



# Texas Taxpayers and Research Association

October 2013

# The Rainy Day Fund Flood: What the Oil and Gas Comeback Means for Texas

In 1988 Texas voters approved the creation of the Economic Stabilization Fund, commonly referred to as the Rainy Day Fund. The fund was designed to smooth out the volatile state tax revenue stream from oil and gas by reserving a portion of future oil and gas severance tax revenues to create a cushion of cash accessible during times of fiscal distress. Few gave the measure much thought-conventional thinking of the day was that the Texas oil and gas industry, once the lion of the Texas economy, was most certainly withering away and the fund would never amount to much. But over the years, in spite of falling oil and gas production and depleting reserves, the fund actually performed well. And today, new technology has awakened the slumbering lion and it roars again. Production is booming, severance taxes are soaring, and even though Texas voters may soon authorize new uses for Rainy Day moneys, the fund is on a path to set new records for deposits and balances, perhaps even reaching its constitutional cap.

Written off for dead a few decades ago, the state's oil and gas industry today faces a resurgent future that will shape economic and tax policy for years to come.

# A Part of Texas Heritage

Since 1901, when Captain Anthony Lucas drilled into a salt dome under Spindletop near Beaumont, oil and gas have been a key part of the definition of Texas. The industry has enjoyed booms and suffered through busts, dragging the state's economy and revenue system with it. Over the Twentieth Century, oil and gas production grew in fits and starts, sparked by new finds and sometimes higher prices, but tempered by occasional price collapses. Gas production peaked in 1972, though a spike in natural gas prices in the mid 2000s sparked a temporary gas resurgence that has since abated as prices have dropped of late. Texas oil production also peaked in 1972, and in spite of some dramatic price swings in the ensuing years, it declined steadily into the early 2000s. Conventional wisdom held that the Texas oil spigot was running dry.

But if there's one sure thing about the Texas oil and gas industry, it is that nothing is ever sure.

Texas' Economic Stabilization, or "Rainy Day," Fund is on a path to set new records for deposits and balances, perhaps even reaching its constitutional cap. Texas oil production is skyrocketing—annual production has doubled since 2005. For an industry once thought near death, the value of oil and gas production in Texas is setting new records: state severance tax collections—based on the value of oil and gas production—set an all-time high in 2013 at just under \$4.5 billion, accounting for almost 10 percent of all state tax collections.

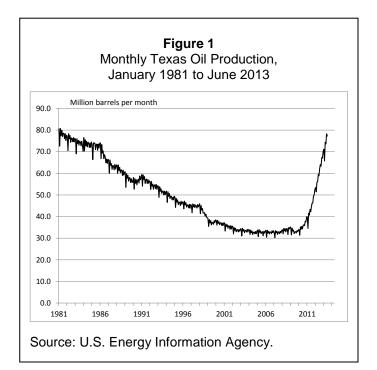
Unlike past booms, the current momentum of the oil and gas industry is not so much based on the prospect of rising prices. Oil prices today are about the same level they were five years ago. Instead the increase in production is based on the application of cost-effective new technologies, and should be sustainable for years to come. Vast new reserves have been found in shale deposits. recoverable through now horizontal drilling and the high pressure injection of water and other fluids—a process commonly

The result is a new boom in drilling-not just in the Barnett, Eagle Ford, and Permian Basin shales in Texas, but Marcellus in Pennsylvania, the Bakken in North Dakota and in several other states and regions. Domestic oil production in the United States, which had been declining steadily since 1970, began to tick upward a few years ago and hasn't looked back. Texas' oil production was over 78 million barrels in May, the highest producing month in over 30 years (Figure production is not yet peaking.

known as hydraulic fracturing, or

"fracking."

The shale boom in Texas started with the successful exploitation of the Barnett Shale around Fort Worth—possibly the largest onshore natural gas field in the United States. Technology gains



## What is Hydraulic Fracturing?

In conventional operations, a well is drilled into fairly porous formations from which oil or gas may freely flow into the well and be brought to the surface. Hydraulic fracturing, or "fracking" is a process used to recover oil and gas in rock formations with very low permeability, such as shale, sandstone, or limestone. A mixture of water, sand and chemicals is injected into the well under high pressure which creates small fractures in the rock. The sand or chemicals enter the fractures and act to prop them open. As the pressure is released, petroleum flows freely into the well so that it may be brought to the surface.

