Solar Leasing and Solar Trends

Elizabeth Thilmany, Faculty Specialist &
Paul Goeringer, Extension Legal Specialist
@aglawPaul

Presented in Garrett County on 1/23/23

Thank you to USDA-NIFA

This work is supported by the Agriculture and Food Research Initiative (AFRI) program, grant no. 2020-68006-31182/project accession no. 1022637, from the U.S. Department of Agriculture, National Institute of Food and Agriculture.

USDA National Institute of Food and Agriculture
U.S. DEPARTMENT OF AGRICULTURE

COLLEGE OF AGRICULTURE & NATURAL RESOURCES

FEARLESSLY FORWARD

Program Partners

Disclaimer

This presentation is intended to provide general information over legal issues and should not be construed as providing legal advice. It should not be cited or relied upon as legal authority. State laws vary and no attempt is made to discuss laws of states other than Maryland. For advice about how these issues might apply to your individual situation, consult an attorney.

Solar Energy Production on Agricultural Lands Project

Solar Energy Production Project

Developing research on solar leasing on farmland to develop educational materials, including extension publications and legal education publications, on the economic, legal, and community issues associated with solar energy leases.

Solar Energy Production Project

Project goal is to develop train-the-trainer resources for Extension and other groups to use to train landowners

COLLEGE OF AGRICULTURE & NATURAL RESOURCES

FEARLESSLY FORWARD

Project Website

As we develop resources you can find it all at:

https://www.solarleasing.umd.edu/

COLLEGE OF AGRICULTURE & NATURAL RESOURCES

FEARLESSLY FORWARD

Solar Leasing

Develop a team

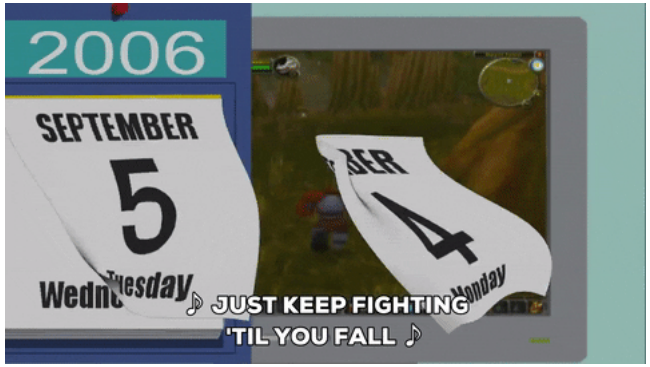
- When presented with a lease, make sure landowner develops a team.
- Possible team members:
  - Attorney
  - Accountant
  - Insurance carrier
  - Family
  - Lender
  - Others?

Types of agreements

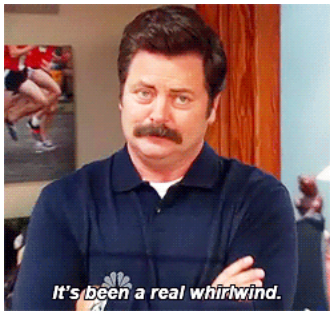
- Letter of intent – simple document that shows intent to potentially develop property
- Option to lease: Little more complex and may include lease terms, gives company time to determine if they want to lease
- Solar lease: this document may include the two listed before and the essential lease terms

Term of lease

- Pay attention to how long the term will run.
- This could include all the stages listed in a lease
- Typically going to run for potentially 20 or longer



Term of lease



- Included in this might be renewals.
- Pay attention to the renewal language to understand how this can be triggered.

Confidentiality Clause

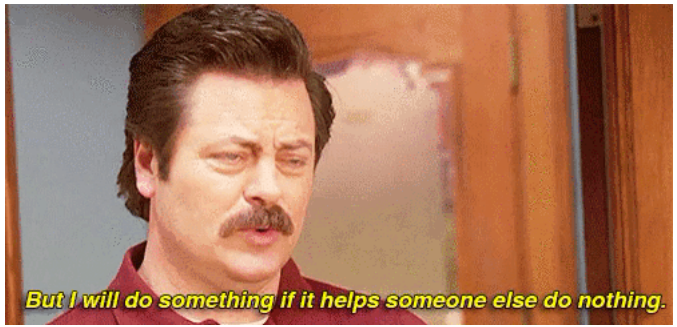
Many leases may contain a confidentiality clause that may limit your ability to discuss the terms with others

Could be narrow or broad

- Pay attention to the language in the contracts
- If you have concerns show the language to an attorney to have them explain

Rent and Royalty Clauses

- Usually set as dollar per acre, **not in royalties**
    - Amount per acre may depend on stage lease is in
- Potential for royalty based on production but is less common depending on the region.

