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Ed Sarfert  
United States Army Corps of Engineers  
Jacksonville District Regulatory Division  
Pensacola Permitting Section  
41 North Jefferson Street, Suite 111  
Pensacola, FL 32502

RE: Permit Application Number SAJ-1998-05213 (SP-EPS)

Santa Rosa County, Florida, proposal to dredge three navigational channels in Santa Rosa Sound

Dear Mr. Sarfert:

Santa Rosa Shores subdivision in Santa Rosa County, Florida, is situated on the northern shore of Santa Rosa Sound, part of the Pensacola Bay System, an estuary of the Gulf of Mexico. The development is characterized by canals adjacent to some residential properties, many of whose owners keep boats moored in these canals. Since there are no public boat ramps within Santa Rosa Shores subdivision, these property owners and their occasional visitors are the only users of the canals.

Santa Rosa County has submitted an application to dredge 2.01 acres through beds of submerged aquatic vegetation (SAV), predominantly *Thalassia*, in order to create three navigational channels connecting the Santa Rosa Shores canals with the deep waters of Santa Rosa Sound.

### **Avoidance and minimization**

Although Applicant claims to have minimized impacts “to the maximum extent practical” by limiting channels widths to 30 feet, it is clear that avoidance has been given no consideration at all.

On its face, this project has a solely private purpose: the ability of a relatively small number of boaters to access the Santa Rosa Shores canals at any tide and any season. By implication, this project has another private purpose only loosely related to navigation: increasing property values along the Santa Rosa Shores canals. Neither of these purposes constitutes a public need for the project.

According to Santa Rosa Shores Homeowners Association in 2002, boats docked in Santa Rosa Shores had an average boat draft of 30 inches, and 92% of boats had a draft of 42 inches or less. Historically, general water depths seaward of the canals are 42 inches or greater, significantly greater as you proceed away from the shore. As such, all but 14 boats moored in Santa Rosa Shores canals had adequate access except at the most extreme low winter tides, if exercising due care and diligence, operating at idle speed in trimmed up configuration, and reading the water. Simply waiting to “power up” until a water depth of 48 inches is reached would alleviate much of the seagrass scarring in the project site. This simple solution would save seagrasses and damage to running gear as well as the costs of the proposed dredging project.

Instead of idling out to deeper water, these boaters have been propeller dredging through the vegetated bottom. And they have been acquiring larger boats.

As of a 2014 vessel survey, it appears that canalfront property owners now own 25 boats that draw 42 inches or more. By purchasing larger boats, canalfront property owners seem to believe they can create an entitlement to "take" 2 acres or more of some of the region's most valuable public natural assets, thriving SAV, specifically the climax species *Thalassia*.

### **Compensatory mitigation**

We are disappointed to see that the the April 2014 revised Seagrass Mitigation Plan (SMP) omits critical specifics, including the locations and acreage of areas to be planted with salvaged seagrasses or otherwise restored. Since the Corps must evaluate the mitigation plan as part of the application, these deficiencies should require denial. However, it is still possible to reject in principle Applicant's plans to transplant submerged aquatic vegetation (SAV) from the channel locations and other donor sites. Mr. Fonseca's own published work strongly advises preserving rather transplanting SAV (*see below*).

A well-designed monitoring plan is critical to a successful transplant program and must be made available before a complete review is possible. Mitigation for such a project must be evaluated prior to approval and be found appropriate and acceptable. A contin-

gency plan should also be prepared prior to issuance of a permit. Since contingency actions may eventually be necessary, these actions need to be evaluated in the same manner, prior to approval. A full evaluation of mitigation actions is not possible without the contingency plan.

"The monitoring phase also provides the final and most crucial piece of data: the area covered when compliance is achieved. This information provides the only means by which the permitting agency can make an objective, defensible decision as to whether the mitigation effort should be approved. This seems to us to be little to ask, since, presently, no data show that seagrass mitigations actually constitute restoration of the system. The entire mitigation concept is based on the premise that equal restoration of vegetation means equal restoration of functional fishery habitat – a logical, but unsupported, precept.

"Finally, these data argue for another form of mitigation instead of restoration, and that is conservation. This is a standpoint that most regulatory agencies embrace, but are required to compromise under specific circumstances (e.g., public interest projects). Our data suggest two important points to consider when permitting destruction of existing seagrass meadows. First, *T. testudinum* meadows recover slowly from damage (Zieman, 1976). Our data clearly demonstrate that restoration of *Thalassia* meadows is a long-term affair, probably a stepwise process that is inherently costly. Applicants must be made aware of the problems involved. Second, *Thalassia* meadows are often very old systems – hundreds of years old in some cases. To trade off a long-standing, highly productive habitat for a restoration process that has a tenuous track record with this target species, seems to be a dubious management practice."

