Maine Department of Agriculture, Conservation and Forestry
LD 820 Report to the Legislature
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Commissioner

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LD 820

- L.D. 820, *Resolve, To Convene a Working Group To Develop Plans To Protect Maine's Agricultural Lands When Siting Solar Arrays*
- Required DACF to convene a working group of stakeholders to develop plans and consider ways to “discourage the use of land of higher agricultural value and encourage the use of more marginal agricultural lands when siting a solar array.”
- DACF to submit “its report and recommendations, including any suggested legislation” to ACF, EUT, and ENR Committees.

A Careful Balance

- DACF supports renewable energy development in Maine and understands that solar is a key component of reducing our reliance on fossil fuels.
- DACF support opportunities for farmers to address their own energy needs with renewable sources, and to enhance the economic viability of their operations with thoughtful siting of renewable energy infrastructure.

- DACF strongly recommends prioritizing siting of solar projects on non-agricultural lands and within areas that do not contain rare plant populations; provide habitat for rare or exemplary natural communities; or diminish the ability for our natural and working lands - to effectively sequester carbon.
- Productive agricultural soils are finite resources.

Careful consideration of appropriate siting of solar projects is necessary to avoid permanent loss of agricultural lands.

DACF's Agricultural, Forestry, and Natural Habitat Goals and Priorities

- Intricately involved in the stewardship, monitoring, and maintenance of accessible public lands, healthy forests, wildlife habitat, and productive agricultural soils.
- These lands support healthy and diverse ecosystems in the state, and provide sustenance, critical natural habitat, and economic opportunities that support the foundation of our heritage industries, as well as our tourism and recreation sectors.
- Mindful of our role to thoughtfully protect and enhance these resources as the state embraces renewable energy goals in its effort to proactively mitigate and adapt to a changing climate.

Maine Won't Wait Goals

- *Maine Won't Wait* offers strategies aimed at meeting Maine's greenhouse gas emission targets.
- The strategies directly identify the intersection of renewable energy, natural and working lands, and food production.
- Strategy C: "reduce carbon emissions in Maine's energy and industrial sectors through clean-energy innovation," by "achiev[ing] by 2030 an electricity grid where 80% of Maine's usage comes from renewable generation."
- Strategy D: "grow Maine's clean-energy economy and protect our natural-resource industries," such as by "increas[ing] the amount of food consumed in Maine from state food producers from 10% to 20% by 2025 and 30% by 2030 through local food system development.

Maine Won't Wait Goals, cont'd.

- Strategy E: "Protect Maine's environment and working lands and waters" and further notes that "by current estimates, Maine loses approximately 10,000 acres of natural and working lands to development each year — a figure which is projected to grow in coming years."
- Avoidance of this potential impact could possibly be achieved by "develop[ing] policies by 2022 to ensure renewable energy project siting is streamlined and transparent while seeking to minimize impacts on natural and working lands and engaging key stakeholders."
- Another goal set under Strategy E is to "[i]ncrease by 2030 the total acreage of conserved lands in the state to 30% through voluntary, focused purchases of land and working forest or farm conservation easements."

Maine Won't Wait Goals, cont'd.

- Each year, Maine's forests, which cover 89% of the state, sequester an amount of carbon equal to at least 60 percent of the state's annual carbon emissions, a figure that rises to 75 percent when durable forest products are included.
- Strategy E implementation outcome:
  - The Forest Carbon Program Task Force, established by Executive Order from Governor Mills, finalized their report in October 2021 that, as directed, "explore(d) incentives to encourage forestland management practices that increase carbon storage specifically on woodland owners of 10 to 10,000 acres."
  - Fundamental to achieving the recommendations in this report, and our overarching forest carbon sequestration goals, is that we work to maintain our existing forestland base.

Interest in Solar on Ag Land is Growing

2020 Summary Solar and Other Development Review			
	Solar	Unknown	Non-Solar
Number of Requests (811)	335	32	444
Project Request Acreage	43,462	2,414	57,603
Acreage Farmland Soils	14,950	1,154	5,606
Acreage Prime FL Soils	4,133	245	1,746
Acreage FL Soils Statewide Importance	10,816	909	3,860
% with Farmland Soils	87%	84%	59%
% with MNAP Features (Rare Plants/Exemplary Habitats)	5.9%	3.1%	10.7%
Lowest Acreage Request	1	2	0
Highest Acreage Request	5,627	460	10,821

2019	Solar	Unknown	Non-Solar
Number of Requests (562)	56	29	467

Acreage Farmland Soil in Maine	2,895,805
Acreage Prime Farmland Soil in Maine	793,434
Acreage Farmland Soils of Statewide Importance	2,102,372

- Numbers represent the total acreage reviews, not those approved for development.
- However, demonstrate a robust interest in solar-specific development relative to non-solar development.
- Significant interest in lands containing prime farmland soils and soils of statewide importance.

