right hand column below. The only variable that was changed in the analysis was the value at TY0 and it generates a very different result.

Table 3. Benefits Yield			
Marsh AAHUs	Chef Phase I	Chef Phase II Only Using IER Table-Assigned TY0 of 65.9% Marsh Cover for V1	Chef Phase II Using Imagery Estimate for TY0 of 24.5% Marsh Cover ¹ for V1
FWP Marsh AAHU	53.7	350.4	349.1
FWOP Marsh AAHU	3.9	169.8	40.9
Net Change	49.7	180.6	308.2
Open Water AAHUs			
FWP Open Water AAHU	8.2	54.3	54.9
FWOP Open Water AAHU	19.4	64.8	119.0
Net Change	-11.2	-10.4	-64.1
Total AAHUs			
Net Marsh AAHU	49.7	180.6	308.2
Net Open Water AAHU	-11.2	-10.4	-64.1
Net Benefits	32.8	127.5	204.8

¹ This is the version of Phase II scoring where the percent marsh vs open water starting point was a visual estimate of those conditions from a 2009 aerial, mimicking the MVN / USFWS approach used for scoring BSFS-5.

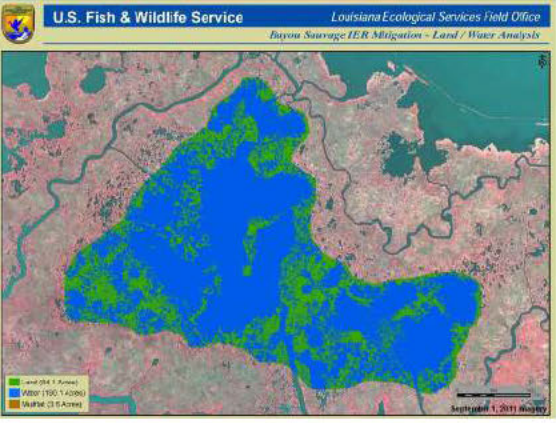
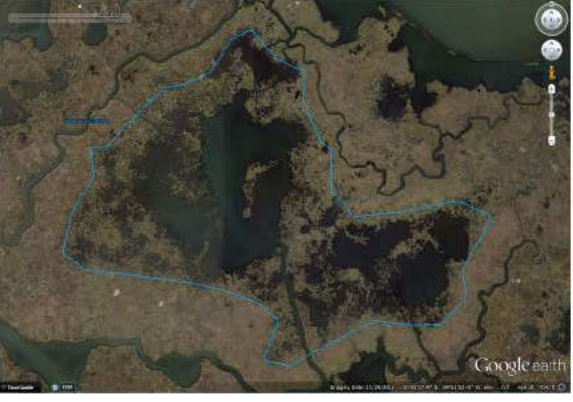

5. Corps Scoring of BSFS-4 and BSFS-5

5.1 How MVN / USFWS Scored Corps Constructed Sites according to WVA Process.

We received copies of the project information sheets (PIS's) for BSFS-4 and BSFS-5, as well as the raw scoring tables for BSFS-5. A standard attachment to a PIS is the land loss spreadsheets, although we did not receive either of these for review. The BSFS-4 and BSFS-5 sites were both scored using the Coastal Marsh Community Model, January 2012, Version 1.1 of the WVA.

There are no substantive differences for the brackish marsh scoring at Chef (using the 2010 version 1.0) and this method; they are in effect the same methods.

Table A-1. BSFS Sites Scoring by MVN/USFWS

Variable ¹	BSFS-4	BSFS-5
V1	<p>At BSFS-4 the entire land loss analysis was applied to V1 in the same manner as for Chef.</p>	<p>At BSFS-5 a different method was used to establish the percent of marsh and open water through time. At BSFS-5 to determine the percent of marsh vs open water for the TY0 starting point, imagery from 2011 was analyzed for the percent of marsh vs water. It was determined that 30% of the site was in marsh. No explanation for why this starting point method was used instead of the typically-used land loss tables.</p> <p>As a point of comparison, for Chef Ph II, the USGS/USFWS habitat/land loss analyses set the percent of marsh at TY0 as 65.9%. When we assess the percent marsh at Chef Ph II for TY0 using image analysis, the percent marsh at TY0 is about 25%. For Chef Ph II the image analysis does provide a <i>significantly</i> more accurate view of the percent marsh to open water for Chef Ph II for TY0. If this is the reason that the starting point method was changed for BSFS-5, it makes sense.</p>
	<p>BSFS-5 Image, from Wetland Value Assessment Project Information Sheet dated June 24, 2015, pg 4, Marsh:Water = 30%:70%</p> 	<p>BSFS-5 aerial photo, 2011, the same year as the image used by the USFWS, depicted by a blue boundary</p>  <p>2009 aerial of Phases II, which has a yellow boundary:</p> 

V2	Site-specific observations were used to set these values for TY0 and assumptions about future conditions were made in accordance with the method.	Site-specific observations were used to set these values for TY0 and assumptions about future conditions were made in accordance with the method.
V3	<p>Site-specific photo-interpretation was conducted for TY0 and compared with a series of photos in the WVA methodology, pages 52-59. Assumptions about future conditions were made in accordance with the method. An example of “Interspersion Class 5” (page 58) is provided here:</p> <p>Example of “Interspersion Class 5” (page 58) :</p> 	<p>Site-specific photo-interpretation was conducted for TY0 and compared with a series of photos in the WVA methodology, pages 52-59. Assumptions about future conditions were made in accordance with the method. An example of “Interspersion Class 3” (page 54) is provided here.</p> <p>Example of “Interspersion Class 3” (page 54).</p> 
V4	For V4 the percent of open water that is shallow was estimated for TY0 by collecting field measurements of depth across the sites. Assumptions were made about percent decline and applied. For future without and with project reductions of 1/3 and 1/6 were applied only at TY50, respectively; all other years were maintained at a constant rate. In contrast, BC tied the decline to the land loss rate provided by USFWS so steady declines occurred, which is more reflective of likely future conditions.	For V4 the percent of open water that is shallow was estimated for TY0 by collecting field measurements of depth across the sites. Assumptions were made about percent decline and applied. For future without and with project reductions of 1/3 and 1/6 were applied only at TY50, respectively; all other years were maintained at a constant rate. In contrast, BC tied the decline to the land loss rate provided by USFWS so steady declines occurred, which is more reflective of likely future conditions.
V5	Salinity data was collected in the field. No future site conditions are expected to affect salinity significantly moving forward. This is consistent with the methodology.	Salinity data was collected in the field. No future site conditions are expected to affect salinity significantly moving forward. This is consistent with the methodology.
V6	Assumed gapping of containment dikes will allow full access to property between TY01 and TY02. Scores were developed on this basis consistent with the method.	Assumed gapping of containment dikes will allow full access to property between TY01 and TY02. Scores were developed on this basis consistent with the method.

Chef Ph I “Future With Project (FWP) Land Loss” worksheet, indicating FWOP and FWP values. At TY0 (2011 in Phase I) the percent of marsh at the site was 17.49% and the percent of water was 82.51%. After TY0, the percent of marsh vs water change depending on whether the site is the without or with project condition. For example, at TY 10 there is a 16.56% marsh to 83.44% water relationship for without project condition; while there is a 97.34% marsh to 2.66% water for with project condition.

