



Economic and Revenue Forecast

Fiscal Year 2011
First Quarter

September 2010



WASHINGTON STATE DEPARTMENT OF
Natural Resources
Peter Goldmark - Commissioner of Public Lands

Acknowledgements

The Washington State Department of Natural Resources' (DNR) *Economic and Revenue Forecast* is a collaborative effort. It is the product of information provided by private individuals and organizations, as well as DNR staff. Without their contributions, the quality of the Forecast would be greatly diminished.

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Craig Calhoun, Economist
Phil Aust, Lead Economist
DNR Office of Budget and Economics
(360) 902-1031

Hard copies of this Forecast are available upon request from:
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Persons who need this information
in an alternate format may call
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Prepared by
Craig Calhoon, Economist
Phil Aust, Lead Economist
DNR Office of Budget and Economics



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Acronyms and abbreviations

bbf	Billion Board Feet
CDN\$	Canadian dollar
CPI	Consumer Price Index
Cwt	Hundred pounds
CY	Calendar Year
DNR	Washington State Department of Natural Resources
FDA	Forest Development Account
Fed	U.S. Federal Reserve Board
FOMC	Federal Open Market Committee
FY	Fiscal Year
GDP	Gross Domestic Product
IMF	International Monetary Fund
ISM	Institute for Supply Management
mbf	Thousand board feet
mmbf	Million board feet
NAFTA	North American Free Trade Agreement
OPEC	Organization of Petroleum Exporting Nations
PPI	Producer Price Index
RCW	Revised Code of Washington
REIT	Real Estate Investment Trust
RISI	Resource Information Systems, Inc.
RMB	Renminbi, China's currency – the basic unit is the yuan
RMCA	Resource Management Cost Account
SAAR	Seasonally Adjusted Annual Rate
TIMO	Timberland Investment Management Organization
US\$	U.S. dollar
WWPA	Western Wood Products Association
WTO	World Trade Organization
Y	Japanese yen



Preface

This *Economic and Revenue Forecast* projects revenues from Washington State trust lands managed by the Washington State Department of Natural Resources (DNR). These revenues are distributed to management funds and beneficiaries as directed by statute. The Forecast information is organized by source, fund, and fiscal year.

DNR revises its Forecast quarterly to provide updated information for trust beneficiaries and department budgeting purposes. (See the Forecast Calendar at the end of this section for release dates.) We strive to produce the most accurate and objective forecast possible, based on current policy direction and available information. Actual revenues depend on DNR's future policy decisions and changes in market conditions beyond our control.

This Forecast covers fiscal years 2011 through 2015. Fiscal years for Washington State government begin on July 1 and end on June 30. For example, the current fiscal year, FY 2011, runs from July 1, 2010 through June 30, 2011.

The baseline date (the point that designates the transition from "actuals" to forecast) for this Forecast is June 30, 2010, the end of the fourth quarter of FY 2010. The forecast beyond that date is based on the most up-to-date market and economic information available at the time of publication, including DNR's timber sales results through August 2010.

Unless otherwise indicated, values are expressed in nominal terms without adjustment for inflation. Therefore, interpreting trends in the Forecast requires attention to inflationary changes in the value of money over time separate from changes attributable to other economic influences.

Each DNR Forecast builds on the previous one, emphasizing ongoing changes. Before preparing each Forecast, international and national macroeconomic conditions and the demand and supply for forest products are re-evaluated. The impact on projected revenues from DNR-managed trust lands is then evaluated, given the current economic conditions and outlook.

DNR Forecasts provide information used in the *Washington Economic and Revenue Forecast* issued by the Washington State Economic and Revenue Forecast Council. The release dates for DNR's Forecasts are determined by the state's Forecast schedule as prescribed by RCW 82.33.020. The table below shows the anticipated schedule for DNR's future *Economic and Revenue Forecasts*.

Economic Forecast Calendar

Forecast Title	Baseline Date	Draft Revenue Data Release Date	Final Data and Publication Date (approximately)
November 2010	End Q1, FY 2011	Nov. 5, 2010	Nov. 30, 2010
March 2011	End Q2, FY 2011	Mar. 4, 2011	Mar. 31, 2011
June 2011	End Q3, FY 2011	June 3, 2011	June 30, 2011
September 2011	End Q4, FY 2011	Sept. 2, 2011	Sept. 30, 2011



Introduction and Forecast Highlights

Employment. The Great Recession, the worst U.S. economic crisis since the Great Depression, has thrown all the employment statistics to extremes. Over eight million fulltime jobs have been lost, 15 million people are unemployed (over six million for over a half year), 2.5 million have given up looking for work, and unemployment remains high at 9.6 percent. There have been some recent improvements in direction of employment indicators though the amounts of improvement have been very small. At this point, we expect the unemployment rate to remain high for the next year and a half.

Housing Markets. Recent news on housing markets is not good. House prices, which had fallen precipitously and have recently been fluttering, are expected to fall further. Sales of existing and new homes and housing starts remain at historic low levels. The income tax credit on home purchases appears only to have moved some home purchases forward in time and now home sales and housing starts are falling again. During the recession, household formation has slowed as a result of jobs lost in the economy and home loan foreclosures are at record high levels. There is now an oversupply of existing housing despite record low construction levels of new homes and record low mortgage loan rates. We don't expect new home construction to recover significantly over the next year or two.

Lumber and Log Prices. The upward trend of increasing lumber and log prices throughout 2009 finally ended in April 2010. Even though demand for building materials was very low, lumber and log prices were being driven up by a temporary inadequate inventory of lumber in the supply chain. Lumber prices peaked in April, with Random Lengths' Coast Dry Random and Stud composite lumber price at \$326/mbf. The composite log price peaked at \$435/mbf in May. By August, the composite lumber price was back down to \$225/mbf and the composite log price was down to \$395/mbf. We expect lumber prices to stabilize as lumber futures prices have recently improved a bit after being flat for many weeks.

DNR Timber Stumpage Prices. The final average stumpage price for DNR timber sales sold in FY 2010 was \$245/mbf. The forecast timber sales prices for FY 2011 were increased by \$25/mbf to \$235/mbf primarily because of the actual timber sales prices received since the June Forecast. We have also increased the FY 2012 stumpage price by \$10/mbf to \$225/mbf. These forecasts of DNR stumpage prices in the next two fiscal years incorporate our continued pessimism about the long-term recovery of the U.S. housing market. The average stumpage price of \$235/mbf projected for the next biennium is a little lower than this biennium's predicted \$240/mbf, but it's higher than the \$230/mbf we were predicting in the last Forecast.

Timber Sales Volume. There are only minor changes to DNR's planned timber sales level, with 9 mmbf of timber sales volume being shifted forward from FY 2010 to FY 2011. There were no bids on 14 of 33 timber sales DNR offered in July and August. If this trend continues it may be difficult for DNR to meet its planned timber sales level for FY 2011.

Forecast Timber Removal Volume and Removal Prices. Actual timber sale removals for FY 2010 totaled 801 mmbf, by far the highest level since the 1985-1988 period. Based on our latest timber purchasers survey (conducted in early July), there are only minor changes in projected timber removal volumes in FYs 2011-2015 which will be in the more normal range of 645-665 mmbf per year. Removal prices are increased by \$10/mbf in FY 2012 and FY 2013 because of the increase in sales prices in FY 2011 and FY 2012.

Bottom Line for Timber Revenues. As a result of the increase in forecast timber removal prices, forecast timber revenues are up from the June Forecast by \$12.5 million, or 4 percent, this biennium and up \$16.5 million, or 5.7 percent, next biennium.

Lease and Other Non-timber Revenues. In FY 2010, the Department received an unprecedented \$20.0 million in revenues from auctions for geoduck harvest. The first two geoduck auctions for FY 2011 were also extremely successful with average prices of \$10.50 and \$10.68 per pound, almost twice the forecast level. Geoduck prices are notoriously volatile; still, prices have remained around \$10 per pound since July 2009. Based on the recent lack of price volatility and the expected continued market strength of China's economy (the main market for geoducks), we have increased our forecast base prices for future actions from \$5.75 to \$6.24 per pound. Based on the FY 2011 geoduck sales to date and the higher forecast prices going forward, projected aquatic lands revenues are up by \$6.1 million for the current biennium and up \$1.6 million for the next biennium from that forecast in June. There were only minor changes in other aquatic and upland lease revenues.

Caveats. Given the extremely low level of housing starts, low demand for forest products, and excess lumber capacity, we expect that lumber prices will remain relatively low and therefore keep log and stumpage prices down through the forecast period. Stumpage prices could be pushed even lower than we currently forecast or not as much. At this point, we judge the upside and downside risks to the forecast to be balanced.



Part 1. Macroeconomic Conditions

This section briefly reviews current and predicted conditions of the U.S. and world economies because these macroeconomic conditions affect the stumpage bid prices for Washington State Department of Natural Resources' (DNR) timber sales.

Construction activity—particularly new housing, repairs, and remodeling—accounts for most of the consumption of finished wood products in the United States. As a result, factors that affect the U.S. construction sector influence DNR's revenues and revenue forecasts. The residential housing sector continues to look bleak at the present time. The pendulum on housing has swung back strongly in reaction to the extreme swing it took at the height of the U.S. real estate bubble.

Prospects for the U.S. economy going forward are, as Federal Reserve Chairman Bernanke told Congress on July 21, “unusually uncertain” and there is a significant downside potential. Economic reports continue to be contradictory and volatile. Employment, housing, and personal consumption reports suggest continued stagnation or very slow recovery while manufacturing output reports have generally been more positive. Still, capacity utilization in manufacturing is only 72 percent, well below its pre-recessionary level of 80 percent and well below the level needed to stimulate investment in new capacity.

International supply and demand also affect domestic timber stumpage prices and lumber prices. On the supply side, Canada has a strong influence on the U.S. wood products sectors as it is a major source of lumber which can enter U.S. markets quite readily. On the demand side, China is an increasingly important market for world commodities.

U.S. economy

The U.S. economy is still growing, but it's barely noticeable. Data revisions have placed activity at a lower level than previously reported. Job growth remains sub-par, housing is headed south again, and financial markets indicate continuing weakness. The level of uncertainty in the outlook has increased.

*Washington State Economic and Revenue Forecast Council
Economic and Revenue Update
September 13, 2010*

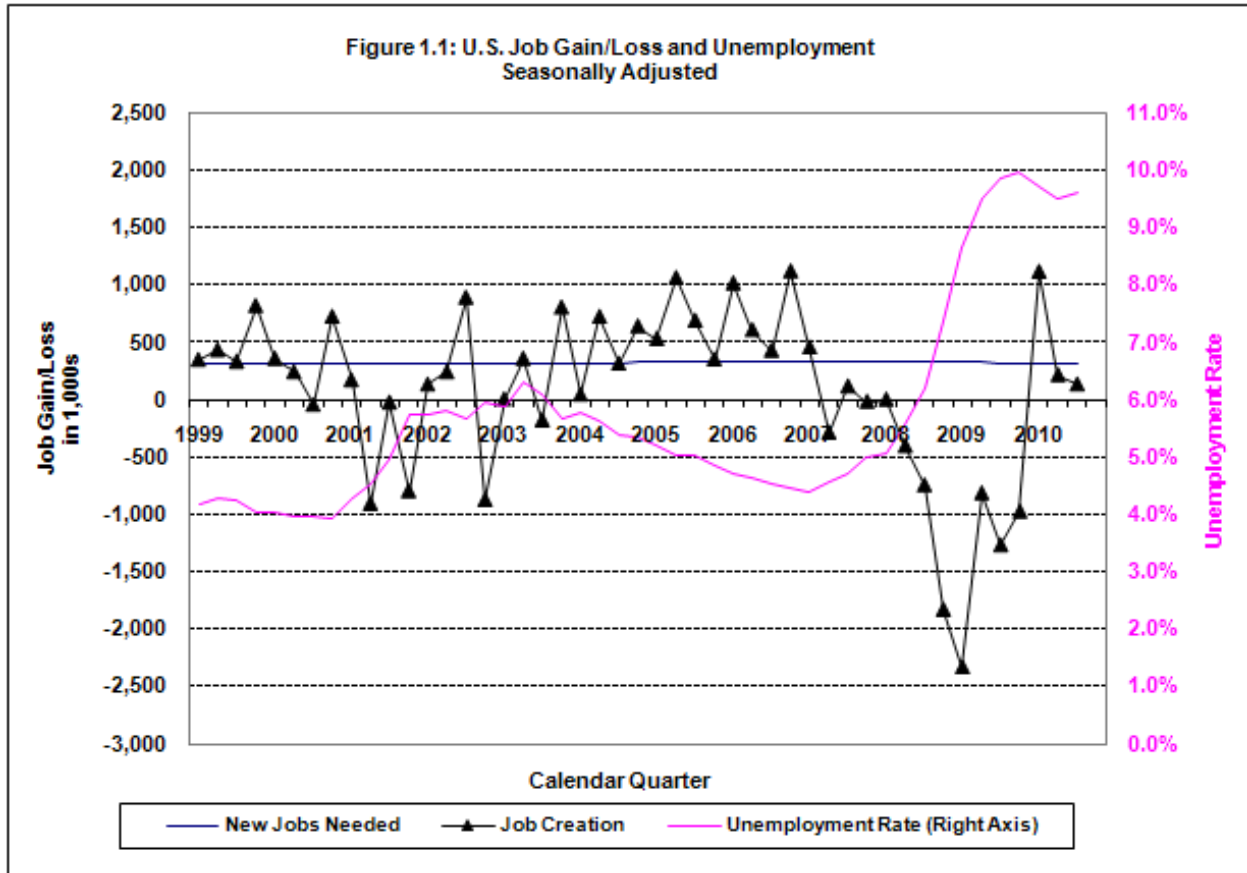
Employment. Employment remains in a bad condition in the U.S. The Great Recession, the worst financial crisis since the Great Depression, has thrown all the employment statistics to extremes. This impact on jobs and the American labor force has not been seen since the 1930's.

U.S. unemployment remains at a very high rate—9.6 percent in August (see **Figure 1.1**). This is an improvement over the peak of 10.0 percent in 4Q 2009, but is still extremely high by historic standards. As shown in **Figure 1.1**, the unemployment rate was in the range of 3.9 to 6.3 percent from 1999 all the way up through 2Q 2008. It then jumped up steeply and has been stuck above 9.5 percent since 2Q 2009. (Washington's unemployment rate was at 8.9 percent in August 2010.)

Over eight million fulltime jobs in the U.S. were lost in the current recession. As recently as November 2007, there were 146.5 million people employed. The number fell to 137.8 million by December 2009. The number of jobs is back up to 139.2 million in August, but that is still far below pre-recession levels. **Figure 1.1** shows that job creation is back in positive territory in 2010, but the rate is dropping again to near zero.

Here are some more statistics from the U.S. Bureau of Labor Statistics which paint a depressing picture of the current state of employment in the U.S.:

1. The number of unemployed persons who are continuing to look for work now stands at 14.9 million in August 2010, after peaking at 15.6 million in October 2009. This compares with 6.7 million unemployed as recently as March 2007.
2. The number of people working only part time now stands at 8.9 million in August 2010, after peaking at 9.2 million in October 2009. This compares with just 4.4 million part time workers as recently as October 2007.
3. The number of “discouraged workers”—those unemployed who have given up looking for work—stands at 2.4 million in August 2010, after peaking at 2.6 million a month earlier. This compares with 1.3 million as recently as December 2007.



4. The U.S. employment to population ratio, which varied monthly in a tight range between 62.0 and 64.7 percent from January 2000 all the way through August of 2008, dropped precipitously to 58.2 percent in December 2009 and is only at 58.5 percent in August of 2010.
5. The number of people unemployed for over a half a year (26 weeks) varied monthly in a range between 0.6 and 2.1 million from January 2000 all the way through September of 2008. The number of long-term unemployed persons exploded to 6.8 million in May 2010 and is still at 6.2 million in August 2010.

It is encouraging that all seven employment indicators discussed above have moved off their extreme points and are improved as of August 2010. But the movements have not been that great and it remains to be seen if the improvements will accelerate as necessary to pull the economy into a full-blown recovery. On the downside, state and local governments are under severe financial stress and further public sector layoffs on the horizon will cut against positive overall job creation.

The consensus of economists seems to be that unemployment will remain high—between 9 and 10 percent—for the next couple of years at least. This will reduce the rebound in consumer confidence and consumer spending, which will in turn be a drag on economic recovery.

Inflation. Inflation is a rise in the general level of prices of goods and services in an economy over a period of time. When the price level rises, each unit of currency buys fewer goods and services; consequently, annual inflation is also an erosion in the purchasing power of money. A chief measure of inflation is the annualized percentage change in general consumer prices (normally the Consumer Price Index) over time.

As shown in orange on **Figure 2.1** (on page 20), the U.S. inflation rate averaged about 3 percent per year from 2000 through 2008. During that period, it was as low as 1.1 percent in 2Q 2002 and as high as 5.0 percent in 2Q 2008. From that relatively recent high point, the U.S. inflation rate (on a 12-month basis) fell rapidly to just 0.1 percent in December 2008. March through October 2009 was actually a deflationary period as prices fell while the economy stagnated (the orange line enters negative territory). The CPI then rose again into early 2010 but has begun to fall once again, down to a 1.2 percent annualized inflation rate in July.

In its August 10 statement the Federal Open Market Committee (FOMC) said that “measures of underlying inflation have trended lower in recent quarters and, with substantial resource slack continuing to restrain cost pressures and longer-term inflation expectations stable, inflation is likely to be subdued for some time”.

In its September 21 statement the Committee reiterated that “measures of underlying inflation have trended lower in recent quarters ...” and added that “measures of underlying inflation are currently at levels somewhat below those the Committee judges most consistent, over the longer run, with its mandate to promote maximum employment and price stability”. This was coupled with the Fed’s recognition that the outlook for the economy continues to weaken. This increases the likelihood that the Fed will announce as early as at the next committee meeting in November additional monetary easing (“QEII”) to support the economic recovery and to raise inflation to levels consistent with its mandate.

Interest Rates. The Fed continues to maintain the target range for the federal funds rate at a historically low 0 to ¼ percent. In its September 21 statement the FOMC, using the same words as in its previous statements, said that it “continues to anticipate that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels of the federal funds rate for an extended period.”

As long as the U.S. economic recovery remains weak, the Fed will not want to raise interest rates and cut off the recovery before it has gained a strong foothold.

Home mortgage rates are currently also at historic lows. The average rate of a 30-year fixed rate mortgage in 2009 was a low 5.04 percent. The rate held in that ballpark for the first four months of 2010, but has since fallen to a new hard-to-believe low of 4.43 percent in August. Fifteen-year fixed rate mortgages can be found at rates under 4.0 percent.

Consumption. Personal consumption expenditures are the total of final purchases of goods and services by individuals in an economy. Total consumption is defined as disposable personal

income minus savings and disposable personal income is defined as total personal income minus taxes. Consumption is a strong indicator of the overall health of the economy.

U.S. real personal income has shown a consistent pattern of regular growth over the last forty years except for several recessionary periods when it has been either flat or very slightly decreasing. During 2008 and 2009, personal income declined much more steeply and over a much longer time period than any other time in the last forty years.

While disposable income was growing at 2.7 percent per year in the pre-recession years of 2003-07, consumption grew an average of 3.0 percent. This distorted consumption level was fueled in large part by easy access to consumer credit, low interest rates, and perceived housing-related wealth. Consumption grew faster than disposable income during this period because Americans were saving at a lower rate.

