

State Trust Lands: What We've Learned

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4 Things

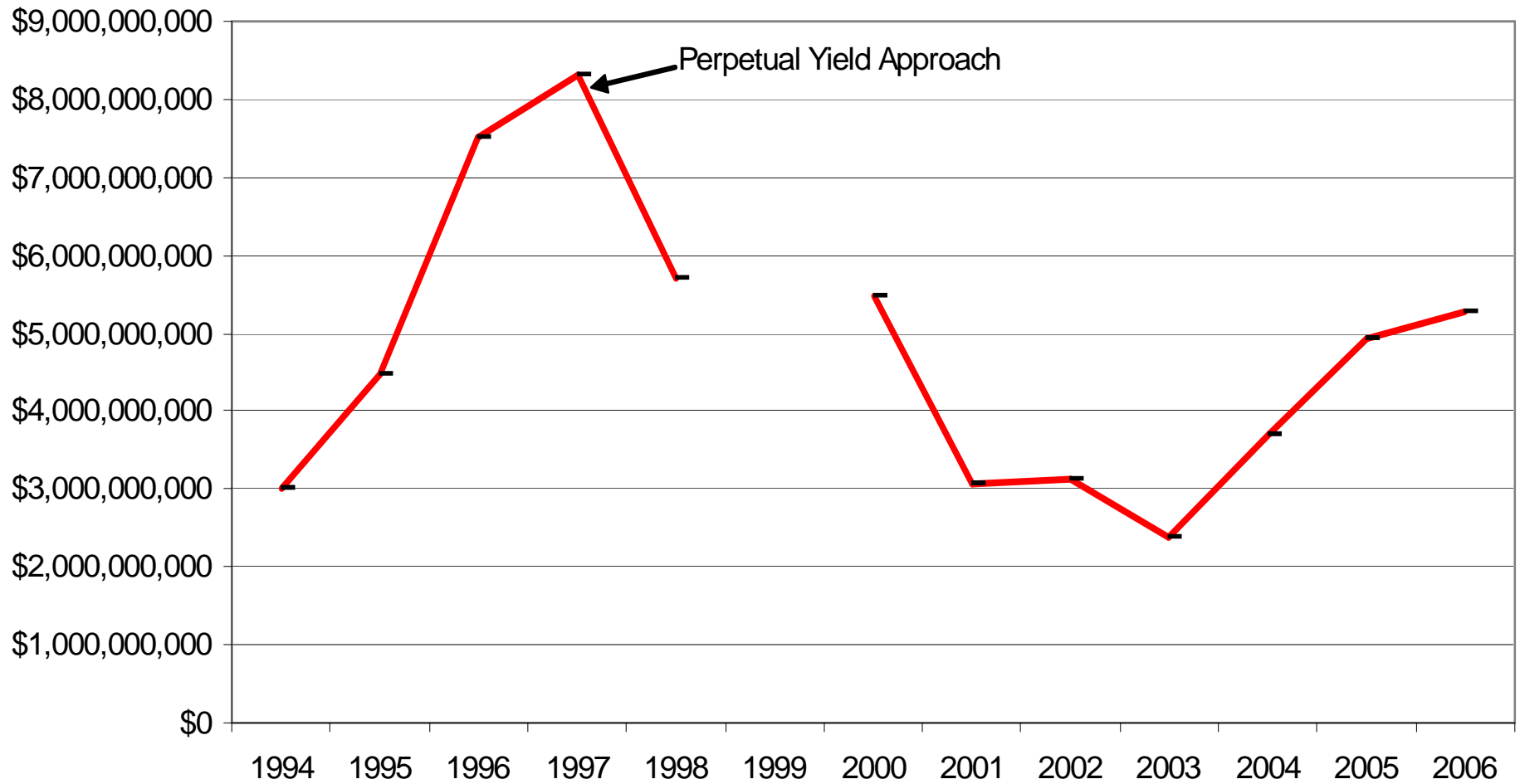
- Asset values are largely unknown
- Asset values on State Lands appear to be large
- Incomes maybe larger vis a vis industrial land revenues
- Return on asset values are low

Asset Values Are Largely Unknown

- Scarcity of market analysis
 - States track annual revenues
 - Asset values are necessary to calculate a rate of return
- Is market analysis appropriate?
 - States are in the timber business for the long run
 - Have limited potential to sell off lands
- Trust land ownership is different than industrial lands