Solar: A Push and Pull for Farms

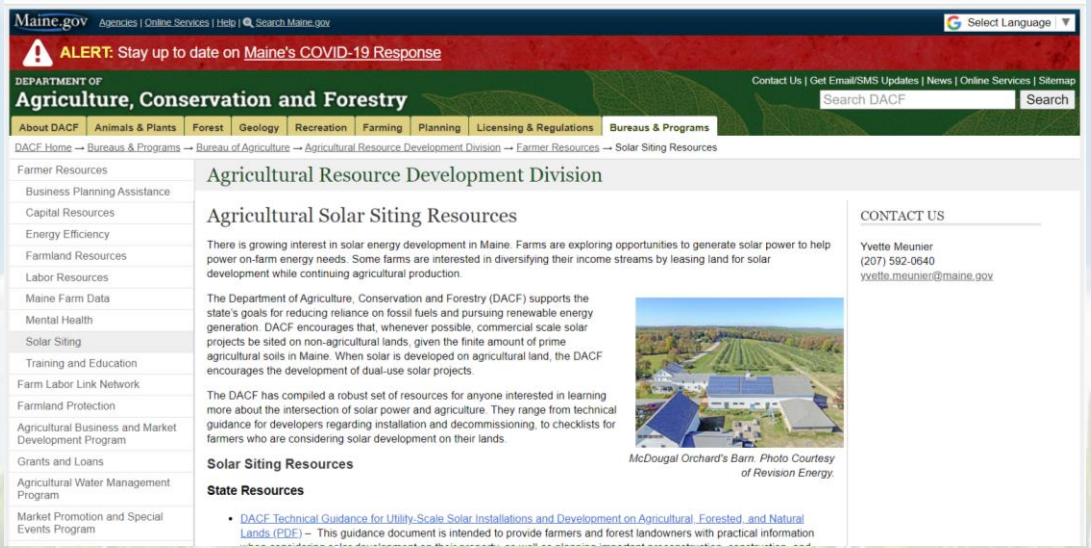
© Electrek.co

Farmington: 490-acre, 300,000-panel solar array – New England's largest

- Competition for affordable leased land. Concern regarding available and affordable fodder.
- Mailing and phone calls to farmers.
- Some municipalities are passing moratoria on solar development.
- Solar can allow farms a stable, diversified income stream.
- Thoughtful siting can allow farming operations to continue.

DACF & Others' Technical Resources

- DACF's doesn't regulate siting development or agricultural soils.
- Have crafted a solar webpage and resources: DACF Technical Guidance for Utility-Scale Solar Installations and Development on Agricultural, Forested, and Natural Lands.
- Maine Audubon and Maine Farmland Trust also have helpful resources.



Ag Solar Siting Stakeholder Process

- Eight facilitated meetings June – December 2021.
- Chaired by Governor's Energy Office and DACF.
- Thirteen members from diverse backgrounds and perspectives.
- Public engagement including public comment at all meetings and comment period on draft report.
- Discussed Maine solar industry's landscape and the state's agriculture and solar development potential.
- Reviewed other states' solar and siting policies (MA; NJ; VT).
- Reviewed Maine Audubon's Maine Renewable Energy Siting Tool.
- Maine Municipal Association's presented its perspective on current use tax law and Maine DEP on licensing process for solar development.
- Developers' experiences with dual use solar projects.
- Farmer's experience converting 45 acres (out of 1,000) into solar.

Stakeholder Recommendation #1

- *Creation of a centralized clearinghouse of information*
- Publicly-accessible database of key characteristics, including spatial data, of approved and constructed solar projects.
- **DACF Supports**: solar data currently hard to find and often incomplete. Will allow a solid understanding of existing (or soon to be developed) solar sites, enabling the calculation of impacted lands, acreage, soil type(s), and other important trends.

