
Wisconsin Legislative Council

INFORMATION MEMORANDUM



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SOLAR ENERGY AND FARMLAND PRESERVATION

Wisconsin law establishes various mechanisms to preserve agricultural land. These mechanisms include land use regulations, such as local zoning, and programs that provide tax credits or other incentives to landowners. Recently, as solar energy facilities have become more prevalent across rural Wisconsin, legislators have inquired about the relationship between the state's mechanisms for preserving farmland and solar development, including, in particular, the effect of solar development on eligibility for farmland preservation tax credits.¹

THE FARMLAND PRESERVATION PROGRAM

The Department of Agriculture, Trade and Consumer Protection (DATCP) administers the state's farmland preservation (FP) program, which includes various components to encourage the preservation of land for agricultural use.² Each component of the FP program has differing implications for the development of solar energy facilities, as discussed below.

FP Plans

State law requires all counties to adopt FP plans. To be certified by DATCP, a county FP plan must describe and map the areas to be preserved for agricultural and agriculture-related uses, while also providing other information outlining the county's policy for farmland preservation and agricultural development. Areas identified for farmland preservation may not include any areas that are planned for nonagricultural development within 15 years of the adoption of a plan. Additionally, if a county has a comprehensive plan for zoning, its FP plan must be included within, and consistent with, that comprehensive plan. [[s. 91.10, Stats.](#)]

County FP plans can serve to guide counties and towns in developing policies to support agricultural land use. These plans also serve as a foundation for other FP mechanisms. Notably, land covered by an agricultural enterprise area (AEA), FP zoning district, or FP agreement, must generally be located within an FP area identified under an FP plan. [[ss. 91.38 \(1\) \(g\), 91.60 \(2\) \(b\), and 91.84 \(1\) \(e\) 4., Stats.](#)]

An FP plan does not, by itself, impose any restrictions on land use (including land use for solar development). However, an FP plan may impact the Public Service Commission's (PSC) review of the siting of a large generating facility. Notably, generating facilities with a capacity of 100 megawatts or greater require a certificate of public convenience and necessity (CPCN) from the PSC. In granting a CPCN, the PSC must determine, among other things, that a project will not

¹ Additional information may be found in Legislative Fiscal Bureau, [Farmland Preservation Program and Tax Credits](#), Informational Paper 76 (Jan. 2023).

² DATCP is required to prepare biennial reports on the status of farmland preservation. [[s. 91.04, Stats.](#)] These reports are available at: <https://datcp.wi.gov/Pages/Publications/FarmlandPreservation.aspx>.

“unreasonably interfere with the orderly land use and development plans for the area involved.”³ [[s. 196.491 \(3\) \(d\) 6., Stats.](#)]

FP Zoning

Municipalities and counties may adopt FP zoning ordinances in accordance with their general zoning authority. However, FP zoning ordinances are also subject to certification by DATCP, and must meet various requirements established by statute and administrative rule. Among these requirements, an FP zoning ordinance must generally limit land uses to the permitted and conditional uses identified in statute.⁴ [[ss. 91.30, 91.38, and 91.42, Stats.](#)]

For an FP zoning ordinance to be certified by DATCP, zoning districts under the ordinance generally must only include land identified for preservation within a county FP plan. [[s. 91.38 \(1\) \(g\), Stats.](#)] Further, for DATCP to determine that an FP zoning ordinance is substantially consistent with an FP plan, zoning districts in the ordinance must cover certain minimum percentages of the land designated for preservation under the FP plan. [[s. ATCP 49.25, Wis. Adm. Code.](#)]

State law provides that utility use (including “facilities for the generation of electricity from sunlight”) qualifies as a conditional use within an FP zoning district.⁵ [[s. 91.46 \(1\) \(f\), Stats.](#), and [s. ATCP 49.01 \(19\), Wis. Adm. Code.](#)] To allow for solar development as a conditional use in an FP zoning district, a political subdivision must make various determinations about a proposed project. For example, the political subdivision must determine that the proposal is reasonably designed to minimize the conversion of land, at and around a site, from agricultural or open space use. Similarly, the proposal must not substantially impair or limit the current or future agricultural use of surrounding parcels of land that are zoned for or legally restricted to agricultural use. [[s. 91.46 \(4\), Stats.](#)]

While conditional use permitting under an FP zoning ordinance may be used to regulate solar energy development, local authority to restrict solar energy systems is also limited under state law. Specifically, state law prohibits a political subdivision from placing any restriction, either directly or in effect, on the installation or use of a solar energy system, unless the restriction satisfies one of the following conditions:

- The restriction serves to preserve or protect the public health or safety.
- The restriction does not significantly increase the cost of the system or significantly decrease its efficiency.
- The restriction allows for an alternative system of comparable cost and efficiency.

