CITY OF FORT LAUDERDALE PUBLIC WORKS DEPARTMENT

DATE:

July 13, 2011

TO:

Marine Advisory Board Chairman

FROM:

Peter R. Partington, P.E., City Engineer PDP

SUBJECT: NAVD 1988 Datum Change – Effect on Maintenance Dredging

When the City's current dredging policy was established, the vertical datum used was the National Geodetic Vertical Datum of 1929 (NGVD). The Mean Low Water elevation was taken to be –1.3 feet NGVD throughout the River system, as few tidal stations were established throughout the River system. This value was such that the MAB policy was that all canals and waterways in the system would have a depth of at least 4 feet below Mean Low Water [center third of canal].

As of January 1, 2011, the permitting agencies have required that all elevations be related to the North American Vertical Datum of 1988 (NAVD). The NAVD datum is approximately 1.6 feet higher than NGVD. This means that the dredged elevation of – 5.3 NGVD is equivalent to –6.9 NAVD. This new number is the one that will now be used as the maintenance-dredging standard.

There are now more sources of tidal information in the River system and Broward County Environmental permit reviewers request that the local Mean Low Water Elevation be shown on each permit submittal. This will mean that the depth of each waterway below Mean Low Water, when dredged in accordance with the MAB policy, may fluctuate from place to place but in no case will it be less than 4 feet below, nor deeper than 5 feet below Mean Low Water.

This memo explains the new numbers that will be used in City and MAB dredging policy in the future.

c: Albert J. Carbon, P.E., Public Works Director Tony Irvine, City Surveyor Karim Rahmankhah, Engineering Design Manager Elkin Diaz, Project Engineer



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