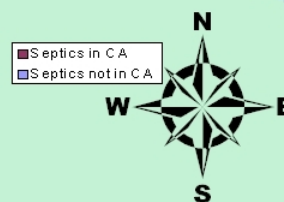
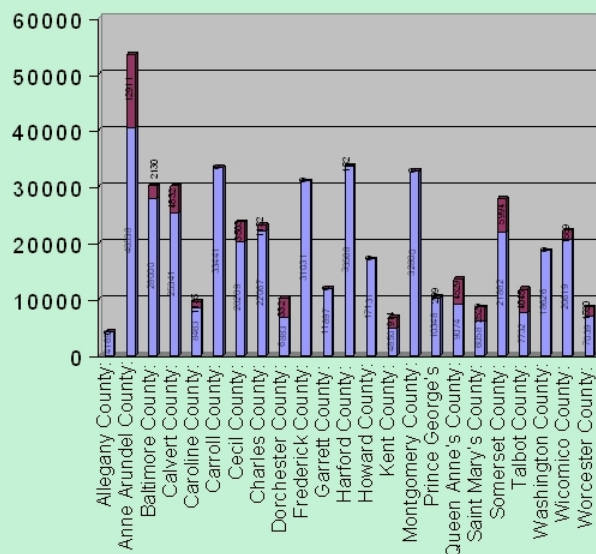


Maryland Onsite Sewage Disposal Systems

420,000 On Site Sewage Disposal Systems in Maryland
 51,000 On Site Sewage Disposal Systems in Critical Area
 2836 Best Available Technology Upgrades**
 1616 Best Available Technology Upgrades in Critical Area**
 Over 6000 Applications for Best Available Technology Upgrades**

