



*STORMWATER  
MANAGEMENT ACT OF 2007  
and SMART GROWTH*

**Town of La Plata  
2009**

Daniel Mears, Town Manager



# *LA PLATA VISION PLAN*

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- Plan adopted 2001
- Comprehensive Plan update 2002
- Walking downtown
  - Reduce traffic and pollution
- Tornado 2002
- Opportunity to implement plan
- New Comprehensive Plan October 2009



# *ZONING FOR SMART GROWTH*

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- Mixed use
  - Overall average 6.5 per acre
- TND Overlay zone
  - Overall average 6.5 per acre
  - Maximum density 20 per acre
- CBT Overlay zone
  - Residential density 20 per acre
  - Allows mixed use
- PRID Overlay zone
  - Redevelopment
  - Infill
  - Up to 15 units per acre



## *PROBLEM AREAS*

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- Redevelopment of existing lots
- New development with high density housing or commercial structures
- Retrofitting or repairing existing systems



# *REDEVELOPMENT*

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- Stormwater design manual 2000
  - Reduce impervious surfaces by 20%
  - Handle 20% stormwater on site
  - Waivers issued during tornado recovery
- Stormwater Management Act of 2007
  - Must be at least 40% existing impervious
  - Reduce impervious surfaces by 50%
  - Handle 50% stormwater on site
  - Environmentally Sensitive Design

CBT ZONING – MIXED USE CONDOMINIUM  
4 Commercial  
7 Residential





## *MIXED USE CONDOMINIUM*

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- Replaced house destroyed by the tornado that had been previously converted into two apartments
- Before: 25% impervious surfaces
- After: 95% impervious surfaces
- Underground storage not adequate
- Town issued waiver – tornado rebuild



**CLASS A OFFICE BUILDING IN LA PLATA**



## *NEW OFFICE BLDG*

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- Walking downtown requires business for daytime population
- Replaced 3 small commercial buildings
- Applied redevelopment requirements
- Before: 25% impervious surfaces
- After: 95% impervious
- Used underground storage

# PROPERTY LINES DOWNTOWN LA PLATA





## *OLD TOWN LA PLATA*

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- Municipality laid out originally with small lots
- 224 Lots evaluated
  - 83% less than an acre
  - 62%  $\frac{1}{2}$  acre or less
  - 30%  $\frac{1}{4}$  acre or less



## *NEW DEVELOPMENT*

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- Goal to mimic original stormwater runoff
  - Water Quality
  - Water Quantity
  - Recharge capability
  - Channel protection
- Accomplish by ESD to MEP
  - No structural BMP unless necessary