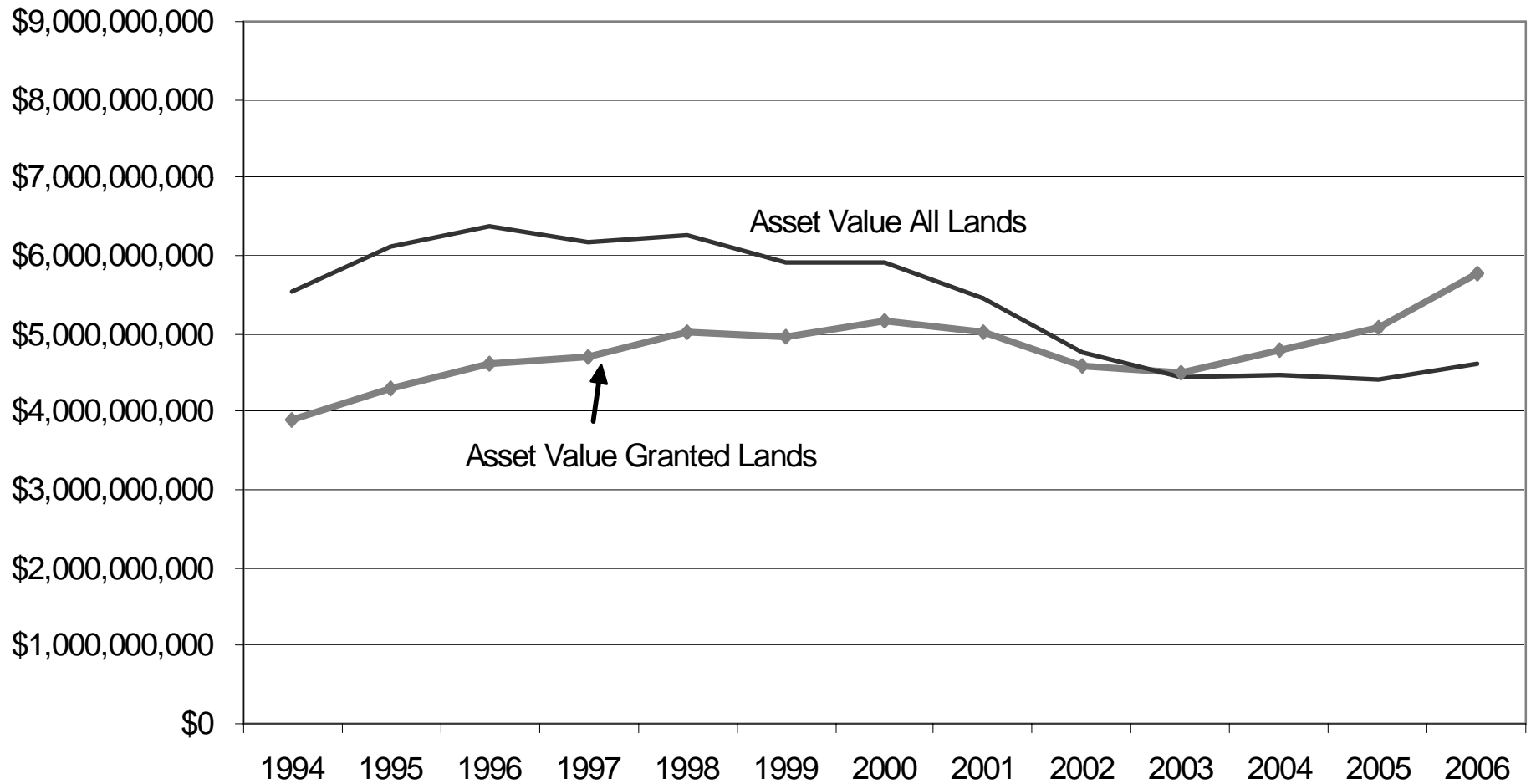
Asset Values Are Large

40% discount WA DNR 1995-96



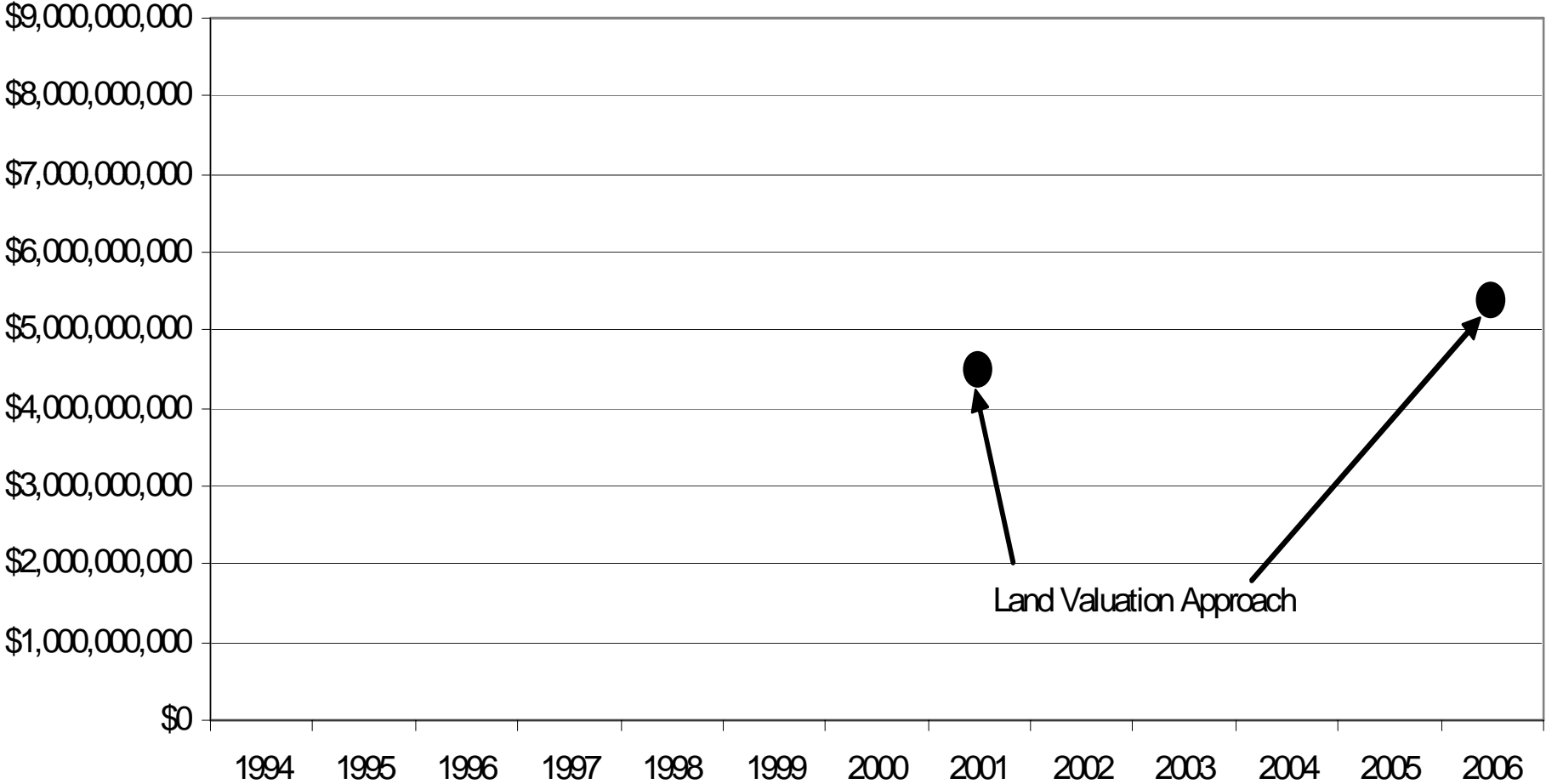
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