#### What is Horizontal Drilling?

Traditionally, oil and gas wells have been vertical wells drilled straight down into the strata—highly inefficient given that many reserves run horizontally within the strata. As technology improved drillers decades ago learned how to slant or curve a well to a particular direction allowing the recovery of reserves that are not directly below the rig itself. The curve could take as much as 2,000 feet to bend to horizontal, at substantial cost to the driller. With new technology a well can bend 90 degrees in only a few feet, substantially reducing drilling cost and allowing pin-point access into certain reserves.

coupled with rising natural gas prices has led to tremendous new investment over the past decade. More recently, low natural gas prices coupled with the discovery of cheaper reserves elsewhere has tempered the Barnett Boom, though a 2011 study by the Perryman Group estimated the annual economic gains from the Barnett activity were near \$14 billion and 120,000 jobs.<sup>1</sup>

One of the newer fields is the Eagle Ford shale in South Texas—running in a northeasterly line for several hundred miles with San Antonio centered to the north. Currently the most active shale play in the world with over 200 drilling rigs running, most of the increase in Texas oil production over the past few years can be attributed to the Eagle Ford.<sup>2</sup> Containing oil, natural gas, and natural gas liquids (condensate), much of the current focus has been on developing the oil and condensate reserves given the stronger price environment for those products. Recent estimates suggest that South Texas' economy has grown by \$61 billion as a result of petroleum investment, with over 116,000 new jobs in a 20 county area.<sup>3</sup>

Surprisingly, one of the hottest new oil and gas plays in Texas is one of the oldest—the Permian Basin. Since the 1920s the Permian has produced 29 billion barrels of oil and 75 trillion cubic feet of natural gas, but within the Permian are a number of new "plays"—the Wolfcamp, the Spraberry, the Cline and other formations. With new technological improvements, the equivalent of over 50 billion barrels of oil may be recoverable—twice some estimates of the size of the Eagle Ford and more than the amount the region has already produced over the past 90 years. The industry consensus is that Permian Basin oil production will reach 2 million barrels of oil per day within the next five years—a more than doubling of recent production levels.

#### **Fueling the Texas Jobs Recovery**

"The oil well runs deep in the Texas economy." Those words began a Comptroller *Fiscal Notes* article in 1984 and still ring true today. As of July 2013, 288,000 Texans worked for oil and gas and other mining companies. Texas accounts for over half of the nation's oil and gas extraction jobs, and in fact the industry is almost 7 times more prominent in the Texas economy than it is in the national economy. Ten percent of the state's private sector economic output is directly

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marketrealist.com.

<sup>&</sup>lt;sup>1</sup> The Perryman Group, A Decade of Drilling: The Impact of the Barnett Shale on Business Activity in the Surrounding Region and Texas: As Assessment of the First Decade of Extensive Development, Waco, Texas.

<sup>&</sup>lt;sup>2</sup> Eagle Ford Shale Play, www.eaglefordshale.com.

<sup>&</sup>lt;sup>3</sup> Economic Impact of the Eagle Ford Shale, 2013 Update, Center for Community and Business Research, University of Texas at San Antonio, Institute for Economic Development, May 2012.

<sup>4</sup> Ingrid Pan, Introduction to the Permian Basin: Part 6: Resource potential and oil vs. gas split,

<sup>&</sup>lt;sup>5</sup> Deon Daugherty, *Permian Basin on Track to Be Top Shale Oil Producer*, Houston Business Journal, September 13, 2013.

from oil and gas production and development. Further, much of Texas' manufacturing is built around oil and gas—either building the pipe and materials used by drillers, or refining and processing the resources produced. In 2013, Texas was home to 52 Fortune 500 company headquarters; 28 of those were either directly involved in oil and gas, or were major suppliers to the industry.

