

Mountain Pine Beetle in Alberta

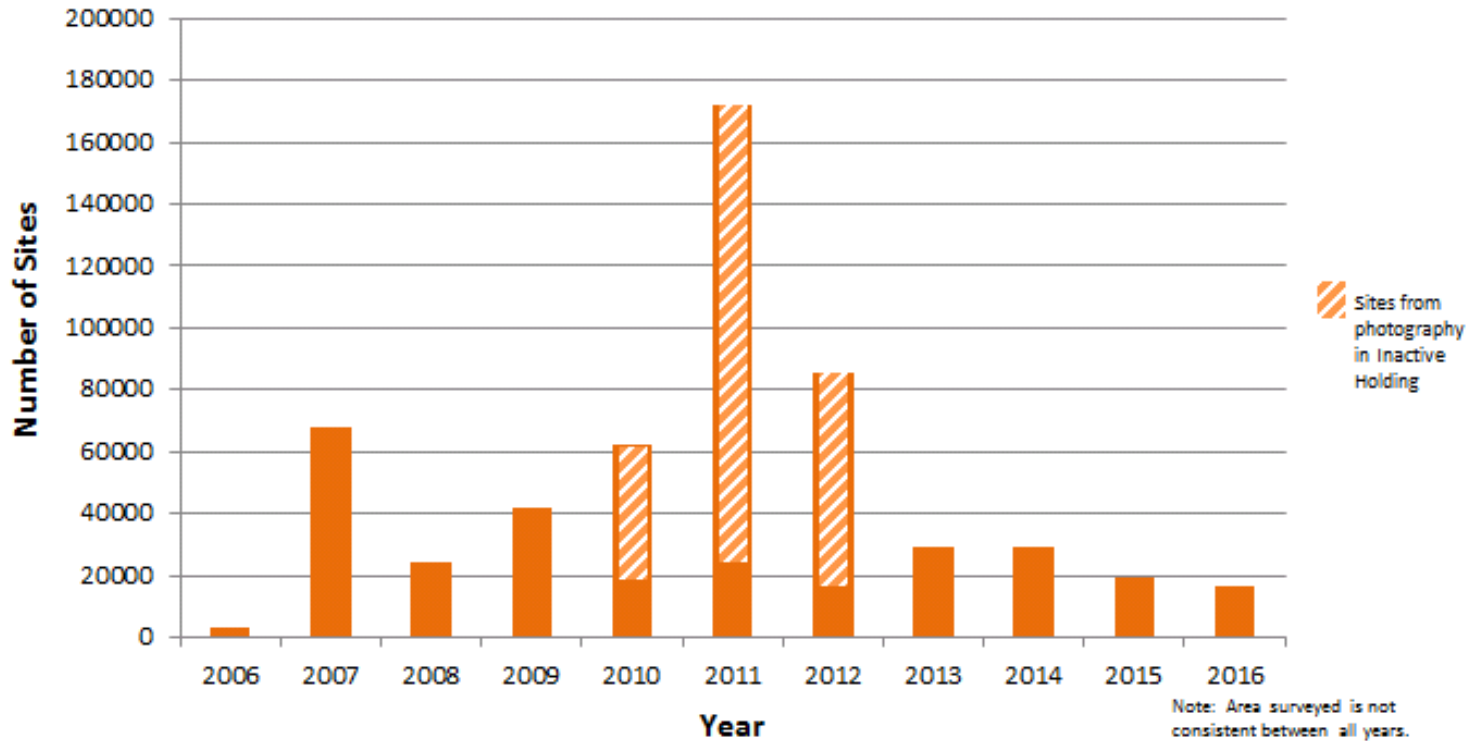
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Mountain Pine Beetle Management Decisions