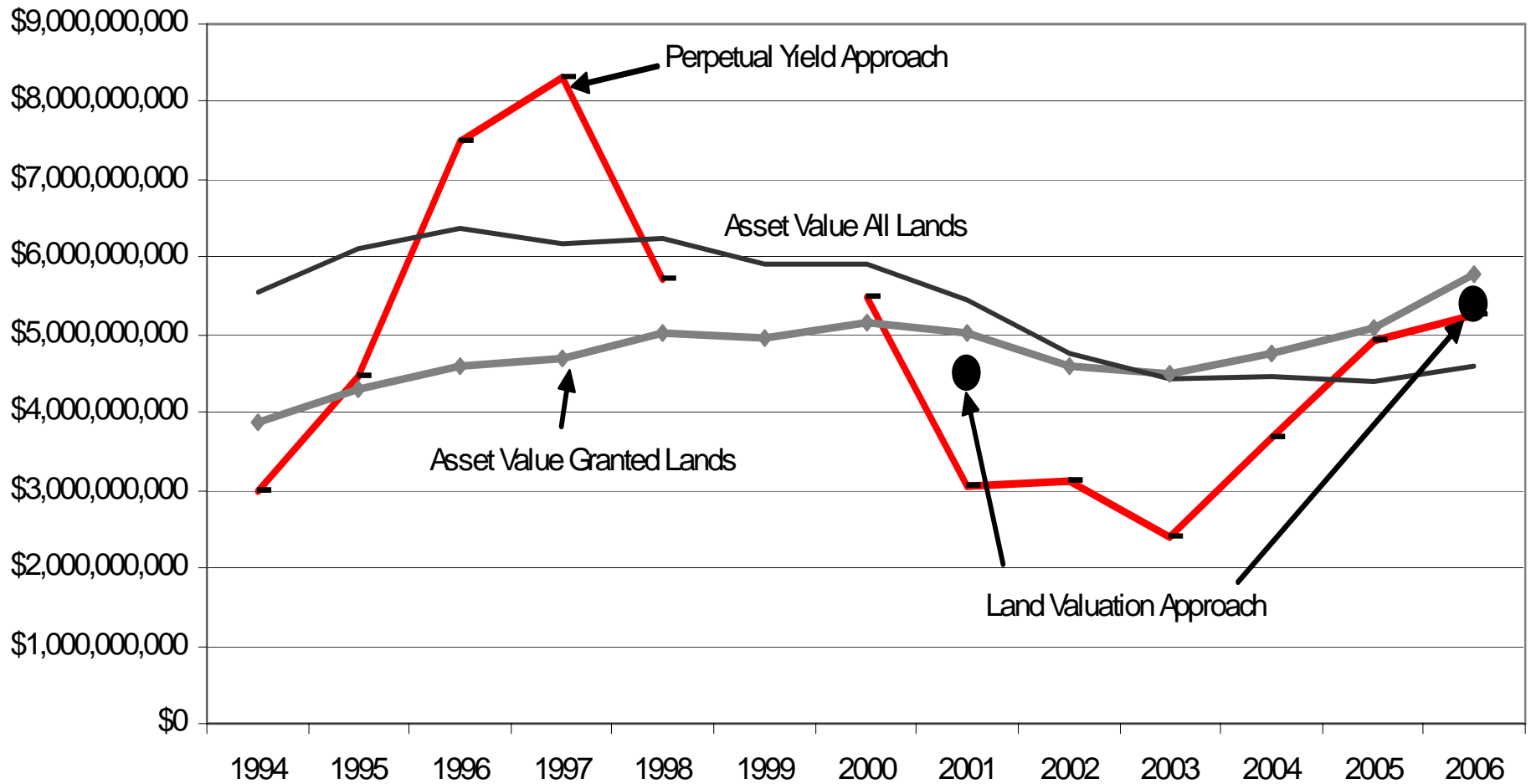
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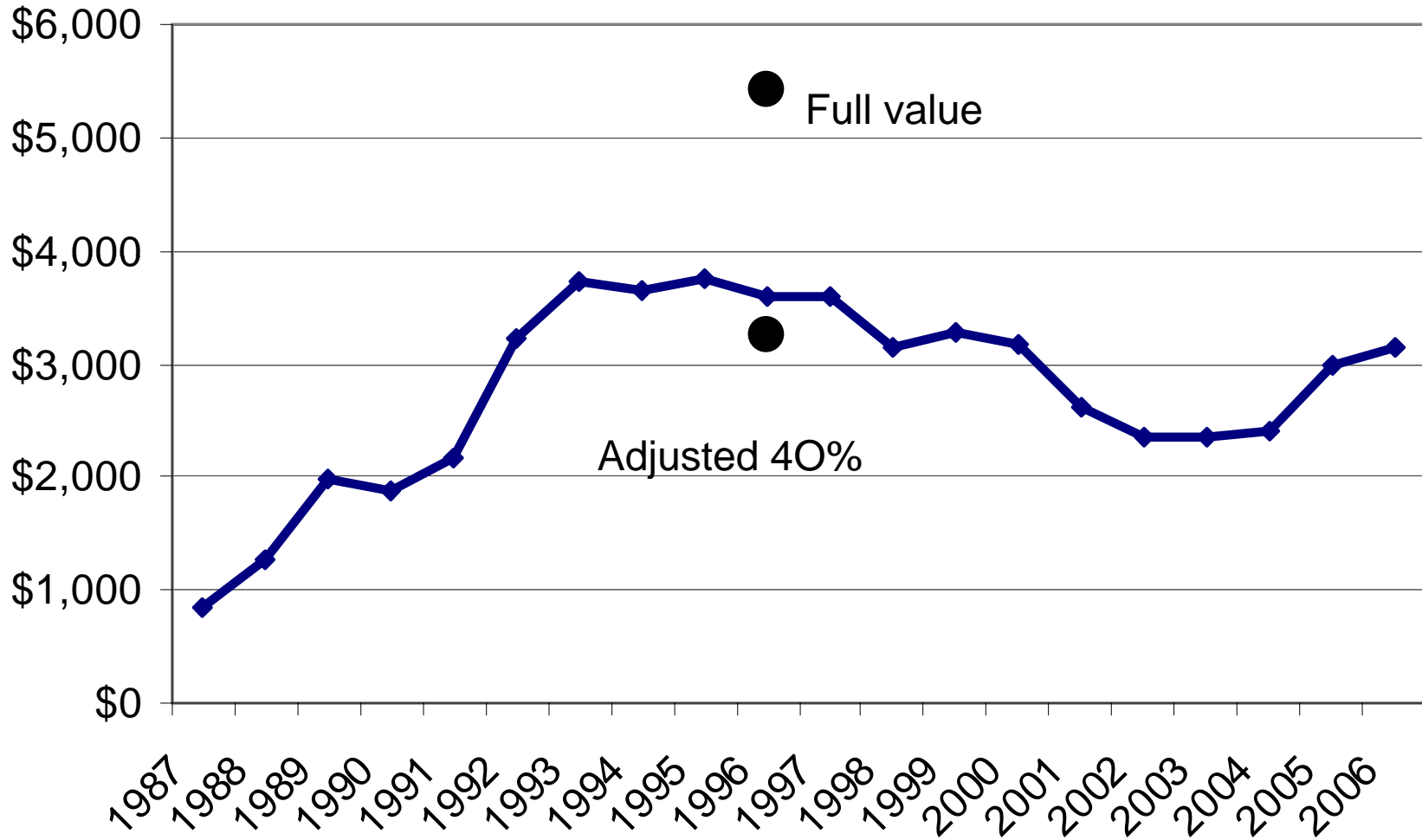


