

# Neighborhood Channel Dredging

Neighborhood SSD Program

Partnering with the City for Dredging

Thoroughgood

March 14, 2012

DCM Dave Hansen  
Phill Roehrs

# Neighborhood Channel Dredging

## Prior Efforts / Reviews

- 1997 Citywide Analysis
  - Too big, too long, unaffordable
- 2004-2005 Series of 4 Council Briefings
  - Four potential courses of action identified
  - No formal council action

# Neighborhood Channel Dredging

## Hybrid Alternative:

- Individual neighborhood SSD's, specific scopes and timelines (3 cycles, 16 years)
- Includes City-funded Spur Channels (early appropriations allow for 1<sup>st</sup> dredging in year 2)
- Partnership - Cost sharing (3 sources)
- City management of effort – formulation, funding, design, permitting, construction, maintenance
- Creates a viable solution to reclaim navigation & improve water quality
- Establishes a reasonable timeline with visible results

# Neighborhood Channel Dredging

## Legal Considerations

- VA Code §15.2-2403 Authorizes SSDs for navigation
- Minimum of 51% property owner approval
- Formal adoption by City Council
- Council preference: 80% property owner approval
- Funds collected must be accounted for and spent only  
for this project

# Neighborhood Channel Dredging

## Project Format

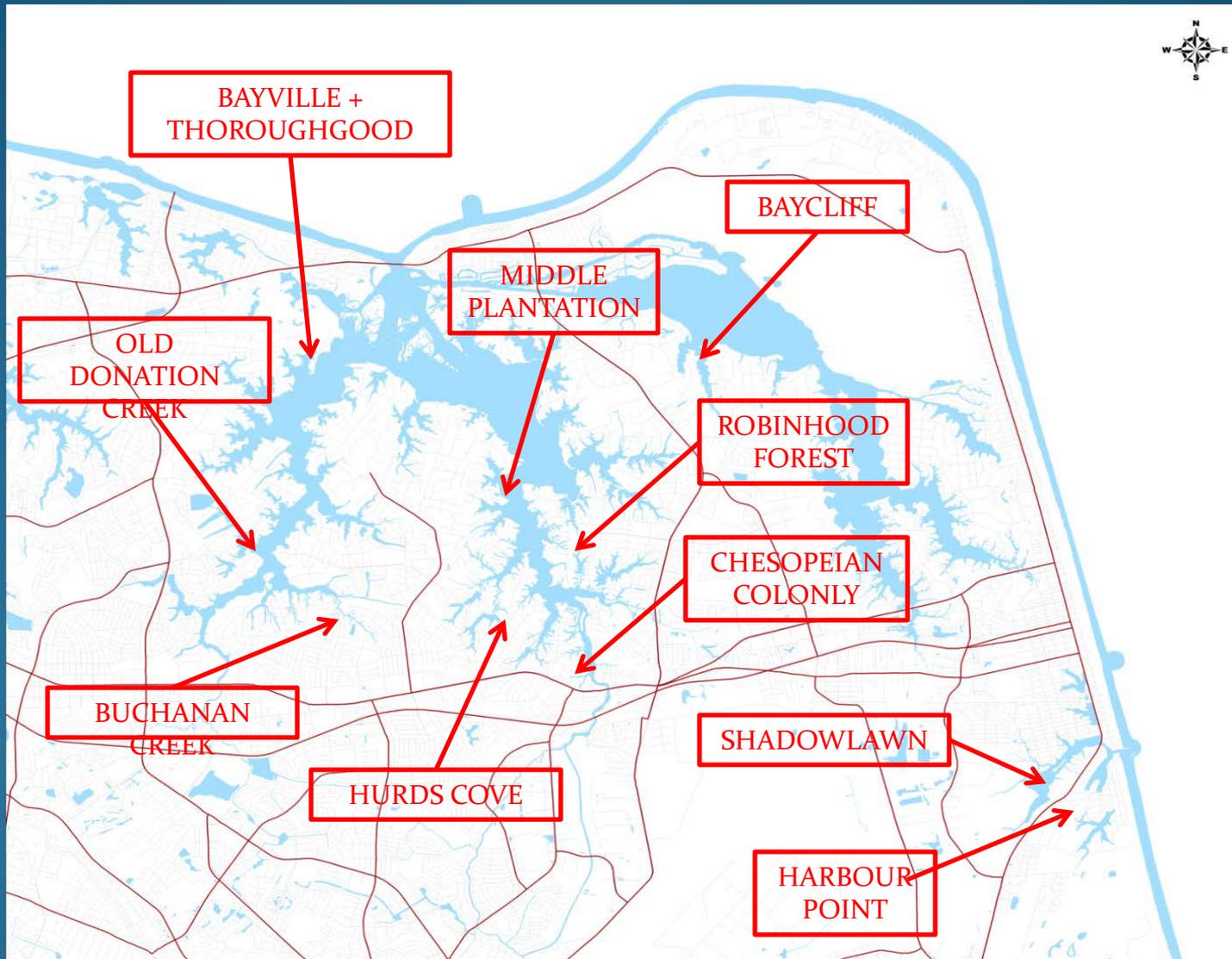
- Mechanical Dredging
- Potential for neighborhood dredged material transfer
- City Dredged Material Transfer Site Network
- Deposition at City Disposal Area :Whitehurst Borrow Pit