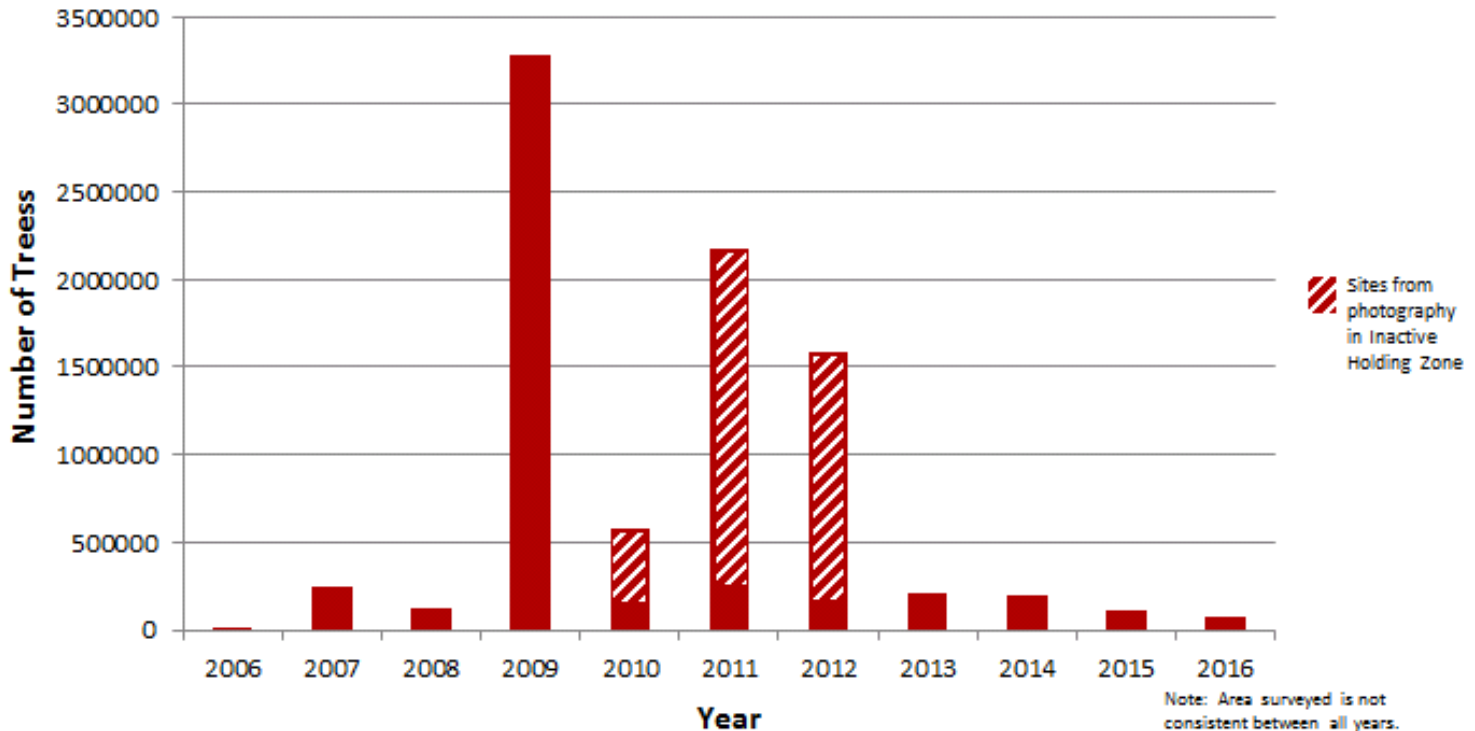
- **What decisions have to be made**
- **How we make the decisions**
- **Impacts of the decisions**