Photo credit: Longroad Energy

Stakeholder Recommendation #2

- *Dual-Use Pilot Program*
- Create pilot program to support dual-use projects in Maine.
- **DACF Supports**: Must conduct research on compatible crops and livestock in Maine to determine viability for farmers interested in pursuing solar energy generation on their land. Because many other recommendations include dual-use, the pilot is critical to truth-test its potential success in Maine.

Photo credit: BlueWave Solar

Stakeholder Recommendation #3

- *Consideration of current use taxation*
- Eliminate tax penalty if farmland continues operations with solar development onsite.
- **DACF Supports**: Provided dual-use projects are proven to be viable (by way of the pilot project), it could be productive to explore whether changes to the farmland current use taxation would be advisable.

Photo credit: BlueWave Solar

Stakeholder Recommendation #4

- *Consideration of standards for dual-use and co-location in permit-by-rule review ("PBR")*
- Standards for these types of projects to be included as permitting criteria in future development of permit-by-rule processes by DEP.
- **DACF Supports**: Offering PBR review to proposals that incorporate dual-use and/or co-location practices offers an incentive to developers to include more agriculture-friendly design considerations into their projects.
- DACF also wants PBR review apply to proposals on marginal agricultural land, contaminated lands (brownfields and PFAS), rooftops, gravel pits, and previously developed parcels to prioritize and incentivize projects that safeguard and/or avoid valuable agricultural land.

Stakeholder Recommendation #5

- *Development of hosting capacity maps*
- These maps can help developers become more efficient at targeted site selection for all sizes of solar projects.
- **DACF Supports**: Comprehensive data that indicates which areas of the grid are saturated and which have the capacity for additional interconnections can minimize land use stress. This information could help developers minimize interconnection costs, thereby increasing their ability to choose to pursue higher-cost dual-use or co-location sites.

Photo credit: ReVision Energy

Stakeholder Recommendation #6

- *Increased support for municipal planning capacity*
- More robust technical assistance capacity and/or financial support for planning should be provided by natural resource agencies directly to municipalities, councils of governments.
- **DACF Supports**: DACF understands the constraints municipalities are facing when it comes to solar development and their need for additional support and resources, such as specific training and informational resources about land use considerations.

Photo credit: ReVision Energy

Stakeholder Recommendation #7

- *Consideration of program preference based on agricultural site characteristics*
- Future state-sponsored programs to support solar resources (i.e., long-term contracts or compensation mechanisms) should include consideration of agricultural siting characteristics. The Distributed Generation Stakeholder Group should consider and include agricultural group members participate.
- **DACF Supports**: Having the PUC evaluate and score proposed projects' agricultural and natural resource impacts could encourage well-designed and sited projects that limit impacts to valuable agricultural lands. DACF also encourages the procurement process to include criteria assessing whether the project is located on the built environment, brownfields, or other contaminated lands, or whether it will be a dual-use or co-location project.

Further DACF Recommendations

- Additional policy recommendations for further consideration include:
- In Lieu Fee: In lieu fee is a mechanism where, if impacts to significant environmental or natural resources (or agricultural resources) cannot be avoided by the proposed development, the developer pays a mitigation fee. That fee is then utilized to fund natural resource, wildlife, or in this case, farmland protection elsewhere in the state.
- Soils Education: Enhancing the general understanding of developers, policymakers, and the general public regarding the importance of our farmland soils (and what opportunities are lost as a result of farmland development to non-agricultural uses) is critical. Build out effort through DACF's Healthy Soils Program.
- Include Natural Resources: When considering potential impacts from solar siting, consider natural resource impacts in addition to agricultural soils. Term includes important wildlife and fisheries habitats, rare plant populations, and rare and exemplary natural communities.

Next Steps

- Pursue developing centralized clearinghouse of solar development information (Rec. #1); establish a robust dual-use pilot program (Rec. #2); and increase support for municipal solar planning (Rec. # 5).
- DACF strongly encourages further analysis of a potential in lieu fee program focusing on solar development on agricultural land.
- Request that the Distributed Generation Stakeholder Group fully assess agricultural and natural resource siting characteristics and/or compensation mechanisms and allow for agricultural representatives to actively engage in that group process.
- Support of one full-time DACF position to successfully implement these recommendations.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Thank you.