

Emmitsburg 2.0

Sustainability Infrastructure



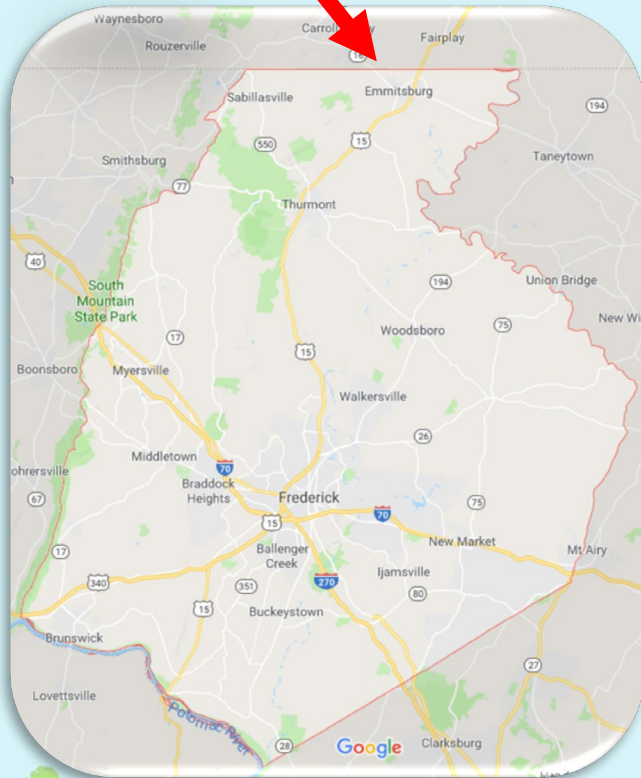
Donald N. Briggs, Mayor, LEED AP+
Town of Emmitsburg - mayorbriggs@emmitsburgmd.gov

Emmitsburg, Maryland



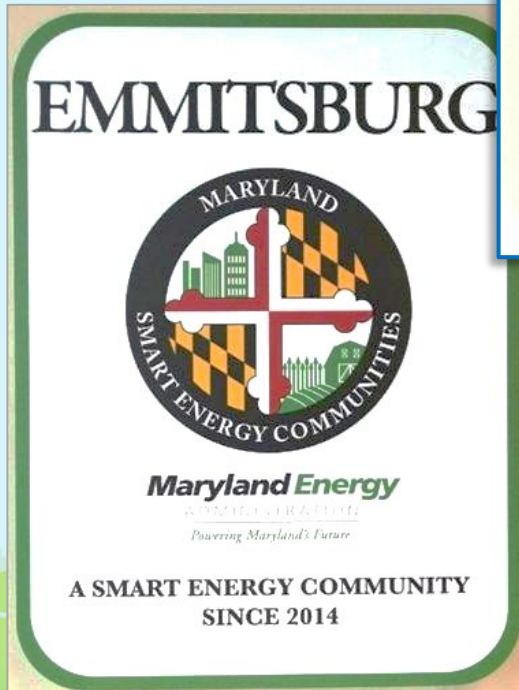
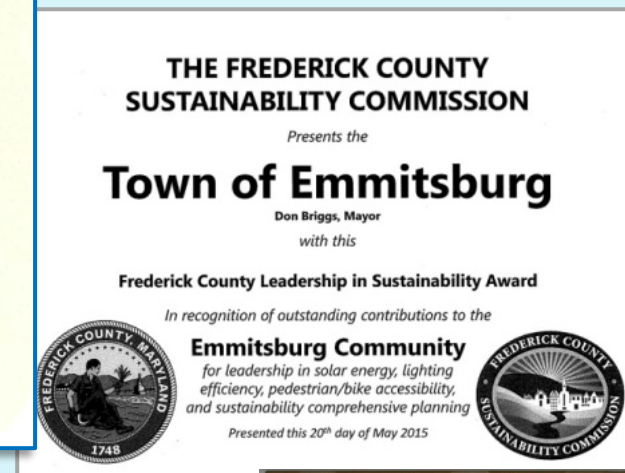
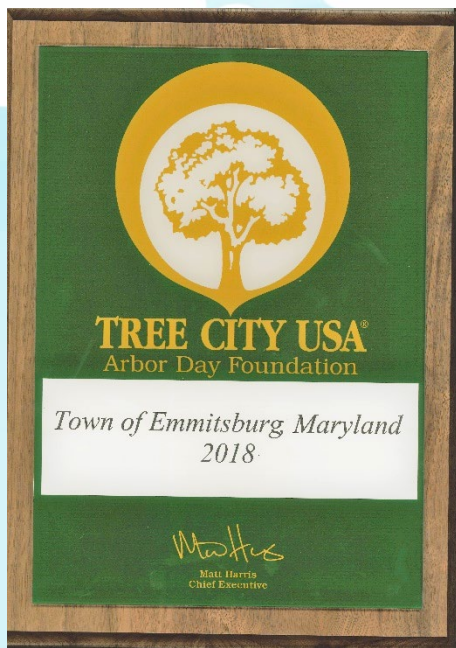
Population: 3,000 residents

