

# Illicit Discharge Detection and Elimination Program

**Prepared for:**

**Doylestown Township and Citizens**

**Doylestown Township, Pennsylvania**

**March 1, 2011**



# Introduction



## CONESTOGA-ROVERS & ASSOCIATES

...The Way We Have Been, The Way We Will Always Be...

CRA was founded on a philosophy of providing Client Focus and Technical Excellence through Teamwork.

We thank our Clients for the opportunity to demonstrate Technical Excellence on their projects and our staff for upholding this standard over the past 30 years.

We are proud of our achievement and look forward to remaining an active and respected member of the communities in which we work.

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2,300 STAFF - OVER 70 OFFICES IN CANADA, U.S., MEXICO, BRAZIL, ARGENTINA, AND U.K.

WORLDWIDE ENGINEERING, ENVIRONMENTAL, CONSTRUCTION, AND IT SERVICES



REGISTERED COMPANY  
**ISO 9001**  
ENGINEERING DESIGN

- Richard Burns, P.G.
- Russell Mehalick



# Previous Presentations

## Illicit Discharge Detection and Elimination Program

Prepared for:  
Doylestown Township and Citizens

Doylestown Township, Pennsylvania

March 16, 2010



## Large Discharge Detection and Elimination Program

Prepared for:  
Doylestown Township and Citizens

Doylestown Township, Pennsylvania

February 17, 2009



## Illicit Discharge Detection and Elimination Program

Prepared for:  
Doylestown Township and Citizens  
Doylestown Township, Pennsylvania

February 19, 2008

## Illicit Discharge Detection and Elimination Program

Prepared for:  
Doylestown Township and Citizens  
Doylestown Township, Pennsylvania

August 7, 2007

November 21, 2006

**2010 presentation available @ Township Website**

<http://www.doylestownpa.org/>



# Agenda

- **Current Status IDD&E**
- **Inspections, Sampling & Results**
- **Going Forward**
- **Takeaways**
- **Q&A**



# Current Status IDD&E

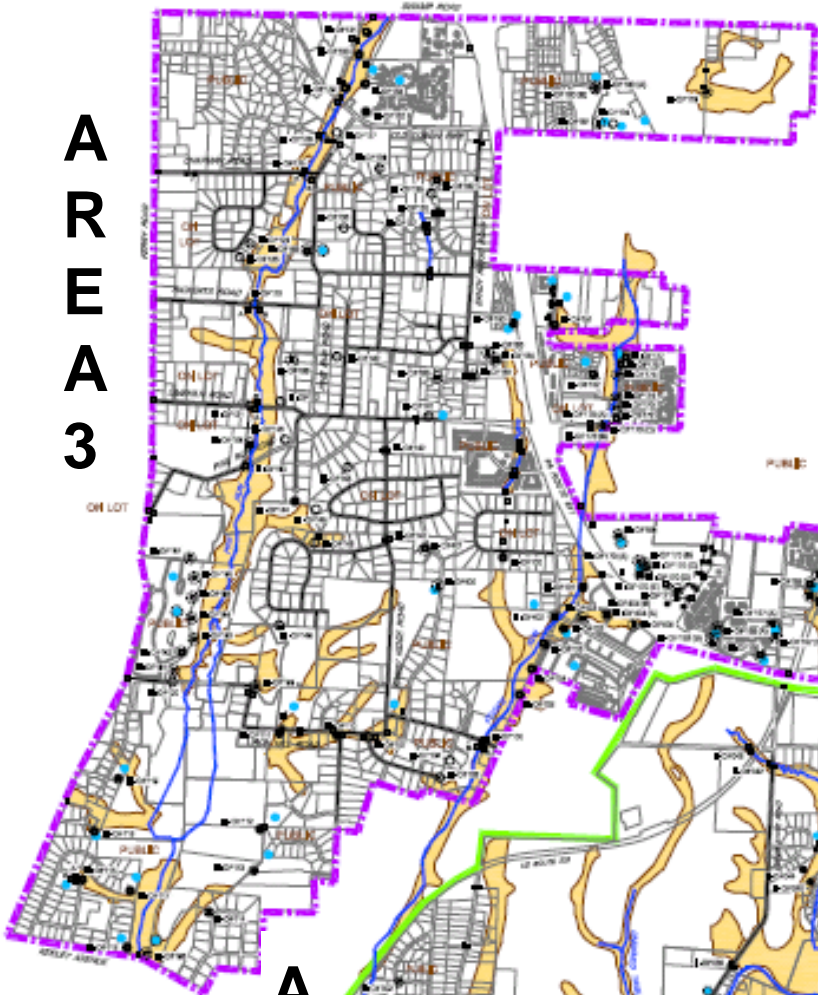
- Township is in Compliance
- NPDES Permit extended to June 2012



