Session: X Marks the Spot – A Treasure Trove of Stormwater Solutions

MACO Summer Conference, August 16, 2018

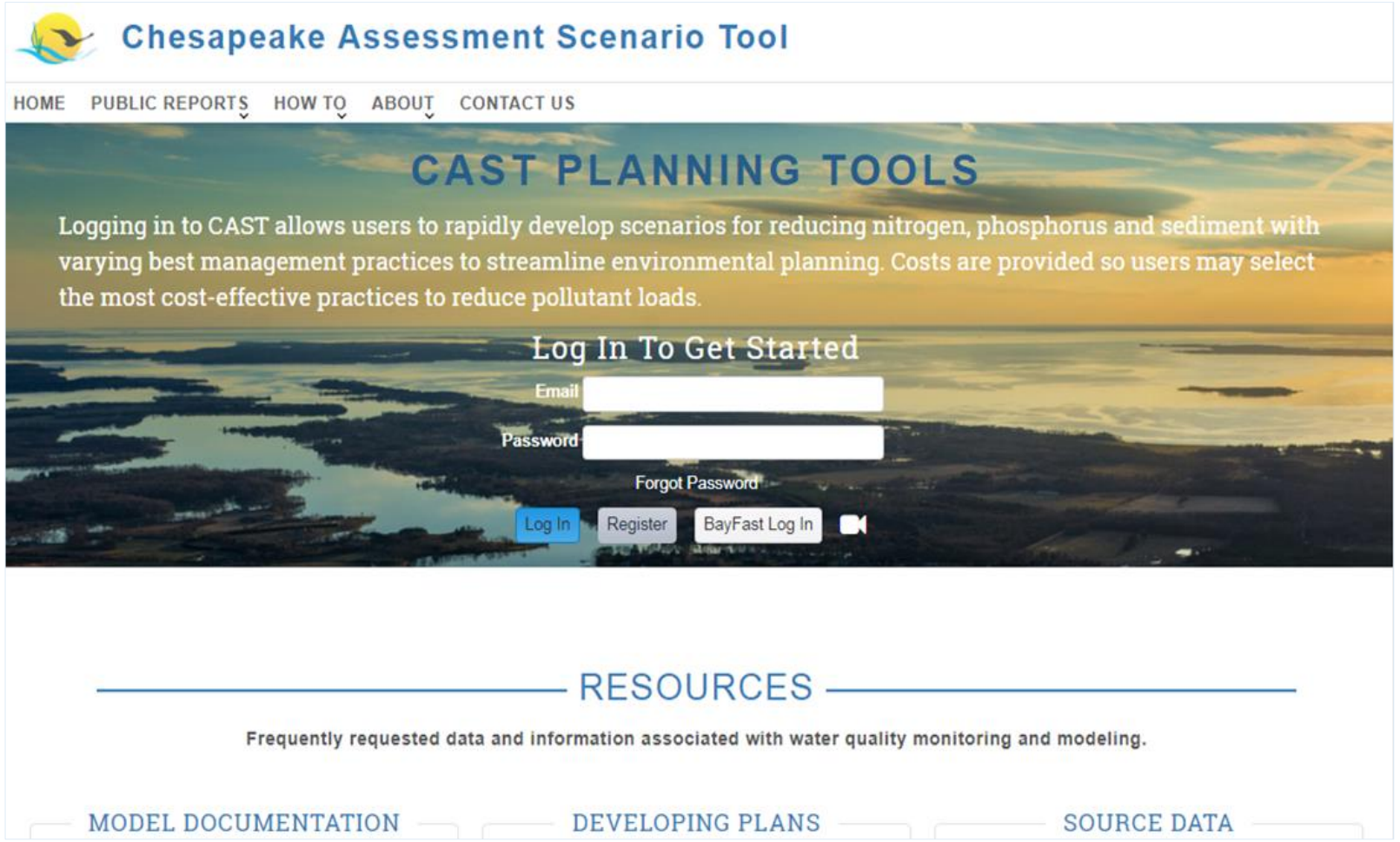
Using CAST for Implementation Planning and Decision Making

Devereux Consulting

Data ✦ Research ✦ Analysis ✦ Strategy

Stormwater Treatment Goals

- Achieve your MS4 permit obligations
- Meet the Chesapeake Bay TMDL requirements
- Determine what actions achieve local TMDLs
- Learn what is in the Bay Model for your community