# Neighborhood Channel Dredging

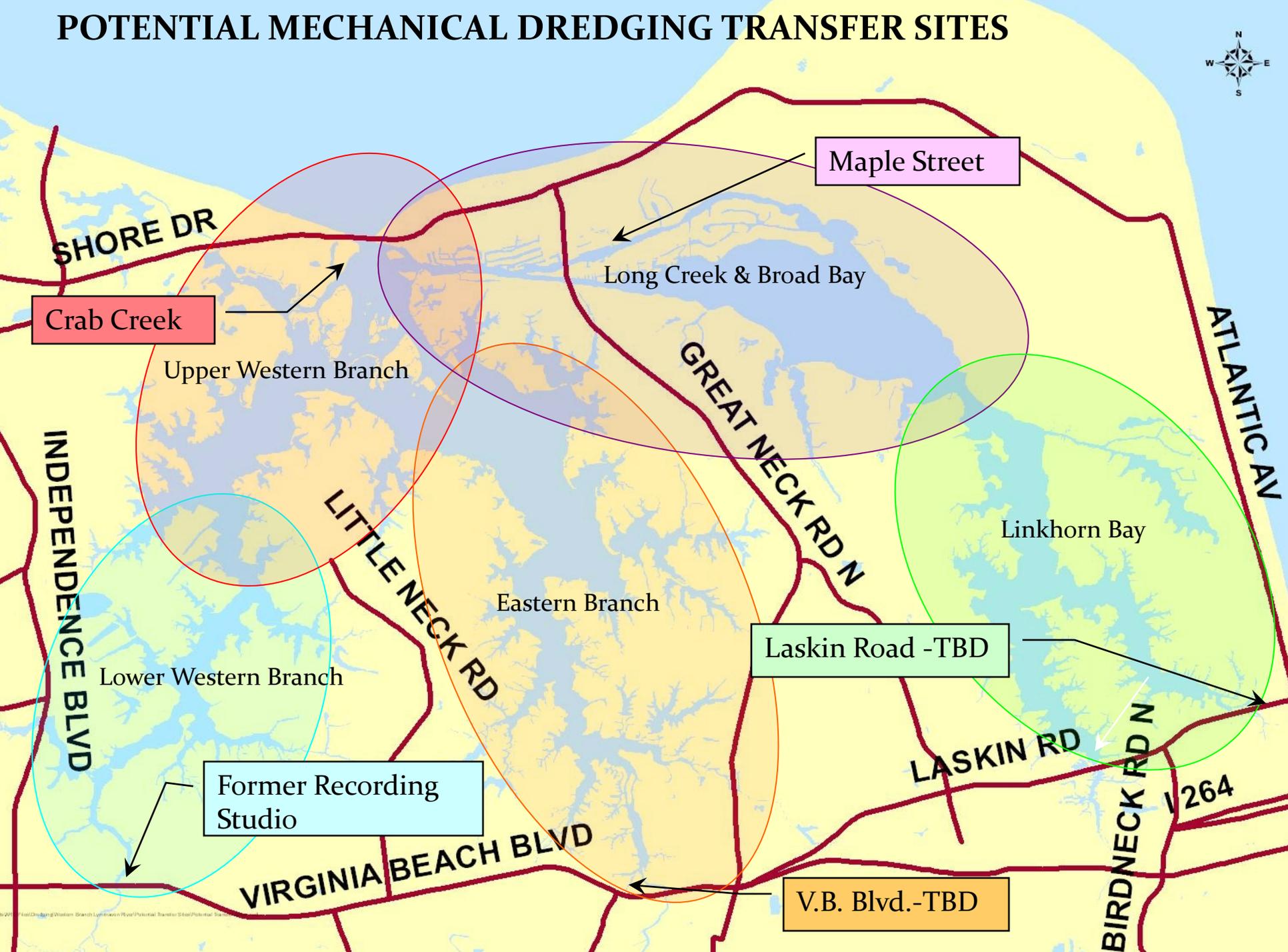
## Program Status Update

- ✓ **Old Donation** SSD Established September 13, 2011
- ✓ **Bayville Creek** SSD to be considered March 27, 2012
- X **Robin Hood Forest** failed to reach 80%
- ❖ **Chesapeake Colony, Shadowlawn & Harbor Point** in willingness phase
  - Buchanan Creek, Thoroughgood and Middle Plantation in formulation
  - Witchduck, Buchanan, Hurds Cove and Riverhaven in discovery

# Neighborhoods In Play



# POTENTIAL MECHANICAL DREDGING TRANSFER SITES



# Neighborhood Channel Dredging

## Program Review:

Financing  
Strategy

- Neighborhood channel funded by SSD
- City cost share's by funding spur channel
  - Individual funding of turn basins
    - City management of project
      - Economies of scale
      - Defined schedule
      - Sunset duration