Asset Values Are Large

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Timberland Market Value



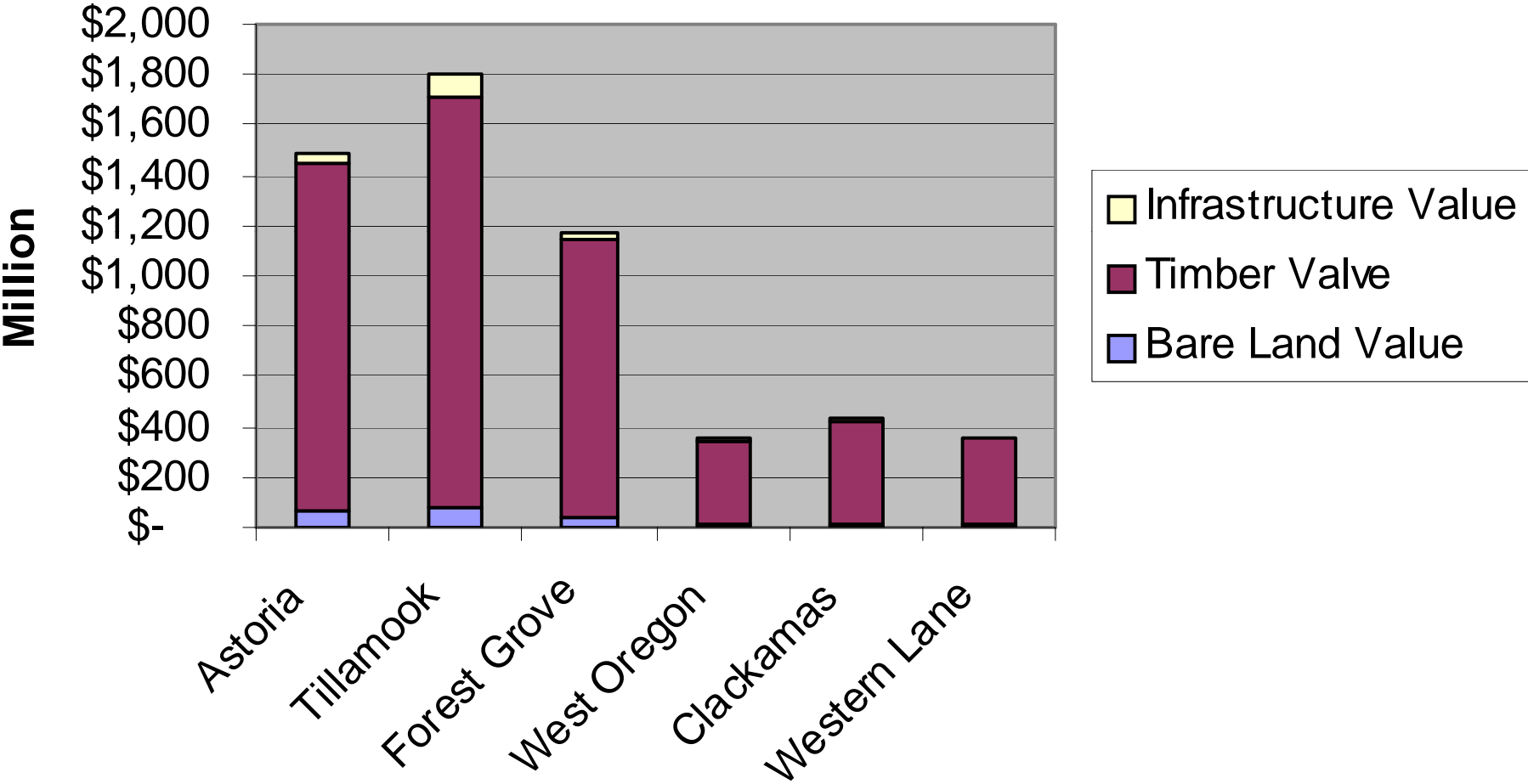
Source: HTRG Research, Deloitte & Touche

Southwest Oregon 1999 Market Value Analysis

Main Cover	Size Class	District Acres	Volume MBF	Bareland Value \$	Reprod Value \$	Timber Value \$	Total Value \$	Value per Acre \$
Conifer & Hardwood	Reprod 0"-.5"	23	0	7,751	8,625		16,376	375
	Sapling .5"-5"	1,352	56	455,624	1,622,400		2,078,024	1,200
	Premerch poles 5"-8"	2,661	2,765	896,757	10,644,000		11,540,757	4,000
	Thinning size 8"-16"	7,080	99,368	2,385,960		44,715,500	47,101,560	6,316
	Med. sawtimber 16"-23"	5,047	141,163	1,700,839		77,001,000	78,701,839	15,257
	Large sawtimber 23"-75"	1,350	64,330	454,950		40,685,075	41,140,025	30,137
Totals		17,513	307,682	5,901,881		162,401,575	180,578,581	
Other:		559		55,900			55,900	100
Nonforested								
Totals		18,072	307,682	5,957,781	12,275,025	162,401,575	180,634,481	9,995

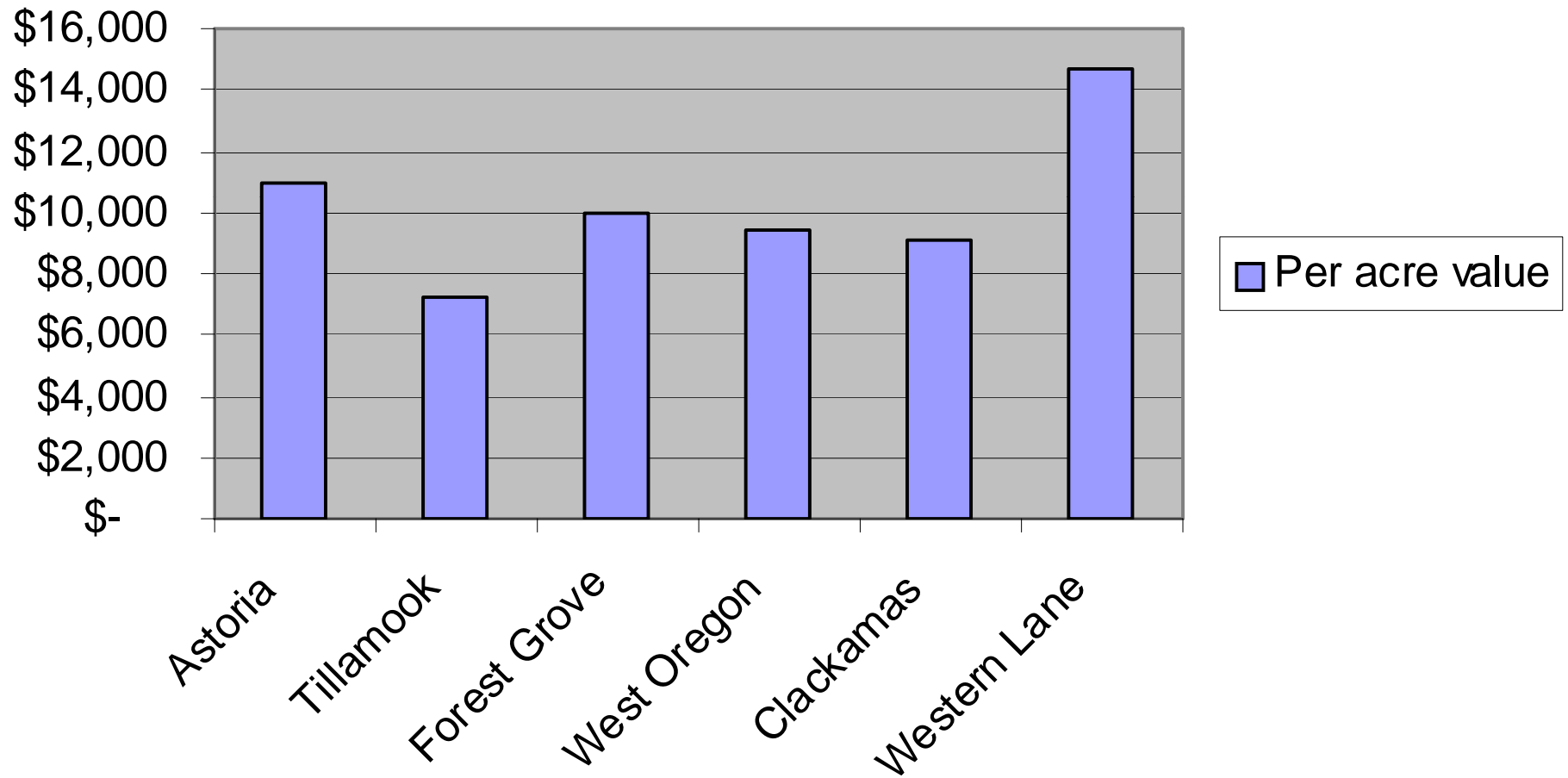
Source: Southwest Forest Management Plan, Final Plan Jan 2001