TY	MED SLR	FWOP				Med SLR					
		BR Marsh		Water		FWP BR Marsh Acres	% Marsh	FWP Acres with collapse	FWP Water		
		Acres	%	Acres	%				Acres	%	
	2010	12.05	17.59%	56.47	82.41%	12.05	17.59%	na	56.47	82.41%	
0	2011	11.98	17.49%	56.54	82.51%	11.98	17.49%	na	56.54	82.51%	
1	2012	11.92	17.40%	56.60	82.60%	6.83	9.97%	na	61.69	90.03%	
2	2013	11.86	17.30%	56.66	82.70%	12.27	17.91%	na	56.25	82.09%	
3	2014	11.79	17.21%	56.73	82.79%	17.01	24.82%	na	51.51	75.18%	
4	2015	11.73	17.12%	56.79	82.88%	42.75	62.39%	na	25.77	37.61%	
5	2016	11.66	17.02%	56.86	82.98%	67.70	98.80%	na	0.82	1.20%	
6	2017	11.60	16.93%	56.92	83.07%	67.51	98.52%	na	1.01	1.48%	
7	2018	11.54	16.84%	56.98	83.16%	67.31	98.23%	na	1.21	1.77%	
8	2019	11.47	16.74%	57.05	83.26%	67.11	97.94%	na	1.41	2.06%	
9	2020	11.41	16.65%	57.11	83.35%	66.90	97.64%	na	1.62	2.36%	
10	2021	11.35	16.56%	57.17	83.44%	66.70	97.34%	na	1.82	2.66%	
11	2022	11.28	16.47%	57.24	83.53%	66.49	97.03%	na	2.03	2.97%	
12	2023	11.22	16.37%	57.30	83.63%	66.27	96.72%	na	2.25	3.28%	
13	2024	11.15	16.28%	57.37	83.72%	66.05	96.40%	na	2.47	3.60%	
14	2025	11.09	16.19%	57.43	83.81%	65.83	96.07%	na	2.69	3.93%	
15	2026	11.03	16.09%	57.49	83.91%	65.61	95.75%	na	2.91	4.25%	
16	2027	10.96	16.00%	57.56	84.00%	65.38	95.41%	na	3.14	4.59%	
17	2028	10.90	15.91%	57.62	84.09%	65.14	95.07%	na	3.38	4.93%	
18	2029	10.84	15.81%	57.68	84.19%	64.91	94.73%	na	3.61	5.27%	
19	2030	10.77	15.72%	57.75	84.28%	64.67	94.38%	na	3.85	5.62%	
20	2031	10.71	15.63%	57.81	84.37%	64.42	94.02%	na	4.10	5.98%	
21	2032	10.64	15.54%	57.88	84.46%	64.18	93.66%	na	4.34	6.34%	
22	2033	10.58	15.44%	57.94	84.56%	63.93	93.30%	na	4.59	6.70%	
23	2034	10.52	15.35%	58.00	84.65%	63.67	92.93%	na	4.85	7.07%	
24	2035	10.45	15.26%	58.07	84.74%	63.42	92.55%	na	5.10	7.45%	
25	2036	10.39	15.16%	58.13	84.84%	63.16	92.17%	na	5.36	7.83%	
26	2037	10.33	15.07%	58.19	84.93%	62.89	91.78%	na	5.63	8.22%	
27	2038	10.26	14.98%	58.26	85.02%	62.62	91.39%	na	5.90	8.61%	
28	2039	10.20	14.88%	58.32	85.12%	62.35	91.00%	na	6.17	9.00%	
29	2040	10.13	14.79%	58.39	85.21%	62.08	90.60%	na	6.44	9.40%	
30	2041	10.07	14.70%	58.45	85.30%	61.80	90.19%	na	6.72	9.81%	
31	2042	10.01	14.60%	58.51	85.40%	61.52	89.78%	na	7.00	10.22%	
32	2043	9.94	14.51%	58.58	85.49%	61.23	89.36%	na	7.29	10.64%	
33	2044	9.88	14.42%	58.64	85.58%	60.94	88.94%	na	7.58	11.06%	
34	2045	9.82	14.33%	58.70	85.67%	60.65	88.51%	na	7.87	11.49%	
35	2046	9.75	14.23%	58.77	85.77%	60.35	88.08%	na	8.17	11.92%	
36	2047	9.69	14.14%	58.83	85.86%	60.05	87.64%	na	8.47	12.36%	
37	2048	9.62	14.05%	58.90	85.95%	59.59	86.97%	na	8.93	13.03%	
38	2049	9.56	13.95%	58.96	86.05%	59.12	86.29%	na	9.40	13.71%	
39	2050	9.50	13.86%	59.02	86.14%	58.66	85.60%	na	9.86	14.40%	
40	2051	9.43	13.77%	59.09	86.23%	58.18	84.91%	na	10.34	15.09%	
41	2052	9.37	13.67%	59.15	86.33%	57.71	84.22%	na	10.81	15.78%	
42	2053	9.31	13.58%	59.21	86.42%	57.23	83.52%	na	11.29	16.48%	
43	2054	9.24	13.49%	59.28	86.51%	56.75	82.82%	na	11.77	17.18%	
44	2055	9.18	13.39%	59.34	86.61%	56.26	82.11%	na	12.26	17.89%	
45	2056	9.11	13.30%	59.41	86.70%	55.77	81.39%	na	12.75	18.61%	
46	2057	9.05	13.21%	59.47	86.79%	55.28	80.67%	na	13.24	19.33%	
47	2058	8.99	13.12%	59.53	86.88%	54.78	79.95%	na	13.74	20.05%	
48	2059	8.92	13.02%	59.60	86.98%	54.28	79.21%	na	14.24	20.79%	
49	2060	8.86	12.93%	59.66	87.07%	53.77	78.48%	na	14.75	21.52%	
50	2061	8.80	12.84%	59.72	87.16%	53.27	77.74%	na	15.25	22.26%	
51	2062	8.73	12.74%	59.79	87.26%	52.75	76.99%	na	15.77	23.01%	
52	2063	8.67	12.65%	59.85	87.35%	52.24	76.24%	na	16.28	23.76%	

Chef Ph II “Future With Project (FWP) Land Loss” worksheet, indicating FWOP and FWP values. At TY0 (2013 in Phase II) the percent of marsh at the site was 65.49% and the percent of water was 34.13%. After TY0, the percents of marsh vs water change depending on whether the site is the without or with project condition. For example, at TY 10 there is a 62.3% marsh to 37.67% water relationship for without project condition; while there is a 97.3% marsh to 2.72% water for with project condition.

TY	MED SLR	FWOP				Med SLR				
		BR Marsh		Water		FWP BR Marsh	%	FWP Acres with collapse	FWP Water	
		Acres	%	Acres	%				Acres	%
	2010	300.21	66.9%	148.22	33.05%	300.21	66.9%	na	148.22	33.05%
	2011	298.57	66.6%	149.86	33.42%	298.57	66.6%	na	149.86	33.42%
	2012	296.98	66.2%	151.45	33.77%	296.98	66.2%	na	151.45	33.77%
0	2013	295.39	65.9%	153.04	34.13%	295.39	65.9%	na	153.04	34.13%
1	2014	293.80	65.5%	154.63	34.48%	44.72	10.0%	na	403.71	90.03%
2	2015	292.22	65.2%	156.21	34.84%	80.31	17.9%	na	368.12	82.09%
3	2016	290.63	64.8%	157.80	35.19%	111.28	24.8%	na	337.15	75.18%
4	2017	289.04	64.5%	159.39	35.54%	279.76	62.4%	na	168.67	37.61%
5	2018	287.45	64.1%	160.98	35.90%	443.01	98.8%	na	5.42	1.21%
6	2019	285.86	63.7%	162.57	36.25%	441.70	98.5%	na	6.73	1.50%
7	2020	284.27	63.4%	164.16	36.61%	440.36	98.2%	na	8.07	1.80%
8	2021	282.68	63.0%	165.75	36.96%	439.00	97.9%	na	9.43	2.10%
9	2022	281.10	62.7%	167.33	37.32%	437.62	97.6%	na	10.81	2.41%
10	2023	279.51	62.3%	168.92	37.67%	436.22	97.3%	na	12.21	2.72%
11	2024	277.92	62.0%	170.51	38.02%	434.79	97.0%	na	13.64	3.04%
12	2025	276.33	61.6%	172.10	38.38%	433.34	96.6%	na	15.09	3.37%
13	2026	274.74	61.3%	173.69	38.73%	431.86	96.3%	na	16.57	3.69%
14	2027	273.15	60.9%	175.28	39.09%	430.36	96.0%	na	18.07	4.03%
15	2028	271.56	60.6%	176.87	39.44%	428.84	95.6%	na	19.59	4.37%
16	2029	269.98	60.2%	178.45	39.80%	427.30	95.3%	na	21.13	4.71%
17	2030	268.39	59.9%	180.04	40.15%	425.73	94.9%	na	22.70	5.06%
18	2031	266.80	59.5%	181.63	40.50%	424.14	94.6%	na	24.29	5.42%
19	2032	265.21	59.1%	183.22	40.86%	422.52	94.2%	na	25.91	5.78%
20	2033	263.62	58.8%	184.81	41.21%	420.88	93.9%	na	27.55	6.14%
21	2034	262.03	58.4%	186.40	41.57%	419.22	93.5%	na	29.21	6.51%
22	2035	260.44	58.1%	187.99	41.92%	417.54	93.1%	na	30.89	6.89%
23	2036	258.86	57.7%	189.57	42.28%	415.83	92.7%	na	32.60	7.27%
24	2037	257.27	57.4%	191.16	42.63%	414.10	92.3%	na	34.33	7.66%
25	2038	255.68	57.0%	192.75	42.98%	412.34	92.0%	na	36.09	8.05%
26	2039	254.09	56.7%	194.34	43.34%	410.57	91.6%	na	37.86	8.44%
27	2040	252.50	56.3%	195.93	43.69%	408.77	91.2%	na	39.66	8.85%
28	2041	250.91	56.0%	197.52	44.05%	406.94	90.7%	na	41.49	9.25%
29	2042	249.32	55.6%	199.11	44.40%	405.09	90.3%	na	43.34	9.66%
30	2043	247.74	55.2%	200.69	44.76%	403.22	89.9%	na	45.21	10.08%
31	2044	246.15	54.9%	202.28	45.11%	401.33	89.5%	na	47.10	10.50%
32	2045	244.56	54.5%	203.87	45.46%	399.41	89.1%	na	49.02	10.93%
33	2046	242.97	54.2%	205.46	45.82%	397.47	88.6%	na	50.96	11.36%
34	2047	241.38	53.8%	207.05	46.17%	395.51	88.2%	na	52.92	11.80%
35	2048	239.79	53.5%	208.64	46.53%	392.49	87.5%	na	55.94	12.48%
36	2049	238.20	53.1%	210.23	46.88%	389.44	86.8%	na	58.99	13.15%
37	2050	236.62	52.8%	211.81	47.23%	386.38	86.2%	na	62.05	13.84%
38	2051	235.03	52.4%	213.40	47.59%	383.29	85.5%	na	65.14	14.53%
39	2052	233.44	52.1%	214.99	47.94%	380.17	84.8%	na	68.26	15.22%
40	2053	231.85	51.7%	216.58	48.30%	377.04	84.1%	na	71.39	15.92%
41	2054	230.26	51.3%	218.17	48.65%	373.88	83.4%	na	74.55	16.63%
42	2055	228.67	51.0%	219.76	49.01%	370.69	82.7%	na	77.74	17.34%
43	2056	227.08	50.6%	221.35	49.36%	367.49	81.9%	na	80.94	18.05%
44	2057	225.49	50.3%	222.94	49.71%	364.26	81.2%	na	84.17	18.77%
45	2058	223.91	49.9%	224.52	50.07%	361.01	80.5%	na	87.42	19.50%
46	2059	222.32	49.6%	226.11	50.42%	357.73	79.8%	na	90.70	20.23%
47	2060	220.73	49.2%	227.70	50.78%	354.43	79.0%	na	94.00	20.96%
48	2061	219.14	48.9%	229.29	51.13%	351.11	78.3%	na	97.32	21.70%
49	2062	217.55	48.5%	230.88	51.49%	347.76	77.6%	na	100.67	22.45%
50	2063	215.96	48.2%	232.47	51.84%	344.39	76.8%	na	104.04	23.20%