Aerial Survey Sites



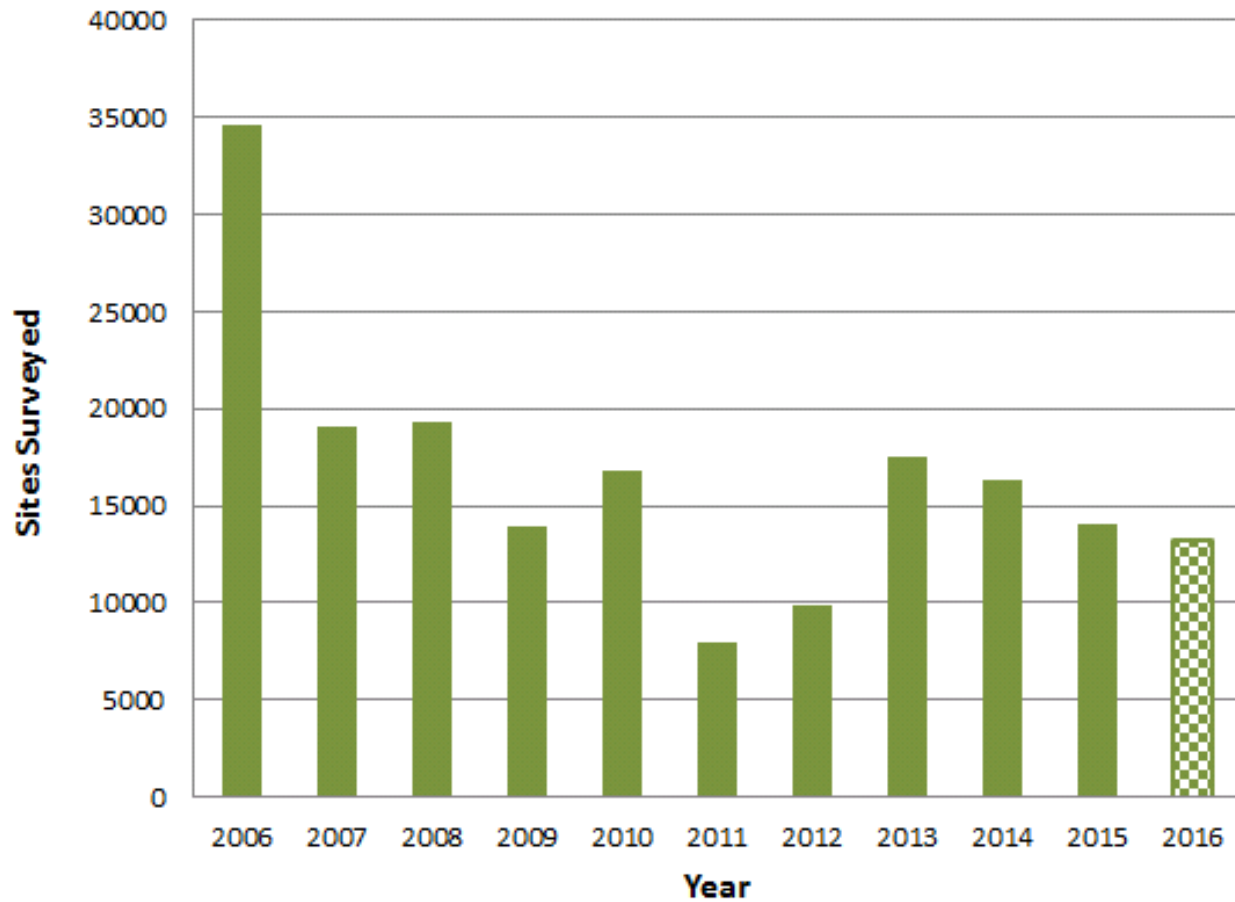
445,628 aerial survey sites

Red Trees Detected During Aerial Surveys



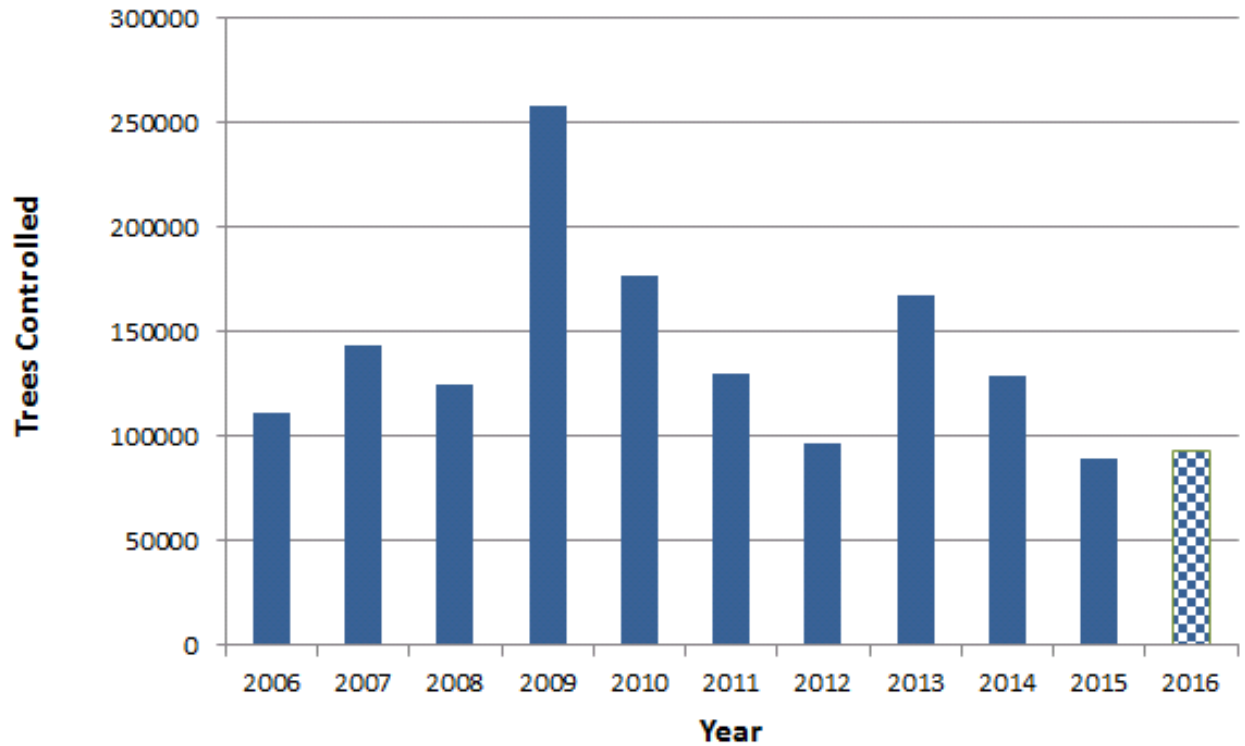
8,589,760 red trees detected

Mountain Pine Beetle Ground Survey Sites



182,626 ground survey sites

Mountain Pine Beetle Single Tree Control

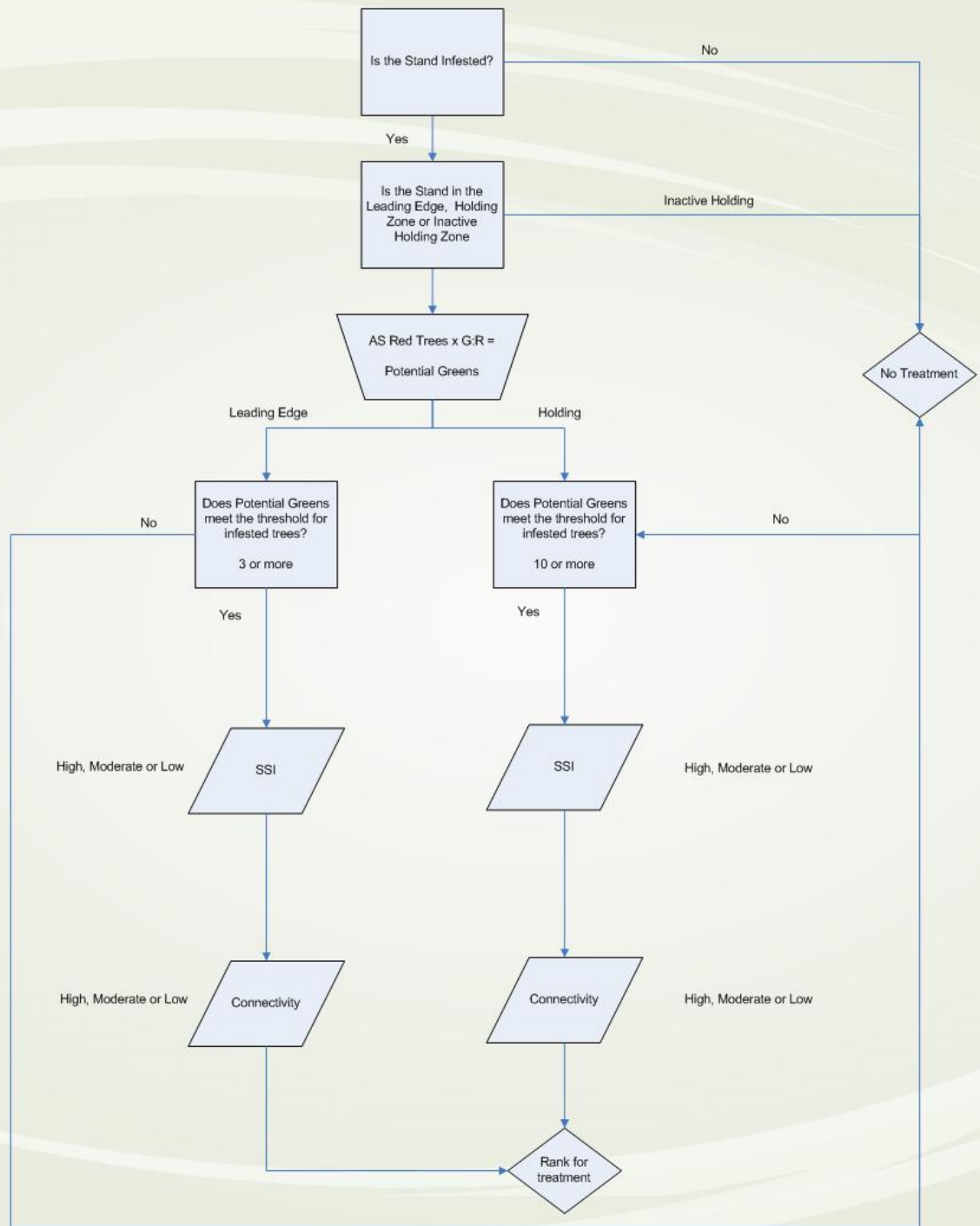


1,520,451 trees controlled

Mountain Pine Beetle Management Decisions

Beetle Strategy – Level 1

- **What aerial surveys sites are ground surveyed and controlled?**





- Assessment Surveys
- Ground Surveys
- Level 1 Control
- Quality Inspection
- Seed Collections
- FRIAA Grants
- Other Grants
- Research
- LiDar
- Program Support
- Base Salary

Mountain Pine Beetle Management Decisions

Pine Strategy – Level 1

- **What stands should be harvested as part of a landscape susceptibility reduction program?**

Table 1: Pine Stand Ranking

Climate Factor (per stand)						Compartment Risk
Very Suitable	1.0	Rank 1	Rank 1	Rank 1	Rank 1	High
		Rank 2	Rank 1	Rank 1	Rank 1	Moderate