Location: Northern Frederick County
(2 miles south of the MD/PA line)



Approx. 425,000 visitors annually:

- Mount St. Mary's University (D1)
- National Shrine of Elizabeth Ann Seton
- National Grotto of Lourdes
- FEMA & National Emergency Training Center & Fire Academy
- National Fallen Fire Fighters Memorial
- Frederick County Fire & Rescue Museum
- Vigilant Hose Company (most visited fire department in the U.S.)



Sustainability

“...development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

Bruntland Commission (formerly the World Commission on Environment and Development), (1987).



Emmitsburg 2.0 Focus:

1. Reduce waste.
2. Reduce expenses/cost.
3. Reduce vehicle dependency.
4. Get-off the electrical grid.
5. Enhance public realm (Town connectivity & recreational facilities).
6. Protect the Emmitsburg watershed.

Factors for Success



“[Sustainability] impacts all decision-making and operating functions across organizations and sectors.”

~ Mayor Briggs/Association of Climate Change Officers ~



Projects Pursued Using the Factors for Success



LED Lights

Installed 2012

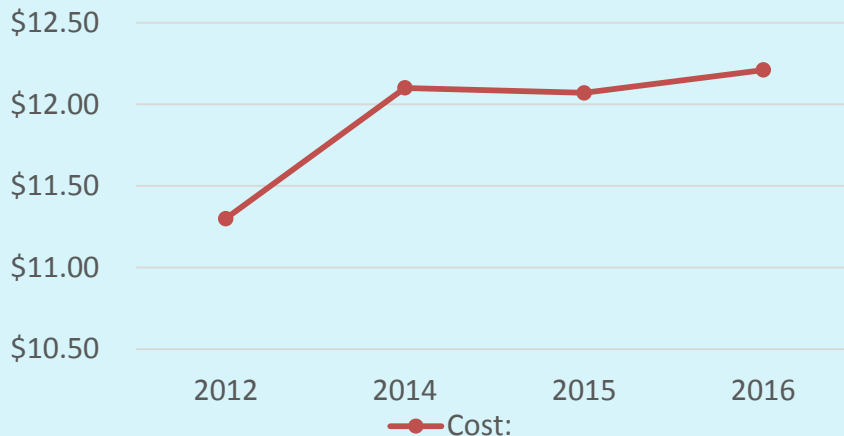


- Replaced 330 street light bulbs (MEA grant).
 - Electricity expense *decreased* by 60+% since installation.
 - Town overall electricity use *decreased* 9% annually.
 - Investment: \$1. Grant and Power Co. rebate.
- Replaced 52 light fixtures & 776 light bulbs in Town owned buildings (MSEC grant).
 - Installation completed in July 2019.
 - Energy savings not yet quantified.

Renewable Solar Energy

For Town accounts including new
\$19M waste water treatment plant

Maryland - Cost of Electricity (per kWh):



