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Michigan Timberlands

Forests cover more than half (54%) of Michigan's land area. Out of this, 19.2 million acres are capable of producing more than 20ft³ per acre of industrial wood per year and are known as timberlands. Private landowners form the major forest ownership group followed by the state and local government, and forest service respectively (fig 1).

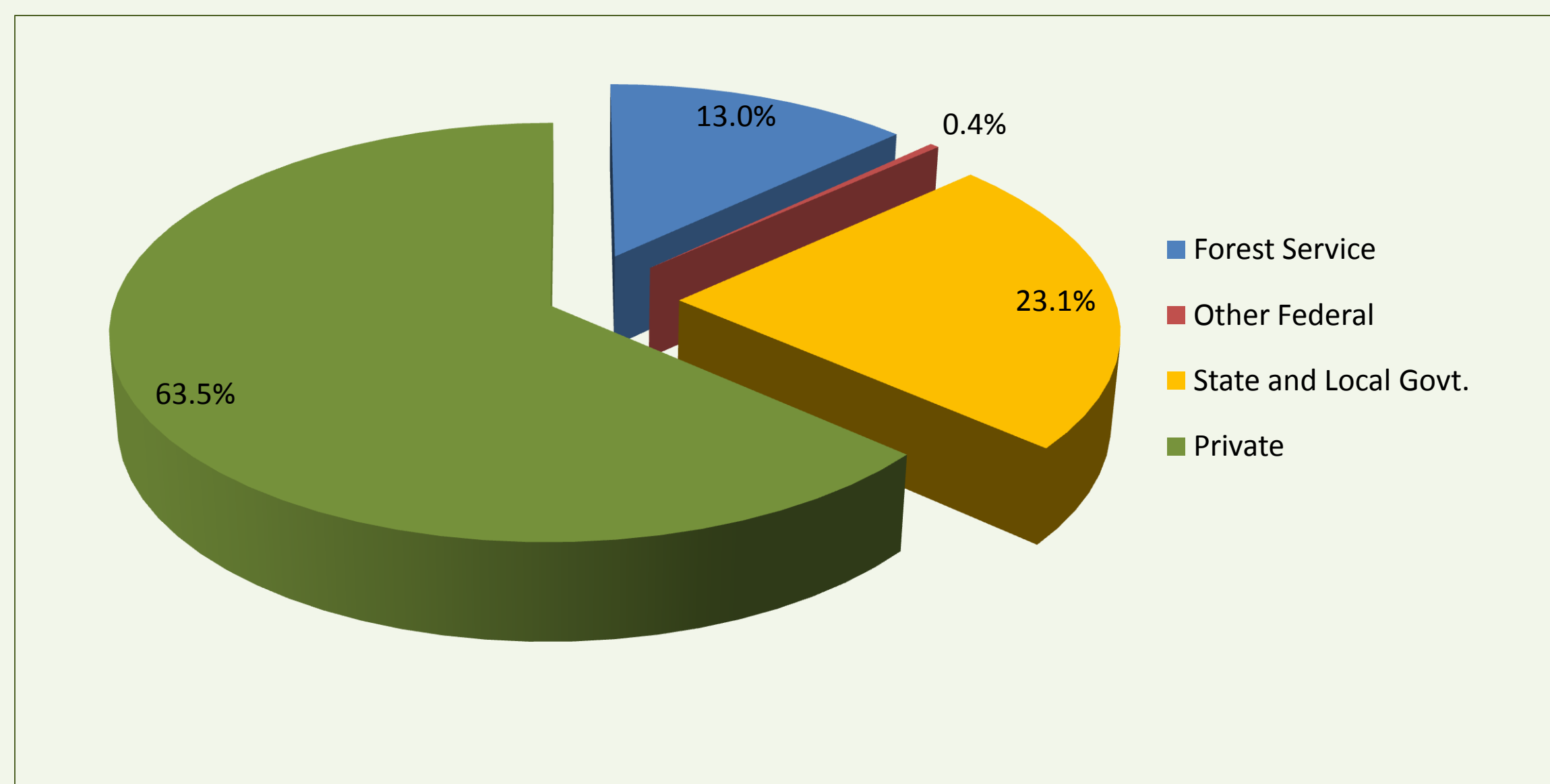


Fig 1. Percentage of MI timberland by ownership

The state is divided into four geographical sub-regions; the eastern upper peninsula (EUP), the western upper peninsula (WUP), the northern lower peninsula (NLP), and the southern lower peninsula (SLP). Thirty eight percent of the total timberland is located in the NLP, 24% in the WUP, 21% in the EUP, and 17% in the SLP.