[[s. 66.0401 \(1m\), Stats.](#)]

In addition to the limits on local authority described above, the PSC’s issuance of a CPCN for a large electric generating facility supersedes any local ordinance that may preclude or inhibit a project. [[s. 196.491 \(3\) \(i\), Stats.](#)]

³ Further information on the PSC’s review process for large solar generating facilities is available in Legislative Council, *Regulation of Solar Generation Facilities*, Information Memorandum (October 2021).

⁴ An FP zoning ordinance may also allow for prior nonconforming land uses (subject to certain limitations). Additionally, DATCP may specify other allowable land uses by rule. [[s. 91.42, Stats.](#)]

⁵ While utility-scale solar generation facilities would qualify as a conditional use, smaller solar energy systems may be considered an accessory use that could qualify as a permitted land use in an FP zoning district. [[ss. 91.01\(1\) and 91.44\(1\)\(b\), Stats.](#)]

FP Agreements

An FP agreement is an agreement between a landowner and DATCP to restrict a given tract of land to agricultural and accessory uses, or undeveloped natural resource and open space uses. For land to be eligible for an FP agreement, it must be located within both an agricultural enterprise area (AEA; discussed below), as well as an FP area identified in a certified FP plan. Additionally, the land must be operated as part of a farm that satisfies certain requirements relating to its gross farm revenues. [[ss. 91.60](#) and [91.62, Stats.](#)]

FP agreements must have a term of at least 15 years, though these agreements may be terminated early. Early termination of an agreement, or the release of land from an agreement, requires approval from DATCP, consent of the landowner, and payment of a conversion fee by the landowner.⁶ [[ss. 91.62](#) and [91.66, Stats.](#)]

Solar energy development, other than that for on-farm “accessory” use, is incompatible with the land use restrictions established by an FP agreement. Such development would generally require termination of an agreement or the release of certain acres from an agreement. [[s. 91.62 \(1\) \(c\), Stats.](#), and [s. ATCP 49.01 \(1\) \(Note\), Wis. Adm. Code.](#)]

Agricultural Enterprise Areas

Upon the petition of landowners and local governments, DATCP may designate certain areas of the state as AEAs. To designate an AEA, DATCP must receive a petition that satisfies certain requirements, and the proposed AEA must be entirely located within an FP area identified under an FP plan. Additionally, land within an AEA must be contiguous and must be primarily in agricultural use. [[ss. 91.84](#) and [91.86, Stats.](#)]

As noted previously, the designation of an AEA enables landowners to enter into FP agreements. However, an AEA does not itself restrict land use. Thus, location within an AEA does not limit solar development, absent an FP agreement or other separate restriction.

Agricultural Conservation Easements

State law directs DATCP to administer a program under which the department may, together with local governments and nonprofits, purchase agricultural conservation easements from willing landowners. These easements continue in perpetuity and prohibit the land subject to the easement from being developed for a use that would make the land unavailable or unsuitable for agricultural use. [[s. 93.73, Stats.](#)]

An agricultural conservation easement would generally prohibit the development of a solar energy facility. However, DATCP’s agricultural conservation easement program is currently inactive and the state does not currently provide direct funding for the program. [[s. 20.115 \(7\) \(i\) and \(tg\), Stats.](#)]

FP Tax Credits

Landowners with land covered by FP zoning, an FP agreement, or both, may be eligible for refundable income or franchise tax credits.⁷ To receive these tax credits, a landowner must

