TAG-Winnipeg (Trees Action Group) presentation to Executive Policy Committee (EPC), March 13, 2012-03-12

1. **Winnipeg's historical record is excellent and internationally recognized.....a significant asset worth preserving.**

2. **Concerning Signs:**
   a. **Personal Observation**: In recent years Winnipeggers have experienced an apparently unprecedented loss of Elm trees in our neighbourhoods.
   b. **Historical and Projected Trends**:
      i. **Since** 1975 Winnipeg has **lost almost 50%** of its mature Elm tree population.
      ii. Current trends suggest Winnipeg **will lose another 50%** of its mature Elm trees **within 12 years**, with only a quarter of the current number remaining by the year 2030.
      iii. **The estimated value of the remaining 143,000 Elm trees is $810 million or close to one billion dollars, a significant City Asset that needs to be taken care**
   c. **DED specific loss rate**: The DED specific loss rate is climbing.
      iv. Between 1975 and 2011 averaged 1.38% per year, but is more than double that in 2011 (3.46%).
      v. **2011 is the first year in Winnipeg's history that the DED loss rate has exceeded 3%.**
      vi. 2% DED loss rate per year gives a city time to replant lost trees while expanding the time in which the significant $$$ required for removal and replacement must be spent
   d. **% of Elms removed specifically because of DED has increased.**
      vii. In the 1970's only 20% of Elms that had to be removed were lost to DED.
      viii. Today over 80% of all Elms we lose are because of DED. The DED loss rate and the total Elm loss rate (from all causes) are now almost the same.
   a. **The city's budget for tree planting, pruning and removal has remained relatively static in recent years.**
      i. $250,000 to increase the pruning schedule to 1:10 years over 5 years will have very limited impact.
      ii. Over-all spending decrease from 2010 on the planting, pruning and removal, and DED control budget lines.
      iii. Chronic under funding is partly responsible for the current crisis.

