Maintaining the Forest Land Base in Minnesota: Threat of Parcelization
NE land ownership

- Federal lands: 35%
- Private lands: 28%
- State lands: 18%
- Tribal lands: 18%
- Water: 0%
- Local gov't lands: 0%
# Residential Development in the NE (acres)

<table>
<thead>
<tr>
<th>Category</th>
<th>1980</th>
<th>2000</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Residential</td>
<td>268,584</td>
<td>483,027</td>
<td>79.8</td>
</tr>
<tr>
<td>Urban/Suburban</td>
<td>15,644</td>
<td>25,575</td>
<td>63.5</td>
</tr>
<tr>
<td>Exurban</td>
<td>252,940</td>
<td>457,451</td>
<td>80.8</td>
</tr>
</tbody>
</table>
% Change in Total Residential (1980-2000)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Carlton</td>
<td>+36.9%</td>
</tr>
<tr>
<td>Cook</td>
<td>+7.7%</td>
</tr>
<tr>
<td>Lake</td>
<td>+131.2</td>
</tr>
<tr>
<td>St. Louis</td>
<td>+98.6%</td>
</tr>
<tr>
<td>NE Landscape</td>
<td>+79.8%</td>
</tr>
</tbody>
</table>
What is Parcelization?

- Division of ownership
- Conversion of larger ownership blocks to smaller ownership units
  - Forest Industry lands
  - Family Forest/NIPF lands
Parcelization Example

Year 1

PIN # 1000
40 acres

Year 2

PIN # 1000
20 acres

PIN # 1001
20 acres
Impacts of Parcelization

- Preclude efficient use of silviculture
- Diminishing economies of scale for timber harvesting/ probability to harvest
- Diminishing biodiversity/increasing likelihood of non-native species/diminishing water quality
- Decreasing likelihood of allowing public access/heightened land use conflicts
Issue Significance

• Average family forest land holding has shrunk
• Increase in the number of family forest owners
• Loss of forestland owned by publicly traded forest products companies
• Changing land use
## Projected future land consumption in NE Counties

<table>
<thead>
<tr>
<th></th>
<th>New Households (2010-2030)</th>
<th>Land Consumption (Midwest avg in acres)</th>
<th>Land Consumption (Duluth avg in acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlton</td>
<td>3,100</td>
<td>10,509</td>
<td>7,192</td>
</tr>
<tr>
<td>Cook</td>
<td>1,030</td>
<td>3,492</td>
<td>2,390</td>
</tr>
<tr>
<td>Lake</td>
<td>750</td>
<td>2,543</td>
<td>1,740</td>
</tr>
<tr>
<td>St. Louis</td>
<td>11,700</td>
<td>39,663</td>
<td>27,144</td>
</tr>
</tbody>
</table>
# Assessment of development pressure

<table>
<thead>
<tr>
<th></th>
<th>Fast Growth</th>
<th>Growth</th>
<th>2\textsuperscript{nd} Home demand</th>
<th>Significant Forest Economy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlton</td>
<td>n</td>
<td>y</td>
<td>n</td>
<td>No data</td>
</tr>
<tr>
<td>Cook</td>
<td>y</td>
<td>y</td>
<td>y</td>
<td>No data</td>
</tr>
<tr>
<td>Lake</td>
<td>n</td>
<td>n</td>
<td>y</td>
<td>No data</td>
</tr>
<tr>
<td>St. Louis</td>
<td>n</td>
<td>n</td>
<td>y</td>
<td>y</td>
</tr>
</tbody>
</table>
Itasca County Case Study

- Describe the extent to which forest parcelization is occurring
- Characterize the nature of forestland parcelization activity
- Determine the extent to which parcelization is related to development
Case Study Findings – 366 splits 1999-2006
Summary of Findings

- Constant rate of parcelization
  - 0.4% each year
- Most activity occurring near water (36%), public land (57%), and large communities
- Parcelization strongly tied to development (68% developed in 7 yrs)
Study Components

• Assessment of trends and drivers of forest land parcelization
• Assessment of available policy responses
• Recommendations for decision-makers
Expansion of Case Study Findings

- 10 county analysis
- Identified areas of parcelization
- Predictive factors
  - Population growth
  - Land values
  - Adjacency to public roads and lands
Relative parcelization activity
Other Driving factors

- Unprecedented shift in ownership
- Growth in forest land values
- Changes in population
- Current policies

International Paper to Sell Most of Its Forestland
The New York Times
Policy Tool Analysis

• Identification of tools
• Evaluative criteria
• Evaluation methodology
• Analytic tools
  – Policy Tool Matrix
  – Forest Transect
Assessment of Policy Tools

- Conservation easements
- Tax policy
- Planning and zoning
- Land exchange
- Fee title acquisition
- Other approaches
Policy Tool Assessment Criteria

• Effectiveness at achieving outcomes
• Efficiency (Benefits vs. Costs)
• Political Palatability
• Equity
• Technical/Operational feasibility
• Administrative Ease
Selected Findings:
Conservation Easements/Land Exchanges

• Effectiveness of existing easement programs could be enhanced by increased coordination.

