

Tributary Selection for Oyster Restoration in Virginia

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VIRGINIA TRIBUTARIES FOR RESTORATION

1. Lynnhaven
2. Lafayette
3. Piankatank
4. ?? Great Wicomico
5. ??

Suggestion/Recommendation: USACE has already completed significant amount of restoration work in the Great Wicomico.....should this be #4?

Result: Great Wicomico was added to the list.



**SALINITY-
BASED
APPROACH**

STEP 1: Develop over-arching strategies to address predominant stressors

Define Salinity
Zones

Develop Disease
Strategy

Develop Reproduction
Strategy

**SITE
SELECTION**

STEP 2

Identify Distinct Bay
Sub-Segments (DSS) for
Evaluation

STEP 3

Identify
Restoration
Scale

STEP 4

**SITE
EVALUATION
(A layered
approach)**

Layer 1-
Absolute
Criteria

Layer 2-
Suitable Area to
Achieve Scale

Layer 3 –
Hydrodynamics &
Larval Retention

**WORK
FOLLOWING
NORMP**

**Tier 1 Tributaries
(Pass all Layers)**

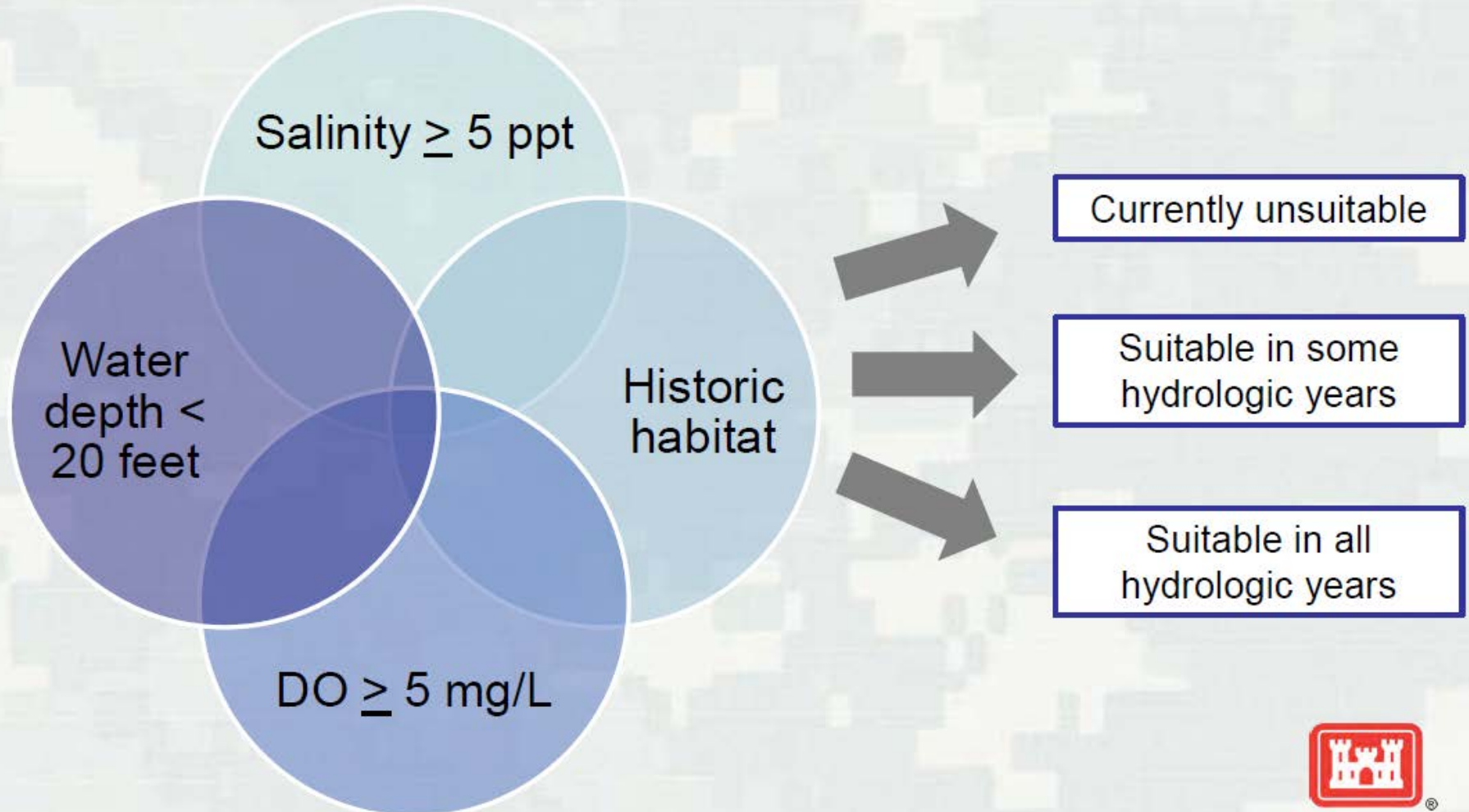
**Develop Individual
Tributary Plans**

**Layer 4-
Further Apply Qualitative Data**

**Tier 2 Tributaries
(Set Aside for Future Resolution)**

Step 5: Tributary Evaluation and Prioritization

Absolute Criteria



Suitability Analysis Results

- Salinity
 - Surface
 - Bottom
- Bottom DO
- Water Depth

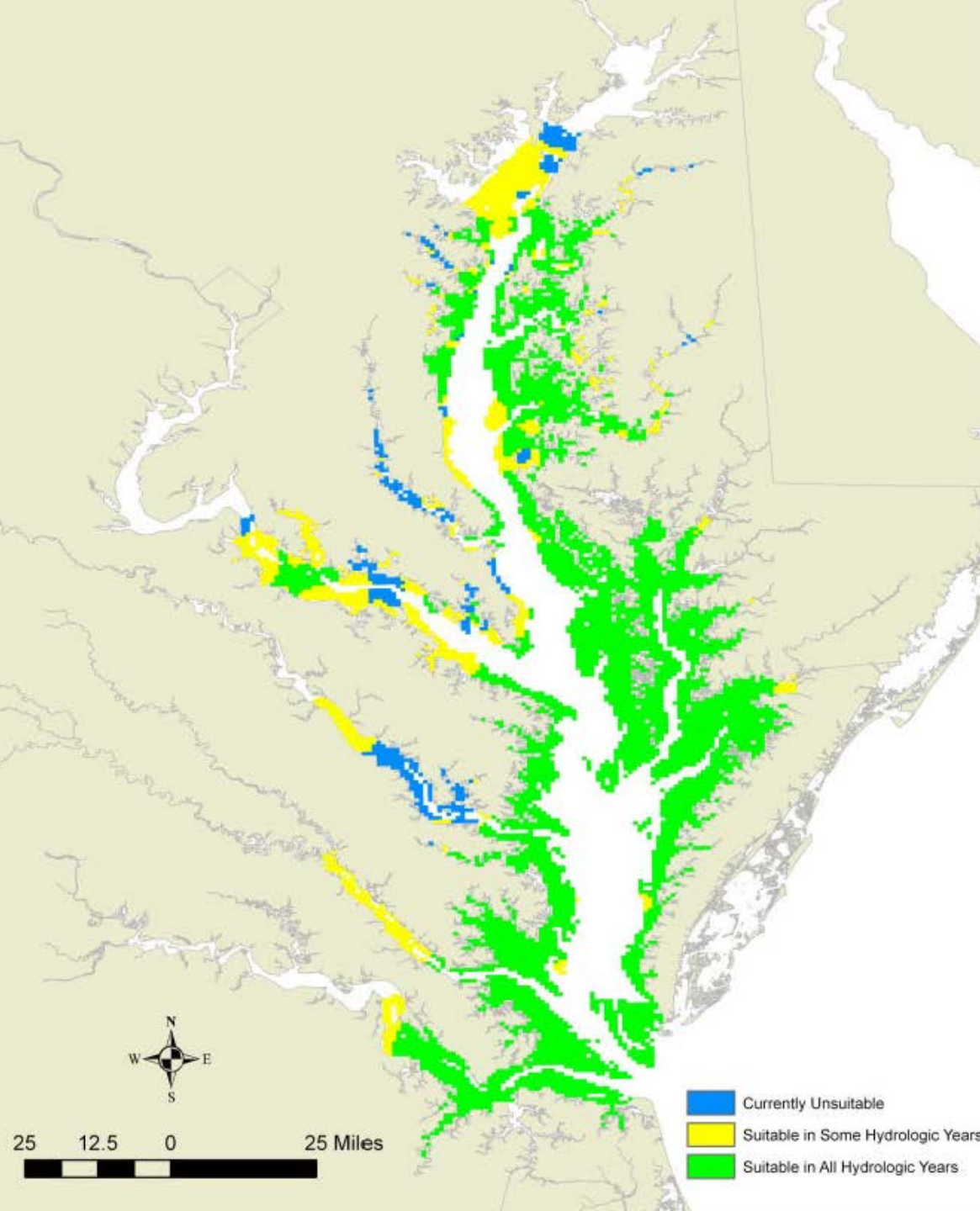
Total Suitable Area

MD= 513,000 acres

VA= 580,000 acres



BUILDING STRONG®



Suitability Analysis Results within Yates/Baylor Boundaries

- Salinity
 - Surface
 - Bottom
- Bottom DO
- Water Depth
- Yates and Baylor Grounds