5550 Newbury Street, Suite B
Baltimore, MD 21209
P: 443.921.9441
F: 410.235.1503

Attachment 2: Letter submitted to Col. Murphy 10/28/2019



1402 Greening Ave
Erie, CO 80516
C: 828.243.2674

11/4/2019

Via E-mail and Certified Mail
ATTN: Colonel Stephen Murphy
US Army Corps of Engineers New Orleans District
7400 Leake Avenue
New Orleans, LA 70118

Re: USACE New Orleans to Venice Non-Federal Levee Mitigation

Dear Colonel Murphy,

Please accept this as a request to withdraw the public notice of the document entitled "CLEAN WATER ACT, SECTION 404 PUBLIC NOTICE: BRACKISH MARSH AND SWAMP MITIGATION FOR THE NEW ORLEANS TO VENICE HURRICANE RISK REDUCTION PROJECT: INCORPORATION OF NON-FEDERAL LEVEES FROM OAKVILLE TO ST. JUDE AND NEW ORELANS TO VENICE FEDERAL HURRICANE PROTECTION LEVEE, PLAQUEMINES AND ST. TAMMANY PARISHES, LOUISIANA" posted by the New Orleans District on October 23, 2019.

The noticed document compares our bank, The Chef Menteur Pass Wetland Mitigation Bank (the only bank eligible for comparison), with an Army Corps led project to be constructed on a nearby National Wildlife Refuge. We believe the assumptions for the comparison and therefore the basis of the presented Tentatively Selected Alternative, are false. On 10/23/2019 and 10/28/2019 we supplied Mark Wingate, Deputy District Engineer for Project Management, additional survey information regarding the pre construction conditions of our site. If reviewed properly, the provided information would significantly modify the analysis utilized to justify the Tentatively Selected Alternative.

From the information made available, it appears the USACE staff utilized poor aerial imagery to evaluate pre-construction conditions of The Chef Menteur Pass Wetlands Mitigation Bank, and therefore erroneously determined 66% of our project was marsh prior to restoration. The information submitted to the District on 10/23/2019 and 10/28/2019 includes the actual pre construction field survey data and photographs taken in the field prior to construction this data indicates approximately 10% of the area was pre-existing marsh which is consistent with analysis utilized by District Regulatory staff when permitting the mitigation bank.

This correction would have a significant effect on the alternative comparison performed in the noticed documents. We therefore formally request the public notice be withdrawn allowing staff time to reanalyze the alternatives utilizing the best available information. The public should be afforded the right to comment on a document that is based on an accurate analysis.

Thank you for your consideration.

Best,

[Redacted Signature]
Kyle Graham
Ecosystem Investment Partners
Kyle@ecosystempartners.com
828.243.2674

**Attachment 3: Fish and Wildlife Service's Final Policy on the National Wildlife
Refuge System and Compensatory Mitigation Under the Section
10/404 Program published in Federal Register Vol. 64, No. 175 on
September 10, 1999**

- What problems or issues do you see affecting management or public use of the Refuge?
- What improvements do you recommend for the Refuge?
- What changes, if any, would you like to see in the management of the Refuge?

The Service has provided the above questions for your optional use. The Service has no requirement that you provide information. The Planning Team developed these questions to facilitate finding out more information about individual issues and ideas. Comments received by the Planning Team will be used as part of the Planning process; individual comments will not be referenced in our reports or directly responded to.

An opportunity will also be provided for public input at an open house on September 18, 1999, (schedule of activities can be obtained from the Fish Springs National Wildlife Refuge at above address). All information provided voluntarily by mail, phone, or at public meetings becomes part of the official public record (i.e., names, addresses, letters of comment, input recorded during meetings). If requested under the Freedom of Information Act by a private citizen or organization, the Service may provide copies of such information.

The environmental review of this project will be conducted in accordance with the requirements of the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.), NEPA Regulations (40 CFR parts 1500–1508), other appropriate Federal laws and regulations, Executive Order 12996, the National Wildlife Refuge System Improvement Act of 1997, and Service policies and procedures for compliance with those regulations.

Dated: September 3, 1999.

Elliott Sutta,

Acting Regional Director, Denver, Colorado.

[FR Doc. 99–23509 Filed 9–9–99; 8:45 am]

BILLING CODE 4310–55–M

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service, Interior

Final Policy on the National Wildlife Refuge System and Compensatory Mitigation Under the Section 10/404 Program

AGENCY: Fish and Wildlife Service, Interior

ACTION: Notice.

SUMMARY: The U.S. Fish and Wildlife Service announces the final policy on

the National Wildlife Refuge System and Compensatory Mitigation under the Section 10/404 program. We are establishing guidelines regarding the use of the National Wildlife Refuge System for compensatory mitigation requirements for water resource development projects authorized by the Department of the Army under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. The purpose of the policy is to provide guidance to our personnel when they are evaluating whether a National Wildlife Refuge should be considered as a site for wetland restoration, enhancement, or creation to replace wetlands lost to dredge and fill impacts authorized by a Section 10/404 permit.

In general, we will not allow compensatory mitigation on National Wildlife Refuge System lands because these lands are already targeted for restoration, and we will be restoring these lands in the future. We recognize that under some limited and exceptional circumstances, compensatory mitigation on a National Wildlife Refuge may be appropriate. If compatible activities occurring on a National Wildlife Refuge require compensatory mitigation, the mitigation must occur within the boundaries of the National Wildlife Refuge being affected and must meet specific criteria. We will not support the use of National Wildlife Refuge System lands for establishment of mitigation banks. We may accept mitigation banks or mitigation projects as additions to the National Wildlife Refuge System subject to specific criteria. Where habitats have already been protected or restored under other Federal programs designed to increase the Nation's wetlands, we will not support the preservation of such restored wetlands as compensatory mitigation for habitat losses from other projects authorized under the Section 10/404 program, except in limited and exceptional circumstances.

EFFECTIVE DATE: The policy becomes effective on October 12, 1999.

FOR FURTHER INFORMATION CONTACT: U.S. Fish and Wildlife Service, Dr. Benjamin N. Tuggle, Chief, Division of Habitat Conservation, 400 ARLSQ, Washington, D.C. 20240, telephone (703) 358–2161; or Dr. Richard A. Coleman, Chief, Division of Refuges, 600 ARLSQ, Washington, D.C. 20240, telephone (703) 358–1744.

