

# Stormwater Funding Program

Village of Royal Palm Beach Council

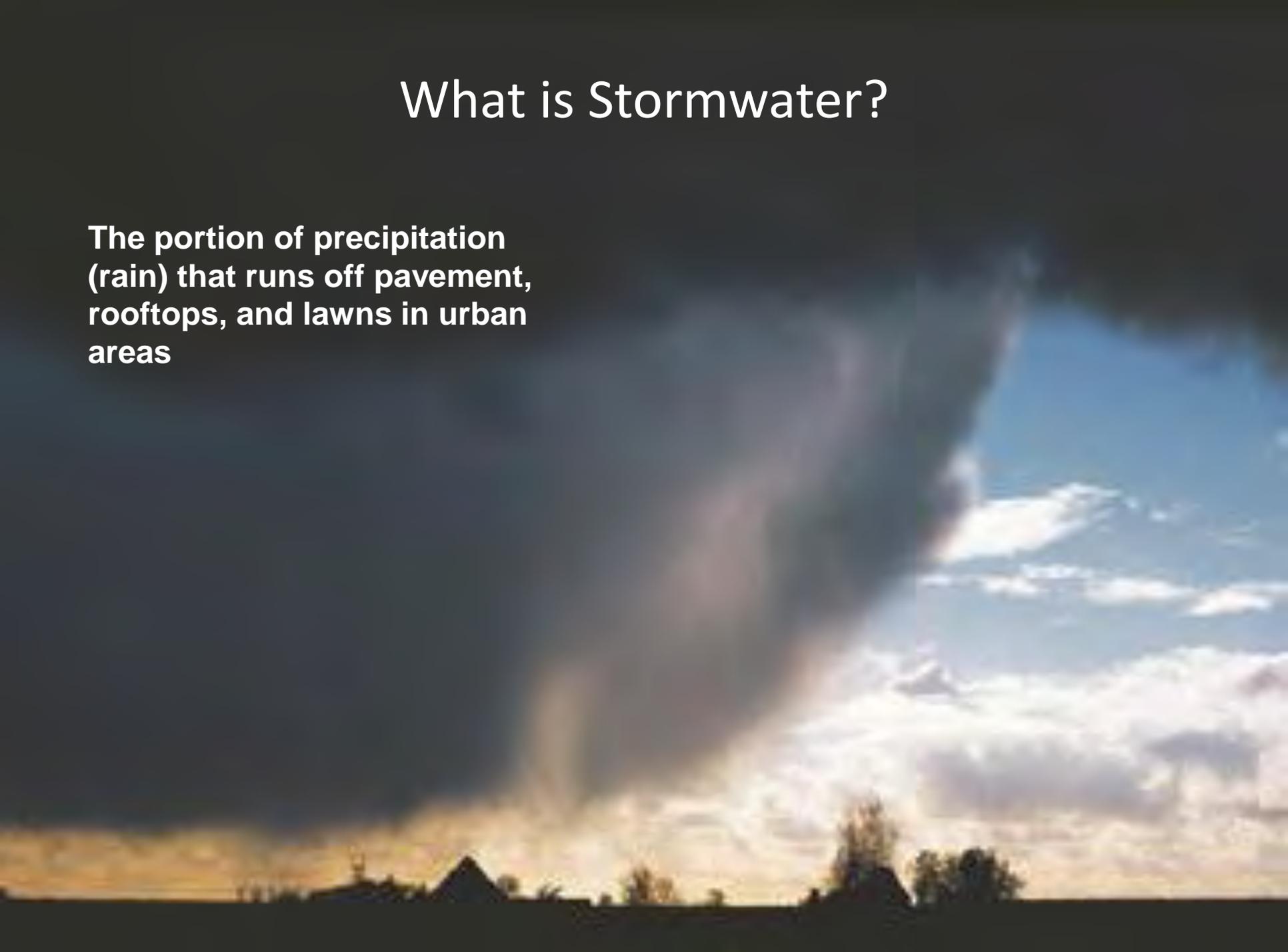
Stormwater  