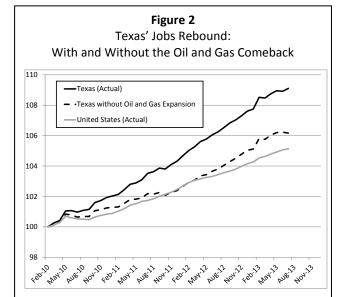
The recent investment in oil and gas has been a huge factor in the Texas recovery.

From January of 2008 through the depths of the recession, the U.S. economy lost 8.7 million jobs over 25 months—a drop of 6.3 percent. Texas entered the recession later, and while the downturn was not as severe, the state was not immune—losing 422,000 jobs over 16 months—a drop of four percent.

The U.S. is still in recovery, roughly 2 million jobs below the pre-recession peak. Texas, on the other hand, sets new jobs records with each passing month, and has regained more

than twice the jobs lost during the recession. Almost one third of this rebound can be attributed to investment in oil and gas. While Texas oil and gas companies have added almost 100,000 direct new jobs—an increase of 49 percent since the bottom of the recession—that figure understates the overall impact on the economy. As they develop new reserves, oil and gas companies must purchase piping, drilling machinery, chemicals, and fuels from manufacturers. Service needs such as engineering, legal, and accounting may be contracted out. Construction crews may be hired to build infrastructure and pipelines. Further, the new hires will need homes, food, and retail items—needs which will spark additional economic activity. The U.S. Bureau of Economic Analysis estimates that each oil and gas job triggers an additional 2.3 jobs in other parts of the economy. That means those new jobs with oil and gas companies have actually helped add over 300,000 new jobs overall.

Absent the tremendous investment in oil and gas, Texas' recovery would have been much less robust—mimicking that of the national economy (Figure 2). It took Texas 22 months to recover the jobs lost during the recent recession; absent oil and gas, it would have taken 50 percent longer—32 months. Still, that is much better than the nation as a whole—42 months after the worst of the recession, the U.S. economy has only recovered about three-fourths of the jobs lost and remains well below the nation's pre-recession peak.



Note: Index value is 100. An index value of 102 indicates job growth of 2 percent from the bottom of the recession.

Source: Texas Taxpayers and Research Association, based on data from the U.S. Bureau of Labor Statistics.

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That does not mean Texas policymakers have simply been passive beneficiaries of their natural resource blessing. Oil and gas extraction is a heavily regulated process, but Texas' regulators' long experience with oil and gas results in an efficient oversight system that makes it possible for the industry to operate safely and cost-effectively in Texas without long delays from red tape, even though the industry is one of the highest taxed in the state's economy today.

#### **Show Me the Money**

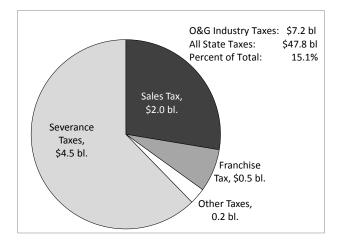
Almost one in every six state tax dollars—\$7.2 billion in 2013—paid into the Treasury is from an oil and gas production or services company.

Texas imposes a severance tax on the production of petroleum resources. Oil is taxed at 4.6 percent of its value, plus producers must pay a regulation tax of 3/16 of a cent on every barrel produced. Natural gas is taxed at 7.5 percent of its value (although producers may qualify for a reduced tax rate if the gas meets certain criteria identifying its recovery as "high cost"). Condensate (a liquid produced from a gas well) is taxed at 4.6 percent. Seventy-five percent of any oil and gas taxes collected in excess of the amount the state collected in 1987 (\$532 million for oil and \$599 million for natural gas) are reserved for the Rainy Day Fund. In 2013, the state collected \$4.5 billion in oil and gas taxes, of which \$2.5 billion will be deposited into the Rainy Day Fund.

Oil and gas operators also must pay a substantial amount of sales taxes. Though they are engaged in production, a large amount of the materials and equipment used are subject to the state sales tax of 6.25%,

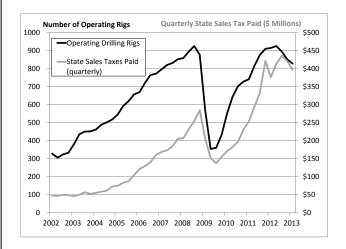
plus any applicable local sales taxes. There is a high correlation between the number of drilling rigs operating and state sales tax paid by the oil and gas industry (Figure 4). On average each drilling rig operating in Texas results in \$1.5 to \$2 million of additional sales taxes paid on an annual basis. San Antonio-based accounting firm Clayton & Clayton estimates that approximately two percent of all drilling costs go to pay sales taxes.