SUPPLEMENTARY INFORMATION:

Background

The national goal of no net loss of wetlands recognizes the importance and the special significance of wetlands to a variety of functions and values

including water quality, flood damage reduction, groundwater recharge, and reduced sedimentation. In addition, wetlands are some of the most important habitats for fish and wildlife resources on the landscape. We (the U.S. Fish and Wildlife Service) strongly support and contribute to this national goal by helping to reduce wetland losses, by restoring lost or degraded wetlands, and by protecting valuable wetlands by bringing them into the National Wildlife Refuge System.

We administer over 92 million acres of land and water within the National Wildlife Refuge System, and we have at least one National Wildlife Refuge in each of the 50 states. The mission of the National Wildlife Refuge System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans. We may allow public uses of National Wildlife Refuge System lands, such as wildlife dependent recreation, when they are compatible with the purposes of the refuge. However, the National Wildlife Refuge System was established and is being managed first and foremost for fish, wildlife, and plant conservation.

At times, we have acquired lands that have been disturbed by past human activities. As such, some National Wildlife Refuges contain degraded fish and wildlife habitats. The development community, and others, have asked if these degraded habitats could be used as mitigation sites for wetland and wildlife habitat losses that occur outside the National Wildlife Refuge System. In the past, we have discouraged the use of National Wildlife Refuge System lands for compensatory mitigation, because we are authorized to restore degraded habitats within the National Wildlife Refuge System and we will be restoring these lands in the future, irrespective of off-Refuge development. However, until now, we have not had a specific policy that outlines when, or if, compensatory mitigation on National Wildlife Refuge System lands might be appropriate.

We recognize that allowing compensatory mitigation on a refuge could result in some resource gains within the National Wildlife Refuge System. However, if we were to target the National Wildlife Refuge System for compensatory mitigation, we could be facilitating a significant net loss of wetlands within the watershed. But we also recognize there may be some limited and exceptional circumstances where allowing compensatory

mitigation to be implemented on a refuge may be in the best interest of the fish, wildlife, and wetland resources in the area. Therefore, the policy provides guidance and flexibility to our personnel when they are determining whether, or under what circumstances, we might allow the National Wildlife Refuge System to be used for compensatory mitigation under the Section 10/404 program.

Previous Federal Action

We published the "Draft Policy on the National Wildlife Refuge System and Compensatory Mitigation under the Section 10/404 Program" in the **Federal Register** on July 31, 1998 (60 FR 58605). The public comment period closed on September 29, 1998.

Summary of Modifications

We modified the draft policy in response to the public comments and additional internal review. Here is a summary of the important changes:

1. We clarified how the policy relates to private lands and to wetlands that have been restored under other Federal programs, such as the Partners for Fish and Wildlife Program.

2. We clarified our explanation of why the policy does not apply to impacts to threatened or endangered species. Any impacts associated with these species are addressed separately under the Endangered Species Act.

3. We modified the "grandfather clause" in Part 7 of the policy. We inserted a statement indicating that mitigation projects currently being implemented are exempt from the policy. The policy will only apply to future projects.

4. We rewrote the policy in "Plain Language", updated and modified several definitions, and changed several technical terms for consistency.

Responses to Comments

The following is a summary of the major comments raised during the public comment period. We have included a summary of the comments, our response, and any modifications to the policy.

Comment: Several commenters asked about the scope of the policy, what we mean by "National Wildlife Refuge System land" and whether the policy applies to other forms of compensatory mitigation.

Response. The policy applies to all lands and waters within the National Wildlife Refuge System being considered for use as compensatory mitigation for activities authorized under the Section 10/404 program. The policy does not include lands that are

within the authorized refuge acquisition boundary, unless they are already owned by the Fish and Wildlife Service as part of the NWRS. In addition, we recognize there are other forms of mitigation being conducted on NWRS lands, such as under Section 4(f) of the Department of Transportation Act of 1966; however, the policy only addresses compensatory mitigation required under the Section 10/404 program.

Comment: Several commenters are concerned that we are applying this policy to private lands, particularly wetlands restored under the Conservation Reserve Program, the Wetlands Reserve Program, and the Partners for Fish and Wildlife Program.

Response: This policy provides guidance to Service personnel evaluating compensatory mitigation proposals for activities authorized under the Section 10/404 program. In contrast to circumstances in which mitigation is proposed on lands within the National Wildlife Refuge System and thus under the control of the Service, our recommendations regarding mitigation proposals on private lands are advisory and not controlling upon the permitting agency.

Preservation of existing wetland habitat compensates for permitted wetland loss in only those limited and exceptional circumstances in which a change in ownership or protection status serves to maintain habitat that would otherwise be certain to be lost. We expect that many private landowners who have used Federal conservation programs to restore wetlands on their lands will allow those wetlands to remain after the term of their restoration agreement or easement expires. Accordingly, we will not recommend or support preservation of those restored wetlands as compensatory mitigation, except in the limited and exceptional circumstances in which their future loss is assured in the absence of additional conservation measures.

Comment: Several commenters stated that if wetlands restored under the Partners for Fish and Wildlife Program or the Conservation Reserve Program cannot be used for compensatory mitigation, they may be converted to non-wetland uses (e.g., agriculture) after the 10-year agreement expires. The commenters believe that Section 10/404 permit holders should target these lands for compensatory mitigation (i.e., preservation) to avoid conversion.

Response: We have clarified the policy to indicate that where wetlands have been restored under Federal wetland restoration programs, such as

the Partners for Fish and Wildlife Program, we will not support the use of these lands as compensatory mitigation under the Section 10/404 program, during the term of the agreement (e.g., 10 years). Upon expiration of the wetland restoration agreement, we will not support the preservation of such restored wetlands as compensatory mitigation for wetland losses under the Section 10/404 program, except in limited and exceptional circumstances. This is consistent with our Mitigation Policy and the Federal guidelines for establishing, using, and operating mitigation banks.

Comment: Several commenters asked that we delete the restrictions on adding mitigation bank lands to a refuge.

Response: The policy retains the restrictions on accepting mitigation bank lands. We recognize the policy may necessitate changes in how mitigation banking and wetland restoration is done in conjunction with National Wildlife Refuge System lands. However, the purpose of the policy is to ensure national consistency regarding compensatory mitigation under the Section 10/404 program and the National Wildlife Refuge System.

Comment: Several commenters asked why we are adopting such rigid guidelines for accepting donated mitigation bank lands into the National Wildlife Refuge System since mitigation banking represents an important opportunity to expand our refuges.

Response: We recognize that accepting a mitigation bank into the National Wildlife Refuge System is an opportunity to protect wetlands and other wildlife habitat produced by compensatory mitigation projects. That is why we included specific provisions that allow these transfers to proceed. However, we want to avoid bringing wetlands and other habitats into the National Wildlife Refuge System that are either not fully restored, do not have sufficient operation and maintenance funding, have mitigation credits running, or otherwise diminish the responsibilities of the Section 10/404 program to fulfill its wetland preservation goals. That is, we are willing to accept donated mitigation bank lands only when they are clear of any outstanding mitigation requirements and associated liabilities.

Comment: Several commenters asked why the policy prohibits mitigation banks on National Wildlife Refuge System lands under all circumstances, since mitigation banking is another form of compensatory mitigation.

Response: If we allow mitigation banks to be established on National Wildlife Refuge System lands, it could

result in a net loss of wetlands in the watershed. Since National Wildlife Refuge System lands are already protected and we will be restoring these lands, allowing mitigation banking on National Wildlife Refuge System lands would not replace the off-Refuge wetland functions and values that are lost to permitted development. By establishing mitigation banks on National Wildlife Refuge System lands and selling the mitigation credits, we would be "trading" off-Refuge wetlands for accelerated restoration of on-Refuge wetlands. Although this may result in some short-term habitat gains on National Wildlife Refuge System lands, in the long-term, it could facilitate a net loss of wetlands in the watershed.

In addition, there are several other concerns:

1. There may be an appearance of a conflict of interest if we are also commenting on and developing mitigation options for the permitted development through the Section 10/404 program;
2. If we allow mitigation banking on National Wildlife Refuge System lands, we might be assigned some degree of liability for future operation and maintenance of the bank if the bank sponsor abandons the project prior to satisfying all mitigation responsibilities; and
3. If we allow Section 10/404 permittees to establish mitigation banks on National Wildlife Refuge System lands, this may undermine entrepreneurial (i.e., economically-based) efforts to develop private mitigation banks elsewhere in the watershed.

Comment: One commenter asked why the policy does not apply to threatened or endangered species. The commenter is concerned that if a listed species is adversely affected by development permitted under Section 10/404, we might allow compensatory mitigation for threatened or endangered species to occur on National Wildlife Refuge System lands.