# IDDE - Dry Weather Inspection



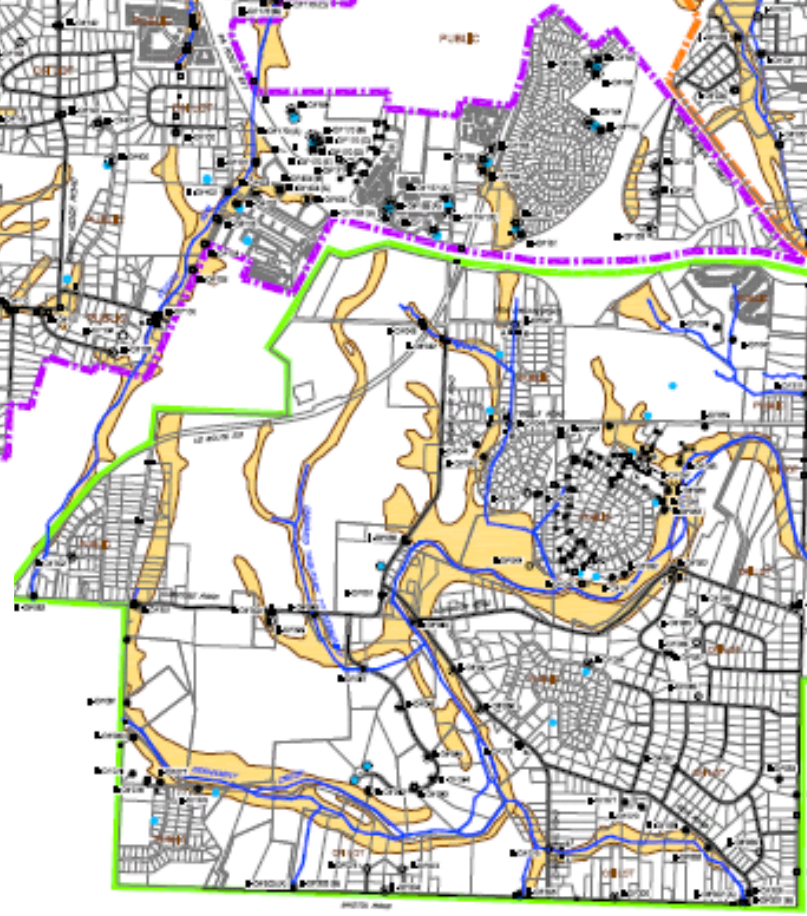