Comparison of Full Service

Cost Source: www.eia.gov/electricity/state



Field #1: 1.109 MW

Opened: April 2014

Production: 124,700 kWh/month

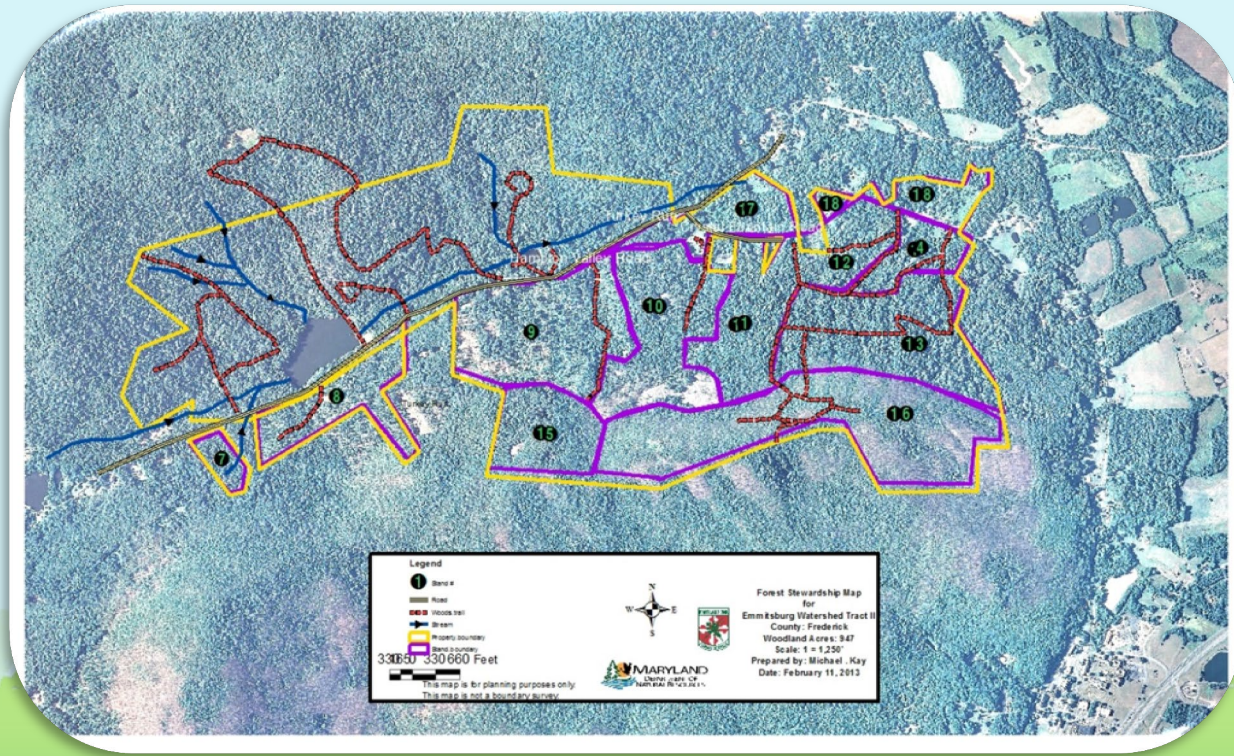
Field #2: 1.295 MW

Opened: August 2015

Production: 129,600 kWh/month

Emmitsburg Watershed

- 900+ acres of mountain woodland.
- Rainbow Lake (11+ acres) is a 33 million gallon water source.
- 15-miles of naturally surface multi-user trails.
- Working with the Maryland State Forestry Department under a select cut harvesting plan for forest renewal.



LG Sonic Algae Control

Solar Powered

Water Savings:

- 412,000 gal/month
- Equivalent to 54 taps

Compound Savings:

- Coagulant (-3.8%)
- Soda Ash (-21%)
- Chlorine (-26%)
- Green Clean Pro (No Longer Needed)



EV Stations



& new Town EV

Four (4) Level II charging stations behind the Emmitsburg Community Center.

Installed: May 2019

Cost: Free (for tourism)

PowerStar



PowerStar returns the excess voltage in terms of real negative power which is then subtracted from the grid input power (Pump Station).

Installed: September 2015

Savings: 56% or \$2,187.42 over a 6 month period

Square & Main Street Revitalization



Connectivity:

10 sidewalk connections
and one street
connection since 2011.

Emmitsburg 3.0 - Climate Smart

- *Mitigation*: Avoid the unmanageable.
- *Adaption*: Managing the unavoidable.
- Materiality, Resilience...



Maryland Primary Risk:

- Hurricanes
- *Extreme Precipitation*
- *Flooding*
- *Extreme Heat*
- Rising Sea Level

(ACCO)

“Climate change impacts all decision-making and operating functions across organizations and sectors.”

~ Association of Climate Change Officers (ACCO)~

*"The world doesn't owe you anything.
It was here first." - Mark Twain*



*"The future is not a gift;
it is an achievement."
- John F. Kennedy*

MAKING SUSTAINABILITY A REALITY IN YOUR COMMUNITY:

A Charles County Story



Presented by Ken Robinson
July 24, 2019

IN THE BEGINNING. . .



