## Wyoming State Government Revenue Forecast Fiscal Year 2018 – Fiscal Year 2022



Mineral Price and Production Estimates General Fund Revenues Severance Taxes Federal Mineral Royalties Common School Land Income Account Total State Assessed Valuation

# **Consensus Revenue Estimating Group CREG**

October 2017

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- From: Don Richards, Co-Chairman Alex Kean, Co-Chairman
- **Date:** October 24, 2017

Subject: Wyoming Revenue Forecast

The Consensus Revenue Estimating Group (CREG) met on October 5, 2017. This meeting was preceded by the minerals valuation group meeting on September 26, 2017. The attached report resulting from those meetings provides the revenue forecasts for fiscal years (FY) 2018 through 2022 and summarizes the assumptions supporting those forecasts. Final, actual revenue information for FY 2017 is incorporated in the tables presented in this report and in the accompanying fiscal profile prepared by the Budget and Fiscal section of the Legislative Service Office (LSO).

This cover memo summarizes the impact of the revenue forecast changes on profiled funds for the remainder of the FY 2017-2018 biennium and the FY 2019-2020 biennium. Detailed explanations of the forecast revenue streams are in the attached CREG report and associated tables.

### 1. TRADITIONAL STATE ACCOUNTS

The October 2017 CREG report increases projected revenues directed to the General Fund (GF) and Budget Reserve Account (BRA) by \$140.8 million over the next three fiscal years (the remainder of the current FY 2017-2018 biennium and the FY 2019-2020 biennium). Additionally, revenues directed to the GF, BRA, and the One Percent Severance Tax Account (OPSTA) exceeded projections for FY 2017 by \$244.3 million, of which \$140.1 million is exclusively attributable to realized capital gains from the Permanent Wyoming Mineral Trust Fund (PWMTF), which were anticipated but not projected. Table A summarizes the net changes to the revenue forecast for the GF and BRA.

Table A. Changes to Estimated Revenue for the GF and BRA as Compared to the January
2017 CREG Report

Account	FY 2018	FY 2019	FY 2020	Total
GF	\$34.5 million	\$21.3 million	\$23.9 million	\$79.7 million
BRA	\$19.9 million	\$19.1 million	\$22.1 million	\$61.1 million
GF & BRA	\$54.4 million	\$40.4 million	\$46.0 million	\$140.8 million

Table B shows actual and forecast revenue totals for the prior, existing, and upcoming biennium.

Table B. Comparison of Blennial Revenues, by Blennium						
Account	2015-2016	2017-2018 est.	2019-2020 est.			
General Fund	\$2.510 billion	\$2.235 billion	\$1.991 billion			
BRA	\$0.834 billion	\$0.725 billion	\$0.665 billion			
Total	\$3.344 billion	\$2.960 billion	\$2.656 billion			

 Table B. Comparison of Biennial Revenues, by Biennium<sup>1</sup>

### Actual FY 2017 General Fund and Budget Reserve Account Revenues

The actual FY 2017 GF revenues exceeded the January 2017 CREG forecast by \$160.5 million, and the actual BRA revenues exceeded the forecast by \$76.8 million. For the GF, investment income, largely from realized capital gains accounted for the vast majority (85.3%) of the difference between the January 2017 forecast and the actual collected revenues. Furthermore, \$132.9 million of the GF revenues attributable to investment earnings has been divided, pursuant to the statutory spending policy, between the LSRA and a range of one-time conditional appropriations. (W.S. 9-4-719 and 2016 Wyoming Session Laws, Chapter 97, Section 7 and 2017 Wyoming Session Laws, Chapter 78, Section 1(e)) As a result, only \$27.6 million of the revenue in excess of FY 2017 projections for the General Fund will remain in the fund. However, application of the State Treasurer's 2009 interpretative policy results in \$10.7 million in realized capital losses in the GF being held as a liability against the cash balance in the General Fund, further reducing the cash available in excess of forecast in the GF to \$16.9 million. The investment income from the PWMTF in excess of the first 2.5 percent of the five-year average market value will be distributed: State health facilities (\$24.3 million); Ludden library (\$2.5 million); University science initiative (\$24.4 million); Casper state facility (\$12 million); and Capitol building rehabilitation and restoration account (\$7.5 million). Additionally, \$62.15 million will be deposited into the Legislative Stabilization Reserve Account (LSRA).

The primary contributor to the outperformance in the BRA was the state share of a single February federal oil and gas lease sale, which generated a bonus payment of approximately \$59 million for Wyoming, two-thirds of which is deposited into the BRA and one-third of which is deposited into the School Foundation Program account (SFP).

Most major revenue categories for the GF ended FY 2017 ahead of January 2017 CREG projections. GF revenue streams that exceeded projections as well as the amount and percentage by which projections were exceeded are: sales and use taxes (\$2.3 million, or 0.6%), PWMTF investment income (\$133 million, or 80.2%), Pooled income (\$4 million, or 4.8%), severance taxes (\$7.6 million, or 4.8%), charges for sales and service (\$8.5 million, or 18.5%), franchise

<sup>&</sup>lt;sup>1</sup> Capital gains distributed to the General Fund totaled \$339.9 million in FY 2015-2016 and \$140.1 million in FY 2017.

taxes (\$1.9 million, or 5.8%), and all other revenue (e.g., licenses and fees, money use fees, etc.) exceeded the January 2017 projections. Penalties and interest (-\$1.9 million, or -29.5%) fell shy of the January 2017 projection.

### FY 2017-2018 Biennium General Fund Revenue Forecast Comparisons

Including the actual revenues collected in FY 2017 and the projections within the October 2017 CREG report, the GF revenue forecast for the FY 2017-2018 biennium was increased by \$195.0 million from the January 2017 report, with \$160.5 million (82.3%) attributable to actual revenues received in FY 2017. Realized capital gains in FY 2017 account for the largest share of this increase. CREG also increased the forecasts for severance taxes, sales and use taxes, investment income from both the PWMTF and pooled income, and revenues in the "all other" category by varying amounts. Table C illustrates the difference in revenue forecast levels by major category:

Revenue Source	January 2017 Forecast FY 2017-2018 Biennium	October 2017 Forecast FY 2017-2018 Biennium*	Difference
Sales and Use Tax	\$825.0 M	\$836.7 M	\$11.7 M
Severance Tax	\$323.0 M	\$332.6 M	\$9.6 M
Investment Income	\$491.8 M	\$643.0 M	\$151.2 M
All Other	\$400.6 M	\$423.2 M	\$22.6 M
Total General Fund	\$2,040.4 M	\$2,235.4 M	\$195.0 M

Table C. FY 2017-2018 Biennium General Fund Revenue Forecast Comparison

\*Totals may not add due to rounding.

### FY 2017-2018 Biennium Budget Reserve Account Revenue Forecast Comparisons

Within the October 2017 forecast of FY 2017-2018 biennial revenue, the CREG report includes increased forecast revenue directed to the BRA of \$19.1 million in severance taxes and \$77.6 million in FMRs. The changes to the BRA account are summarized in Table D.

Table D. FY	2017-2018	Biennium	Budget	Reserve	Account	(BRA)	Revenue	Forecast
Comparison								

<b>D</b>	January 2017 Forecast FY 2017-2018	October 2017 Forecast FY 2017-2018	Diff
Revenue Source	Biennium	Biennium	Difference
Severance Tax	\$233.3 M	\$252.4 M	\$19.1 M
Fed. Min. Royalty	\$395.3 M	\$472.9 M	\$77.6 M
Total BRA	\$628.6 M	\$725.3 M	\$96.7 M

# Bottom Line: FY 2017-2018 Biennium GF/BRA and Legislative Stabilization Reserve Account (LSRA) Balances

For the FY 2017-2018 biennium, projected GF/BRA combined revenues plus the \$36 million transfer from the LSRA (2016 Wyoming Session Laws, Chapter 31, Section 300(c)) and beginning cash balances and received reversions minus appropriations and FY 2017 realized capital losses to Cover memo page iii

the GF share of the SAP yields a shortfall of \$96.7 million after fully funding the \$104.55 million statutory reserve amount for FY 2017-2018. The Legislature has addressed this shortfall through a loan from the OPSTA and contingent transfers from the LSRA. As a result of the revisions contained within the October 2017 CREG forecast, the anticipated amount needed to be transferred from the LSRA provided by the 2017 Supplemental Budget Bill (2017 Wyoming Session Laws, Chapter 120, Section 300(k)) has been reduced from \$56,552,772 as of the end of the 2017 General Session to \$0. Furthermore, the full maximum amount of the projected loan from the OPSTA (2016 Wyoming Session Laws, Chapter 31, Section 322) has been reduced from \$168.5 million to \$96.7 million. Net of upward revisions of severance tax projections to be deposited into the OPSTA during the FY 2017-2018 biennium and accounting for the loan to the BRA, there is a projected available balance in the OPSTA of \$80.3 million.

The following table provides a condensed accounting and projected ending balances of the GF, BRA, OPSTA, and LSRA as of June 30, 2018, under the October 2017 CREG forecasted revenue levels.