Utility Workshop

February 23, 2012

**CDM  
Smith**

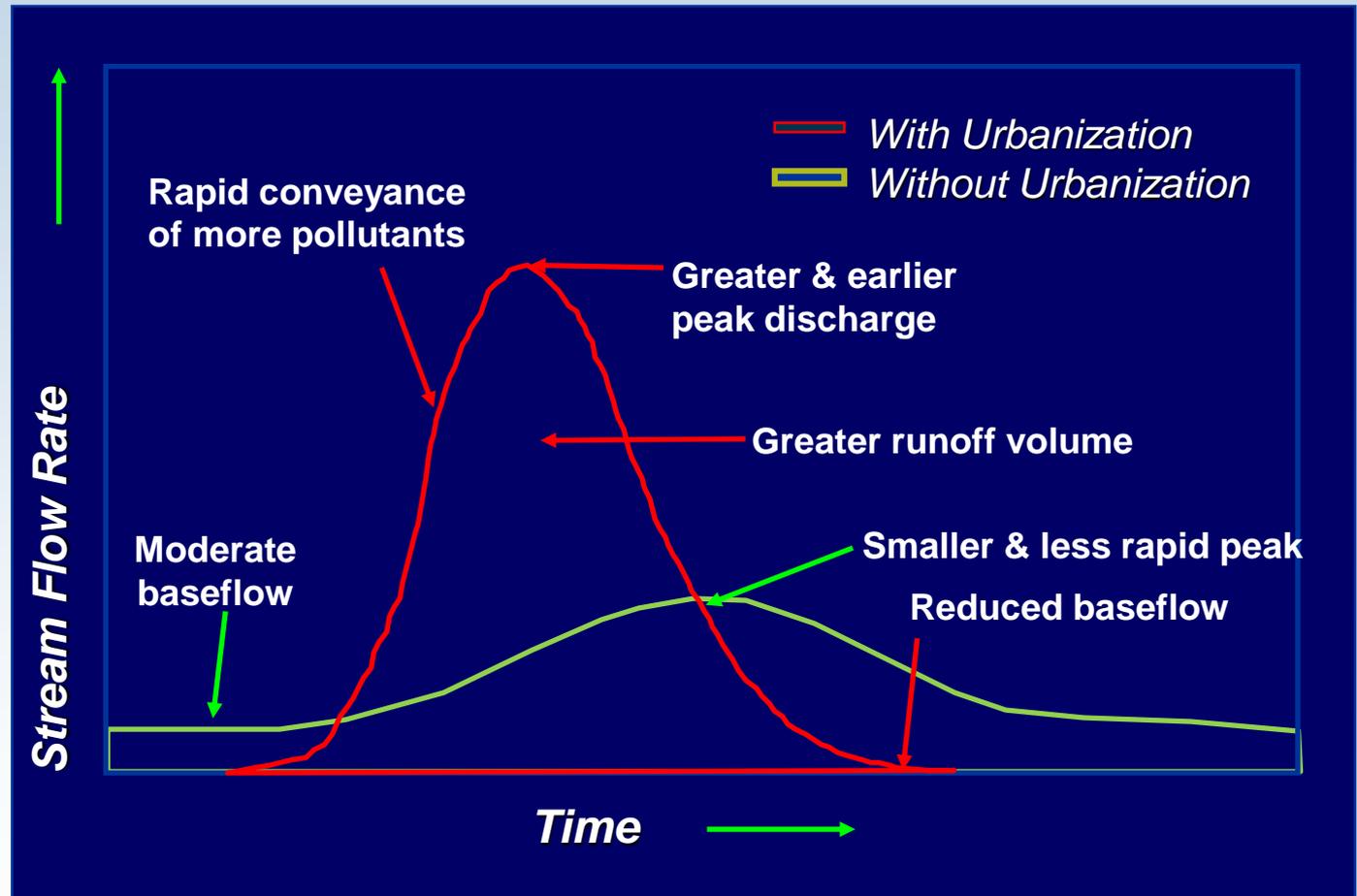
# What is Stormwater?

