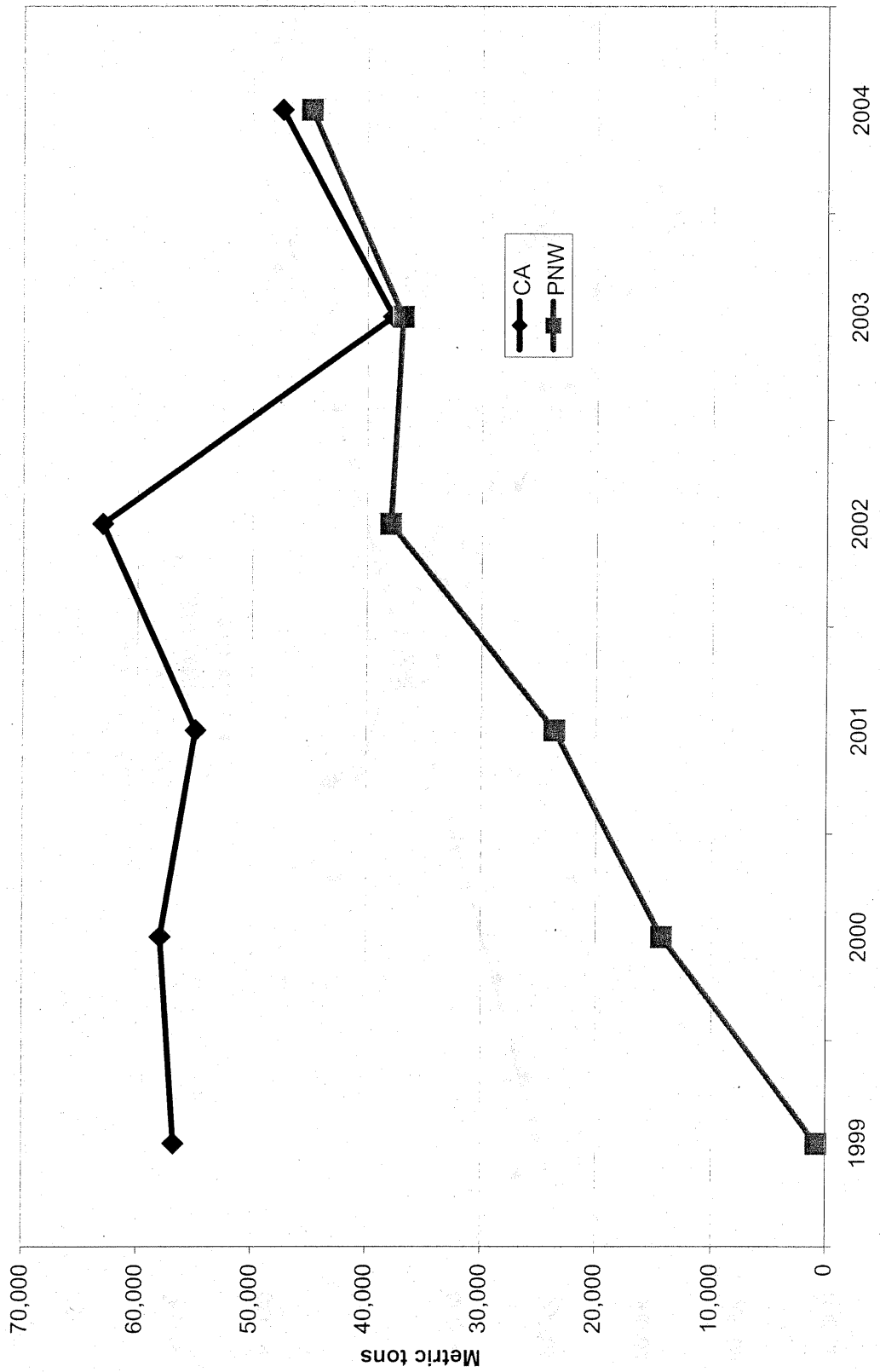
