

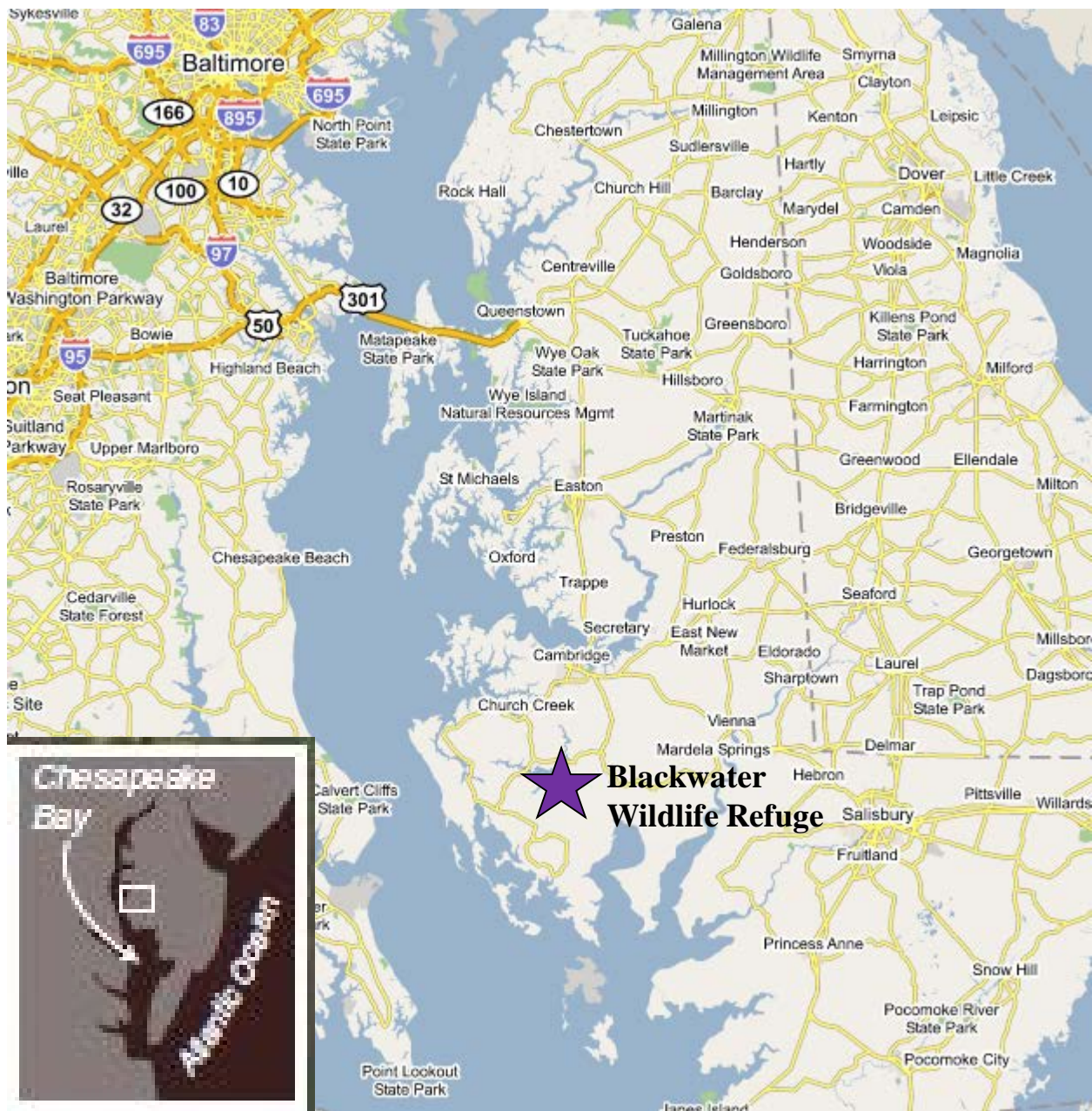
Blackwater Wildlife Refuge on Maryland's Eastern Shore

