

FY14 RSM-EWN IPR

Norfolk District, James River Federal Navigation Channel, Lower Reaches, Doug Stamper

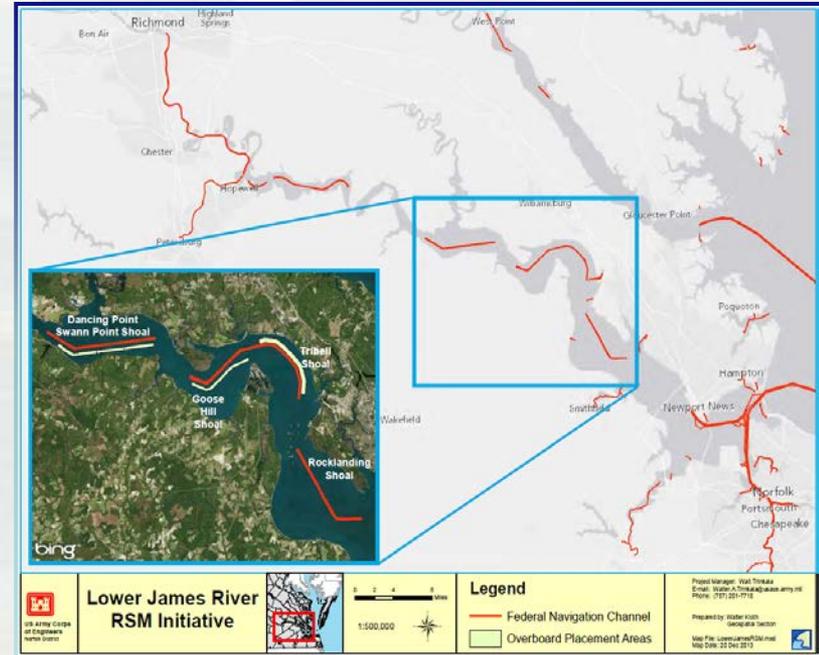
BLUF: James River Partnership says increased shoaling rates are a major concern in the near term maintenance of the channel. Can a regional evaluation of sediment movement reduce the uncertainty in estimation of future dredging quantities?

Description/Challenges

- Deep draft channel serving Port of Richmond
- Upper/Middle/Lower Reaches
- Annually Maintenance Dredging
- Partnership perceived increased shoaling
- VA wants dredging area sediment flows evaluated
- EWN steered James River PM to RSM

Objectives

- Evaluate recent 12-year historical shoaling rates
- Compare recent dredging history & 2002 predictions for 2002 to 2014 period
- Particle tracking modeling
 - Update and enhance 2002 report
 - Consider tributary channel inflows, sediment placed in overboard sites
 - Near/far field, is placement upstream settling into downstream shoals?



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Approach

(including Tools/Models/Data Used)

- eGIS
- SBAS
- Particle Tracking Model (PTM)
- Navigation Project Evaluation Dancing Point/Swann Point Channel, 2002
- 2002 to 2014 James River Hydrographic Survey Data

Deliverables

- SBAS Files
- GIS Mapping and Files posted to RSM portal
- Conceptual Sediment Budget
- Workshop IPR Presentation
- Technical Note
- Modeling Results to VMRC

JAMES RIVER, VIRGINIA
FEDERAL NAVIGATION PROJECT

Navigation Project Evaluation

Dancing Point/Swann Point
Channel

by: James W. Holton, Jr., John B. Walsh, &
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Final Report
July 2002



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Accomplishments/Benefits/Lessons Learned/Action

Real Benefit: The “Human Software”

- RSM helping **UNIFY** James River PDT
 - broadening big-picture perspective & possibilities
 - RSM enables what was not previously possible
 - Oh, we can do that??
 - System boundary, IDIQ task order - **Juggling**
- **LOCAL SPONSOR**
 - with respect to VMRC Condition
 - Perceived problem, not real?
- **UGH!!**...Post-audit Contracting corrective actions
 - Acquisition Strategy driving decisions
 - We have to go through all that AGAIN?!?
- **INTERNALLY** (CENAO) it's taking a while for RSM to “catch and get ‘swing’ in the boat”
 - Mathews (3 years) – **PROACTIVE** sponsor, **IDENTIFYING** the need
 - James River (1 year) – **LESS INVOLVED** sponsor, **KNOWN** need
 - Now the CENAO team is getting it....
 - Coordination, doing those things you couldn't do otherwise –
 - RSM provides a way to accomplish it



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District PDT Members

Doug Stamper, RSM POC

Walter Kloth, GIS

Alicia Farrow, H&H Section

Walt Trinkala, James River PM

Dave Linn, Survey Manager

Robert Pruhs, Environmental Engineer

Nan Sothcott, Program Analyst

Vertical Team

Stakeholders and Partners

James River Partnership

Virginia Port Authority

Port of Richmond

Virginia Marine Resource Commission

CENAO, CENAD, ERDC

Leveraging/Collaborative Opportunities

James River O&M, General

Superstorm SANDY

MARAD

RSM

Corps Software Development

Investment in Enterprise GIS