Large-Scale Oyster Restoration in Maryland

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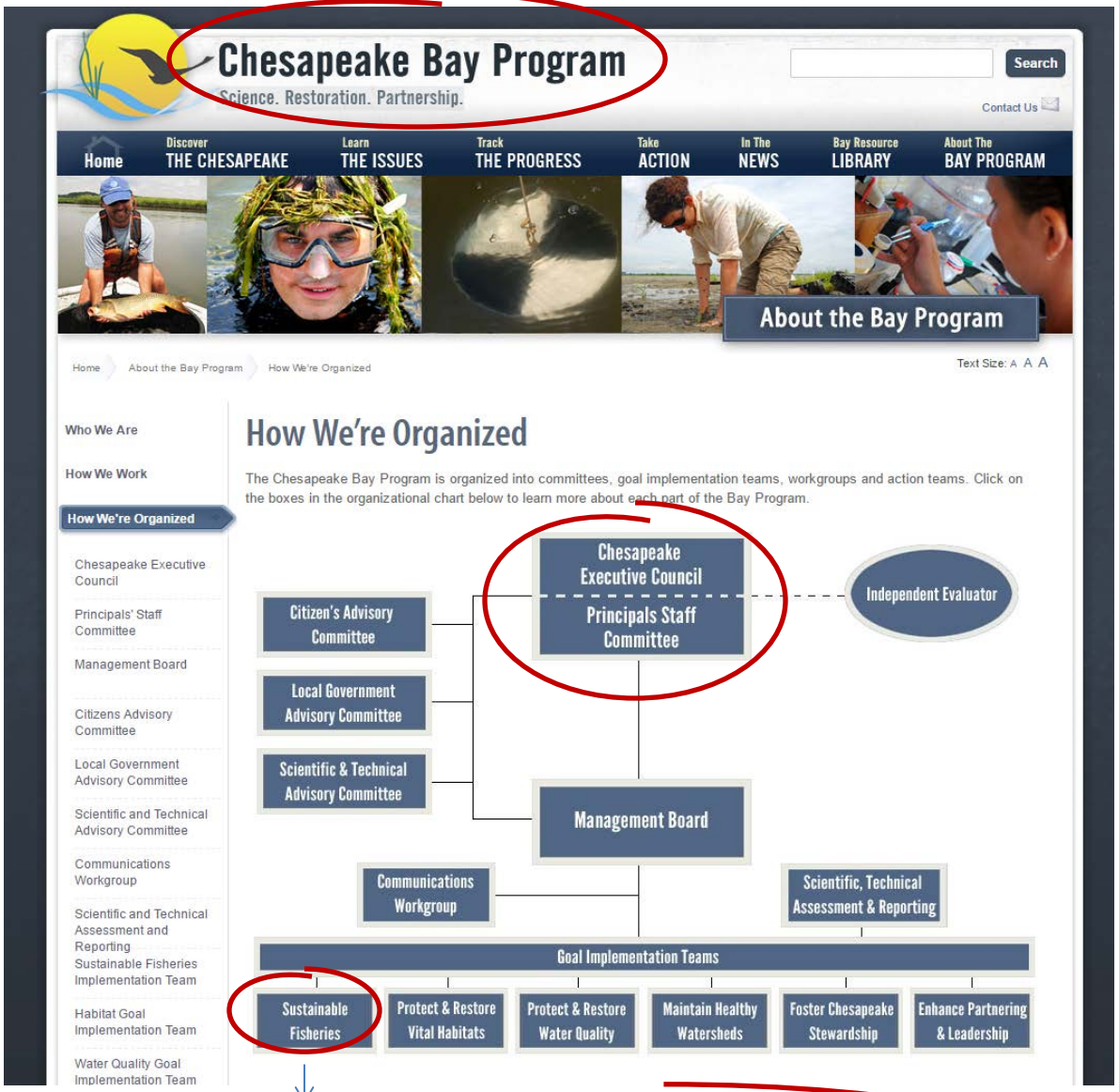
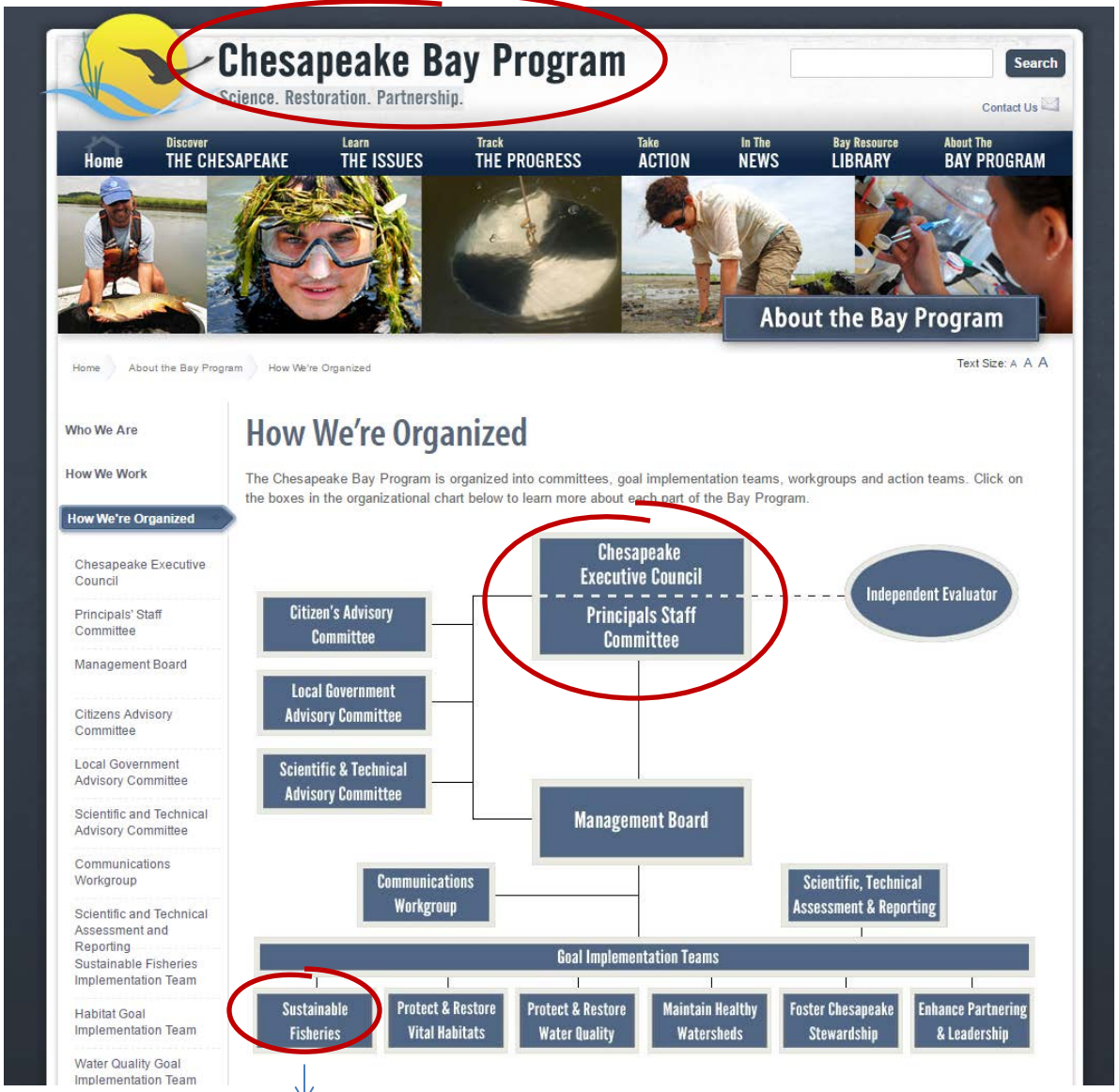


