

Neighborhood Channel Dredging

Neighborhood SSD Program
Partnering with the City for Dredging

Jody Cove

November 14, 2012

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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 1st 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

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Legal Considerations

- VA Code §15.2-2403 Authorizes SSDs for navigation
- Minimum of 51% property owner approval
- Formal adoption by City Council
- Staff recommending 80% property owner approval

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Current Proposal:

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

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

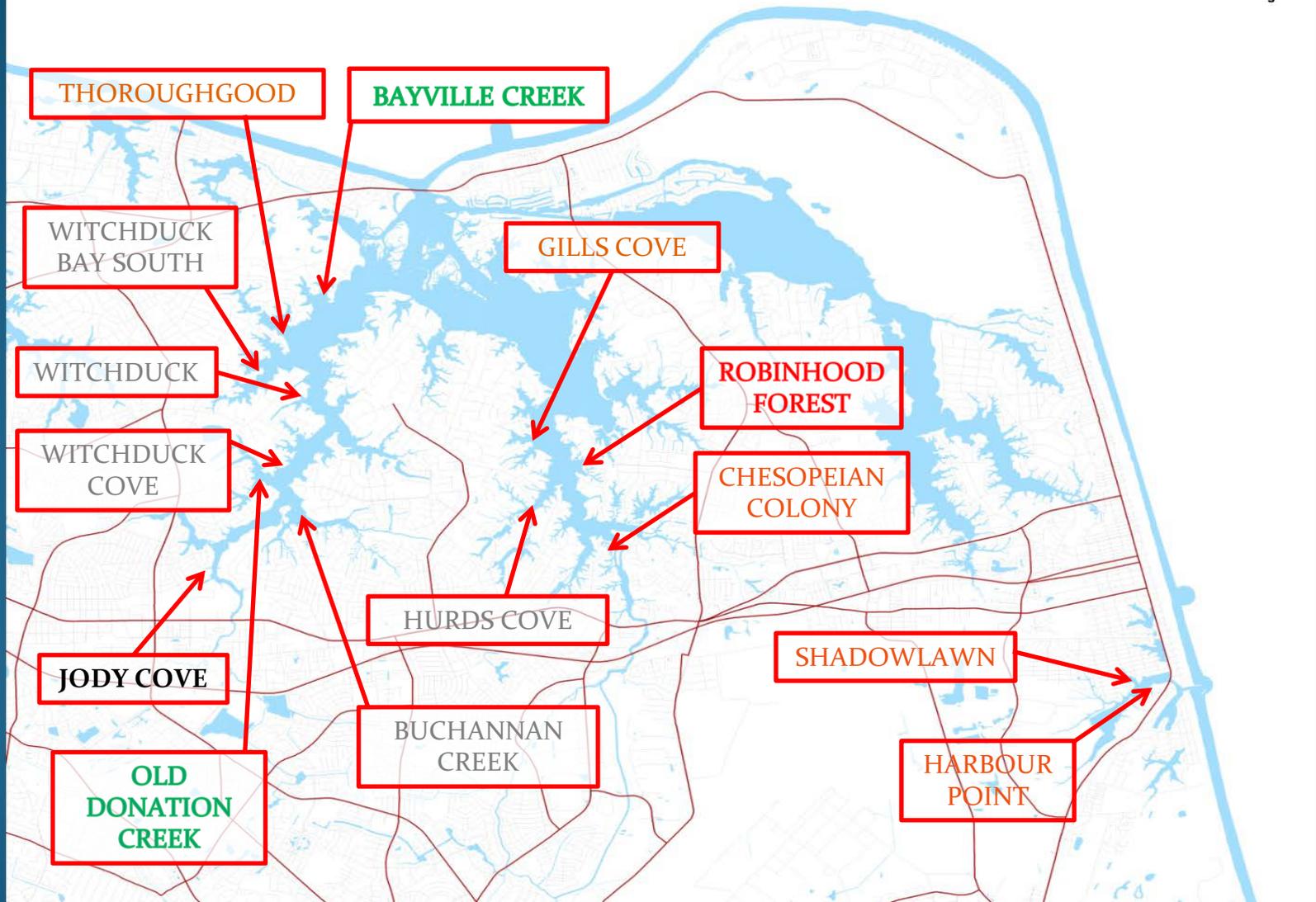
Program

Status Update

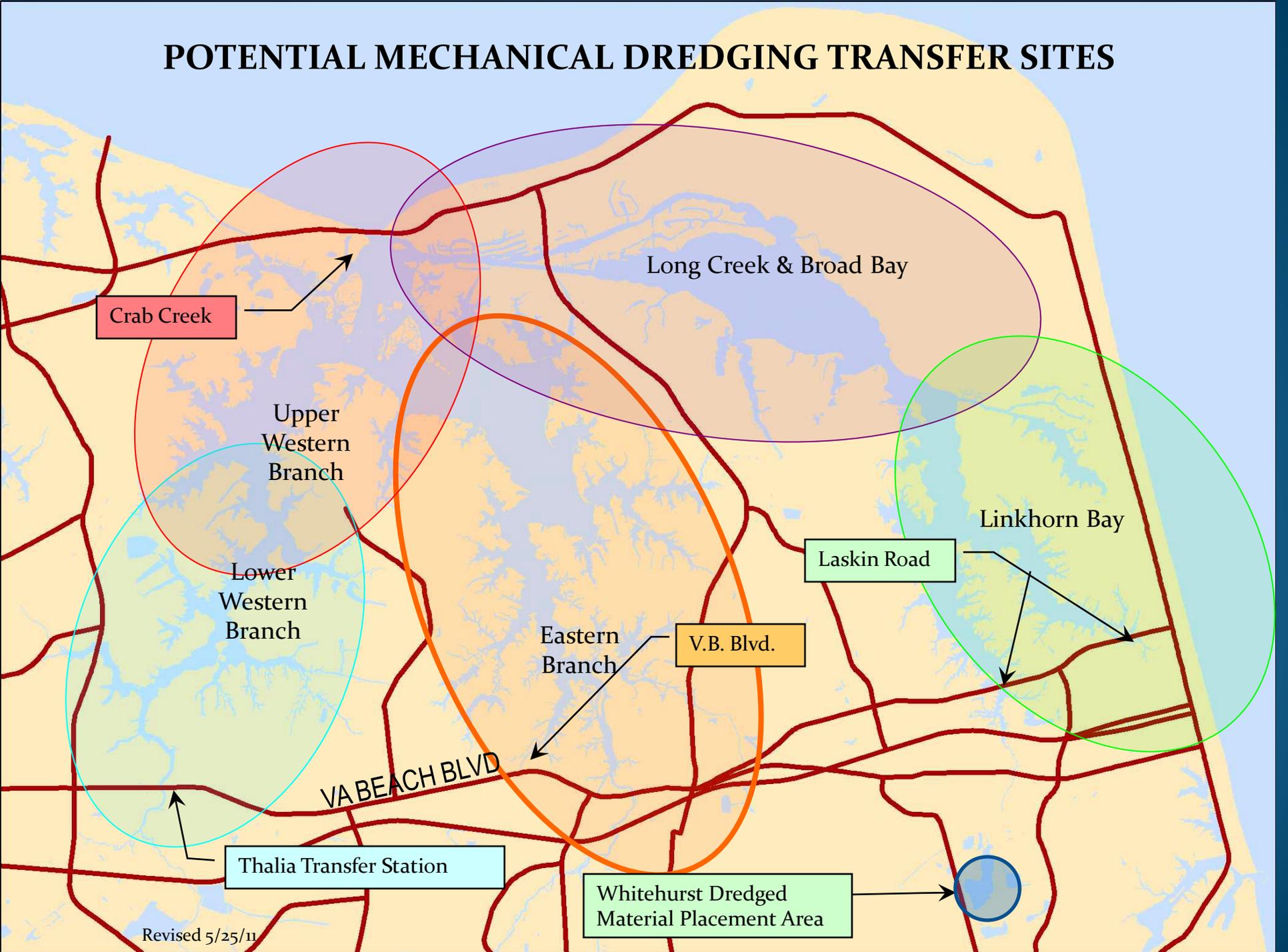
- ✓ **Old Donation** SSD established September 13, 2011
- ✓ **Bayville Creek** SSD established March 27, 2012
- X **Robin Hood Forest** failed to reach 80%
- ❖ **Chesapeake Colony, Thoroughgood, Shadowlawn, Gills Cove & Harbor Point** in willingness phase
 - Buchanan Creek, Thoroughgood and Middle Plantation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