Response: We have clarified the policy to specifically state that consideration of impacts to threatened or endangered species is not within the scope of this policy. Any such concerns are addressed under the Endangered Species Act and its associated regulations at 50 CFR Parts 17, 402, and 424.

Comment: The "grandfather clause" in the policy could allow a significant amount of mitigation activities to be implemented on NWRS lands which are inconsistent with the policy. In the draft policy, the clause states: "The policy does not apply to existing mitigation

agreements with the Service in effect at the time of policy issuance." However, we currently have several long-term agreements with various organizations and agencies that allow compensatory mitigation to be conducted in conjunction with National Wildlife Refuges. These agreements could provide a permanent exemption from the policy.

Response: We have deleted the statement that exempts existing mitigation agreements from the policy. Instead, we have stated that the policy does not apply to existing mitigation projects that are currently being implemented. However, we will review all mitigation agreements, and modify them as necessary, to ensure they are consistent with the policy. In other words, all mitigation projects currently underway are exempt, but any new projects must comply with the policy.

Record of Compliance

We have prepared a Record of Compliance documenting that this rule-making action complies with the various statutory, Executive Order, and Department of the Interior requirements that are applicable to rulemakings. A copy is available upon request. (See **FOR FURTHER INFORMATION CONTACT.**)

The number of acres of wetlands restored on National Wildlife Refuge System lands in FY96 was 79,291, but only approximately 10 acres were restored as compensatory mitigation under the Section 10/404 program. Likewise, of the 60,708 acres of wetlands restored on National Wildlife Refuge System lands in FY97, only 75 acres were restored under the Section 10/404 program. Since the policy was developed to reflect the informal practices currently used by Service personnel, the policy will serve to codify, but not significantly change, agency practice. Therefore, the numbers of acres of wetlands restored on National Wildlife Refuge System lands as mitigation for activities authorized under the Section 10/404 program will probably not change significantly with the policy.

This policy was reviewed under Executive Order 12866. As discussed above, only 85 acres during fiscal years 1996 and 1997 were restored on national wildlife refuges as a result of compensatory mitigation while a more than 130,000 acres were restored. Accordingly, this policy will not have a significant economic effect on a substantial number of small entities as defined under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Similarly, this policy is not a major rule under 5 U.S.C.

804(2), the Small Business Regulatory Enforcement Fairness Act.

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501, *et seq.*), this policy does not affect State, local, and tribal governments since it only applies to lands and activities within the National Wildlife Refuge System. This policy does not produce a Federal mandate of \$100 million or greater in any year, therefore, it is not a "significant regulatory action" under the Unfunded Mandates Reform Act.

In accordance with Executive Order 12630, the policy does not have significant takings implications. This policy will not result in takings since it only applies to lands and activities within the National Wildlife Refuge System.

In accordance with Executive Order 12612, the policy does not have significant Federalism effects. This policy will not affect other governments since it only applies to lands and activities within the National Wildlife Refuge System. This policy will not affect small governments.

In accordance with Executive Order 12988, the Office of the Solicitor has determined that the policy does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the Order. This policy does not require any information collection for which Office of Management Budget approval is required under the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*).

We have analyzed this policy in accordance with the criteria of the National Environmental Policy Act and 318 DM 2.2(g) and 6.3(D). This policy does not constitute a major Federal action significantly affecting the quality of the human environment. An environmental impact statement/assessment is not required. We have determined there are no effects on Federally recognized Indian tribes since it only applies to lands and activities within the National Wildlife Refuge System. The action is categorically excluded under Departmental NEPA procedures (516 DM 2, Appendix 1.10), which applies to policies, directives, regulations, and guidelines of an administrative, legal, technical, or procedural nature; or the environmental effects of which are too broad, speculative, or conjectural to lend themselves to meaningful analysis and will be subject later to the NEPA process, either collectively or case-by-case.

Final Policy on the National Wildlife Refuge System and Compensatory Mitigation Under the Section 10/404 Permit Program

Part 1. What Is the Purpose of This Policy?

We are establishing a national policy on the National Wildlife Refuge System and compensatory mitigation requirements for water resource development activities administered by the Department of the Army under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. Our purpose is to provide guidance to our personnel that have a decision making role for the use of lands within the National Wildlife Refuge System as it applies to the Section 10/404 program.

The mission of the National Wildlife Refuge System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations. The Federal government established National Wildlife Refuges for the restoration, preservation, development, and management of wildlife and wildlands habitat; for the protection and preservation of endangered or threatened species and their habitat; and for the management of wildlife and wildlands to obtain the maximum benefits from these resources (50 CFR 25.11(b)). We are currently managing National Wildlife Refuge System lands to obtain the maximum fish, wildlife, and ecological benefits. Therefore, our management and restoration activities will occur regardless of other activities, including those authorized under the Section 10/404 program.

We provide recommendations to the Department of the Army, Corps of Engineers, for mitigation using the Clean Water Act, the Section 404(b)(1) guidelines, the Fish and Wildlife Coordination Act, the National Environmental Policy Act, and our Mitigation Policy (January 23, 1981, 46 FR 7644). These authorities and guidance documents state that the biological impacts must be determined by comparing the environmental conditions with the project in place (the "with-project conditions") against the environmental conditions without the project in place (the "without-project conditions"). Under our Mitigation Policy, we recommend compensatory mitigation for unavoidable adverse impacts to fish and wildlife resources only after project sponsors have taken

all practicable actions to avoid or minimize the impacts.

We will continue to restore wetlands and wildlife habitat on National Wildlife Refuge System lands independent of off-Refuge water resource development activities; therefore, our NWRS restoration activities are part of the environmental conditions that would occur without the development project authorized by the Section 10/404 permit. If we allow wetland restoration activities to occur on National Wildlife Refuge System lands as compensatory mitigation for off-Refuge impacts authorized under Section 10/404, we could be facilitating a long-term net loss of wetlands within the watershed. Therefore, we will not recommend or allow compensatory mitigation on National Wildlife Refuge System lands for activities authorized under the Section 10/404 program, except as provided in this policy.

Part 2. What Are Definitions Used in This Policy?

There are numerous technical terms that are used throughout the policy. We are providing the definitions to ensure clarity and consistency.

Appropriate. The determination of what level of mitigation constitutes "appropriate" is based on the comparison between the functions and values of the aquatic resources that will be impacted and the potential of the proposed creation, restoration, enhancement, and/or preservation at the mitigation site to replace the lost functions and values after subtracting the baseline functions and values of the mitigation site.

Bank sponsor. Any public or private entity responsible for establishing and, in most circumstances, operating a mitigation bank.

Compensatory mitigation. For purposes of Section 10/404, compensatory mitigation is the restoration, creation, enhancement, or in exceptional circumstances, preservation of wetlands and/or other aquatic resources for the purpose of compensating for unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved (Federal Guidance for the Establishment, Use and Operation of Mitigation Banks (60 FR 58605)).

Credit. A unit of measure representing the accrual or attainment of aquatic functions at a mitigation bank; the measure of function is typically indexed to the number of wetland acres restored, created, enhanced, or preserved (Federal Guidance for the Establishment, Use

and Operation of Mitigation Banks (60 FR 58605)).

Direct effects are caused by the action and occur at the same time and place. (CEQ NEPA regulations; 40 CFR 1508.8(a)).

Director means the Director of the United States Fish and Wildlife Service.

Fish and wildlife resources means birds, fish, mammals, and all other classes of wild animals and all types of aquatic and land vegetation upon which wildlife is dependent (U.S. Fish and Wildlife Service Mitigation Policy, Manual Chapter 501 FW 2).

Habitat means the area which provides direct support for a given species, population, or community. It includes all environmental features that comprise an area such as air quality, water quality, vegetation and soil characteristics and water supply, including both surface and groundwater. (U.S. Fish and Wildlife Service Mitigation Policy, Manual Chapter 501 FW 2).

Indirect effects are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable (CEQ NEPA regulations; 40 CFR 1508.8(b)).

Minimize means to reduce to the smallest practicable amount or degree. (U.S. Fish and Wildlife Service Mitigation Policy, Manual Chapter 501 FW 2).

Mitigation includes: (a) avoiding the impact altogether by not taking a certain action or parts of an action; (b) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (c) rectifying the impact by repairing, rehabilitating, or restoring the affected environment; (d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and (e) compensating for the impact by replacing or providing substitute resources or environments." (CEQ NEPA regulations; 40 CFR 1508.20(a-e)).

Mitigation bank. A mitigation bank is a site where wetland and/or other aquatic resources are restored, created, enhanced, or in exceptional circumstances, preserved expressly for the purpose of providing compensatory mitigation in advance of authorized impacts to similar resources. For purpose of Section 10/404, use of a mitigation bank may only be authorized when impacts are unavoidable (Federal Guidance for the Establishment, Use and Operation of Mitigation Banks (60 FR 58605)).