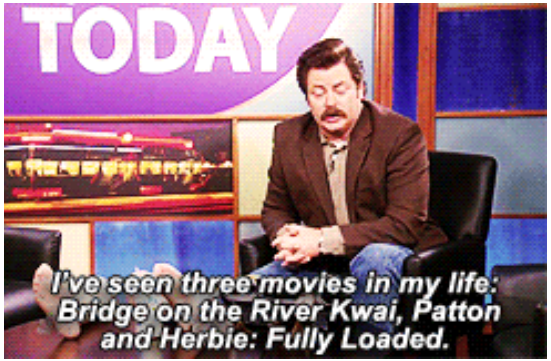


Remediation Period

Once lease ends, company will need to remediate the site.

Currently MD requires as a part of the CPCN process for company to get bond to cover costs.

Still good practice for landowner to include language for how farmland will be remediated.



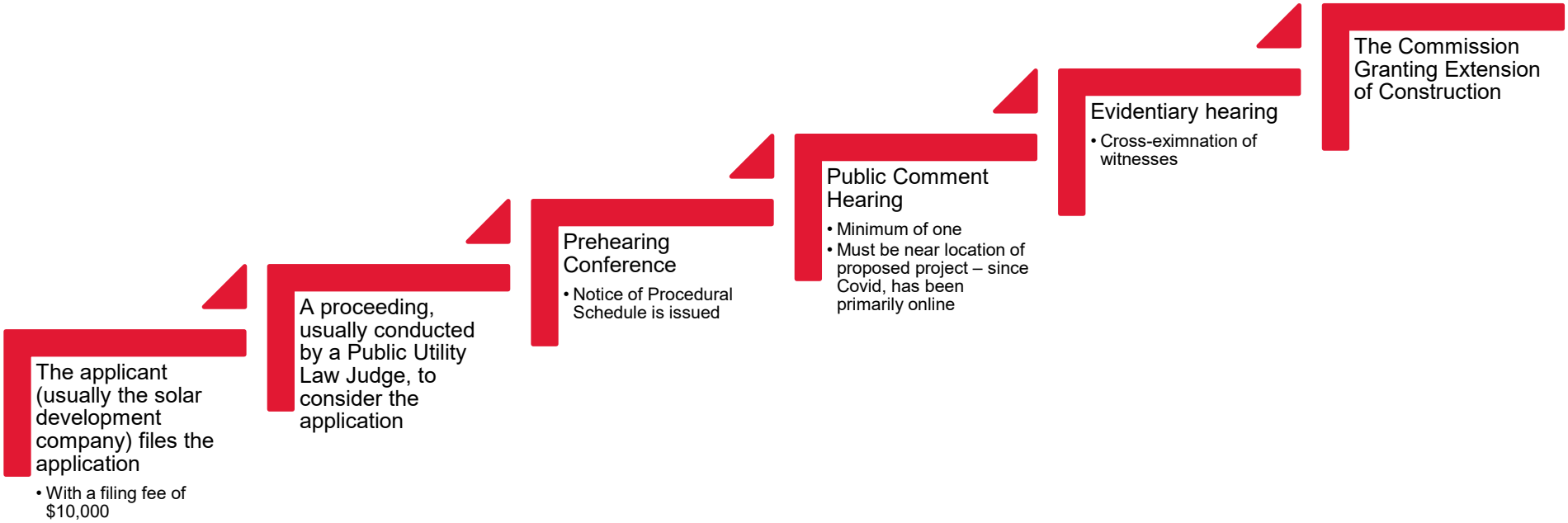
Solar Developments in Maryland

Land Use & Solar Development Updates

Updates on Large-Scale Solar Developments in Maryland

- Maryland has the most significant solar, specific carve-out of any state at 14.5% energy generation sales by 2028
- **Utility-scale solar** is a solar energy generating system that sells electricity through power purchase agreements or into the wholesale electricity market
    - Utility-scale solar facilities are usually owned by a generation company and require a Certificate of Public Convenience and Necessity (CPCN) to be developed and connected to the grid