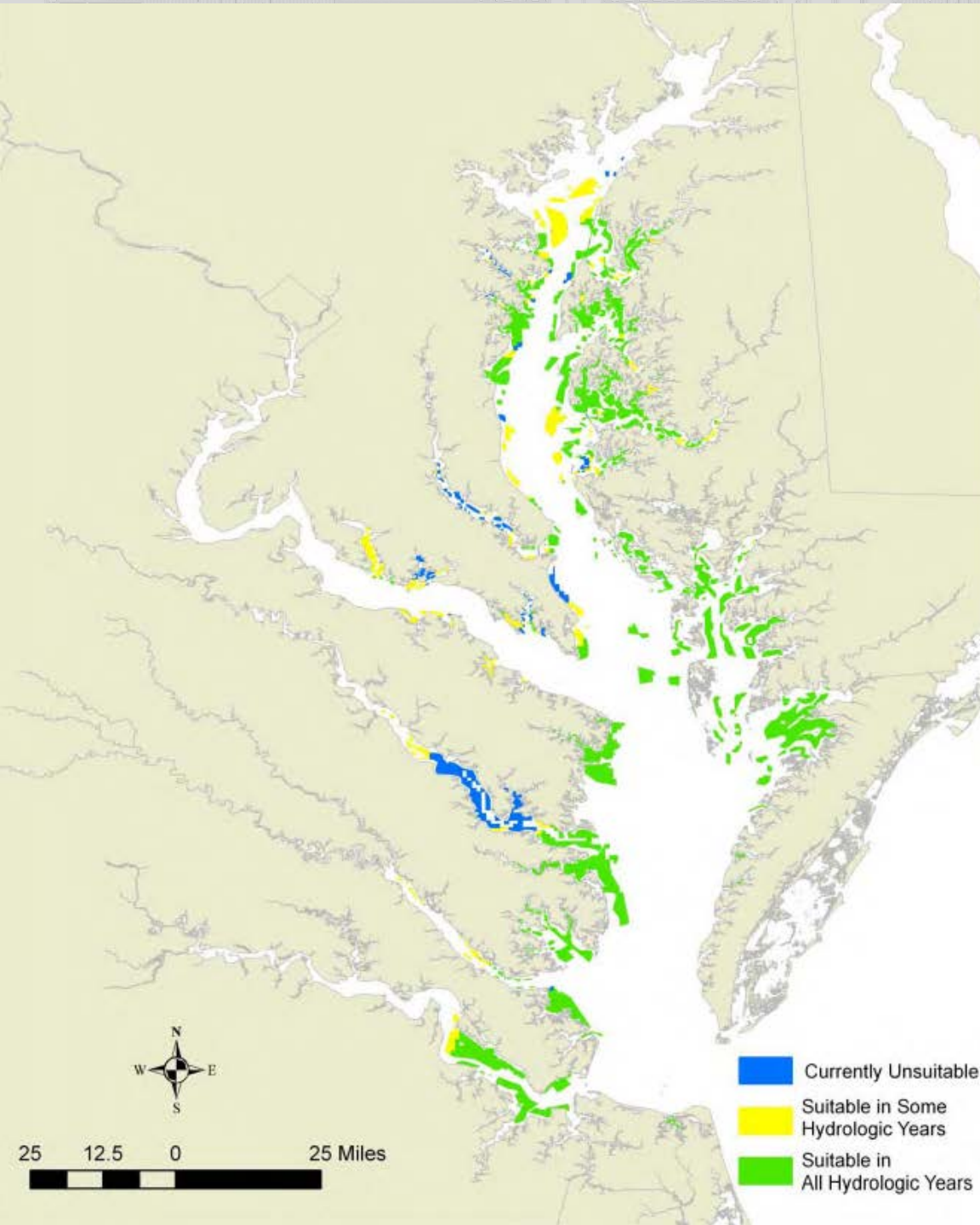
Total Suitable Area

MD= 132,000 acres

VA= 121,000 acres



BUILDING STRONG®



- Currently Unsuitable
- Suitable in Some Hydrologic Years
- Suitable in All Hydrologic Years



25 12.5 0 25 Miles

Tier 1

Tier 2

Maryland

Severn R (S)

South (S)

Chester R (S)

Eastern Bay (S)

Choptank R (S)

Harris Creek (S)

Broad Creek

Little Choptank (S)

St. Mary's R (S)

Tangier Sound

(includes Nanticoke R (S))

Manokin R (S)

Magothy R (S)

Rhode R

West R

Corsica R (S)

Honga R

Potomac R

Fishing Bay

Monie Bay

Big Annemessex R

Little Annemessex R

Patuxent R (S)

All MD Mainstem

Segments (S)

*Virginia*Rappahannock R
(lower, middle)

Great Wicomico R (S)