Neighborhood Channel Dredging

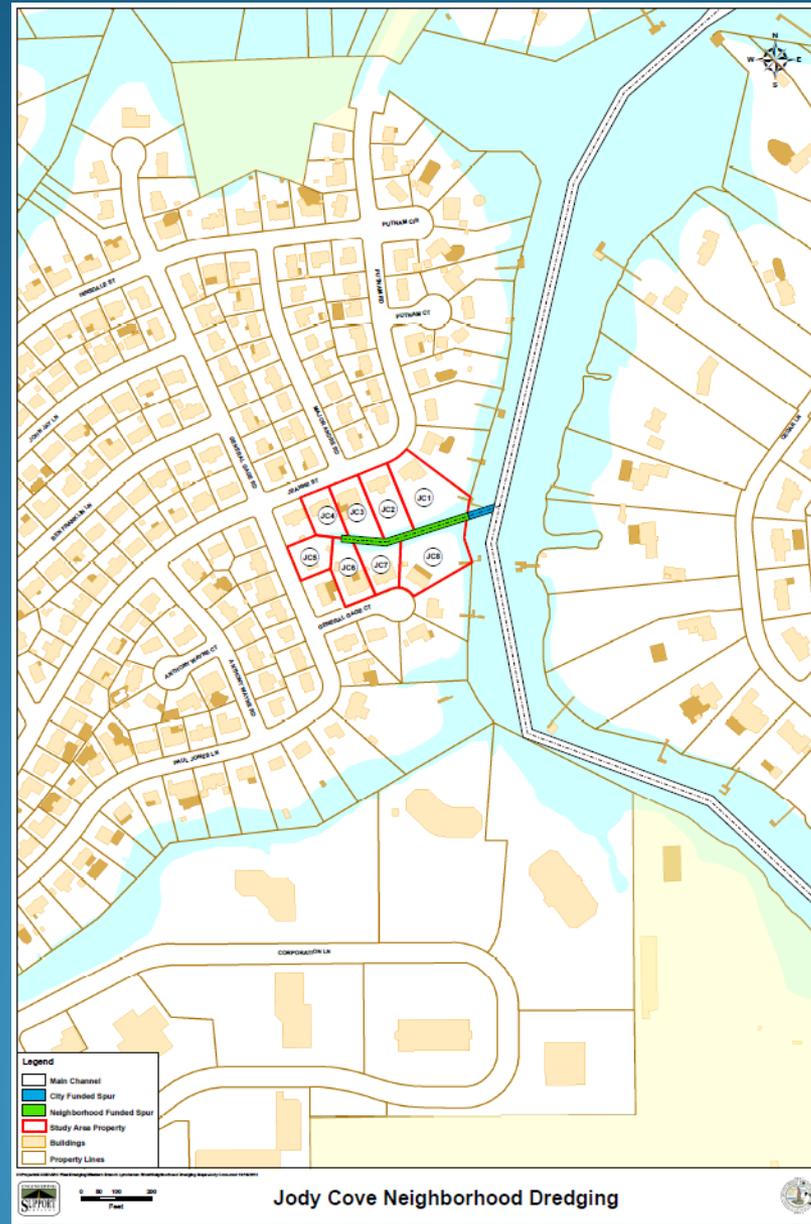
NEIGHBORHOODS IN PLAY



POTENTIAL MECHANICAL DREDGING TRANSFER SITES



Neighborhood Channel Dredging



Neighborhood Channel Dredging

Dredging Cycles

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



Neighborhood Channel Dredging

1st Dredging Cost Estimate

- City Portion: \$12,990
- SSD Portion: \$45,450
- Individual Channels: could average up to \$2,000 each
- 1st Dredging engineering and construction contract could be up to approximately \$75,000
- 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	217 CY	\$12,990
2	152 CY	\$8,067
3	<u>108 CY</u>	<u>\$8,108</u>
	477 CY	\$29,165