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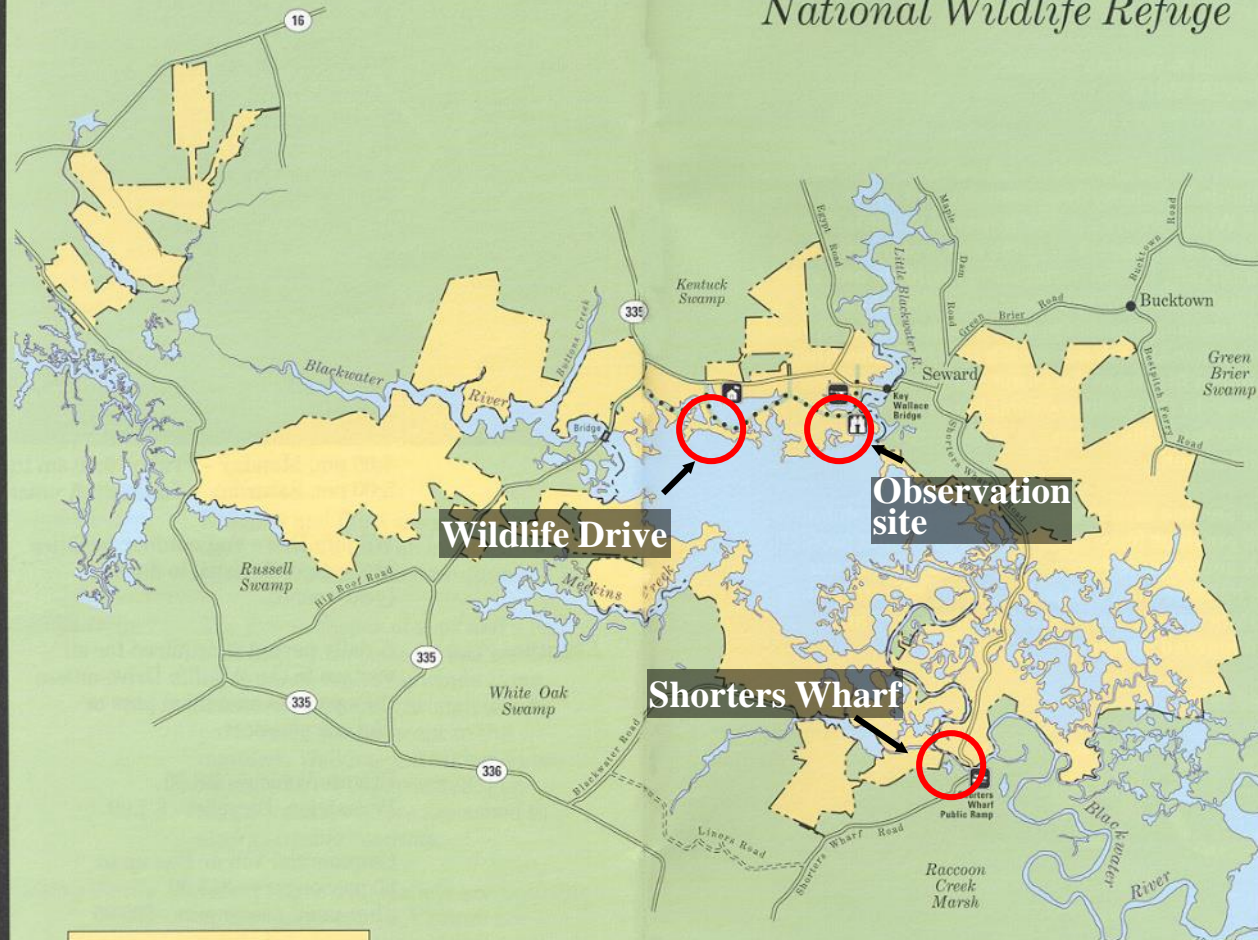
APRIL 11, 2017





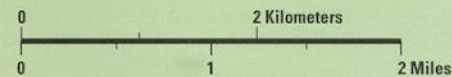
3 Sites Created

Blackwater National Wildlife Refuge



Legend

- Refuge Boundary
- Refuge Headquarters
- Visitor Center
- Wildlife Drive
- Public Boat Ramp
- Observation Site



Blackwater Wildlife Refuge (2003)

- TLP at Shorter's Warf, Observation Tower, and along Wildlife Drive
- Each site was 1-2 acres in size; placement thickness 3-6"
- Seeds thrown in with dredged material while being placed and planted post placement
- Observation Tower & Wildlife Drive experienced abundant growth, no die backs
- Shorter's Warf experienced a 4-5 year die back then abundant growth

Vegetation Establishment

- Planting Schemes
- Planting Spacing
- Row Gaps
- Hydro-Seeding
- No Planting



Observation Tower (2003)



Observation Tower (2003 and 2005)

Observation Tower August 2014



Wildlife Drive(2003)



Wildlife Drive (2003 and 2004)





Wildlife Drive August 2014



Shorter's Warf August 2014



NFWF Grant Placement (2016)

- Approximately 26,000 cy of dredged material placed at Shorter's Warf
 - Placement across the channel from 2003 demonstration
- 40 acres in size
- 4 elevations created to determine best approach for future work
- Goals: migratory bird species habitat, reduce marsh fragmentation

Blackwater Wildlife Refuge (2016)



During placement (Dec. 2016)

Possible Future Uses

- Ellis Bay (Wicomico River)
- Swan Island (Smith Island channels)
- Barren Island (Honga River)



Questions?