**TRADITIONAL NEIGHBORHOOD DEVELOPMENT**



# *IMPLEMENTATION OF STORMWATER ACT CHANGES*

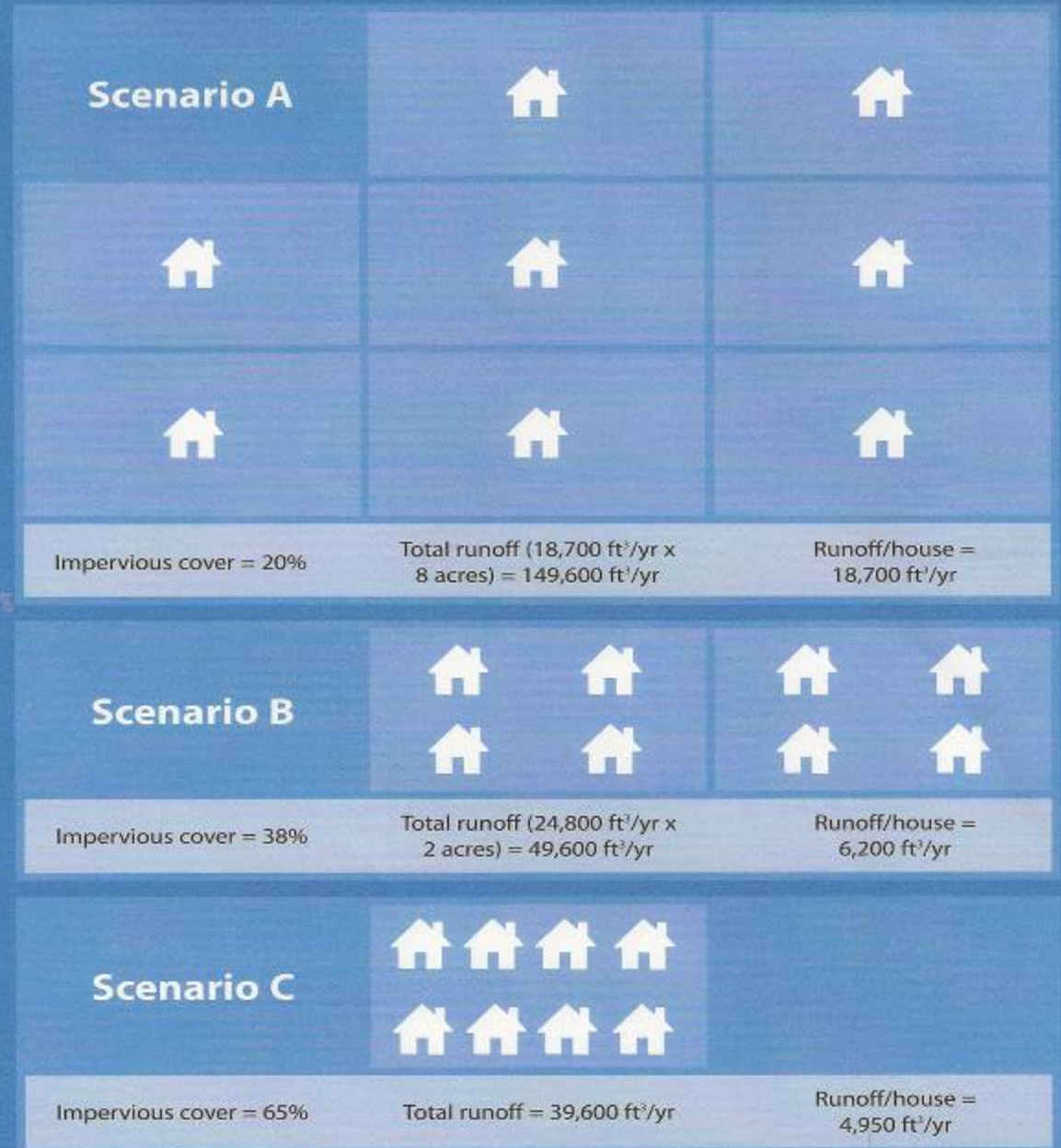
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- Proposed changes not appropriate for high density municipal residential development
  - Handle stormwater on site
  - Eliminate curbs, gutters, and sidewalks
- Individual lots too small for ESD



EXHIBIT 4: Each Scenario Accommodates Eight Houses

EPA Document  
“Protecting Water  
Resources with High-  
Density Development”