2004 MDP Septic Data

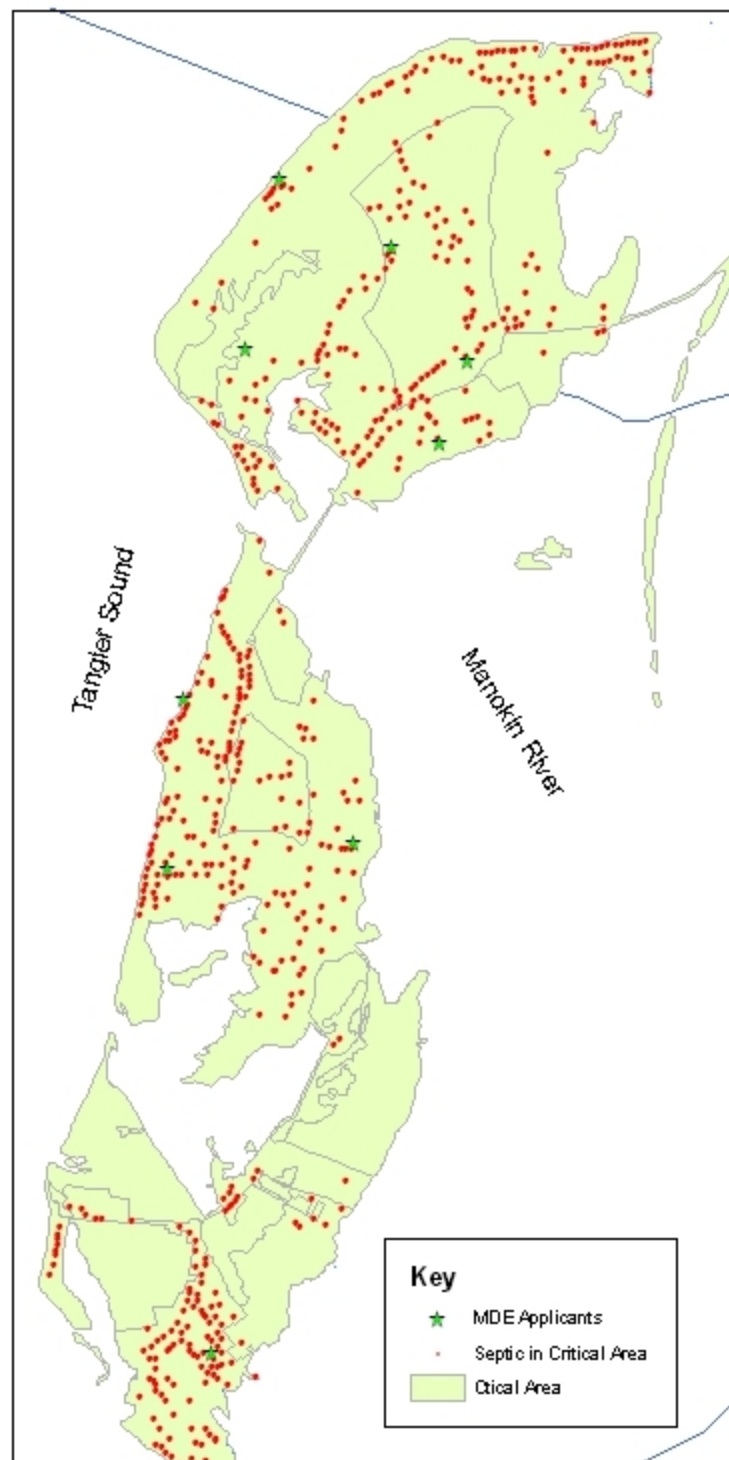
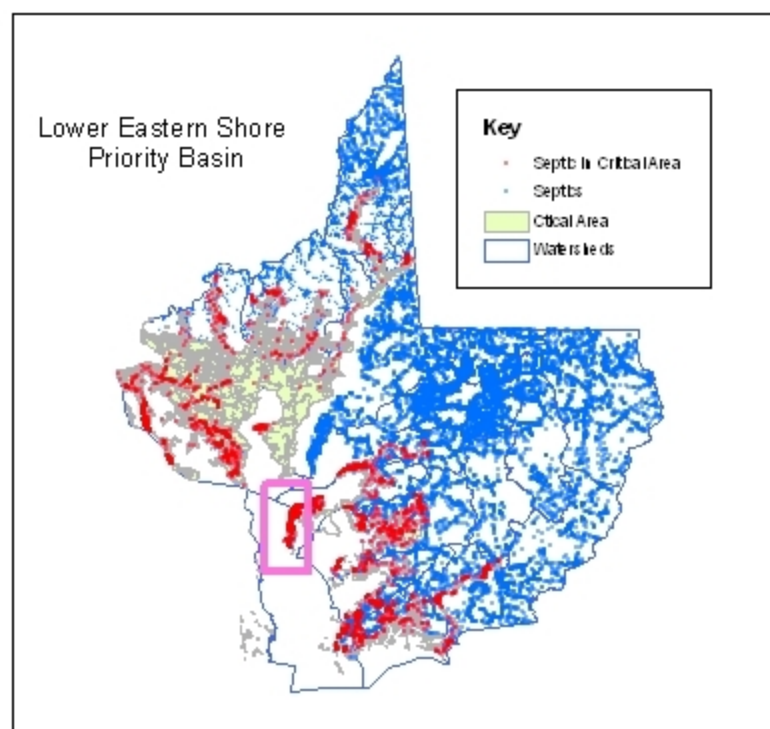
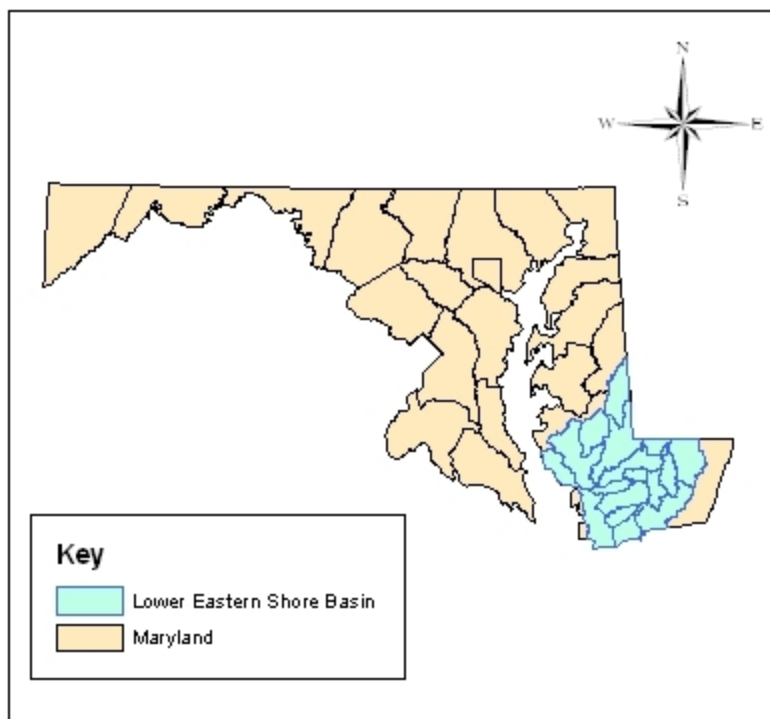


