

CITY COUNCIL WORKSHOP  
CITY OF BONITA SPRINGS  
WEDNESDAY, SEPTEMBER 7, 2016  
4:00 P.M.  
CITY HALL  
9101 BONITA BEACH ROAD  
BONITA SPRINGS, FLORIDA 34135  
MINUTES

I. CALL TO ORDER

Mayor Peter Simmons called the meeting to order at 4:01 P.M.

II. PLEDGE OF ALLEGIANCE

Mayor Simmons led in the Pledge of Allegiance.

III. ROLL CALL

Mayor Simmons and all Council Members were in attendance except for Council Member Mike Gibson.

IV. PUBLIC COMMENT

[4:03:51 PM](#) Rick Steinmeyer commented on the budget.

V. DISCUSSION ON TOTAL NITROGEN REDUCTION:

Public Works Director Matt Feeney furnished a PowerPoint presentation (attached) to address the Total Nitrogen Reduction program.

VI. PUBLIC COMMENT

[5:00:28 PM](#) Rick Steinmeyer supports doing what needs to be done.

[5:00:44 pm](#) Kathy McGrath commented on the Kehl Canal and work that needs to be done.

VII. ADJOURNMENT

There being no further items to address, the workshop adjourned at 5:03 P.M.

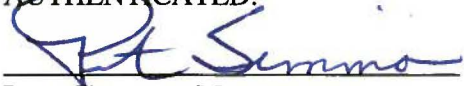
Respectfully submitted,

  
Debra Filipek, City Clerk

APPROVED:  
BONITA SPRINGS CITY COUNCIL:

Date: SEPTEMBER 23, 2016

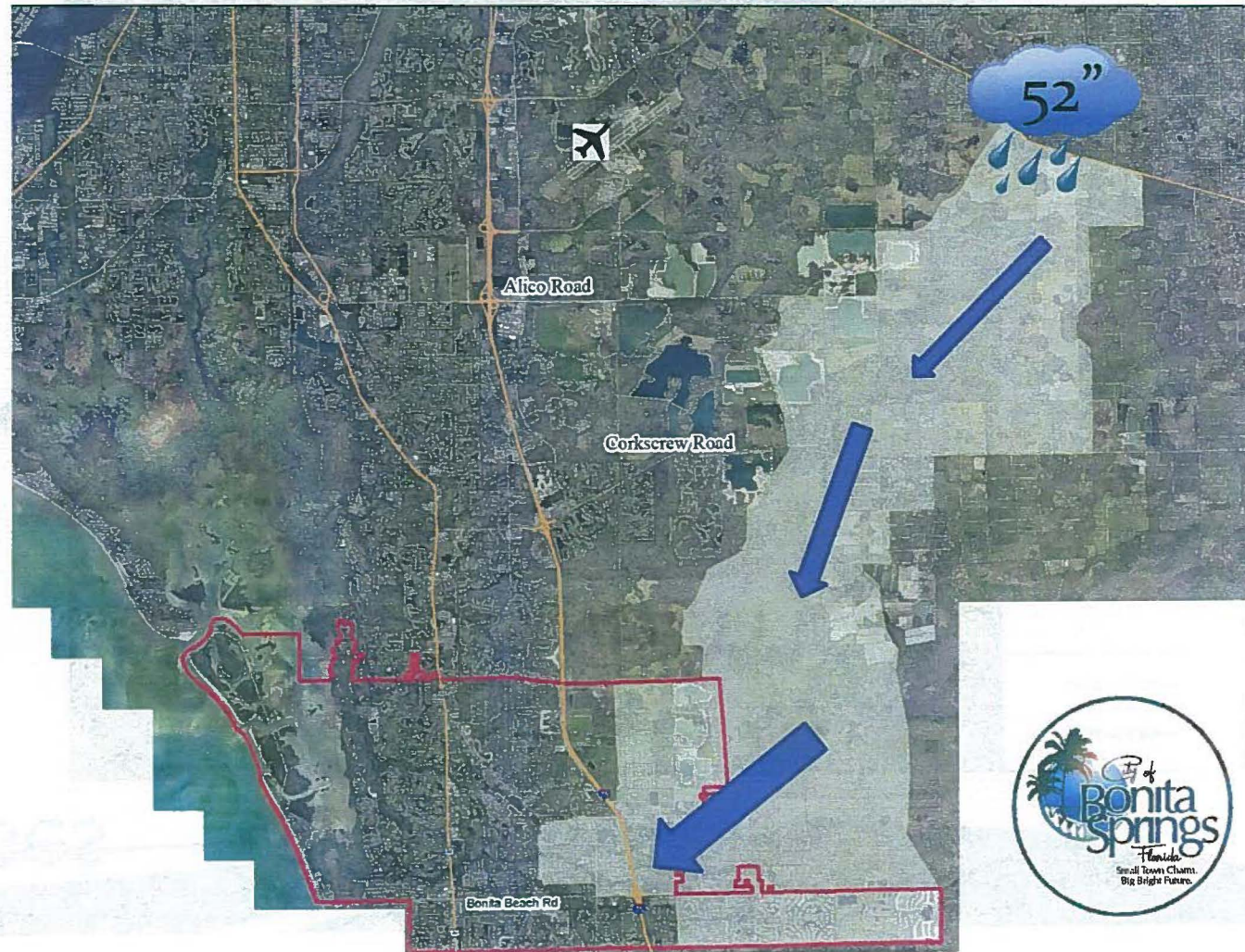
AUTHENTICATED:

A handwritten signature in blue ink, appearing to read "Peter Simmons", written over a horizontal line.

Peter Simmons, Mayor

# Imperial River Watershed

- Freshwater Basin: 70.2 Square Miles (44,960 Acres)
- Major Tributary to Estero Bay
- Elevations Range: 5 to 10 feet above Sea Level up to 35 feet in the Eastern upper reaches
- Predominant Soil: Shelly Sand & Clay = Moderate to Good Drainage

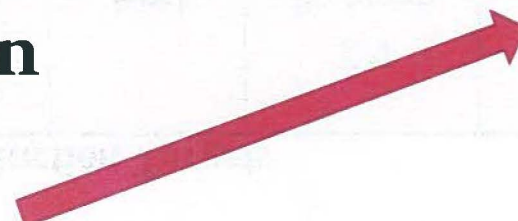


# Current Conditions

- **Total Maximum Daily Load (TMDL) of .74 mg/l of Nitrogen established for the River**
- **Basin Management Action Plan Established by the state in November 2012 to achieve .74 mg/l goal by 2027.**

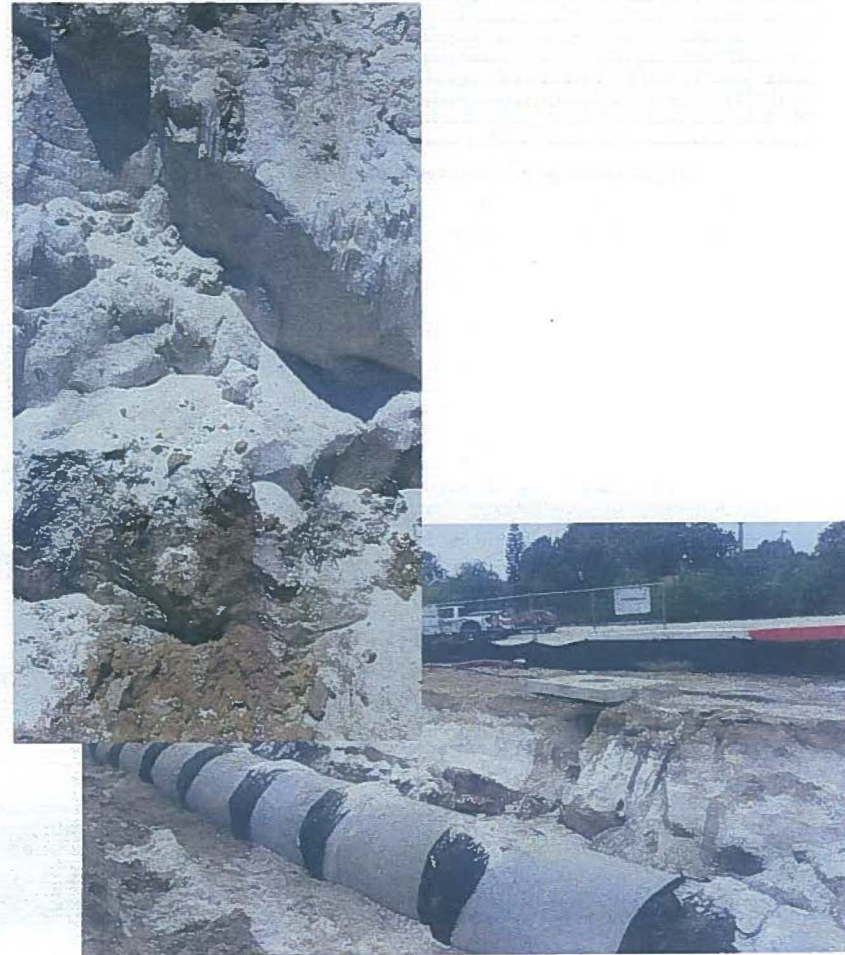