**A  
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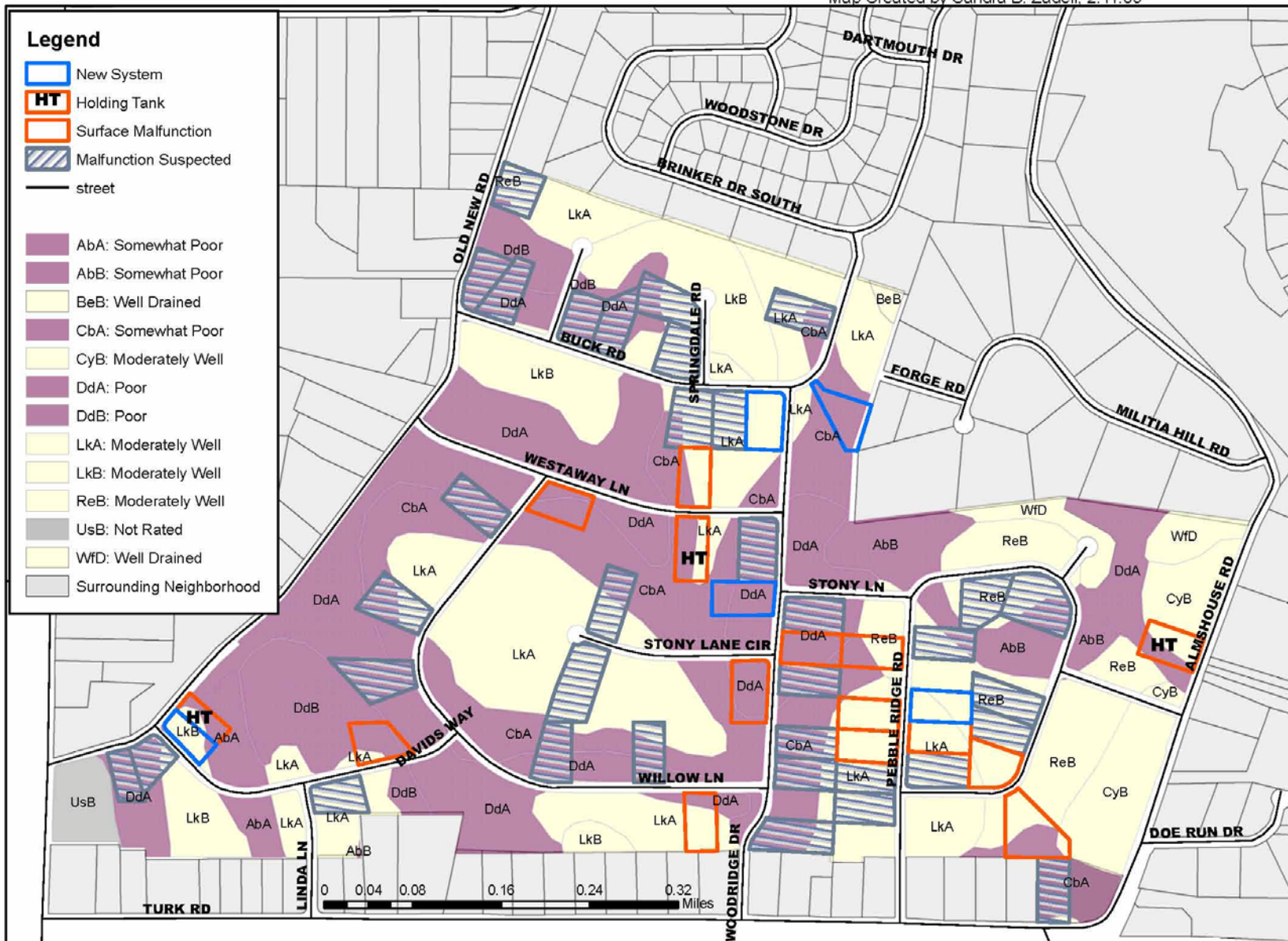


