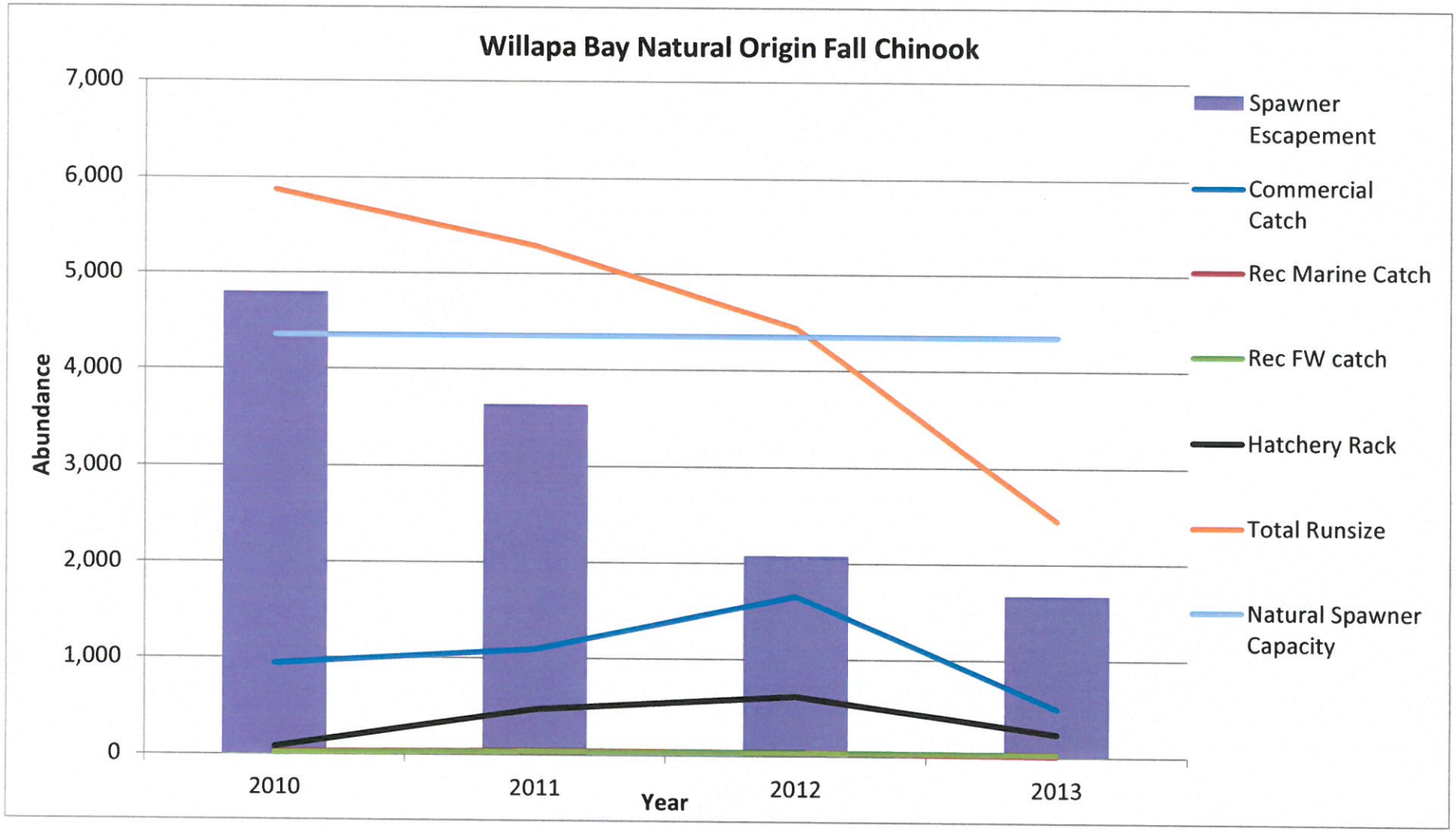
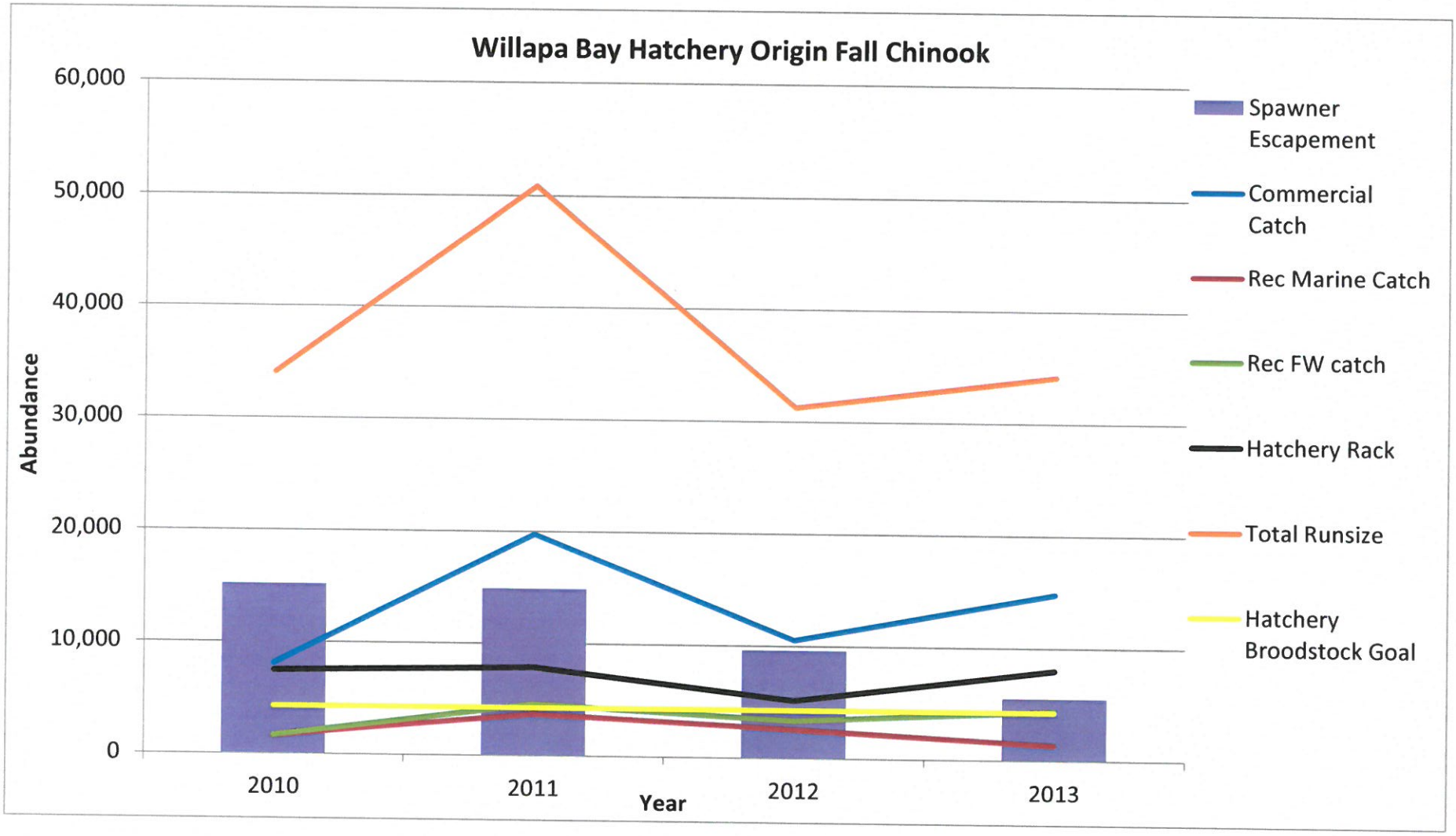