 Table E. FY 2017-2018 Biennium Projected Funds Available in Traditional Accounts

Projected LSRA Balance as of June 30, 2018 – Oct. 2017 CREG	<u>\$1,600.6 M</u>
Projected GF Balance as of June 30, 2018 – Oct. 2017 CREG	<u>\$0.0 M</u>
Projected BRA Balance as of June 30, 2018 – Oct. 2017 CREG	<u>\$104.6 M</u>
Projected OPSTA Balance as of June 30, 2018 – Oct. 2017 CREG	<u>\$80.3 M</u>

### FY 2019-2020 Biennium General Fund Revenue Forecast Comparisons

Within the October 2017 CREG report, the GF revenue forecast for the FY 2019-2020 biennium was increased by \$45.2 million from the January 2017 report. The primary revenue sources with increased projections include charges for sales and service (\$17.0 million); severance taxes (\$10.4 million); PWMTF and Pooled interest and dividends (\$9.9 million); sales and use taxes (\$7.7 million); franchise taxes and other revenue (\$4.0 million). These increases were offset, in small part, by declines in projected penalties and interest. Table F illustrates the difference in revenue forecast levels by major revenue category.

### Table F. FY 2019-2020 Biennium General Fund Revenue Forecast Comparison

	January 2017October 2017ForecastForecastFY 2019-2020FY 2019-2020							
<b>Revenue Source</b>	Biennium	Biennium	Difference					
Sales and Use Tax	\$ 857.3 M	\$865.0 M	\$7.7 M					
Severance Tax	\$ 309.7 M	\$320.1 M	\$10.4 M					
Investment Income	\$ 498.7 M	\$508.6 M	\$9.9 M					
All Other	\$ 280.4 M	\$297.6 M	\$17.2 M					
<b>Total General Fund</b>	\$1,946.1 M	\$1,991.3 M	\$45.2 M					

On a fiscal year basis, the FY 2019 GF revenue forecast increased from January 2017 levels by a total of \$21.3 million, while the FY 2020 GF revenue projection increased by \$23.9 million.

### FY 2019-2020 Biennium Budget Reserve Account Revenue Forecast Comparisons

Within the October 2017 CREG Report, the BRA revenue forecast for the FY 2019-2020 biennium increased by \$20.8 million in severance taxes and \$20.4 million in FMRs. The changes are summarized in Table G.

Table G. FY	2019-2020	Biennium	Budget	Reserve	Account	(BRA)	Revenue	Forecast
Comparison								

Revenue Source	January 2017 Forecast FY 2019-2020 Biennium	October 2017 Forecast FY 2019-2020 Biennium	Difference
Severance Tax	\$ 233.4 M	\$254.2 M	\$20.8 M
Fed. Min. Royalty	\$ 390.5 M	\$410.9 M	\$20.4 M
Total BRA	\$ 623.9 M	\$665.1 M	\$41.2 M

### 2. PROFILED EDUCATION ACCOUNTS:

Over the next three fiscal years, FY 2018 - 2020, forecast education revenues directed to the state's profiled education accounts, including revenues not directly projected by CREG, have been increased by a net \$64.6 million. Investment income projections increased by \$69.5 million since the January 2017 CREG report. However, these increases have already been profiled, in part, in the March 21, 2017 LSO Fiscal Profile as they were at least partially attributable to legislation adopted in the 2017 General Session that provides for guaranteeing, or backfilling, investment income up to five percent of the five-year market average of the Common School Permanent Land Fund (CSPLF) from the Common School Permanent Land Fund Reserve Account to the extent that funds are available, not a change to the CREG projection. (2017 Wyoming Session Laws, Chapter 206) Additionally, estimated FMR receipts to the SFP increased by \$18.2 million, and increases in state land income, specifically projected oil and gas lease bonus income accounted for an upward revision of \$10.0 million. Offsetting these increases are estimated declines in recapture payments of \$26.9 million and 12-mill levy revenue of \$4.0 million due to lower anticipated assessed values, and \$2.2 million decline in other SFP account projected revenues not projected by CREG.

In addition, in FY 2017, the SFP account and School Capital Construction Account (SCCA) received \$74.8 million of revenue in excess of the prior projections. Of this amount, \$30.9 million is attributable to FMRs, specifically, the large oil and gas lease sale in February 2017, and \$26.4 million is attributable to fees and leases on State trust lands, specifically a large oil and gas lease sale in March 2017. The changes to the revenue forecast in future years as compared to January 2017 are summarized in Table H. In addition, Table I shows the actual and projected revenue for the SFP and SCCA from the 2015-2016 biennium through the 2019- 2020 biennium. (*Note: These tables summarize all revenues directed to the SFP and SCCA, not simply those forecast by CREG.*)

 Table H. Changes to Estimated Revenues, not limited to CREG projected revenues, for the SFP and SCCA as Compared to the January 2017

Account	FY 2018	FY 2019	FY 2020	Total
SFP	\$75.9 million	\$10.4 million	(\$21.7) million	\$64.6 million
SCCA	No change	No change	No change	No change
SFP & SCCA	\$75.9 million	\$10.4 million	(\$21.7) million	\$64.6 million

Table I. Comparison of Biennial Revenues, by Biennium

Account 2015-2016		2017-2018 est.	2019-2020 est.
SFP	\$1.802 billion	\$1.478 billion	\$1.285 billion
SCCA	\$0.453 billion	\$0.148 billion	\$0.027 billion
SFP & SCCA	\$2.255 billion	\$1.626 billion	\$1.312 billion

### <u>Revenue Estimate Changes to the School Foundation Program/School Capital Construction</u> <u>Accounts</u>

Actual FMRs initially directed to the SFP in FY 2017 were \$215.5 million, \$30.9 million more than expected without regard to statutorily required swaps between investment income and FMRs. Additionally, actual investment earnings from the Common School Permanent Land Fund (CSPLF) were \$154.9 million (\$3.2 million less than January 2017 CREG projections from interest and dividends and \$68.3 million from realized capital gains). Of the FY 2017 investment income in excess of projection, \$59.9 million was deposited into the School Permanent Land Fund Spending Policy Reserve Account. No funds were deposited into the Common School Permanent Land Fund Fund Fund Fund corpus.

The October 2017 CREG report increases the forecast of FMRs for FY 2017-2018 directed to the SFP by \$38.9 million, and projections of FMRs for FY 2019-2020 directed to the SFP were increased by \$10.2 million.

The changes in actual and estimated FMR revenues, combined with assessed valuation estimated changes and other funding model component changes incorporated by LSO and associated with this forecast result in an expected ending balance in the SFP account on June 30, 2018, of \$255.3 million. The ending balance for the SCCA on June 30, 2018, is projected to be \$370,000. The ending balance for the School Foundation Program Reserve Account on June 30, 2018, is projected to be \$159.9 million.

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## **Section 1 – Mineral Price and Production Estimates**

The CREG projection of severance tax collections over the forecast period, which encompasses FY 2018 through FY 2022, calls for stabilization of revenue collections and even some areas of modest increases from levels forecast in January 2017. Over the forecast period, severance tax collections and federal mineral royalty (FMR) receipts are not projected to return to levels experienced between FY 2005 and FY 2015. The October 2017 forecast reverses CREG's position on oil production, projecting flat to small increases, as opposed to previously forecast declines. Natural gas production is estimated to continue its downward trend, though at a somewhat steeper rate of decline than previously forecast. Overall, the October 2017 CREG report forecasts higher production of coal in each of the projected years compared to the January 2017 report; however, CREG continues to project an overall decline in coal production, year-over-year, due to closure and planned closure of coal-fired electric generation facilities, competition from other energy sources, and compliance with regulations.

The assumptions set forth in this first section carry through the remainder of the report. For specific forecast assumptions, please refer to the individual subsection for each mineral contained within this section of the report. Table 3, found within the appendix, summarizes the price and production forecast levels of the individual major minerals: oil, natural gas, surface coal, and trona.

### Oil:

Wyoming oil production in calendar year (CY) 2015 recorded its highest level since CY 1993, according to Wyoming Oil and Gas Conservation Commission data. Just one year later, in CY 2016, oil production declined 13.9 million barrels (bbls) or 16.1 percent. Buoyed by rig counts averaging over 11 oil rigs from January 2017 through September 2017, as opposed to an average of less than 4 for the same period in 2016, oil production is on pace to be comparable to CY 2016. In other words, the production decline experienced in CY 2016 should not be repeated. At least for the near-term, new oil production and naturally-occurring well depletions in Wyoming are offsetting each other resulting in stable production.