Since consumption is a function of income, it is no surprise that household consumption fell off in the U.S. economy during the last two calendar years, down by 0.3 percent in 2008 and 0.6 percent in 2009, as the U.S. economy lost millions of jobs. This contraction in consumption was unparalleled going back to the Great Depression.

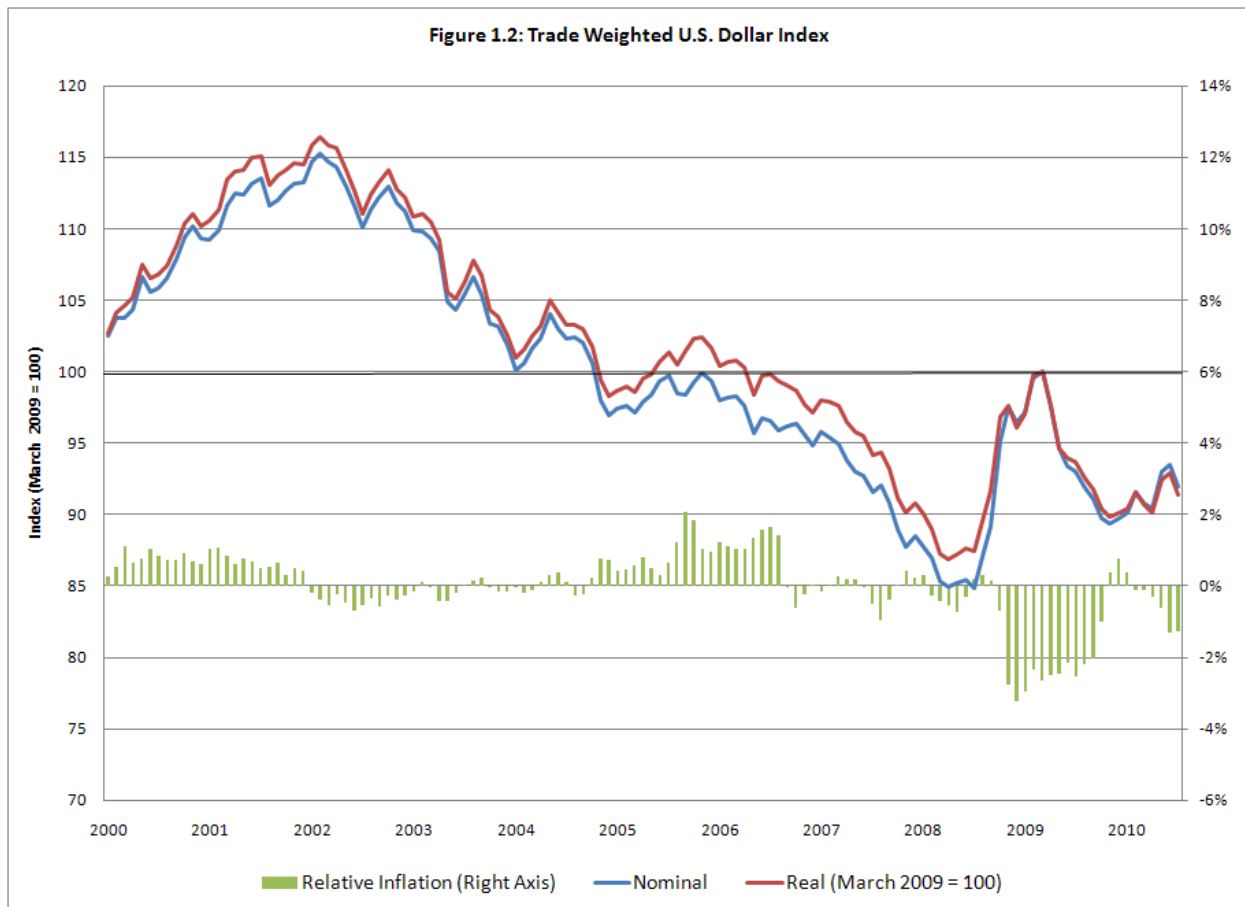
Consumer spending finally turned up again in late 2009 and continues up in 2010 through August. However, household spending remains constrained by high unemployment, modest income growth, lower housing wealth, and tight credit. Even though there is believed to be considerable pent-up demand building, it will be difficult for the U.S. consumer to drive a strong and sustainable recovery until these underlying limiting factors improve.

During this recessionary period, people with jobs have also become more conservative with their spending (consumption), paying down their debt and increasing their savings. It is likely that at least for some time U.S. households will partake less in the asset-leveraged and credit-fueled spending that characterized the last decade.

Trade and the U.S. Dollar. Figure 1.2 shows the trade-weighted U.S. dollar index for the last decade. The broad index is a weighted average of the foreign exchange values of the U.S. dollar against the currencies of a large group of major U.S. trading partners. The chart shows that the dollar was at its strongest (relative to other world currencies) in early 2002. Going back to 1973, the only other time the U.S. dollar peaked at a higher point was in early 1988, when it was 13 percent higher in real terms than in early 2002. Since 2002, the dollar has been on a long depreciating trend.

After a low point in the spring of 2008, the relative value of the dollar rose sharply during 2008 as the financial crisis went global and the U.S. dollar was seen as a safer haven for investors looking out on a bleak global financial landscape. The dollar index peaked in spring 2009 and then fell through to a new low at the end of the year. It has been going sideways, with considerable volatility so far in 2010.

Most economists expect the dollar to fall over the next several years as the economies of our trading partners grow faster than the U.S. economy. In a much anticipated move, China has

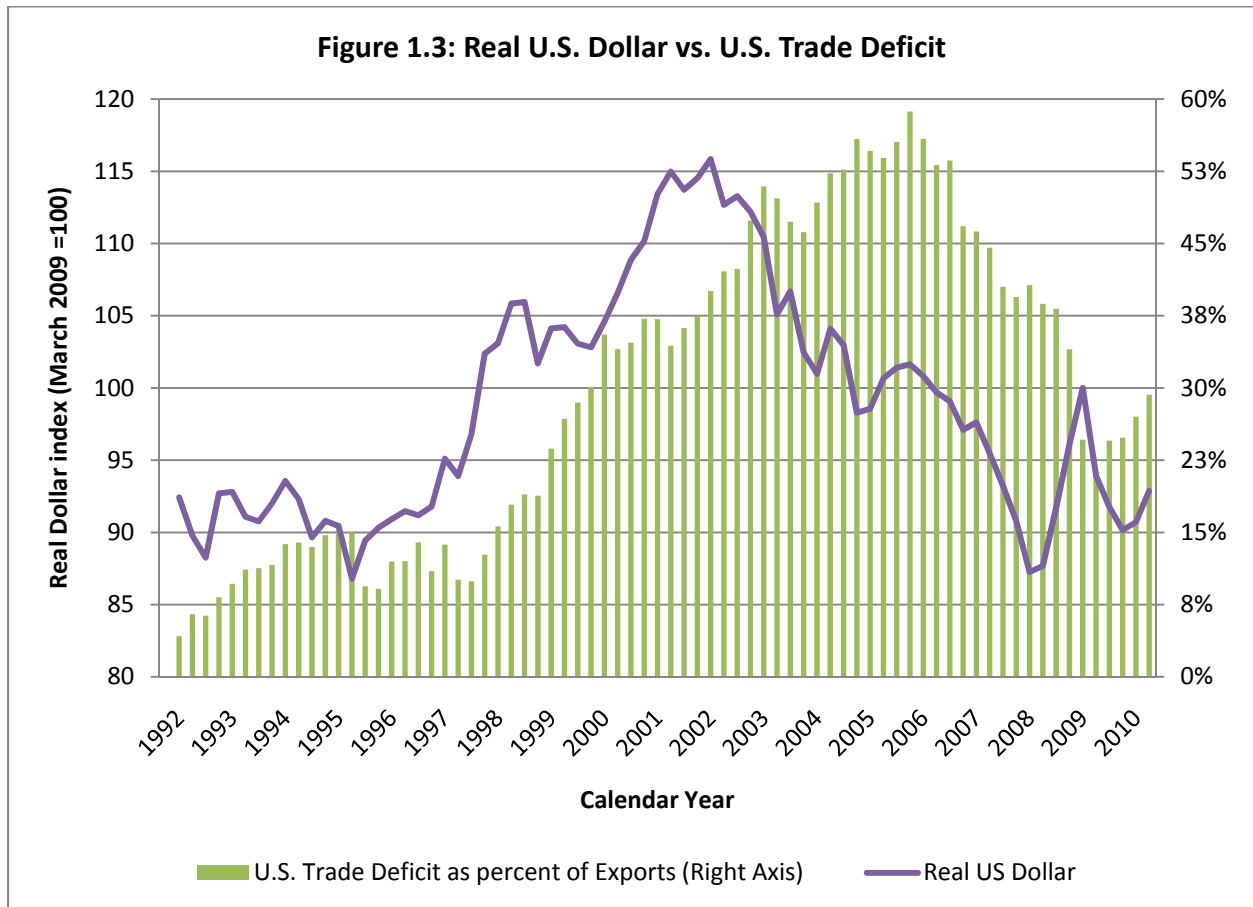


recently announced it would allow its currency to begin to float more freely against the U.S. dollar and this revaluation of the yuan (aka renminbi) will likely cause the dollar to fall even farther. In reality, the Chinese have only allowed a 1 percent change in relative valuation, leading some to suggest this was more of a political move to placate members of the U.S. Congress and American economists who are calling for a more dramatic revaluation. They say that the undervaluation of the yuan is in effect subsidizing China's cheap exports.

It is the judgment of the IMF that, in view of the very limited movement in the Chinese currency, the rapid pace of productivity and income growth in China relative to its trading partners, the size of its current account surplus, and the substantial level of ongoing intervention in exchange markets to limit the appreciation of the Chinese currency, the renminbi is significantly undervalued. We share that assessment. We are concerned, as are many of China's trading partners, that the pace of appreciation has been too slow and the extent of appreciation too limited.

*Timothy Geithner, U.S. Treasury Secretary
 In testimony before the Senate Committee on Banking, Housing, and
 Urban Affairs on the Department of Treasury's semiannual Report to
 Congress on International Economic and Exchange Rate Policies
 September 16, 2010*

Figure 1.3 shows the relationship between the real U.S. dollar and the U.S. trade deficit as a percentage of U.S. exports. The trade deficit generally follows the dollar but with a considerable lag. For example, the dollar peaked in early 2002 but the trade deficit peaked about four years later in 2006 at almost 60 percent. The dollar reached a low in early 2008 and the trade deficit fell to a low 23 percent of exports in early 2009. The dollar has gone up, back down, and recently back up again since its recent low in early 2008. The trade deficit has been on the increase since the low point in early 2009.



In July 2010, the trade deficit was \$42.8 billion, as imports valued at \$196.1 billion exceeded exports valued at \$153.3 billion. Largest U.S. country-to-country trade surpluses in July, in billions of dollars, were with Hong Kong (+1.8), Singapore (+1.2), Brazil (+1.0), Australia (+0.9), United Arab Emirates (+0.9), and Netherlands (+0.9). Largest country-to-country trade deficits in July were with China (-25.9), Mexico (-5.3), Japan (-4.9), Germany (-3.6), Nigeria (-2.4), and Ireland (-2.4). The trade deficit with the combined OPEC countries was \$8.0 billion.

U.S. Gross Domestic Product (GDP). Real gross domestic product (GDP) growth slowed again to a 1.6 percent annual growth rate in the second quarter of 2010, according to the U.S. Bureau of Economic Analysis. The good news is that GDP continued to grow for the third quarter in a row, although not as much as the 3.7 percent (annual rate) in the first quarter of 2010 or the 5.6 percent rate in 4Q 2009. The three consecutive positive quarterly results come after

GDP did not change over the entire calendar year 2008 and actually contracted by 2.6 percent over the year in 2009.

The slower GDP growth in 3Q 2010 primarily reflected a surge in imports compared with the previous quarter and a slowdown in inventory investment.

Back before our June Forecast, Calculated Risk accurately predicted a slowdown in GDP growth in the second half of 2010 due to factors such as less federal stimulus spending, the end of the inventory correction, slower growth in personal consumption expenditures, another downturn in housing, a slowdown in Europe and/or China, and continued cutbacks in state and local government spending. These factors have come to pass and other economists have been busy revising their forecasts of GDP growth downward. In June, economists were generally predicting a GDP growth rate of around 2.5 to 3.5 percent for calendar year 2010. In a September Reuters survey of 70 economists, GDP growth is now forecast to average 2.7 percent in 2010 and 2.4 percent in 2011. Struggling homes sales, weak consumer confidence, lack of substantial job creation, and the lofty unemployment levels are prompting economists to rein in growth expectations.

Prospects for the U.S. economy going forward, at least in the remainder of 2010, remain uncertain and there is a significant downside potential. The economic reports continue to be unsettled and contradictory. We think GDP growth will be more like 2 percent for the year.

World economy

China is increasingly important in the world as its economy continues its phenomenal growth rate. China's GDP grew at 9.5 percent annually over the last two decades and the International Monetary Fund (IMF) expects it to grow by 10.5 percent 2010 and by 9.6 percent in 2011.

The U.S. and China are now the world's two largest economies and there are many important interconnections. Because of its West Coast location, Washington state has especially strong social and trade ties to China. In 2006, China was third behind Canada and Japan in terms of value of Washington's exports. In 2007 China moved ahead of Japan into second and in 2009 moved ahead of Canada into first. China and Canada dominate Washington's exports, accounting for 17.6 and 13.1 percent (by value) respectively in 2009.

DNR has a special interest in China because it is an important market for and importer of logs and geoducks, two of DNR's highest revenue producing resources (although DNR logs cannot be exported in log form).

North American wood products exports to China have surged in the first half of 2010, particularly in the case of logs from the U.S. and lumber from Canada. U.S. log exports to China through June 2010 exceeded the first half totals of the previous 12 years combined. In 12 straight months, log exports to China have exceeded those of the same month a year earlier and the gains have been drastic. China accounted for 21 percent of U.S. log exports in the first half of 2010, up from 7 percent for all of 2009, and up from 1 percent as recently as 2006. In May and June, China accounted for 31 and 30 percent of U.S. log exports, respectively. The U.S. shipped 178.7 mmbf of logs to China year-to-date through June, compared with 53.0 mmbf for the first half of 2009. Increased Chinese log imports from the U.S. are coming partly as a result of tariffs and tighter availability of Russian logs.¹

Logs from DNR land cannot be exported because of the federal log export ban, but China's appetite for logs and lumber has some indirect effect on DNR timber sale prices in the current markets by reducing the effective supply of logs from private lands to domestic mills. During the current recession, the rate of timber harvest on private lands in Washington is about one-half of what it was from 2000 into 2007. At the same time, export of Washington logs to China is rapidly increasing. So even though domestic demand for logs is low, the supply available to mills from private lands is also sharply lower at present.

Turning from the forest to the bed of Puget Sound, the new wealthy class in China is practicing conspicuous consumption and ordering geoduck in expensive restaurants in Shanghai and Hong Kong. This supports the record run of DNR geoduck auctions in the \$10 per pound range over the last couple years. Most all of the Washington state geoduck harvest (DNR and tribal) is exported fresh to China.

¹ From "China Absorbs North American Lumber, Logs", Random Lengths Yardstick, Vol. 20, Issue 8, August 2010.

There is a dramatic shift in regional industrial development occurring in China away from the major eastern coastal manufacturing zones (Shenzhen in the Pearl River Delta area, the Yangtze River area around Shanghai, and Bohai Bay north of Beijing) which have helped the country become the world's largest exporter. Although some firms continue to move some of their operations offshore (for example to Bangladesh and Vietnam), they are increasingly building huge factories in China's interior to escape the labor shortages and rising costs in the coastal areas. In Zhengzhou, 1000 miles inland, the Taiwan-based electronics firm Foxconn (the largest company and exporter in China) is building a mammoth new industrial complex which will employ up to 200,000 new workers. Intel, the world's biggest chip maker, opened a \$600 million plant this year in Chengdu in the western province of Sichuan. The industrial move inland is also part of a strategic shift to rebalance China's economy to rely less on exports for future growth and more on domestic consumption. The worker has become the consumer in China, with the government determined to raise household incomes and reduce wealth disparities.²

The shaky U.S. economy and stock market continues to keep a wary eye on the Eurozone. It appears that strong action by the European Union and the International Monetary Fund has forestalled an economic crisis in Greece by providing funding to prop up the Greek government budget in return for a requirement that Greece enter a period of austerity. There are still concerns about national debt problems in other larger Eurozone countries, namely Portugal, Spain, and Ireland. As of September 22, the Ireland-to-German bond spread has increased to 418 bps (basis point on 10-year bonds) and the Portugal-to-German spread has increased to 402 bps--both new records. It remains to be seen how attempts to enforce austerity will play out economically, socially, and politically as European governments attempt to cut government pay rates, cut government services, raise retirement ages, and reduce pensions.

IMF predicts growth in the developed countries to average 2.6 and 2.4 percent in 2010 and 2011 respectively. Before the great recession, oil and other commodity prices were increasing, reflecting growing world demand. Once again, China's and to a lesser extent India's growth is leading to renewed demand for resources and higher resource prices. Inflation in the emerging world is now running at 6 percent on a twelve month basis. Increased commodity demand is resulting in higher growth in many parts of the developing world. Projected growth in the emerging economies is 6.8 and 6.4 percent for the same periods.

Despite growing commodity prices, inflation pressures are expected to remain subdued in advanced economies and are currently running at under 2 percent on a twelve month basis, while core inflation is less than 1 percent. The still-low levels of capacity utilization and well-anchored inflation expectations should contain inflation pressures in advanced economies, where inflation is expected to remain around 1¼-1½ percent in 2010 and 2011.

The downside risks to global growth outweigh the upside risk stemming in part to lingering financial risk in a number of areas of the world including Europe, Japan, and Dubai. Tensions are rising about China's purported manipulation of its currency's exchange rate and Brazil's finance minister recently said that the world is in the midst of an international currency war.

² From article by James Pomfret, "Special Report: World's Workshop Heads to Inland China", Reuters, August 25, 2010, <http://www.reuters.com/article/idUSTRE67O19420100825>.



Part 2. Log and Lumber Industry Factors

This chapter focuses on specific factors that affect timber stumpage prices and overall timber sales revenues received by the Washington State Department of Natural Resources (DNR). Timber stumpage prices reflect demand for lumber and other wood products, timber supply, and regional and local lumber mill capacity. The demand for lumber and wood products is directly related to the demand for housing and other end-use markets.

The short run outlook for the forest products industry continues to be rather pessimistic as the largest and longest recessionary period since the Great Depression persists with high unemployment and a depressed housing market. In the U.S. West Coast region, lumber mill closures and curtailments continue due to depressed lumber market conditions.