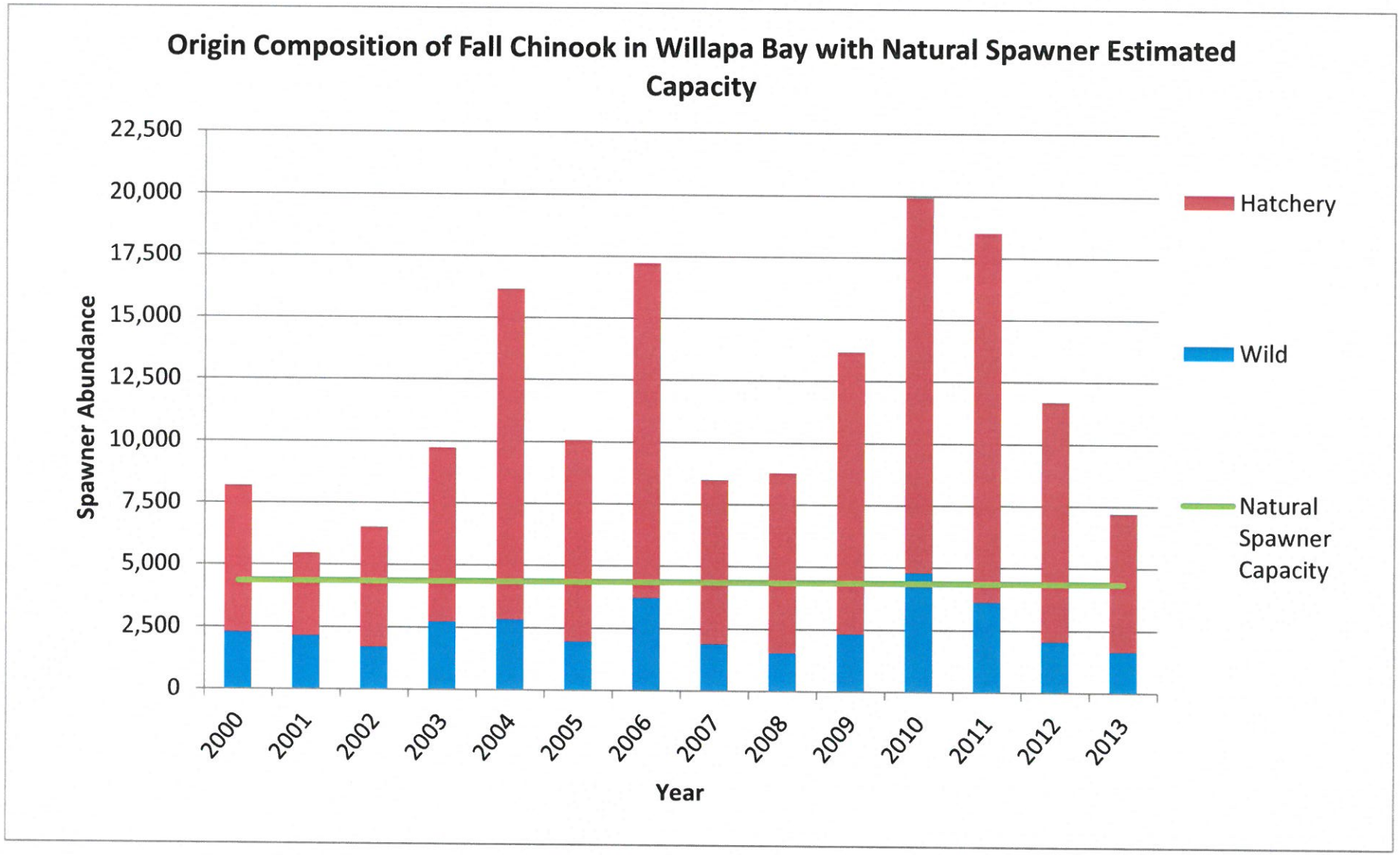