		Rank 2	Rank 2	Rank 1	Rank 1	Low
Highly Suitable	0.8	Rank 1	Rank 1	Rank 1	Rank 1	High
		Rank 2	Rank 2	Rank 1	Rank 1	Moderate
		Rank 2	Rank 2	Rank 2	Rank 1	Low
Moderately Suitable	0.5	Rank 2	Rank 1	Rank 1	Rank 1	High
		Rank 2	Rank 2	Rank 2	Rank 1	Moderate
		Rank 3	Rank 2	Rank 2	Rank 2	Low
Low Suitability	0.2	Rank 2	Rank 1	Rank 1	Rank 1	High
		Rank 3	Rank 2	Rank 2	Rank 2	Moderate
		Rank 3	Rank 2	Rank 2	Rank 2	Low
Very Low Suitability	0.1	Rank 3	Rank 2	Rank 2	Rank 2	High
		Rank 3	Rank 3	Rank 2	Rank 2	Moderate
		Rank 3	Rank 3	Rank 3	Rank 3	Low
		0 to 30	31 to 50	51 to 80	81 to 100	
		Pine Rating				

Forestry Division									
Mountain Pine Beetle Funding and Spending									
For fiscal years 2004-05 to 2015-16									
(Millions)									
Allocated Funding							Expenditures		
Year	Federal Contribution	Other Contribution	Supplementary Estimate	Included in Forest Mgt Budget	Budget Base Funding (BU 069)	Total Provincial Funding	Base Spending (BU 069)	Supplemental Spending	Total Expenses
2004-05	-	-	-	-	0.95	0.95	0.95	-	0.95
2005-06	-	-	-	-	7.04	7.04	7.04	-	7.04