CPCN Process in Maryland



COLLEGE OF AGRICULTURE & NATURAL RESOURCES

FEARLESSLY FORWARD

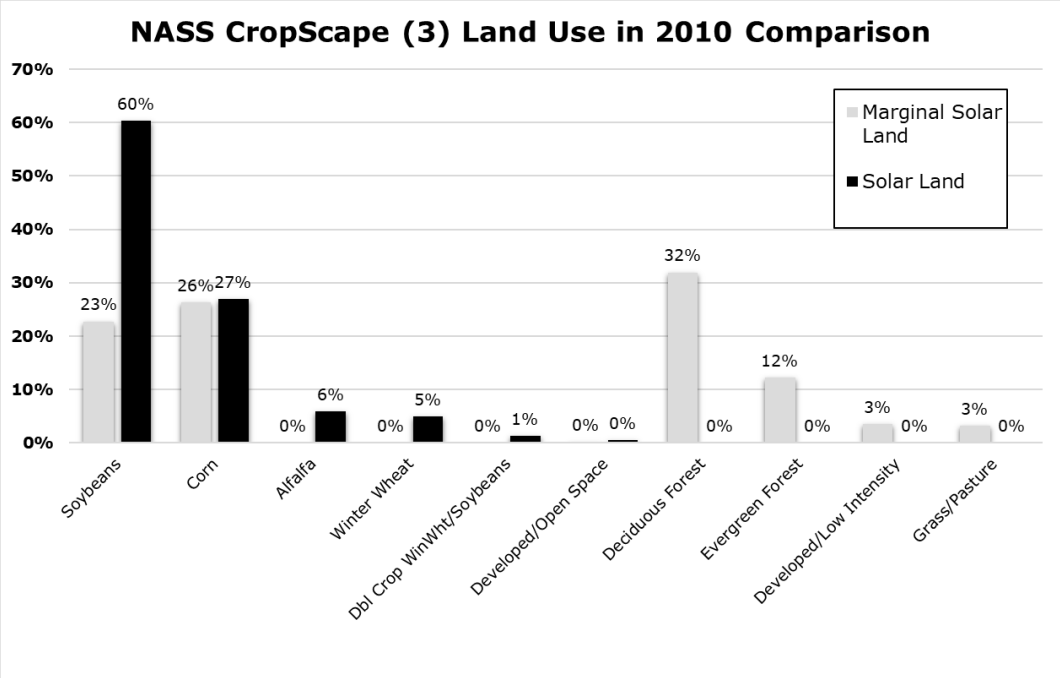
https://www.psc.state.md.us/electricity/wp-content/uploads/sites/2/CPCN-Process-revised-9-12-19.pdf

Updates on Large-Scale Solar Developments in Maryland (cont.)

- In Maryland, one of the currently* built utility-scale solar projects is **not** on “Prime Farmland” or “Farmland of Statewide Importance,” as defined by the Natural Resources Conservation Service (NRCS).
    - 44% of utility-scale acres are on “Prime farmland.”
    - 48% on “Farmland of statewide importance.”
    - 8% on “Not prime farmland.”