Total Forest Asset Value

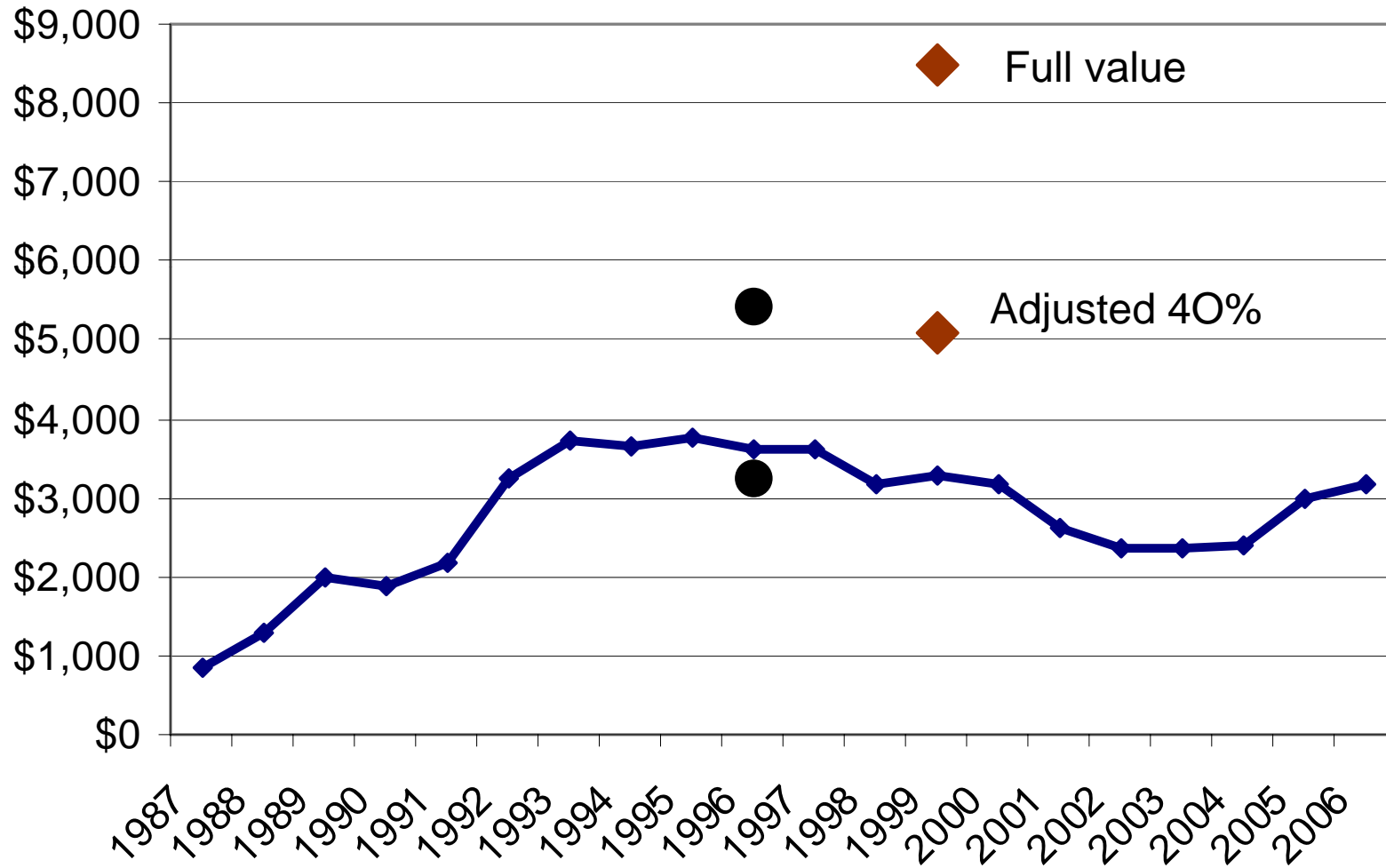


Source: Northwest Forest Management Plan, Final Plan Jan. 2001

All Age Forests Values

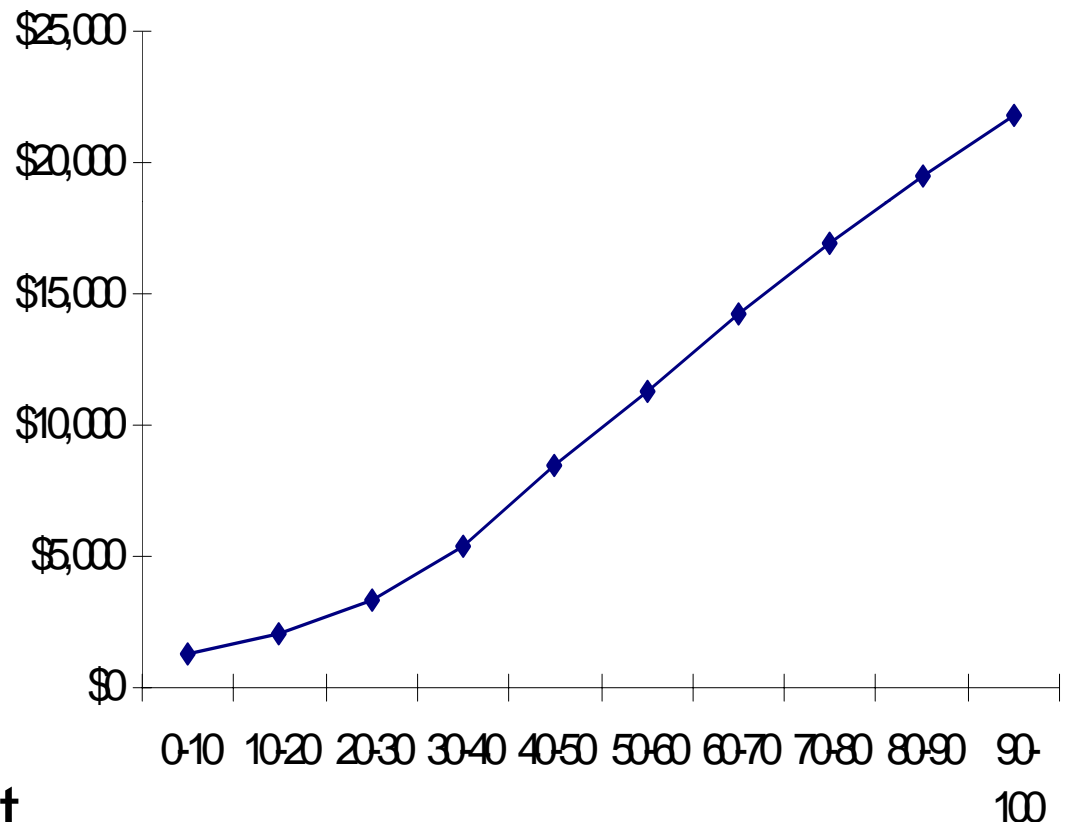


Timberland Market Value



Incomes Maybe Larger Than Industrial Land Revenues

- Per acre values at harvest for industrial lands should be lower based on these market assessments
- All age forests revenues can be higher, but at a cost



Return On Asset Values Are Low

- Lands carrying high timber volumes
- High asset values lead to low ROAV

Trust Land Objectives

Courts have provided wide latitude for state management discretion in spite of acknowledging fiduciary principles

- Harvest rates, rotations and preserves
- Environmental measures
- Substantial variance in cost tradeoffs

What Do Trusts Control?