TABLE 31: TN REQUIRED REDUCTIONS FOR THE IMPERIAL RIVER BASIN MS4S

ENTITY	AREA (ACRES)	EXISTING TN (LBS/YR)	ALLOCATION (LBS/YR)	% REDUCTION	REDUCTION REQUIRED
Lee County	26,113	94,469	92,913	1.6%	1,556
City of Bonita Springs	7,154	37,426	27,524	26.5%	9,903
FDOT	96	347	252	27.4%	95
Agriculture	11,597	120,084	71,514	40.4%	48,570
Totals:	44,960	252,326	192,202	23.8%	60,125



# Loading & Reduction Calculations: Soil Type

- **Hydrologic Soil Groups (HSG): Based on minimum Infiltration Rate**
  - **Class A: sand/loamy sand**
  - **Class B: silt loam or loam**
  - **Class C: sandy clay loam**
  - **Class D: clay loam, sandy clay, clay**



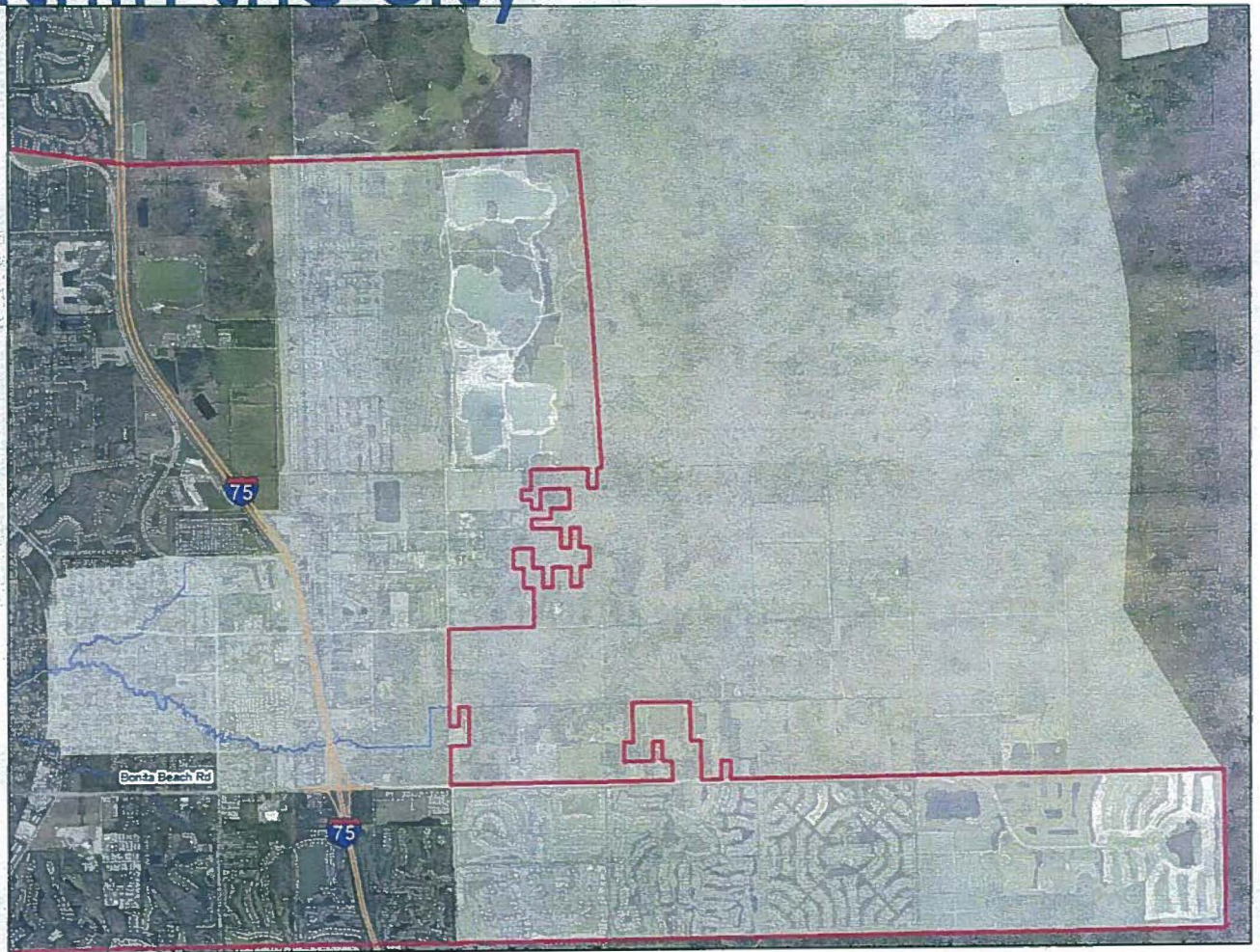
# Loading & Reduction Calculations: Land Use