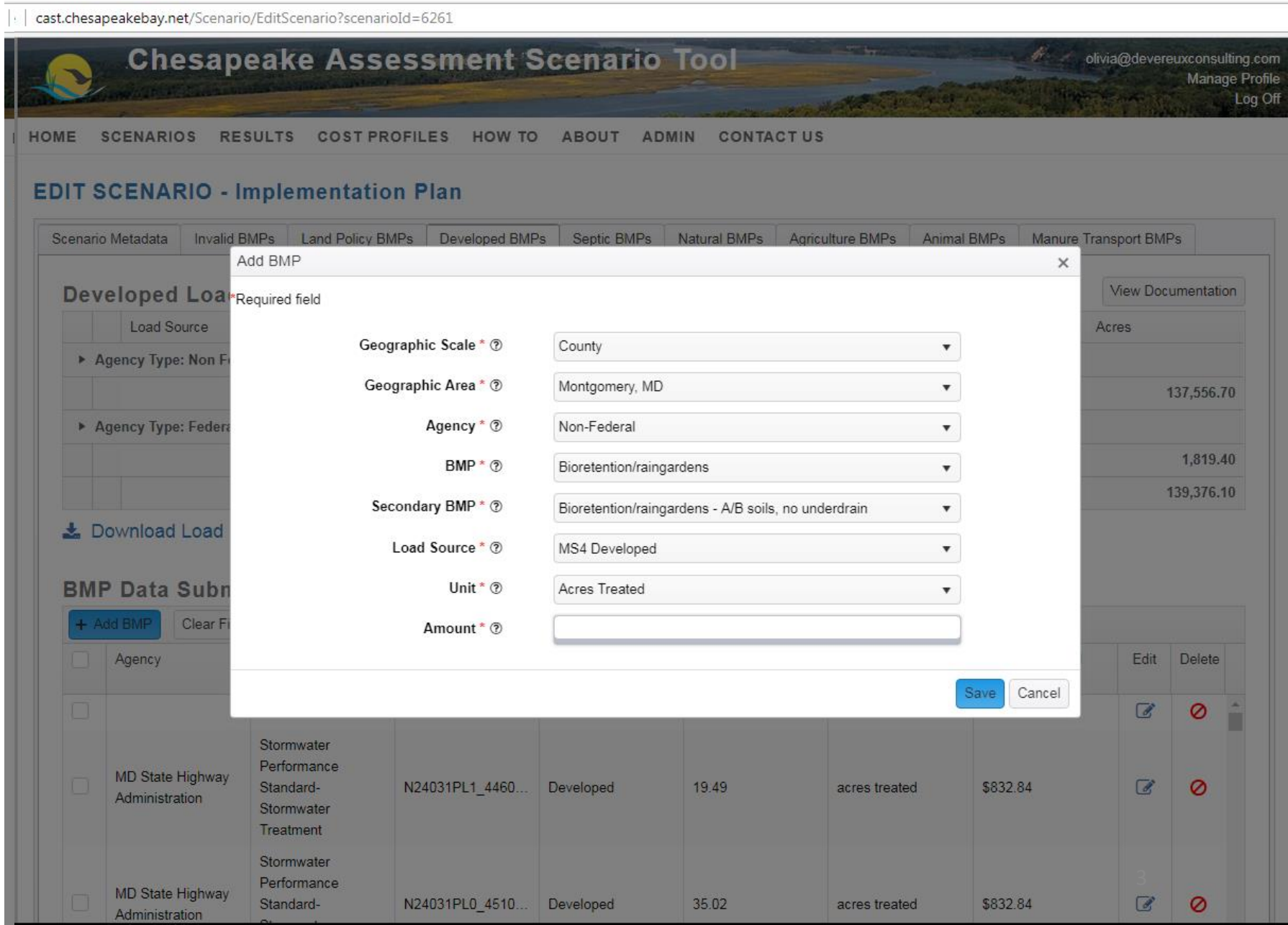
Use CAST to help document meeting permit requirements

Implementation Strategy

- Develop a plan that meets water quality permit requirements

Watershed Restoration

- Retrofit 20% of impervious surfaces not currently controlled to the maximum extent practicable (MEP)



Permitted vs. “Voluntary” BMPs

BMPs can be assigned to a MS4 area. The different options are:

- MS4 Buildings and Other
- MS4 Roads
- MS4 Tree Canopy over Impervious
- MS4 Tree Canopy over Turf Grass
- MS4 Turf Grass