Chesapeake Bay Agreement Oyster Goal:
("restore oyster populations in 10 tributaries by 2025")



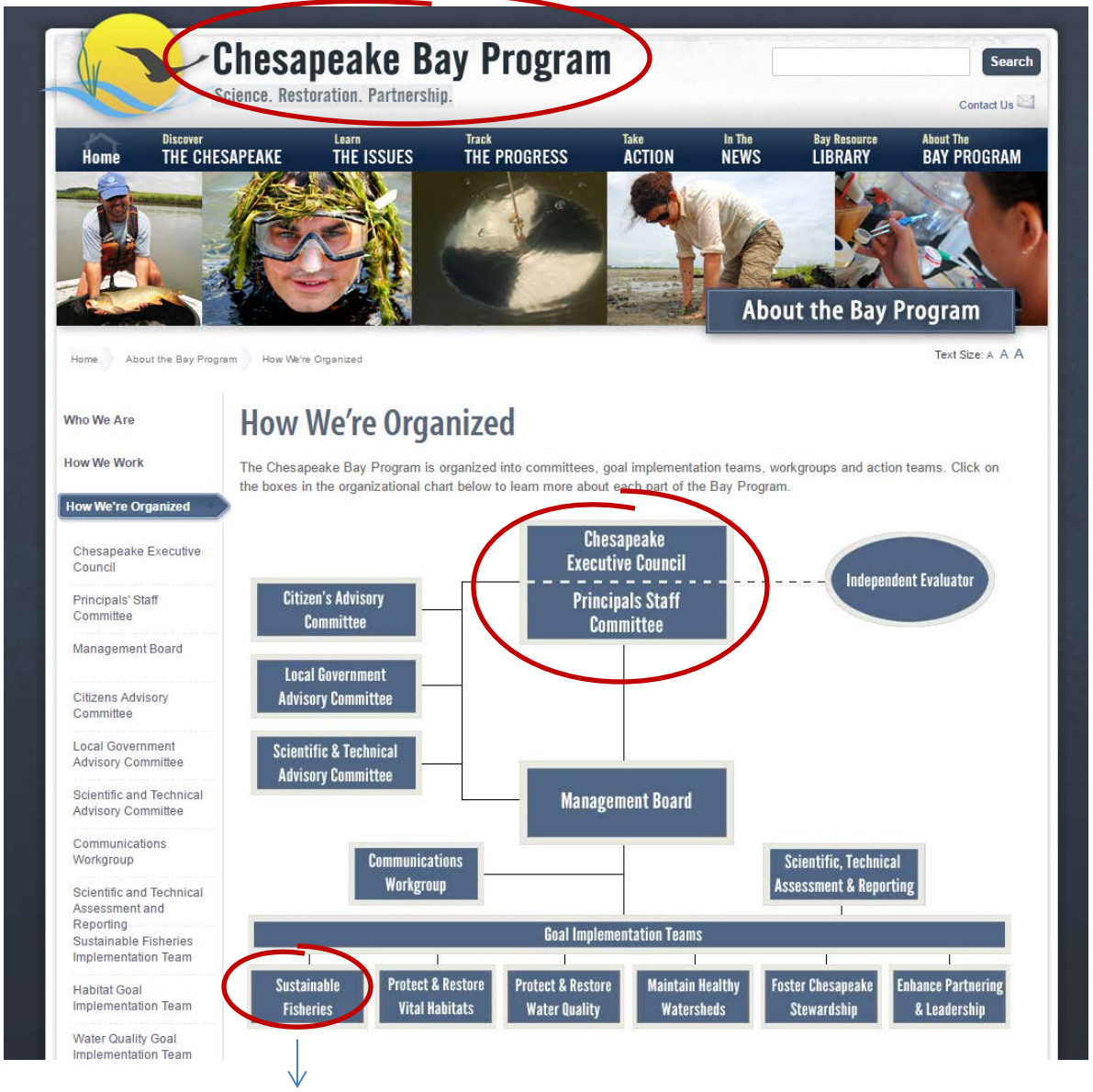
Chesapeake Bay Oyster Metrics Team (2011)

NOAA · MARYLAND DEPARTMENT OF NATURAL RESOURCES · VIRGINIA MARINE RESOURCES COMMISSION · PRFC Potomac River Fisheries Commission · VIMS Virginia Institute of Marine Science, William & Mary · University of Maryland Center for Environmental Science · Oyster Recovery Partnership

Chesapeake Bay Oyster Metrics Team

And 17 consulting scientists

- Developed Bay-wide, science-based consensus definition of:
  - a '<u>restored reef</u>'
    - Success criteria to be met 6 year post restoration:
      - Oyster density
      - Oyster biomass
      - Presence of multiple year classes
      - Shell budget
      - Reef footprint
      - Reef height
  - a '<u>restored tributary</u>' *(How many restored reefs do you need for the tributary to be considered 'restored?)*
- On-the-ground restoration could then be planned & built to meet these metrics