- **Nutrient Loading Rates are applied based on land use which in turn provides a nutrient load based on the curve numbers run-off value**

<b>Imperial River Basin Loading Rates by Land Use</b>			
<b>Key</b>	<b>Category</b>	<b>Included FLUCCS</b>	<b>MG/L Loading</b>
1100	Single-Family Residential	1100s	1.03
1200	Medium-Density Residential	1200s	1.29
1300	Multi-Family Residential	1300s	1.38
1400	Commercial	1400	1.28
1550	Industrial	1550	1.24
1610	Mining	1610, 1620, 1630, 7400, 7430	0.29
1660	Mining - Holding Ponds	1660	0.73
1700	Institutional/Transportation/Utilities	1700, 1710, 8140, 8310, 8320	0.53
1800	Golf Courses and Parks	1800, 1820, 1850	0.77
1900	Rangeland	1900, 1920, 3100, 3200, 3210, 3300	0.52
2000	Agriculture	2000s	3.05
4000	Upland Forested	4000s	0.17
5000	Freshwater - Open Water	5000s	0.73
6120	Forested - Freshwater Wetlands	6120-6300	0.54
6410	Non-Forested Freshwater Wetlands	6410, 6430, 6440	0.47
6420	Saltwater Wetlands	6420, 6510	0

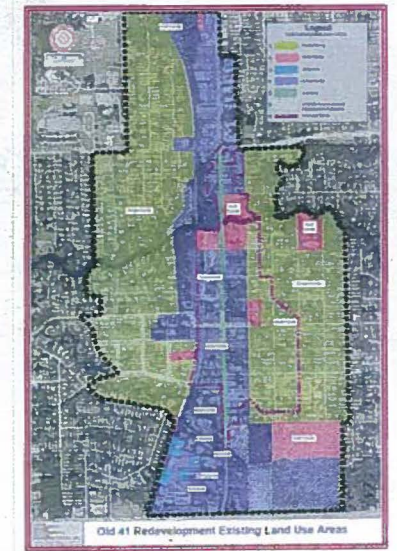
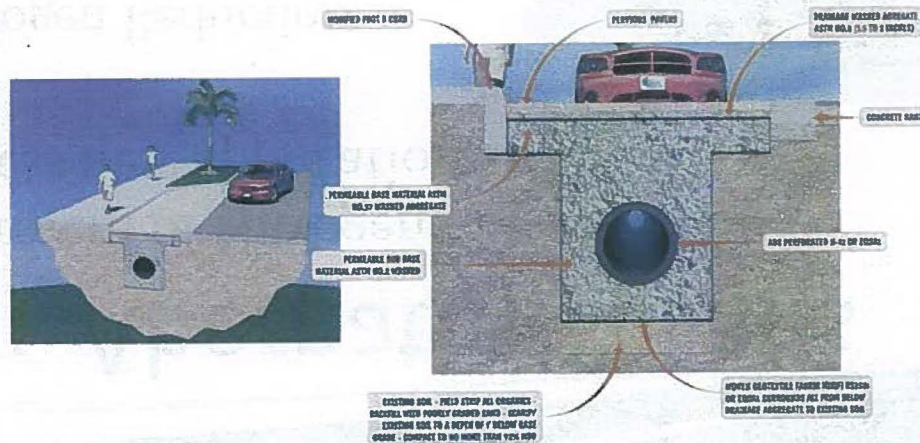
# Project Siting Within the City

- **Projects eligible for consideration in the reduction of the City's nitrogen quota are limited to the Imperial's basin**