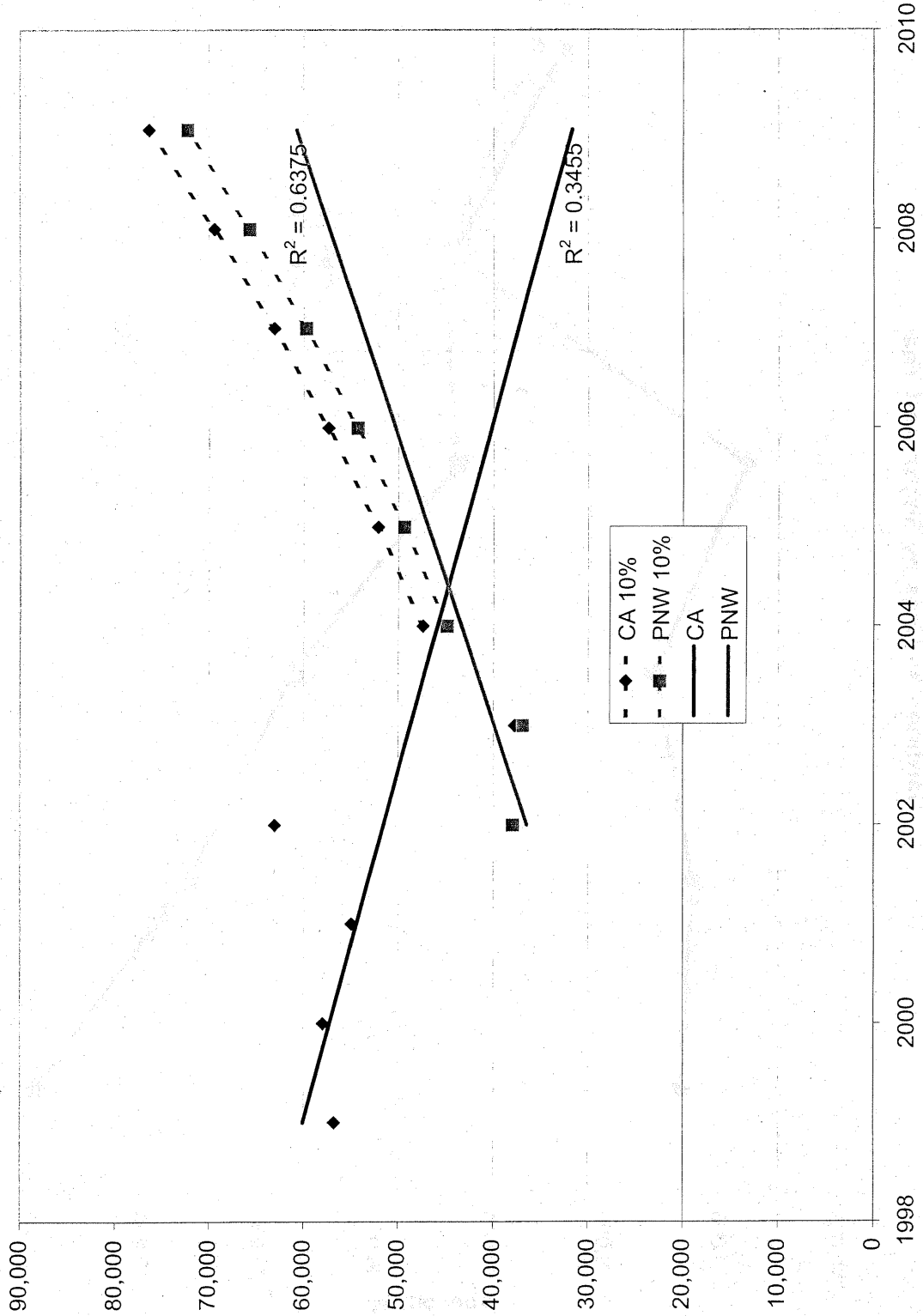


