

Research Brief

Factors driving working forest conservation and parcelization in Wisconsin



In an era of rapid industrial land divestment, this research confirms the important role played by public conservation policies, including tax programs and funds for public land and conservation easement acquisition, in shaping outcomes for privately owned forestland.

Background

About two-thirds of forested acres in Wisconsin are owned by private individuals and corporations. Industrial forest companies enrolled their forestland in the state's Managed Forest Law (MFL) tax program, but nearly all have sold their landholdings in the state since 2000. Following sale, forested lands are likely to move from timber production and public recreation access to more subdivided parcels and development for other private non-timber production uses. Some of these properties have moved to more formal levels of protection by public ownership or conservation easement.

Methods

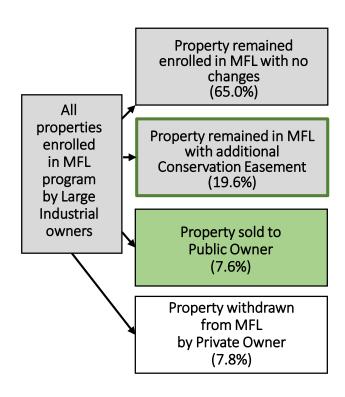
Using records from Wisconsin's Managed Forest Law (MFL) we identified all 40-acre properties that were enrolled in 1999 as a part of large corporate ownerships, then tracked all properties through 2014 using withdrawal records and property ownership maps. We identified four potential ownership and conservation tenure outcomes for each property through the end of 2014. We compared the characteristics of these properties using a multinomial regression model and examined the characteristics of properties actively withdrawn from the MFL. These estimates were then used to calculate the risk of program withdrawal for remaining MFL enrolled properties.

Forestland Changes

In 1999, there were 27,232 properties (1,078,800 acres) enrolled in Wisconsin's MFL program as a part of large industrial ownerships.

By the end of 2014,

- 65.0% remained enrolled and had no change in conservation status.
- 19.6% had been put in conservation easements.
- 7.6% had been sold to public agencies.
- 7.8% had been withdrawn from the MFL tax program by private owners.



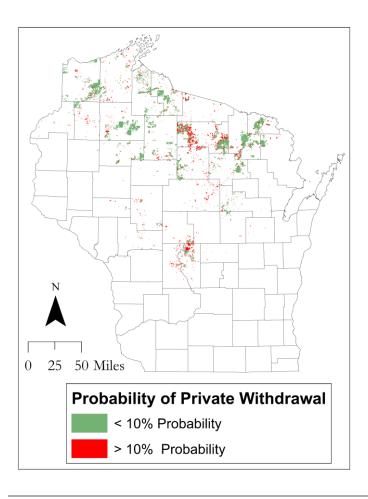
Forest Parcelization

Of the privately withdrawn properties, 22.8% were parcelized into two or more new parcels.

Properties more likely to be withdrawn and parcelized if they were,

- adjacent to a paved road or water,
- in smaller, isolated blocks,
- closer to urban areas,
- had been enrolled in MFL for fewer years.

Based on these factors, properties remaining in the MFL program that are at relatively higher risk of private withdrawal are clustered in the central and north-central parts of the state.



Property withdrawn from MFL by Private Owner (2000-2014)

Property remained intact through 2014 (77.2%)

Property divided into two or more parcels (22.8%)



Key Lessons

Public policies and land characteristics have shaped ownership and conservation outcomes of industrial forestland in Wisconsin.

Forested properties that are withdrawn from the state tax program are often parcelized.

Public agency land purchases have protected properties similar to those withdrawn for private development, while conservation easements have protected larger forested blocks.

MFL enrollment terms and required repayments for years elapsed are a statistically significant deterrent for private landowner withdrawal from the program.

Many remaining MFL-enrolled properties are still at risk of program withdrawal and subsequent parcelization for development.

Source

L'Roe, A.W. & Rissman, A.R. (2017). Factors that influence working forest conservation and parcelization. *Landscape and Urban Planning*, 167, 14-24.

For complete article, please see: https://doi.org/10.1016/j.landurbplan.2017.05.021

Research Sponsor

This project was supported by funding from the National Institute of Food and Agriculture, U.S. Department of Agriculture, McIntire-Stennis Formula grant WIS01807, the National Science Foundation's Graduate Research Fellowship Program under grant DGE-1256259, and the National Science Foundation's Integrated Graduate Education and Training (IGERT) award DGE-1144752: Novel ecosystems, rapid change, and no-analog conditions.