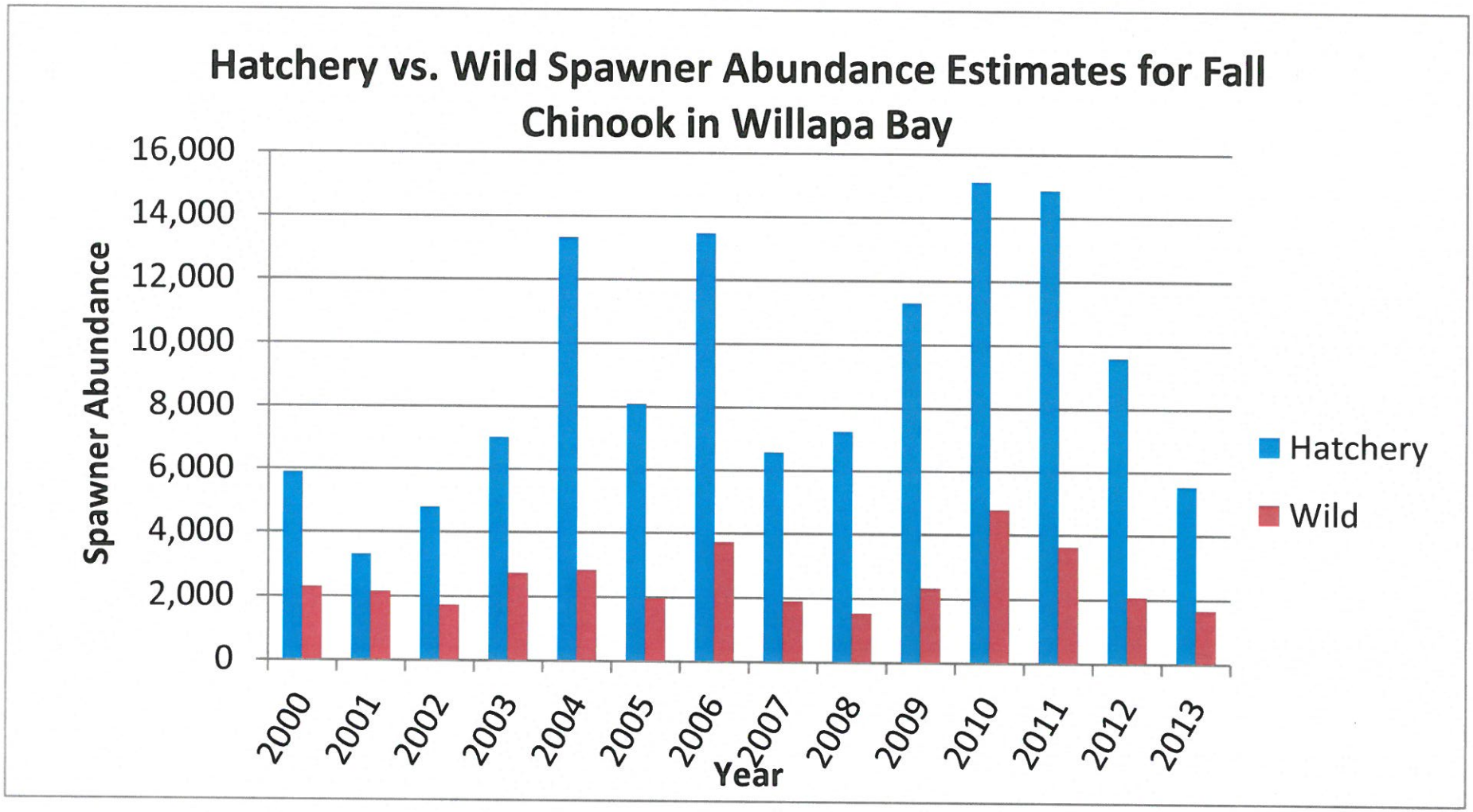
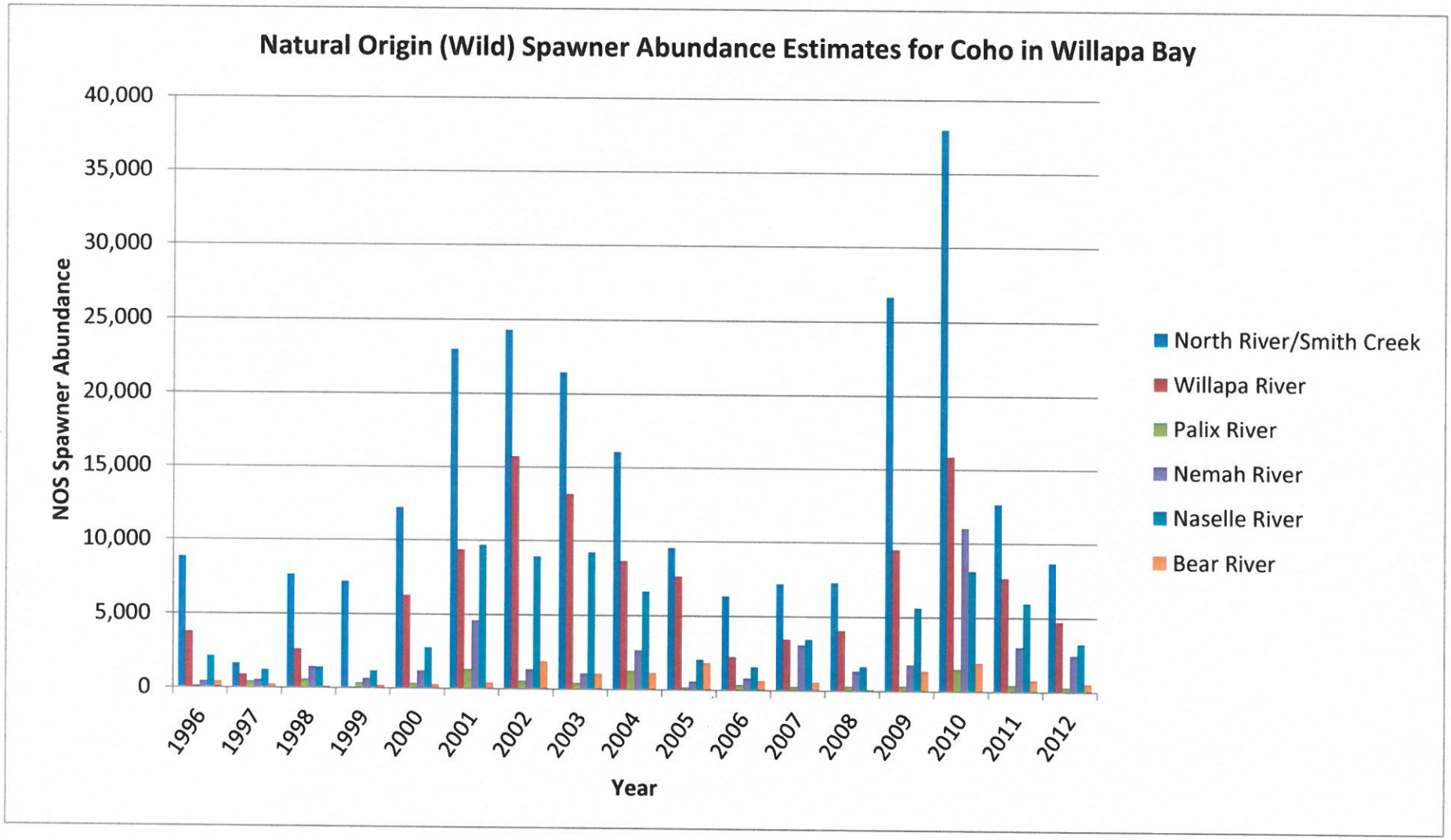