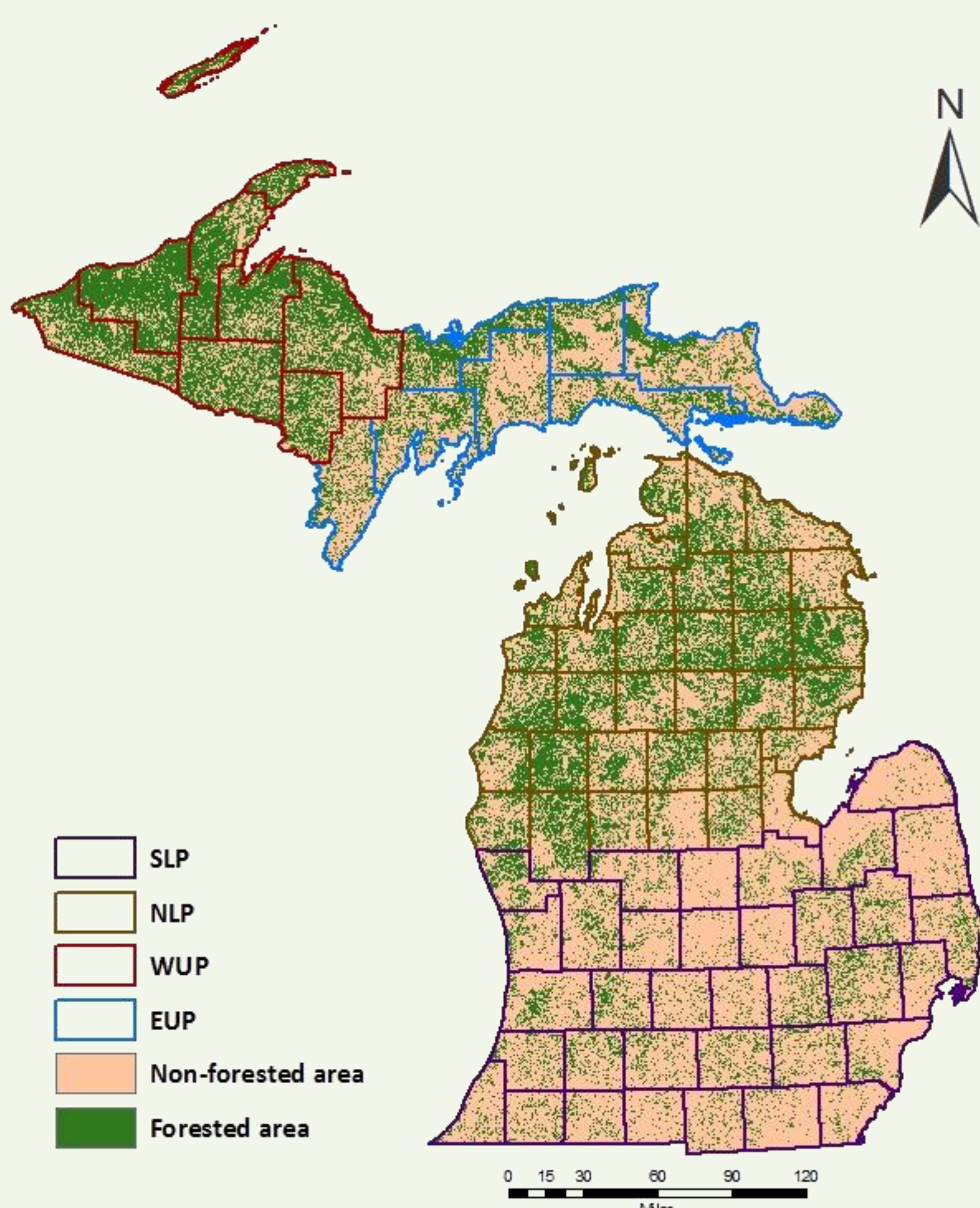


Fig 2. Map of Michigan by region and forested area

Current Growth and Removals

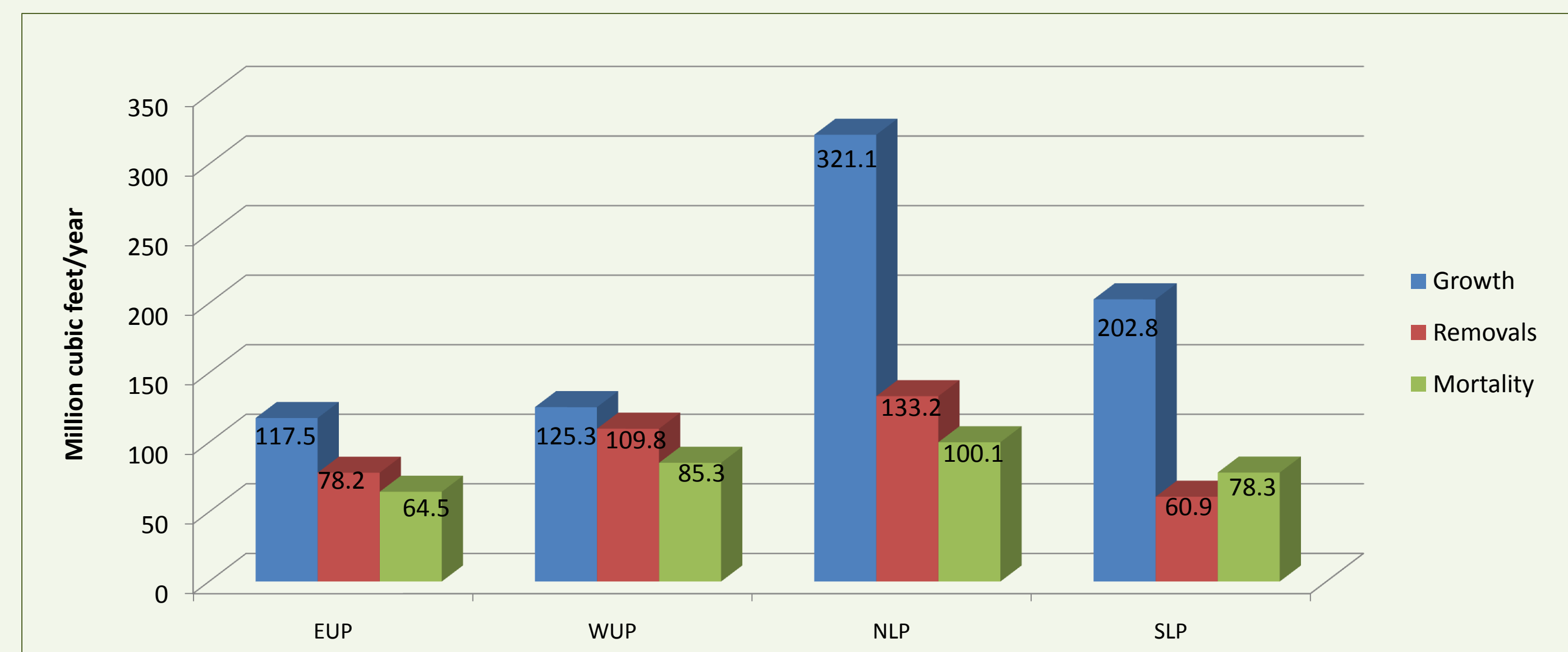


Fig 3. Average annual growth, removals, and mortality in MI timberlands by region

The annual growth of wood in MI is 766.6 million cubic feet of live trees. Out of this, 382.2 million cubic feet is removed each year, leaving an unutilized resource of approximately 384.4 million cubic feet per year. Among the regions, the NLP has the highest annual growth and removals. However, the WUP removes the largest percentage of growth (87%) followed by the EUP (67%), the NLP (42%) and the SLP (30%) respectively.