In terms of the pricing environment, average Wyoming oil prices for the first six months of CY 2017, were \$45.23/bbl, compared to the January CREG forecast of \$45/bbl. As a result, and after considering futures markets, investment house estimates and other government oil price projections, CREG left price estimates for CY 2017 unchanged. As a positive for Wyoming's oil producers, the average price of Wyoming oil as compared to the price of West Texas Intermediate crude oil (WTI) has benefited from a narrowed price differential to approximately \$4/bbl, as compared to \$10/bbl to \$13/bbl from CY 2012 to CY 2015. This narrowed differential is in part due to lower overall prices but also the quality of Wyoming's new oil production. Broadly speaking, prices for WTI are generally anticipated by futures markets and many external forecasters to be confined within the \$40/bbl to \$60/bbl range. CREG forecasts do not enjoy such a broad range provided by some external forecasters. The October 2017 CREG forecast does not revise any of the projected oil prices for CY 2017 through CY 2020, but CREG

increased the projected price per barrel by \$2 in CY 2021 and CY 2022 in order to signal a potential for upward bias in the prices for out-years.

As has been stated in prior CREG reports, Wyoming's fossil fuels are not resource constrained. In particular with this year's oil forecast, production is seen by CREG as dependent upon price. In the event of a price increase beyond CREG's forecast to \$60/bbl or higher, substantial increase in oil production, not unlike the robust growth experienced in CY 2015, is a possibility. However, to be consistent with the pricing outlook, the CREG forecast for production ranges from 71 million barrels to 73.8 million barrels, per year, throughout the forecast period. Put differently, new production is seen as slightly more than offsetting natural depletion.

From a forecasting perspective, this flat to modestly increasing production may appear muted. In fact, it is the single largest revision to the CREG forecast when comparing the January 2017 and October 2017 reports. As recently as January 2017, CREG projected continued oil production declines to the 62 million barrel range. A move to flat to modest production increases is overall positive for purposes of severance tax collections, federal mineral royalty payments, assessed valuations, sales and use tax collections, and even the prospect of occasional bonus payments from federal and state lease sales. A reversal from a negative outlook to stable or slightly improving outlook provides restrained optimism in the overall outlook for State revenues.

Technological advances, opportunities to access newly discovered resources, and strong initial rates of production all contributed to the recent growth in Wyoming oil production. The efficiency and technology developments in the oil (and gas) sector merit acknowledgement. As demonstrated by recent production data, it takes far fewer days, and therefore fewer rigs, to generate production increases. Horizontal drilling techniques and the science and technology behind fracturing different formations has, and CREG believes will, benefit Wyoming oil production into the future. Wyoming was not the only location to benefit from these advances, and the exceptional increases in national oil production, without offsets elsewhere, have resulted in a negative effect on oil prices due to a prolonged supply-demand imbalance.

The enthusiasm and potential for future Wyoming oil production increases can be evidenced by the robust growth in applications for permits to drill (APDs), sales and use tax collections in the mining sector over the summer months of 2017, and the level of bonus bids from recent auctions. Notwithstanding this enthusiasm, CREG recognizes the price determinates of a world market, supply and demand pressures, geopolitical tensions, the impact of OPEC action, and the responsiveness of U.S. shale producers. In this price determinative environment, only modest year-over-year Wyoming oil production growth is forecast, until a sustained improvement of oil price becomes evident. Unless and until oil demand and supply rebalance, leading to a higher price level, CREG does not anticipate oil production in Wyoming to increase much beyond the natural declines. National and international developments, including adherence to output constraints, could serve to change this price-dependent outlook.

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Calendar Year	January 2017 Forecast	October 2017 Forecast							
2017	67.0 M bbls. / \$45.00	71.0 M bbls. / \$45.00							
2018	62.0 M bbls. / \$45.00	71.0 M bbls. / \$45.00							
2019	62.0 M bbls. / \$50.00	71.7 M bbls. / \$50.00							
2020	62.0 M bbls. / \$50.00	72.4 M bbls. / \$50.00							
2021	62.0 M bbls. / \$50.00	73.1 M bbls. / \$52.00							
2022	62.0 M bbls. / \$50.00	73.8 M bbls. / \$52.00							

Comparison of Oil Production and Price Forecasts: bbls. and \$/bbl.

### Natural Gas and Coal Bed Methane:

Wyoming natural gas production, according to the Oil and Gas Conservation Commission, declined 6.9 percent in CY 2016, and is down another 8 percent in the first six months of CY 2017, despite a nearly doubling of natural gas rigs in operation in Wyoming from an annualized average of 5.9 in CY 2016 (January through September). Given declining natural gas production trends in six of the last seven years, CREG maintains the forecast of continued declines in production through CY 2022. Specifically, the forecast assumes year-over-year reductions of 6.4 percent in CY 2017, 2.5 percent annual reductions for CY 2018 through CY 2020, and 2.0 percent reductions for the balance of the forecast period (CY 2021 and CY 2022). Consistent with the trends of recent years, declining production in many of Wyoming's primary natural gas basins and a significant reduction in coal bed methane production are not being offset by new production in a substantial fashion. Given the available volumes of recoverable natural gas in other states, in particular Appalachian states, it is not anticipated that significant new production will come on-line in Wyoming without an appreciable and sustained increase in price, not presently forecast by CREG, at least in a broad sense. On the other hand, new oil production replacing depleting wells will offset some of the declines in natural gas through the associated gas volumes. Additionally, the steep declines in coal bed methane are likely to flatten as a majority of the volumes have already been eliminated from production. Finally, there is renewed investment, as evidenced by the rig count increase in some areas of the State, including operations under new ownership that may have interest in bolstering production where possible. In summary, while CREG anticipates the overall declining production trend to continue, the steepness of the production decline curve is anticipated to eventually be more gradual than experienced in the last 18 months.

The CY 2016 average price received for Wyoming's full natural gas stream (including liquids) was \$2.51/mcf, just a penny higher than the CREG estimate for that period. Wyoming natural gas prices from January 2017 through June 2017 averaged \$3.18/mcf, or \$0.18/mcf higher than the January 2017 estimate. Given the comparative weakness of the natural gas markets of the last three months, as compared to the first six months of CY 2017, CREG is not adjusting its forecast of \$3.00/mcf for the calendar year at this time. The forecast calls for modest increases in the out-years beyond \$3.00/mcf. Nonetheless, the overall outlook for natural gas prices, particularly given exports to Mexico and liquefied natural gas (LNG), CREG is modestly increasing its projected natural gas price toward the end of the projection period.

Calendar Year	January 2017 Forecast	October 2017 Forecast
2017	1.813 Tcf / \$3.00	1.730 Tcf / \$3.00
2018	1.777 Tcf / \$3.10	1.687 Tcf / \$3.10
2019	1.741 Tcf / \$3.10	1.645 Tcf / \$3.10
2020	1.706 Tcf / \$3.10	1.604 Tcf / \$3.15
2021	1.672 Tcf / \$3.20	1.572 Tcf / \$3.25
2022	1.639 Tcf / \$3.25	1.541 Tcf / \$3.25

**Comparison of Natural Gas Production and Price Forecasts:** 

## Coal:

Wyoming surface coal production declined by 76.8 million tons, or 20.6 percent, in CY 2016. The abrupt and severe decline in Wyoming's surface coal production in CY 2016 was unprecedented. Surface coal production in Wyoming declined by 31.8 percent, year-over-year for the first six months of CY 2016. Coal production in CY 2017 has arrested its decline and, for the first six months of CY 2017 is ahead of CY 2016 levels by 26.5 million tons, or 21.2 percent. However, these gains are coming off multi-year low production levels. While the first six months' production is on pace to achieve 302 million tons, the second half of the year appears to be even stronger based upon federal data. As a result, CREG's forecast for CY 2017 total production is 320 million tons.

Several factors influence the demand for Wyoming coal. For example, competition from natural gas continues to reduce demand for coal used for electrical generation at lower prices. Additionally, new U.S. coal-fired power plants are not being built currently, and more than a dozen electric plants consuming Wyoming coal have closed electric generation units. Electrical generation operators have announced plans to close additional units over the five–year forecast period. New electric generation in the U.S. uses either renewable feedstocks (solar or wind) or natural gas. Headwinds continue to face Wyoming coal, including increased competition and fuel switching for new and existing power plants as well as federal environmental regulations. In the near-term, the price of natural gas and availability of renewable electric generation options will substantially influence the level of coal-to-natural gas switching for purposes of electricity generation.

Given the cost-competitive nature of Wyoming's low-sulfur coal, initial coal production declines were borne disproportionately by Wyoming's competitors. More recently, announced plant closures have included Wyoming coal customers. As stated in previous CREG reports, in the absence of new energy demand, facilities or exports, total coal demand will be suppressed. Although CREG does not include any major breakthroughs to the outlook for Wyoming coal in its projections, Wyoming's cost-competitive, clean coal would benefit from any demand increase, significant new export opportunities, or technological breakthroughs enhancing the emissions or products for coal.

Under the current federal regulatory positioning, CREG continues its practice of not incorporating any positive or negative developments until such time as they become fairly settled. To wit, CREG acknowledges the potential of new market growth from increased exports of Wyoming coal, especially to Asia; however, in the absence of action on this prospect, the potential production impacts have not been incorporated. Likewise, federal regulatory mandates on emissions appear unsettled, and even under a clear outlook, actionable requirements do not occur until outside of the projection period.