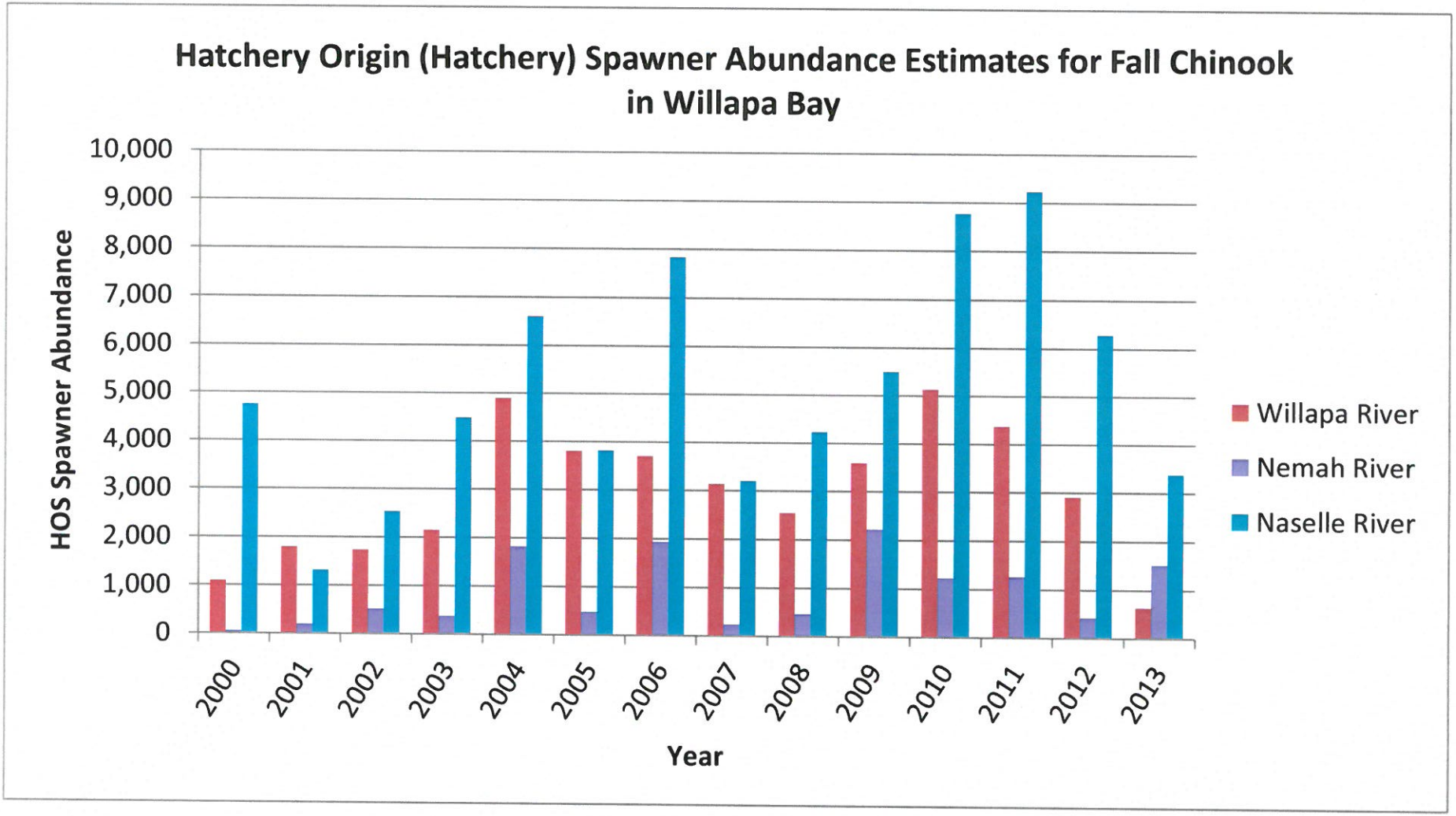