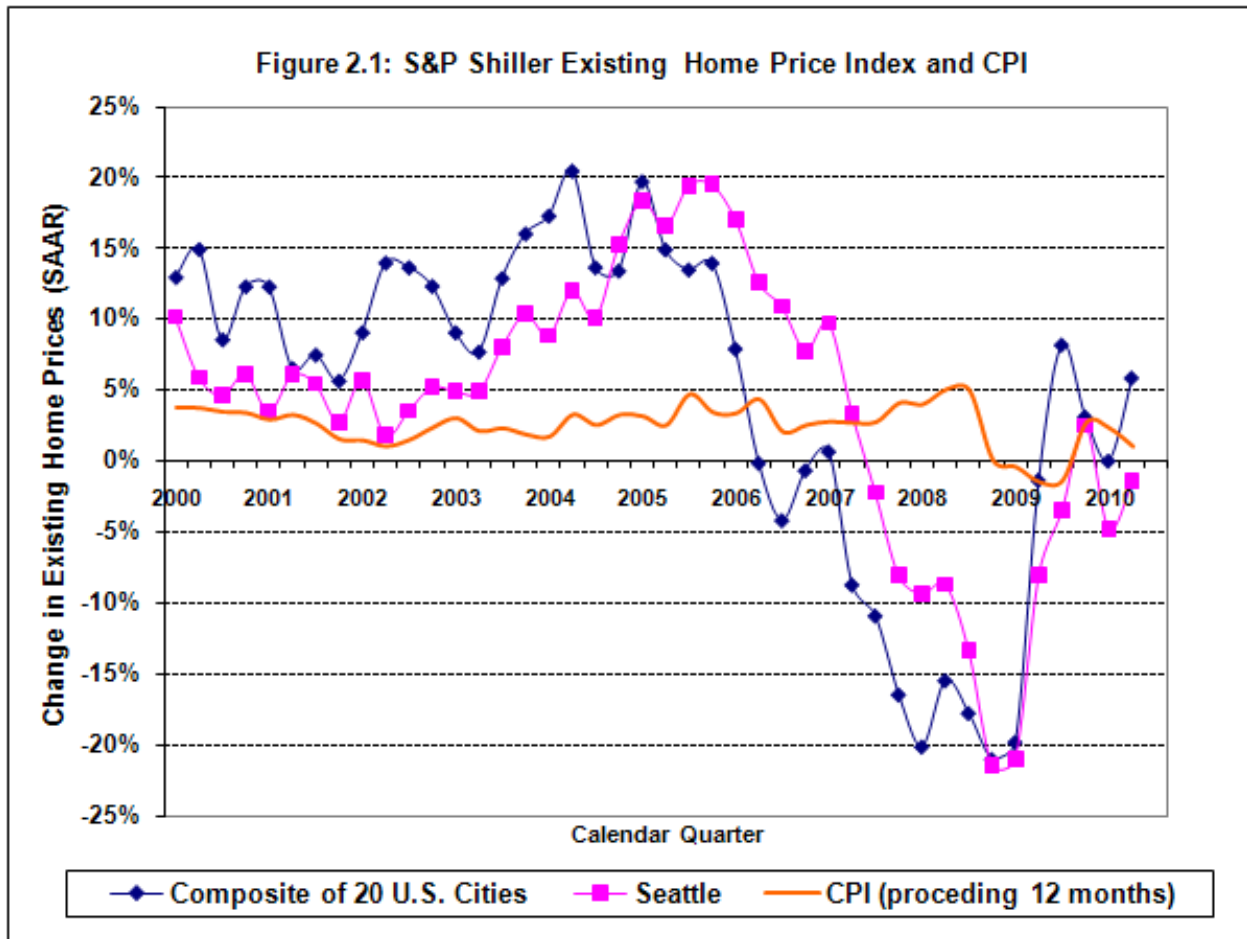
U.S. housing market

The economic models have really been turned upside down. The Fed cuts interest rates, mortgages hit their lowest levels in record history, and new home sales are at all time lows? We can basically rip up the first few chapters of Economics 101 textbooks.

*David Rosenberg, Chief Economist, Gluskin Sheff & Associates Inc.
July 22, 2010*

Housing Prices. In 2000, U.S. housing prices began increasing at a higher rate over a more prolonged time period than ever seen as long as records have been taken. As shown on **Figure 2.1**, during the real estate bubble period from late 2003 through 2005 the Case-Shiller Index, a composite housing price of the largest 20 U.S. cities, was increasing at an annual rate (SAAR) of 13 to 20 percent. During this time period consumer prices were increasing at just 2.5 percent, resulting in a real price increase of housing of over 10 percent per year. Housing prices started declining by the second quarter of 2006 after the real estate bubble burst with the collapse of the subprime mortgage industry. U.S. homes then sharply lost value over the next three years, losing 30 percent of their prior worth. This dramatic fall was also unprecedented in its magnitude.

House prices actually increased again in mid-2009, but this was caused by a now-expired federal tax credit for homebuyers. U.S. housing prices were flat with no change for the first quarter of 2010. In 2Q 2010, home prices rose by 6 percent SAAR, but again this was due to an extension of the homebuyer tax credit program.



As shown in **Figure 2.1**, Seattle home price changes have generally followed the same pattern as U.S. home prices, with a lag. Seattle prices have fallen for the last two quarters.

Most housing experts think that housing prices have not yet reached the bottom. Evidence is that prices in most cities were dropping again in July as home sales collapsed with the end of the tax break stimulus program. The Case-Shiller Index is seriously lagged in time and is based on a three month rolling average, so the apparent real price drop starting in July won't show up much until the October release (which will include data for June, July, and August).

The outlook for existing home prices remains dreary because of the unprecedented number of mortgage loan foreclosures. This places a huge inventory of housing units into the ownership of banks and other financial institutions, which are motivated to move the properties at a discount to cut their carrying costs. This "shadow inventory" will act as a drag on housing prices for the next several years.

The abrupt fall in housing prices also puts even more pressure on Americans who find their houses worth less than the amount of their mortgages ("negative equity" or "under water"). This will likely lead to more foreclosures as people lose their jobs or are otherwise financially stressed. At best, many find themselves captive in their existing homes (which some have dubbed as "house arrest"), reducing their mobility and making the economy less dynamic.

Existing Home Sales. The rate of existing home sales has become unsettled and very volatile over the last year. As shown on **Figure 2.2**, sales of existing homes moved up solidly throughout 2009 to 1.49 million (SA quarterly rate) in the 4th quarter, although an estimated 30 percent of existing home sales are distressed sales. But the recovery has not been sustained as the spike in sales of existing homes in the last quarter of last year was attributable to the December 31 expiration of the federal tax credit for homebuyers. The quarterly rate fell sharply to 1.28 million for 1Q 2010. The program was extended through April of this year and once again there was a surge in existing home sales in 3Q 2010 to 1.39 million. The bad news is that in July, with the support of the credit gone, the rate fell to a distressing low 0.96 million (seasonally adjusted quarterly rate) (uncharted), the lowest since 1995. It is now obvious that normal home buying activity was moved forward to take advantage of the end-of-April tax credit deadline.

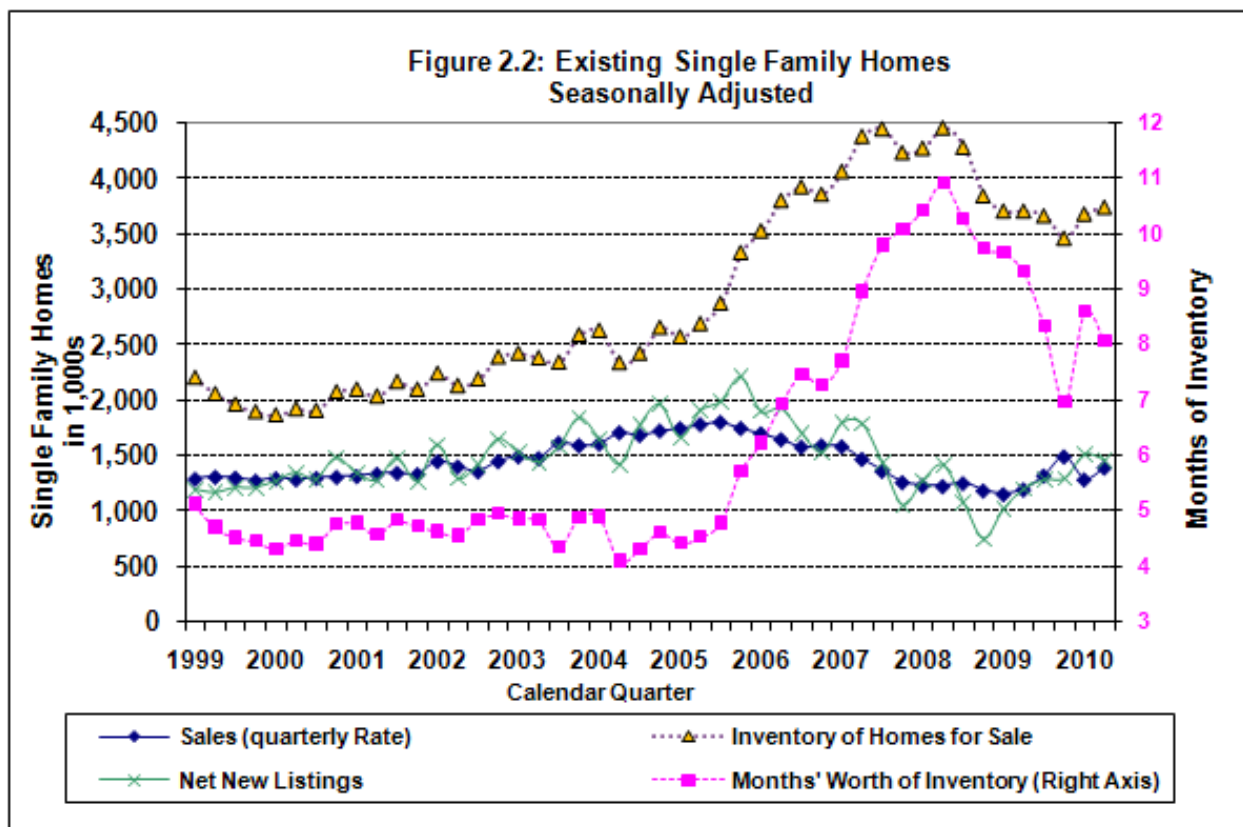
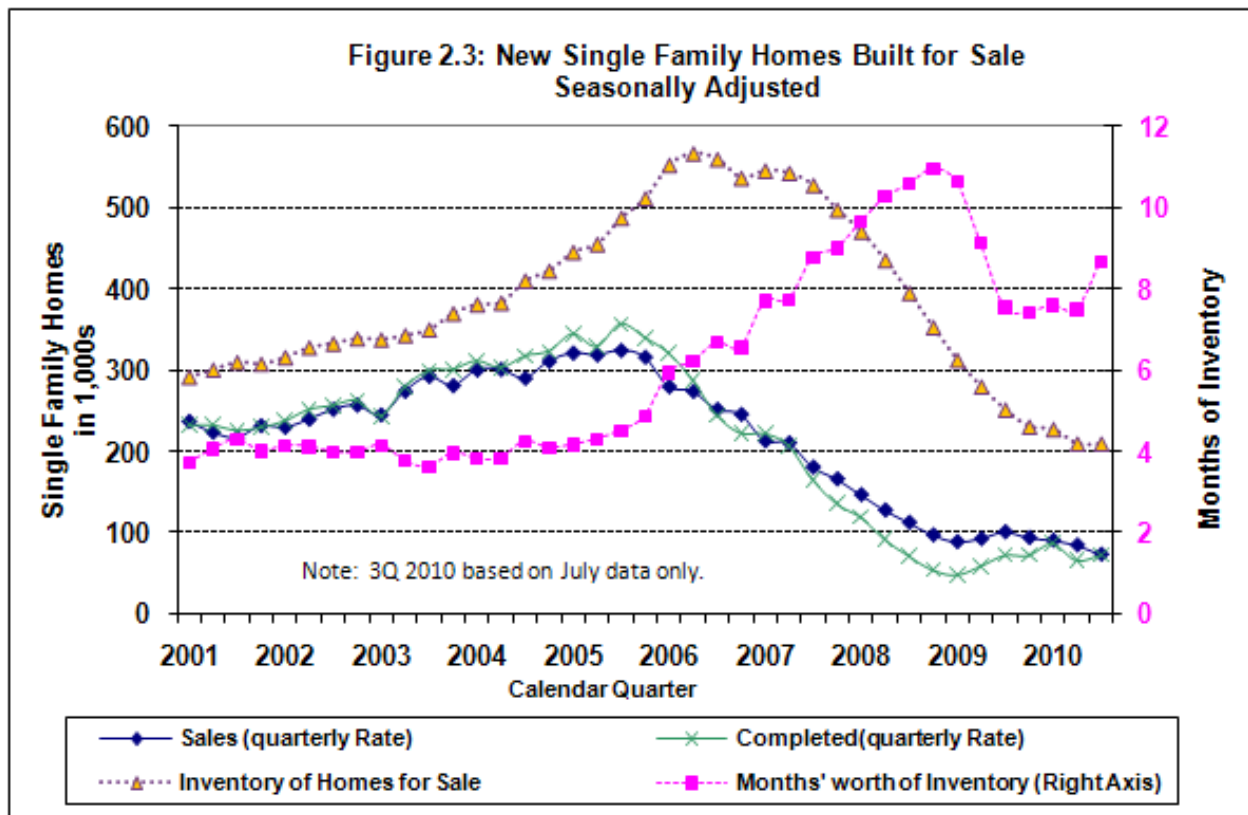


Figure 2.2 also shows that 2Q 2010 continued 1Q’s reversal of the recently declining inventory in existing single family homes. The number of existing homes on the market was generally in the range of 2 million to 2.5 million from 1999 into 2005. When the U.S. real estate bubble burst, the number of existing homes on the market climbed rapidly to 3.5 million by 2006 and then to 4.5 million in 2007. By mid-2008, the inventory had dropped below 4.0 million and it was down to just below 3.5 million homes in 4Q 2009. But inventory jumped back up in 1Q and 2Q 2010 to 3.7 million. Contributing to the increased inventory was the fact that more existing houses were newly listed on the market in 1Q and 2Q than in the previous six quarters, perhaps in response to the encouraging increases in existing home sales due to the tax credit programs.

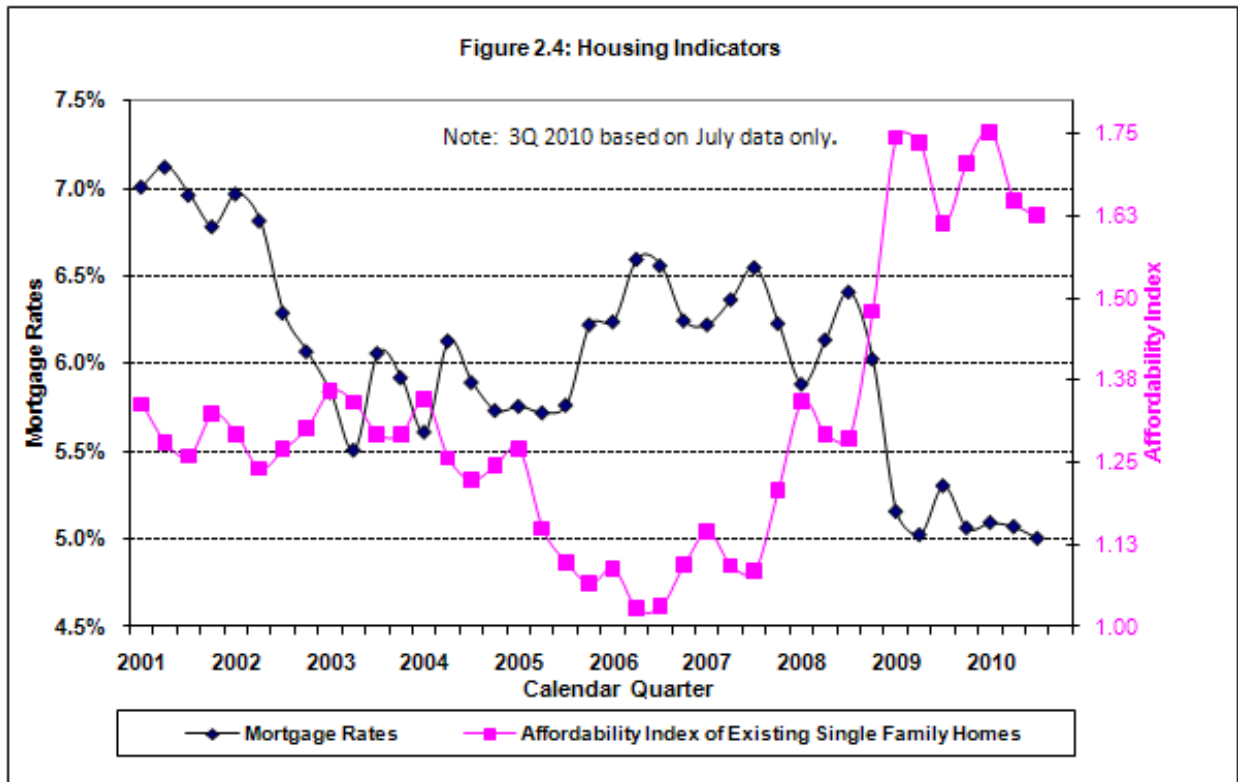
The months' worth of inventory of existing homes follows the pattern of number of existing homes on the market. From 1999 through 2005, there was consistently only four to five months of inventory. After the market collapse, existing home inventory climbed to a peak of almost 11 months' worth in 2Q 2008. As sales of existing homes recovered, the inventory fell to seven months' worth in 4Q 2009, only to leap back up above eight months' worth for 1Q and 2Q 2010. With the exceptionally low rate of sales of existing homes in July, the months' worth of inventory has now jumped to 12.1 months (not on **Figure 2.2**), the highest on record.

New Home Sales. Sales of new U.S. homes fell off much more dramatically than sales of existing homes during the recession. From the peak in 3Q 2005 to the low point in 1Q 2009, sales of existing homes fell by 36 percent. In the same period, sales of new homes fell by a whopping 72 percent (compare rate of sales for existing homes and new homes on **Figures 2.2 and 2.3**). And unlike sales of existing homes, which turned up throughout 2009, sales of new homes stayed relatively flat through 2009 and now are falling again in 2010. New home sales reached a new low in July 2010.



The dramatic drop in new house construction has also served to bring down the inventory of newly built homes to the lowest level in 10 years. At a high in July 2006, there were 572,000 new single family homes available to purchase in the U.S. In July 2010, there were only 210,000 (see **Figure 2.3**). However, because sales are so low, the months' worth of inventory of new homes increased in July to 8.7 months (compared to pre-bubble level of just 4.2 months).