Given recent federal Energy Information Administration data and historic seasonality of coal production, CREG has increased its CY 2017 surface coal production forecast by 10 million tons to 320 million tons. Given this rebound, and while CREG continues to forecast a decline in Wyoming surface coal production, the rate of production decline has been tempered. This improved outlook is also consistent with CREG's price forecast of natural gas, a chief competitor to Wyoming's surface coal for electric generation purposes. This forecast also takes into account a more favorable federal regulatory climate for coal consumption. Nonetheless, the CREG forecast continues to decline over the projection period, after considering the announced plant closures. In general, weather events, natural gas markets, rebuilding stockpiles, and other factors could impact Wyoming's coal production. However, given known information from existing consumers of Wyoming coal, the overall outlook is a modestly diminished trend line for production, absent an exogenous event such as export opportunities, technological development, or similar event.

In terms of pricing, the spot market price of Powder River Basin coal declined from more than \$12.20/ton average for CY 2014 to approximately \$8.60/ton last fall. Spot coal prices have rebounded to average north of \$11.50/ton in the summer and early fall of CY 2017. While the average price for Wyoming surface coal in CY 2016 was \$13.27, or \$0.02 higher than the CREG projection, the prices received for Wyoming surface coal in CY 2017 through June average \$12.87/ton - \$0.38/ton under the forecast. Recognizing this decline, CREG reduced its outlook for surface coal prices to \$12.75/ton for the next three years and adopted a further reduction to \$12.50/ton thereafter. Acknowledging that the vast majority of Wyoming coal is currently bought and sold through longer term contracts, spot market data provides an indicator to assess potential pricing trends within the overall market. Nonetheless, as higher priced, longer term contracts are re-negotiated, including for plants with a planned end-of-life, the contracts' agreed upon prices for Wyoming surface coal may be challenged to reach the levels experienced in the past several years. The specific price and production forecast for Wyoming surface coal is illustrated below.

Comparison of Surface Court Fronteenen and Frice Forecusts: tons and \$7.00									
Calendar Year	January 2017 Forecast	October 2017 Forecast							
2017	310 M tons / \$13.25	320 M tons / \$12.75							
2018	295 M tons / \$13.25	310 M tons / \$12.75							
2019	280 M tons / \$13.25	310 M tons / \$12.75							
2020	280 M tons / \$13.25	300 M tons / \$12.50							
2021	275 M tons / \$13.25	300 M tons / \$12.50							
2022	275 M tons / \$13.25	290 M tons / \$12.50							

### Comparison of Surface Coal Production and Price Forecasts: tons and \$/ton

## Trona:

With the largest natural trona deposit in the world, Wyoming's production is driven by demand, not resource availability. Trona production is historically responsive to overall global gross domestic product. Trona prices are responsive to changes in demand and affected by prices required to produce synthetic trona and volumes of synthetic trona sold. The January 2017 CREG projection for price was \$75.00 per ton for each year throughout the projection period, while the average computed Wyoming realized price was \$74.41 for FY 2017. The projected production for FY 2017 was 20.25 million tons and actual production, according to the Department of Revenue, ended FY 2017 at just over 21 million tons. Both price and production estimates were in-line with actual results for both CY 2016 and FY 2017. Year-to-date production through the first six months of CY 2017 is exactly on pace to reach 20.5 million tons of taxable production, while the average price is falling short of the projection by a modest 1.5 percent. The price of trona has not been nearly as volatile as oil and gas prices historically. Given the recent history of production, CREG has left the forecast unchanged, anticipating modest production growth over the projection period. Likewise, as the forecast price is just slightly over the actual computed price, the forecast price of \$75 per ton is also left unchanged over the projection period.

Calendar Year	January 2017 Forecast	October 2017 Forecast
2017	20.5 M tons / \$75.00	20.5 M tons / \$75.00
2018	21.0 M tons / \$75.00	21.0 M tons / \$75.00
2019	21.0 M tons / \$75.00	21.0 M tons / \$75.00
2020	21.0 M tons / \$75.00	21.0 M tons / \$75.00
2021	21.5 M tons / \$75.00	21.5 M tons / \$75.00
2022	21.5 M tons / \$75.00	21.5 M tons / \$75.00

Comparison of Trona Production and Price Forecasts: tons and \$/ton

## Uranium and Other Minerals:

Since the negative market outlook stemming from the tsunami that struck Fukushima's nuclear reactors in March 2011, uranium producers have yet to see a rebound in prices. Wyoming uranium production for CY 2016 (1.85 million pounds) has declined in recent years from 3.4 million pounds in CY 2014 and 2.6 million pounds in CY 2015. Uranium prices received by Wyoming producers also missed CREG estimates by approximately 15 percent in CY 2016. Similar to other mining commodities such as coal and trona, Wyoming's available reserves of uranium are currently not a restriction on production. Rather, the world supply, lack of committed demand, and current low price are negatively impacting Wyoming production. As a result, CREG forecasts production at 1.8 million pounds throughout the forecast period - a reduction from 2 to 2.3 million pounds in prior forecast. Additionally, CREG reduced the forecast price to \$30/lb for the forecast period, down from \$35/lb. This forecast price is still substantially above the current spot price, which is hovering near \$21/lb. This difference recognizes long-term contracts, which garner higher prices. Should market demand increase, particularly due to the number of new nuclear plants under construction or planned for construction, Wyoming is home to the largest U.S. economic reserves of uranium and would benefit from those increasing demand trends.

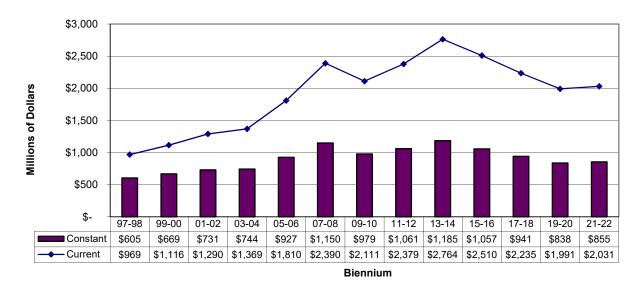
The valuation of all other minerals, including bentonite, sand and gravel, precious stones and metals, quarried rock, and other industrial mineral production, is forecast at \$98 million throughout the forecast period, down from \$110 million in the October 2016 report. This reduction is incorporated to reflect the most recent actual data of prior years. Chief among these other minerals, marginal demand for bentonite continues to be driven by oil drilling activity.

## **Section 2 – General Fund Revenues**

Total GF revenue for the FY 2017-2018 biennium is forecast to reach \$2.24 billion. (See Table 2 found within the appendix to this report.) This represents a decrease of \$274.9 million (11.0%) compared to the FY 2015-2016 biennial receipts. Comparing these two biennia is not without important differences, however. For example, the total forecast revenue to the GF in the FY 2017-2018 biennium is actually overstated, for historical comparative purposes, by \$133.6 million due to a temporary diversion of severance taxes and FMRs that normally would be deposited into the Highway Fund. Similarly, FY 2016 GF revenues were somewhat higher due to the approximately six month diversion of one percent severance taxes deposited into the GF rather than the Permanent Wyoming Mineral Trust Fund (PWMTF). Finally, the FY 2015-2016 biennium includes actual, realized capital gains for both years in the biennium, whereas the FY 2017-2018 biennium includes only one year of actual, realized capital gains. Notwithstanding these differences, the decrease illustrates the decline in the State's revenue picture over the last few years. In fact, the October 2017 CREG forecast total revenue is consistently less than the actuals collected in the last three biennia and 19.1 percent lower than the actual GF revenue collections in the FY 2013-2014 biennium. For purposes of context, October 2017 CREG forecast revenues for the GF appear to be in the approximate range of revenue levels experienced in FY 2009-2010.

On the positive side, the October CREG report increases the revenue projection for FY 2018, FY 2019, and FY 2020 by an average of 2.7 percent, or \$26.6 million per fiscal year. This increase in the next three years of forecast GF revenue collections is derived from modest increases in several revenue streams: sales and use tax (\$3.8 million to \$9.4 million increase); severance taxes (\$2.0 million to \$5.6 million increase); investment income (\$4.1 million to \$14.2 million increase); and other revenue (\$8.6 million to \$8.9 million increase). In fact, with the exception of (a) cigarette taxes (included in "all other" on Table 1 and Table 2) and (b) penalties and interest, this report identifies modest increases in revenue growth across most revenue streams when compared to the January 2017 CREG forecast.

Sales and use tax collections remain the largest major revenue stream for the GF, after relinquishing this position to investment income briefly in FY 2015 due to strong realized capital gains from the PWMTF. Statewide sales and use tax collections deposited to the GF comprised 34.7 percent of the FY 2017 GF revenues and are anticipated to comprise 40 percent or more of GF revenue throughout the projection period. Investment income, comprised of both investment earnings from the PWMTF and the GF portion of pooled income from the State Agency Pool, is the second largest source of revenue projected by CREG, accounting for more than \$250 million per year, or roughly 25 percent of the total GF annual revenue forecast. Severance taxes comprise the third largest revenue category through the forecast period at roughly \$160 million per year, or around 16 percent. Since FY 2000, severance taxes have comprised an average of 19.5 percent (\$194.7 million) of GF total revenue.