Detailed description: A vertical legend on the right side of the page. It contains four colored lines corresponding to the map's overlays: blue, orange, green, and purple. Below the legend is a title block with a logo for 'South Atlantic' and the text 'STORMW...'. At the bottom right, there is a small logo for 'AS 3000'.

# Soil Survey - 2008

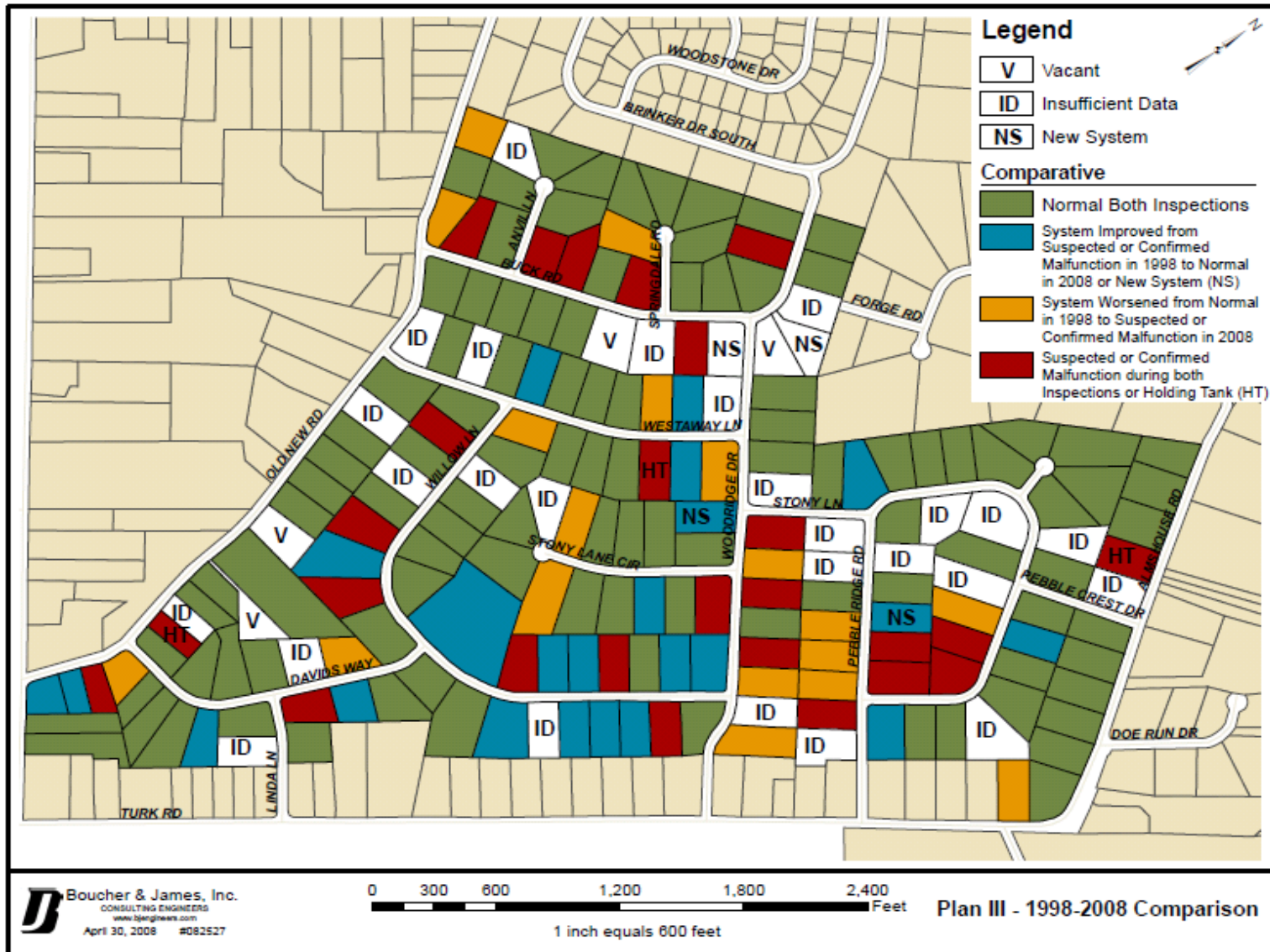
Boucher and James Study Findings with Soils

Map Created by Sandra B. Zadel, 2.11.09





# Septic System Inspections 1998-2008



# IDD&E Inspections, Sampling & Results - 2010

- **Focused Inspections & Sampling on Area 1**
- **Limited sampling Area 3**
- **Sample Analysis (fecal coliform)**
- **Data Review**
- **Interaction with Health Department regarding failed dye test in 2009.**
  - **Corrective Action taken by Health Dept. Capped end of 4” PVC pipe. Still flow from around pipe as of CRA’s last inspection in October 2010.**
  - **Health Dept. talked to homeowner and additional Corrective Action (install holding tank) to be taken by homeowner.**
- **Prepared Annual Report for PADEP**