**The portion of precipitation (rain) that runs off pavement, rooftops, and lawns in urban areas**



# Stormwater Runoff is Natural. What Urbanization Does to Runoff is Not.

- Flooding
- Erosion & Excess Sediments
- Pollution



# Why Do We Care About Stormwater?

## *Residents Expect...*

- No flooding & proper drainage
- Clean water & healthy canals for fishing & recreation
- High level of service at low individual cost

## *Common Beliefs...*

- The Village maintains the entire stormwater system
- The Village will correct past wrongs
- The Village will not allow the system to degrade

# What Does the Village do to Achieve Resident's Expectations?

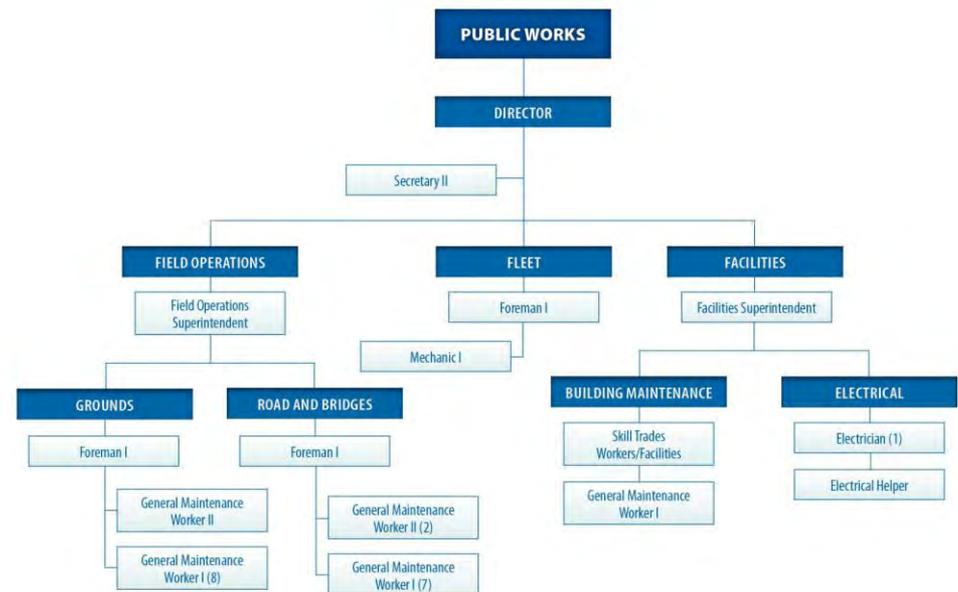
## Stormwater Management Functional Areas

1. Stormwater Program Management
2. National Pollution Discharge Elimination System (NPDES) Phase I Permit Compliance
3. Operations and Maintenance (O&M)
4. Capital Improvements Project (CIP)

# Stormwater Program Management - “Staff Time”

- Public Works Department
  - Stormwater program management
  - Master planning
  - Capital Improvement Project (CIP) prioritization
  - Regulatory compliance activities (TMDL, NPDES, SFWMD, etc.)
  - System inspections
  - Operation & Maintenance (O&M) services

- Engineering Department
  - Project management services for large projects
  - Review of development plans
  - Construction inspection



# National Pollution Discharge Elimination System Permit Compliance

- NPDES program
  - Public Education & Outreach
  - Public Involvement
  - Illicit Discharge Detection & Elimination
  - Construction Site Runoff Control
  - Municipal Operations  
Pollution Prevention
- New permit has more Village obligations to be compliant than in years past



# Operation & Maintenance (O&M)



- Current Annual Stormwater Maintenance Practices
  - Mix of routine & Inspection based service
  - Includes mowing and aquatic weed control in ponds & canals
  - Includes minor maintenance repair of inlets and pipes
  - Village has maintenance responsibility for 140 miles of roadway drainage