**Chart 1: General Fund Revenues** 

Constant Dollars: Base is 1982-84; no additional inflation is yet incorporated for years beyond 2016.

## Sales and Use Taxes:

GF sales and use tax receipts for FY 2017 totaled \$407.3 million, a decrease of \$24.7 million (5.7%) from FY 2016 levels and was the lowest amount collected for annual sales and use tax collections since FY 2005. However, actual sales and use tax receipts for FY 2017 exceeded the level forecast last January by \$2.3 million (0.6%). The forecast for the GF share of total sales and use tax revenue for FY 2018 is \$429.4 million, an increase of \$9.4 million (2.2%) from the level forecast in January 2017. For the FY 2017-2018 biennium, CREG increased the forecast for the GF share of sales and use tax by \$11.7 million (1.4%) to \$836.7 million.

Curtailed economic activity associated primarily with oil, gas and coal extraction was the main reason for the reduction in sales and use tax collections in FY 2017. Of the 12 primary industry sectors, mining accounted for 34.0 percent of the total decline in a year-over-year comparison. Nineteen of the state's 23 counties incurred year-over-year losses of collections with Campbell, Converse, Natrona, Sublette, and Sweetwater incurring most of the decline. Oil, gas and coal extraction represented a significant portion of activity for each of these counties. Albany, Crook, Teton, and Washakie counties recorded increases in collections for the year compared to FY 2016.

The state share of the statewide sales and use tax forecast for FY 2018 represents a \$22.1 million (5.4%) increase from the total receipts in FY 2017. For purposes of developing the sales and use tax projection, personal income is expected to see above average growth in FY 2018 primarily due to a modest recovery in mineral extraction activities. Additionally, 2017 Wyoming Session Laws, Chapter 85, Sales from remote sellers, took effect on July 1, 2017, requiring online businesses engaged in more than 200 transactions or \$100,000 in sales in the state to collect and remit sales taxes. Furthermore, the August 21, 2017 solar eclipse generated some additional economic activity for the State that likely provided a short-term boost to taxable spending for FY

2018. For the remainder of the forecast, CREG expects personal income to experience moderate growth. As for oil and gas employment, another variable used to forecast sales and use tax collections in Wyoming, CREG anticipates little growth in this mining sub-sector through FY 2019 with slightly improved growth for the rest of the forecast period.



Chart 2: Sales and Use Tax Revenues to the General Fund

## Severance Tax:

Actual FY 2017 severance tax receipts directed to the GF totaled \$167.0 million, which was \$18.5 million (10.0%) less than FY 2016 total receipts. However, due to the partial year diversion of the "statutory one percent severance tax" from the PWMTF being deposited into the GF, the FY 2016 total is overstated. This six month diversion generated \$33.6 million, which was deposited into the GF. Removing this anomaly, the FY 2017 severance tax receipts actually increased by \$15.1 million (9.9%).

The total GF share of severance tax revenue for FY 2018 is forecast to reach \$165.6 million, which is \$2.0 million (1.2%) higher than projected in the January 2017 CREG forecast. Similarly, the forecast for severances taxes directed to the GF in the FY 2019-2020 biennium is \$320.1 million, an increase of \$10.4 million (3.4%) compared to the January 2017 projection. This October 2017 forecast predicts a stabilization of the declines in severance taxes deposited to the GF in recent years. Specifically, severance tax revenue deposited into the GF exceeded \$200 million from FY 2005 through FY 2015 – in some years significantly in excess of \$200 million. Throughout the projection period, CREG forecasts the annual severance tax deposits to the GF will be in the \$160 million range. Broadly, this decline in severance tax revenue can be attributed to lower forecast prices for oil, natural gas, and surface coal than the average prices received during the period FY 2005 through FY 2015 and declining levels of production in natural gas and coal, as compared to FY 2005 through FY 2015. Although some stability of severance tax collections is evident in this forecast, severance tax collections directed to the GF

Constant Dollars: Base is 1982-84; no additional inflation is yet incorporated for years beyond 2016.

are anticipated to stabilize at roughly 30 percent below the levels experienced in the period from FY 2005 through FY 2015.

## Mineral Trust Fund and Pooled Income Revenue Sources:

Investment income generated from the PWMTF and the State Agency Pool (SAP) and distributed to the GF for FY 2017 totaled \$384.8 million, which is \$137.0 million (55.3%) higher than the January 2017 forecast and \$146.1 million (61.2%) higher than distributed investment earnings in FY 2016. The year-over-year difference illustrates the volatility in realized capital gains from this revenue stream. In FY 2017, the PWMTF generated \$140.1 million in realized capital gains and the SAP, the source of pooled income for the GF and many other state funds, ended the fiscal year with net realized capital losses for the second straight year. Investment income in the form of interest and dividends from the PWMTF generated \$158.7 million. Interest and dividends directed to the GF from the SAP exceeded the January 2017 CREG forecast by \$4.0 million, or 4.8 percent, totaling \$86.0 million.

A key difference between capital gains and losses generated in the PWMTF and capital gains and losses generated in the SAP is application of the State Treasurer's 2009 interpretative policy implemented by then State Treasurer Joe Meyer. For the PWMTF, realized capital losses are held until such time as realized capital gains offset the losses. The State is in a net positive position with realized capital gains from the PWMTF, so this policy does not have a material impact on FY 2017 investment income. However, in the application of this interpretative policy to non-permanent funds such as the SAP, the policy states, "If there are annual capital losses in excess of capital gains from investments of the Wyoming Funds, they will be accounted for as a debit against the book value of the Wyoming Fund for which an annual capital loss was computed." This accounting entry reduces the cash against the underlying fund. In the case of the PWMTF, the effect is that the capital loss can be "held" until such time as it is offset by realized capital gains. In the case of the GF portion of the SAP, the cash in the GF is reduced immediately. As of June 30, 2017, there are a combined \$15.1 million in realized losses in the GF generated in FY 2016 and FY 2017.

On a more positive note, the investment earnings directed to the GF from the PWMTF exceeded the 2.5 percent of the five-year market average by \$132.9 million. The Legislature had appropriated these funds, essentially realized capital gains, in 2016 Wyoming Session Laws, Chapter 97, Section 8, as "conditional appropriations." As a result, \$20 million was deposited into the state [health] facilities construction account; \$2.5 million will be available for the LCCC Ludden Library; \$24.4 million will be available for the UW science initiative account; \$12 million was deposited to the State facilities account [Casper facility]; and \$7.5 million was deposited to the Capitol Building Rehabilitation and Restoration Account. This last deposit is approximately \$12.5 million short of the full conditional appropriation to the Capitol Building account of \$20 million. Additionally, no funds were deposited to the Mineral Impacted Road account.

Looking forward, the yield forecast (investment income attributable to interest and dividends) for the PWMTF for the October 2017 forecast is roughly 2.15 percent throughout the projection period (FY 2018 – 2.12%; FY 2019 through FY 2021 – 2.15%; and FY 2022 – 2.16%). The

forecast yield for the SAP is higher in the near-term (2.52% for FY 2018) before declining to 2.26 percent for the balance of the projection period. The decline in forecast yield is due to a revised asset allocation plan within the State Treasurer's Office. While the exact period of the transition to the new asset allocation is dependent upon several factors including, but not limited to, internal staff and market conditions, the new allocation model further shortens duration, emphasizes risk reduction and capital preservation but also generates less estimated future yield. In terms of forecast income, the CREG projection takes into account the anticipated growth in the PWMTF corpus through severance tax distributions, including deposits to the PWMTF of the statutory one percent severance tax, which reflects current law after FY 2018. In terms of the forecast income for the SAP, the projections account for the current appropriations from the LSRA, reducing the available corpus of the SAP eligible for investment, as well as a future no interest loan from the Permanent Wyoming Mineral Trust Fund Reserve Account (PWMTF RA) to the Capitol Building Rehabilitation and Restoration Account. More directly, CREG's income forecasts take into account both anticipated future yield and the estimated size of various account balances available for investment based upon current law.

While the PWMTF market value continues to increase through constitutionally-required severance tax deposits and growth of unrealized capital gains, for the SAP and especially the portion of the SAP that generates investment income for the GF, the opposite is true. As State reserves are appropriated and expended, the investable balance of the SAP is declining. With the exception of FY 2019, the increased yield assumptions offset the anticipated declines in balances of the SAP.

In this report, CREG continues its approach of forecasting only regularly distributed investment income from interest and dividends and not realized capital gains and losses. Additionally, pursuant to W.S. 9-4-719(b), to the extent the forecast income from the PWMTF is less than 2.5 percent of the five-year market average in any fiscal year, and if sufficient funds are available in the PWMTF RA, deposits are made to the GF from the PWMTF RA to "guarantee" or "backfill" the GF up to the 2.5 percent of the five-year market average. As a result, the guaranteed revenue has been included in the forecast by CREG. Under the October 2017 forecast, annual transfers of \$12.3 to \$16.2 million will be required in FY 2018 through FY 2022. There is sufficient cash balance within the PWMTF RA to more than cover all of the estimated transfers to the GF throughout the forecast period as well as fully fund the legislatively-approved loan, if necessary, from the PWMTF RA to the Capitol Building Renovation and Rehabilitation Account. No funds are currently forecast to be deposited into either the Strategic Investments and Projects Account (SIPA) to support capital projects conditionally appropriated from the SIPA in FY 2018 or the Legislative Stabilization Reserve Account (LSRA), although if investment income exceeds the forecast, these projects would be at least partially funded.