Willapa Bay Natural Origin Fall Chinook
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
Abundance
2010
2011
2012
2013
Year
Spawner Escapement
Commercial Catch
Rec Marine Catch
Rec FW catch
Hatchery Rack
Total Runsize
Natural Spawner Capacity

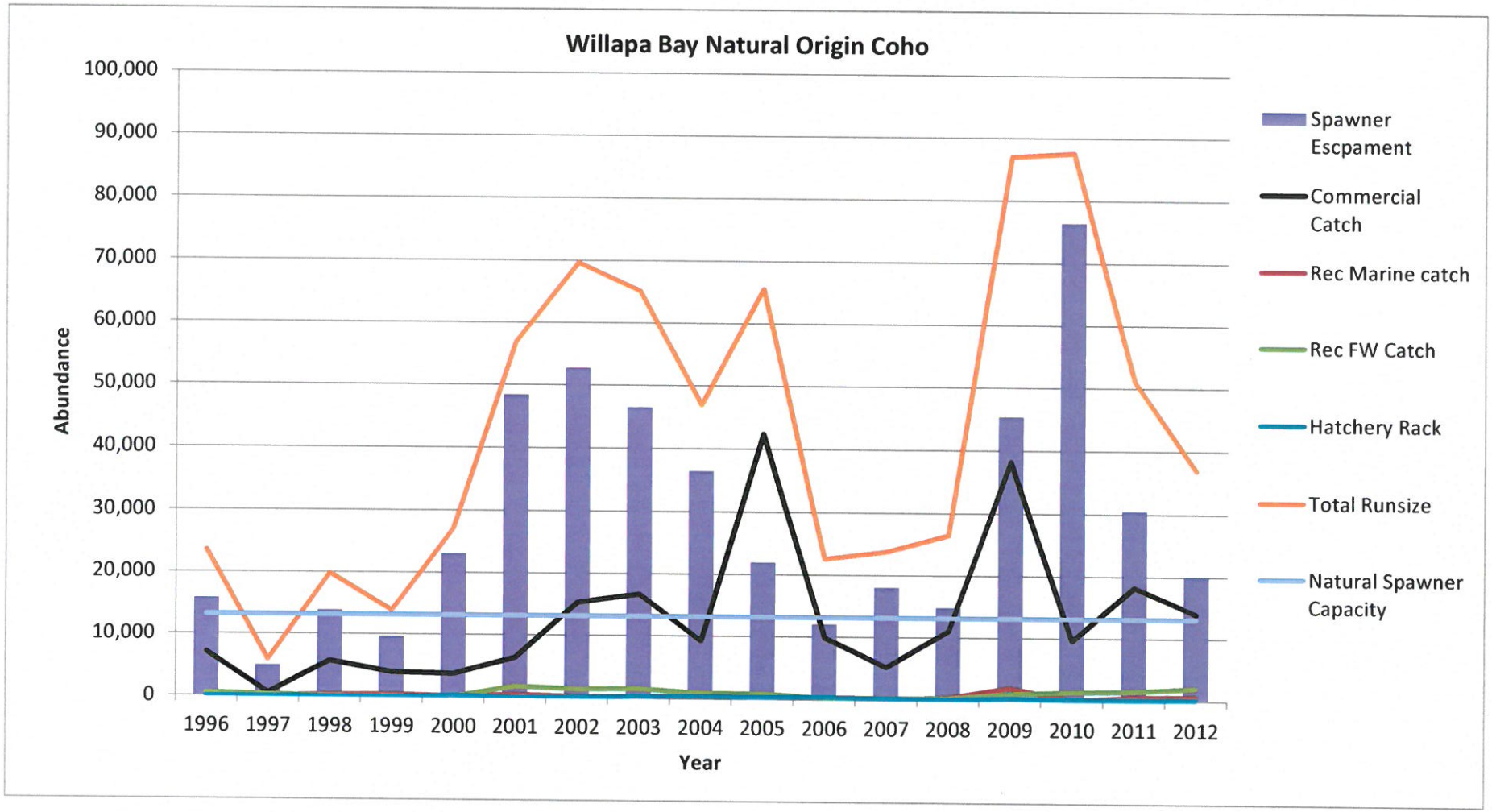

Willapa Bay Hatchery Origin Fall Chinook
60,000
50,000
40,000
30,000
20,000
10,000
0
Abundance
2010
2011
2012
2013
Year
Spawner Escapement
Commercial Catch
Rec Marine Catch
Rec FW catch
Hatchery Rack
Total Runsize
Hatchery Broodstock Goal

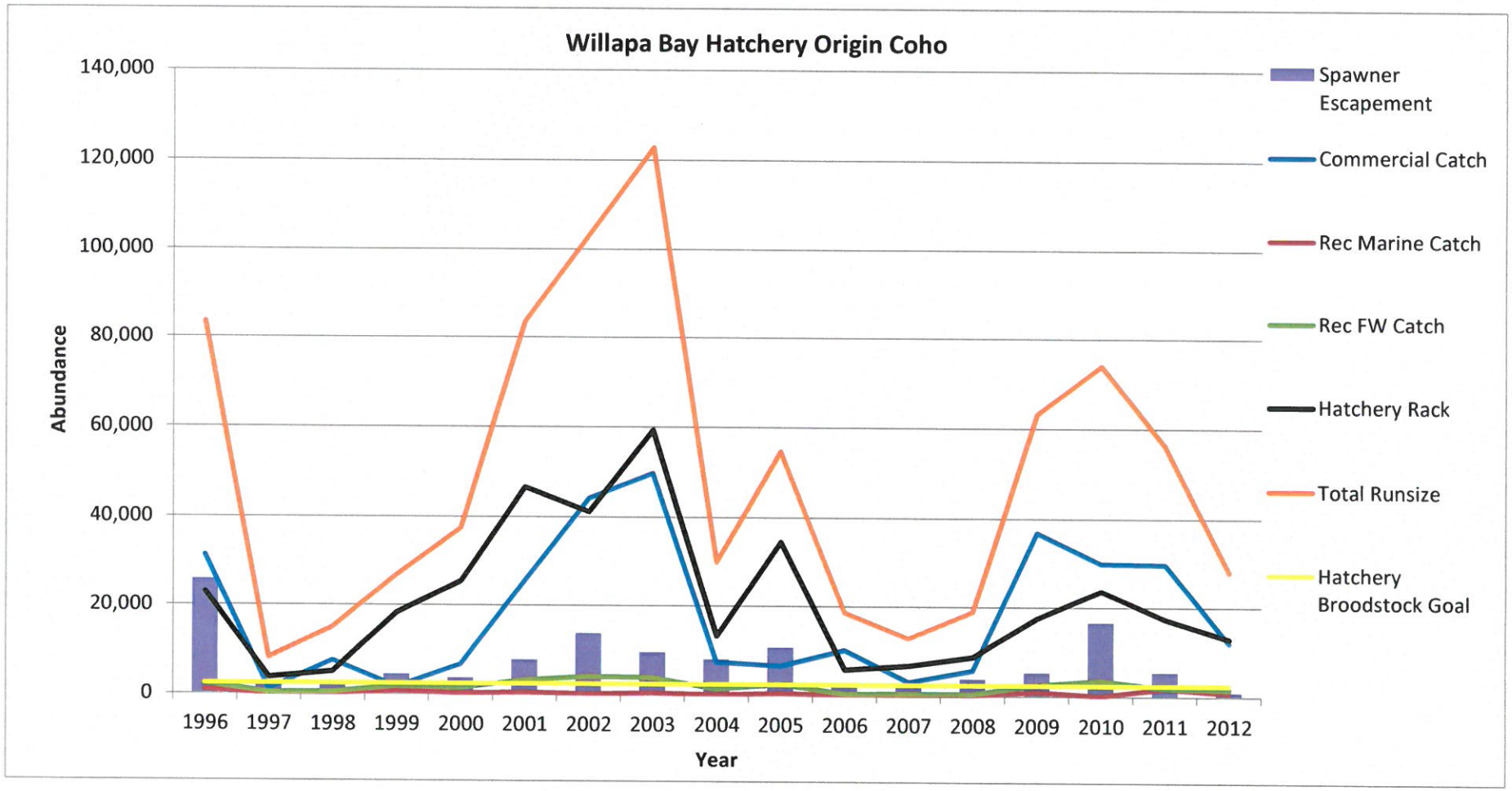

Origin Composition of Fall Chinook in Willapa Bay with Natural Spawner Estimated Capacity
Spawner Abundance
22,500
20,000
17,500
15,000
12,500
10,000
7,500
5,000
2,500
0
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Year
Hatchery
Wild
Natural Spawner Capacity