Figure 3
State Taxes Paid by Oil and Gas Production and Services Companies, 2013



Source: Texas Taxpayers and Research Association, based on data from the State Comptroller of Public Accounts.

Figure 4
Oil and Gas Industry Sales Taxes Paid and
Texas Drilling Rigs in Operation



Source: Baker Hughes and the Texas Comptroller of Public Accounts.

Oil and gas companies also account for 11 percent of the Texas franchise tax, paying roughly half a billion dollars of the \$4.8 billion tax.

Local governments are a substantial beneficiary of oil and gas activity particularly certain

Figure 5
Local Property Values for Property Tax Purposes, Selected Counties, 2002 and 2012

County	Oil and Gas Values (\$ ml)		Percent	Percent of Local Tax Base	
	2002	2012	Increase	2002	2012
Johnson	\$ 0.0	\$ 2,059.6	3,224,645%	0%	16%
San Augustine	\$ 1.1	\$ 424.4	39,266%	0%	34%
Dimmit	\$ 26.4	\$ 1,750.2	6,521%	4%	48%
Gonzales	\$ 11.3	\$ 684.2	5,939%	1%	16%
Karnes	\$ 39.3	\$ 2,310.5	5,778%	7%	58%
Tyler	\$ 18.6	\$ 609.2	3,176%	4%	44%
La Salle	\$ 69.7	\$ 1,567.8	2,150%	14%	45%

Source: County Self Reports, Property Tax Assistance Division, Comptroller's Office

school districts and counties. Unlike many states that tax production, Texas property taxes are assessed on reserves in place, as well as on all property used to develop and produce reserves. While overall Texas property values increased 78% over the past ten years, oil and gas property values more than tripled. Due to new production, some counties experienced an astronomical increase in oil and gas property on their tax roll. Oil and gas property now comprises 5.75% of all property value in the state, up from 3.3% in 2002.

Rising oil and gas values for counties, cities and special districts means they can raise more revenue, subject to certain limits. For schools, the increased property values generate additional dollars for enrichment and facilities. For property owners, as the oil and gas industries tax payments rise, overall tax rates may fall—reducing the amount of property taxes they would otherwise pay.

Figure 5 offers a sample of counties with the highest percentage increase in oil and gas property value between 2002 and 2012.

#### From Here, Where?

Most of the oil and condensate shale projects in Texas are indeed price sensitive, but unless prices drop below \$60 a barrel for a sustained period of time, horizontal drilling remains financially viable in the Permian Basin and Eagle Ford. Oil price forecasts for the next several years tend to cluster in a narrow range around the current price near \$100 per barrel. The U.S. Energy Information Agency projects prices for West Texas Intermediate crude over the next two years in the low \$90s, and increasing to \$119 by 2020, with continuing gains in production. The World Bank projects oil prices to be about \$99 over the next two years, then drift slightly down to \$95.80 by 2020. And even those who warn of the potential for a possible sudden price dip below \$50, suggest that a dip would be short in

Almost one in every six tax dollars—\$7.2 billion in 2012— paid into the Treasury is from an oil and gas production or services company.

<sup>&</sup>lt;sup>6</sup> Annual Energy Outlook, U.S. Energy Information Agency, December 5, 2012.