With respect to the general investment environment, world gross product is rebounding and asset prices, as indicated by market indices appear fully valued, if not overvalued by several measures. Currently, there are few indications of substantial future inflation or imminent recession in the United States. Equity markets, as measured by the Standard and Poor's 500 index for example, are near all-time highs after a sustained bull market over the last eight years. This environment raises some caution as to additional levels of risk going forward. Furthermore, accurately predicting the timing of when interest rates might fully normalize or when equity values might

revert to the mean is not possible. The inability to accurately predict the timing of such market events is evidenced by the fact that the October 2016 CREG report noted that equity and fixed income markets, by several measures, were also overvalued.

Finally, as of this writing, the PWMTF held approximately \$590 million in unrealized capital gains, or 8.2 percent of the corpus. Additionally, the State Treasurer's Office has realized \$54.0 million in capital gains in FY 2018 from the PWMTF. Looking forward through the balance of FY 2018, it is possible that a planned repositioning of the portfolio of the SAP will result in the liquidation of poor performing investments. This could lead to the realization of \$80 million or more in losses, of which approximately \$25 million in losses could be attributable to the GF through SAP investments and another \$10 to \$15 million in losses would be attributable to the PWMTF, if the investments are sold. More favorably, due to asset reallocation it is also possible that \$100 to \$150 million in realized capital gains, attributable to PWMTF investments could be realized in FY 2018. Put differently, while the timing of asset reallocation cannot be predicted with certainty and while CREG does not forecast the realization of gains or losses, CREG believes it is important to outline the (a) realized gains to date from the PWMTF, (b) potential future realized losses that would negatively impact GF revenues; and (c) potential future realized gains that would positively impact GF revenues.

## **Remaining General Fund Revenue Categories:**

The remaining GF revenue sources are comprised of more than 180 different revenue streams from over 70 state agencies and boards. FY 2017 GF revenue from these sources totaled \$214 million, which is \$68.9 million (47.5%) higher than the FY 2016 level and \$13.7 million (6.8%) higher than CREG forecast last January. The primary driver for the difference between FY 2016 totals and FY 2017 totals was the temporary diversion of FMRs from the Highway Fund to the GF for both fiscal years of the 2017-2018 biennium. This accounted for \$60.1 million of the \$68.9 million year-over-year difference. The largest difference in the actual collections when compared to the January 2017 CREG forecast was the result of stronger than forecast charges for state sales and services, which exceeded the projection by \$8.5 million. In fact, every major category of revenue supporting the GF not previously discussed in this report exceeded the January 2017 forecast except for penalties and interest, which fell \$1.9 million (29.5%) short of the forecast; cigarette taxes, which fell \$1.1 million (7.0%) short of the forecast; and a "catchall" category of revenue from other sources which fell short of estimates by just over \$1 million. The penalties and interest revenue stream is related to the total valuation of severance tax collections and can be impacted by new property development. With a decline in severance tax valuations and limited new drilling operations, a comparable decline in collected penalties and interest is evident. Cigarette tax collections continue a year-over-year decline through decreased consumption. CREG has adjusted its forecast accordingly for these minor revenue streams throughout the projection period. Other substantial FY 2017 revenue sources include franchise taxes (\$34.8 million), insurance premium tax and agent licenses (\$27.7 million), cost allocation (\$22.6 million), profit from liquor sales (\$15.5 million), and domestic corporate filings (\$13.8 million).

Overall, revenue from these sources is forecast to generate \$209.2 million for FY 2018, before dropping to \$148.8 million for the balance of the projection period. The decline in the forecast

from FY 2018 to FY 2019 is twofold. First, the temporary diversion of FMRs from the Highway Fund to the GF of \$60.1 million is removed. Second, CREG has forecast \$300,000 consecutive two-year reductions in cigarette tax collections in FY 2018 and FY 2019 before leveling off at \$14.1 million annual collections for the balance of the forecast period. The forecast also incorporates recognition of the volatile nature of some of these smaller revenue streams, responses to a survey of state collection agencies, and recent declines in the penalties and interest component.

## **Section 3 – Severance Tax Summary**

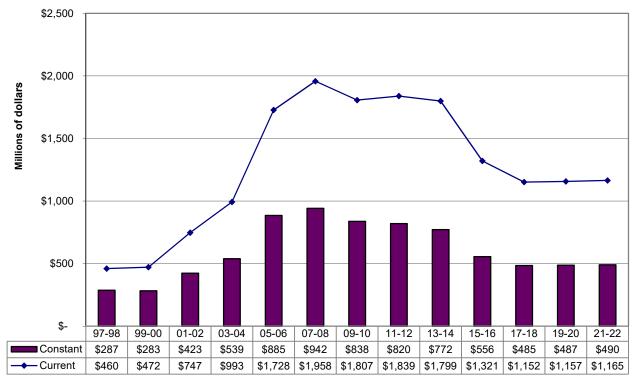
Refer to Section 1 of this report for detailed information about the mineral price and production assumptions that form the basis of the severance tax forecast. As shown in Tables 4 and 5 in the appendix to this report and in Chart 3, projected severance tax revenues total \$1.15 billion in the FY 2017-2018 biennium, down from \$1.32 billion for the FY 2015-2016 biennium – a decrease of \$168.8 million (12.8%). This decrease is on top of a \$478.9 million (26.6%) decrease between the FY 2013-2014 and FY 2015-2016 biennia. The total severance taxes projected for the FY 2017-2018 biennium have been increased by \$49.8 million (4.5%) compared to the January 2017 CREG report. CREG forecasts \$571.5 million to \$583.6 million in annual severance tax collections throughout the projection period. This reflects an increase ranging between \$9.4 million and \$33.6 million per year as compared to the January 2017 CREG projection.

The components of the CREG forecast contributing to annual estimated severance tax collections pulled the forecast in opposite directions. Among the major changes in CREG's price and production forecasts, the largest component increase to the projections, which ultimately overwhelmed all the other changes, is the increased forecast of oil production through the forecast period. This increase is offset, in part, by decreases in forecast natural gas production. Finally, the net effect of somewhat higher projected coal production and lower coal prices is a modest overall net positive to annual estimated severance tax collections. The components of trona-related forecast remain unchanged.

Despite the substantial declines in coal production experienced in FY 2016 and FY 2017, coal remained the largest contributor to severance tax collections in FY 2017, as noted in Table 6. Coal is projected to remain the largest contributor to severance tax collections until FY 2021, at which point, if projections are accurate, oil severance tax collections would become the largest commodity from which severance taxes are generated.

The total severance tax collections throughout the projection period hover in the \$570 million to \$583 million range. This level of severance taxes is comparable to collections in FY 2017, but about \$320 million less than, or 64 percent of, the eleven year period commencing in FY 2005 and ending in FY 2015.

The revisions to the forecast in severance tax collections impact four accounts: the PWMTF, which benefits from each incremental increase or decrease in severance taxes from oil, gas or coal; the One Percent Severance Tax account; and the GF and the Budget Reserve Account (BRA), since marginal increases and decreases only impact accounts benefiting the so-called over-the-cap distribution. All accounts benefitting from severance taxes collections less than \$155 million, notwithstanding the PWMTF, will receive their full share. The net result of the October 2017 CREG forecast is an increase to the GF on the order of \$1.9 million to \$6.8 million per fiscal year and increases to the BRA on the order of \$3.9 million to \$13.6 million per fiscal year.



## **Chart 3: Severance Tax Revenues to All Accounts**

Biennium

Constant Dollars: Base is 1982-84; no additional inflation is yet incorporated for years beyond 2016.

## Section 4 - Federal Mineral Royalties and Coal Lease Bonuses

Refer to Section 1 of this report for detailed information about the minerals price and production assumptions that form the basis of the FMR and coal lease bonus (CLB) forecasts. Tables 7, 7(a), 7(b), 8, 8(a), and 8(b) in the appendix to this report show detailed projections for FMRs and CLBs.