# Capital Improvement Projects (CIP)

- Needs evaluated annually based upon available funding
- Ongoing/Planned CIP
  - Saratoga drainage improvements
  - LaMancha drainage & bike path
  - Storm drain outfall replacements
  - Commons drainage improvements
  - Misc. drainage improvements
- Current program ***does not include*** canal dredging, but will need to in order to maintain current Level of Service over time



# Stormwater Program Level of Service Evaluations

<i>Level of Service</i>	<i>Program Management Activities</i>	<i>NPDES Compliance Activities</i>	<i>Operation and Maintenance Program Activities</i>	<i>Capital Improvement Projects</i>
A	Comprehensive Planning + Full Implementation Capabilities	Exemplary Permit Compliance	Fully Preventative/ 100% Routine	10-year Plan
B	Pro-Active Planning + Systematic CIP Implementation Capabilities	Pro-Active Permit Compliance	Mixture of Routine and Inspection Based	20-year Plan
C	Priority Planning + Partial CIP Implementation Capabilities	Minimal Permit Compliance	Inspection Based Only	40-year Plan
D	Reactionary Planning + Minimal CIP Implementation Capabilities	Below Minimum Permit Compliance	Responsive Only (Complaint-based)	50-year Plan
F	No Planning + No CIP Implementation Capabilities	Non-Compliance	Less than full response to all complaints	75-year Plan

Overall Level of Service = C

# Funding of the Village Stormwater Program

- Current stormwater program
  - General Fund
  - Includes both O&M and some CIP services
  - Provides Level of Service C
- Regulatory changes have increased the cost of providing the current level-of-service
- Existing canal system deficiencies need to be integrated into the CIP program
- A more equitable option to fund the program is a stormwater utility fee because the customer pays in proportion to services received instead of their assessed property value

# What is a Stormwater Utility?

- Enterprise Fund Similar to Water, Wastewater, Solid Waste Utilities
- Dedicated Funding through User Fee
- Fee Related to Benefit Received or Service Provided

# Benefits = Charge

- Management of Runoff Benefits Fee Payers
- Fee or Assessment Related to Runoff
- Common Proxy for Runoff is Impervious Area

**Customer receives services from the utility in direct measure to their runoff as measured by impervious area.**

# How is the Fee Calculated?

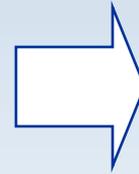
## Residential Customers

**Single Family Units**

**Multi-Family Units**

**Condominiums**

**Mobile Homes**



Each is assigned 1 depending on number of dwelling units.