- Not market certainty - affecting prices
- Do control objectives that contribute to non-market environmental values at some cost to trust beneficiaries
- Do select target metrics
- Question: are they producing objectives efficiently?

Trust objectives

- Regulatory minimums or an HCP
- Voluntary (?) or social ecological goals
 - Long rotations or biopathways
 - Preserves
 - Diversity in forest structures
 - Operational constraints
- Max NPV on what is left

Performance metrics

- SEV or ROA
- Habitat (surrogate for species populations)
- Stand Structure Diversity
- Treatment specific (NA preserve, mgt. alternatives)
- Target Landscape Structure

Efficient Targeting

- Establish ecological target
- Determine most efficient pathway

or:

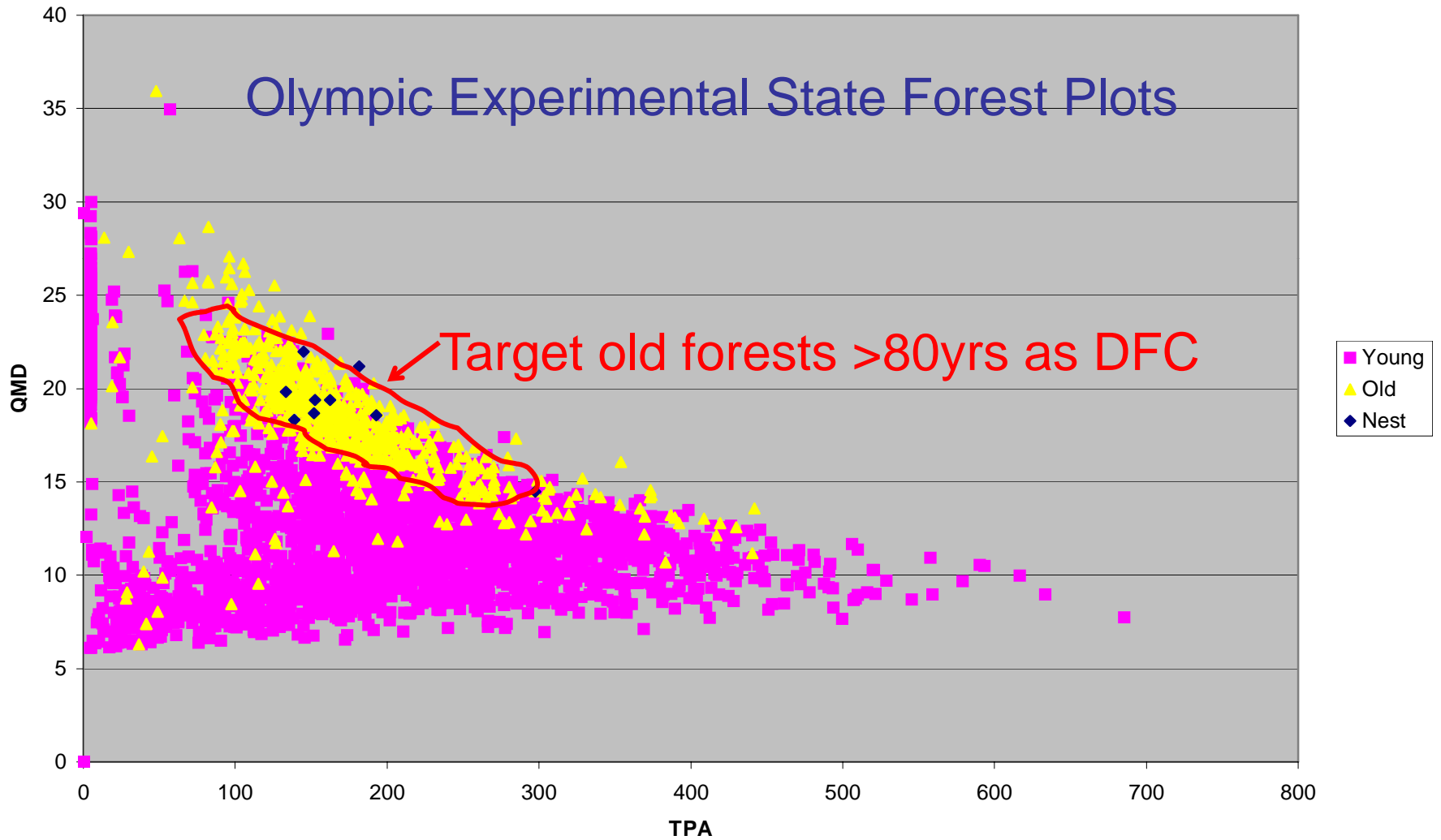
- determine a balance between cost and progress toward ecological target along most efficient pathway

What is needed?

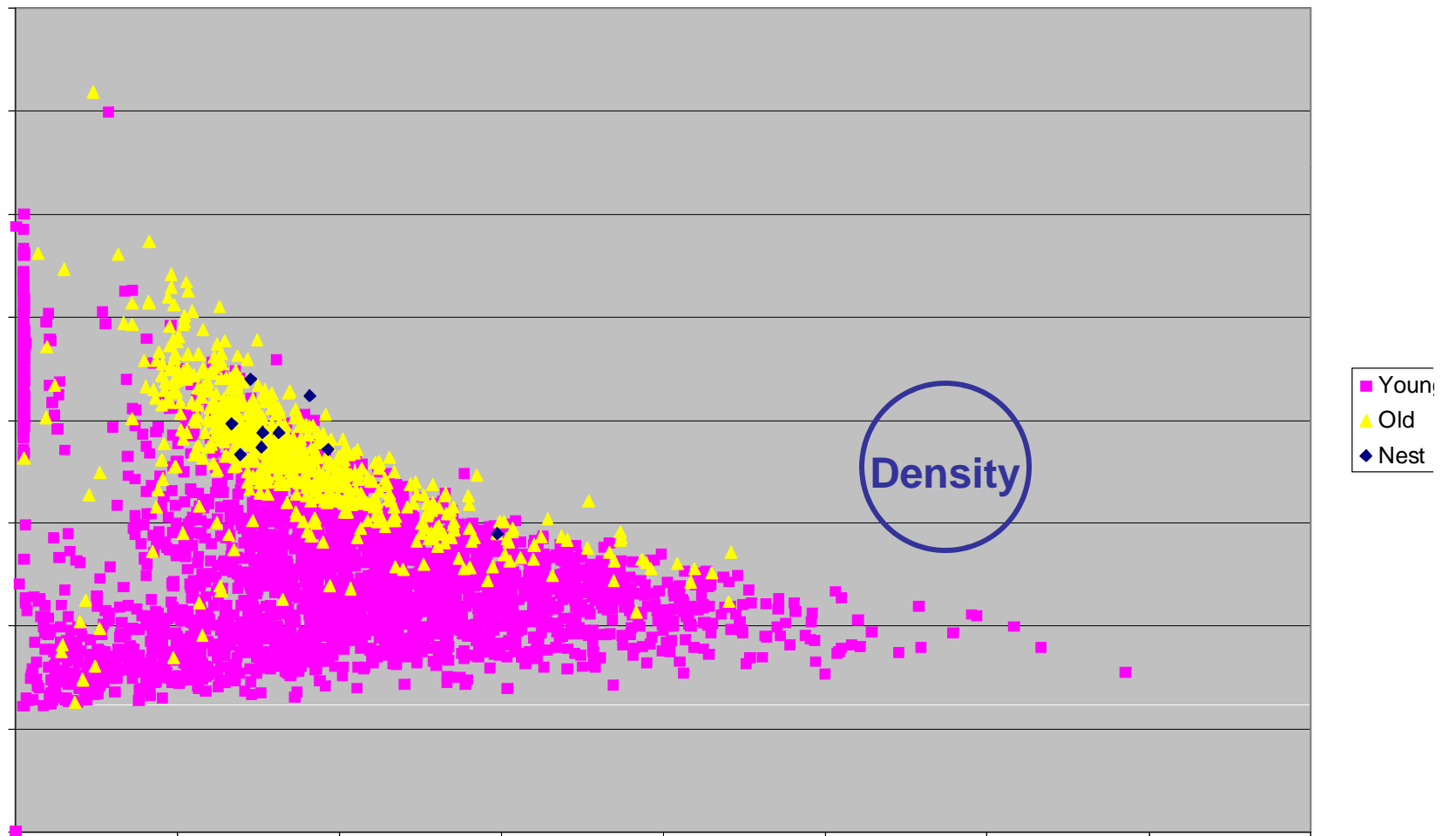
- Old forest functions are in shortest supply (*and highest cost*)
 - Determine desired structure (DFC)
 - Search for most efficient pathways
 - Balance cost with progress toward objective