2006-07	-	-	-	50.00	2.60	52.60	2.60	46.50	49.10
2007-08 ⁽¹⁾	8.00	-	22.00	50.00	2.60	74.60	2.60	74.40	77.00
2008-09	-	-	18.00	50.00	5.20	73.20	5.20	54.60	59.80
2009-10 ⁽²⁾	10.00	-	25.00	-	4.20	29.20	4.20	32.30	36.50
2010-11 ⁽³⁾	0.37	-	30.00	-	4.20	34.20	4.20	28.20	32.40
2011-12 ⁽⁴⁾	-	0.15	30.00	-	4.20	34.20	3.39	29.40	32.79
2012-13 ^(5,6)	-	0.45	40.00	-	4.30	44.30	3.32	37.92	41.24
2013-14 ⁽⁷⁾		1.10	40.00		4.30	44.30	2.68	42.33	45.01
2014-15 ⁽⁸⁾		1.10	40.00		2.50	42.50	3.05	35.38	38.44
2015-16 ⁽⁹⁾		1.25	35.00					34.40	35.65
Total	18.37	4.05	280.00	150.00	42.09	394.59	39.24	345.65	455.92

Mountain Pine Beetle Management Decisions

Funding Levels

- Since 2009 \$262 million has been spent on MPB management activities in Alberta
- Since 2004 total spending is \$456 million

What are we getting for the money spent?

Mountain Pine Beetle Management Decisions

- **Need to base these decisions on the best available information.**
- **Through the MPBEP, have made strides towards answering these questions.**

Dr. Allan Carroll

Dr. Brad Seely

Dr. Clive Welham