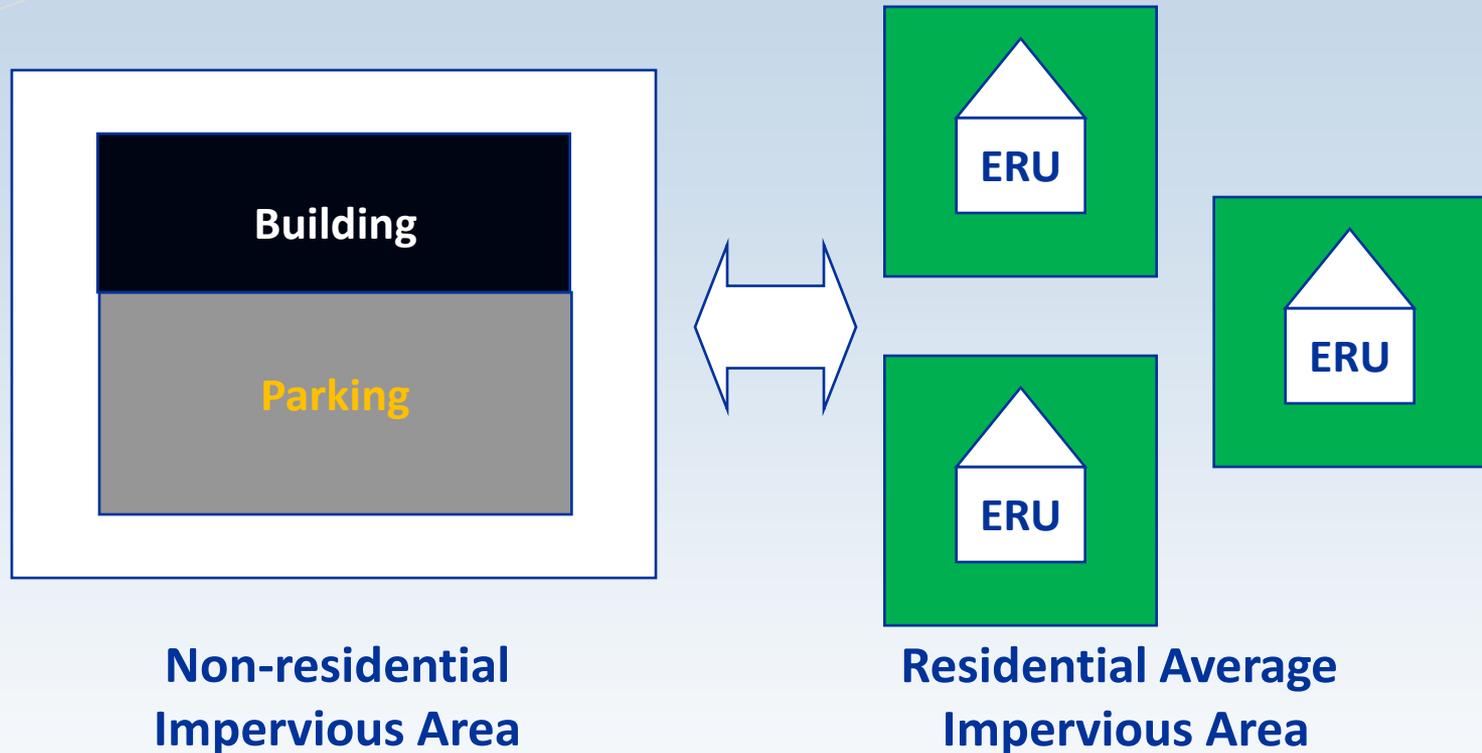
**Fee = ERU x Rate (\$ per ERU per month)**

**For Village, 1 ERU = 2,720 square feet**

**ERU = Equivalent Residential Unit (Billing Unit)**

# How is the Fee Calculated?

## Non-Residential Customers



***In this example, the non-residential customer pays three times the amount as the residential customer since their impervious area represents three typical homes.***

# Stormwater User Fee Advantages

- Most Equitable Funding Method (That is, Residents Pay for the Services They Receive)
- Provides Stable and Dedicated Funding
- Allow Long-Term Planning for Stormwater Management
- Sound Legal Standing
- Allows for Credits for Good Stormwater Management Behavior

# Potential Stormwater Utility Fees

<u>LOS</u>	<u>Program Costs</u>	<u>Rate *</u> <u>(\$/mo/ERU)</u>
Current CIP	\$620,000	\$3.20
Program w/o CIP	\$649,700	\$3.40
CIP 3-5 Years	\$840,500	\$4.35
Current LOS	\$1,270,000	\$6.60
Current LOS 3-5 Years	\$1,490,000	\$7.75

\* ERUs = 16,094 for Village Excluding ITID & LWDD; most recent data from Village GIS

# Stormwater Utilities in Palm Beach County

Rates (\$/month/ERU) – December 2011 (FSA)