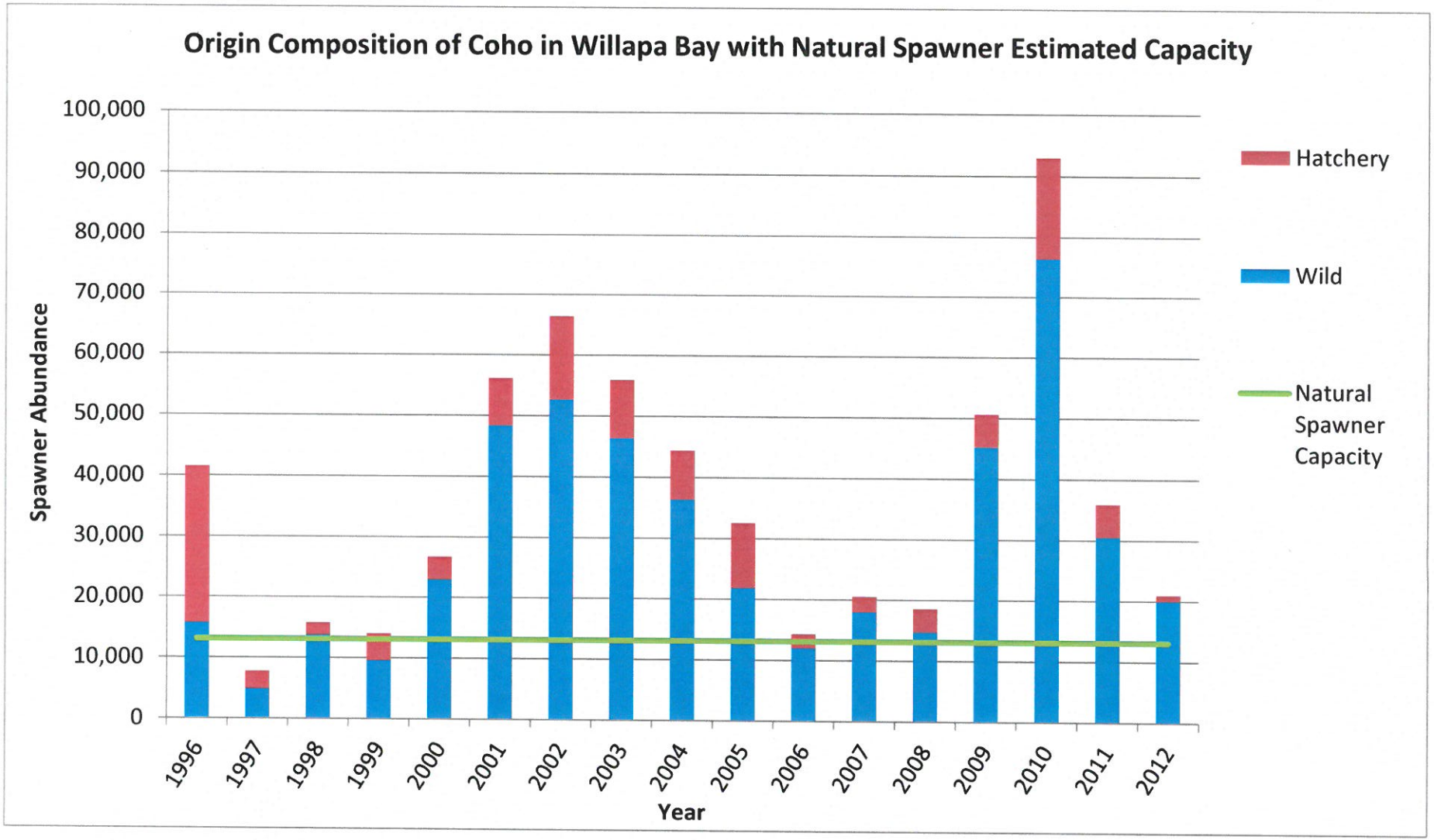

Hatchery vs. Wild Spawner Abundance Estimates for Fall Chinook in Willapa Bay
Spawner Abundance
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Year
Hatchery
Wild

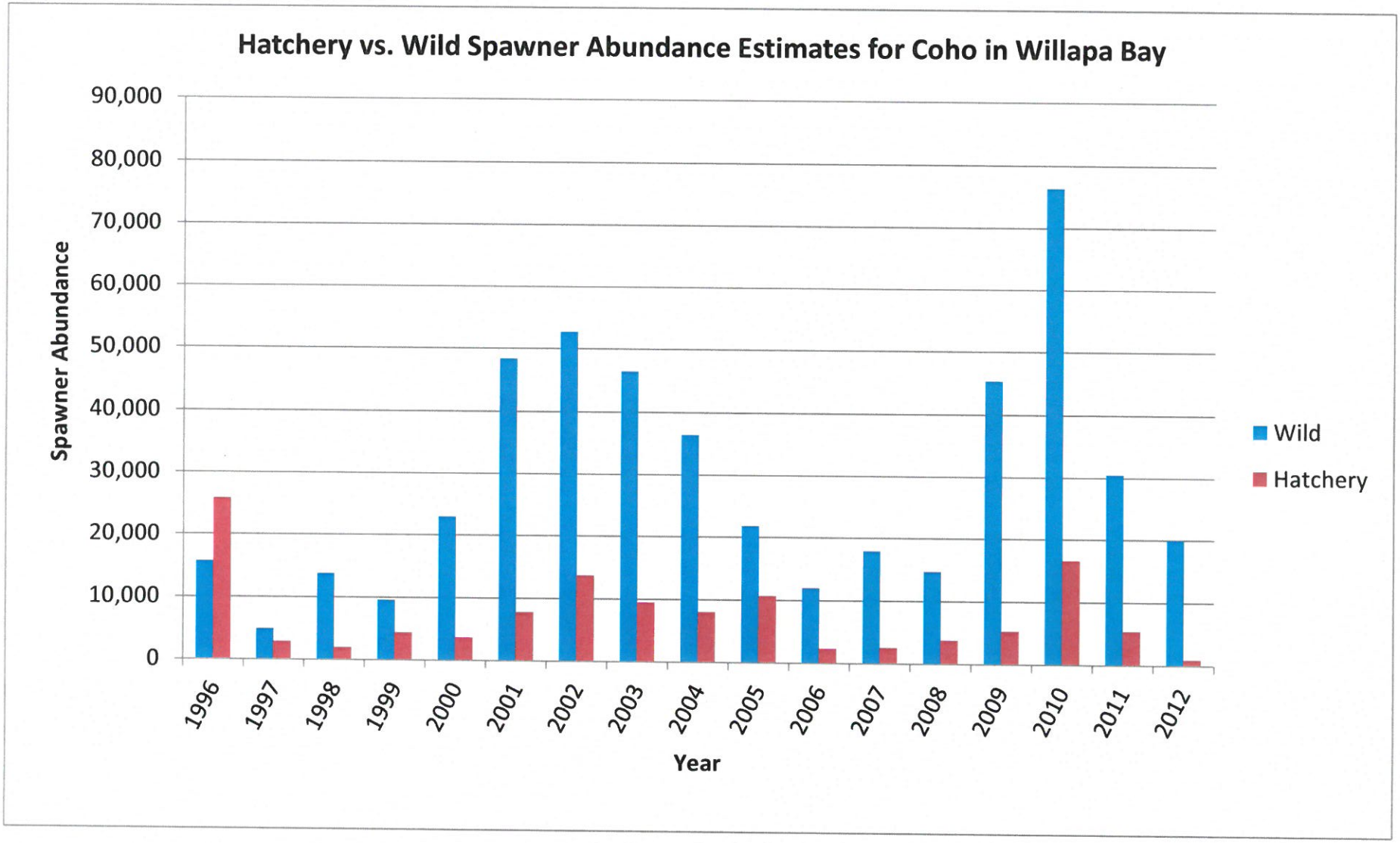

Natural Origin (Wild) Spawner Abundance Estimates for Coho in Willapa Bay
NOS Spawner Abundance
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
Year
North River/Smith Creek
Willapa River
Palix River
Nemah River
Naselle River
Bear River