* As of May 2022

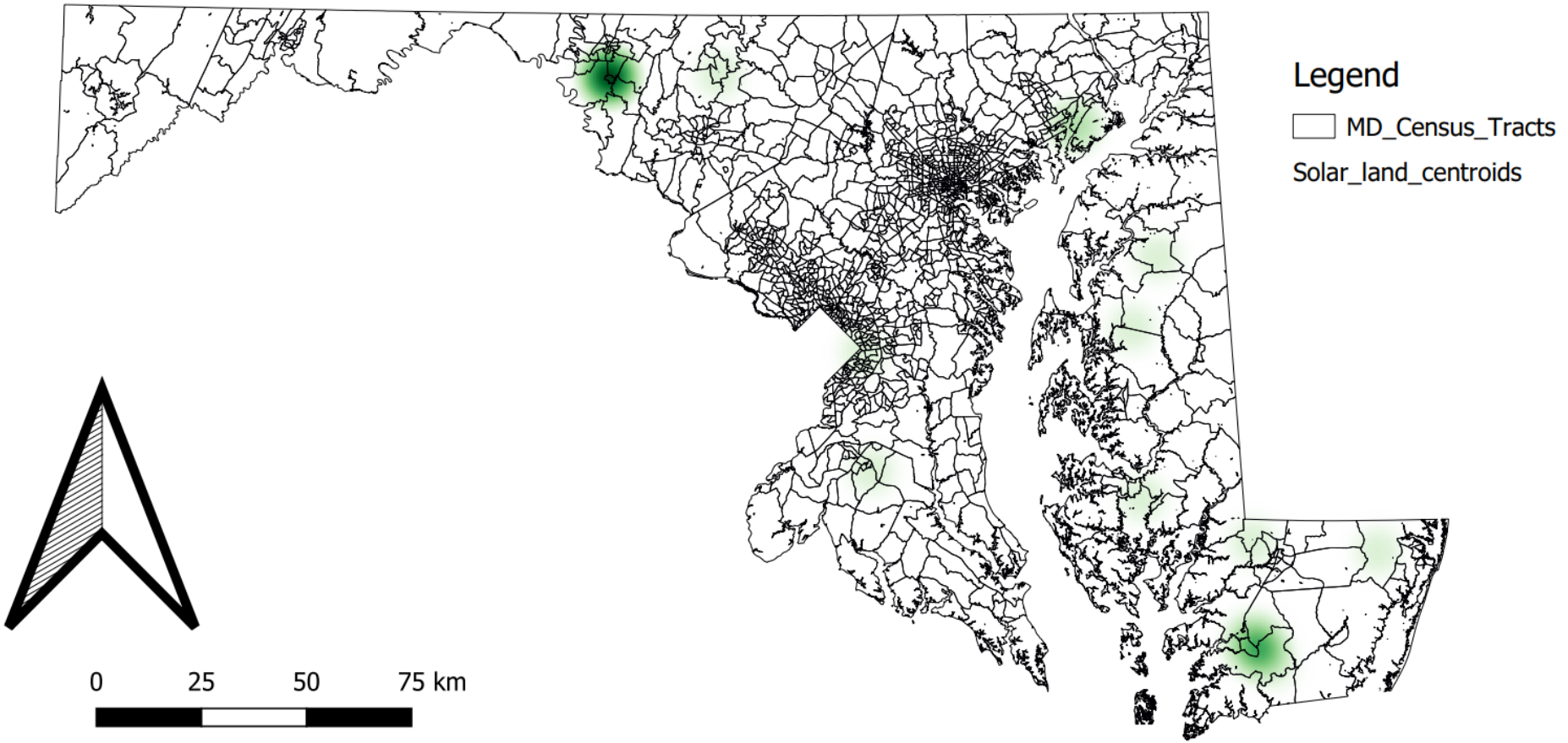
What type of land is being converted to solar “fields”?