⁶ The conversion fee is equal to three times the per-acre value, for the year in which the FP agreement is terminated or land is released, of the highest value category of tillable cropland in the municipality in which the land is located, as specified by the Department of Revenue. [[s. 91.66 \(1\) \(c\), Stats.](#)]

⁷ 2009 Wisconsin Act 28, the 2009-2011 biennial budget act, made various changes to the state’s FP program, including its associated tax credits. Certain landowners may still receive pre-2010 tax credits based upon FP

comply with DATCP's soil and water conservation standards on each farm for which they claim FP tax credits. County land conservation committees must monitor compliance with these standards and must inspect each farm for which a landowner claims FP tax credits at least once every four years. Similarly, DATCP must review each county land conservation committee's compliance with its inspection duty at least once every four years. [[ss. 91.80](#) and [91.82, Stats.](#)]

FP tax credits are calculated by multiplying a claimant's qualifying acres by one of the following amounts:

- \$10, if the qualifying acres are located in an FP zoning district and are also subject to an FP agreement entered into after July 1, 2009;
- \$7.50, if the qualifying acres are located in an FP zoning district, but are not subject to an FP agreement entered into after July 1, 2009; or
- \$5, if the qualifying acres are subject to an FP agreement entered into after July 1, 2009, but are not located in an FP zoning district.

[[s. 71.613 \(2\), Stats.](#)]

The effect of a particular solar energy facility on eligibility for FP tax credits depends, in part, on whether the otherwise qualifying acres are subject to an FP agreement. As noted above, the land use restrictions within an FP agreement generally preclude the development of solar energy facilities (beyond facilities that qualify as an accessory use). As such, the owner of land upon which a solar energy facility is built is generally ineligible for tax credits for acres subject to an FP agreement.

In contrast, solar energy development on acreage covered by FP zoning does not automatically render a landowner ineligible for FP tax credits. Instead, based on the statutory language and DATCP interpretation, the effect depends on the percentage of the qualifying acres that are used for the solar energy development. Specifically, for the purposes of calculating FP tax credits, state law defines "qualifying acres" as the number of acres of a farm that satisfy certain criteria (generally relating to the land's coverage by an FP agreement or FP zoning district). In turn, "farm" is generally defined, through cross-reference, as "all land under common ownership that is primarily devoted to agricultural use."⁸ While the statutes enumerate various activities that constitute "agricultural use," they do not define the term "primarily" for the purposes of the definition of a farm. Thus, "primarily" is subject to agency interpretation. DATCP interprets the definition of a farm, based on the commonly accepted meaning of the term "primarily," to mean land under common ownership where more than 50 percent of the land is devoted to agricultural use. [[ss. 71.613 \(1\) \(d\)](#), and [\(h\)](#), and [91.01 \(13\), Stats.](#)]

As discussed previously, solar energy development generally constitutes a conditional use within an FP zoning district. If a solar energy facility were to be developed on fewer than 50 percent of an agricultural landowner's acreage within an FP zoning district, the landowner may still be eligible for tax credits associated with FP zoning. Specifically, their acreage covered by an FP zoning district could still qualify as a farm because it is "primarily devoted to agricultural use." Conversely, if more than 50 percent of a landowner's acreage were to be developed into a solar energy facility, the total acreage would no longer constitute a farm. In this scenario, the farm,

agreements signed prior to July 1, 2009. However, these pre-2010 tax credits make up a relatively small portion of the overall FP tax credits claimed.

⁸ The definition of "farm" under [s. 71.613 \(1\) \(d\), Stats.](#), also includes minimum requirements relating to gross farm revenues.

and the acreage for which the landowner could receive tax credits, would only consist of the acres that remain in agricultural use.

OTHER MECHANISMS THAT INCENTIVIZE PRESERVATION OF FARMLAND

In addition to the FP mechanisms established in statute, agricultural zoning ordinances adopted by local governments, as well as the state's agricultural use property tax exemption, may also support agricultural land use. These laws, and their relationship to solar energy development, are discussed below.

Agricultural Zoning

While local governments may adopt FP ordinances under the DATCP program, they may also adopt agricultural zoning ordinances to designate certain areas for agricultural use, if authorized to do so under their general zoning authority. State law does not specify the permitted, conditional, or prohibited uses within zoning districts designated under these ordinances. Instead, the impact of agricultural zoning on a particular solar development depends on the requirements of the applicable zoning ordinance.