Target DFC “Stand Conditions” for Old Forests & Owl Nests

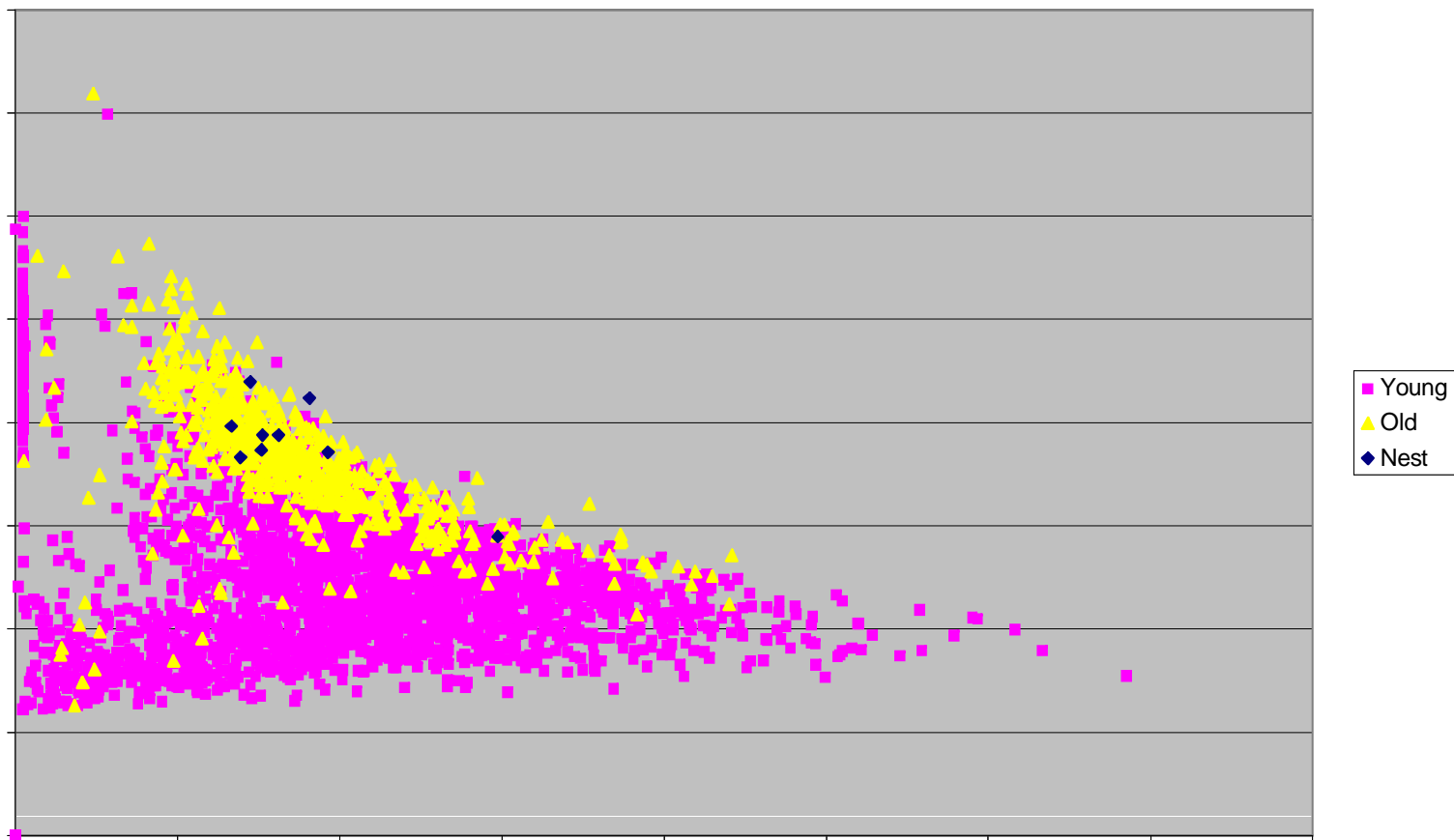
TPA and QMD for Trees > 6" DBH



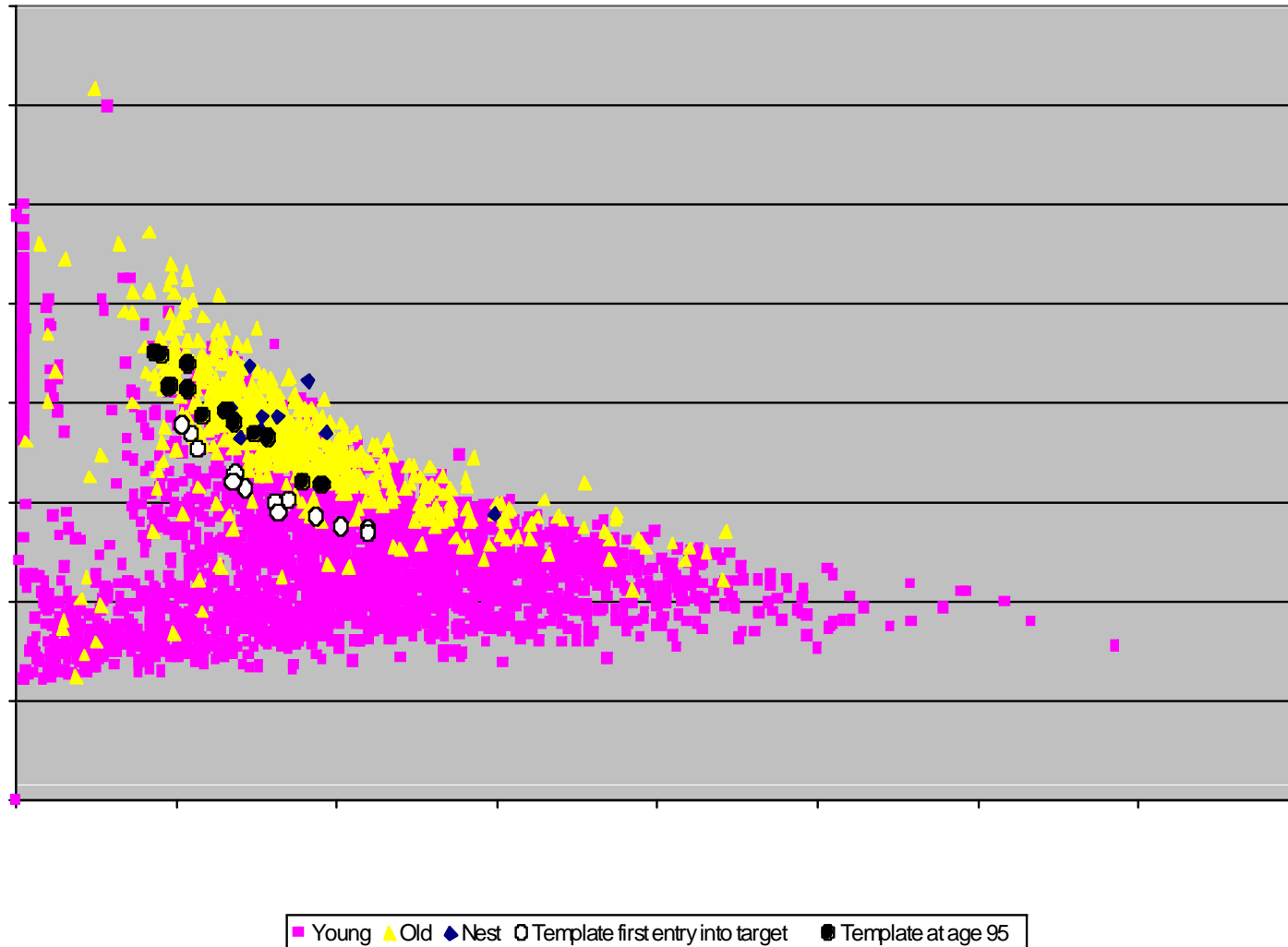
Medium Sites @ Treatment



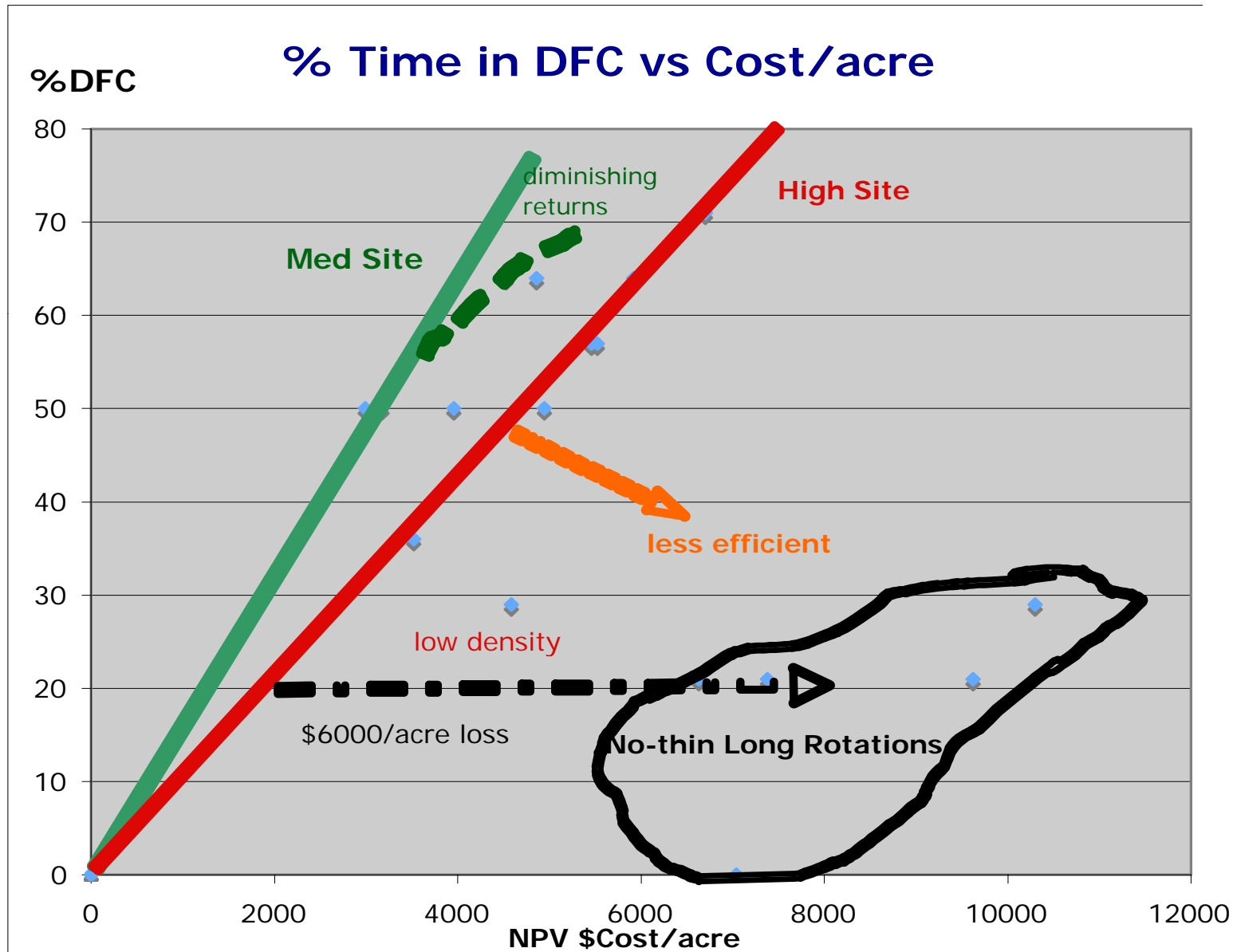
High Sites @ treatment



Locations entering DFC and at 100 yrs



Benefit vs Cost



Efficient Delivery of non-market objectives

- Efficiency can be controlled & is important
- Old forest structure is key
- Biodiversity pathways provide both DFC and diverse young forests on the way
- No-thin long rotations are not efficient

Efficient Management Pays

- When the objective is old forest functionality it pays to manage for efficiency
- Opportunity cost can be \$4000-8000 NPV per acre
- Efficient pathways \$60-90/%DFC/acre
- The same methods would apply to other objectives (e.g.DFC in riparian zone, selected habitat, etc.)

Thinning Alternative: to sustain viable economics

	Forest Land Value <u>SEV acre</u>	% Time <u>in DFC</u>
No Touch Buffer	\$-215	32
Thin & Narrow Buffer	\$207	65-70
No Buffer	\$627	<<32