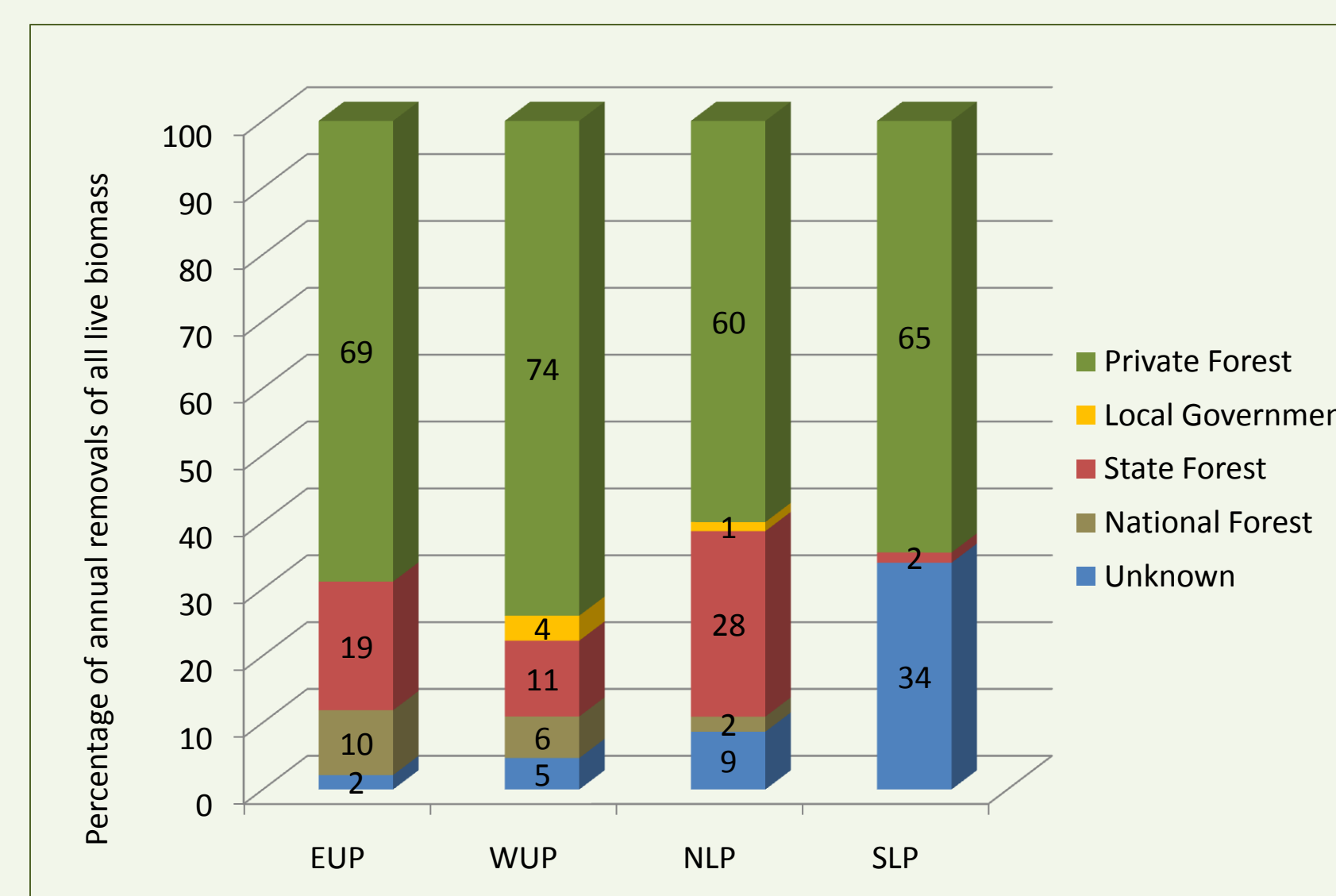


Fig 4. Percentage of the all live biomass removed annually from MI timberlands by ownership and region

Approximately 67% of the annual removals come from private forests, 19% from the forests owned by state and local government, and 5% from the national forests.