# *PROTECTING WATER RESOURCES WITH HIGHER-DENSITY DEVELOPMENT*

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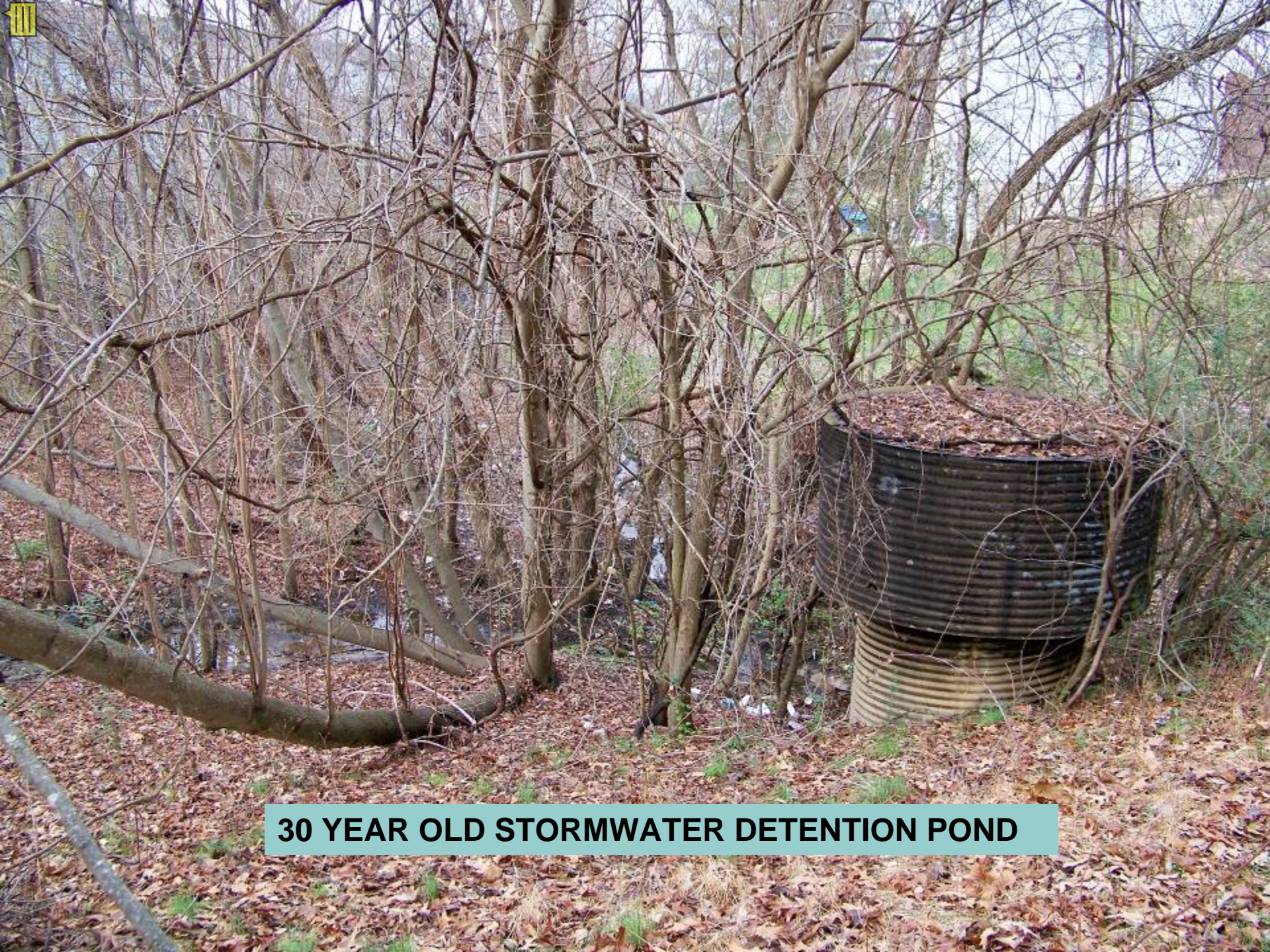
- Run off/acre
  - One House per acre - 18,700 ft/acre/yr
  - Four Houses per acre - 24,800 ft/acre/yr
  - Eight Houses per acre - 39,600 ft/acre/yr
- Run off/dwelling unit
  - One House per acre - 18,700 ft/du/yr
  - Four Houses per acre - 6,200 ft/du/yr
  - Eight Houses per acre - 4,950 ft/du/yr



# *EXISTING STORMWATER MANAGEMENT FACILITIES*

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- Old Town didn't have any stormwater management system
- Structures and drainpipes too small
- Storm drains have deteriorated
- No funding for inspections, repairs, or improvements



**30 YEAR OLD STORMWATER DETENTION POND**



## *PROTECTING WATER RESOURCES WITH SMART GROWTH*

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- One million new residents in Maryland by 2030
- Density averaging can be used to preserve critical area
- Stormwater runoff requirements should be based on a total watershed impact



# *PROPOSED SOLUTIONS*

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- Administrative
- Local
- Legislative



## *ADMINISTRATIVE*

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- Stormwater management should be done on a watershed basis
  - Follow “Smart Growth” and Forest Conservation models
  - Cluster stormwater management activities throughout each water shed by reducing runoff in rural areas to compensate for increased runoff in growth areas



## *ADMINISTRATIVE*

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- Offsite mitigation can be incorporated for high density development
- State should provide guidance to have options that do not impact density goals of smart growth



# *LOCAL GOVERNMENT*

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- Create stormwater utility
  - Make regular inspections
  - Enforce new ordinance
  - Use fee in lieu to retrofit existing stormwater system
  - Establish capital and operating budgets



## *LEGISLATIVE*

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- Increase the amount of exemption for redevelopment in high density residential housing or commercial areas from 5000 square feet of land area to 20,000 square feet
- Encourage the use of off site ESD features in high density housing developments instead of individual lots
- Authorize funding options for stormwater management by local governments