<sup>&</sup>lt;sup>7</sup> Commodity Price Forecast Update, World Bank, Development Prospects Group, July 8, 2013.

duration (as in 2009) and would tend to slow, but not suspend many of the current projects.<sup>8</sup>

The market for natural gas is, well, less fluid. North American markets are largely encapsulated—subject less to global factors and more to simple supply and demand (and currently there is an excess of North American supply). For example, the average price of an mcf (i.e., a thousand cubic feet) of natural gas in Europe in 2012 was \$11.80, but only \$2.90 in the United States—challenging for Texas producers natural gas but tremendous benefit for their customers.9 More recently, North American natural gas prices have rebounded somewhat to near \$4.00, and over the longer term the world price disparity may narrow as more facilities are built for the import/export of liquefied natural gas. Still, with current technology, prices may have to be nearer \$5.00 before drilling for natural gas picks up substantially. The World Bank projects a modest gas price incline through 2020, with prices rising from under \$4.00 to \$5.60 by 2020. The U.S. Energy Information Agency puts gas prices just under \$5.00 by 2020.

Absent a collapse in oil and gas prices, production will most certainly increase. The U.S. Energy Information Agency forecasts a 31 percent increase in domestic oil production from 2011 to 2020 (but notes the possibility that increases could be a much higher 70

percent), <sup>10</sup> a 44 percent increase in condensate production, and a 16 percent increase in natural gas production.

Much of that growth will come from Texas.

#### An Eye to the Future

To assess the impact of continued improvement in the oil and gas industry, a <u>conservative</u> set of assumptions are made:

- Texas Eagle Ford Production continues to rise, but more slowly, to a peak of just under 1.2 mbd per day by 2018
- Texas Permian production increases by 50 percent over the next several years
- Oil prices trade over the next six years in a range drifting downward to \$90 a barrel
- Natural gas production remains flat, but condensate production increases 20 percent by 2020
- Natural gas prices trade over the next six years over a range drifting up to \$4.25 per mcf

**Upside Risks.** These assumptions are more conservative than those of many analysts, who anticipate higher oil and gas prices, as well as higher production levels from the Eagle Ford and Permian Basin areas. The risk of a price spike from Middle East instability is not factored into these projections, nor is increased natural gas production to service new export facilities.

Downside Risks. New regulatory hurdles limiting other environmental hydraulic fracturing, or regulations causing a suspension of or slowing in activities could impact production growth, as could repeal of state tax incentives for natural gas development. The expansion of China's economy is driving additional demand on world markets, and a severe and prolonged Chinese recession could weaken oil prices. The risk of a sharp drop in the price of oil resulting from an expansion of production in the Middle East is not factored in, though the region's ability to "turn on the spigot" is diminishing over time.

<sup>&</sup>lt;sup>8</sup> Leonardo Maugeri, *Oil: The Next Revolution: The Unprecedented Upsurge of Oil Production Capacity and What It Means for the World*, Discussion Paper 2012-10, Belfer Center for Science and International Affairs, Harvard Kennedy School, June 2012.

<sup>&</sup>lt;sup>9</sup> World Bank, ibid.

<sup>&</sup>lt;sup>10</sup> http://www.eia.gov/todayinenergy/detail.cfm?id=11691

Texas Railroad Commissioner Barry Smitherman recently predicted that Texas annual oil production, which has already doubled, could double again by 2016 and triple by the early 2020s. While that projection may (or may not be) optimistic, Eagle Ford production has clearly increased much faster than originally anticipated and is nearing a production rate of 1 million barrels per day. Bentek Energy estimates Eagle Ford oil production could ultimately peak at 1.6 million barrels daily by 2016<sup>11</sup>; DrillingInfo.com estimates that there are at least 85,000 more wells left to drill in the Eagle Ford, and projects production could peak in 2022 at 1.8 million barrels of production daily. Bentek Energy's base case forecast projects Permian oil production to roughly double by 2017, with continued growth anticipated beyond that. <sup>13</sup>

The outlook for natural gas is less certain. Natural gas is expensive to develop, and production from traditional gas wells has been flat or declining in recent years—aided somewhat by tax incentives for high-cost gas. Gas production figures have been propped up somewhat by casinghead gas production—associated gas found in oil deposits and produced from oil wells. Production of condensate, a gas liquid, will continue its upward trend. Absent a strong rebound in natural gas prices though, Texas "dry" gas production may remain fairly flat over the next several years.

Overall, the tremendous investment in oil and gas development in Texas is most certain to continue for years to come. Industry job growth will continue, albeit at a slower rate from current elevated levels, and the corresponding impact on the economy will continue to be sharply positive.