- CSS Buildings and Other
- CSS Roads
- CSS Tree Canopy over Impervious
- CSS Tree Canopy over Turf Grass
- CSS Turf Grass

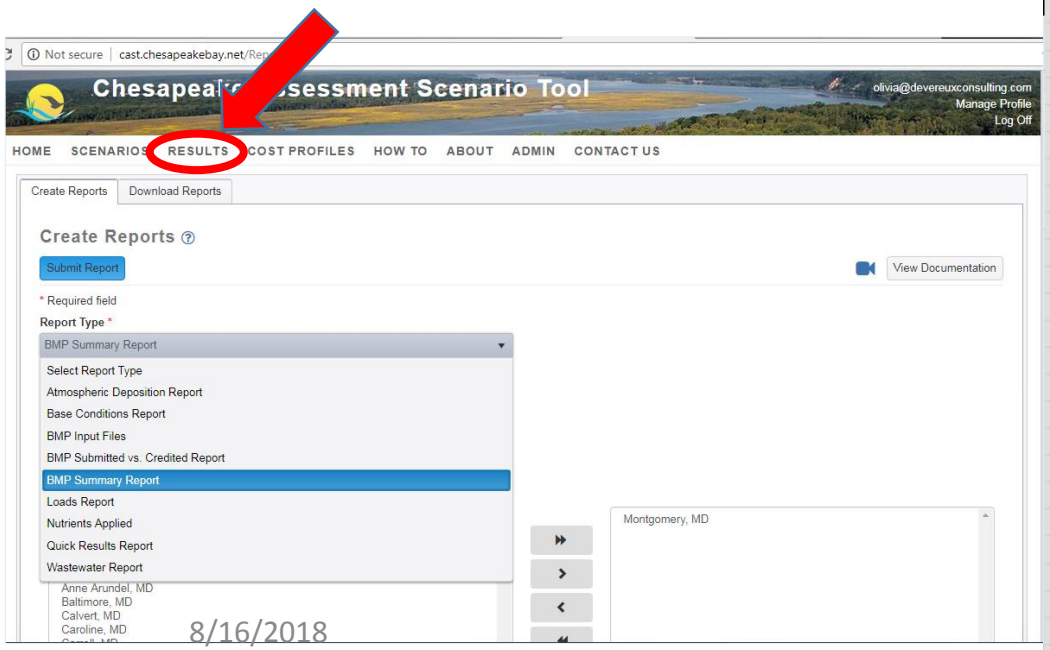
- Non-Regulated Buildings and Other
- Non-Regulated Roads
- Non-Regulated Tree Canopy over Impervious
- Non-Regulated Tree Canopy over Turf Grass
- Non-Regulated Turf Grass