Affordability. U.S. mortgage loan rates have fallen to their lowest on record (see **Figure 2.4**). In July the 30-year fixed mortgage rate was down to 4.90 percent. The family income required



The **Affordability Index** is the ratio of median family income and the income required to qualify for the median-priced existing single-family home. In July 2010 the affordability index was \$60,498/\$37,392 or 1.618.

to qualify for a mortgage on the \$183,400 median priced existing single family U.S. home at July’s rate of 4.90 percent is only \$37,392 per year. This compares with an average qualifying income of \$45,984 in 2008 and \$52,992 in 2007. Median family income was \$60,498 in July, compared with an average of \$63,366 in 2008 and \$61,173 in 2007. At least for those families

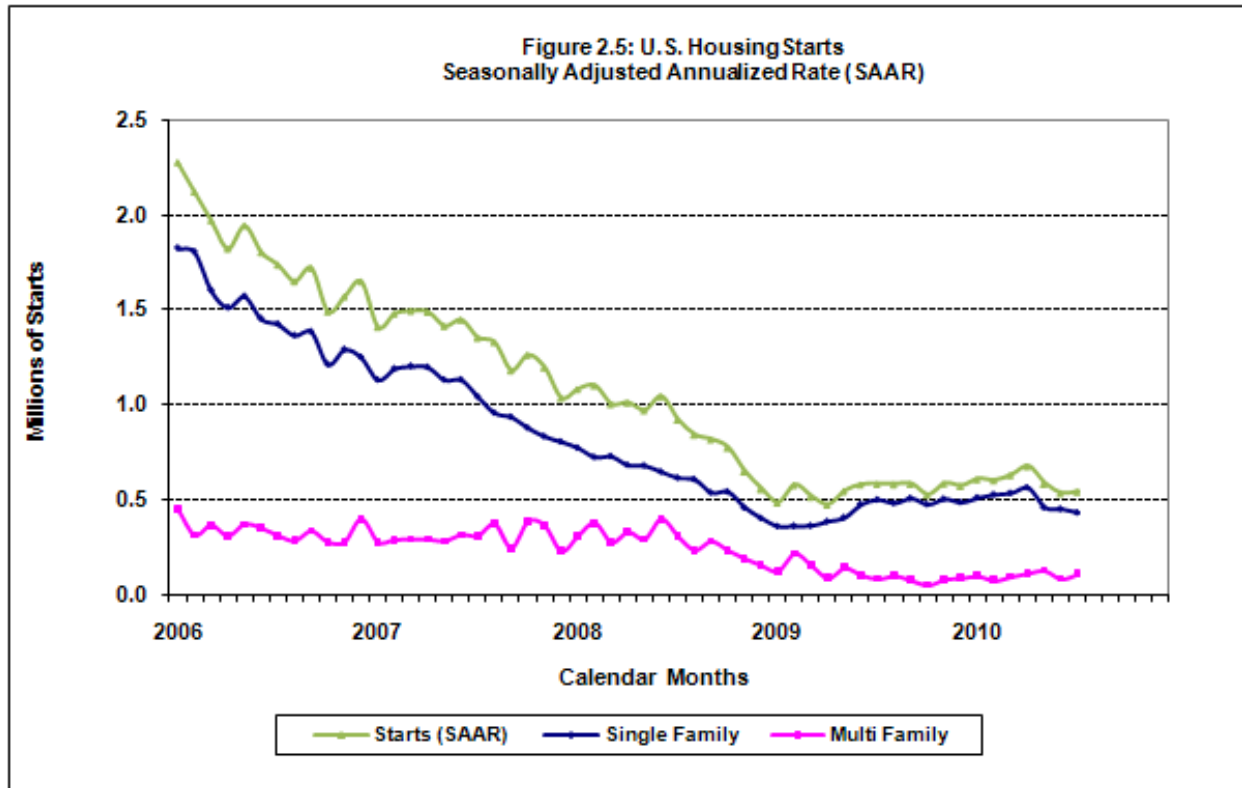
housing prices and mortgage rates have fallen more rapidly than family income.

Four years ago, the monthly payment on a \$300,000 house with 20 percent down and a mortgage rate of about 6.6 percent was \$1,533. Today that \$300,000 house would sell for \$213,000 and a 30-year fixed-rate mortgage with 20 percent down would carry a rate of about 4.2 percent and a monthly payment of \$833. In addition, the down payment would be \$42,600 instead of \$60,000.

*Karl E. Case, Professor Emeritus of Economics at Wellesley College
and co-creator of Standard & Poor’s Case-Shiller housing index
September 1, 2010*

Housing Starts. The rate of new home construction has dropped to a level not seen in most Americans’ lifetimes. Since the U.S. Census Bureau started keeping track in 1959, the average number of new housing units built in the U.S. was 1.534 million per year. This includes the

unprecedented high rates around 2 million per year during the U.S. real estate overvaluation bubble from late 2003 into early 2006 (peaking at an annual rate of 2.273 million in January 2006). In 2009, only 554,000 new housing units were built, with a record low point of 447,000 (SAAR) in April 2009. The rate has increased to a 679,000 annual rate in April 2010, but it is now down to a 546,000 annual rate in July. See **Figure 2.5** for detail.



Historically, about two-thirds of all housing starts are single family homes, averaging 1,092,000 per year for the previous 50 years. In 2009, there were only 442,000 new single-family homes built. From the bottom of 360,000 in January 2009, single family home starts generally increased throughout 2009 and into the early months of 2010, peaking at 563,000 in April. Since then, however, the rate of single family home construction has begun falling again and it is down to 432,000 (seasonally adjusted annual rate) in July. See **Figure 2.5**.

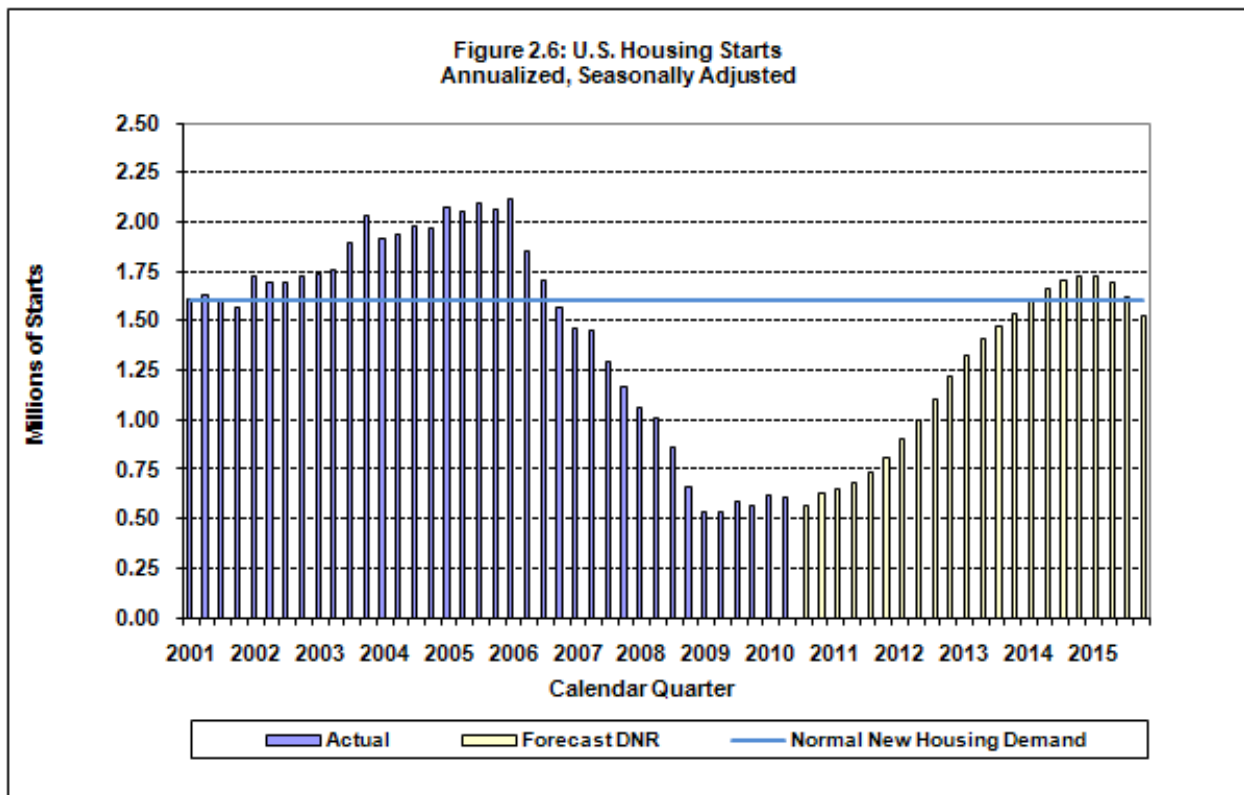
Multifamily housing starts continue to bounce along the bottom, although the numbers for April through July 2010 are a little higher than over the last year (see **Figure 2.5**). An average of 442,000 multifamily housing units were built in the United States every year over the last 50 years. Over the last year ending in July, the number of multifamily housing starts was only 95,000, but things are up from an all time low of 54,000 (annual rate) in October 2009.

Total housing starts, both single family and multifamily, is at the depressed rate of 589,000 over the last year ending in July. This is way below the average of over 1.5 million new housing units built in the U.S. over the last 60 years and way below the estimated total annual demand for new

housing of 1.6 million³. The market will need to work down the huge excess inventory of existing homes before housing starts can get back to near normal levels. Long term, absorbing the excess housing inventory is a necessary step for the home building sector (and the forest products industry) to recover. But the low level of housing starts will also continue to be bad news for the economy and jobs in the short term.

An indication that single family housing starts may not recover any time soon is the lack of confidence among home builders about the market for newly built, single-family homes. The latest National Association of Home Builders/Wells Fargo Housing Market Index (HMI) shows that homebuilder confidence for new single-family homes is stuck at an 18-month low, with the HMI remaining steady at 13 in September after falling for three consecutive months. Any HMI number under 50 indicates that more builders view home sales conditions as poor rather than good. A score of 13 means that the vast majority of home builders (87 percent) view current home sales conditions as poor.

Compounding the housing sector situation is the slowdown in household formation, which not only is a result of the recession but then feeds back to prolong the recession. Household formation typically stalls during a recession as people move in with family or friends, or share rentals. In addition, young adults are less likely to leave their parents' home to form new



³ Normal “demographic demand” for new housing is about 1.2 million annually, the net rate of household formation. Total demand for new housing is about 1.6 million annually (the blue line on **Figure 2.6**). The difference is about 0.3 million new units needed to replace net removals of existing homes (due to demolitions and natural disasters) and 0.1 million in second home demand and demand for vacant housing units necessary in a normally operating housing market.

households if they are unemployed. Recent surveys suggest that young U.S. adults are also delaying marriage and childbearing for economic reasons. The U.S. lost 1.2 million households from 2005 to 2008. Normal rates of household formation, around 1.2 million new households per year, won't return until the job market recovers. And the housing market won't return to more normal levels until household formation does.

Figure 2.6 shows the actual annual rate of new housing starts in the U.S. since 2001 by quarter. It clearly shows that the U.S. overproduced new housing units during the housing bubble (i.e., housing starts exceeded the normal 1.6 million annual rate of new housing demand). The rate then fell off dramatically from 2006 to 2009 and remains in a rather flat trough. We now expect the recovery in new housing starts to be more delayed and less steep than in prior Forecasts. With any luck, the excess inventory of housing units will be mostly eliminated by the end of 2013 and housing starts will return to more normal levels by 2014.

The excess supply [of existing housing units] is keeping pressure on residential investment, and therefore on employment and economic growth. As new households are formed, the excess supply will be absorbed--but this is happening very slowly. It takes jobs to create households, and usually housing is the key driver for employment growth in the early stages of a recovery. So this is a trap: the excess supply means weak employment growth, leading to few new households, so the excess supply is absorbed slowly--putting off more robust employment growth. The excess supply is also pushing down house prices (prices are just starting to fall again). Lower prices will . . . push more homeowners into negative equity. And negative equity is the other key problem for housing. It is difficult for homeowners with negative equity to sell, it is difficult to move for employment or other reasons, it is hard to refinance, and it is demoralizing for many homeowners (especially those with substantial negative equity). Negative equity frequently leads to distressed sales (short sales or foreclosures) . . . [F]alling prices makes the negative equity problem worse.

*Calculated Risk
September 16, 2010*

Lumber, log, and stumpage prices

It's very scary. This business environment is something most people haven't seen in their careers. This is not once in a generation. It's far beyond that. This is, perhaps, once in a century type stuff. [This is] equivalent to what was happening in the Depression years.

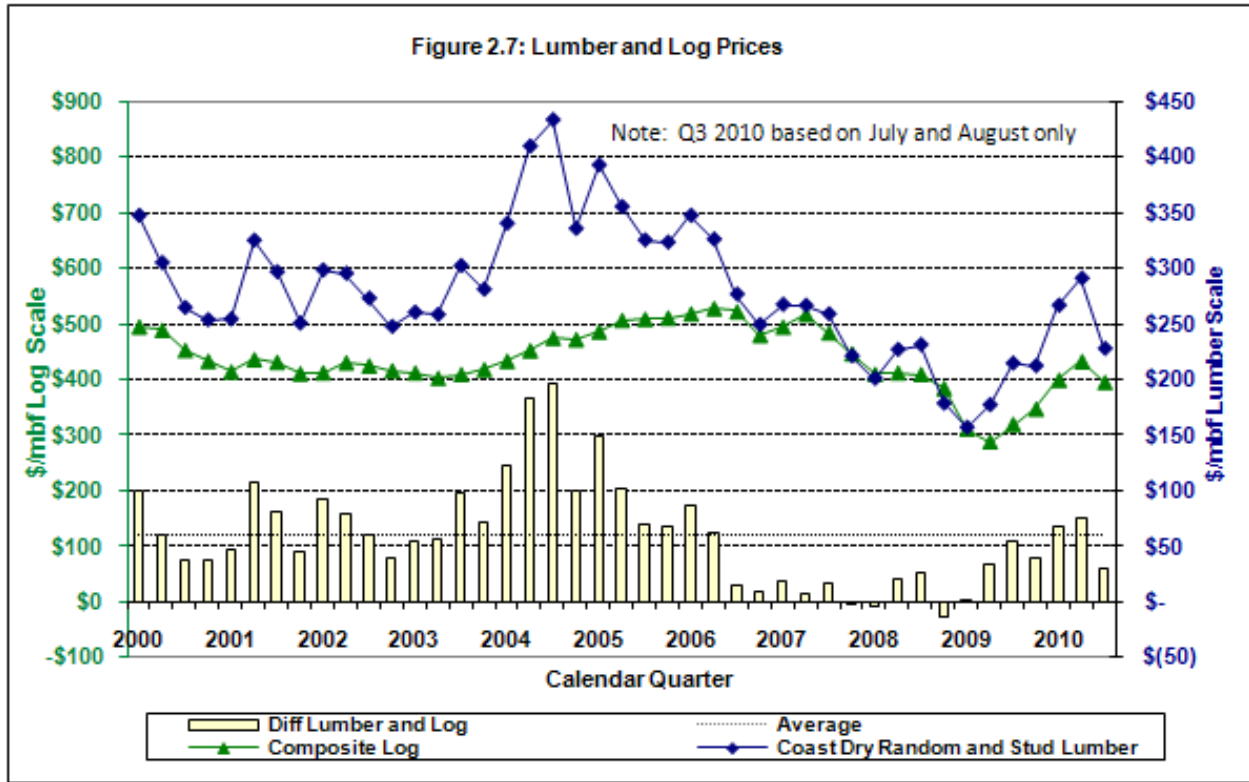
*Butch Bernhardt, Western Wood Products Association, on the state of the timber industry
August 23, 2010*

Lumber Production. Total North American softwood lumber production has averaged 64 billion board feet per year for the last fifteen years (1995-2009). The record year for lumber production was 2005 with 75 billion board feet. In 2009, total North American sawmill output was only 44 billion board feet, 31 percent off the 15-year average level of lumber production and 41 percent off the record year (2005). The percentage falloff was the same in both U.S. and Canadian sawmills.

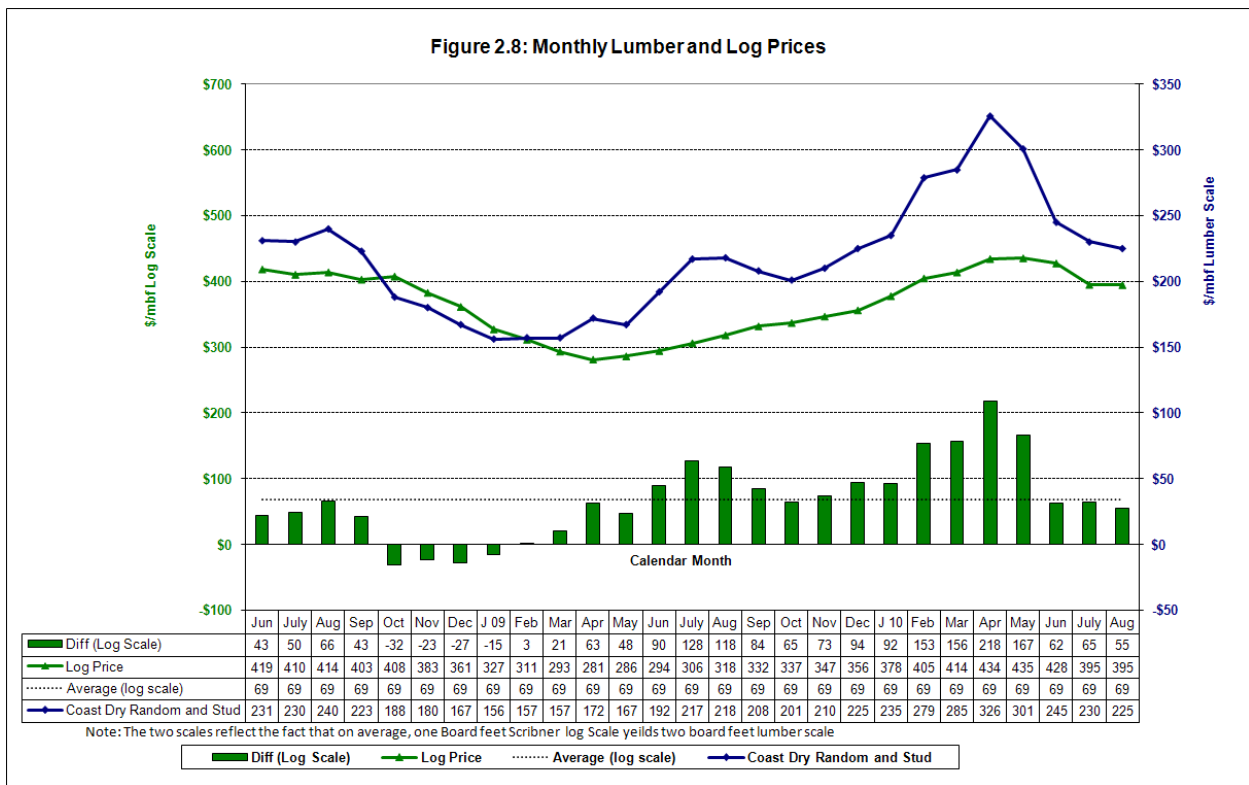
In the peak lumber production year of 2005, U.S. and Canadian sawmills together were operating at 91 percent of capacity. After the housing market crash, they were operating at only 57 percent of capacity in 2009. Closer to home, sawmills in western Washington and western Oregon ("Coast" region) were operating at 93 percent of capacity in 2005 but at only 56 percent in 2009 (and at only 45 percent in December of 2009).

Recovery in the lumber market will continue to fall short of recoveries in previous recessions. In the absence of a meaningful recovery in U.S. housing, total demand for North American lumber will be slow to move off the extremely low 2009 level. RISI has recently changed its prediction of when U.S. and Canada lumber production will return to the 64 billion board feet annual level from 2013 to 2014. But this may well be optimistic given the likelihood that it will be many years before the U.S. housing market is able to break out of its currently depressed state.

