

49th STREET OUTFALL STORMWATER RETROFIT SYSTEM







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27°44'27.36" N 82°41'49.55" W

elev - 2 ft

© 2008 Google™

Eye alt 2102 ft

PROJECT DESCRIPTION

- **TWO WET DETENTION PONDS IN A SERIES**
- **TREATS A 244-ACRE (commercial and residential) DRAINAGE BASIN**
- **NUTRIENT REMOVING BAFFLE BOXES TO REMOVE SUSPENDED SOLIDS UPSTREAM OF THE PONDS AND OUTFALL**
- **EDUCATIONAL COMPONENT**

PROJECT INFORMATION

- **The wet pond and baffle boxes will remove 2,320 pounds of pollution from Boca Ciega Bay**
- **The wet ponds will capture one inch of stormwater runoff with most of the debris**
- **Eighty percent of the flow will be discharged 2,670 feet further away from the beach**
- **The additional baffle boxes will remove debris at the intersections of 27th Ave. and 48th St. and 49th St. S. and 29th Ave. S. to improve Boca Ciega Bay**
- **The alum project removed an additional 489 kg of nutrients at approximate cost of \$1,250,000 more than the wet ponds. At this project location, the alum ponds are not cost efficient and constructing and maintaining them is not feasible**
- **SWFWMD and FDEP agree that this project will improve Boca Ciega Bay water quality and have a contracts with City for their matching contributions**

Nutrient Separating Baffle Box

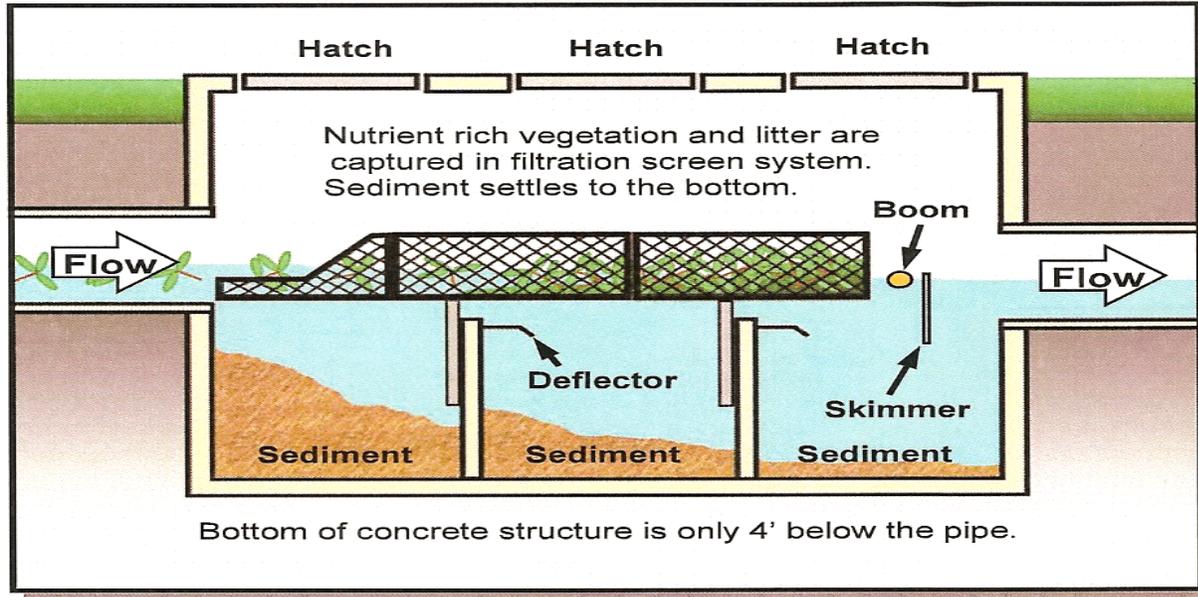
Functional Description

During The Storm Event

Captures foliage,
litter, sediment,
phosphates,
hydrocarbons...
Everything!

Turbulence
deflectors prevent
captured sediment
from
re-suspending.

Hydrocarbons
collect in front of
skimmer and are
absorbed by
Storm Boom.



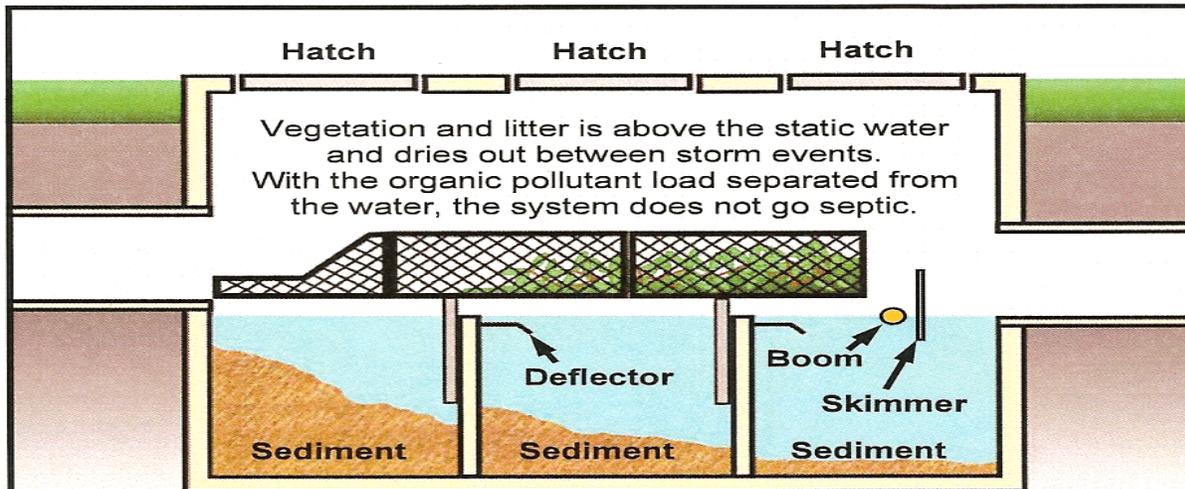
Patented

The System Stays Healthy!

Nutrient pollutant
load is not lost to
static water and
flushed out at the
next storm event.

Separating
organic matter
from the static
water prevents
bacterial buildup.

After The Storm Event



During servicing, the screen system hinges off to the side to give easy access to the sediment collected in the lower chambers.



GRAPHIC SCALE
(IN FEET)

EXISTING OUTFALL, 2038 FT

EXISTING OUTFALL, 2880 FT

PROPOSED OUTFALL, 5580 FT

3

2

1



PROJECT BUDGET

SWFWMD GRANT	\$640,291
CITY OF GULFPORT	640,291
APPROPRIATION	<u>500,000</u>
TOTAL COST	\$1,780,582

49th STREET / PROJECT SCHEDULE

- Existing Southwest Florida Water Management District (SWFWMD) permit extension July 2014
- Cooperative Funding application to Southwest Florida Water Management District (SWFWMD) October 2014 – Funding in October 2015
- Construction January 2016-June 2017
- Ongoing System Maintenance – Starting June 2017