#### The Implications for State Finances

Just as the ramp up in oil and gas has been a blessing for the Texas Treasury during the recession, it should continue to be one for years to come.

With almost any available drilling rig currently in use, sales tax collections from the oil and gas industry are at a very high plateau from which growth over the next several years will be more modest. Industry sales tax payments will indeed rise as new rigs are built and become operational, but the sharp increases in sales tax collections of the past few years are not likely sustainable.

Severance tax revenues, however, will likely set new records with each passing year, as those rigs complete new wells. While shale

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<sup>&</sup>lt;sup>11</sup> Aimee Duffy, Better Know an Energy Play: Eagle Ford, The Motley Fool, December 27, 2012.

<sup>&</sup>lt;sup>12</sup> Jennifer Hiller, *Million Barrel Daily Oil Output in 2014*, San Antonio Express News, September 18, 2013.

<sup>&</sup>lt;sup>13</sup> Rick Van Eyk, Vice President Permian Midstream Strategic Development, Occidental Petroleum, *Permian Basin Overview*, September 12, 2012.

wells, in particular, have relatively sharp production declines in their initial years, the tremendous number of new wells will drive production for years to come. Much of the resulting revenue growth will accrue to the state's Economic Stabilization Fund.

# The Rainy Day Fund Flood

Through 2013, over \$14 billion has been deposited into the fund mostly from natural gas taxes, and most of that during the gas "bubble" of the mid 2000s (Figure 6). Most recently, the tide has shifted with most of fund's deposits coming from oil taxes, as Texas has set a new record for oil severance tax collections in each of the past three years. During its life, in only 5 different years has money failed to flow into the Rainy Day Fund, and last time happened was 13 years ago. Over the last eight vears. the average annual deposit has been almost \$1.4 billion.

### **Origins of the Economic Stabilization Fund**

In 1987, Texas lawmakers faced the continuing fallout from the dual collapse of both the petroleum and the commercial real estate markets. The \$5.7 billion dollar package passed that year remains the biggest in the state's history—even without adjusting for inflation. The then-chair of the Ways and Means Committee, Stan Schlueter, had long noted that Texas state finances were tied to the health of the highly volatile oil and gas industry, sometimes for the better and sometimes for the worse. He proposed an amendment to the Texas Constitution to smooth out that relationship. HJR 2, as introduced, provided that any severance tax revenue collected on the production of oil in excess of a \$15 price per barrel and on natural gas in excess of a \$1.50 price per mcf, be set aside in an Economic Stabilization, or "Rainy Day," Fund.

HJR2, as it finally passed, provided that when either oil or natural gas tax revenues exceed the amount the state collected in 1987, 75 percent of the excess would be set aside in the Economic Stabilization Fund (in addition the fund would receive half of any future unencumbered general revenue balances plus any money the legislature appropriated to the fund). Lawmakers could withdraw money from the fund only with a supermajority vote: three-fifths if the state was either in a deficit or facing falling revenues, and two-thirds at any other time. The fund was capped, however, at ten percent of the amount deposited into the general revenue fund during the previous biennium (a somewhat higher number than the Comptroller's certification revenue estimate).

This mechanism was intended to provide for automatic stability—in times of petroleum prosperity, a portion of those revenues would be set aside, rather than spent. In times of duress, the legislature could tap the savings to smooth over revenue fluctuations rather than having to raise taxes or cut critical programs.

In truth, HJR 2 was not a controversial piece of legislation because many at the time thought the best years of the oil and gas industry were over. The resolution passed the House 141 to 1, the Senate by 30 to 0, and was approved by Texas voters by a 62 percent majority.