Lumber and Log Prices. The upward trend of increasing lumber and log prices throughout 2009 finally ended in April 2010 (see **Figures 2.7 and 2.8**). It was obvious that lumber and log prices were not being driven up by strong aggregate demand for building materials as housing starts have bounced along the bottom. The upward trend during 2009 was probably the result of prices having been too low and the need to entice mills to remain open or reopen to meet the low demand. Prices increased even more sharply in the first four months of 2010 as the very weak demand for lumber caused by the recession led to depletion of lumber inventories at the mill yards and throughout the entire distribution network, resulting in a temporary very short supply of lumber. The extremely low lumber inventories throughout the supply chain, combined with a reduction in supply of logs (as private landowners sharply reduced harvest in response to low log prices), caused the strong increasing lumber and log prices over this period (the very low demand for lumber exceeded the very lower supply). Random Lengths' Coast Dry Random and Stud lumber composite went from \$156/mbf in January 2009 to \$326/mbf in April 2010.



The composite log price went from \$281/mbf in April 2009 to \$435/mbf in May 2010. See Figure 2.8.



This inventory correction was quickly reversed over the next few months resulting in lower lumber and log prices. Random Lengths' Coast Dry Random and Stud lumber composite price was back down to \$230/mbf in July and \$225/mbf in August. The composite log price was down to \$395/mbf in both July and August. **See Figure 2.8.**

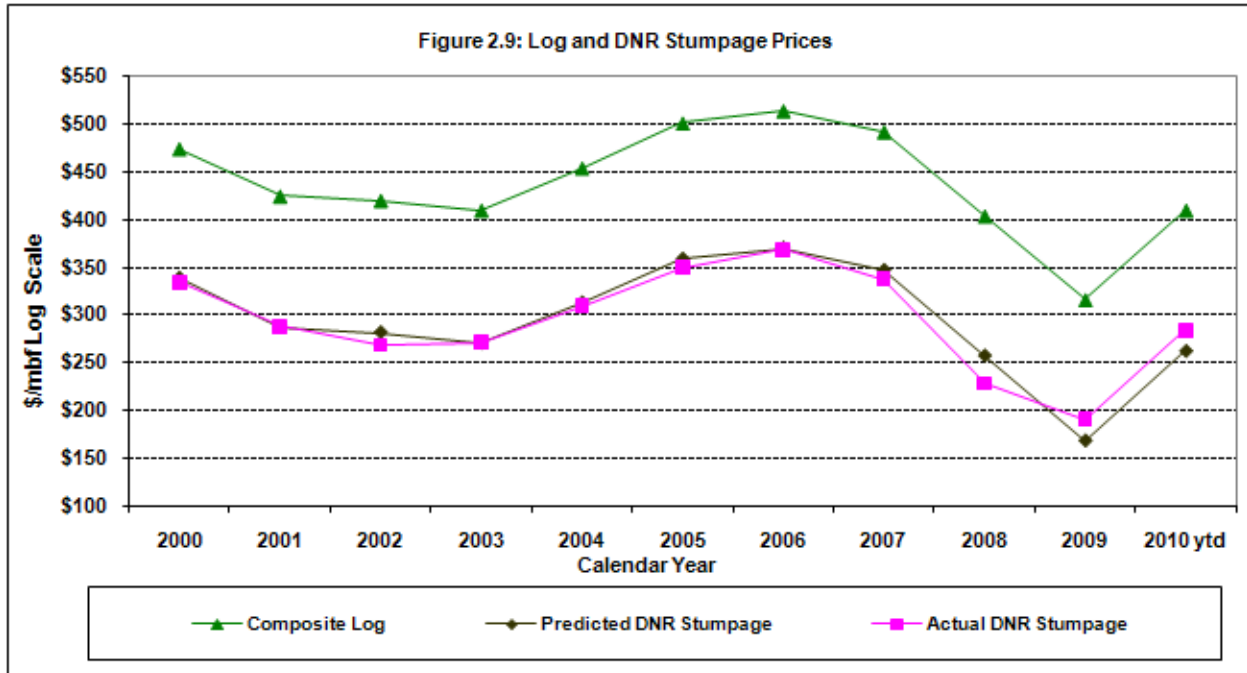
Lumber futures traded on the Chicago Merchantile Exchange that closed at \$327/mbf on April 21 dropped rapidly to \$178/mbf on June 23, a 46 percent drop in two months. Since then, lumber futures prices have been mostly in the \$195-215/mbf range and they are up to \$223/mbf as of September 13.

At this point, the inventory of lumber is now adequate throughout the supply chain and therefore we believe that the inventory-related adjustment to lumber prices is behind us. Despite continued low demand for lumber and low operating rates for mills, mills have shown strong resistance to lower lumber prices and we expect this to continue. Recent data indicates that log harvest from private lands increased significantly during the first half of 2010 (about 36 percent over the same period in 2009); even though it remains at a low level on historic terms it is likely to be adequate to meet mills' needs for now. The return of converting logs to lumber at current prices is low compared to normal levels. Based on this, we believe that downward pressure on log prices will be strong even if lumber prices remain at their current level.

Timber Supply. The outlook for timber supply in the U.S. is generally positive. Timber removals in all U.S. regions remain at levels well below the peak levels of the last decade and below sustainable cut levels. In fact, the volume of timber harvested in Washington in 2009 was the lowest since 1903 and in Oregon the lowest since 1934. Private forest landowners especially elected to not harvest or sell timber at low stumpage prices. As a result, volume of operable and legally harvestable timber is accumulating in the woods and will continue to do so at least during the years 2010-2014, as timber harvest levels remain fairly low relative to timber inventory and growth. Combined with the lethargic demand for saw timber, this growing supply will dampen timber prices through FY 2015, the forecast time period.

A factor acting to reduce longer range (after 2014) North American timber supply is the devastation to British Columbia's timber base resulting from the mountain pine beetle epidemic. Beetle kill of B.C. timber peaked in 2004 at 130 million cubic meters and fell to 71 million cubic meters in 2007. It is projected that the annual kill will remain in this range until 2011, after which it will tail off rapidly. This means there is a glut of BC timber available now as the province tries to salvage as much of the beetle-killed trees as possible while it is still suitable for lumber production. But estimates are that only about one-quarter of the infested wood will be converted to lumber and five percent will go to pulp, OSB, or biofuels. The rest will be left to decompose in the forest and not be available for future harvest as it would have been without the beetle kill.

Log and DNR Stumpage Prices. **Figure 2.9** shows prices for logs, predicted DNR stumpage, and actual DNR stumpage on an annual basis since 2000. The "composite log price" represents actual prices for logs delivered to the mill weighted by the average geographic location, species, and grade composition of timber sold in DNR timber sales. The "predicted" DNR stumpage



price is calculated by deducting \$150/mbf for the log price to account for logging, transportation, and other costs of getting the standing timber to the mill.

Both log prices and predicted DNR timber sale prices were highest in 2006, when the composite log price was at \$514/mbf and the predicted DNR timber sale price averaged \$368/mbf. The graph shows the steep fall off in prices to 2009, when logs were at \$316/mbf and stumpage was at \$191/mbf (only 52% of the price just three years earlier).

The graph also shows the sharp upturn in log and predicted DNR stumpage prices in the first eight months of 2010. Please note that these are year-to-date average prices only through August. Log prices have come down in July and August but actual DNR timber sale prices, which have much more volatility from month to month, were still going up in August. It remains to be seen where the average log and DNR timber sale prices will be for the entire 2010 calendar year, but we expect them both to be below their eight months year-to-date figure. Even though the actual DNR timber sales price stayed up in July and August (at \$293 and \$320, respectively) there may be some weakness developing in that only 19 of 33 offered sales actually sold and only 55 percent of the volume offered was sold. In July, 5 of the 7 (out of 14) sales sold had only one bidder.



Part 3. DNR's Revenue Forecast

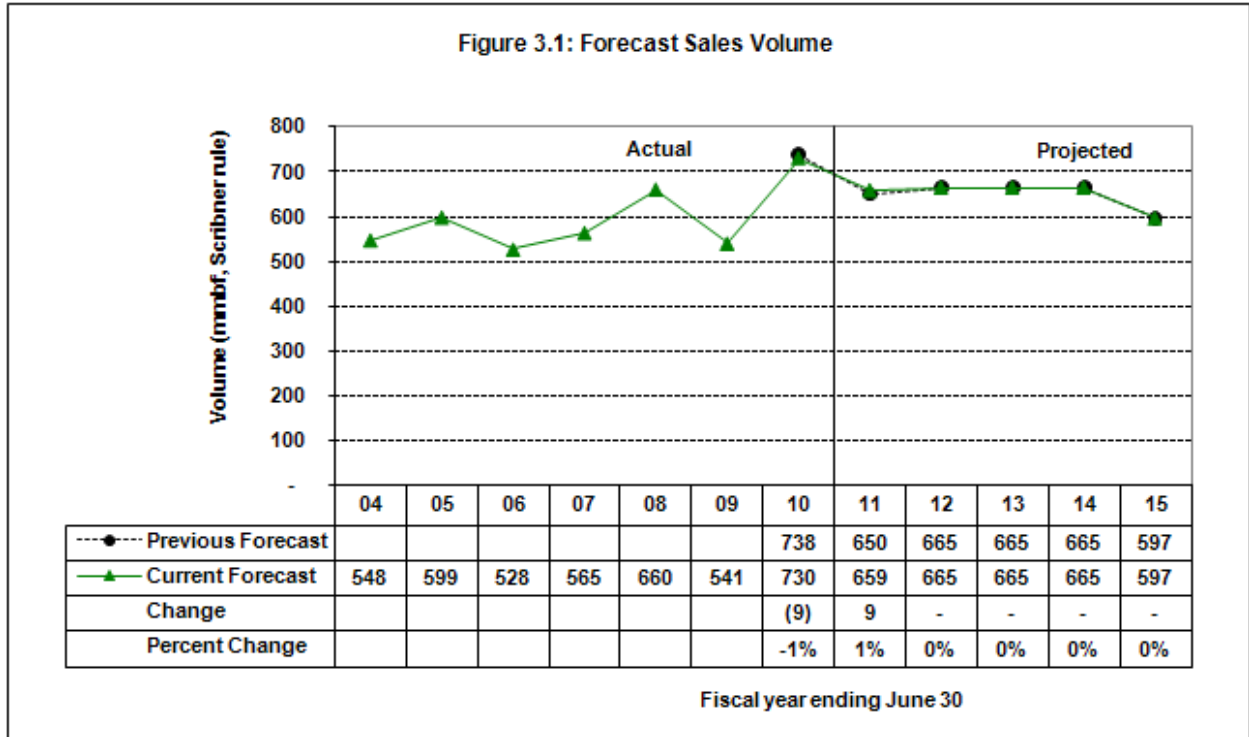
This Revenue Forecast includes Department revenues from timber sales on trust lands, leases on trust uplands, and leases on aquatic lands. It also forecasts revenues to individual funds. Some caveats about the uncertainty of forecasting Department revenues are summarized at the end of this section.

Timber revenues

The Washington State Department of Natural Resources (DNR) sells timber through contracts. The Department determines the total volume to be offered for sale each month and the minimum bid for each timber sale. The sale is awarded to the highest bidder and the average sales price (\$/mbf) is set at the time of auction. DNR collects a 10 percent initial deposit at the time of sale and holds it until the sale is completed. Revenues are collected at the time of harvest (removal). The initial deposit is credited as the last 10 percent is harvested. DNR timber sale contracts sold over the last several years have varied in duration from less than three months to three-and-a-half years, with an average (weighted by volume) of about 22 months. The Department is considering reoffering some sales that have not sold in recent auctions at lengthened contract periods in order to increase interest. The purchaser determines the actual timing of harvest within the terms of the contract. As a result, timber revenues to beneficiaries and DNR management funds lag current market conditions.

Timber that is sold but not yet harvested is referred to as “volume under contract” or “inventory”. Timber volume is added to the inventory when it is sold and placed under contract and it is removed from the inventory as the timber is harvested.

Timber Sales Volume. In FY 2010, DNR sold 742 mmbf of timber. However, 12 mmbf was in “resales” of defaulted timber sales previously sold, so the effective total was 730 mmbf. This is less than the 738 mmbf which was predicted in the near-to-fiscal-year-end June Forecast (see **Figure 3.1**) because June 2010 timber sales volume sold was 34 mmbf rather than the 43 mmbf predicted as there were no bidders on three of the 12 sales offered. We have added the 9 mmbf shortfall from FY 2010's forecast amount to FY 2011, revising the predicted timber sales volume for next fiscal year up to 659 mmbf. The forecasts for FYs 2012-2015, which are tied into DNR's sustainable harvest, remain unchanged.



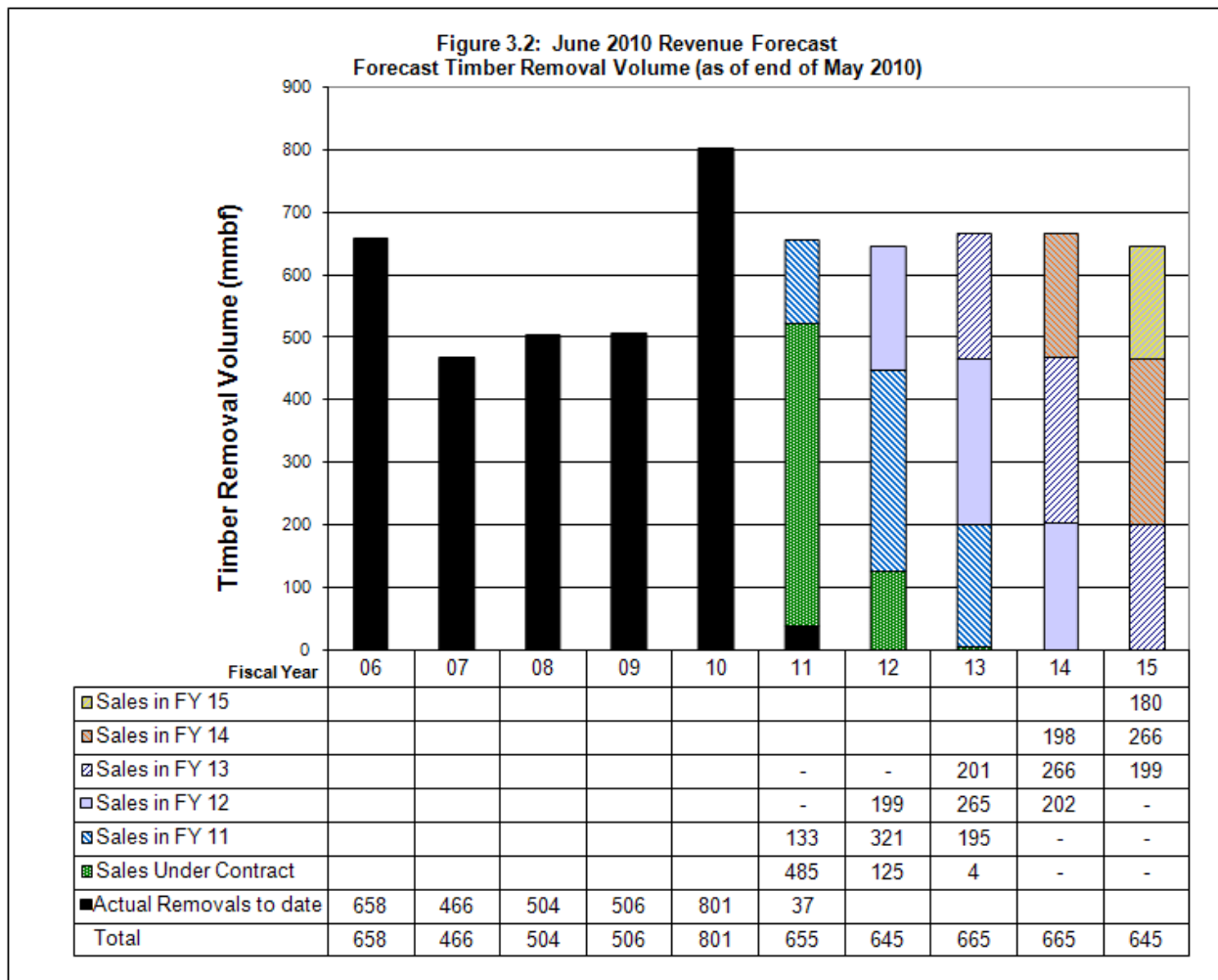
There is an increasing downside risk that it may be difficult for DNR to make its target timber sales volume for FY 2011. There may be some weakness developing in that only 19 of 33 timber sales offered in July and August (the first two months of the fiscal year) actually sold and only 55 percent of the volume offered was sold. In July, five of the seven sales sold (out of the 14 offered) only had one bidder.

Timber Removal Volume. Actual timber sale removals for FY 2010 totaled 801 mmbf (see **Figure 3.2**), by far the highest level since the 1985-1988 period. This was up by 11 mmbf over that predicted in the June Forecast, but that was only 1 percent higher than forecast (see **Figure 3.3**).

The Department currently has 615 mmbf valued at \$148.0 million under contract. This is a large decrease from the timber sale inventory at the time of the June Forecast, when there was 720 mmbf valued at \$170.8 under contract. This is in part due to seasonal factors as June and July typically have high monthly rates of timber harvest while DNR timber sales volume was off in June, July, and August of CY 2010 because of the level of no bids.

For each Forecast, we survey DNR timber sale purchasers to determine their planned timing of removals from the timber volume they have under contract at the time of the survey. The latest survey, conducted in the first week of August, indicates that purchasers are not planning to significantly accelerate their harvest plans as was true over the last two Forecasts.

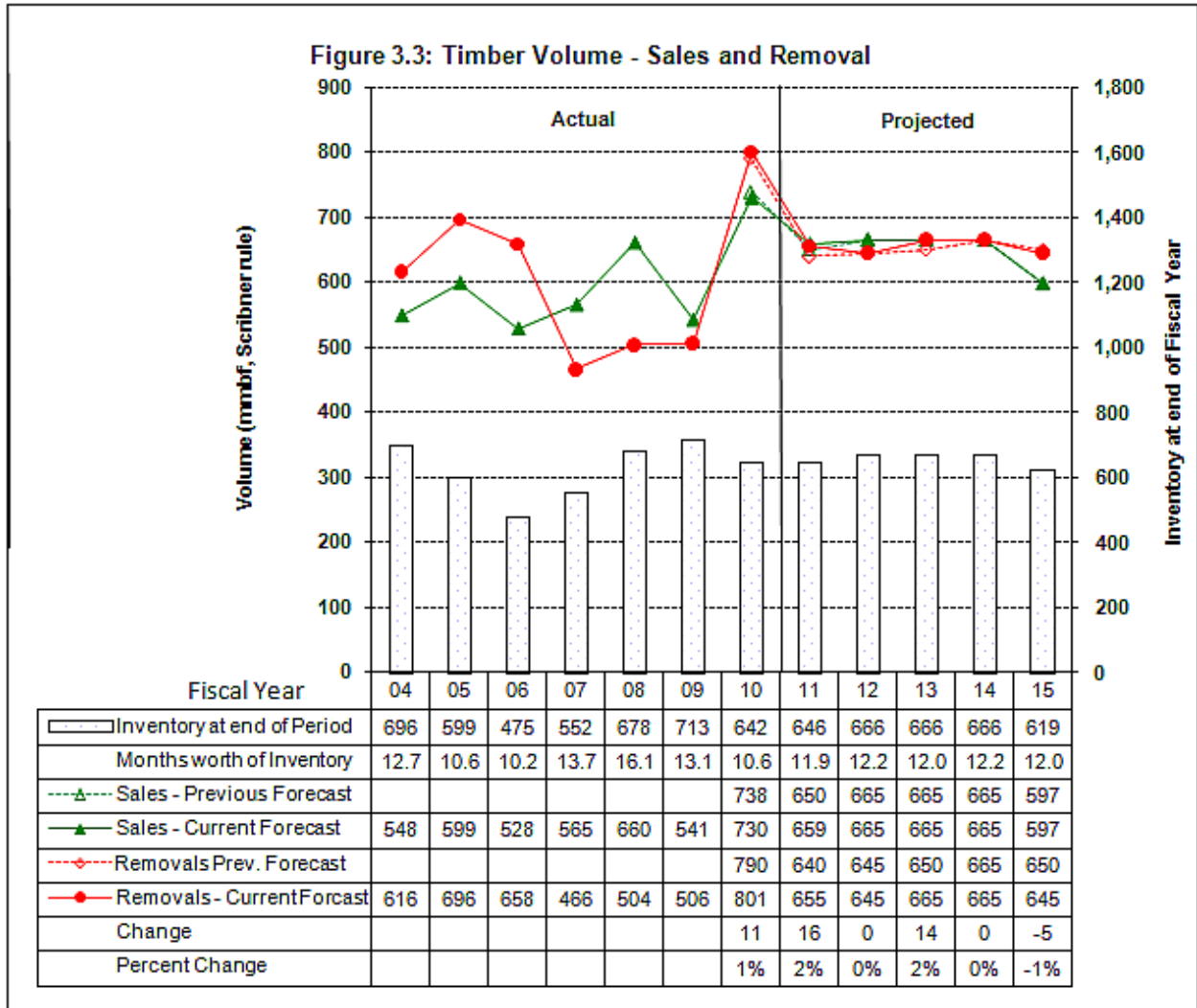
Purchasers plan to harvest 485 mmbf, 79 percent of the volume under contract, this fiscal year (FY 2011) and 129 mmbf (21 percent) next biennium (2011-13) (see **Figure 3.2** for detail).