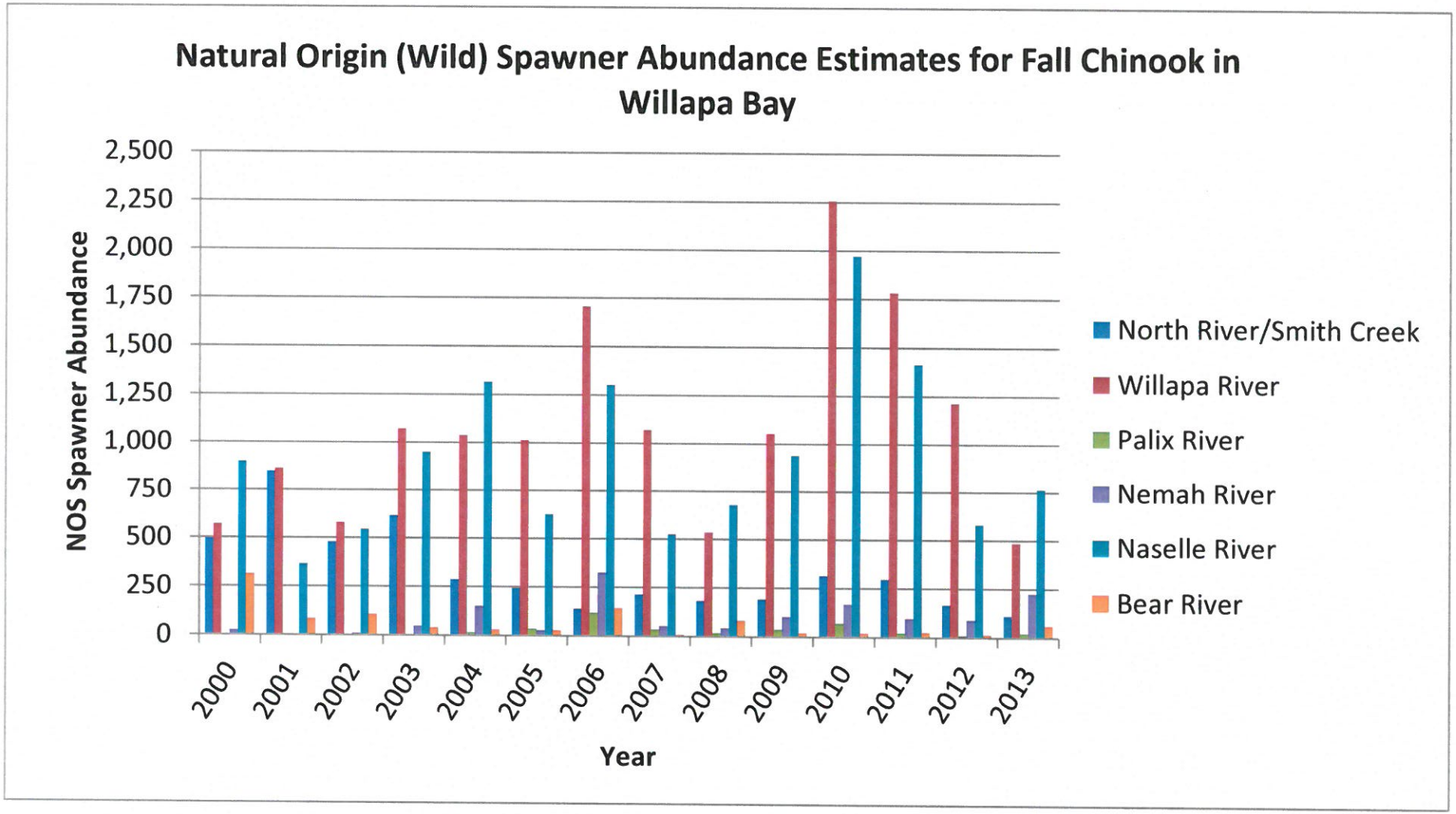

Hatchery Origin (Hatchery) Spawner Abundance Estimates for Fall Chinook in Willapa Bay
HOS Spawner Abundance
10,000
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Year
Willapa River
Nemah River
Naselle River