# Downtown Revitalization

- Pervious Parking with Exfiltration Trench:
  - 535 lbs of Nitrogen Reduction



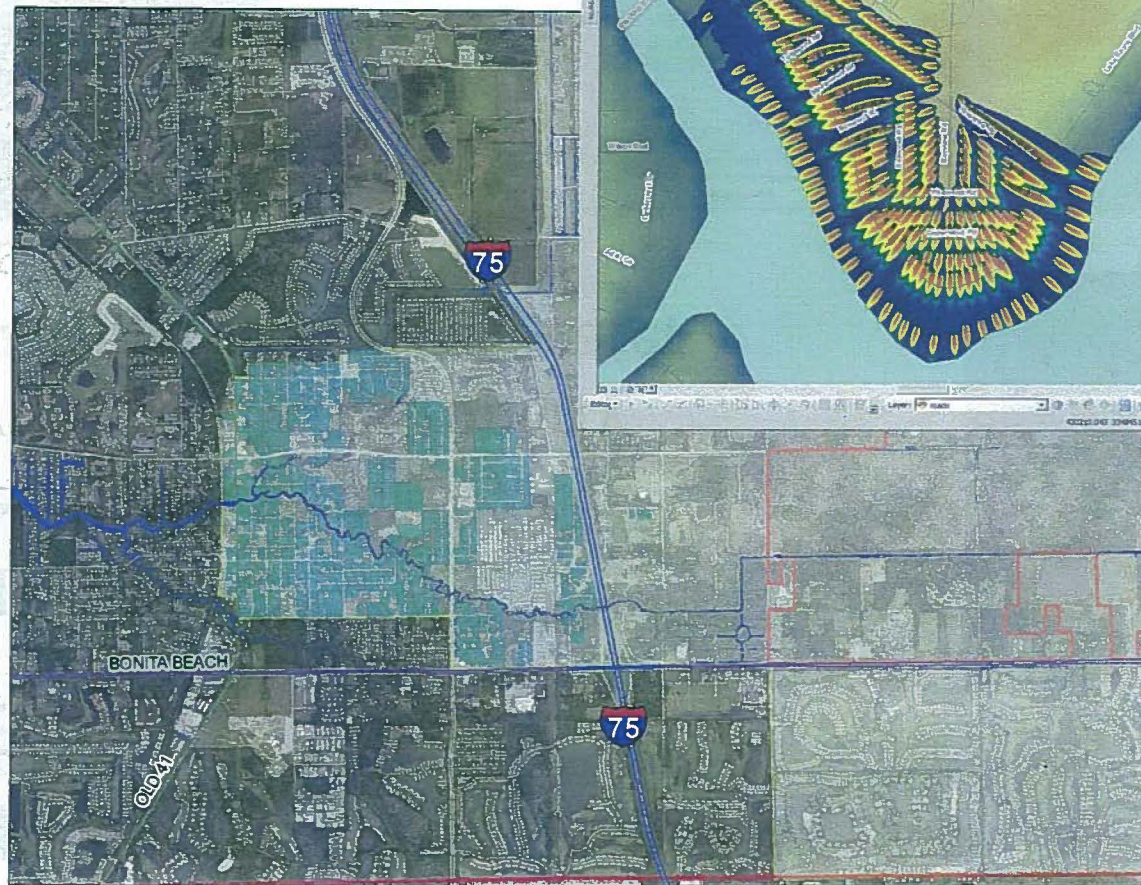
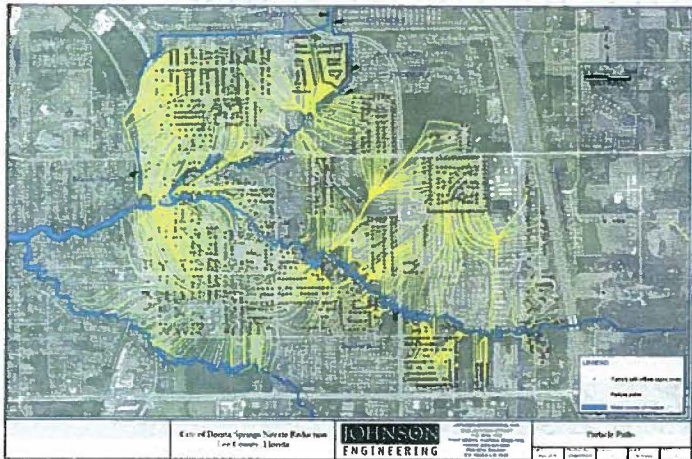


# Septic Tank Conversions

2000-2016 BSU has Removed  
1535 Septic Tanks from Basin

ArcNLET: FDEP Model

- 330 lbs +/- of Nitrogen  
Reduction





Questions?