Through July (the first month of FY 2011), purchasers removed 37 mmbf. Together with the expected removals of 485 mmbf from volume under contract and another 133 mmbf from timber sales yet to be sold in the current fiscal year, this brings our forecast of total timber removals for FY 2011 to 655 mmbf. This is an increase of 16 mmbf, or 2 percent, from what we previously forecast for FY 2011 (see **Figure 3.3**).

Timber Sale and Removal Volume. Timber removals generally follow the pattern for sales but not always. For the ten-year period from FY 1997 through FY 2006, removals were greater than sales in seven of the ten years and the volume under contract fell by more than half, from 1 billion board feet to just over 475 million board feet. During the FY 2004-2006 period, removals averaged 17 percent more than the sales level for those three years (see **Figure 3.3**). Also during that period, the volume under contract decreased from 696 mmbf to 475 mmbf, and the months' worth of inventory at the current harvest rate fell to just 10.2 months.

From FY 2007 to FY 2009, things turned around and removals were about 17 percent less than sales for the three-year period. During this time, the volume under contract grew from 475 mmbf to 692 mmbf by the end of FY 2009 and the months' worth of inventory increased from 10.2 to a peak of 15.6 months at the end of FY 2008.

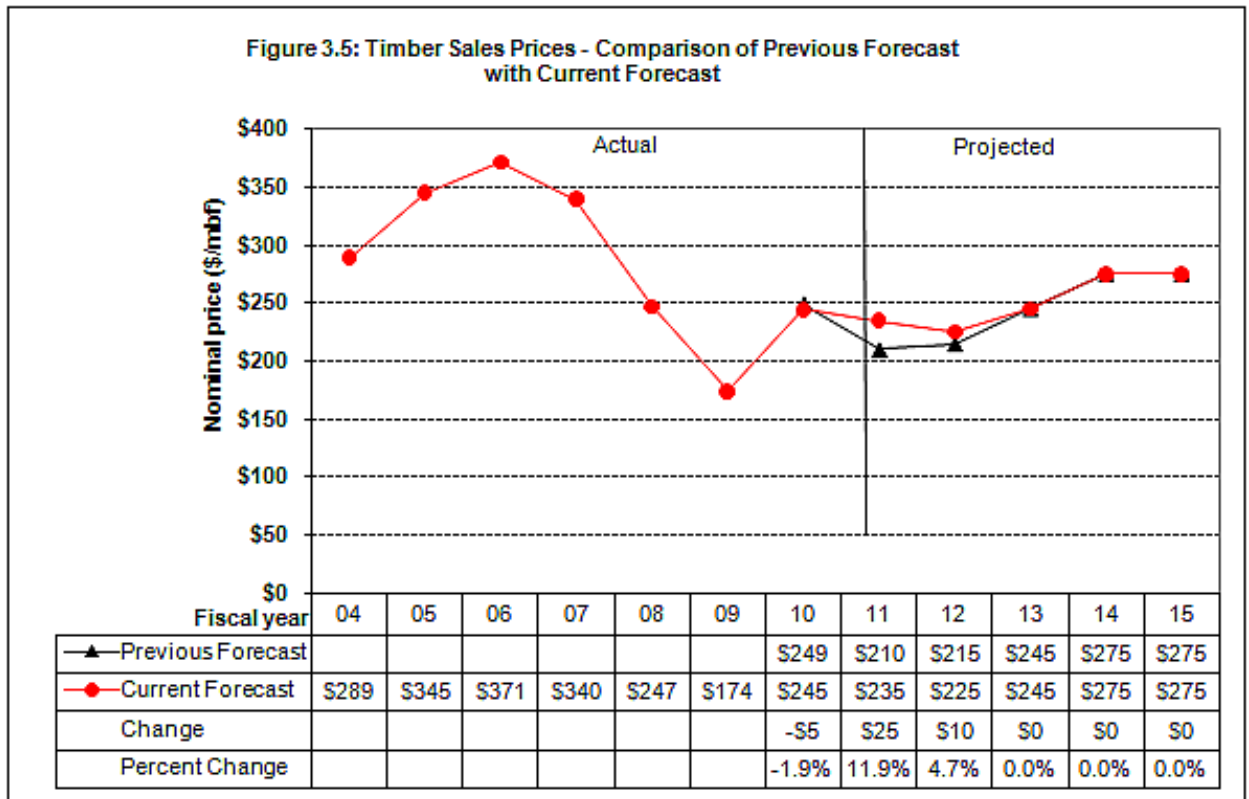
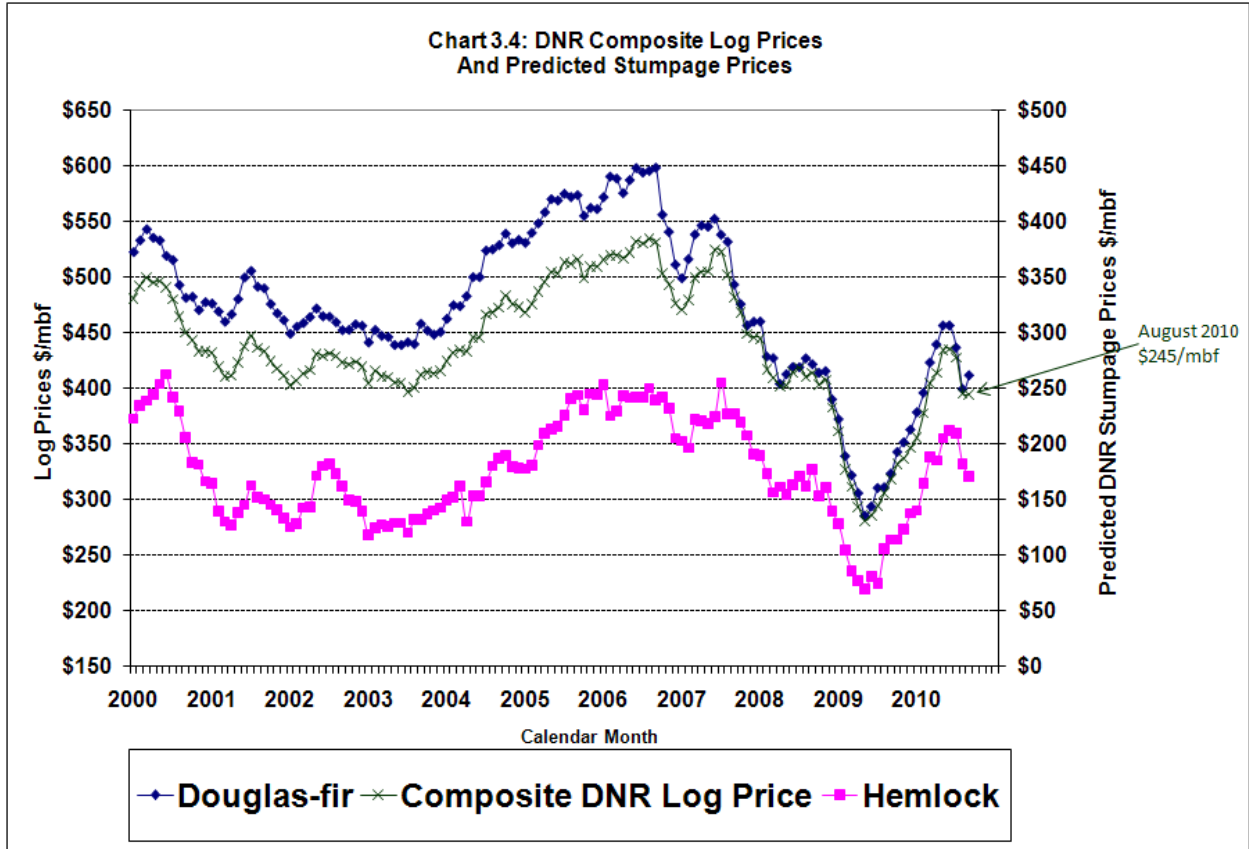


Generally, we anticipate that the DNR timber purchasers will draw down the volume under contract during periods of increasing prices and add to the volume under contract when prices are falling.

Going forward, even though we are forecasting prices to increase somewhat, we project that removals will be more or less equal to sales through 2014 (see **Figure 3.3** for details).

Timber Sales Prices. When we did the June Forecast, the composite (weighted by species) stumpage price had peaked in May at \$285/mbf (\$435/mbf composite log price minus \$150/mbf logging costs). Since then it has fallen to \$245 in July and August. See **Figure 3.4**.

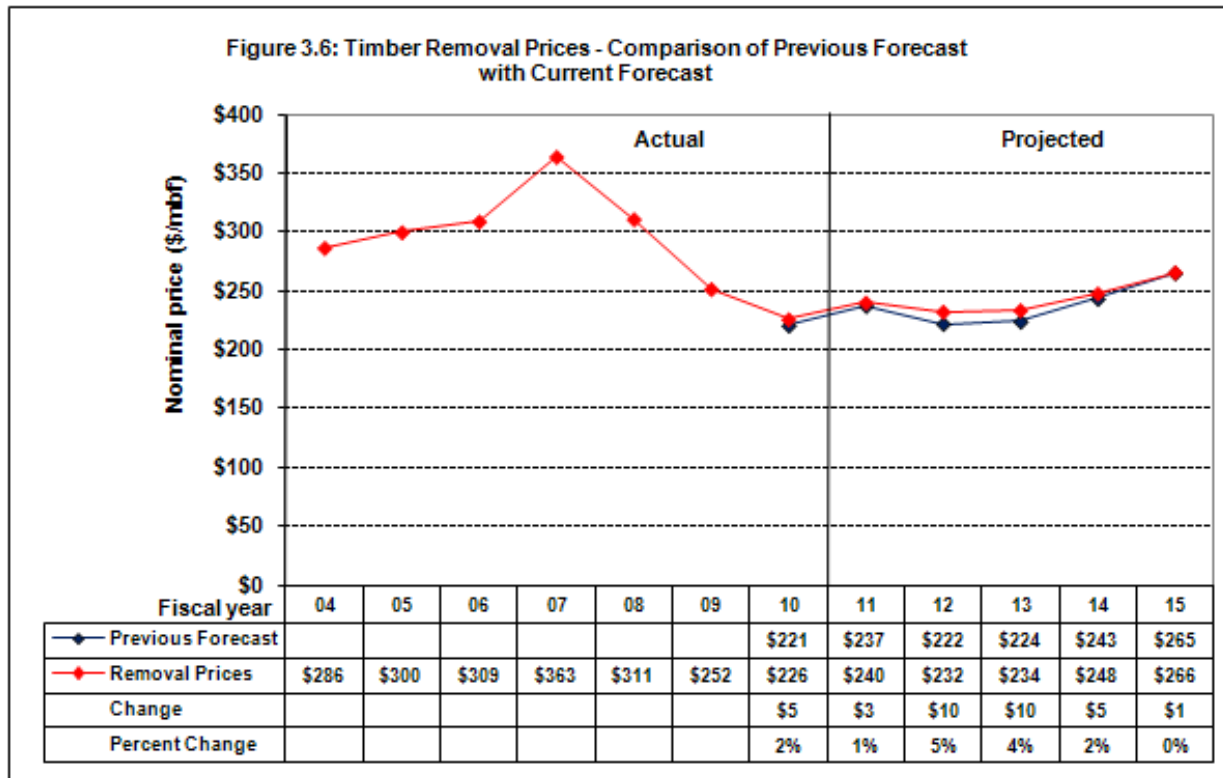
In the June Forecast, we forecast DNR timber stumpage prices to average \$249/mbf for the full fiscal year 2010 (see **Figure 3.5**). The final actual average price for DNR timber sales in FY 2010 was slightly lower at \$245/mbf.



At the current time, there seems to be support in the market that will keep lumber and log prices from falling significantly lower. Accordingly, we are revising our forecast DNR stumpage prices upward for FY 2011 and 2012. We now expect stumpage prices to average \$235/mbf for FY 2011, down \$10/mbf from FY 2010 but up \$25/mbf from that forecast in June (see **Figure 3.5**). We are also revising our stumpage price for FY 2012 upward from \$215/mbf to \$225/mbf. Our higher forecast timber sale prices for FYs 2012-2015 are left unchanged.

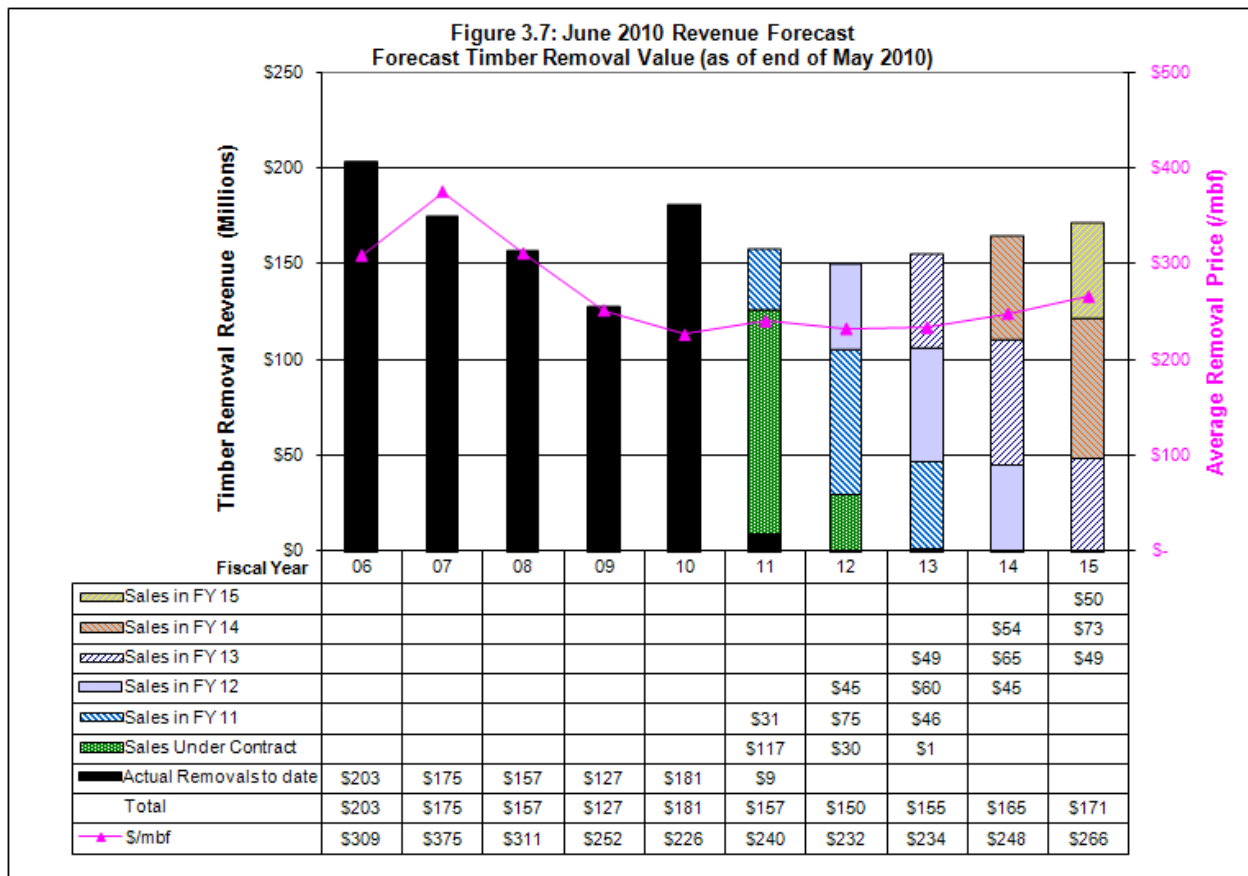
These forecasts of DNR stumpage prices in the next two biennia incorporate our continued pessimism about the long-term recovery of the U.S. housing market. The average stumpage price of \$235/mbf for the next biennium is a little lower than this biennium's \$240/mbf, but it's higher than the \$230/mbf we were predicting in the last Forecast.

Timber Removal Prices. Timber removal prices are a function of timber sales prices and the timing of the timber's removal. They can be thought of as a moving average of previous timber sales prices, weighted by the volume of sold timber removed in each time period. The removal volumes used to calculate the weights are shown in **Figure 3.2**, which results in a smoothing out and a lag of timber removal prices compared to timber sales prices. For example, sales prices bottomed out at \$174/mbf in FY 2009 (see **Figure 3.5**). As shown in **Figure 3.6**, removal prices are forecasted to bottom out in FY 2010 at \$226/mbf, \$52/mbf higher than the bottom for sales prices.



We are changing our forecast of timber removal prices to show modest increases across the board for the years FYs 2011-2015 (see **Figure 3.6**). The highest increases are in FYs 2012 and 2013 at \$10/mbf each, reflecting the higher timber sales prices predicted in FYs 2011 and 2012.