With the renewed growth in Texas oil and gas activity, those numbers could be left in the dust. Over the next several years, Texas is on a course to deposit over \$20 billion into the Rainy Day Fund—an average of over \$3 billion annually (Figure 7), setting new records each year—and that is based on a <u>conservative</u> estimate of world petroleum markets and oil and gas activity in the state (see "An Eye to the Future" on page 7). Should annual oil production ultimately triple from today's levels, as Texas Railroad Commissioner Barry Smitherman has opined, annual severance taxes could exceed \$9

Figure 6
A Financial History of the Economic Stabilization Fund (\$ millions)

		Transfers					
			GR Balance			Appropri-	Ending
Year	Gas	Oil	Transfer	Total	Interest	ations	Balance
1990	\$18.5	\$0.0		\$18.5	\$0.8	-	\$19.3
1991	\$7.8	\$0.0		\$7.8	\$1.9	(\$29.0)	\$0.0
1992	\$18.4	\$118.0	\$20.2	\$156.6	\$6.8	-	\$163.4
1993	\$0.0	\$0.0		-	\$7.4	(\$119.0)	\$51.8
1994	\$31.0	\$0.0		\$31.0	\$3.0	(\$56.6)	\$29.2
1995	\$0.0	\$0.0		-	\$0.6	(\$21.5)	\$8.3
1996	\$0.0	\$0.0		-	\$0.4	(\$0.5)	\$8.2
1997	\$0.0	\$0.0		-	\$0.4	-	\$8.6
1998	\$47.5	\$0.0		\$47.5	\$2.3	-	\$58.4
1999	\$17.9	\$0.0		\$17.9	\$3.8	-	\$80.1
2000	\$0.0	\$0.0		-	\$4.7	-	\$84.8
2001	\$103.1	\$0.0		\$103.1	\$8.7	-	\$196.6
2002	\$685.8	\$0.0		\$685.8	\$21.6	-	\$904.0
2003	\$83.6	\$0.0		\$83.6	\$19.4	(\$446.5)	\$560.5
2004	\$352.6	\$0.0		\$352.6	\$5.5	(\$553.0)	\$365.6
2005	\$594.5	\$0.0		\$594.5	\$17.3	(\$970.5)	\$6.9
2006	\$793.0	\$112.1		\$905.0	\$21.5	(\$528.3)	\$405.1
2007	\$1,304.5	\$247.4		\$1,551.9	\$65.8	(\$691.5)	\$1,331.3
2008	\$971.8	\$226.9	\$1,779.8	\$2,978.5	\$136.0	(\$90.5)	\$4,355.3
2009	\$1,563.7	\$678.3		\$2,241.9	\$128.8	(\$0.4)	\$6,725.7
2010	\$606.0	\$263.9		\$869.9	\$97.0	\$0.0	\$7,692.6
2011	\$94.3	\$357.2		\$451.5	\$67.0	(\$3,198.7)	\$5,012.4
2012	\$382.5	\$705.2		\$1,087.6	\$33.3	\$0.0	\$6,133.4
2013	\$701.1	\$1,177.9		\$1,879.0	\$53.0	(\$1,936.2)	\$6,129.2

Note: Interest, appropriations, and ending balance for 2013 are estimated.

billion and deposits to the Rainy Day Fund could top \$6 billion a year. Even if prices drop sharply and ultimately settle near \$60 a barrel, with a corresponding slowdown in production, annual deposits into the Rainy Day Fund would still likely exceed a billion dollars.

Because of the tremendous investment in Texas oil and gas, it appears the Rainy Day Fund likely has a long-term, continuous source of on-going revenue.

#### **Ballot Initiatives Could Impact Fund**

In 2011, Texas faced the prospect of a record budget deficit of \$4.3 billion, coupled with a shortfall going forward of \$27 billion. Lawmakers eliminated that deficit by amending the budget in place to cut spending and tapping the Rainy Day Fund for \$3.2 billion—roughly a third of its projected balance at that time. The sparing use of the fund during the worst national recession since the Great Depression has invited a policy discussion over what is the appropriate balance

Should annual oil production ultimately triple...annual severance taxes could exceed \$9 billion and deposits to the Rainy Day Fund could top \$6 billion a year.

needed—particularly as it nears its allowable limit. Lawmakers evaluated the needs of the state and the opportunity cost of idle balances in the Rainy Day Fund. As a result of those deliberations, Texas voters will get to decide on two Constitutional amendments-one setting aside \$2 billion from the fund for water projects in 2013 and, in 2014, one providing that half of the oil and gas money going into the be instead used fund transportation projects.