Future Potential

Wood removals are determined in part by the government agency planning and by state, regional and international timber markets. National and state forests utilize written management plans which specify removal targets as well as limits to removals. Private timberlands include the forests owned by timber management organizations (TIMOs) and non-industrial private forest owners (NIPF). While the management of TIMO owned forests are guided by the forest management plans, those under NIPF ownership usually lack such explicit plans and are determined more by owner preferences, beliefs, and attitudes.

Allowable annual harvests from the national forests exceed current harvest by 35.4 million cubic feet (fig 5), thus revealing the potential for increased harvesting in the future.

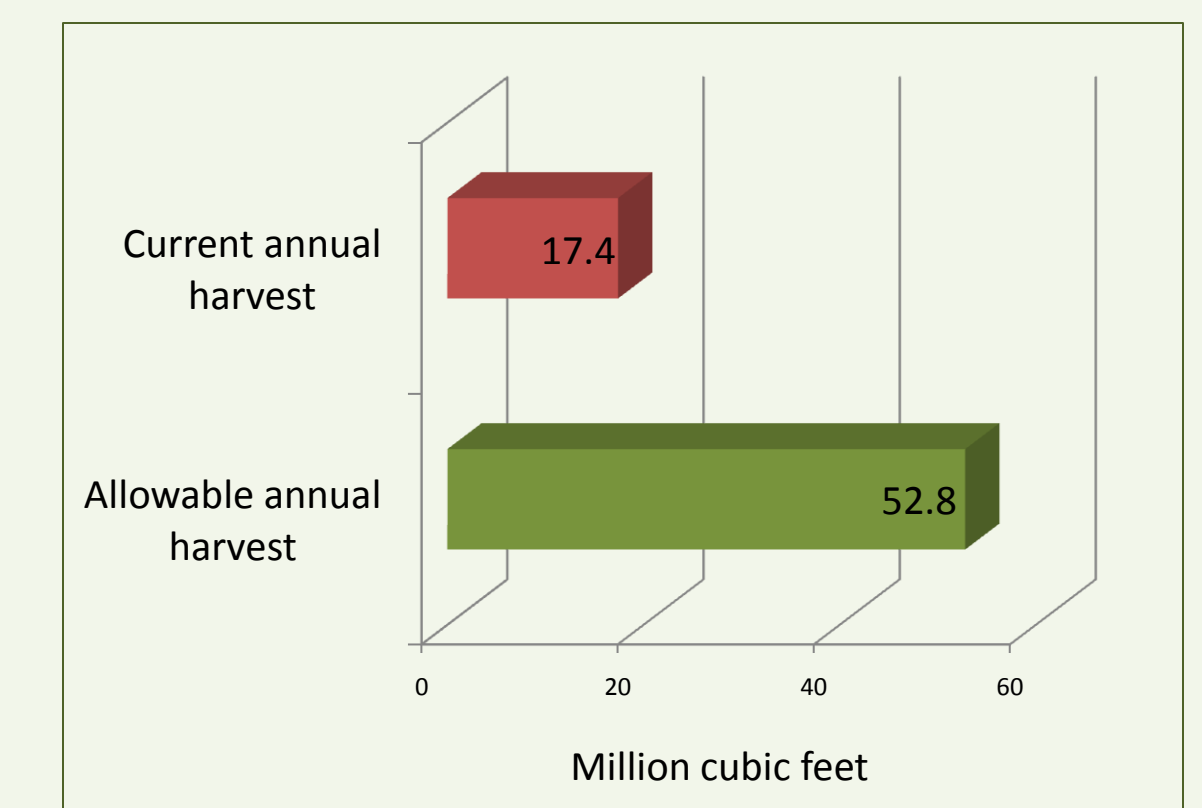


Fig 5. Current and allowable annual harvest from Michigan's national forests

In case of the state forests, the net annual growth of all live biomass exceeds the removals by 61.3 million cubic feet per year. According to the state forest management plan, approximately 53,000 acres of timberland are offered for sale annually and tentatively the same amount will be up for sale in the near future.