Piankatank R

Mobjack Bay

York R

Pocomoke/Tangier
Sound

James R

Lynnhaven R

VA Mainstem

Little Wicomico R

Cockrell Creek

Corrotoman R

Severn R

Poquoson R

Back R

Onancock Creek

Nassawaddox Creek

Hungars Creek

Cherrystone Inlet

Old Plantation Creek

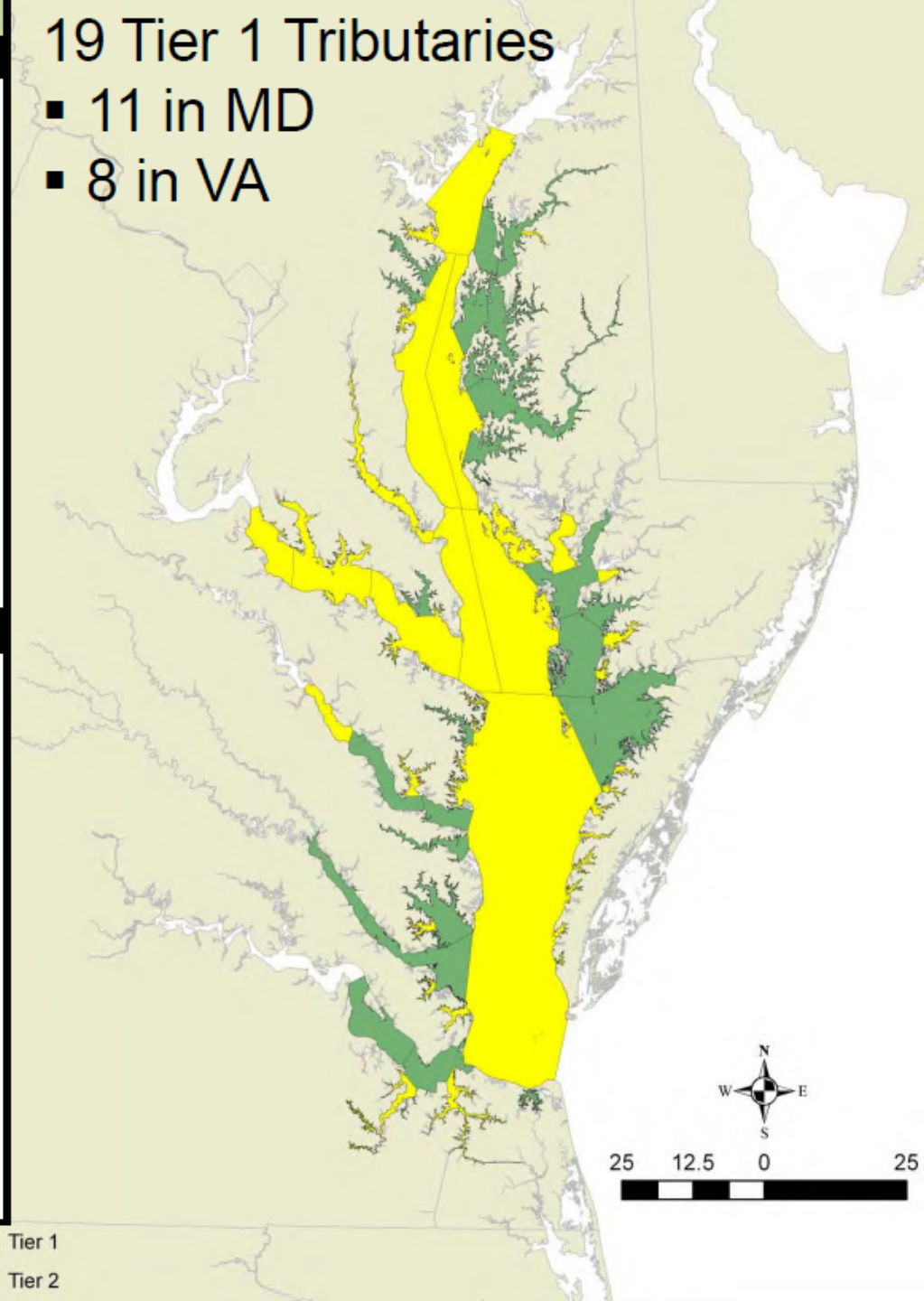
Elizabeth R

Nansemond R

19 Tier 1 Tributaries

■ 11 in MD

■ 8 in VA



Tier 1

Tier 2



25 12.5 0 25

Tier 1 Tributaries/Areas	Restoration Target (Acres)
Great Wicomico River	100 - 400
Lower Rappahannock River	1,300 - 2,600
Piankatank River	700 - 1,300
Mobjack Bay	800 - 1,700
Lower York River	1,100 - 2,100
Pomocoke/Tangier Sound	3,000 - 5,900
Lower James River	900 - 1,800
Upper James River	2,000 - 3,900
Elizabeth River	200 - 500
Lafayette (sub-trib of Elizabeth)	80
Lynnhaven River	90 - 200



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DISCUSSION AMONG VIRGINIA INTERAGENCY TEAM

Criteria discussed for selection of tributary #5:

1. Tier 1 – optimum for restoration
2. Interest in restoration by organizations
3. Public and stakeholder support
4. Group consensus



DISCUSSION AMONG VIRGINIA INTERAGENCY TEAM

Tributaries considered:

1. Rappahannock

- Pros: existing rotational harvest
- Cons: huge tributary, difficult to reach restoration status

2. Elizabeth River (apart from Lafayette)

- Pros: Elizabeth River Project interested in working there
- Cons: VMRC not interested in investment

3. James River

- Pros: VMRC interested in working there; develop new rotational harvest
- Cons: Huge tributary, difficult to reach restoration status

3. Lower York River

- Pros: VMRC interested in working there
- Pros: Good location; adjacent to VIMS and local interest
- Cons: Large area



FINAL RECOMMENDATION FROM VA INTERAGENCY TEAM

1. Lynnhaven
2. Lafayette
3. Piankatank
4. Great Wicomico
5. Lower York River

#6/#11/Alternate: Elizabeth River

Discussionimplications of listing



QUESTIONS P P



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