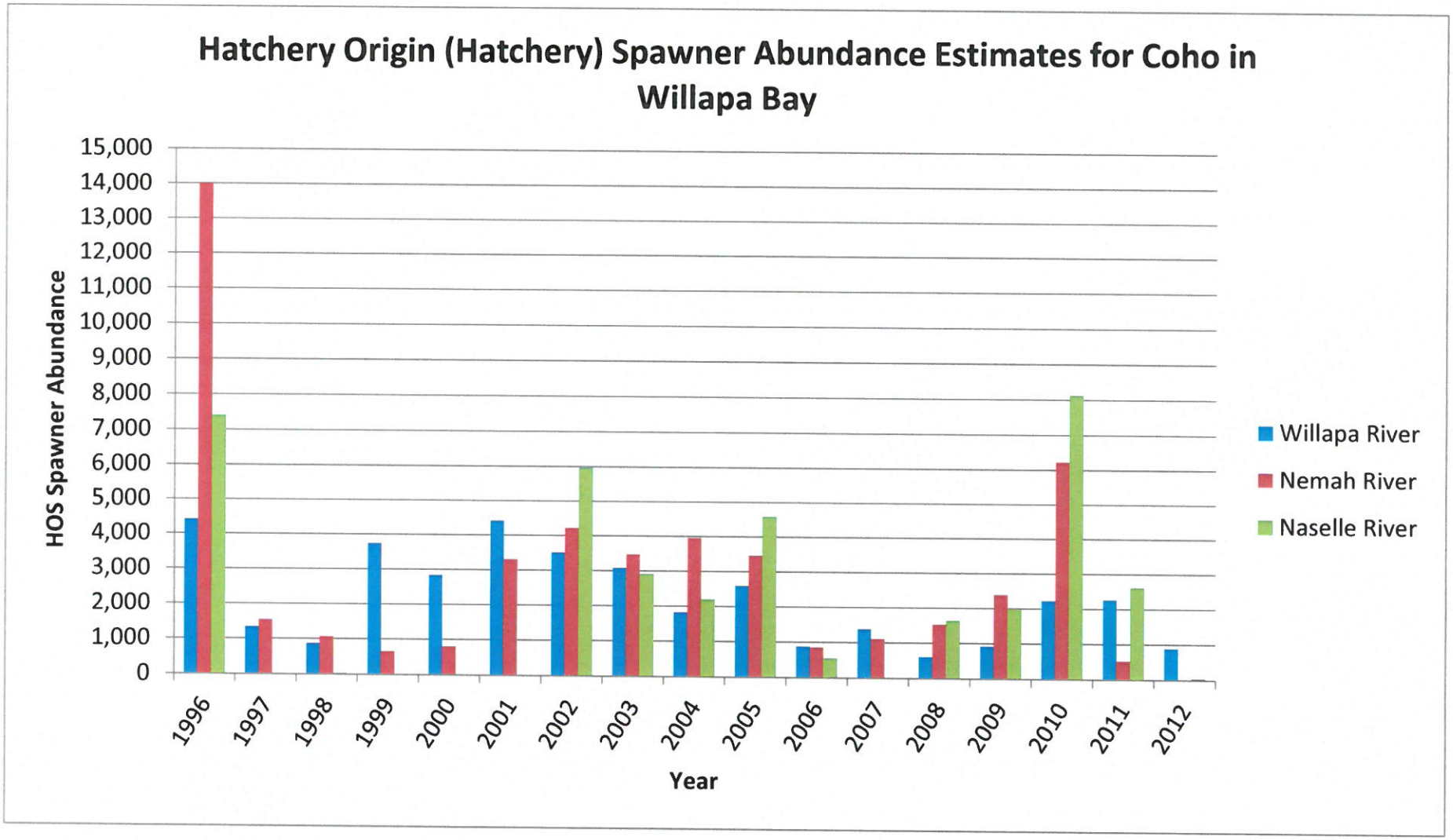

Willapa Bay Natural Origin Coho
100,000
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Abundance
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
Year
Spawner Escpament
Commercial Catch
Rec Marine catch
Rec FW Catch
Hatchery Rack
Total Runsize
Natural Spawner Capacity

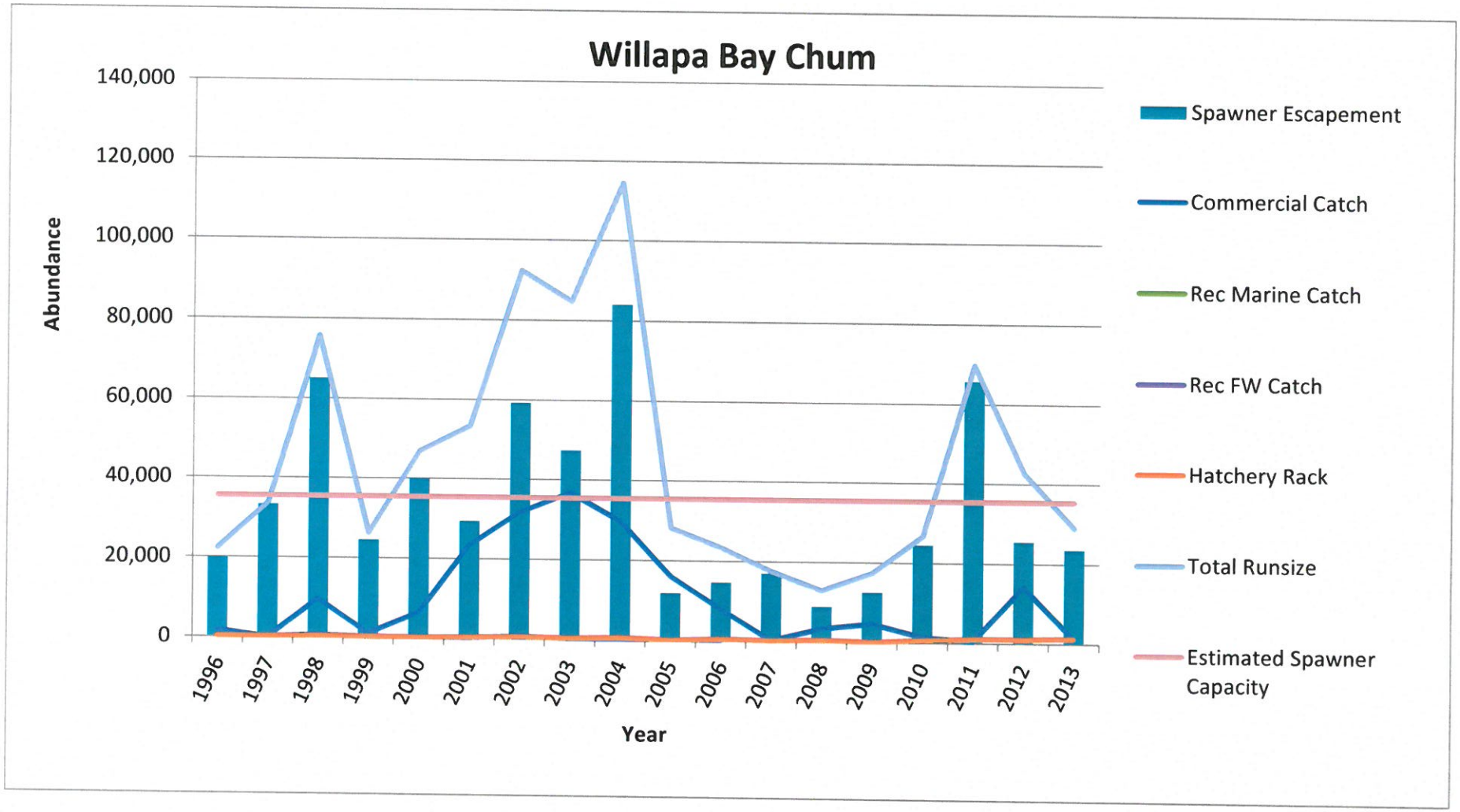

Willapa Bay Hatchery Origin Coho
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
Abundance
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
Year
Spawner Escapement
Commercial Catch
Rec Marine Catch
Rec FW Catch
Hatchery Rack
Total Runsize
Hatchery Broodstock Goal


Origin Composition of Coho in Willapa Bay with Natural Spawner Estimated Capacity
Spawner Abundance
100,000
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
Year
Hatchery
Wild
Natural Spawner Capacity


Hatchery vs. Wild Spawner Abundance Estimates for Coho in Willapa Bay
Spawner Abundance
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
Year
Wild
Hatchery


Natural Origin (Wild) Spawner Abundance Estimates for Fall Chinook in Willapa Bay
NOS Spawner Abundance
2,500
2,250
2,000
1,750
1,500
1,250
1,000
750
500
250
0
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Year
North River/Smith Creek
Willapa River
Palix River
Nemah River
Naselle River
Bear River


Hatchery Origin (Hatchery) Spawner Abundance Estimates for Coho in Willapa Bay
HOS Spawner Abundance
15,000
14,000
13,000
12,000
11,000
10,000
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
Year
Willapa River
Nemah River
Naselle River


Willapa Bay Chum
Abundance
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Year
Spawner Escapement
Commercial Catch
Rec Marine Catch
Rec FW Catch
Hatchery Rack
Total Runsize
Estimated Spawner Capacity