- CSS Construction
- Regulated Construction

Use CAST output to help document meeting permit requirements

Report and Monitor

- Submit annual report on BMP implementation progress



FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW ACROBAT

A1 | Urban/Suburban Practices

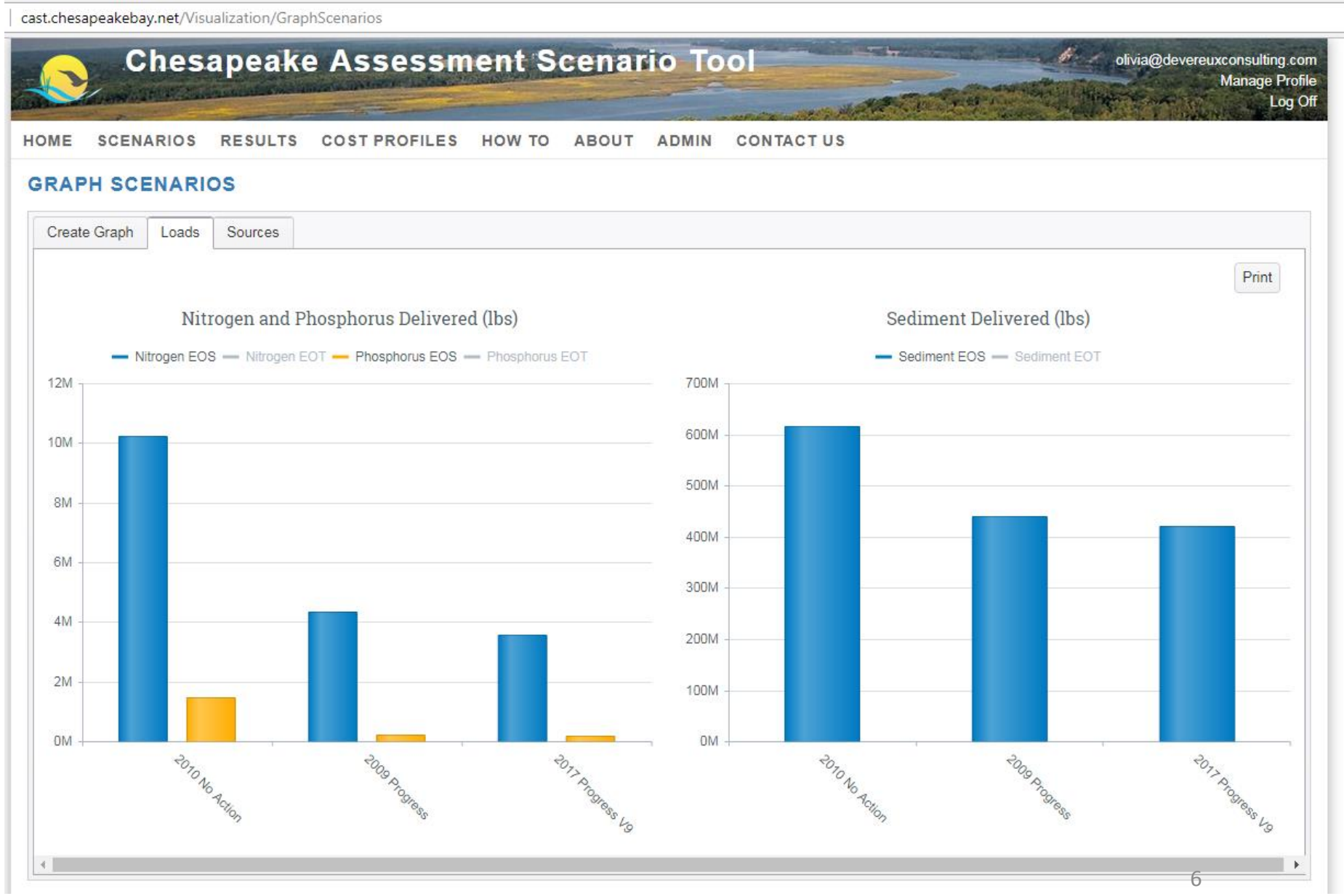
	A	B	C	D
1	*Urban/Suburban Practices*	**Unit**	2017 Progress V9	2017 Progress V9
2				
3	Runoff Reduction Performance Standard	acres	2312.30	0.1%
4	Storm Water Treatment Performance Standard	acres	38789.30	2.1%
5	Wet Ponds & Wetlands	acres	118497.30	6.4%
6	Floating Treatment Wetlands	acres	0.00	0.0%
7	Dry Ponds	acres	47537.90	2.6%
8	Extended Dry Ponds	acres	45875.20	2.5%
9	Infiltration Practices	acres	6697.30	0.4%
10	Filtering Practices	acres	1425.10	0.1%
11	BioRetention	acres	3913.50	0.2%
12	BioSwale	acres	868.40	0.0%
13	Permeable Pavement	acres	176.00	0.0%
14	Vegetated Open Channel	acres	2537.70	0.1%
15	Urban Filter Strips	acres	2.70	0.0%
16	Grey Infrastructure(IDDE)	acres	0.00	0.0%
17	Impervious Disconnection	acres	0.00	0.0%
18	**Stormwater Management Composite**	acres	268632.70	14.5%
19				
20	Erosion and Sediment Control	acres	29305.20	93.0%
21	Impervious Surface Reduction	acres	291.40	0.0%
22	Urban Forest Buffers	acres	26.70	0.0%
23	Urban Grass Buffers	acres	0.00	0.0%
24	Urban Tree Planting	acres	0.00	0.0%
25	Urban Forest Planting	acres	23.90	0.0%
26	Urban Nutrient Management	acres	19194.20	1.6%
27	Urban Stream Restoration	feet	17163.50	0.0%
28	Storm Drain Cleanout	lbs TSS	0.00	
29	Street Sweeping	acres	0.00	0.0%
30	Urban Shoreline Management	feet	4152.50	0.0%
31				
32				
33	Septic Connections	systems	725.70	0.2%
34	Septic Denitrification	systems	7771.70	1.9%
35	Septic Pumping	systems	8131.40	2.0%
36				
37	*Land Policy*	**Unit**	2017 Progress V9	2017 Progress V9
38				
39	Forest Conservation	acres	0.00	0.0%
40	Growth Management	acres	0.00	0.0%