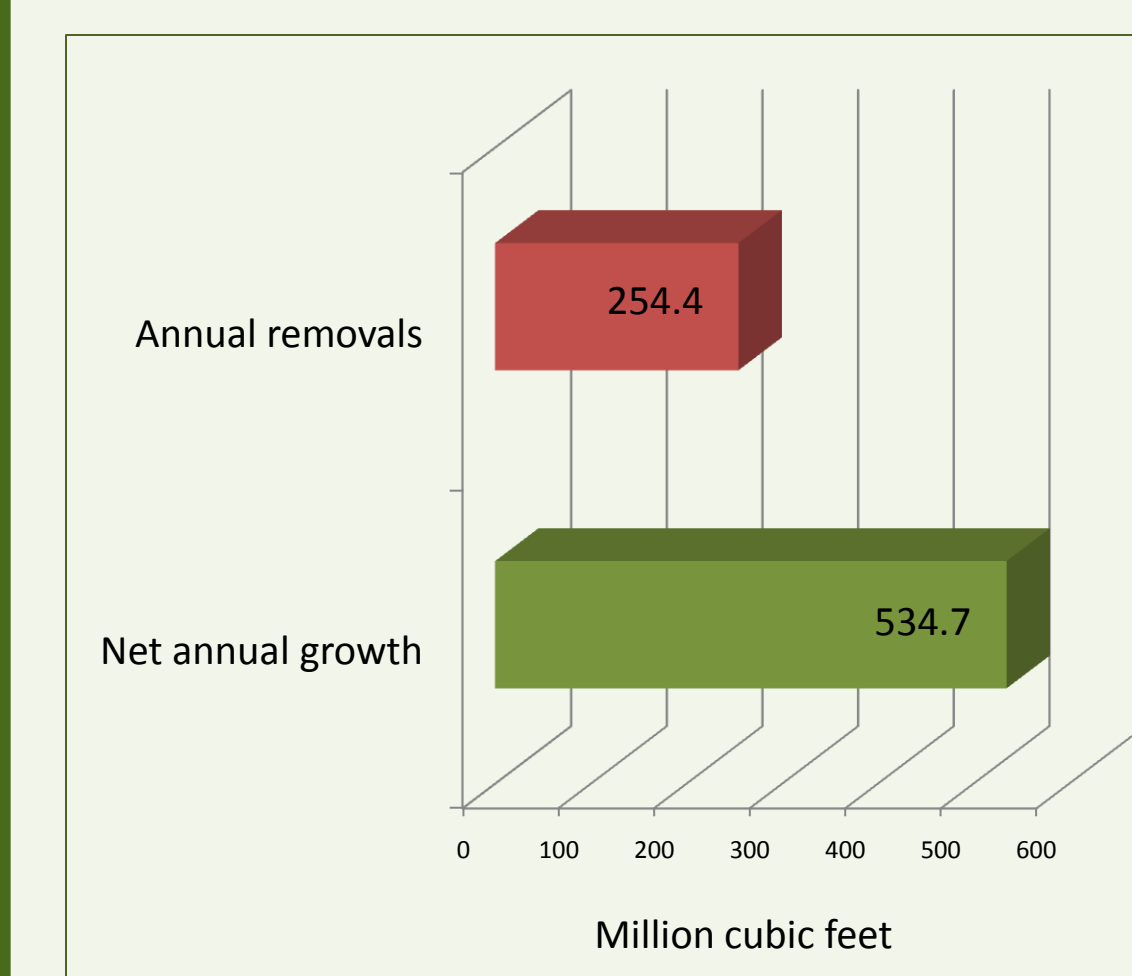


Fig 6. Net annual growth and removals of all live biomass from Michigan's private forests

Private lands remove 48% of the annual growth, thus retaining 280.3 million cubic feet of unused wood per year (fig 6). Majority of the NIPF owners cite non-economic factors as the most important reason for forest ownership.

However, 45.4% of them have harvested timber in the past. This trend can thus be assumed to remain in effect in the future as well.

Besides this, approximately 71.8 million cubic feet of harvest residue, and 1.6 million cubic feet of mill residue remain unused in the state at present. All this offer a promising future for wood availability in MI.

Challenges to increased harvesting

MI loggers indicate high stumpage and low mill price, shortage of capable labor force, competition for stumpage, insufficient timber supply from both public and private lands, and high fuel prices as some of the challenges for increased harvesting in the future. Nevertheless, majority of them (75%) are willing to expand the operation in future under favorable market conditions.