- Fonseca, M.S., G.W. Thayer, and W.J. Kenworthy. 1987. *The use of ecological data in the implementation and management of seagrass restorations*, pp. 176-187. In: M.J. Durako, R.C. Phillips, and Roy R. Lewis, III (eds.), *Proceedings of a Symposium on Subtropical-Tropical Seagrasses of the Southeastern United States*. Florida Marine Research Publication, No. 42. Florida Department of Natural Resources, Bureau of Marine Research. [Under Literature Cited in the Seagrass Mitigation Plan (SMP).]

Essential monitoring details are lacking, but the available summary is not reassuring. "65% coverage by seagrasses within a period of 5 years and continued monitoring and

management until coverage is achieved which is consistent to randomly selected SAV beds within the Project vicinity." Random selection of SAV beds for use as comparison sites invites manipulation. Propeller scars need only reach the defined success criteria during any single monitoring event, after which monitoring will cease. This is clearly unacceptable. The Remedial Action Plan outlined in the SMP consists of descriptions and evaluations, with restoration activities mentioned only in passing. When all or portions of the mitigation fail, the public could be left without recourse.

In Exhibit 1., *Seagrass Transplanting Practicability Opinion*, CSA attempts to refute "the negative perception associated with seagrass transplanting in the northeastern Gulf of Mexico. This perception may be due to the limited number of past projects in the area." It begins by citing projects that have not succeeded and/or may not be relevant.

The SAV transplantation in St. Andrews Bay is widely considered to have failed. Port Manatee's outcomes are very controversial, its latitude is south of Tampa Bay, and its restoration sites are much shallower than this area of Santa Rosa Sound. This leaves Applicant without examples to cite as models of success. Another obstacle to success is the depths at which transplantation would have to be carried out. Sunlight attenuation at these depths is major disadvantage. Growing seasons are significantly shorter in northwest Florida, so SAV would likely not become established within the allotted time, if ever.

Mere survival is not assured, particularly for *Thalassia*, and transplanted SAV of both species could be sacrificed. Growth of *Thalassia*, a tropical or subtropical climax species, is slow even in optimum locations (*see above*) and is further challenged by the climate of the northern Gulf of Mexico. Even for *Halodule*, transplant methods are experimental, especially where boat traffic is heavy and in open water locations. Seagrass removal and division may result in the loss of a substantial portion of donor grassbeds.

Applicant appears to concede that the *Thalassia*, which predominates in the locations to be dredged, will be sacrificed due to its resistance to transplantation and that *Halodule* will be extracted from other donor sites. This only compounds the potential damage this plan presents, in that the donor sites are themselves currently productive habitat.

The priority issue to be weighed in evaluating this plan is not whether but how much net loss of SAV it would cause. Since the project is located in designated Essential Fish Habitat for federally managed species (and nursery, foraging and refuge habitat for other commercially and recreationally important species), within a bay system largely devoid of SAV due to other anthropogenic impacts, no net loss can be rationalized.

In the absence of appropriate examples, CSA offers this: "It is the expert opinion of the Project Team that there is no evidence to suggest that seagrasses cannot be successfully transplanted and beds restored in Santa Rosa Sound." This empty assertion falls far short of providing evidence that seagrasses *can* be successfully successfully transplanted and beds restored in Santa Rosa Sound.

### **Financial assurance**

Financial assurances for this costly and potentially long term project are lacking. It is not clear whether Santa Rosa County, the Santa Rosa Shores homeowners in general, or some smaller ad hoc group is intending to carry out construction and accept the substantial liabilities associated with the proposal. Neither of the Santa Rosa Shores homeowners groups appears to be in a position to guarantee financial responsibility.

Santa Rosa County Ordinance Number 91-21 establishing the Municipal Services Benefit Unit that has been used for funding engineering and legal services in preparation of this application do not, in fact, authorize any activities associated with dredging new channels. Section 4 of the ordinance reads: "It is the purpose of this Ordinance to establish a schedule of assessments to fund canal maintenance and to provide for a method and procedure for the collection of such established assessments." No property owners in the subdivision can be bound by this ordinance to pay assessments for any costs other than the maintenance of the existing canals.

The mission of the U.S. Army Corps of Engineers is to avoid adverse impacts to existing aquatic resources. The Santa Rosa Shores dredging proposal does not satisfy the Corps' goal of to achieve a no net loss of aquatic habitat value, and no public need for the project has been demonstrated; therefore, the undersigned urge denial of this application.

We also request that, should be project be approved, locations for new dock or pier construction be used as non-channel donor sites.

We appreciate this opportunity to comment for the record.