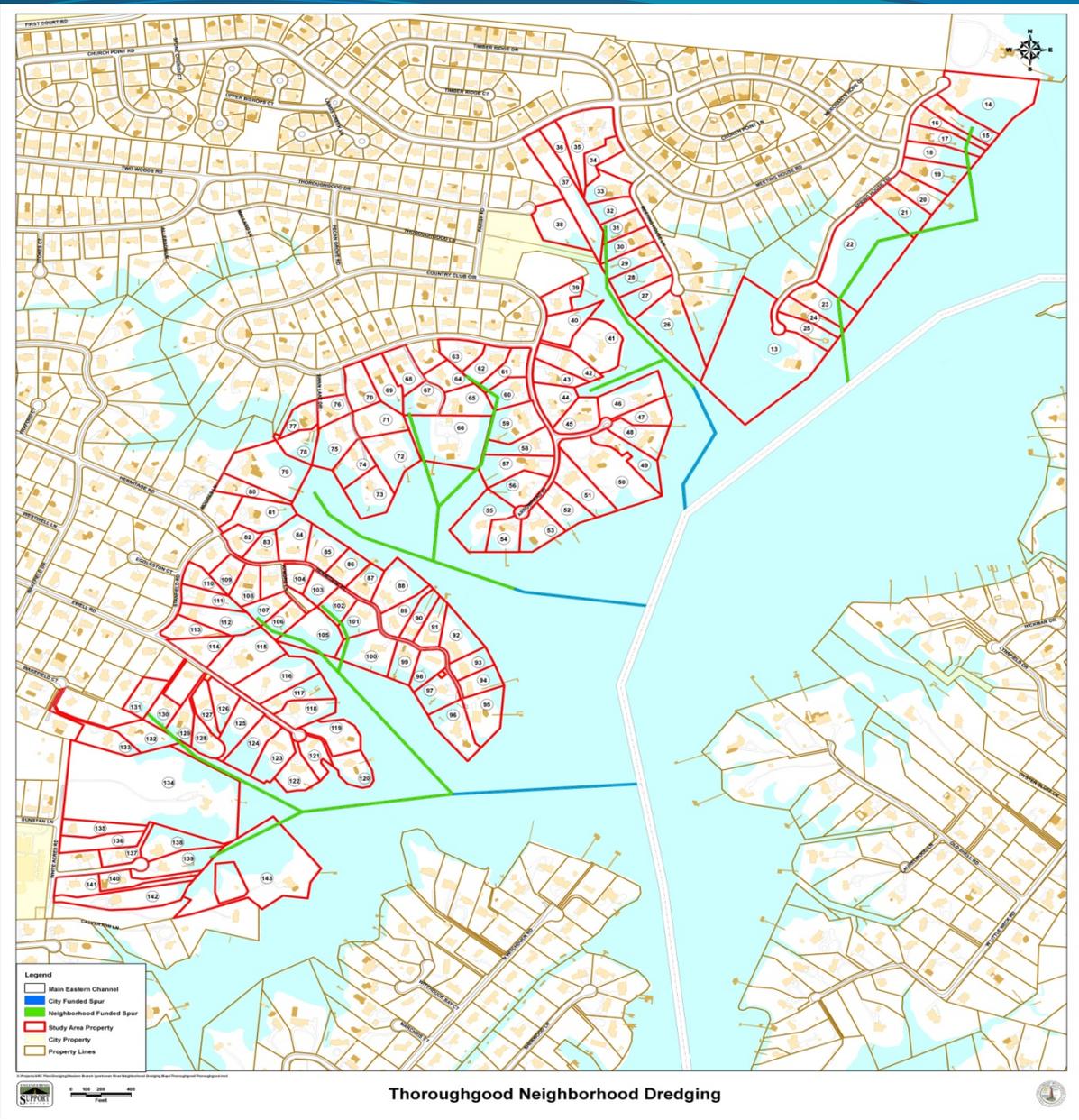
Funding  
Sources  
3

# Neighborhood Channel Dredging

## Dredging Cycles

- Initial dredging: 2 years after SSD adoption
- Projected cycle: 7 years
- 2<sup>nd</sup> cycle anticipated at 70% of initial volume
- 3<sup>rd</sup> cycle anticipated at 50% of initial volume





# Neighborhood Channel Dredging

## 1<sup>st</sup> Dredging Cost Estimate

- City Portion: \$30,068
- SSD Portion: \$1,559,812
- Individual Channels: could average up to \$5,000 each
- 1<sup>st</sup> Dredging engineering and construction contract could be over \$2,000,000
- Includes design, administrative costs, survey and construction

# Neighborhood Channel Dredging

## Life Cycle Estimated Costs City Portion

<u>Cycle</u>	<u>Volume</u>	<u>Cost</u>
1	613 CY	\$30,068
2	429 CY	\$21,736
3	306 <u>CY</u>	<u>\$21,847</u>
	1,348 CY	\$73,651

(includes 5% cost escalation)

(\$30, \$42.21, \$59.40)

# Neighborhood Channel Dredging

## Thoroughgood

### Life Cycle Estimated SSD Costs

<u>Cycle</u>	<u>Volume</u>	<u>Cost</u>
1	41,217 CY	\$1,559,812
2	28,852 CY	\$1,461,511
3	20,608 <u>CY</u>	<u>\$1,468,923</u>
	<b>90,677 CY</b>	<b>\$4,490,246</b>

(includes 5% cost escalation)