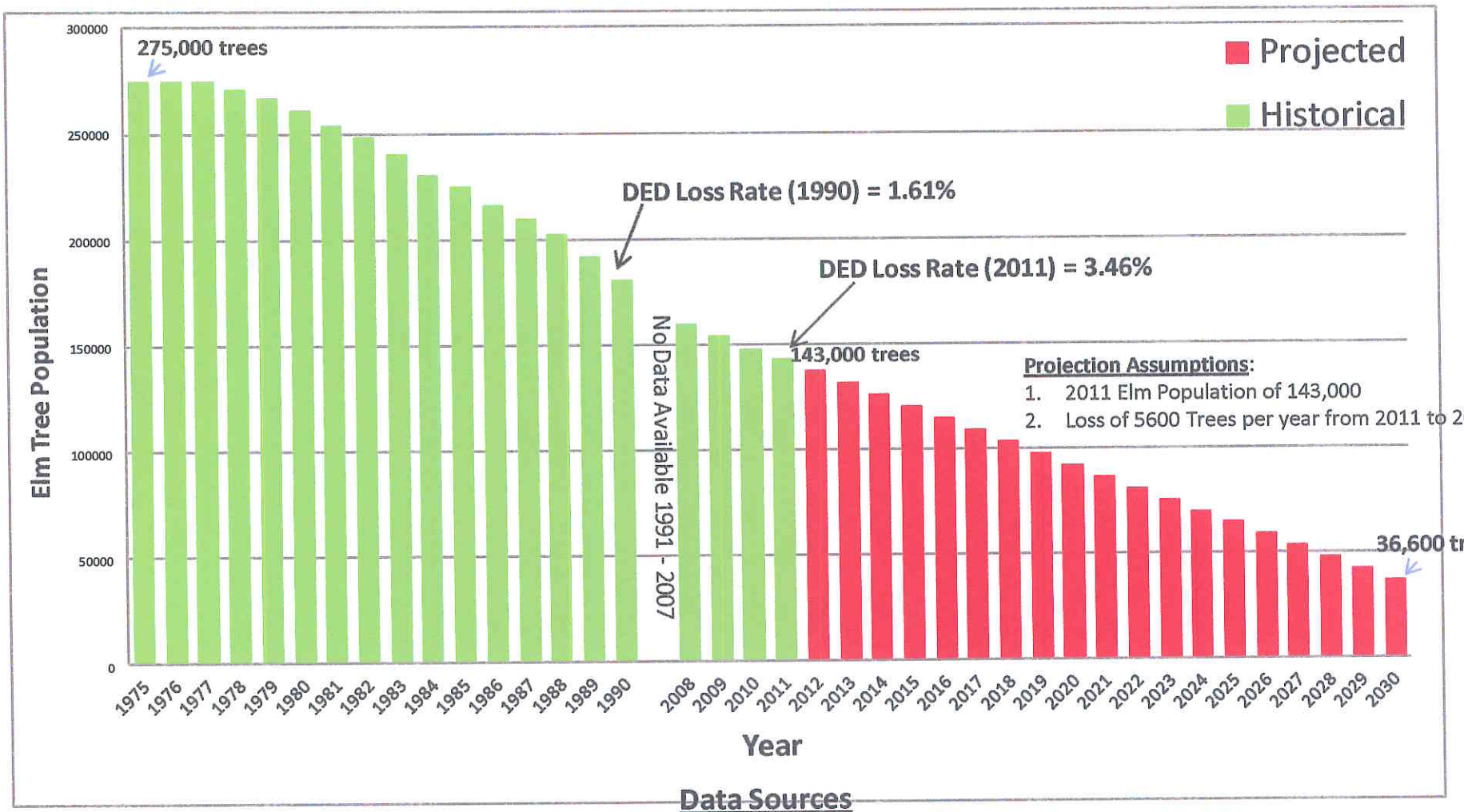
3. **The Costs of Inaction will be Very Significant:**
    a. **Loss of mature elm tree canopy**:
    b. **Staggering short-term cost of removal and replacement of diseased elms**
        i. accumulated costs between 2011 and 2017 for removal and replacement of **$39 million**
        ii. Estimated **savings of $20 million in only 5 years** if loss rate reduced to 2%.
        iii. Removal and replacement costs are for the most part **OBLIGATORY costs**
    c. **The Lost Asset Value of mature elm forest will be even greater:**
        i. If Elm Trees losses continue at the current rate the **estimated accumulated lost asset value of $205 million between 2011 and 2017**
        ii. If Elm tree losses are reduced to 2% per year from 2011 onwards, **estimated savings of $107 million in only 5 years**.

4. **The Solution must include:**
        i. **A Comprehensive Strategic Plan to reduce mature Elm Tree losses to 2% a year**
            - Public Works Committee motion of March 5, 2012
        ii. **A stakeholders Advisory Committee**
            - to provide support and guidance
            - to insure problems are identified and if possible resolved before the plan comes back to Council.
        iii. **An Emergency Investment of $1 million to increase the percentage of tagged Elms removed by Sept. 30, 2012**
            - Recognizes the current capacity of existing resources and the potential need to request tenders from beyond Winnipeg
            - the scientific literature consistently identifies the timely removal of diseased Elms as a crucial part of an effective DED control program
            - the current target of one year has been identified to us in consultations with forestry experts, sympathetic counsellors and supporters of TAG as a significant contributor to the current crisis.
            - We have received estimates of the per tree cost of between $600 - $1000 to remove, and an estimated backlog of 1000-1500 trees left beyond September 30th
            - Failure to remove trees in a timely manner in this coming season will have cumulative consequences that cannot be recovered.