0 4.5 9 18 27 36 Miles

Legend

- Septics in Critical Area
- Septics not in Critical Area
- Critical Area
- Water
- Maryland Counties
- Bay Watershed States

Primary Basin Lower Eastern Shore



Lower Eastern Shore Priority Basin
Consuming parts of Worcester, Somerset, Wicomico, Dorchester and Caroline Counties. There are seventeen watersheds inside of the basin. With a total of eighty three applicants from both County funded grants and MDE direct grants. Sixty three of those applications have been installed as of June 11, 2008. There are no high priority watersheds in this basin. Installation costs totalling \$683,708.30.



Maryland Department of the Environment
1800 Washington Blvd.
Baltimore, MD 21230

Martin O'Malley, Governor
Anthony Brown, Lt. Governor
Shari Wilson, Secretary

BAY RESTORATION FUND RANKING DOCUMENTATION 2012

VENDOR IN ASCENDING ORDER	COST OF PURCHASE, INSTALLATION AND 5 YEAR OPERATION MAINTENANCE	VERIFIED BY
1 BioMicrobics RetroFast**	\$9,405.00	Vendor
2 Singulair TNT	\$11,079.00	Vendor
3 Singulair Green	\$11,079.00	Vendor
4 Hoot BNR	\$11,954.00	Vendor
5 AdvanTex AX20	\$12,300.00	Vendor
6 Advantex AX20RT	\$12,300.00	Vendor
7 SeptiTech M400D	\$13,056.00	Vendor
1 Bionest SOLO OT-60	\$13,219.00	Vendor
2 Hoot ANR	\$15,607.70	Vendor
3 Aquapoint Bioclere	\$16,750.00	Vendor
4 Nitrex***	\$17,000.00	Vendor
5 Amphidrome	\$22,921.50	Vendor

All prices are Estimates and subject to change, contact Manufacturer.

Price does not include electrical costs per year

Price does not include cost of pumping septage

** RetroFast unit limited to households of 1-4 occupants with 3 bedrooms or less.; Price includes use of new tank. For use of existing tank, contractor must certify tank suitable and watertight

*** Nitrex unit Add-on anoxic filter. Price includes the use of Advantex AX20 unit.

VENDOR IN ASCENDING ORDER	MEAN % REDUCTION TN (Using 60mg/L influent)	MEAN EFFLUENT CONCENTRATION	VERIFIED BY
1 AdvanTex AX20RT	76%	14 mg/L	MDE
2 Advantex AX20	71%	17 mg/L	MDE
3 SeptiTech M400D	67%	20 mg/L	MDE
4 Hoot BNR	64%	21 mg/L	MDE
5 RetroFast	57%	25 mg/L	MDE
6 Singulair TNT	55%	27 mg/L	MDE
7 Singulair Green	55%	27 mg/L	MDE
Amphidrome	Deliberative Data	Deliberative Data	
Bioclere	Deliberative Data	Deliberative Data	
Bionest	Deliberative Data	Deliberative Data	
Hoot ANR	Deliberative Data	Deliberative Data	
Nitrex***	Deliberative Data	Deliberative Data	

Non Field Verified systems are listed alphabetically.

As the data for non field verified systems is incomplete, MDE has classified the % reduction of TN and the Price per Pound of N Reduced for Non Field Verified Systems as Deliberative Data.