(includes 5% cost escalation)

(\$31.50, \$44.32, \$62.37)

Neighborhood Channel Dredging

Life Cycle Estimated Costs SSD Portion

<u>Cycle</u>	<u>Volume</u>	<u>Cost</u>
1	1,139 CY	\$45,450
2	797 CY	\$42,403
3	<u>569 CY</u>	<u>\$42,618</u>
	2,506 CY	\$130,471

(includes 5% cost escalation)

(\$31.50, \$44.32, \$62.37)

Neighborhood Channel Dredging

Jody Cove

Appropriations Schedule

<u>Cycle</u>	<u>Year</u>	<u>Design</u>	<u>Construction</u>
1	1	\$11,800	
	2		\$47,200
2	8	\$10,200	
	9		\$40,800
3	15	\$10,200	
	16		\$40,800
Total		\$32,200	\$128,800

City Spur and Neighborhood SSD Channels = \$161,000

Neighborhood Channel Dredging

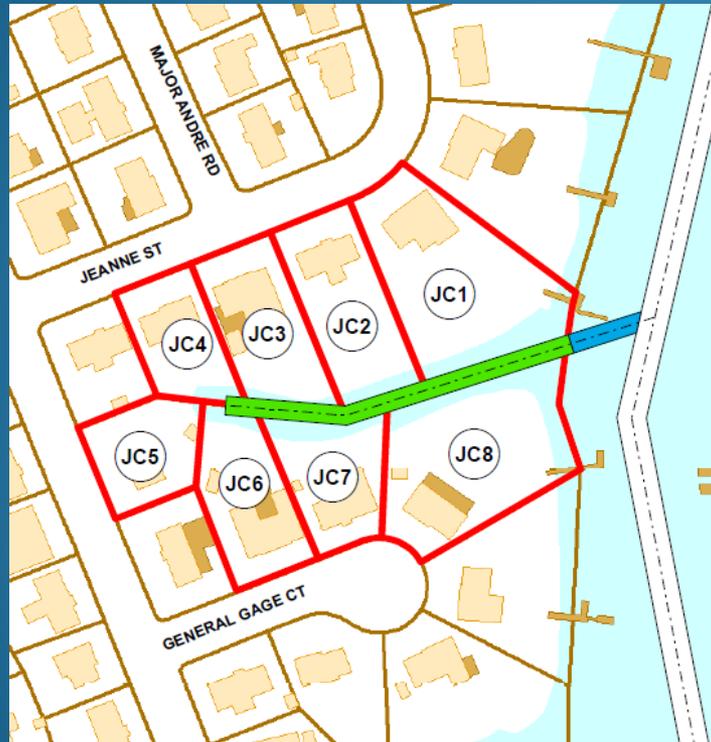
Jody Cove SSD Data

- Total SSD assessed value: \$2,564,300
- 8 properties in the neighborhood district
- Each penny surcharge raises \$256/year
- SSD rate covers costs for 16 year life: **31.8¢/\$100** of the
FY12 assessed value
- Average \$320,538 property contributes \$1,019/year
- Review rate at end of every 4th year

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Real Estate

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



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Risks

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

Neighborhood Channel Dredging

Next Steps for Jody Cove

- Refine maps and participants
- Assess community's willingness to continue
- Brief City Council on project
- Determine if 80% willing, formal petition
- Public hearing
- City Ordinance establishing SSD
- Begin design and permitting