



UNITED FOR A HEALTHY GULF

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3 August 2015

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RE: **MVN 2013-02664** Harveston Wastewater Wetland Assimilation in East Baton Rouge Parish

Dear Mr. Gautier and Ms. Hill,

I am writing on behalf of the Gulf Restoration Network (GRN)¹. We have serious concerns about the application for a Section 404 permit (**MVN 2013-2745-EBB**) submitted to the U.S. Army Corps of Engineers ("Corps"), and a Water Quality Certification (**WQC# 150406-01**) submitted to the Louisiana Department of Environmental Quality ("LDEQ") by Harveston Wastewater c/o Natural Resource Professionals ("Harveston").

Harveston is requesting a Section 404 permit After the Fact to fill 4.5 acres of wetlands, and indirectly impact at least 287 acres of wetlands with an assimilation project. These projects can be of benefit to wetlands and wetland values, but we have also seen them fail. We need more information, including an operational plan, a monitoring plan, and a failsafe plan, to determine the indirect impacts to wetlands and the validity of the operation.

GRN has many questions regarding the effectiveness of this practice in this particular location. These questions are rooted in hydrological and ecological details unavailable in the public notice. The forests in question are listed by USFWS PFO1C and PFO1A; we do not want a PFO1C / seasonally flooded hardwood area to be constantly flooded by effluent streams. These forests cannot be changed into a degraded or relict condition.²

The three cells should be flooded at alternating times. It seems that this design allows for that, but there is no operational information in the notice, when it needs to be a condition of the permit. Should monitoring show the loss of root layer elevation and/or loss of assimilative capacity, operations should be changed before

¹ a diverse coalition of individual citizens and local, regional, and national organizations committed to uniting and empowering people to protect and restore the resources of the Gulf of Mexico

² As defined by Schafer et al 2009

https://www.southeastern.edu/acad_research/depts/biol/faculty/publications/pdf/2009/shafe_et_al2009a.pdf



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canopy is lost; the wastewater plant upstream needs to be built with the capacity to assimilate all necessary nitrogen at the plant before the water gets to the 287 acres at the end of the pipe, just in case the assimilation project begins to negatively impact the wetlands, the assimilation pipe can be shut off if it is found to negatively impact root zone accretion.

Where these kinds of projects have failed, we have seen wastewater plants attempt to foist as much half-treated water as possible to the treatment wetland, at a constant rate. This floods the plant life and attracts herbivores, as well as interacts with decomposition in the root zone. It is not well known which of these effects is dominantly negative, or if some interaction between them results in loss of the wetland, but all of these things must be noted so that the assimilation improves wetland values, rather than degrades them.

Tree seedlings need one full growing season of drawdown time in order to survive. These details must be in an operational plan—every place in the assimilation area needs planned drawdown time, so that the additional flooding does not preclude the growth of new trees. We recognized that species composition may change, but we would see the canopy preserved for wildlife purposes.

The GRN asks that accretion of soil in the root zone be added as a monitoring requirement and management goal. A sediment elevation monitoring plan, at the existing water quality sites, would be sufficient to determine whether or not the water released into 290 acres is actually beneficial. Soil layer accretion is a very rough proxy for carbon sequestration and belowground growth, so it is very reasonable that the applicant.

And management goals are meaningless without a backup, or “failsafe” plan. Should the wetland turn to open water, does the plant have a plan to prevent nitrate from flowing into adjacent bayous and the Amite River? What is the mitigation option should this plant impact wetlands indirectly?

1. Direct, indirect, secondary, and cumulative impacts must be fully considered.

Given the information in the Public Notice, it does not appear that Harveston has fully considered the indirect, secondary, and cumulative impacts of the proposed wetland fill and assimilation:

The Louisiana policy states that “administrative authority will not approve any wastewater discharge or certify any activity for federal permit that would impair water quality or use of state waters.”³ Because of the possibility of negative impact to wetlands and waters, a failsafe plan is needed to comply with this policy.

Additionally, the Federal regulations have not been fully implemented. Per executive orders 11988 and 11990, in order to prevent impacts to wetlands certain aspects need to be analyzed.

³ LA. ADMIN. CODE tit. 33, pt. IX §1109(A)(2).