Briefly gone thru
Phil Anderson
6-16-05
10:40 AM

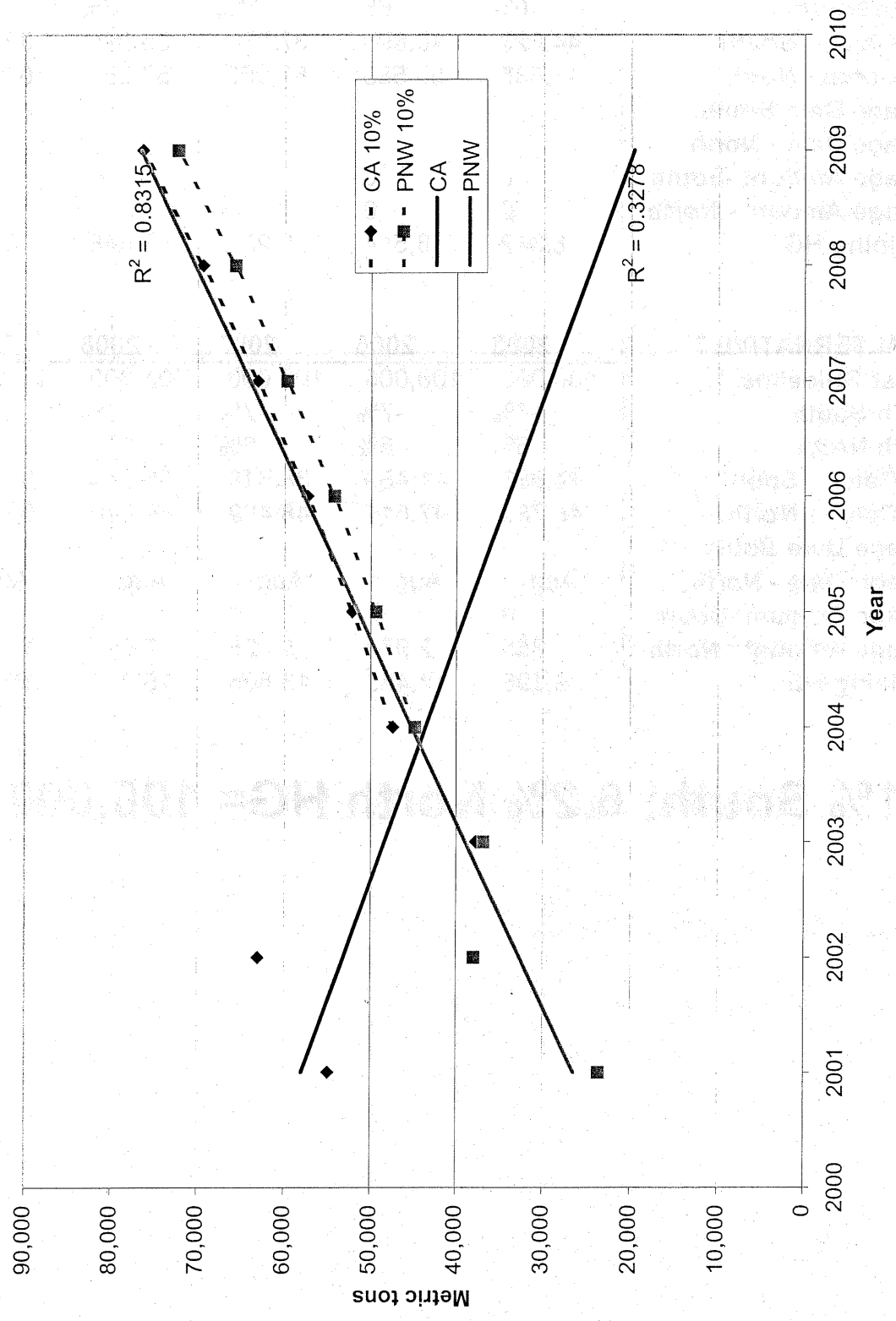
Sardine Landings by Sector and Year



Landings projected for 5 years using last 6 years for CA, last 3 years for PNW



Landings projected 5 years based upon last 4 years



Comparison of Alternative 3 and 7 at growth rates of -7.1% South, 6.2% North

ALTERNATIVE 3	2005	2006	2007	2008	2009
Harvest Guideline	100,000	100,000	100,000	100,000	100,000
Growth South	-7%	-7%	-7%	-7%	-7%
Growth North	6%	6%	6%	6%	6%
Total Catch - South	44,023	40,898	37,994	35,296	32,790
Total Catch - North	47,635	50,588	57,056	57,056	60,593
Shortage Date-South					
Shortage Date - North					
Shortage Amount -South	0	0	0	0	0
Shortage Amount - North	0	0	0	0	0
Remaining HG	8,342	8,514	8,281	7,648	6,616

