

MEMORANDUM

DATE: July 19, 2011
TO: City Council
THROUGH: City Manager Judie Zimomra
FROM: Public Works Director Gates Castle *GAC*
RE: Infiltration / Inflow

One of the Public Works goals is to reduce flows to the Donax Water Reclamation Facility by 10% through the elimination of infiltration / inflow (I/I). Infiltration / Inflow is extraneous water that enters a sanitary sewer system through cracked or broken pipes, leaking manholes or wet wells, and missing cleanout caps. As a result of the extra flow, treatment plant efficiency decreases and plant expansion could be required, both of which result in higher utility bills to residents.

Of the \$500,000 budgeted for infiltration / inflow corrections in FY08 and 09 (\$250,000 in each year), over \$425,000 was expended in the older sewer systems, namely the Dunes, Beachview and Gumbo Limbo. The attached chart gives a breakdown of funds expended in each subdivision, resulting flow reductions, estimated cost savings and payback period. Also attached is a map showing these high I/I areas.

The FY12 Sewer operating budget includes \$90,000 for additional infiltration / inflow corrections. This is \$110,000 less than originally proposed for FY12 I / I correction expenditures, in order to keep within the proposed 3% rate increase. Also deferred was \$50,000 proposed for an Infiltration / Inflow Study to identify additional sources of infiltration / inflow.

Cc: Finance Director Sylvia Edwards

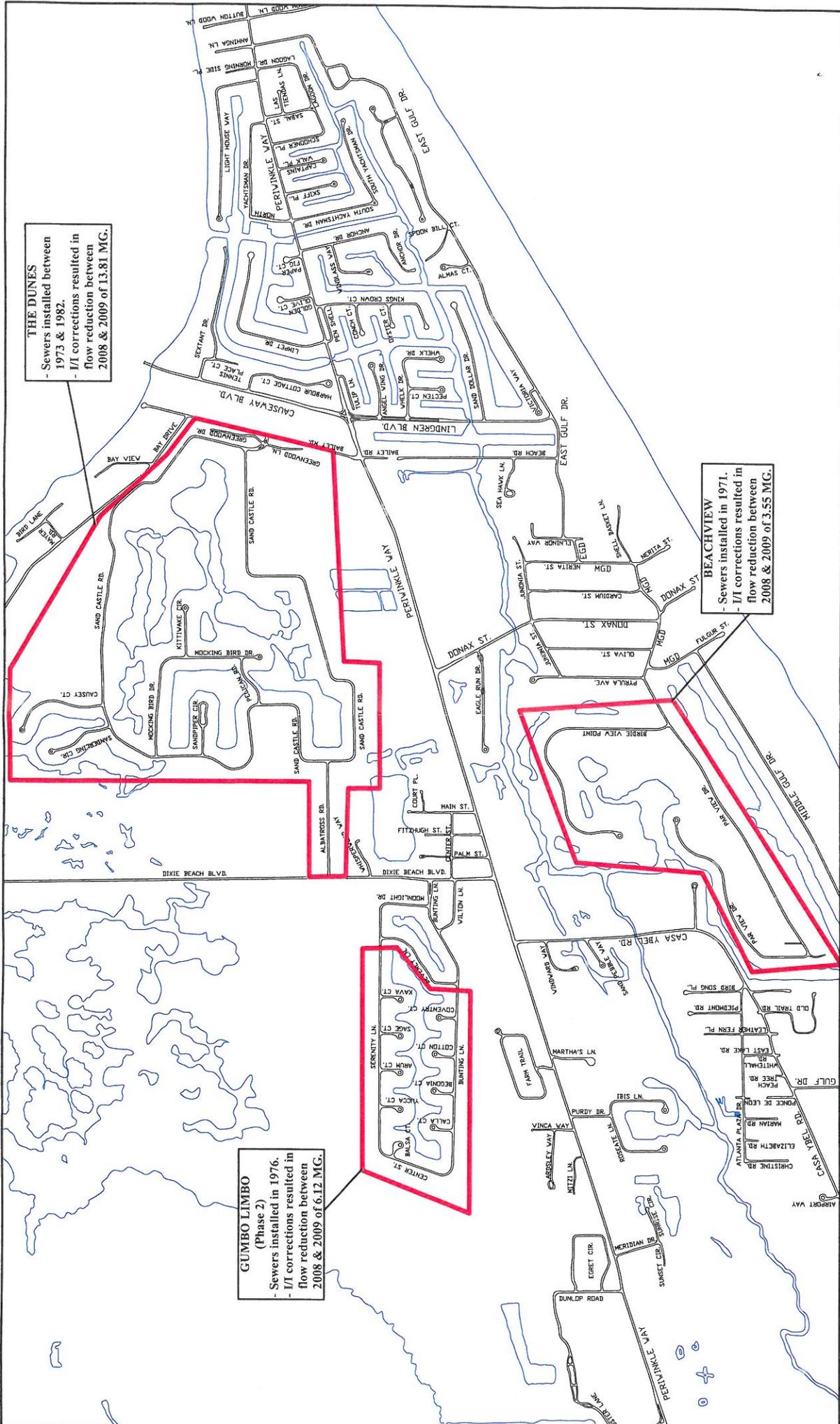
Infiltration / Inflow Corrections

	Funds Expended (2008 and 2009)	Flow Reduction from 2008 to 2009 (Gallons)	Annual Savings (@ \$7.81/1,000gal)	Payback Period (yrs)
Dunes	\$250,246	13,806,720	\$107,830	2.32
Beachview	\$61,534	3,550,660	\$27,731	2.22
Gumbo Limbo	<u>\$115,356</u>	<u>6,124,943</u>	<u>\$47,836</u>	<u>2.41</u>
TOTAL	\$427,136	23,482,323	\$183,397	2.33 (average)

THE DUNES
 - Sewers installed between 1973 & 1982.
 - I/I corrections resulted in flow reduction between 2008 & 2009 of 13.81 MG.

BEACHVIEW
 - Sewers installed in 1971.
 - I/I corrections resulted in flow reduction between 2008 & 2009 of 3.55 MG.

GUMBO LIMBO (Phase 2)
 - Sewers installed in 1976.
 - I/I corrections resulted in flow reduction between 2008 & 2009 of 6.12 MG.



INFLOW AND INFILTRATION CORRECTIONS
 (BETWEEN 2008 AND 2009)

DRAWN BY: JMH
 APPROVED BY: GATES D. CASTLE, P.E.

DATE: 10/22/2010
 SCALE: NTS | PROJECT NO. Inflow-Infiltration Corrections Map 2008-2009

City of Sanibel
 800 Dunlop Road
 Sanibel, FL 33957



REVISION No.	DATE	BY	CHK	APPD

CHECKED BY: SHEET NO. 1