National Wildlife Refuge means a designated area of land, water or an interest in land or water within the

National Wildlife Refuge System, but does not include Coordination Areas (*National Wildlife Refuge System Administration Act of 1966* (16 U.S.C. 668dd–668ee; 80 Stat. 927, as amended)).

National Wildlife Refuge System means all lands, waters, and interests administered by the U.S. Fish and Wildlife Service as wildlife refuges, areas for the protection and conservation of fish and wildlife species threatened with extinction, wildlife ranges, game ranges, wildlife management areas, or waterfowl production areas, and other areas for the protection and conservation of fish and wildlife (*National Wildlife Refuge System Administration Act of 1966* (16 U.S.C. 668dd–668ee; 80 Stat. 927, as amended)).

Practicable. Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes (Federal Guidance for the Establishment, Use and Operation of Mitigation Banks (60 FR 58605)).

Project means any action, planning or approval process relating to an action that will directly or indirectly affect fish and wildlife resources (U.S. Fish and Wildlife Service Mitigation Policy, Manual Chapter 501 FW 2).

Purposes of the refuge means the purposes specified in or derived from law, proclamation, executive order, agreement, public land order, donation document, or administrative memorandum establishing, authorizing, or expanding a refuge, refuge unit, or refuge subunit (*National Wildlife Refuge System Administration Act of 1966* (16 U.S.C. 668dd–668ee; 80 Stat. 927, as amended)).

Restoration. Re-establishment of wetland and/or other aquatic resource characteristics and function(s) at a site where they have ceased to exist, or exist in a substantially degraded state (Federal Guidance for the Establishment, Use and Operation of Mitigation Banks (60 FR 58605)).

Part 3. What Are the Restrictions Regarding Compensatory Mitigation on National Wildlife Refuge System Lands?

We will not allow compensatory mitigation for habitat losses authorized through the Section 10/404 program to be implemented on lands and waters within the National Wildlife Refuge System, except under limited and exceptional circumstances. The criteria for considering compensatory mitigation within the National Wildlife Refuge System are as follows:

(a) The proposed water resource development project, including the mitigation plan, is consistent with the

Section 404(b)(1) guidelines, has undergone all appropriate sequencing for avoidance and minimization of impacts, and is consistent with the U.S. Fish and Wildlife Service's Mitigation Policy (Manual Chapter 501 FW 2); and

(b) The proposed mitigation plan supports the mission of the National Wildlife Refuge System, is consistent with the purposes for which the refuge was established, and is consistent with an approved Comprehensive Conservation Plan or other approved management plan(s) for the refuge; and

(c) The mitigation would result in significantly increased natural resource benefits when compared to other appropriate, off-site mitigation options as determined by the Ecological Services Field Office supervisor and the Refuge manager; and

(d) The mitigation plan is written to ensure we are under no obligation to allow compensatory mitigation on any National Wildlife Refuge System lands in the future; and

(e) The Regional Director recommends the mitigation plan to the Director for approval.

Part 4. What Are the Restrictions for Mitigation Banks on National Wildlife Refuge System Lands?

We will not allow use of National Wildlife Refuge System lands for mitigation banks to compensate for the effects of activities authorized by the Section 10/404 program. We may accept mitigation banks as additions to the National Wildlife Refuge System under the following conditions:

(a) The mitigation bank is directly related to the purposes for which the refuge was established and is consistent with an approved Comprehensive Conservation Plan or other approved management plan(s) for the refuge, as determined by the Refuge manager;

(b) The mitigation bank is consistent with the mitigation banking agreement as determined by the appropriate Ecological Services Field Office supervisor;

(c) The bank sponsor fully funds the transfer, management, and protection of the mitigation bank/project as outlined in the "Federal Guidance for the Establishment, Use, and Operation of Mitigation Banks, II. E. Long-Term Management, Monitoring, and Remediation" (November 28, 1995; 60 FR 58605);

(d) The mitigation bank is an established, functioning wetland (or other wildlife habitat as appropriate) and the bank sponsor ensures that all success criteria have been met in accordance with the approved mitigation plan; and

(e) The bank sponsor withdraws or forfeits all mitigation credits before we acquire the bank. The Regional Director may grant exceptions to the requirement that all mitigation credits must be withdrawn or forfeited prior to acquisition. However, if we accept a mitigation bank before all credits are withdrawn, the bank sponsor must remain responsible for meeting the criteria in the mitigation banking agreement and must remain accountable for the mitigation credits.

The Regional Director must approve the addition of a mitigation bank to a National Wildlife Refuge. If lands within the authorized refuge acquisition boundary have been fully acquired, inclusion of a mitigation bank must be approved by the Director.

Part 5. What Are the Requirements for Compensatory Mitigation for Direct Effects on National Wildlife Refuge System Lands?

If we allow development activities under a Section 10/404 permit to occur on a National Wildlife Refuge that require compensatory mitigation, the mitigation must occur on the National Wildlife Refuge being directly affected by the activity. However, before we can authorize these activities on National Wildlife Refuge System lands, the Refuge manager must:

(a) Determine the activity is compatible;

(b) Ensure the project sponsor has made every effort to avoid and minimize the effects before they request compensatory mitigation;

(c) Determine the mitigation activities support the mission of the National Wildlife Refuge System and are consistent with the purposes of the refuge;

(d) Issue a special use permit, if appropriate; and

(e) Coordinate with the appropriate Ecological Services Field Office supervisor.

Part 6. How Do We Treat Lands Protected by Other Federal Wetland Programs?

Where habitats are protected or restored under other Federal programs or activities designed to increase the Nation's wetlands, we will not recommend, support, or advocate the use of these lands as compensatory mitigation, including mitigation banks, for habitat losses authorized under Section 10/404, under any circumstances, during the term of the restoration agreement. These other Federal programs and activities include easement areas associated with inventory and debt restructure

properties under the Food Security Act, lands protected or restored for conservation purposes under fee title transfers, lands protected by a habitat management agreement with the Service, or habitats protected by programs authorized by the Consolidated Farm and Rural Development Act, and the Food Security Act of 1985. After the wetland restoration agreement has expired, we will not recommend, support, or advocate the preservation of such restored wetlands as compensatory mitigation for habitat losses authorized under the Section 10/404 program, except in limited and exceptional circumstances.

Part 7. What Is the Scope of the Policy?

This policy applies to all lands and waters within the National Wildlife Refuge System considered for use as compensatory mitigation for activities authorized under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. The policy does not apply to existing mitigation projects currently being implemented. However, we will review all mitigation agreements currently in effect, and modify them as necessary, to ensure consistency with this policy.

The policy does not apply to public lands administered by other government agencies nor does it apply to private lands. However, the purpose of the policy is to provide guidance to our personnel when they are evaluating proposals for compensatory mitigation regarding a proposed Section 10/404 permit. These proposed permits could be for development actions occurring on either public or private lands.

This policy does not apply to threatened or endangered species. The requirements for threatened and endangered species are covered in the Endangered Species Act of 1973 and accompanying regulations at 50 CFR Parts 17, 402, and 424. Under Section 7 of the Endangered Species Act, as amended, all Federal agencies shall ensure that activities authorized, funded, or carried out by them are not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. Mitigating adverse impacts of a project would not in itself be viewed as satisfactory agency compliance with Section 7. Furthermore, it is clear to the Service that Congress considered the traditional concept of mitigation to be inappropriate for Federal activities impacting listed species or their critical habitat.

Part 8. What Are the Authorities for This Policy?

We are establishing this policy in accordance with the following authorities:

Fish and Wildlife Act of 1956 (16 U.S.C. 742(a)–754). This Act authorizes the development and distribution of fish and wildlife information to the public, the Congress, and the President; and the development of policies and procedures that are necessary and desirable to carry out the laws relating to fish and wildlife.

Fish and Wildlife Coordination Act (16 U.S.C. 661–667(e)). This Act authorizes the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and the State agencies responsible for fish and wildlife resources to investigate all proposed Federal undertakings and non-Federal actions needing a Federal permit or license which would impound, divert, deepen, or otherwise control or modify a stream or other body of water and to make mitigation and enhancement recommendations to the involved Federal agency.

Watershed Protection and Flood Prevention Act (16 U.S.C. 1001–1009). This Act allows the Secretary of the Interior to make surveys, investigation, and “* * * prepare a report with recommendations concerning the conservation and development of wildlife resources on small watershed projects”.