ALTERNATIVE 7	2005	2006	2007	2008	2009
Harvest Guideline	100,000	100,000	100,000	100,000	100,000
Growth South	-7%	-7%	-7%	-7%	-7%
Growth North	6%	6%	6%	6%	6%
Total Catch - South	44,583	41,489	38,618	35,954	33,483
Total Catch - North	46,780	47,614	48,499	49,440	50,438
Shortage Date-South					
Shortage Date - North	Aug	Aug	Aug	Aug	Aug
Shortage Amount -South	0	0	0	0	0
Shortage Amount - North	855	2,974	5,225	7,616	10,155
Remaining HG	9,196	11,488	13,506	15,264	16,771

-7.1% South; 6.2% North HG= 100,000

Comparison of Alternative 3 and 7 at growth rates of 0% South, 5% North

ALTERNATIVE 3	2005	2006	2007	2008	2009
Harvest Guideline	100,000	100,000	100,000	100,000	100,000
Growth South	0%	0%	0%	0%	0%
Growth North	5%	5%	5%	5%	5%
Total Catch - South	47,388	47,388	47,388	46,278	45,389
Total Catch - North	47,097	49,452	53,722	53,722	54,611
Shortage Date-South				Sep, Dec	Sep, Dec
Shortage Date - North				Sep, Dec	Sep, Dec
Shortage Amount -South	0	0	0	1,110	1,999
Shortage Amount - North	0	0	0	799	2,635
Remaining HG	5,515	3,160	688	0	0

ALTERNATIVE 7	2005	2006	2007	2008	2009
Harvest Guideline	100,000	100,000	100,000	100,000	100,000
Growth South	0%	0%	0%	0%	0%
Growth North	5%	5%	5%	5%	5%
Total Catch - South	47,944	47,970	47,998	48,027	48,058
Total Catch - North	46,628	47,293	47,991	48,724	49,494
Shortage Date-South					
Shortage Date - North	Aug	Aug	Aug	Aug	Aug
Shortage Amount -South	0	0	0	0	0
Shortage Amount - North	468	2,158	3,933	5,796	7,753
Remaining HG	5,983	5,319	4,621	3,888	3,118

0% South; 5% North HG= 100,000

Comparison of performance of alternatives 3 and 7 should catches collapse in the North, but remain available at lower levels in the south. in the South. Sector growth rates are set to simulate a withdrawal of sardines from northern waters while the southern fishery remains level.
 North = -80%/yr growth; South = 0%/yr growth

Alternative 3	2005	2006	2007	2008	2009
Harvest Guideline	50,000	50,000	50,000	50,000	50,000
Growth South	0.00%	0.00%	0.00%	0.00%	0.00%
Growth North	-80.00%	-80.00%	-80.00%	-80.00%	-80.00%
Total Catch - South	41,198	47,388	47,388	47,388	47,388
Total Catch - North	8,802	1,794	72	72	14
Shortage Date-South					
Shortage Date - North					
Shortage Amount -South	6,190	0	0	0	0
Shortage Amount - North	169	0	0	0	0
Remaining HG	0	818	2,253	2,540	2,598

Alternative 7	2005	2006	2007	2008	2009
Harvest Guideline	50,000	50,000	50,000	50,000	50,000
Growth South	0.00%	0.00%	0.00%	0.00%	0.00%
Growth North	-80.00%	-80.00%	-80.00%	-80.00%	-80.00%
Total Catch - South	41,182	45,326	45,823	45,923	45,942
Total Catch - North	8,925	1,794	359	72	14
Shortage Date-South					
Shortage Date - North					
Shortage Amount -South	6,313	2,084	1,569	1,466	1,446
Shortage Amount - North	45	0	0	0	0
Remaining HG	0	2,902	3,822	4,006	4,043