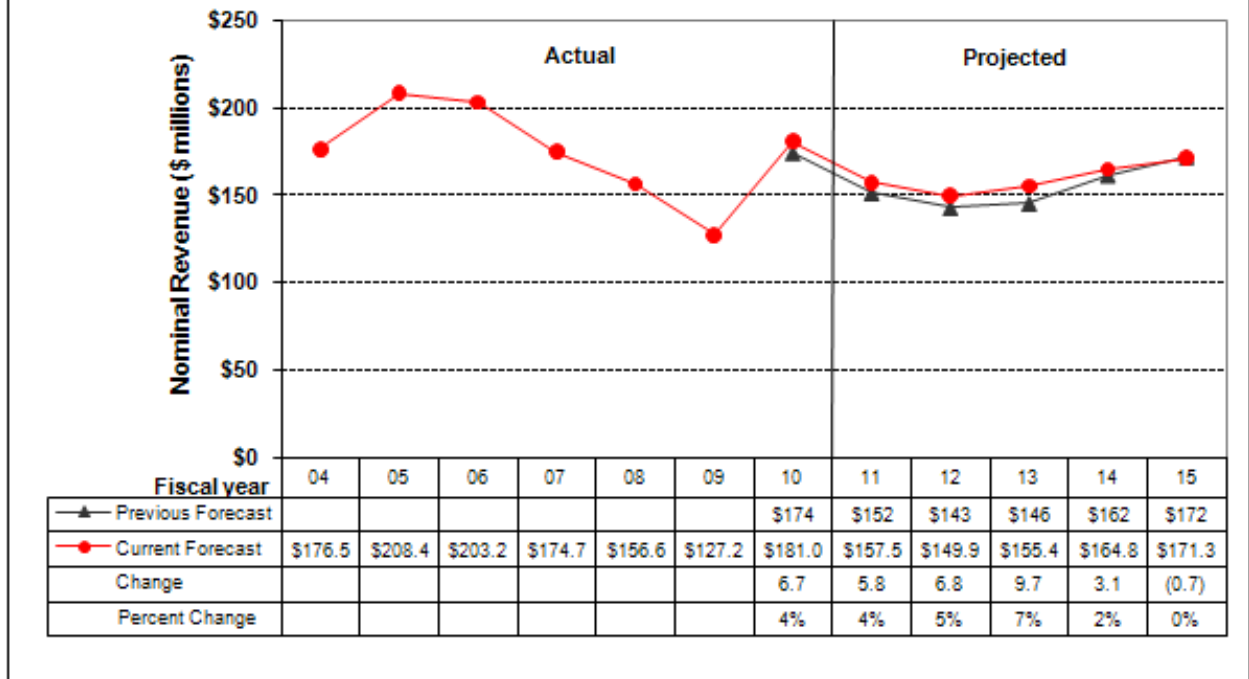
Timber Removal Revenues. Figure 3.7 shows projected annual timber removal revenues and the average removal price for that fiscal year, broken down by the fiscal year in which the timber was sold (“sales under contract” are already sold as of July 2010) or will be sold. Over 56 percent of the forecast timber harvest revenue this biennium (FY 2010 and FY 2011) will come from sold timber already harvested to date, another 35 percent will come from previously sold timber sales currently under contract as of the end of July, and the remaining nine percent will come from harvests on timber sales yet to be sold in FY 2011.



As shown in **Figure 3.7**, most of the timber sold this fiscal year 2011 will be harvested in the next biennium (FYs 2012 and 2013).

Final actual timber removal revenues in FY 2010 were up by \$6.7 million (4 percent) (see **Figure 3.8**) as a result of removal volumes and removal values both being a little higher than previously forecast. Forecast revenues are also up for each year FY 2011 through 2014 because of the higher forecast average annual removal prices combined with the higher or unchanged forecast annual removal volumes.

Figure 3.8: Timber Removal Revenues - Comparison of Previous Forecast with Current Forecast, 2004-2015



In the current biennium (FYs 2010 and 2011), we are revising forecast timber removal revenues up by \$12.5 million, or 4 percent, to \$338.5 million. See **Figure 3.8** for detail. In the 2011-13 Biennium (FYs 2012 and 2013), forecast timber removal revenues are up by \$16.5 million, or 5.7 percent, to \$305.3 million. In the 2013-15 Biennium, we are revising our forecast of timber removal revenues upward by \$2.3 million, or 1 percent, to 336.1 million.

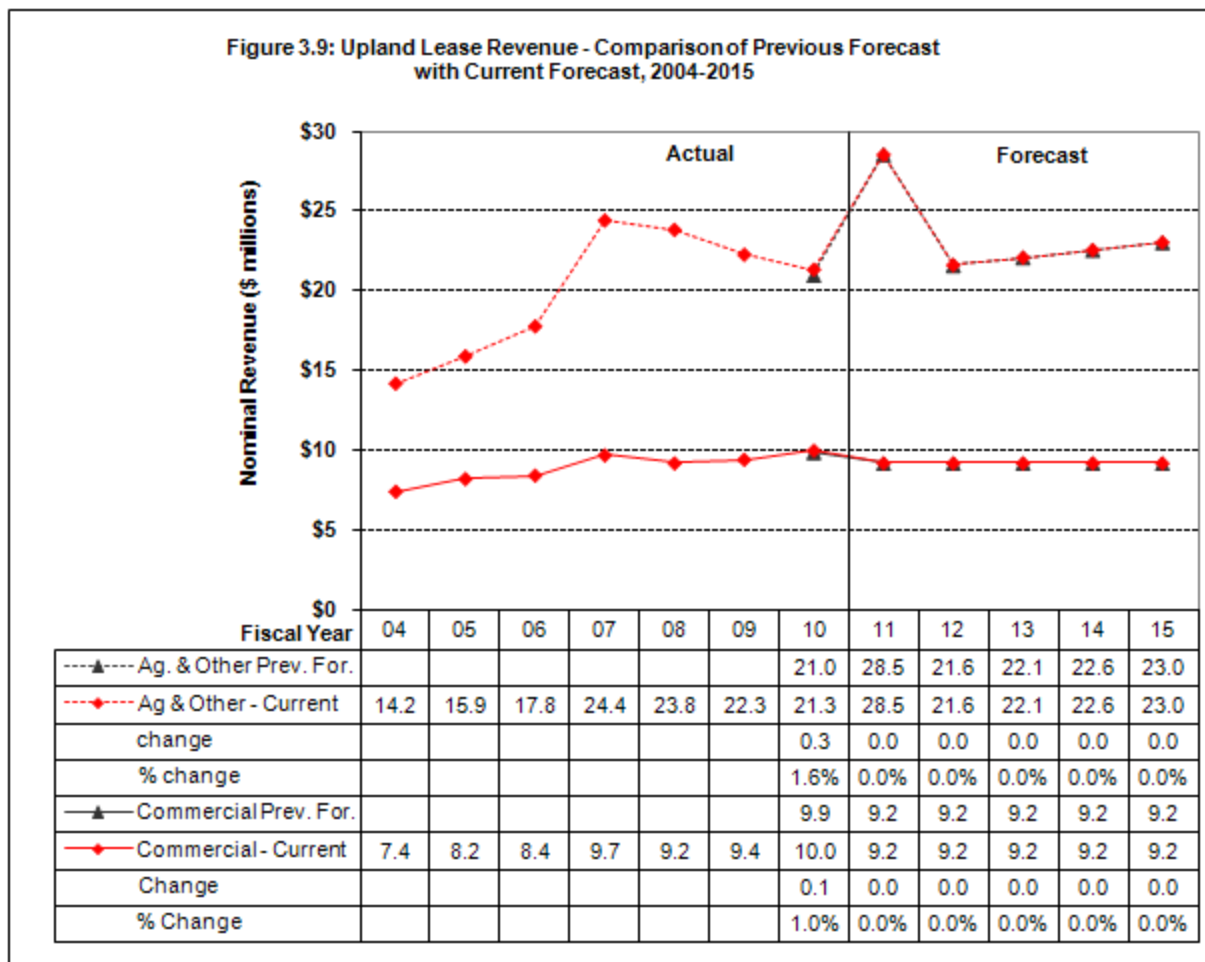
To put these numbers in historical perspective, the projected timber removal revenue of \$149.9 million for FY 2012 would be the lowest year in real terms going all the way back to FY 1968 except for the recent low year in FY 2009. And FYs 2011, 2013, and 2014 aren't predicted to be a lot better. These relatively low historical removal revenues forecast over the next several fiscal years are being driven by predicted low stumpage prices, as the projected removal volumes are certainly not low by historical standards.

Upland lease revenues

Upland lease revenues are generated primarily from leases and the sale of valuable materials, other than timber, on state trust lands. In this Forecast, upland lease revenues are divided into two categories:

- 1) **Commercial**—Commercial real estate leases.
- 2) **Agricultural and Other**—Agricultural, special use, mineral and hydrocarbon, right-of-way, communication site, and special forest products leases, and sale of valuable materials other than timber.

Commercial. FY 2010 was a very good year for commercial lease revenue, at \$10.0 million the highest fiscal year on record. This was slightly higher than the \$9.9 forecast in the near-fiscal-year-end June Forecast (see **Figure 3.9**) and higher than the \$9.2 projection in the February Forecast. Commercial lease revenues were higher than expected because of rent adjustments on some of the leases.



The current U.S. recession has increased the probability that some of DNR's commercial building lessees could vacate and default. Because of the continuing sluggishness of the economic recovery and because commercial real estate especially is in the doldrums, we are leaving our forecast for future years' commercial leasing revenue at the \$9.2 million level. There is more downside risk to this forecast than upside risk because of the bleak outlook for commercial real estate at the present time. The National Association of Realtors expects vacancy rates for office space to increase to 17 percent into 2011 and to hold steady at 13 percent for retail space, with rental rates for both types continuing to fall.

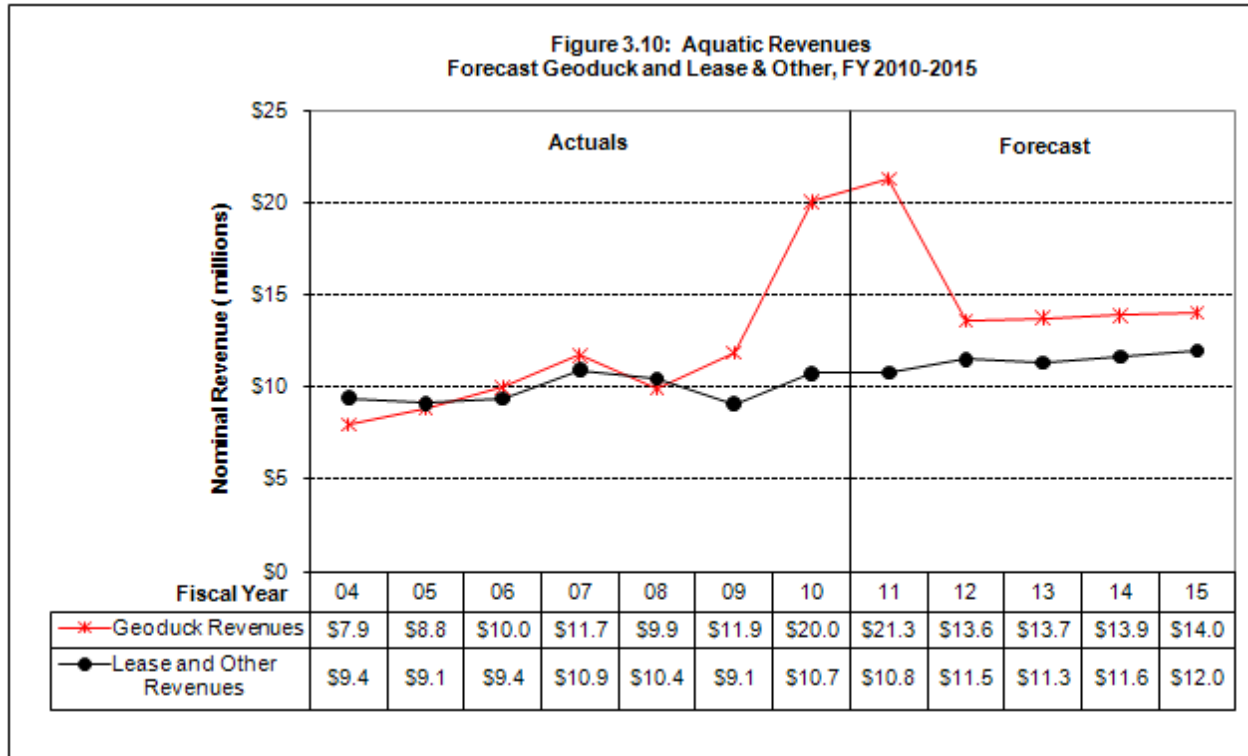
Agricultural and Other. Revenue collections on agricultural and other upland leases were \$21.3 million for FY 2010, \$0.3 million more than predicted in the near-fiscal-year-end June Forecast as all of the "other" upland lease categories (special forest products, special use, communication sites, and rights of way) had higher than expected fourth quarter revenues. The total \$21.3 million yearly amount was down from the three previous fiscal years (see **Figure 3.9**) because of cyclically low prices for wheat, apples, and cherries, a rent credit to a lessee for capital improvements on trust land, and lower than expected sand, gravel, and rock revenues due to the construction sector slowdown caused by the recession.

As described in previous Forecasts, the spike shown in FY 2011 on **Figure 3.9** for projected agricultural and other upland lease revenues is due to the proposed one-time sale of trust-owned communication site facilities located on trust lands (DNR will sell the communication site improvements to a master lessee but retain ownership of the underlying land asset). The proceeds of this transaction is currently estimated at \$7 million and there is some uncertainty whether it will occur in FY 2011 or FY 2012.

Otherwise, as shown on **Figure 3.9**, we expect revenues in the agricultural and other upland leases category to increase over the forecast period. Revenues should be up on agricultural leases as crop prices rebound and in the "other leases" category as wind power leases come on line. There will be a countervailing influence as the outlook is that revenues in the mineral, oil and gas, and rock, sand, and gravel category will be sharply down over the forecast period.

Aquatic lands revenues

Geoduck Revenues. In FY 2010, the Department received \$20.0 million in revenues from auctions for geoduck harvest (see **Figure 3.10**). This was an unprecedented amount, easily exceeding the previous one-year highs of \$11.7 and \$11.9 million in FYs 2007 and 2009.



We are beginning to become less surprised by the sale-after-sale high prices around \$10 per pound DNR has been receiving at its geoduck auctions. The last six auctions from July 2009 through August 2010 have netted sales prices of \$9.15, \$8.71, \$10.61, \$10.58, \$10.55, and \$10.68 per pound. This is compared to the previous eight sales from June 2007 through April 2009 that averaged \$5 per pound while ranging from a low of \$3.85 per pound to a high of \$6.85 per pound. There were some higher prices (\$6.34 to \$8.78) in 2005 and 2006, but they were interspersed with much lower prices (\$3.08 to \$4.49). Going back to 1993, there was an auction in November 1994 that received \$7.35 per pound, one in December 1997 at \$6.55 per pound, and one in August 1999 at \$6.40 per pound. But these were the rare exceptions as 23 of the 41 auctions from 1993 through 2005 were below \$4.50 per pound and the average price was \$4.33 per pound. What is different now is that the volatility has disappeared and the price has been remaining high auction after auction.

The actual average geoduck price for the four FY 2010 auctions, weighted by volume, was \$9.74 per pound.

The average price for the first two FY 2011 auctions (including the May 2010 auction which was billed for and accounted in FY 2011, when the geoducks will be harvested and the revenues

received), weighted by volume, is \$10.63 per pound. The two FY 2011 auctions to date have already generated potential revenues of \$15.6 million (contingent on harvest).

Geoduck prices have been highly volatile through history before July 2009 and may well return to more “normal” volatility at some point. Or perhaps a new “normal” with high prices auction after auction is in effect, at least for now. To a significant extent, the geoduck harvest price is influenced by economic prosperity in China, especially by the new wealthy class in Shanghai and Hong Kong (the predominant end market), and we foresee no immediate reversal in China’s strong economic growth and well-being.

Based on the continued higher-than-forecast geoduck prices, we are changing our forecast of geoduck revenues in FY 2011 and beyond. The new revised baseline unit price is \$6.24 per pound, which remains conservative. The new forecast price for FY 2011, which includes the actual proceeds of the May and August 2010 sales, is \$8.98 per pound. We are now forecasting a new record year for geoduck sale revenues of \$21.3 million in FY 2011, sharply up from the \$15.1 million predicted in the June Forecast.

A wild card in geoduck harvest revenues is PSP, or paralytic shellfish poisoning. If geoduck beds are closed to harvest because of an unpredictable occurrence of this toxin, the harvest opportunity and therefore revenues could be deferred or lost.

Lease and Other Revenues. Lease and other aquatic land revenues (other than from geoduck sales) totaled \$10.7 million for FY 2010 (see **Figure 3.10**). This included unanticipated revenues from the settlement with Taylor Shellfish for unauthorized use of state aquatic lands. Taylor will make payments of roughly \$500,000 each year in FYs 2010, 2011, and 2012 and these are included in the Forecast for the next two fiscal years. A negative adjustment of \$400,000 is included in the Forecast for FY 2011 to account for lower than expected revenues in non-water dependent aquatic lands leases. About 75 percent of these leases are subject to an annual adjustment equal to the rate of change in the Producers Price Index (PPI), which this year will be -8.8 percent due to the economic recession.

Because of the sustained high geoduck prices, total aquatic lands revenues set a new record high of \$30.8 million in FY 2010. Also because of the high returns from geoduck auctions already in the book for FY 2011, we are now predicting a new high for total aquatic lands revenues of \$32.0 million in FY 2011, up \$6.1 million from the June Forecast. Based on higher forecast geoduck prices, we have also revised our forecast to total aquatic land revenues up modestly for the 2011-13 and 2013-15 biennia (see **Figure 3.11** for detail).

Figure 3.11: Aquatic Revenues
Comparison of Previous Forecast with Current Forecast, 2010-2015

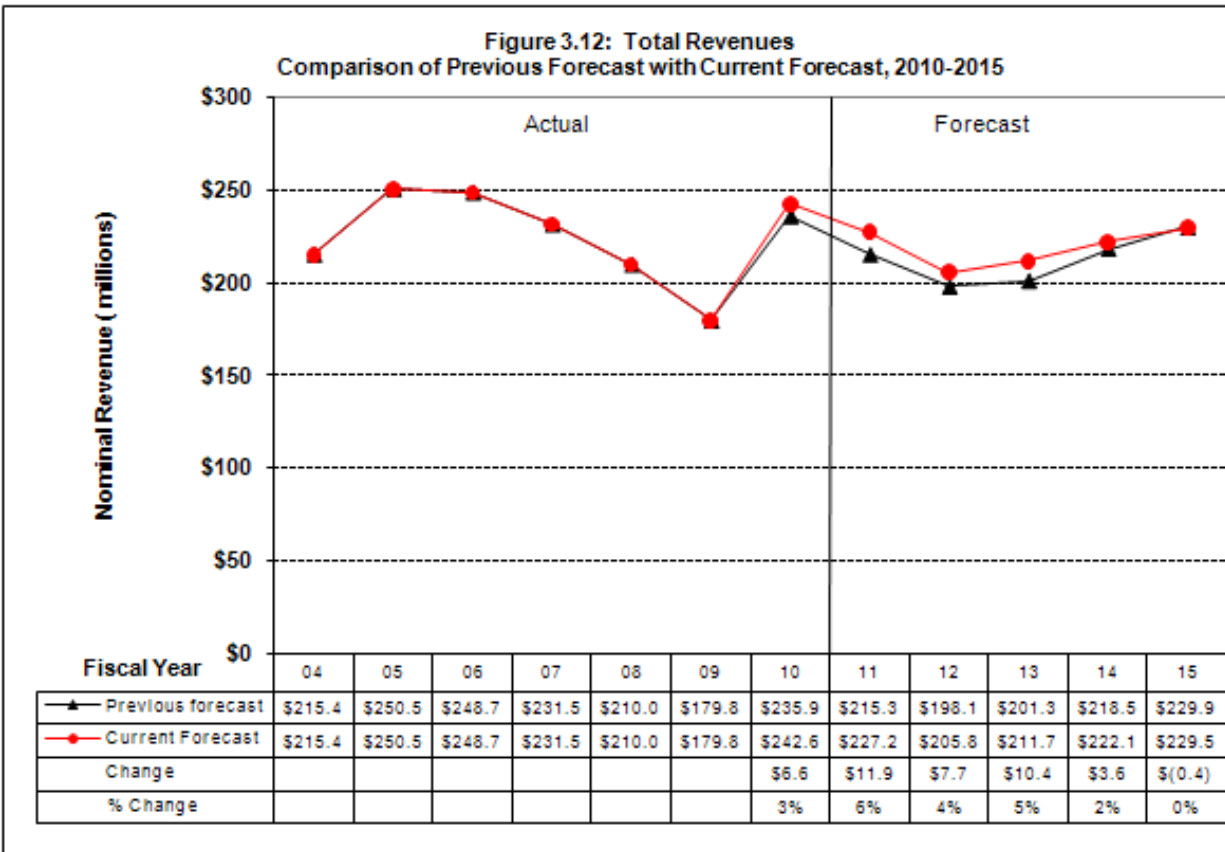


	04	05	06	07	08	09	10	11	12	13	14	15
▲ Previous Forecast							\$30.8	\$25.9	\$24.2	\$24.3	\$25.0	\$25.6
● Current Forecast	\$17.3	\$17.9	\$19.3	\$22.6	\$20.4	\$20.9	\$30.8	\$32.0	\$25.1	\$25.0	\$25.5	\$26.0
Change							0.0	6.1	0.9	0.7	0.5	0.3
Percent Change							0.0%	23.6%	3.6%	2.9%	2.0%	1.2%

Fiscal year ending June 30

Total revenues from all sources

Forecast revenues for the current biennium (FYs 2010 and 2011) are up from the June Forecast by \$18.5 million, or 4.1 percent (see **Figure 3.12**). The largest part of the increase was due to actual timber removal revenues for FY 2010 being \$6.7 million higher than predicted and projected timber removal revenues for FY 2011 now being \$5.8 million higher than previously forecast (see **Figure 3.8**) (in both years the result of modest increases in both predicted removal volumes and prices). In addition, there was a \$6.1 million increase in predicted non-timber revenues in FY 2011 (driven by a \$6.2 million increase in predicted geoduck auction revenues).