Fig. 1

Elm Tree Populations Winnipeg

Historical and Projected



Data Sources

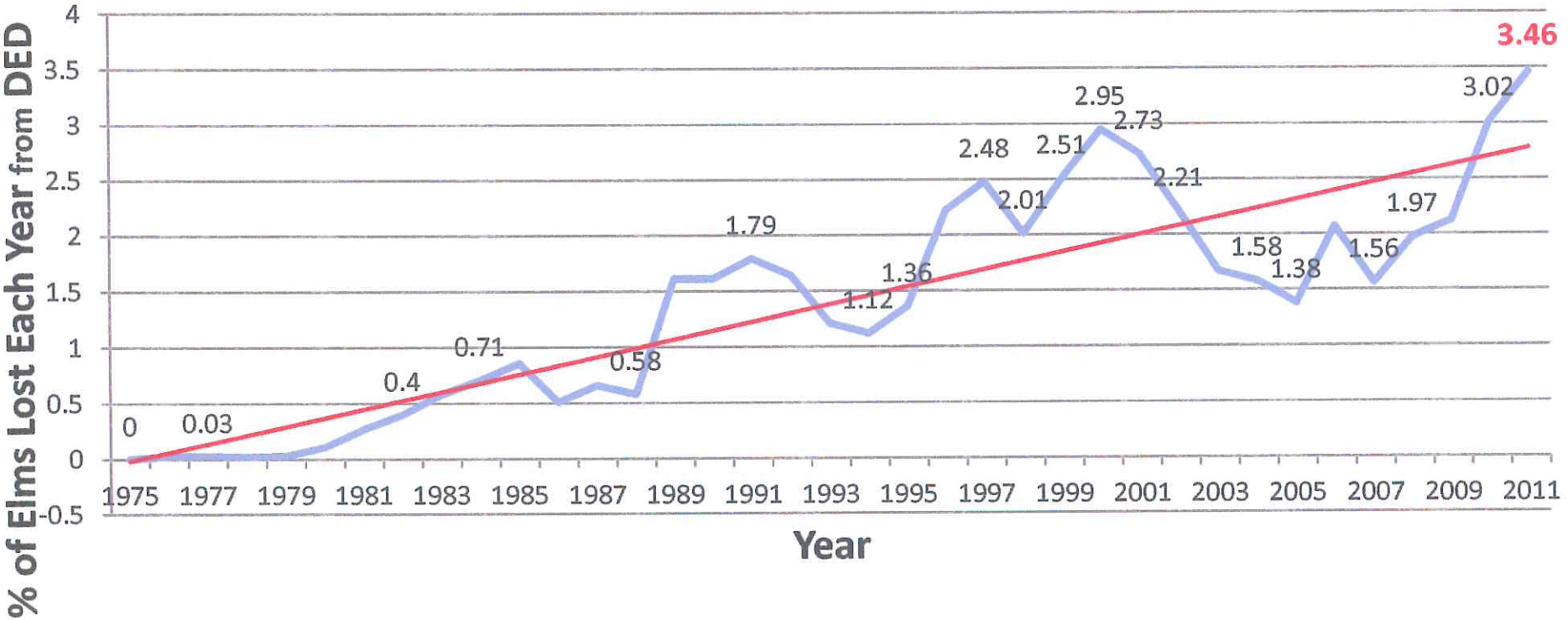
1975–1990 Tree Counts: Westwood, A.R., Proc. Entomol. Soc. Manitoba, vol. 47 (1991), pp. 44 – 56
2008 – 2011 Tree Counts: City of Winnipeg Forestry Department (web site, personal communication)
2012 – 2030 Projected Tree Counts: Dr. Chris Green, University of Manitoba, 2012