# IDD&E Sampling - 2010

## Area 1

### Outfalls

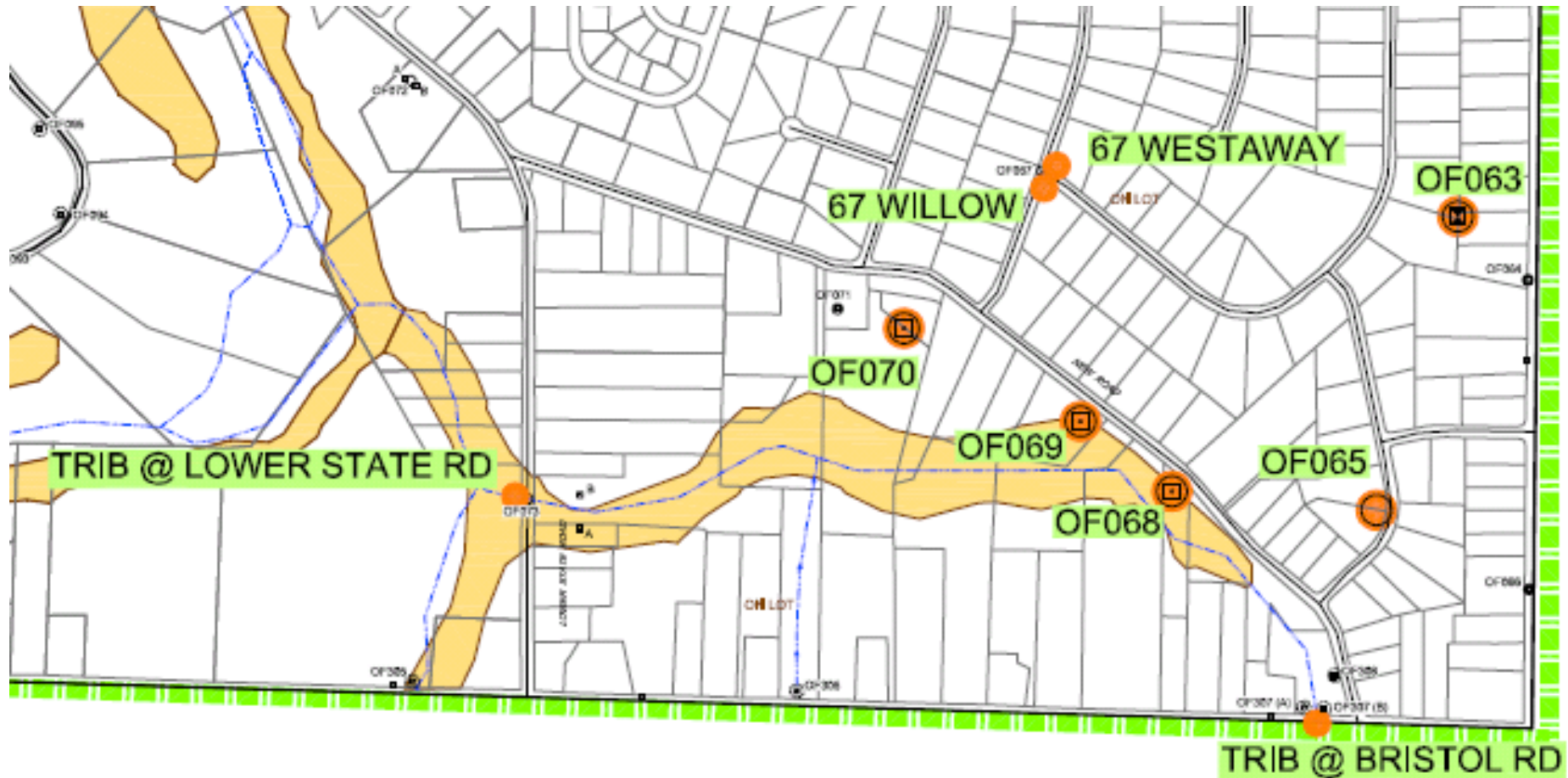
- **8 confirmatory samples at 6 problem outfalls**
- **Only 1 FC sample >200 col/100 ml**
- **Maximum FC = 1,100 col/100ml**

### Stream

- **Upstream and Downstream of historical Hot Spots**
- **Upstream 30 col/100ml**
- **Downstream 320 col/100ml**