Revenues during the 2011-13 Biennium (FYs 2012 and 2013) are up from the previous Forecast by \$18.1 million, or 4.5 percent (see **Figure 3.12**). Most all of this change is attributable to timber removal revenue being adjusted upward by \$16.5 million (see **Figure 3.8**) due to a \$10/mbf higher removal price predicted in both years (see **Figure 3.6**) and a higher removal volume predicted in FY 2013 (see **Figure 3.3**). The other \$1.6 million increase is due to higher forecast revenues from geoduck sales.

Current forecast revenues for the 2013-15 Biennium (FYs 2014 and 2015) are up \$3.2 million, or 0.7 percent, from the previous Forecast. This is mostly attributable to timber removal revenue being adjusted upward by \$3.1 million in FY 2014 due to higher timber removal prices than previously predicted. Lower predicted timber removal revenues of \$0.7 million in FY 2015 offsets higher predicted geoduck auction revenues of \$0.8 million for the biennium.

Some caveats

DNR strives to produce the most accurate and objective forecast possible, based on the Department's current policy directions and available information. Actual revenues will depend on future policy decisions made by the Legislature and the Department, as well as market and other conditions beyond DNR's control. Listed below are issues that could potentially have a significant impact on future revenues from DNR-managed lands:

- **U.S. and Global Economic and Financial Crisis.** The U.S. is still recovering from the deepest and longest recession since the Great Depression. The effects of the burst real estate bubble and the collapse of the financial system in the U.S. crossed over into the larger national economy and into other countries' economies. There is currently an unusually high degree of uncertainty and volatility in national and international economic and financial systems. Forecasting in uncertain times is even more difficult than usual. In its current weakened state, the probability of a new financial or geopolitical shock nudging the economy back into recession is elevated.
- **U.S. Housing Market.** It has been over four years since the housing downturn began. Housing starts hit a 50-year low point last year and they remain near the bottom. New home sales hit an new all-time low recently in July 2010. Housing data remains discouraging and we have reduced our housing starts forecast yet once again and even that may be too optimistic. It is possible that the housing recovery will be pushed back even further by a slower-than-expected economic recovery and an oversupply of existing and new homes. This would likely result in lower timber sales prices than we currently forecast.
- **Timber Sales Volume.** We forecast 659 mmbf in DNR timber sales in FY 2011 and then 665 mmbf annually for FYs 2012 through 2014. This would meet the 1995-2014 decadal sustainable harvest on DNR managed forest lands. There is some risk that DNR will not be able to sustain this level of timber sales because of external economic factors, administrative challenges, and potential litigation over the marbled murrelet and other environmental issues.

At this point we judge the downside and upside risks to our forecast to be about balanced. Naturally, we worry more about the downside risks.

These and other future circumstances could have a great impact on future Department revenues. As events and market conditions develop, DNR will incorporate new information into future Forecast updates.

Distribution of revenues

The distribution of timber revenues by trust are based on:

- The value of timber in the inventory (sales sold but not yet harvested);
- The volumes of timber in planned sales for the remainder of FY 2011 and FY 2012; and
- The distribution of the sustainable harvest for FY 2013 through FY 2015.

Timber sales are expected to be harvested on average between 11.9 and 12.2 months after they are sold. (See **Figure 3.3** for details.) Distributions of lease revenues are assumed to be proportional to historic distributions unless otherwise specified.

Since a single timber sale can be worth over \$3 million, dropping, adding, or delaying even one sale can represent a significant shift in revenues to a specific trust fund.

Management Fee Deduction. The budget passed by the Legislature extended the 30 percent RMCA deduction through the end of the 2009-11 Biennium. The RMCA deduction is assumed to return to 25 percent in FY 2012. The forecast RMCA revenues at the 30 percent deduction for FY 2012 and beyond are shown at the top of **Table 3.2**.

Revenue forecast tables

Tables 3.1 and 3.2 on the following pages provide Forecast details. Table 3.1 focuses on the source of revenues, and Table 3.2 focuses on the distribution of revenues. Both tables include historical and projected figures.

Table 3.1 September 2010 Forecast by Source (In millions of dollars)								
Change from June 2010 Forecast								
Timber Sales	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
Volume (mmbf)	660	541	730	659	665	665	665	597
Change	-	-	(9)	9	-	-	-	-
% Change	0%	0%	-1%	1%	0%	0%	0%	0%
Price (\$/mbf)	\$247	\$174	\$245	\$235	\$225	\$245	\$275	\$275
Change	\$0	\$0	-\$5	\$25	\$10	\$0	\$0	\$0
% Change	0%	0%	-2%	12%	5%	0%	0%	0%
Value of Timber Sales (In millions of dollars)	\$ 163.0	\$ 94.0	\$ 178.5	\$ 154.9	\$ 149.6	\$ 162.9	\$ 182.9	\$ 164.3
Change	\$ -	\$ -	\$ (5.6)	\$ 18.4	\$ 6.7	\$ -	\$ -	\$ -
% Change	0%	0%	-3%	13%	5%	0%	0%	0%
Timber Removals	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
Volume (mmbf)	504	506	801	655	645	665	665	645
Change	-	-	11	16	0	14	-	(5)
% Change	0%	0%	1%	2%	0%	2%	0%	-1%
Price (\$/mbf)	\$311	\$252	\$226	\$240	\$232	\$234	\$248	\$266
Change	\$0	\$0	\$5	\$3	\$10	\$10	\$5	\$1
% Change	0%	0%	2%	1%	5%	4%	2%	0%
Timber Revenue (In millions of dollars)	\$ 156.6	\$ 127.2	\$ 181.0	\$ 157.5	\$ 149.9	\$ 155.4	\$ 164.8	\$ 171.3
Change	\$ -	\$ -	\$ 6.7	\$ 5.8	\$ 6.8	\$ 9.7	\$ 3.1	\$ (0.7)
% Change	0%	0%	4%	4%	5%	7%	2%	0%
Lease Revenue	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
Agricultural and Mineral	\$ 23.8	\$ 22.3	\$ 21.3	\$ 28.5	\$ 21.6	\$ 22.1	\$ 22.6	\$ 23.0
Change	\$ -	\$ -	\$ 0.3	\$ -	\$ -	\$ -	\$ -	\$ -
% Change	0%	0%	2%	0%	0%	0%	0%	0%
Commercial	\$ 9.2	\$ 9.4	\$ 10.0	\$ 9.2	\$ 9.2	\$ 9.2	\$ 9.2	\$ 9.2
Change	\$ -	\$ -	\$ 0.1	\$ -	\$ -	\$ -	\$ -	\$ -
% Change	0%	0%	1%	0%	0%	0%	0%	0%
Aquatic Revenue	\$ 20.4	\$ 20.9	\$ 30.8	\$ 32.0	\$ 25.1	\$ 25.0	\$ 25.5	\$ 26.0
Change	\$ -	\$ -	\$ 0.0	\$ 6.1	\$ 0.9	\$ 0.7	\$ 0.5	\$ 0.3
% Change	0%	0%	0%	24%	4%	3%	2%	1%
Total Lease Revenue	\$ 53.4	\$ 52.6	\$ 62.1	\$ 69.8	\$ 55.9	\$ 56.3	\$ 57.3	\$ 58.2
Change	\$ -	\$ -	\$ 0.4	\$ 6.1	\$ 0.9	\$ 0.7	\$ 0.5	\$ 0.3
% Change	0%	0%	1%	10%	2%	1%	1%	1%
Total All Sources	\$ 210.0	\$ 179.8	\$ 243.1	\$ 227.2	\$ 205.8	\$ 211.7	\$ 222.1	\$ 229.5
Change	\$ -	\$ -	\$ 7.1	\$ 11.9	\$ 7.7	\$ 10.4	\$ 3.60	\$ (0.41)
% Change	0%	0%	3%	6%	4%	5%	2%	0%
Note: Trust land transfer is not included in distribution revenues.								
This table excludes interest and Land Bank transactions, fire assessments, permits, and fees.								
Totals may not add due to rounding.								

Table 3.2: 2010 September Forecast by Fund (In millions of dollars)

	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	
Change from June 2010 Forecast									
30% RMCA thru FY 11									
					RMCA AT 30%====>	\$ 29.9	\$ 32.9	\$ 34.5	\$ 35.2
Management Funds									
041 RMCA - Upland	\$ 32.0	\$ 26.5	\$ 31.8	\$ 31.6	\$ 24.9	\$ 27.4	\$ 28.7	\$ 29.3	
Change	\$ -	\$ -	\$ 0.7	\$ (0.1)	\$ (0.4)	\$ 1.0	\$ 0.1	\$ (0.1)	
% Change	0%	0%	2%	0%	-2%	4%	0%	0%	
041 RMCA - Aquatic	\$ 8.6	\$ 8.9	\$ 13.9	\$ 14.4	\$ 10.9	\$ 10.8	\$ 11.0	\$ 11.2	
Change	\$ -	\$ -	\$ 0.2	\$ 3.1	\$ 0.4	\$ 0.3	\$ 0.3	\$ 0.2	
% Change	0%	0%	2%	27%	4%	3%	2%	1%	
014 FDA	\$ 18.6	\$ 17.3	\$ 25.9	\$ 23.0	\$ 20.2	\$ 19.6	\$ 20.7	\$ 22.6	
Change	\$ -	\$ -	\$ 1.0	\$ 1.1	\$ 1.8	\$ 1.3	\$ 0.7	\$ (0.0)	
% Change	0%	0%	4%	5%	10%	7%	3%	0%	
Total Management Funds	\$ 59.2	\$ 52.7	\$ 71.6	\$ 69.0	\$ 56.0	\$ 57.7	\$ 60.4	\$ 63.1	
Change	\$ -	\$ -	\$ 2.0	\$ 4.1	\$ 1.9	\$ 2.7	\$ 1.0	\$ 0.0	
% Change	0%	0%	3%	6%	3%	5%	2%	0%	
Current Funds									
113 Common School Construction	\$ 56.6	\$ 41.5	\$ 47.9	\$ 51.2	\$ 52.8	\$ 57.4	\$ 60.0	\$ 61.4	
Change	\$ -	\$ -	\$ 0.8	\$ 0.1	\$ (1.9)	\$ 1.6	\$ (0.6)	\$ (0.1)	
% Change	0%	0%	2%	0%	-3%	3%	-1%	0%	
999 Forest Board Counties	\$ 52.5	\$ 48.6	\$ 67.9	\$ 60.0	\$ 55.5	\$ 50.8	\$ 53.7	\$ 56.4	
Change	\$ -	\$ -	\$ 2.3	\$ 5.2	\$ 7.1	\$ 3.7	\$ 1.8	\$ (0.2)	
% Change	0%	0%	3%	10%	15%	8%	4%	0%	
001 General Fund	\$ 3.0	\$ 1.4	\$ 5.0	\$ 3.0	\$ 2.2	\$ 2.6	\$ 2.8	\$ 3.1	
Change	\$ -	\$ -	\$ 0.8	\$ (0.8)	\$ (0.7)	\$ 0.1	\$ 0.1	\$ (0.0)	
% Change	0%	0%	18%	-22%	-24%	4%	2%	0%	
348 University Bond Retirement	\$ 2.3	\$ 3.4	\$ 1.8	\$ 1.0	\$ 1.1	\$ 1.6	\$ 1.6	\$ 2.0	
Change	\$ -	\$ -	\$ (0.2)	\$ 0.2	\$ 0.2	\$ 0.1	\$ 0.0	\$ 0.0	
% Change	0%	0%	-9%	26%	19%	5%	1%	1%	
347 WSU Bond Retirement	\$ 1.2	\$ 1.6	\$ 1.2	\$ 1.2	\$ 1.2	\$ 1.2	\$ 1.2	\$ 1.3	
Change	\$ -	\$ -	\$ 0.1	\$ -	\$ -	\$ -	\$ -	\$ -	
% Change	0%	0%	12%	0%	0%	0%	0%	0%	
042 CEP&RI	\$ 3.8	\$ 3.8	\$ 5.6	\$ 4.7	\$ 5.3	\$ 5.6	\$ 5.9	\$ 6.4	
Change	\$ -	\$ -	\$ 0.7	\$ (1.8)	\$ 0.0	\$ 0.3	\$ 0.2	\$ (0.0)	
% Change	0%	0%	13%	-27%	1%	5%	3%	-1%	
036 Capitol Building Construction	\$ 5.2	\$ 5.7	\$ 8.7	\$ 7.6	\$ 6.6	\$ 7.2	\$ 7.6	\$ 7.4	
Change	\$ -	\$ -	\$ 0.1	\$ 0.2	\$ 0.2	\$ 0.5	\$ 0.2	\$ (0.1)	
% Change	0%	0%	2%	3%	2%	7%	2%	-1%	
061/3 Normal (CWU, EWU, WWU, TESC)	\$ 0.1	\$ 0.1	\$ 0.1	\$ 0.1	\$ 0.1	\$ 0.1	\$ 0.1	\$ 0.1	
Change	\$ -	\$ -	\$ (0.0)	\$ -	\$ -	\$ -	\$ -	\$ -	
% Change	0%	0%	-39%	0%	0%	0%	0%	0%	
Other Funds	\$ 0.2	\$ 0.4	\$ 0.1	\$ 0.0	\$ 0.0	\$ 0.3	\$ 0.3	\$ 0.4	
Change	\$ -	\$ -	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	
% Change	0%	0%	9%	11%	7%	4%	4%	0%	
Total Current Funds	\$ 125.0	\$ 106.5	\$ 138.3	\$ 128.8	\$ 124.7	\$ 126.7	\$ 133.3	\$ 138.4	
Change	\$ -	\$ -	\$ 4.5	\$ 3.2	\$ 4.9	\$ 6.2	\$ 1.7	\$ (0.5)	
% Change	0%	0%	3%	3%	4%	5%	1%	0%	

(Continued)

Table 3.2 (Continued): September 2010 Forecast by Fund (In millions of dollars)

Change from June 2010 Forecast 30% RMCA thru FY 11								
Aquatic lands Enhancement Account	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
02R	\$ 11.7	\$ 12.0	\$ 16.8	\$ 17.6	\$ 14.2	\$ 14.2	\$ 14.5	\$ 14.8
Change	\$ -	\$ -	\$ (0.2)	\$ 3.1	\$ 0.4	\$ 0.3	\$ 0.3	\$ 0.2
% Change	0%	0%	-1%	21%	3%	3%	2%	1%
Permanent Funds								
	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
601 Agricultural College Permanent	\$ 4.3	\$ 2.9	\$ 6.1	\$ 3.2	\$ 2.9	\$ 3.5	\$ 3.7	\$ 3.4
Change	\$ -	\$ -	\$ 0.1	\$ 0.7	\$ 0.3	\$ 0.4	\$ 0.2	\$ (0.0)
% Change	0%	0%	2%	30%	12%	13%	6%	0%
604 Normal School Permanent	\$ 3.1	\$ 2.5	\$ 4.0	\$ 2.5	\$ 2.0	\$ 2.5	\$ 2.6	\$ 2.6
Change	\$ -	\$ -	\$ 0.2	\$ (0.0)	\$ (0.7)	\$ 0.2	\$ 0.1	\$ (0.0)
% Change	0%	0%	5%	-2%	-27%	7%	5%	-1%
605 Common School Permanent	\$ 0.2	\$ 0.3	\$ 0.4	\$ 0.5	\$ 0.4	\$ 0.4	\$ 0.4	\$ 0.4
Change	\$ -	\$ -	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
% Change	0%	0%	10%	1%	1%	1%	1%	1%
606 Scientific Permanent	\$ 6.0	\$ 2.8	\$ 5.1	\$ 5.3	\$ 5.1	\$ 6.3	\$ 6.7	\$ 6.5
Change	\$ -	\$ -	\$ 0.0	\$ 0.9	\$ 0.9	\$ 0.5	\$ 0.2	\$ (0.1)
% Change	0%	0%	1%	22%	21%	9%	4%	-1%
607 University Permanent	\$ 0.5	\$ 0.1	\$ 0.7	\$ 0.3	\$ 0.5	\$ 0.4	\$ 0.4	\$ 0.3
Change	\$ -	\$ -	\$ 0.4	\$ (0.1)	\$ 0.1	\$ 0.1	\$ 0.0	\$ (0.0)
% Change	0%	0%	215%	-26%	16%	21%	12%	-2%
Total Permanent Funds	\$ 14.1	\$ 8.6	\$ 16.3	\$ 11.9	\$ 10.9	\$ 13.1	\$ 13.9	\$ 13.3
Change	\$ -	\$ -	\$ 0.8	\$ 1.5	\$ 0.5	\$ 1.2	\$ 0.6	\$ (0.1)
% Change	0%	0%	5%	15%	5%	10%	5%	-1%
Total All Funds								
	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
Total	\$ 210.0	\$ 179.8	\$ 243.1	\$ 227.2	\$ 205.8	\$ 211.7	\$ 222.1	\$ 229.5
Change	\$ -	\$ -	\$ 7.1	\$ 11.9	\$ 7.7	\$ 10.4	\$ 3.6	\$ (0.4)
% Change	0%	0%	3%	6%	4%	5%	2%	0%
Note: Trust land transfer is not included in distribution revenues.								
This table excludes interest and Land Bank transactions, fire assessments, permits, and fees.								
Totals may not add due to rounding.								