** RetroFast unit limited to households of 1-4 occupants with 3 bedrooms or less.

*** Nitrex unit Add-on anoxic filter. Price includes the use of Advantex AX20 unit.

VENDOR IN ASCENDING ORDER	PRICE PER POUND OF N REDUCED	VERIFIED BY
1 Advantex AX20RT	\$68.55	MDE
2 Advantex AX20	\$73.37	MDE
3 HOOT BNR	\$82.21	MDE
4 RetroFast**	\$88.35	MDE
5 Singulair TNT	\$90.88	MDE
6 Singulair Green	\$90.88	MDE
7 SeptiTech M400D	\$93.19	MDE
Amphidrome	Deliberative Data	Deliberative Data
Bioclere	Deliberative Data	Deliberative Data
Bionest	Deliberative Data	Deliberative Data
Hoot ANR	Deliberative Data	Deliberative Data
Nitrex***	Deliberative Data	Deliberative Data

Price per pound of N reduced equals (((Price of technology plus (increased electrical costs multiplied by Ten))divided by Ten) divided by (24.32 lbs of N per year multiplied by percent reduction of N by system)

As the data for non field verified systems is incomplete, MDE has classified the % reduction of TN and the Price per Pound of N Reduced for Non Field Verified Systems as Deliberative Data.

** RetroFast unit limited to households of 1-4 occupants with 3 bedrooms or less.

VENDOR IN ASCENDING ORDER	OPERATION AND MAINTENANCE PER YEAR AFTER THE 5 YEAR CONTRACT	MINIMUM NUMBER OF SITE VISITS PER CONTRACT	VERIFIED BY
1 Hoot BNR	\$150.00	1	Vendor
2 AdvanTex AX20	\$200.00	1	Vendor
3 Advantex RT	\$200.00	1	Vendor
4 Singulair TNT	\$300.00	2	Vendor
5 Singulair Green	\$300.00	2	Vendor
6 RetroFast	\$300.00	2	Vendor
7 SeptiTech M400D	\$300.00	1	Vendor
1 Bionest	\$100.00	1	Vendor
2 Bioclere	\$200.00	2	Vendor
3 Nitrex	\$200.00	1	Vendor
4 Hoot ANR	\$250.00	1	Vendor
5 Amphidrome	\$330.00	1	Vendor

Analysis based on price to homeowner per year

All prices are Estimates and subject to change, contact manufacturer.

Additional Charges may apply with certain manufacturers. It is the responsibility of the homeowner to contact the manufacturer for precise details of contract.

VENDOR IN ASCENDING ORDER	1 YEAR ELECTRICAL CONSUMPTION (represented as kWh/ year)	INCREASED ELECTRICAL COSTS PER YEAR ASSUMING \$0.11 PER kWh	VERIFIED BY
1 Advantex AX20	335.8 kWh/ year	\$36.94	OSET NTP
2 Advantex AX20RT	335.8 kWh/year	\$36.94	OSET NTP
3 Hoot BNR	765.77 kWh/ year	\$84.23	NSF International
4 Singulair TNT	979.66 kWh/ year	\$107.76	NAT Testing Lab
5 Singulair Green	979.66 kWh/year	\$107.76	NAT Testing Lab
6 SeptiTech M400D	1934.50 kWh/ year	\$212.80	Vendor
7 RetroFast**	2584 kWh/year	\$284.24	Pump Manufacturer
1 Nitrex***	394.2 kWh/year	\$43.36	Vendor/ OSET NTP
2 Hoot ANR	765.77 kWh/year	\$84.23	NSF International
3 Amphidrome	839.5 kWh/year	\$92.35	EPA, ETI
4 Bioclere	886.44 kWh/year	\$97.51	New Jersey Pinelands study
5 Bionest SOLO OT-60	1752 kWh/year	\$192.72	Pump Manufacturer

\$0.11 is an assumed average kWh rate for Maryland 2012.

** RetroFast unit limited to households of 1-4 occupants with 3 bedrooms or less.

*** Nitrex unit electrical consumption is based on the electrical use of the Nitrex system coupled with an Advantex AX20.

RED Font = Technologies that have successfully completed Maryland's Bay Restoration Fund Field Verification process.

BLUE Font = Technologies that have not completed Maryland's Bay Restoration Fund Field Verification process.

Please contact the county Environmental Health Division for specific process of submitting an application

[For a list of county contact information, CLICK HERE.](#)

Please contact the Maryland Department of the Environment for specific questions regarding becoming a Best Available Technology in Maryland.

[For MDE contact information, CLICK HERE.](#)

[For a flow chart on how to become a BAT in MD, click here.](#)

The information on this page is subject to change. Before selecting a technology for use on the property in question, please contact each vendor to verify the information is current and accurate. MDE is only a facilitator in presenting this information in accordance with HB347. MDE strongly advises that the applicant contact the vendor directly for more information.

[For a list of vendor contact information, CLICK HERE.](#)