Maryland Oyster Restoration Interagency Workgroup

NOAA

MARYLAND DEPARTMENT OF NATURAL RESOURCES

OYSTER RECOVERY PARTNERSHIP | ORP

Maryland Oyster Restoration Interagency Workgroup

Coordinates efforts in Maryland among state and federal partners to achieve Chesapeake Bay Agreement oyster goal
("restore oyster populations in 10 tributaries by 2025")

- Collects input from consulting scientists and the public, and incorporates it into decision making
  - Ex: Held public open houses/ virtual open houses
  - Ex: participated in multiple trips and meetings with watermen community on Tred Avon river;
  - Ex: Held meetings with consulting scientists; asked them to review/ edit tributary plans
  - Ex: Presentations to community groups and organizations as requested

- Develops restoration plans for each tributary
- Coordinates and tracks construction and planting efforts
- Coordinates and tracks monitoring against pre-established success criteria (Chesapeake Bay Oyster Metrics)
- Stephanie Westby (NOAA) is chair

Progress on Large-Scale Oyster Restoration in Maryland

Harris Creek

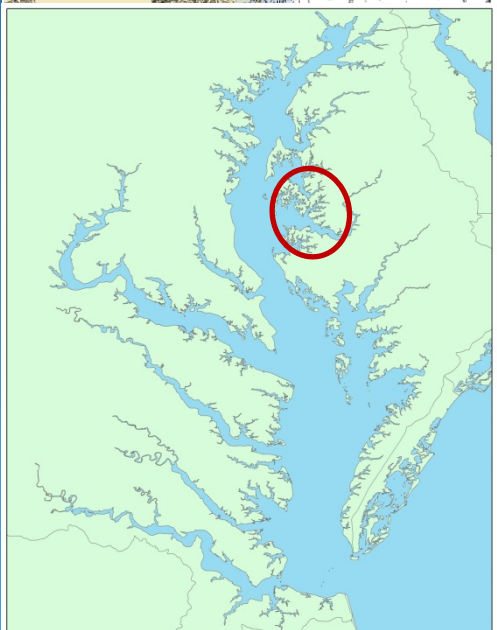
- 350 acres;
- Initial reef construction and seeding completed Sept 2015

Tred Avon River

- 147 acres targeted (*per DRAFT plan*);
- As of end 2015: 2.5 acres complete/ 16 acres partly complete *(reefs constructed but not yet seeded, or reefs partly seeded)*
- Plantings ongoing in summer 2016

Little Choptank River

- 440 acres targeted;
- As of end 2015: 27 acres complete/ 125 acres partly complete *(reefs constructed but not yet seeded, or reefs partly seeded)*
- Plantings ongoing in summer 2016



Choptank River

Harris Creek: So how's it doing?

- First 100 acres (planted in 2012) were monitored in fall 2015 to determine whether they meet the Oyster Metrics success criteria (ex: oyster density/biomass; presence of multiple year classes). Remaining acres to be monitored as they age to three years.
  - Fact sheet, http://www.chesapeakebay.noaa.gov/habitats-hot-topics/preliminary-data-show-harris-creek-oyster-restoration-project-doing-well
  - Full report expected next week
    - 100% of reefs treated currently meet oyster density and biomass *threshold* success criteria (15+ oysters per m^2 over 30% of reef area).
    - 50% of reefs treated currently meet oyster density and *target* success criteria (50+ oysters per m^2 over 30% of reef area).
    - Same trend holds true for oyster biomass (100% of reefs meet the *threshold*; 50% of reefs meet the higher *target* success criteria.
    - 100% of reef have multiple year classes of oysters present (another success criteria)

Little Choptank:
So how's it doing?

Photo:
Oyster Recovery Partnership


Photo:
Oyster Recovery Partnership


Photo:
Oyster Recovery Partnership


Photo:
Oyster Recovery Partnership

Natural Set on Florida Shell

Photo:
Oyster Recovery Partnership

Natural Set on Stone

Photo:
Oyster Recovery Partnership

Jay Fleming video

Video:
Oyster Recovery Partnership