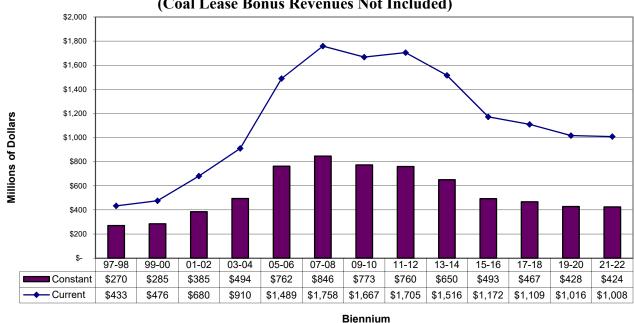
The federal government sequestered 6.9 percent of Wyoming's FMRs and CLBs during federal fiscal year (FFY) 2017. The most recent federal guidance indicates Wyoming should receive all of its FMR and CLB payments withheld during FFY 2017 in the early portion of FFY 2018 – sometime after October 1, 2017. Under the current federal practice (withholding of sequestered FMRs in the current federal fiscal year and payment of the withheld FMRs in the following year), CREG is not including any additional impacts of federal sequestration in its forecast. There is both positive and negative risk with this projection methodology. Specifically, if the federal sequester were to cease, Wyoming would presumably receive the sequestered amount from the prior year, without having any deduction in the current year, resulting in a one-time windfall of as much as \$40 million. On the other hand, if Congress increases the magnitude of the sequester percentage above 6.9 percent or Congress or the Administration revises the treatment of federal mineral revenues under the federal budget, Wyoming (and other western states) could receive less FMRs and CLBs. For purposes of forecasting, CREG employs an assumption of the status quo throughout the forecast period. Should the outlook regarding future federal sequestration issues change, CREG can incorporate it in future reports.

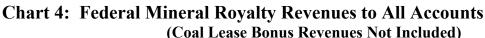
## **Federal Mineral Royalties:**

FMRs received attributable to state FY 2017 totaled \$580.2 million – just \$102,845 less than total severance tax collections. This represents an increase of \$97.9 million (20.3%) over FY 2016 receipts. This level of FMR receipts also exceeded the January 2017 CREG projection by \$92.4 million (18.9%). Well over half of this excess can be attributed to a February 2017 federal oil and gas lease sale that generated bonus payments of approximately \$59 million for Wyoming. Without this bonus payment, actual FMR receipts would have been approximately \$33.4 million (6.8%) more than the January 2017 CREG projection.

In light of recent strong oil and gas lease auctions, CREG increased the proportion of FMRs not directly attributed to oil, natural gas, or coal federal royalties. Specifically, CREG added \$20 million for FY 2018 in order to recognize the near-term potential for bonus payments. FMRs have declined from their peak of \$1.0 billion in FY 2008 by \$420.8 million, or 42.0 percent. Over the forecast period, CREG projects total FMRs of \$529.1 million in FY 2018 and range between \$503.5 to \$509.6 million for the balance of the projection period. Unlike projected severance tax collections, since more coal and less oil is produced on federal lands, the projected increase in oil production does not overwhelm the decline in natural gas and coal volumes over the projection period. Further, while the collections through the forecast period exceed those experienced in the near-term low of FY 2016, they fall well short (more than \$100 million) of the average level of receipts since the turn of the century.

Similar to severance tax revenues, the revisions to the forecast in FMR receipts impact two accounts: the School Foundation Program (SFP) and the BRA. These accounts are impacted since they are the only accounts benefitting from FMRs in excess of the \$200 million distribution cap. The net result of the October 2017 CREG forecast is an increase to the SFP on the order of \$4.7 million to \$8.0 million per fiscal year and increases to BRA on the order of \$9.5 million to \$16.0 million per fiscal year.





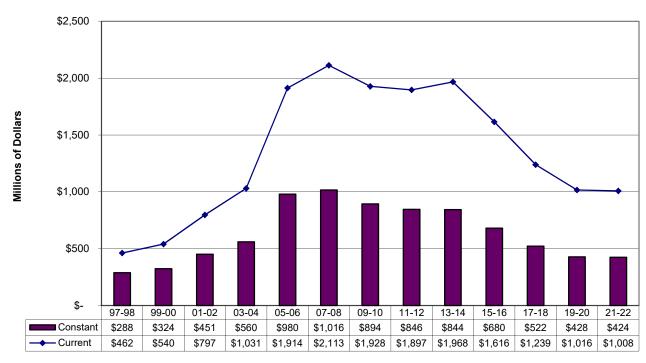
Constant Dollars: Base is 1982-84; no additional inflation is yet incorporated for years beyond 2016.

## **Coal Lease Bonuses:**

The only forecast coal lease bonus payment through the projection period occurs in FY 2018. The entire \$5.3 million projected for FY 2018 is exclusively related to the federal sequestration discussion in the previous subsection, "Federal Mineral Royalties." Specifically, Wyoming's share of coal lease bonus payments from FFY 2017 was withheld and is anticipated to be paid in FFY 2018. Pursuant to 2016 Wyoming Session Laws, Chapter 31, Section 331, all coal lease bonus payments received by Wyoming in FY 2018 will be deposited into the School Capital Construction Account.

Since the release of the January 2017 CREG report, there have been no successful federal coal lease sales, and there are currently no anticipated sales throughout the balance of CY 2017. At present, there is no timeline for the next federal coal lease sale in Wyoming. Although there are a few coal lease applications in Wyoming that are being pursued, several factors including a recent decision by the 10<sup>th</sup> U.S. Circuit Court of Appeals related to the consideration by the

Bureau of Land Management of future greenhouse gas emissions leaves the outlook for and timing of future coal lease sales uncertain. Consistent with past practice, CREG does not forecast the revenue from coal lease bonus payments until such time as an auction is complete and the first payment is made.





Biennium

Constant Dollars: Base is 1982-84; no additional inflation is yet incorporated for years beyond 2016.

## Section 5 – Common School Land Income Account Revenue

Income to the Common School Land Income Account (CSLIA) is derived from the investment of the Common School Permanent Land Fund (CSPLF), from grazing fees, bonus payments on mineral leases, and other surface leases of state trust lands dedicated to schools. This income is subsequently deposited into the SFP. Please refer to the tables at the end of Section 5 for estimates of annual income and differences from the October 2016 CREG forecast.

The CSLIA received \$86.6 million in interest and dividends, \$3.2 million, or 3.5 percent less than the January 2017 CREG estimate. However, the CSLIA benefited from \$68.3 million in realized capital gains, in contrast to FY 2016 during which no capital gains were realized. Pursuant to W.S. 9-4-719(r), amounts in excess of three percent of the five-year average market value of the CSPLF and less than the spending policy amount are directed to the School Foundation Program Reserve Account (SFP RA) via a distribution of a like amount of FMRs. In FY 2017, the investment income from the CSPLF exceeded this three percent threshold. Therefore, \$59.9 million was deposited into the SFP RA. Furthermore, pursuant to W.S. 9-4-719(g), since total investment earnings from the CSPLF exceeded five percent of the five-year average, \$5.2 million was deposited into the CSPLF exceeded five percent of the five-year average, \$5.2 million was deposited into the CSPLF exceeded five percent of the five-year average, \$5.2 million was deposited into the CSPLF exceeded five percent of the five-year average, \$5.2 million was deposited into the CSPLF exceeded five percent of the five-year average, \$5.2 million was deposited into the CSPLF exceeded five percent of the five-year average, \$5.2 million was deposited into the CSPLF exceeded five percent of the five-year average, \$5.2 million was deposited into the CSPLF exceeded five percent of the five-year average, \$5.2 million was deposited into the CSPLF exceeded five percent of the five-year average, \$5.2 million was deposited into the CSPLF exceeded five percent of the five-year average, \$5.2 million was deposited into the CSPLF exceeded five percent of the five-year average, \$5.2 million was deposited into the Common School Permanent Land Fund Reserve Account (CSPLF RA).

The projected yield (interest and dividends) from the CSPLF for FY 2018 through FY 2020 is 2.22 percent, and the projected yield is 2.23 percent for the balance of the projection period. For FY 2018, the projected investment income from the CSPLF has been increased due to the changes adopted in 2017 Wyoming Session Laws, Chapter 206, which guarantees five percent of the five-year market average of the CSPLF for deposit to the CSLI account to the extent sufficient funds are available in the CSPLF RA. There are sufficient funds in the CSPLF RA for FY 2018. Therefore, \$79.0 million will be transferred to the CSLIA under current investment projections. Recall that no capital gains or losses are projected, though as of this writing \$28.4 million in capital gains have been realized by the State Treasurer's Office since July 1, 2017. In fact, in FY 2019 there will still be sufficient funds in the CSPLF RA, barring increases, to transfer \$35.9 million to the CSLIA. However, that transfer will only be sufficient to guarantee 3.5 percent of the five-year average market value of the CSA. For years beyond FY 2019, no transfers will be made unless and until sufficient investment earnings or legislative transfers are available to restore a sufficient balance to the CSPLF RA to guarantee a level of investment income to the CSLIA.

The CSLIA also received income from fees and leases in FY 2017 totaling \$44.4 million, which represents an increase of \$26.3 million from FY 2016 receipts. Of this total deposit, \$30.9 million can be attributed to state lease bonus revenue from competitive oil and gas auction sales conducted by the Office of State Lands and Investments (OSLI), reflecting the highest amount of bonus payments in the last six fiscal years.