COLLEGE OF AGRICULTURE & NATURAL RESOURCES

FEARLESSLY FORWARD

Centroid, Heat Map of Utility-Scale Solar Projects in Maryland



The Potential Motives of Landowners in Maryland – Sensitivity Analysis Results

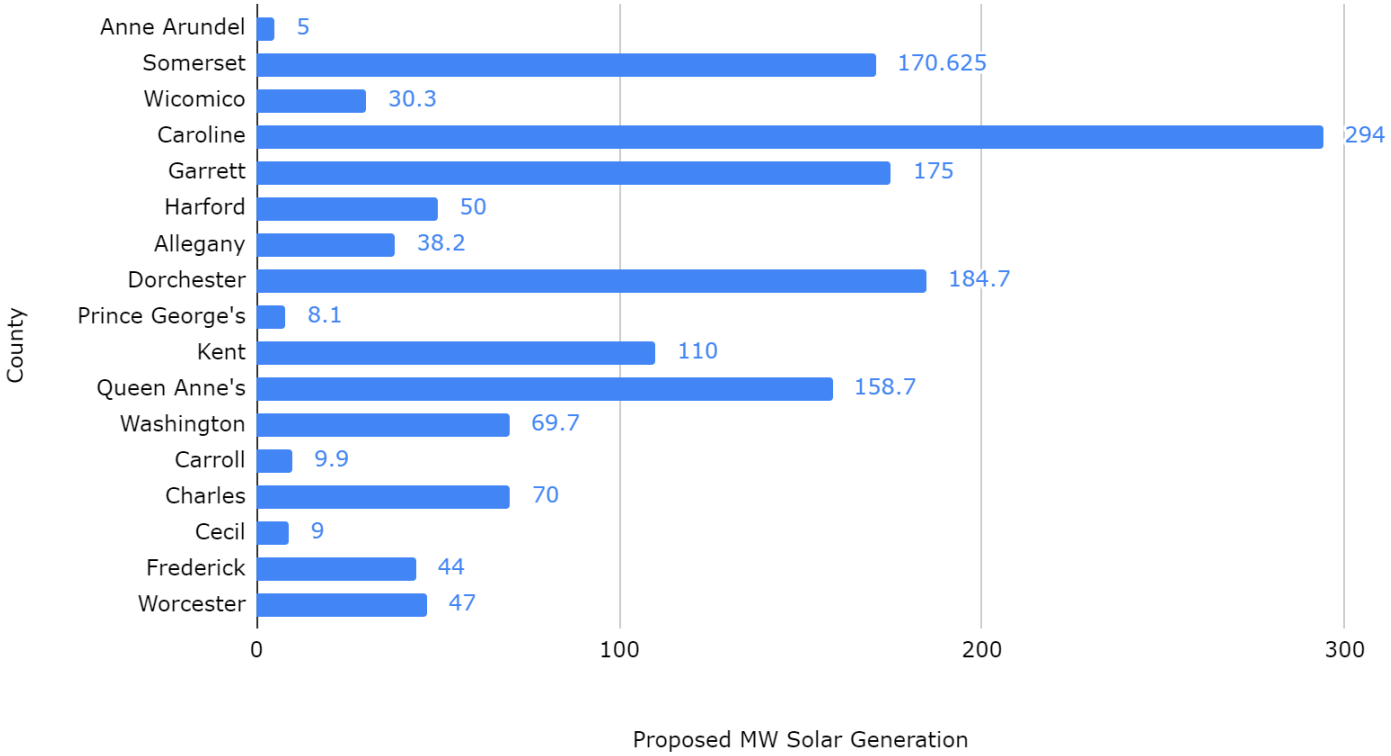
- A sensitivity analysis is conducted to understand the **economic impact** on MD's agricultural industry rather than the energy production from utility-scale solar fields on MD's agricultural lands.
    - A case study farm that resulted in the development of farmland into solar
- The crop rotation is identified using the United States Department of Agriculture (USDA)'s National Agricultural Statistics Service (NASS) data
- Rent values for solar are estimated from the uncovered contracts focus group discussions, throughout Maryland and New York.

		Annual Rent per Acre for Utility-Scale Solar			
		$500	**$800**	**$1,250**	**$1,925**
Annual farm profit estimates per acre	**$151**	231%	429%	727%	1174%
	$274	82%	192%	356%	602%
	$443	13%	81%	182%	334%
	$629	-21%	27%	99%	206%

COLLEGE OF AGRICULTURE & NATURAL RESOURCES

FEARLESSLY FORWARD

Proposed MW Solar Generation vs. County



COLLEGE OF AGRICULTURE & NATURAL RESOURCES

FEARLESSLY FORWARD

As of January 2023

What’s happening with solar development in Garrett County?

About the Data

This map provides annual average daily total solar resource using 1998-2016 data (PSM v3) covering 0.038-degree latitude by 0.038-degree longitude (nominally 4 km x 4 km).

For more information, visit:
https://nsrdb.nrel.gov
Email us at: nsrdb@nrel.gov

kWh/m²/Day

- ≥ 5.75
- 5.50 to 5.75
- 5.25 to 5.50
- 5.00 to 5.25
- 4.75 to 5.00
- 4.50 to 4.75
- 4.25 to 4.50
- 4.00 to 4.25
- < 4.00