Concerning Sign 2

Fig. 2

% of Elms Lost Per Year from DED

showing Upward Trend between 1975 and 2011

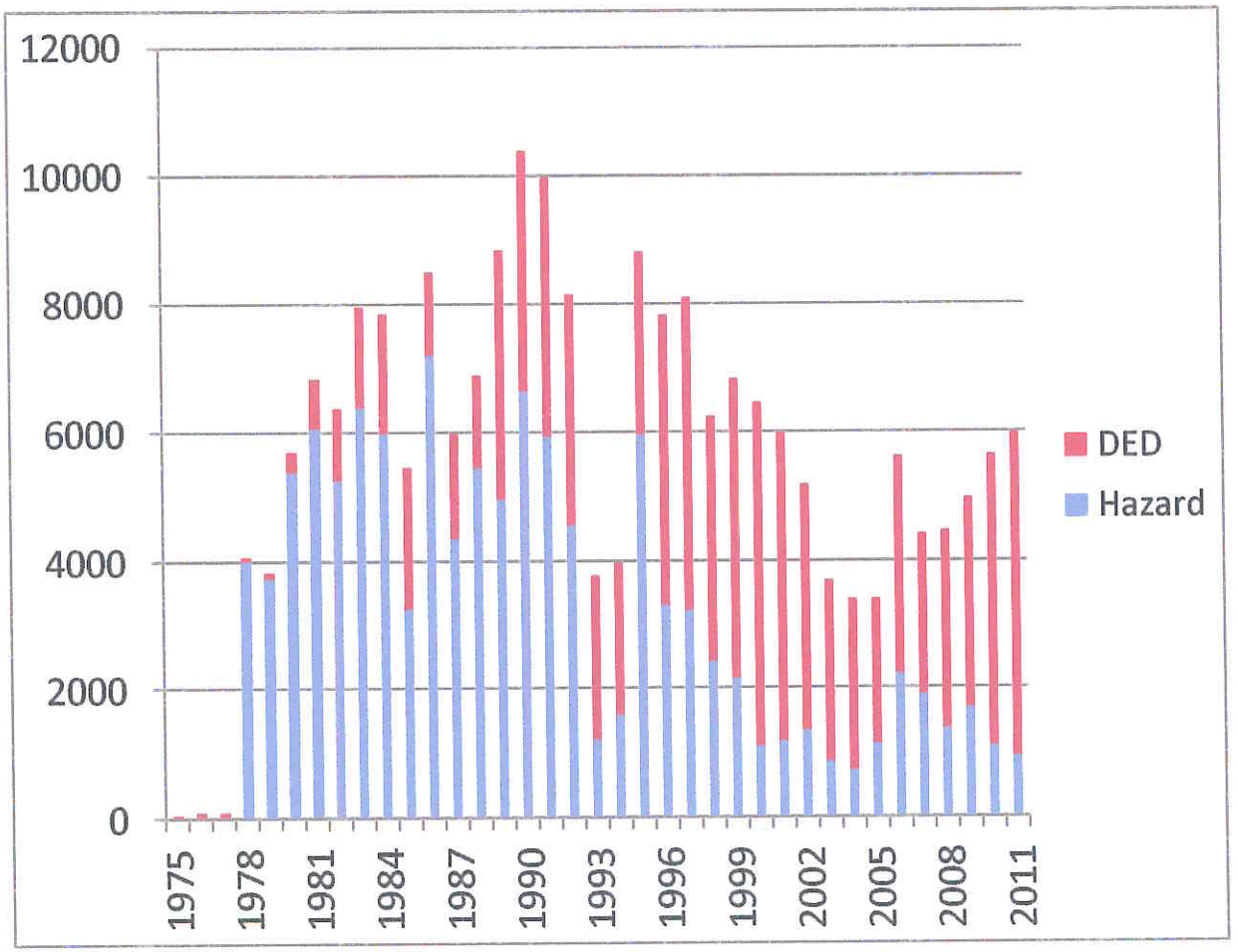


Concerning Sign 3

Fig. 3

Elms Removed by Cause

Hazard Removal vs. Dutch Elm Disease



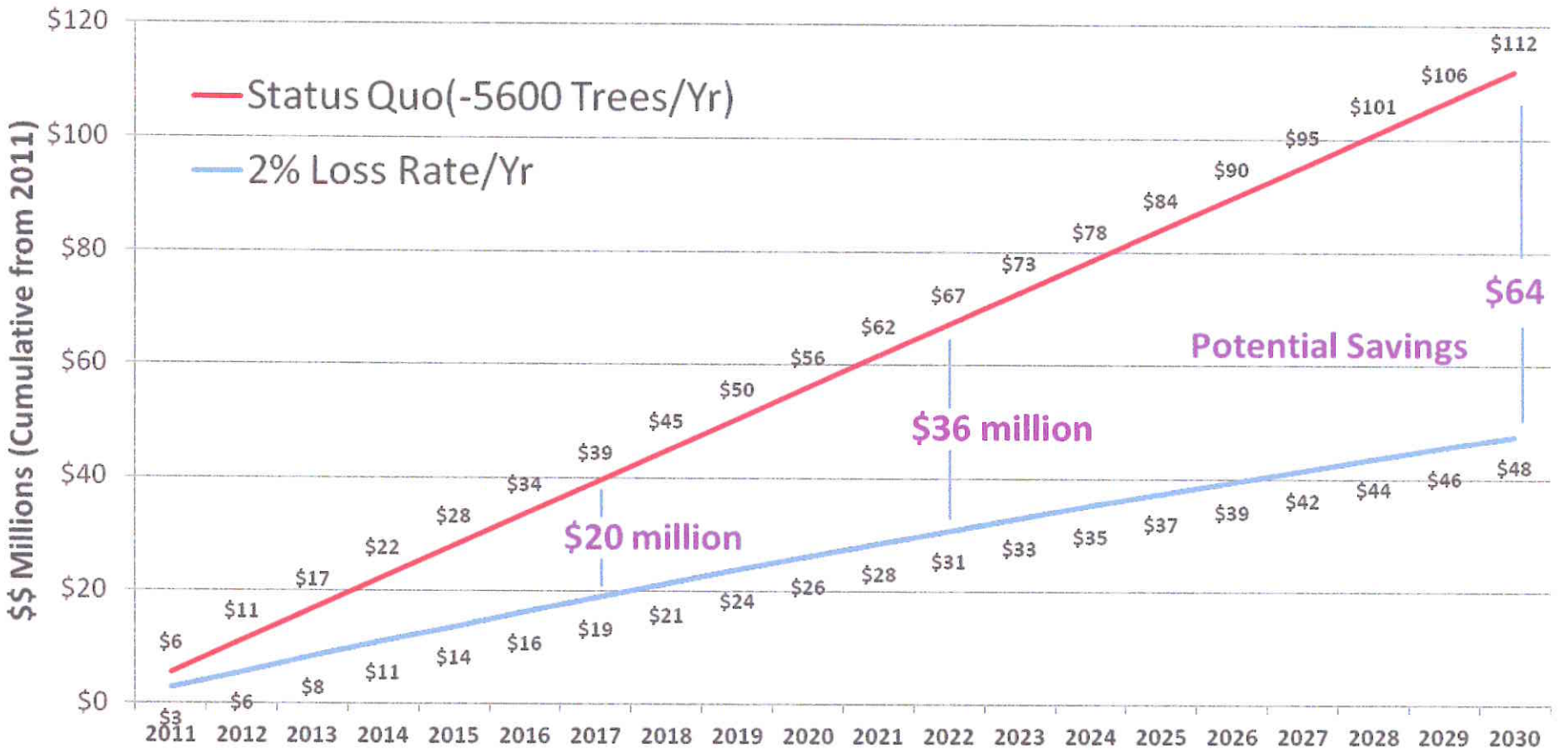
Concerning Sign 4

Potential Savings

Fig. 4

Removal and Replacement Costs of Elm Trees

(cumulative $$$) for Elm Tress Lost in Winnipeg



Assumptions and Calculations

Average Costs of Removal/Replacement: $1000 per Elm tree (2005 dollars)

Status Quo Scenario (red line): 5600 trees will be lost per year to the year 2030 from a 2011 base Elm population of 143,000

2% Loss Rate/Yr Scenario (blue line): 2% of each year's Elm population will be lost to the year 2030, starting from a 2011 base Elm population of 143,00(

Removal and Replacement Costs for each Scenario: The number of Elm Trees lost each year multiplied by $1000, accumulated from the year 2011 to 2030