National Environmental Policy Act of 1969 (42 U.S.C. 4321–4347). This Act and its implementing regulations (40 CFR part 1500–1508) requires that Federal agencies, such as the U.S. Fish and Wildlife Service, be notified of all major Federal actions affecting fish and wildlife resources and their views and recommendations solicited. In addition, the Act provides that the Congress authorize and directs that, to the fullest extent possible, all agencies of the Federal Government identify and develop methods and procedures which will ensure that presently unquantified environmental values may be given appropriate consideration in decision making along with economic and technical considerations.

National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd–668ee: 80 Stat. 927, as amended). This Act states that the mission of the National Wildlife Refuge System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of

present and future generations of Americans. The Act requires, among other things, the Secretary of the Interior: to maintain the biological integrity, diversity, and environmental health of the National Wildlife Refuge System; to develop comprehensive conservation plans for National Wildlife Refuges; and not to initiate or permit a new use of a refuge or expand, renew, or extend an existing use of a refuge, unless the use has been determined to be compatible.

Part 9. What References Are Cited in This Policy?

Federal Guidance for the Establishment, Use, and Operation of Mitigation Banks, II. E. Long-Term Management, Monitoring, and Remediation (November 28, 1995, 60 FR 58605).

U.S. Fish and Wildlife Service Draft Policy on the National Wildlife Refuge System and Compensatory Mitigation under the Section 10/404 Program; Notice of Draft Policy and request for comments (July 31, 1998, 63 FR 40928–40932).

U.S. Fish and Wildlife Service Mitigation Policy; Notice of Final Policy (January 23, 1981, 46 FR 7644) as corrected.

Dated: March 12, 1999.

Jamie Rappaport Clark,
Director, U.S. Fish and Wildlife Service.
[FR Doc. 99–23627 Filed 9–9–99; 8:45 am]
BILLING CODE 4310–55–U

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[OR–094–09–1920–00–4012: GP9–0303]

Temporary Closure of Public Lands; Lane County, Oregon

AGENCY: Bureau of Land Management, Interior.

ACTION: Temporary closure of public lands in Lane County, Oregon.

SUMMARY: Notice is hereby given that certain public lands in Lane County, Oregon are temporarily closed to all public use, including recreation, parking, camping, shooting, hiking and sightseeing, from September 1, 1999 through October 31, 1999. The closure is made under the authority of 43 CFR 8364.1.

The public lands affected by this temporary closure are specifically identified as follows:

Federal lands located in Section 29, Township 17 South, Range 4 West of the Willamette Meridian, Oregon, more generally described as follows: All

Attachment 4: Fish and Wildlife Service Memo on “Request for an exception to the Service's Final Policy on the National Wildlife Refuge System and Compensatory Mitigation under Section 10/404 Program” October 2007



United States Department of the Interior

FISH AND WILDLIFE SERVICE

1875 Century Boulevard
Atlanta, Georgia 30345

In Reply Refer To:
FWS/R4/ES

OCT 2 1 2007

Memorandum

To: Director (D) [REDACTED]
From: Regional Director, Southeast Region [REDACTED]
Subject: Request for an exception to the Service's Final Policy on the National Wildlife Refuge System and Compensatory Mitigation under Section 10/404 Program.

In 1999, the Service published in the Federal Register (FR Vol. 64, No. 175, 49229 – 49234) its Final Policy on the National Wildlife Refuge (NWR) System and Compensatory Mitigation Under the Clean Water Act, Section 404 and Rivers and Harbors Acts Section 10 programs (Final Policy). In general that policy restricted compensatory mitigation on NWRs except under limited and exceptional circumstances. This memorandum identifies what we believe to be a limited and exceptional circumstance that should allow compensatory mitigation to be implemented on the NWR lands in coastal Louisiana.

The ongoing loss of coastal Louisiana wetlands (approximately 1,149 square miles between 1956 and 2004; average loss rate of 24 square miles per year) was recently exacerbated by Hurricanes Katrina and Rita in 2005. Those hurricanes caused an initial loss of wetlands equivalent to 9 years (approximately 217 square miles) of mean annual losses. Louisiana wetlands provide 26 percent of the seafood landed in the conterminous United States and over 5 million migratory waterfowl utilize those wetlands every year. In addition, those wetlands provide protection to coastal towns, cities and their infrastructure, as well as important infrastructure for the nation's oil and gas industry. In response to the 2005 hurricane season Congress authorized the Army Corps of Engineers to study the feasibility of large-scale coastal hurricane protection for coastal Louisiana; such projects may require extensive mitigation. The combination of these large-scale levee construction projects and the accelerating loss of Louisiana's coastal wetlands, especially poignant following the 2005 hurricane season, have produced a unique situation that warrants consideration for an exception to the Final Policy. While the Service did receive funding to restore impacts following those hurricanes, that funding was used primarily to restore refuge facilities with a relatively small contribution to habitat restoration. The criteria developed for the proposed policy exception will ensure that mitigation conducted on NWR lands would typically be beyond the normal funding levels of the NWR system and would not detract from the maintenance of wetland habitats and their function and values within the impacted ecoregion.

TAKE PRIDE
IN AMERICA 

Attached criteria have been developed through coordination between Ecological Services and NWR programs for limited application within coastal Louisiana.

We appreciated your consideration of this policy exception. If you have any questions or require additional information, please contact me at 404/679-4000.

Attachments

Concur:



DIRECTOR

4.14.08
Date

Criteria for Assessment and Acceptance of Compensatory Mitigation on Coastal National Wildlife Refuge Lands

The Fish and Wildlife Service (Service) is seeking an exception to the Service's policy regarding acceptance of compensatory mitigation on Louisiana's coastal National Wildlife Refuge (NWR) lands (i.e., Delta, Bayou Sauvage, Big Branch, Mandalay, Shell Keys, Breton, Cameron Prairie, and Sabine). Projects which may qualify under this exception shall be assessed by both the responsible Ecological Services field office and the affected NWR and approved prior to their use.

The following criteria shall be used by the Service to assess the suitability of projects requiring compensatory mitigation for acceptance of such mitigation on NWR lands. Proposed projects shall be assessed on a case by case basis. Conforming to the listed criteria is no guarantee of acceptance of such mitigation on refuge lands. Ecological Services and Refuge management must agree on the terms and the proposal must be approved by the Regional Director before compensatory mitigation may take place on refuge lands. Mitigation would be directed towards those refuge lands that have experienced or are experiencing high habitat loss rates not likely to be abated/restored through normal appropriation processes. For example, coastal marshes and other habitats which are experiencing high loss rates due to coastal erosion, subsidence, etc. or those lands impacted by hurricanes or tropical storms would qualify (as determined by best available information). The objective is to place mitigation on lands that may be lost if no action is taken.

Prior to consideration for placement on refuge lands, proposed compensatory mitigation must first meet standard Service mitigation policy requirements governing the appropriate use of compensatory mitigation as outlined below

1. Proposed mitigation must be in-kind (habitat) unless deemed ecologically preferable to do otherwise.
2. Mitigation should follow policy requirements for placement within the same watershed/basin/ecoregion when feasible and appropriate, and for movement outside those boundaries when necessary.
3. Comparison of future with and future without proposed mitigation to determine need for action on refuge lands.
4. Project impacts have gone through mitigation sequencing procedures (avoid, minimize, rectify)
5. Proposed mitigation must result in no net-loss of wetland functions and values.

Also, the following requirements were established in the final mitigation policy for implementing Section 10/404 compensatory mitigation on NWR lands:

1. Proposed mitigation must be consistent with the mission of the NWR system, purposes of the refuge, and the refuge CCP or other approved management plans.
2. Suitable restoration plan/proposal developed prior to implementation.

3. Approved plan provides sufficient funding of O&M and monitoring for life of the project.
4. Proposed mitigation approved by the Regional Director or his designee for acceptance under the mitigation policy exception.
5. Acceptance of compensatory mitigation under this exception does not obligate the Service to allow additional mitigation on any refuge lands

Additionally, projects must meet the following assessment criteria for placement of mitigation on refuge lands under the requested exception. It is understood that for regulatory purposes other State mandates may supersede use of NWR lands for compensatory mitigation.

1. Project requiring compensatory mitigation is considered a Federal Public Works Project. To be considered a public works project under these criteria a project must be sponsored wholly or in part by a Federal agency and/or be funded wholly or in part (> 35%) by Federal funds.
2. Project requiring compensatory mitigation must be located wholly or primarily (70% or greater) south of the I-10 and I-12 corridors.
3. Project impacts are within close proximity to a refuge or within the same watershed/basin where indirect or cumulative impacts to refuge habitat values or resources may occur.
4. Suitable/feasible off-refuge mitigation sites which will retain public use functions as well as ecological functions are not available within the same watershed for in-kind mitigation.
5. Refuge lands have experienced or are experiencing high habitat loss rates not likely to be corrected/restored through normal appropriations processes and which may be lost or irreversibly damaged with the no action alternative.
6. Placement of mitigation on refuge lands provides equivalent ecosystem benefits to potential off-refuge placement and provides public use benefits not available on off-refuge sites.
7. Placement of mitigation on refuge lands provides protection or synergistic benefits to other lands (especially public lands) or habitats (e.g., wading bird rookeries, endangered species habitat, etc.) not available on off-refuge mitigation sites.