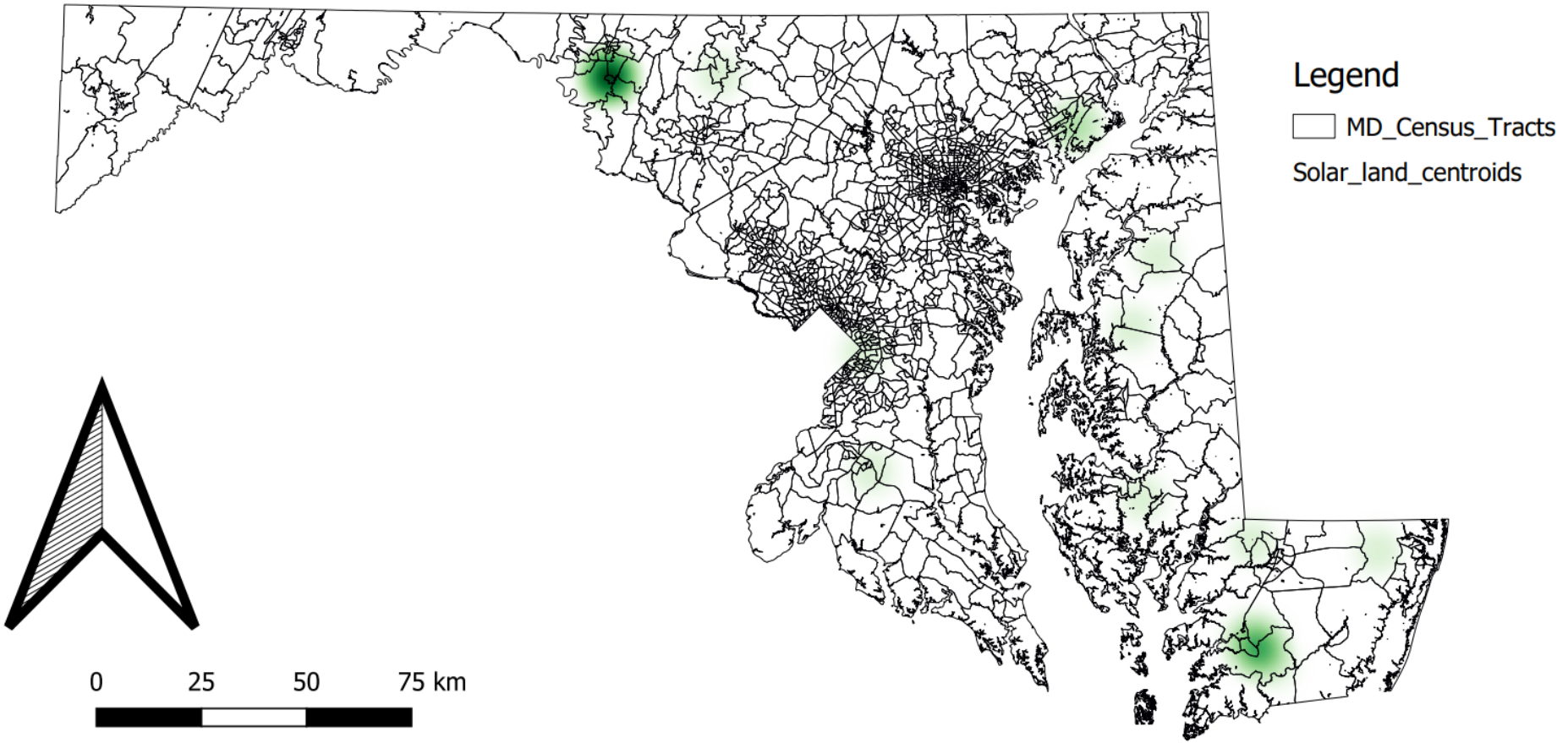
NREL
NATIONAL RENEWABLE ENERGY LABORATORY

Billy J. Roberts, February 22, 2018

One utility-scale solar project in process in the County - CPV Backbone Solar

- Application filed on 4/27/2021
    - “The site was deep mined for coal from the 1940’s and 1950’s…the Site has been significantly disturbed and altered such that very little remains in its natural condition.”
- Last update on the project was the approval of the decommissioning plan on 8/25/2022
    - In original filing construction was estimated to occur from May 2022 to August 2023

Centroid, Heat Map of Utility-Scale Solar Projects in Maryland



Md. Risk Management Blog

Department of Ag and Resource Econ's blog updated periodically with timely legal, crop insurance, farm policy, and water conservation information.

www.agrisk.umd.edu

Signup to get posts delivered to you

My podcast is also available there.

COLLEGE OF AGRICULTURE & NATURAL RESOURCES

FEARLESSLY FORWARD

Southern Ag Today Blog

COLLEGE OF AGRICULTURE & NATURAL RESOURCES

FEARLESSLY FORWARD

Any questions?

Paul Goeringer
3204 Symons Hall, College Park, MD 20742
301.405.3541 / lgoering@umd.edu / @aglawPaul Twitter and Instagram
AREC: arec.umd.edu / ALEI: umaglaw.org / Blog: agrisk.umd.edu
CONSERVE: conservewaterforfood.org / Crop Insurance: arec.umd.edu/extension/crop-insurance
Podcast: marylandagpodcast.org

COLLEGE OF
AGRICULTURE &
NATURAL RESOURCES

FEARLESSLY
FORWARD


FEARLESSLY
FORWARD