The 2013 water initiative would constitutionally authorize and protect a legislative appropriation of \$2 billion to be used to provide loans to local governments for projects in support of the state water plan. This initiative is key to meeting the state's future water needs.

The 2014 highways initiative partially addresses the anticipated cost of expanding the state's transportation infrastructure. If authorized, robust oil and gas revenues would provide a substantial amount of revenue, but not even the most optimistic forecasters would suggest it could meet the \$4 billion that highway planners estimate is needed annually. The highway funding package also establishes legislative oversight of future set-asides for transportation. If the legislature determines that the financial viability of the Rainy Day Fund is in any way threatened, the transfer to highways would be suspended and funds would go to the Rainy Day Fund as under current law.

Should both ballot initiatives fail (Figure 8), the Rainy Day Fund at the end of 2014 will set a new all-time record of \$8.7 billion at the end of 2014, eclipsing the previous mark of \$7.7 billion at the end of 2010.

Figure 7
The Outlook for Severance Taxes and the Rainy Day Fund

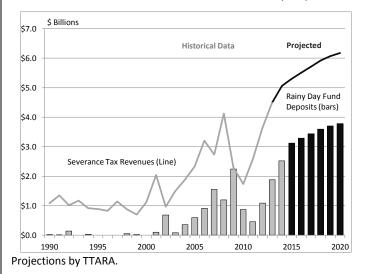


Figure 8

The Outlook for Severance Taxes and the Rainy Day Fund,
No Constitutional Amendments Pass (\$ billions)

Year	Severance	Rainy Day	RDF Year	Fund Cap
	Taxes	Set-Aside	End Balance	
2014	\$5.1	\$2.5	\$8.7	\$14.4
2015	\$5.3	\$2.9	\$11.8	\$14.4
2016	\$5.5	\$3.1	\$15.1	\$16.1
2017	\$5.7	\$3.3*	\$16.1	\$16.1
2018	\$5.9	\$3.4*	\$18.0	\$18.0
2019	\$6.1	\$3.6*	\$18.0	\$18.0
2020	\$6.2	\$3.7*	\$20.2	\$20.2

<sup>\*</sup> Actual transfer would be reduced because the fund would be at its constitutional limit. Approximately \$8.9 billion would be retained in the state's general revenue fund because of the cap on the Rainy Day Fund. Set-aside is from prior year tax.

Figure 9
The Outlook for Severance Taxes and the Rainy Day Fund,
Both Constitutional Amendments Pass (\$ billions)

Year	Severance	Highway	Rainy Day	Year End	Fund
	Taxes	Share	Share	Balance	Cap
2014	\$5.1	\$0.0	\$2.5	\$6.7	\$14.4
2015	\$5.3	\$1.5	\$1.5	\$8.2	\$14.4
2016	\$5.5	\$1.6	\$1.6	\$9.9	\$16.1
2017	\$5.7	\$1.6	\$1.6	\$11.6	\$16.1
2018	\$5.9	\$1.7	\$1.7	\$13.4	\$18.0
2019	\$6.1	\$1.8	\$1.8	\$15.3	\$18.0
2020	\$6.2	\$1.9	\$1.9	\$17.3	\$20.2

Under current conditions the balance would continue to grow, and in 2017 would hit the constitutional cap of 10 percent of the amount deposited into the General Revenue Fund in the previous biennium.

Should voters approve both initiatives (Figure 9), the fund would continue to grow, still setting new records, but at a somewhat slower pace. A new ending cash balance record would be set in 2015, and every year thereafter. The fund would be near, but somewhat under its constitutional cap by 2020, but would likely hit it soon thereafter.

#### **Conclusions: The Future Bodes Well**

The Texas oil and gas industry is vibrant, and is pulling along with it both the Texas economy and the Texas State Treasury—particularly the Economic Stabilization, or "Rainy Day," Fund.

While the Legislature is asking Texas voters to weigh in on using some portion of the fund or its revenues to help fund the state's infrastructure needs, those additional uses should not threaten its financial vitality.

Thanks to the burgeoning investment in Texas oil and gas, the Texas Rainy Day Fund is well on its way to its constitutional limit. The only question is how soon it will get there.