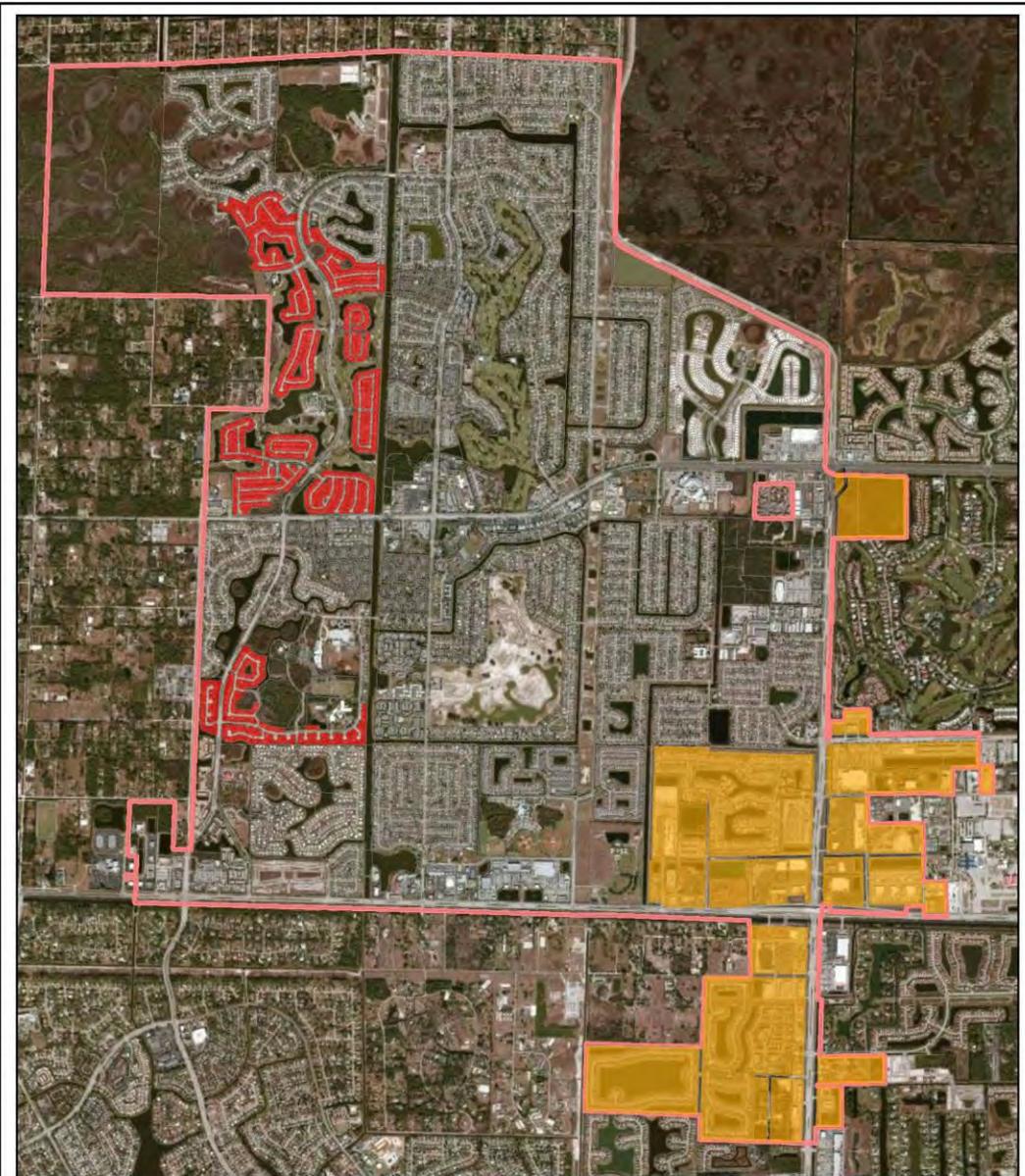
Boca Raton	\$2.90	Lake Worth	\$5.80
Boynton Beach	\$5.00	Riviera Beach	\$4.50
Delray Beach	\$5.33	Tequesta	\$7.13
Jupiter	\$4.37	West Palm Beach	\$8.48
Palm Beach Avg.	\$5.44	(8 SWUs)	
Statewide Avg.	\$4.79	(157 SWUs)	

Stormwater Management in Most of the Urban Area  
of Palm Beach County is Provided by Drainage  
Districts Funded by Special Assessments

# Village of Royal Palm Beach

- Village Boundary
- Indian Trails Improvement District
- Lake Worth Drainage District

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## Legend

Drainage District	The Village of Royal Palm Beach Parcels
Indian Trail Improvement District	The Village of Royal Palm Beach Boundary
Lake Worth Drainage District	



0 1,500 3,000 6,000 Feet

# Questions?



# Single Family Impervious Area Distribution

