



CITY OF MARTINEZ

PARKS, RECREATION, MARINA & CULTURAL
COMMISSION

DATE: March 20, 2012
TO: Parks, Recreation, Marina & Cultural Commission
FROM: Tim Tucker, City Engineer
SUBJECT: Marina Dredging

ACTION

Accept Report

BACKGROUND

At the February PRMCC Mr. Ciaramitaro spoke regarding Marina dredging and the possibility of the City purchasing a dredge machine and conduct dredging by City staff. Subsequently staff was forwarded a 100 plus page report completed in 2009 from Mr. Phil Ciaramitaro through Commission Dylan. The report has recently been forwarded to the Engineering Division of Public Works for review.

Staff is in the process of reviewing the report. The report was completed by the small town of Cobourg, Ontario Canada, located on Lake Ontario. It should be noted that the economic feasibility study was based on Contractor unit costs for dredging that are four to six times the costs Martinez has experienced over the last two dredging cycles.

The Commission should also keep in mind the Delta is a unique environment with special environmental mitigation concerns. There are several dredging techniques available. The City has used hydraulic dredging in the past. This process minimizes the risk of "takes" of the endangered delta smelt. This method also minimizes the creation of silt in the water column. In general a large steel suction pipe is buried one to two feet into the mud. A relatively high percentage of mud to water ratio slurry is pumped through somewhat flexible plastic pipe to the silt ponds. The material travels through four settling ponds prior to discharge to the bay. Dredging is terminated when the discharge exceeds turbidity levels set by our permit. Our silt contains fine materials that can take weeks to settle out.

The dredger proposed by Mr. Ciaramitaro is an auger. Staff is reviewing literature on the machine. Our initial concern is that this machine is better suited for higher sand content material.

Staff will provide a final report and recommendation to the PRMCC once our review is completed.