Though agricultural zoning ordinances may be used to regulate solar energy development, these ordinances would be subject to the limits on local authority to restrict solar energy facilities, discussed above.

Agricultural Use Tax Exemption

In addition to the mechanisms described above, Wisconsin's agricultural use property tax exemption supports agricultural land use by reducing the property tax burden imposed on agricultural lands.⁹ In general, Wisconsin law requires property to be taxed uniformly, meaning that property must be either fully taxed, based on the property's market rate, or entirely exempted from property taxes. However, the Wisconsin Constitution provides an exception to those general requirements for agricultural land. Specifically, land that is classified as agricultural for property tax assessment purposes is taxed based on the rental value of the property for agricultural use, rather than on the property's market value. [[Wis. Const. art. VIII, s. 1; s. 70.32 \(2r\), Stats.](#)]

For purposes of property taxes, "agricultural land" is land that is "devoted primarily to agricultural use." [[s. 70.32 \(2\) \(c\) 1g., Stats.](#)] The [2023 Wisconsin Property Assessment Manual](#) and Department of Revenue (DOR) rules specify that land is "devoted primarily to agricultural use" if it is in an agricultural use for the production season of the prior year, and not in a use that is incompatible with agricultural use on January 1 of the assessment year. [[s. Tax 18.05 \(4\), Wis. Adm. Code.](#)]

⁹ Further information on this tax exemption is available in Legislative Council, [Wisconsin's Agricultural Use Tax Exemption](#), Issue Brief (November 2022).

In this context, “agricultural use” means any of the following:

- Crop production.¹⁰
- Livestock production.¹¹
- Growing Christmas trees.
- Growing ginseng.
- Land without improvements that is subject to a state or federal easement or enrolled in a state or federal program, if certain conditions apply.
- Growing short rotation woody crops, including poplars and willows, using agronomic practices.¹²

[[s. 70.32 \(2\) \(c\) 1i., Stats.](#); [s. Tax 18.05 \(1\), Wis. Adm. Code.](#)]

Installation of a solar energy facility falls outside that definition. Thus, for purposes of the agricultural use property tax exemption, the property on which a solar energy facility is installed is not classified as agricultural land, beginning in the first taxable year after which the facility is installed. However, that change affects only the portion of a parcel on which a solar energy facility is installed. Portions of the same parcel that fall within the definition of “agricultural use” retain their agricultural land classification.¹³

However, land that is sold or leased for use as a solar energy facility may be exempt from property taxation nonetheless, if another property tax exemption applies.¹⁴ Specifically, Wisconsin law exempts real property from property taxes if the property is “used and useful in the operation of the business” of a light, heat, and power company, electric wholesaler, or electric cooperative.¹⁵ [[s. 70.112 \(4\) \(a\), Stats.](#)]

This information memorandum was prepared by Benjamin Kranner, Staff Analyst, and Anna Henning, Principal Attorney, on August 31, 2023 (Revised September 6, 2023).

¹⁰ Included crop production activities are those set forth in subsector 111 of the [North American Industry Classification System \(NAICS\)](#).

¹¹ Included livestock production activities are those set forth in subsector 112 of the [NAICS](#).

¹² “Agronomic practices” means agricultural practices generally associated with field crop production, including soil management, cultivation, and row cropping. [[s. 70.32 \(2\) \(c\) 1k., Stats.](#)]

¹³ See page 497 of the [2023 Wisconsin Property Assessment Manual](#) for a discussion regarding differing classifications of portions of a single parcel of land.

¹⁴ In addition to property tax exemptions that may apply to land, Wisconsin law also provides a property tax exemption for certain renewable energy systems, including solar energy systems. [[s. 70.111 \(18\), Stats.](#); [s. Tax 12.50, Wis. Adm. Code.](#)]

¹⁵ In lieu of local property taxes, these entities pay an annual license fee to DOR based upon their gross revenues. Local governments receive utility aid (a form of shared revenue, paid from the general fund) to offset the loss in revenue resulting from the local property tax exemption.