From: [Dave Butler](#)
To: [Wilkinson Wolfson, Laura L CIV USARMY CEMVN \(USA\)](#)
Subject: [Non-DoD Source] FW: SEA 543a
Date: Wednesday, December 04, 2019 12:03:16 PM

Laura,

Please find LDWF comments regarding SEA543a below.

Thanks,

Dave Butler
Permits Coordinator
Louisiana Department of Wildlife and Fisheries
2000 Quail Drive
Baton Rouge, LA 70808
(504) 286-4173 New Orleans Office
(225)763-3595 Baton Rouge Office
(225)765-2625 FAX

-----Original Message-----

From: Elizabeth Barron <EBarron@wlf.la.gov>
Sent: Wednesday, December 4, 2019 10:40 AM
To: Dave Butler <dbutler@wlf.la.gov>
Subject: RE: SEA 543a

LDWF Ecological Studies has reviewed and concurs with the Corps' findings in Environmental Assessment #543 and has no further comment concerning the New Orleans to Venice Hurricane Risk Reduction Project at this time. Levee construction shall occur simultaneously with mitigation.

Thanks,

Elizabeth Barron
Biologist
Louisiana Department of Wildlife and Fisheries
2000 Quail Drive
Baton Rouge, LA 70808
225-763-3587

-----Original Message-----

From: Dave Butler <dbutler@wlf.la.gov>
Sent: Monday, November 4, 2019 10:34 AM
To: Elizabeth Barron <EBarron@wlf.la.gov>
Subject: FW: SEA 543a

Due 12/4/19

Blocked<https://www.mvn.usace.army.mil/projects/NOV/> Search EA #543 for the supplemental EA and the Final EA if you need to look backward.
Supplemental EA Links below.

Blocked<https://www.mvn.usace.army.mil/Portals/56/docs/Projects/NOV%20NFL/Environmental%20assessment%20SEA%20543.pdf?ver=2019-10-23-134212-683>

Blocked<https://www.mvn.usace.army.mil/Portals/56/docs/Projects/NOV%20NFL/Draft%20SEA%20543a%20FONSI.pdf?ver=2019-10-23-134038-153>

Blocked[https://www.mvn.usace.army.mil/Portals/56/docs/Projects/NOV%20NFL/404\(b\)\(1\)%20Public%20Notice%20signed_Redacted.pdf?ver=2019-10-23-134901-107](https://www.mvn.usace.army.mil/Portals/56/docs/Projects/NOV%20NFL/404(b)(1)%20Public%20Notice%20signed_Redacted.pdf?ver=2019-10-23-134901-107)

Blockedhttps://www.mvn.usace.army.mil/Portals/56/docs/Projects/NOV%20NFL/SEA%20543a%20Appendices%20A%20thru%20M_Redacted.pdf?ver=2019-10-23-134751-497

Dave Butler
Permits Coordinator
Louisiana Department of Wildlife and Fisheries
2000 Quail Drive

Baton Rouge, LA 70808
(504) 286-4173 New Orleans Office
(225) 763-3595 Baton Rouge Office
(225) 765-2625 Fax

-----Original Message-----

From: NOXEROX@wlf.la.gov <NOXEROX@wlf.la.gov>
Sent: Monday, November 4, 2019 7:30 AM
To: Dave Butler <dbutler@wlf.la.gov>
Subject: SEA 543a

Please open the attached document. It was sent to you using a Xerox multifunction printer.

Attachment File Type: pdf, Multi-Page

Multifunction Printer Location: New Orleans, LA
Device Name: NOXeroxSuite422

For more information on Xerox products and solutions, please visit Blocked<http://www.xerox.com>



1402 Greening Ave
Erie, CO 80516
C: 828.243.2674

11/4/2019

Via E-mail and Certified Mail
ATTN: Colonel Stephen Murphy
US Army Corps of Engineers New Orleans District
7400 Leake Avenue
New Orleans, LA 70118

Re: USACE New Orleans to Venice Non-Federal Levee Mitigation

Dear Colonel Murphy,

Please accept this as a request to withdraw the public notice of the document entitled "CLEAN WATER ACT, SECTION 404 PUBLIC NOTICE: BRACKISH MARSH AND SWAMP MITIGATION FOR THE NEW ORLEANS TO VENICE HURRICANE RISK REDUCTION PROJECT: INCORPORATION OF NON-FEDERAL LEVEES FROM OAKVILLE TO ST. JUDE AND NEW ORELANS TO VENICE FEDERAL HURRICANE PROTECTION LEVEE, PLAQUEMINES AND ST. TAMMANY PARISHES, LOUISIANA" posted by the New Orleans District on October 23, 2019.

The noticed document compares our bank, The Chef Menteur Pass Wetland Mitigation Bank (the only bank eligible for comparison), with an Army Corps led project to be constructed on a nearby National Wildlife Refuge. We believe the assumptions for the comparison and therefore the basis of the presented Tentatively Selected Alternative, are false. On 10/23/2019 and 10/28/2019 we supplied Mark Wingate, Deputy District Engineer for Project Management, additional survey information regarding the pre construction conditions of our site. If reviewed properly, the provided information would significantly modify the analysis utilized to justify the Tentatively Selected Alternative.

From the information made available, it appears the USACE staff utilized poor aerial imagery to evaluate pre-construction conditions of The Chef Menteur Pass Wetlands Mitigation Bank, and therefore erroneously determined 66% of our project was marsh prior to restoration. The information submitted to the District on 10/23/2019 and 10/28/2019 includes the actual pre construction field survey data and photographs taken in the field prior to construction this data indicates approximately 10% of the area was pre-existing marsh which is consistent with analysis utilized by District Regulatory staff when permitting the mitigation bank.

This correction would have a significant effect on the alternative comparison performed in the noticed documents. We therefore formally request the public notice be withdrawn allowing staff time to reanalyze the alternatives utilizing the best available information. The public should be afforded the right to comment on a document that is based on an accurate analysis.

Thank you for your consideration.

Best,

[Redacted Signature]
Kyle Graham
Ecosystem Investment Partners
Kyle@ecosystempartners.com
828.243.2674



State of Louisiana
Department of Health and Hospitals
Office of Public Health

October 29, 2019

Ms. Laura Lee Wilkinson
U.S. Army Corps of Engineers; Regional Planning and Environment Division South
New Orleans Environmental Branch, CEMVN-PDS-C
7400 Leake Avenue
New Orleans, Louisiana 70118

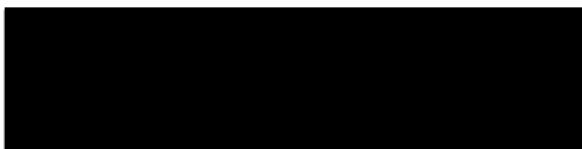
**Re: Draft Supplement Environmental Assessment 543a (SEA 543a)
Brackish Marsh and Swamp Mitigation for the New Orleans to Venice Hurricane Risk
Reduction Project: Incorporation of Non-Federal Levees from Oakville to St. Jude and New
Orleans to Venice Federal Hurricane Protection Levee, Plaquemines and St. Tammany
Parishes, Louisiana**

This office is in receipt of a Solicitation of Views regarding the above referenced project(s).

Based upon the information received from your office we have no objection to the referenced project(s) at this time. The applicant shall be aware of and comply with any and all applicable Louisiana State Sanitary Code regulations (LAC 51, as applicable). Furthermore, should additional project data become available to this office that in any way amend the information upon which this office's response has been based, we reserve the right of additional comments on the referenced project(s).

In the event of any future discovery of evidence of non-compliance with the Louisiana Administrative Code Title 51 (Public Health-Sanitary Code) and the Title 48 (Public Health-General) regulations or any applicable public health laws or statutes which may have escaped our awareness during the course of this cursory review, please be advised that this office's preliminary determination on this Solicitation of View of the project(s) shall not be construed as absolving the applicant of responsibility, if any, with respect to compliance with the Louisiana Administrative Code Title 51 (Public Health-Sanitary Code) and the Title 48 (Public Health-General) regulations or any other applicable public health laws or statutes.

Sincerely,



Yuanda Zhu, P.G., Ph.D.
Louisiana Department of Health and Hospitals, Office of Public Health
Engineering Services
Telephone: (225) 342-7432
Electronic mail: yuanda.zhu@la.gov