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Title 18 of the Code of Federal Regulations states,

The Council shall take action to: Avoid long- and short-term adverse impacts associated with the occupancy and modification of floodplains and the destruction or modification of wetlands; Avoid direct and indirect support of floodplain development and new construction in wetlands wherever there is a practicable alternative; Reduce the risk of flood loss; Promote the use of nonstructural loss reduction methods to reduce the risk of flood loss; Minimize the impact of floods on human health, safety and welfare; Minimize the destruction, loss or degradation of wetlands; Restore and preserve the natural and beneficial values served by floodplains; Preserve and enhance the natural and beneficial values served by wetlands.⁴

To Minimize destruction and loss, and to restore and preserve natural and beneficial vales, we need more details, and the applicant needs and operational plan, a mitigation plan, a failsafe plan. We doubt that there is an operational plan, mitigation plan, and failsafe plan, so we assert that this executive orders have not been followed until such details are complete.

Indirect and Secondary impacts – This project may possibly destroy wetlands that act as a buffer to reoccurring storms and localized flooding. The destruction of these wetlands would certainly contribute to the weakening of the state’s storm defenses. The Code of Federal Regulations recognizes the significance of secondary impacts from wetland destruction by emphasizing that “minor loss of wetland acreage may result in major losses through secondary impacts.”⁵ Where almost 287 acres of wetlands are involved, it is unacceptable that the applicant offers no analysis of these probable impacts.

If there will be ecological lift, the applicant must outline the benefits, possibly in habitat units. Where there will be potential impact, that also must be evaluated. We have seen loss of hundreds of acres of wetland due to a single assimilation pipe, and we have seen unpermitted sewage pipes flood and destroy wetland forest canopy.

Cumulative impacts – The cumulative impacts on storm and flood protection must be taken into consideration. This project could incite additional construction and in turn jeopardize even more wetlands unique to this area. Wetlands loss could result in more flooding in surrounding communities, as well as degraded water quality in the local streams and the Amite River, and those surrounding wetlands. The whole area must be looked at as an interrelated ecological unit in order to adequately assess the cumulative impacts.

Since the public notice does not assess, or even recognize, the potential direct, indirect, and cumulative impacts that will result from the disruption of just fewer than 290 acres of wetlands, the Corps must not approve this permit as submitted.

⁴ 18 C.F.R. §725.2.

⁵ 40 C.F.R. §230.41.



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2. The final plan, including an operations plan, a mitigation plan, and a failsafe plan, should be made available to the public before any permits are granted.

We feel that the current Public Notice system is not adequate to fully involve the public in the Section 404 permitting process. In the vast majority of cases, the only item available to the public in the entire process is the initial Public Notice, which occurs before the Corps and the permitted go through the “avoid, minimize, and mitigate” process.

Therefore, the public is never given the opportunity to comment on the final project, including the mitigation plan. In this case, success of the project is also contingent in proper operations and planning for contingencies.

We have often been told that many changes happen to the permits before they are issued, but the public never sees them until the wetlands have already been filled and water quality altered.

We request more information in the initial Public Notice (e.g., preliminary mitigation plans, efforts made to avoid impacts, necessity of project location, adequate alternative analysis, environmental assessments, etc.).

Due to the fact that this regulation is not followed, the public notice is incomplete and must be reissued with an operations plan, mitigation plan, and failsafe plan.

3. We question whether any mitigation for lost wetlands could completely replace the function and values lost.

If any impacts to wetlands occur during this project, mitigation is required. A recent LSU master’s thesis has outlined the failure to replace ecological functions by the New Orleans District 404 regulatory branch.⁶ Although, in the abstract, acreages were replaced around a 1:1 ratio, a functional analysis showed that the acreage of improved wetland needed to replace ecological functions was close to 2.4:1 for every acre destroyed.

Given the history of failure of mitigation, particularly for wetland forest in the New Orleans District, particular in the last year of interim rules, we feel that it would be extremely difficult to replace the function and values of this particular wetland if offsite mitigation takes place. Recent scientific literature reviews^{7,8} of wetland

⁶WETLAND MITIGATION BANKS AND THE NO-NET-LOSS REQUIREMENT: AN EVALUATION OF THE SECTION 404 PERMIT PROGRAM IN SOUTHEAST LOUISIANA by Abbey Anne Tyrna http://etd.lsu.edu/docs/available/etd-04102008-141642/unrestricted/Tyrna_thesix.pdf

⁷ Spieles, D. J. 2005. Vegetation Development in Created, Restored, and Enhanced Mitigation Wetland Banks of the United States. *Wetlands*. 25:51-63.