**(\$30, \$42.21, \$59.40)**

# Neighborhood Channel Dredging

## Thoroughgood

### Appropriations Schedule

<u>Cycle</u>	<u>Year</u>	<u>Design</u>	<u>Construction</u>
1	1	\$320,000	
	2		\$1,280,000
2	8	\$300,000	
	9		\$1,200,000
3	15	\$300,000	
	16		\$1,200,000
Total		\$920,000	\$3,680,000

City Spur and Neighborhood SSD Channels = \$4,600,000

# Neighborhood Channel Dredging

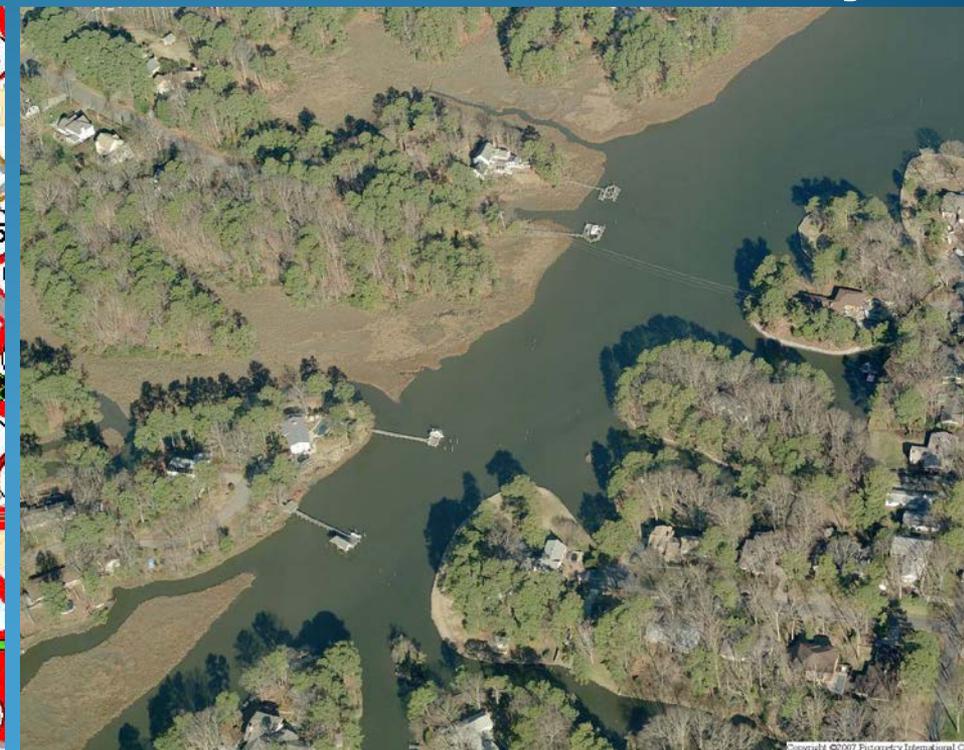
## Thoroughgood SSD Data

- Total SSD assessed value: \$140,744,800
- 169 properties in the neighborhood district
- Each penny surcharge raises \$14,074/year
- SSD rate covers costs for 16 year life: 20¢/\$100 of the  
FY12 assessed value
- Average \$832,809 property contributes \$1,660/year
- Review rate at end of every 4<sup>th</sup> year

# Neighborhood Channel Dredging

## Real Estate

- Voluntary Dedication of Construction Easements and Rights-Of-Way
- Obtain consent from owner of bottomland: McLeskey



# Neighborhood Channel Dredging

## Risks:

- **Environmental permits**
- **Encroachment approval**
- **Real estate dedication**
- **Real estate valuation changes**
- **Cost escalation assumption (5% annually)**

# Neighborhood Channel Dredging

## Next Steps for Thoroughgood

- Refine maps and participants
- Determine whether “whole” or in “parts”
- Assess communities willingness to continue
- Brief City Council on project
- Determine if 80% willing, formal petition
- Public hearing
- City Ordinance establishing SSD
- Begin design and permitting