# Area 1 Sample Location Map



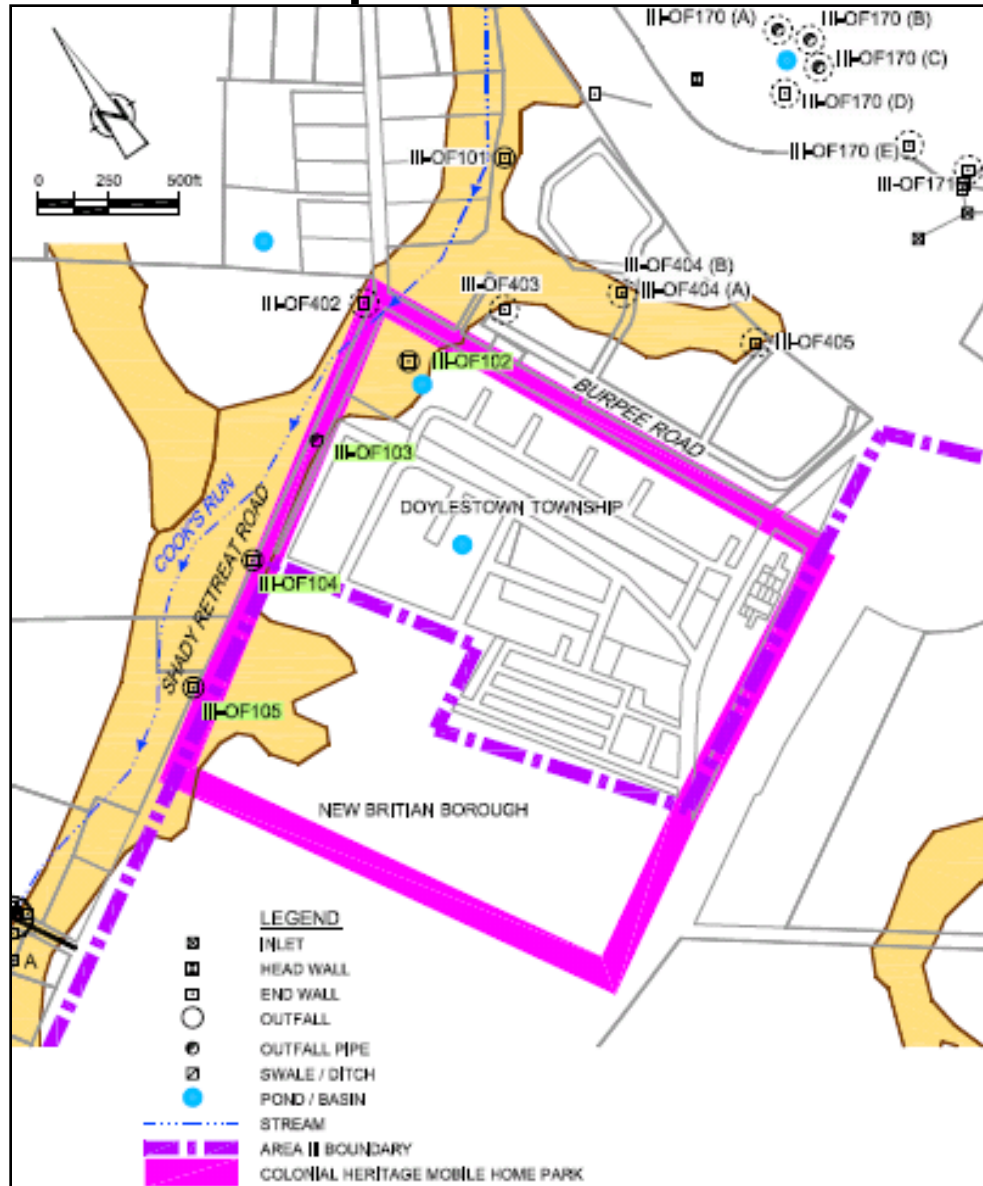
# IDD&E Sampling - 2010

## Area 3 Outfalls

- **2 confirmatory samples at 4 outfalls**
- **No FC samples >200 col/100ml**



# Area 3 Sample Location Map



# Going Forward

- **Continue inspections and sampling of select outfalls and source areas with historical FC impact**
- **Based on sampling results, complete additional source investigations (i.e. dye tracing, TV inspection), if necessary**
- **Source Mitigation**



# Takeaways

- Township in Compliance - Permit Extended
- Continue Inspections & Sample Analysis
- Review Data
- Continue to work with Health Dept to perform mitigation as necessary
- Septic system maintenance
- Public participation
- Pollution prevention & good housekeeping
- **Goal is to Improve Water Quality!!!**





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