• Effective use of conservation easements is linked to the stewardship of the easement.

• Legislation to expedite public land exchange has had little impact on development of private forest lands.
Selected Findings:
Land Use Planning and Zoning

• Most counties have a comprehensive plan, but many are inadequate or counterproductive in encouraging retention of forest land.

• Small to modest incentives have been quite effective in encouraging planning activities in Minnesota.

• Most zoning encourages parcelization.
Selected Findings: Property Taxation

• Preferential property tax treatment of forest lands is the preferred vehicle to encourage forest land owners to retain forest lands.
• Most state property tax programs are not very effective at encouraging forest land retention.
• Awareness and the need for a covenant are obstacles for land owners.
<table>
<thead>
<tr>
<th>Community Character</th>
<th>Forest Management</th>
<th>Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>• “Main Street” and surrounding residential neighborhoods.</td>
<td>• Urban forest is among any community’s most important assets.</td>
<td>Forest land parcelization is not an issue in the Urban Center.</td>
</tr>
<tr>
<td>• Often includes older industrial districts.</td>
<td></td>
<td>Cities can help limit the demand for rural residential land by promoting attractive infill development.</td>
</tr>
<tr>
<td>• Paved streets and central water and sewerage.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Forest land parcelization is not an issue* in the Urban Center.
<table>
<thead>
<tr>
<th>The Commercial Forest</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Forest values - clean water, outdoor recreation, timber, and wildlife – are produced on private land.</td>
<td>Road network generally limited to that needed for forest management.</td>
</tr>
<tr>
<td></td>
<td>Essentially continuous forest cover. May also include recreational facilities, like campgrounds; other resource-dependent uses, like mines; and the occasional hunting cabin.</td>
<td>Plenty of interior forest.</td>
</tr>
<tr>
<td></td>
<td>Only significant areas of residential development are along lakeshores.</td>
<td>Good connectivity where the forest is not continuous.</td>
</tr>
<tr>
<td></td>
<td>Average parcel size &gt; 40 acres.</td>
<td>Encompasses many special resources, including stream corridors, wetlands, steep slopes, archeological and historical sites, and important plant and wildlife habitats.</td>
</tr>
<tr>
<td></td>
<td>Investment Strategies:</td>
<td>Regulatory Strategies:</td>
</tr>
<tr>
<td></td>
<td>Ideal environment for the use of conservation easements and a tax program (property or income, or both) to encourage land retention and sustainable forest management.</td>
<td>Exclusive Forest Use Zoning – is the best regulatory strategy here.</td>
</tr>
<tr>
<td></td>
<td>Acquisition may be necessary to protect special resources or ensure public access for recreational use.</td>
<td>Where local governments hesitate at Forest Use Zoning: Very large (at least 80 acres) minimum lot size can be used in concert with stringent Firewise and resource protection standards. Local governments will also want to consider the costs of providing services to remote home sites.</td>
</tr>
</tbody>
</table>
General Principles

• Reliance on incremental changes and enhancement of existing programs
• Recognize need to carefully target public investments and foster partnerships
• Strive for multiple benefits from conservation investments
• Recognize that all tools in the ‘toolbox’ are needed
Forest Land Retention: Policy Options

1) Use the Department of Natural Resources’ Minnesota Forests for the Future program as a coordinated platform for a coordinated approach to forest land conservation.

2) Empower and encourage local governments to use local planning to maintain their forest land base.

3) Develop and execute conservation easements in a deliberate, coordinated and sustainable manner.
Forest Land Retention: Policy Options

4) Use and build on current state tax policy and incentives to encourage family forest owners to maintain the forest land base.

5) Rely on fee simple acquisition and land exchanges for exceptional cases, small parcels and for consolidation or access to public land.

6) Provide strong support to the counties to foster their management capabilities in order to encourage forest stewardship and retain county administered forest land.
Questions

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www.frc.mn.gov