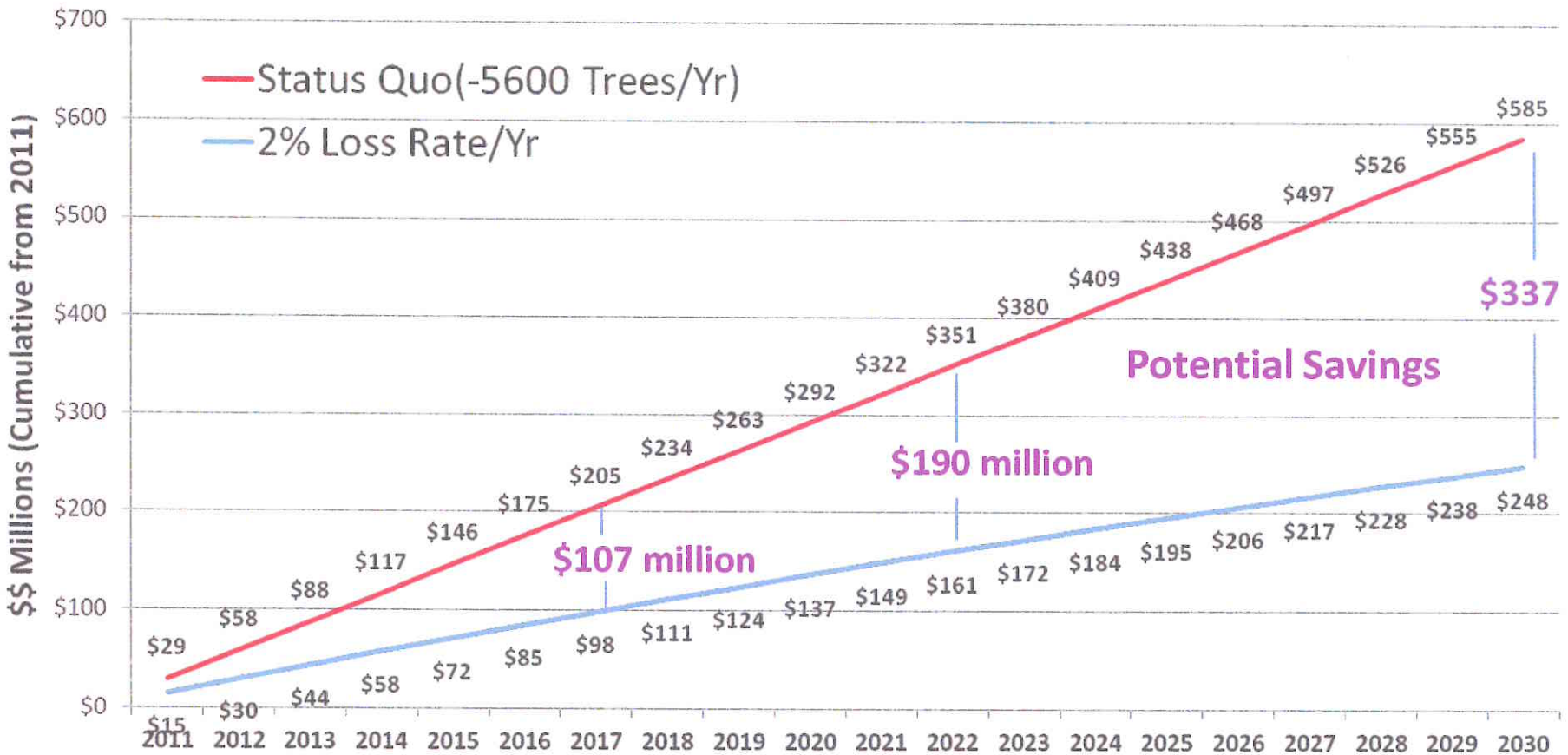
Potential Savings: The difference in accumulated costs between the Status Quo and the 2% Loss Rate scenarios

Potential Savings

Fig. 5

Lost Asset Value of Elm Trees

(Cumulative $$$) for Elm Trees Lost in Winnipeg



Assumptions and Calculations

Asset Value of an Average Elm Tree: $5665 (**in 2011 dollars**) in terms of its accrued value and the goods and services it provides to the citizens of Winnipeg

Status Quo Scenario (red line): 5600 trees will be lost per year to the year 2030 from a 2011 base Elm population of 143,000

2% Loss Rate/Yr Scenario (blue line): 2% of each year's Elm population will be lost to the year 2030, starting from a 2011 base Elm population of 143,000

Cumulative Costs for Each Scenario: The number of Elm trees lost each year multiplied by $5665, accumulated from the year 2011 to 2030

Potential Savings: The difference in accumulated costs between the Status Quo and the 2% Loss Rate scenarios.