Morgantown Coal Generated Power Plant, Newburg, MD



Swan Point Community, Swan Point, MD

ISSUES

Coal Plant Expansion

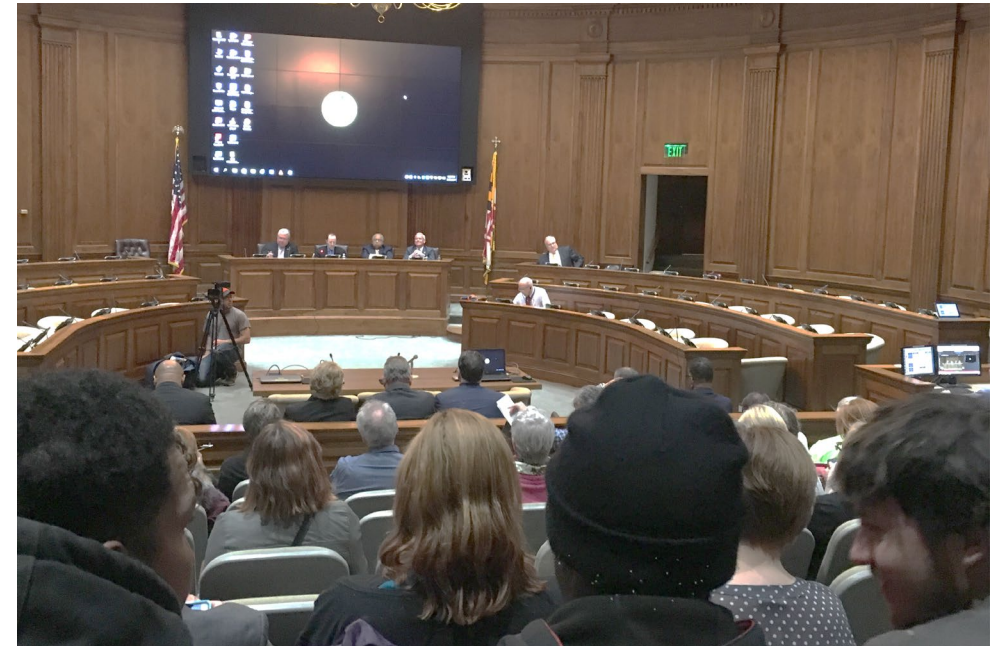
1. Barge Facility Construction: Intended to Import Coal from Venezuela
2. Ground Water Aquifer Depletion to Cool Mandated Scrubber Pollution Controls



CREATING COMMUNITY AWARENESS

Unlikely Allies

- Conservative Swan Point Residents Call Foul on Mirant to State!
- Legally Challenges Mirant to the Maryland Public Service Commission Resulting in a “Half Victory”
- Barge Facility Built – **But Used Once**
- Mirant Forced to Build Desalinization Plant Instead of Using Millions of Gallons of Ground Water Daily



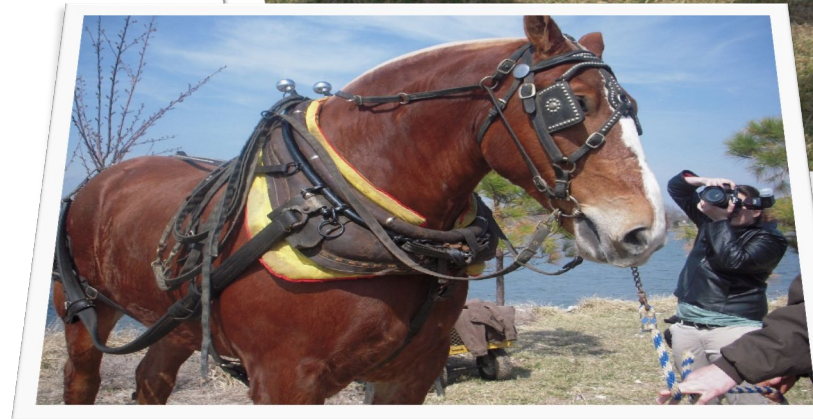
CREATING MORE SUSTAINABILITY BUZZ

Installed the First Residential Wind Turbine in Southern Maryland in Sight of the Coal Smoke Stacks of Mirant



WHO SHOWED UP TO RAISE THE WINDMILL

- Green Club from the Local Elementary School
- King, a Maryland Draft Horse (To Alleviate County Fears of Heavy Equipment)
- 7 Television News Crews including NBC Nightly News
- Print Media including Front Page Story in the Washington Post



IN THE NEWS CREATING AWARENESS



GOVERNMENT RESISTANCES CREATES A NEW POLITICIAN

- Environmental Concerns—A Surprising Issue for Charles County Voters
- Elected in 2010 over the Heavily Favored Incumbent



FIRST TERM IN OFFICE SUSTAINABILITY ACCOMPLISHMENTS

- Received State & Federal Grants to Fund a Wind Turbine to Power the Maryland Welcome Center in Charles County
- Worked with Local Utility (SMECO) to Successfully Construct First Commercial Solar Facility in Southern Maryland
- Lobbied State & Federal Government which Resulted in the Denial of Permits to Build a Four Lane Road known as the Cross County Connector that would have Traversed Environmentally Sensitive Lands
- Pressured Commissioner Majority NOT to Pass a Backward Thinking Land Use Comprehensive Plan*

* More on that in Second Term!



SECOND TERM IN OFFICE

SUSTAINABILITY ACCOMPLISHMENTS

GETS REALLY GOOD!!

- Led Effort to Pass the **Most Progressive Comprehensive Plan** in the State of Maryland
- Established a Watershed Conservation District Encompassing Thousands of Acres to Assure Responsible Growth and Reduce the Suburban Sprawl for which Charles County was Infamous
- Established a Conservation Easement for Public Land Originally Designated for a Technical & Business Park in the Mattawoman Creek's Stream Valley
- Created Rural Legacy Districts:
 - Shoreline Restoration Projects*
 - Cultural Heritage Asset Projects* (Leading to the National Marine Designation Status which will be Coming Later this Year to the Ghost Fleet of Mallows Bay)