⁸ Moreno-Mateos D, Power ME, Comín FA, Yockteng R, 2012 Structural and Functional Loss in Restored Wetland Ecosystems. *PLoS Biol* 10(1): e1001247. [doi:10.1371/journal.pbio.1001247](https://doi.org/10.1371/journal.pbio.1001247)



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mitigation sites have described these kinds of failure in detail, but the failure is due partially to the fact that the functions of wetland soils are largely unaccounted for. In this case, the applicant is affiliated with wetland mitigation banks, surely the applicant has the expertise to account for potential damages and calculate measures to mitigate its damages on site—given the cessation of the assimilation operation.

The overall lack of recovery of biogeochemical functioning may have been driven largely by the low recovery of the carbon storage and the low accumulation of soil organic matter.⁹

We request sediment elevation table monitoring at the same sites as the LPDES water quality monitoring. Sediment elevation accretion in the root layer is an appropriate, extremely simple proxy for carbon storage and soil function.

The mere mention of a plan is inadequate information to base an evaluation of cumulative impacts from loss of wetland function.

Even if mitigation took place within the same hydrologic basin, we question if any amount of acreage offsite would be able to replace the function and values (local flood mitigation, local flora/fauna, etc.) that this tract of wetland currently performs. Furthermore, compensatory mitigation in distant ecosystems with no ecological interrelation with the parcel and locality at issue wholly removes any meaning behind the word “compensatory.”

⁹ *Id.*



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SUMMARY

- 1. Direct, indirect, secondary, and cumulative impacts must be fully considered.**
 - a. Since the public notice does not assess, the potential direct, indirect, and cumulative impacts that will result this permit, the Corps must not approve this permit as submitted.*

- 2. The final plan, including an operational plan, mitigation plan, and failsafe plan, should be made available to the public before any permits are granted.**
 - a. We request more information in the initial Public Notice (e.g., operational plans regarding pulsing and water level, preliminary mitigation plans, efforts made to avoid impacts, necessity of project location, adequate alternative analysis, environmental assessments, etc.).*
 - b. the public notice is incomplete and must be reissued with an operations plan, mitigation plan, and failsafe plan.*

- 3. We question whether any mitigation for lost wetlands could completely replace the function and values lost.**
 - a. We request more information in the initial Public Notice on efforts made to avoid impacts, necessity of project location, adequate alternative analysis, environmental assessments, and agency comments.*
 - b. We request sediment elevation be monitored to ensure accretion of wetland soils at the site. This measure is a simple proxy for many ecological values.*



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In conclusion, the Corps and LDEQ must take the mandates of the Clean Water Act and related federal regulations seriously. The applicant has not assessed indirect impacts, and has only vaguely described any plan for compensatory mitigation.

10 years after two catastrophic storms and engineering failures, GRN is weary of the permitted destruction that has been occurring throughout Louisiana and the rest of the Gulf Coast, and particularly because it is not aligned with multiple stated federal and state restoration aims. We hope that the Corps and LDEQ will take the above comments seriously and act upon them accordingly. The land is our wealth, our shelter from storms and wind, and our only certain protection against the rising seas.

In order to keep us and the public properly informed, we request notification of approvals or changes to Harveston's After the Fact Section 404 permit and Water Quality Certification request, the details of operational, mitigation, and failsafe plans, as well as an Environmental Assessment that quantitatively evaluates direct, indirect, secondary, and cumulative impacts.

We look forward to a written response.

For a healthy Gulf,
[sent via e-mail]

A handwritten signature in black ink, appearing to read "Scott Eustis", is positioned below the text "For a healthy Gulf, [sent via e-mail]".

Scott Eustis, M.S., Coastal Wetland Specialist

Cc: Matt Rota, Water Resources Program Director
May Nguyen, Tulane Environmental Law Clinic
Raul Gutierrez, U.S. EPA, Region 6