Read Me | Scenario Details | **Summary BMPs** | Summary BMP Groups | SummaryBMPPctImpLoadSources

Use CAST output to help document meeting permit requirements

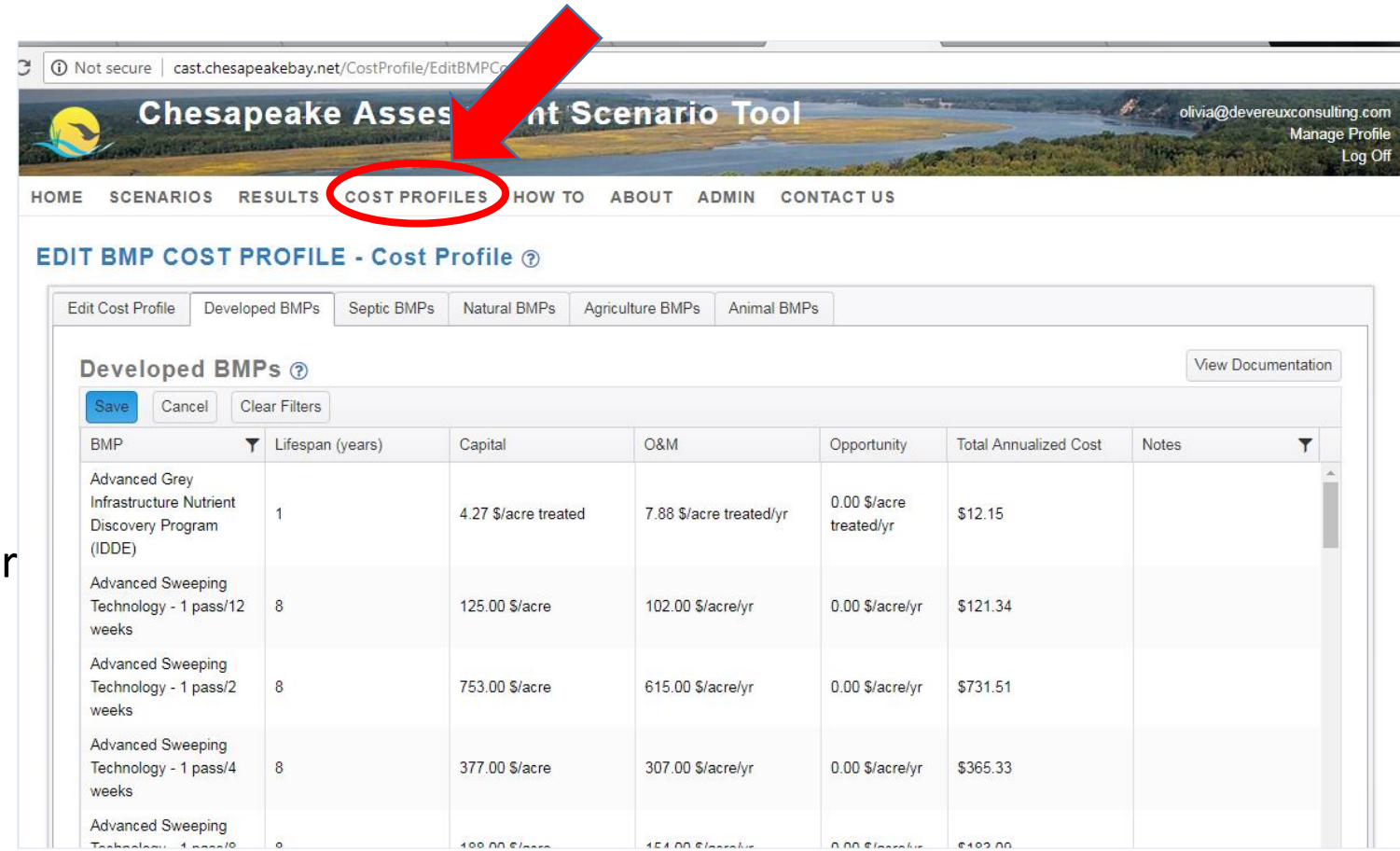
Report and Monitor

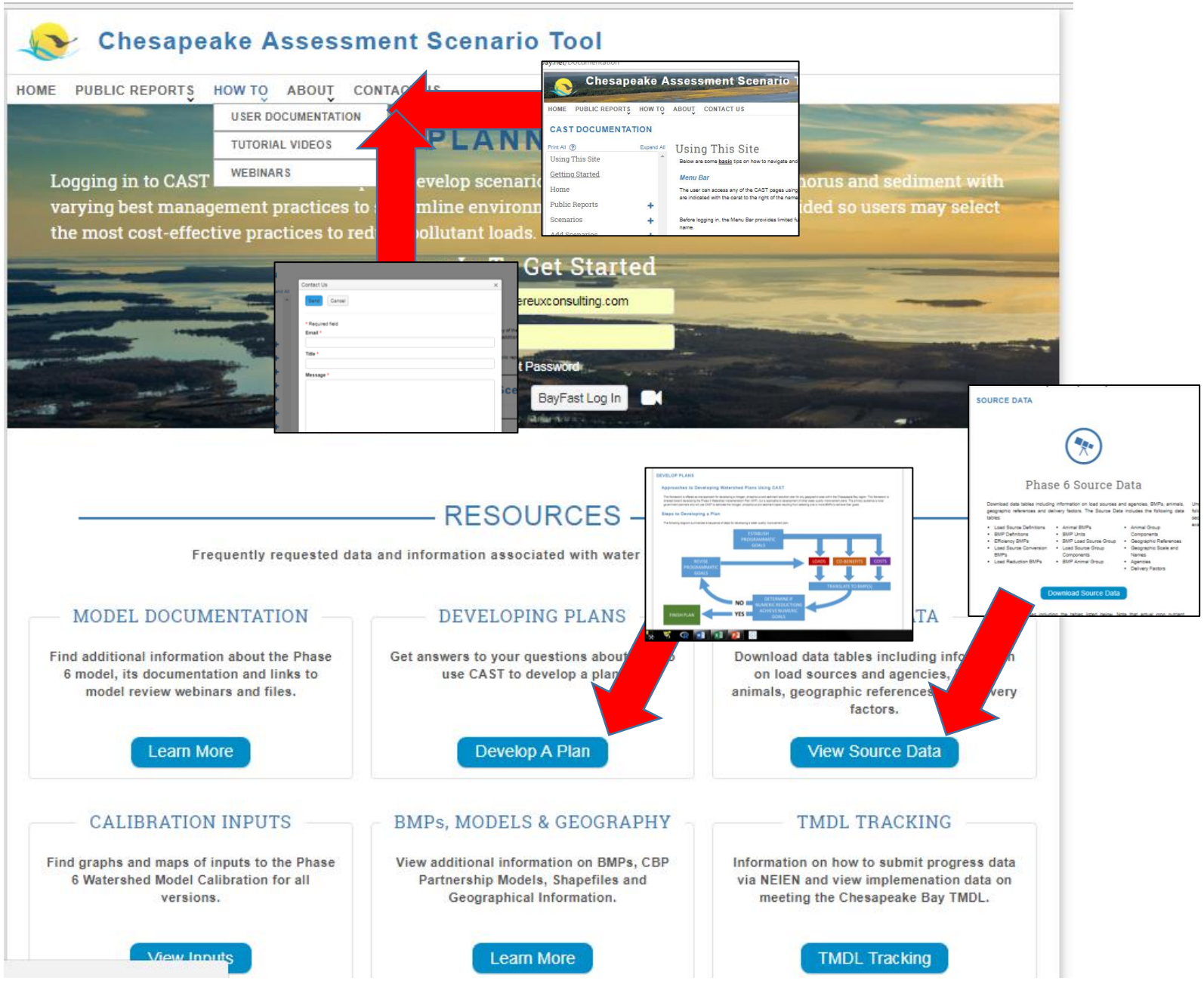
- Submit annual report on water quality progress



Typical Questions Answered with CAST

- What is the current land use and land cover in my community and where can I quickly access these data?
- How do I find out how my pollutant loads and land uses are projected to change for various 2025 development scenarios for my community?
- Which BMPs are currently in the Model for my community?
- How can I estimate which of those BMPs were implemented as part of my MS4 permit?
- Which BMPs are most cost-effective?




Chesapeake Assessment Scenario Tool
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TUTORIAL VIDEOS
WEBINARS
Logging in to CAST
varying best management practices to
the most cost-effective practices to red
Get Started
BayFast Log In
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TMDL TRACKING
Information on how to submit progress data via NEIEN and view implemenation data on meeting the Chesapeake Bay TMDL.
TMDL Tracking

Questions?

Olivia H. Devereux

President of Devereux Environmental Consulting

Olivia@DevereuxConsulting.com

301-325-7449