A Master Plan to Fund It All: Maximizing Mitigation Funding on Florida’s Space Coast

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F4: Mitigation Benefits and Applications

June 5, 2014
May 2009 Flooding

- Unnamed storm with varied rainfall patterns
- Flooding across Florida
City of Ormond Beach 27 inches in 7 days
Major Pumping Efforts Across the City

- 10 pumps @ 46,400 GPM
- Pump Station – 234 hours for 122 MG
Background

- Rainfall Comparison
  - 100-Year, 7-day storm: 17 inches
  - May 2009 storm: 27 inches in 7 days

- Stormwater Regulations and Policies
  - City Code
    - New Development: 25-yr, 24-hr event (9 inches)
  - 1998 SMMP – $20 M in Recommended CIP
    - Desired flooding LOS – partial road, no house
    - $12 M constructed CIP – areas of minimal flooding
    - $8 M remaining CIP – areas of most flooding
  - 2009 SMMP Update – May 2009 Storm Focused
Flooding in Project Area

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Riverside Drive Project Area

Construct ditch-bottom inlets

Connect inlets to existing pipe system

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Central Park Project Area

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Central Park Components

- Emergency Control Structure
- Open Channel Pond Connections
- Connection Improvements between Creek and Pond
- Culvert Upgrades
- Compliment Previous Roadway Improvements
- Utilize Existing Pump Station

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How Do We Fund It All?

Multiple Grants

- Hazard Mitigation Grant Program (HMGP)
- Flood Mitigation Assistance (FMA)
- Pre-Disaster Mitigation (PDM)
- Repetitive Flood Claims (RFC)
Riverside Drive Project Area

$277,500
Originaly submitted under PDM (75%)
PDM funding was limited
Redirected application to RFC (100%)
Central Park Project Components

Multiple Grants

- HMGP
- FMA
- PDM
- RFC
Hand Avenue HMGP

- 2004 – Hurricanes Charley, Frances and Jeanne
- 2008 – $940,000 HMGP Grant Award
  - Raise roadway
  - Improve drainage
- $2.3M total project cost
- Insufficient benefit to cover full project
- Original Hand Avenue Award
  - $940K/$2.3M (40.8% under HMGP)
Expanded Hand Avenue HMGP

- Original Hand Avenue Award
  - $940K/$2.3M
    (40.8% under HMGP)
- Identified Expansion Opportunities
  - Pond Interconnection
- Hand Avenue Expansion
  - $1.7M/$2.3M (75% under HMGP)
- Redirected May 2009 Storm
  HMGP Funding
  - Wilmette Avenue Flap Gates
Total Grant Funding

• Riverside Drive Drainage Improvements
  – $277,500 (100% under RFC)

• Hand Avenue and Central Park Improvements
  – $2.98M/$3.97M (75% under HMGP)
  – increase of $3.35M

• Wilmette Avenue Flap Gates
  – $300K/$400K (75% under HMGP)
On-Going Grant Funding

Central Park Phase 2 (pending)

- $4.58M/$6.1M
- 67,000 GPM (150 cfs) Pump Station and 60” Force Main
- Tier 3 Application, -- positioned for future grants
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