With the decline in oil and gas prices, there was a corresponding decline in state lease bonus revenue in FY 2016. However, the trajectory changed with a March 2017 oil and gas lease auction of state lands, which generated \$26.3 million in bonus income for the CSLIA. CREG elected to maintain the projection of fee and lease revenues, which have averaged approximately

\$9 million per year over the last decade and include a modest amount of bonus payments, though roughly half of the average of recent years, establishing the total projected level at \$18 million per year. For FY 2018 only, given the level of recent interest in two state auctions that have already occurred this fiscal year, CREG has increased the projection of total CSLIA fees and leases by \$10 million to \$28 million for FY 2018. CREG will monitor future auctions to determine if further increases or decreases to projected bonus levels are warranted.

Fiscal Year	Investment Income (all accounts)	Fees and Leases	Total
2010	\$63.2	\$37.3	\$100.5
2011	\$103.5	\$112.5	\$216.0
2012	\$102.4	\$26.2	\$128.6
2013	\$147.6	\$20.1	\$167.7
2014	\$174.4	\$26.4	\$200.8
2015	\$218.4	\$23.5	\$241.9
2016	\$79.5	\$18.1	\$97.6
2017	\$157.8	\$44.4	\$202.2

**Common School Land Income History (millions of dollars)** 

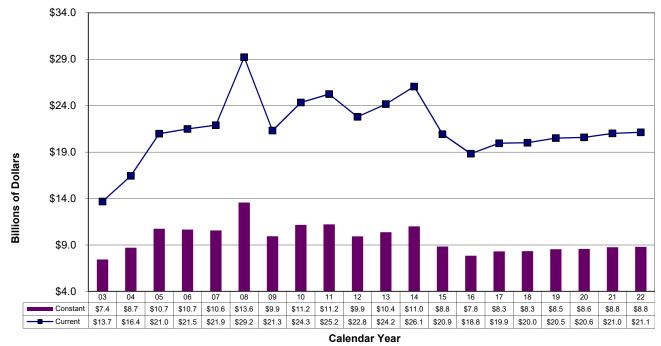
**Common School Land Income Forecast (millions of dollars)** 

Fiscal Year	Investment Income October 2017 Estimate	Fees and Leases October 2017 Estimate	Total Oct. 2017 Estimate	Difference from Oct. 2016 Estimate
2018	\$164.6	\$28.0	\$192.6	\$94.0
2019	\$125.1	\$18.0	\$143.1	\$38.4
2020	\$93.0	\$18.0	\$111.0	\$1.4
2021	\$97.2	\$18.0	\$115.2	\$1.0
2022	\$101.2	\$18.0	\$119.2	\$0.7

## Section 6 – Total State Assessed Valuation

Please refer to Section 1 of this report for detailed information about the minerals price and production assumptions that form the basis of the minerals portion of the state assessed valuation forecast.

Assessed valuation projections are shown in Table 9 in the appendix to this report. Statewide assessed valuation for non-mineral property has increased steadily over the past decade, only declining once since the turn of the century – a decline of 1 percent in CY 2009. However, in CY 2016, the non-mineral property assessments recorded just a 0.7 percent increase, substantially below the CREG estimate of 2 percent growth. A major contributor to the muted growth in non-mineral property valuation was negative growth in industrial property valuation, specifically property related to coal mining. Given the recent declines in production, several major bankruptcies, and lower production volumes, this sector could continue to adversely impact total state valuations, at least in the near term. Taking both the long and short-term trends into consideration, CREG reduced its outlook for non-mineral assessed valuation growth from 2 percent over the projection period to 1 percent growth in CY 2018 and 1.5 percent growth in CY 2019, before returning to 2 percent growth for the balance of the projection period. In contrast, the prior five-year average growth of non-mineral assessed valuation is 2.9 percent.





Constant Dollars: Base is 1982-84; no additional inflation is yet incorporated for years beyond 2015.

#### Table 1 General Fund Revenues Fiscal Year Collections by Source

Fiscal Year	Severance Tax (1)	Sales and Use Tax	PWMTF Income (2), (3)	Pooled Income (3)	Charges - Sales and Services	Franchise Tax	Revenue from Others	Penalties and Interest	Federal Aid and Grants	All Other (4), (5)	Total
Historical:	<b>AT</b> O 000 040	<b>\$045 400 054</b>	<b>\$00.004.040</b>	<b>A</b> O 4 000 000	A 47 705 000	<b></b>	<b>AF</b> 400 040	<b>A</b> F 004 000	<b>.</b>	<b>\$</b> 40,000,000	<b>\$ 400 707 004</b>
1997	\$70,906,043	\$215,183,851	\$92,221,049	\$24,230,603	\$17,795,890	\$13,458,008	\$5,198,340	\$5,601,208	\$11,866,009	\$12,326,030	\$468,787,031
1998	\$69,557,973	\$234,725,638	\$101,277,447	\$23,368,069	\$18,171,735	\$13,320,789	\$5,979,414	\$6,766,153	\$10,557,300	\$16,563,929	\$500,288,447
1999	\$58,924,423	\$234,725,590	\$106,845,392	\$25,322,337	\$20,333,143	\$11,438,251	\$7,009,009	\$5,873,055	\$10,293,095	\$19,488,056	\$500,252,351
2000	\$83,616,343	\$262,338,523	\$117,485,136	\$26,191,754	\$18,799,203	\$13,628,848	\$14,829,611	\$5,809,027	\$8,189,111	\$64,712,342	\$615,599,898
2001	\$139,104,484	\$296,341,913	\$97,378,092	\$34,849,907	\$20,569,692	\$15,029,401	\$10,085,700	\$6,612,961	\$10,946,298	\$21,301,693	\$652,220,141
2002	\$117,185,445	\$313,077,987	\$90,510,496	\$29,114,751	\$20,858,833	\$17,099,710	\$7,532,683	\$6,359,976	\$8,878,403	\$27,328,449	\$637,946,733
2003	\$149,549,109	\$300,953,910	\$58,647,855	\$19,214,275	\$20,467,084	\$19,598,042	\$8,199,193	\$10,131,822	\$10,590,119	\$27,332,601	\$624,684,010
2004	\$184,408,599	\$326,625,269	\$98,110,315	\$28,716,923	\$24,260,907	\$21,745,077	\$5,315,629	\$9,031,984	\$11,651,917	\$34,686,832	\$744,553,452
2005	\$225,275,895	\$363,846,232	\$87,789,396	\$39,340,611	\$26,460,644	\$23,962,541	\$5,674,323	\$11,571,551	\$8,313,378	\$41,702,561	\$833,937,132
2006	\$240,254,868	\$421,438,545	\$123,952,616	\$65,048,984	\$24,733,817	\$24,889,058	\$5,842,094	\$17,153,208	\$10,264,260	\$42,493,736	\$976,071,186
2007	\$213,964,458	\$479,072,573	\$150,487,083	\$90,590,111	\$29,478,126	\$28,164,990	\$6,301,203	\$15,248,945	\$10,830,645	\$46,156,155	\$1,070,294,289
2008	\$257,859,263	\$504,711,048	\$321,357,789	\$105,567,137	\$30,458,234	\$26,251,292	\$10,704,460	\$6,443,234	\$9,819,073	\$46,743,278	\$1,319,914,808
2009	\$217,580,767	\$492,443,467	\$135,264,226	\$89,969,956	\$33,780,336	\$23,978,875	\$6,276,827	\$11,878,190	\$9,159,713	\$44,485,273	\$1,064,817,630
2010	\$226,994,930	\$412,845,265	\$139,450,800	\$117,295,842	\$33,254,667	\$23,805,596	\$21,431,697	\$13,962,941	\$10,686,279	\$46,344,453	\$1,046,072,470
2011	\$230,313,366	\$470,905,619	\$215,755,659	\$90,718,694	\$35,503,191	\$23,210,774	\$29,554,028	\$12,000,700	\$11,388,412	\$55,715,767	\$1,175,066,210
2012	\$221,153,387	\$497,683,644	\$235,847,144	\$112,352,685	\$38,218,559	\$24,446,393	\$7,602,898	\$11,229,632	\$10,065,657	\$45,243,811	\$1,203,843,810
2013	\$210,280,486	\$481,431,386	\$366,635,722	\$189,833,643	\$38,867,796	\$26,889,478	\$6,345,761	\$9,304,095	\$0	\$51,616,450	\$1,381,204,817
2014	\$234,556,823	\$521,102,606	\$395,337,466	\$86,425,307	\$41,169,666	\$36,257,448	\$5,865,169	\$11,536,105	\$0	\$50,126,092	\$1,382,376,682
2015	\$200,734,679	\$544,030,172	\$494,234,268	\$114,227,416	\$43,580,396	\$39,313,515	\$7,110,572	\$11,440,883	\$0	\$54,416,621	\$1,509,088,522
2016	\$185,476,491	\$432,008,558	\$149,823,404	\$88,843,568	\$46,838,913	\$35,441,681	\$6,438,459	\$6,260,009	\$0	\$50,121,154	\$1,001,252,237
2017	\$167,012,242	\$407,315,823	\$298,790,011	\$85,972,480	\$54,609,497	\$34,792,975	\$9,067,348	\$4,441,920	\$0	\$111,043,801	\$1,173,046,097
Projected:											
2018	\$165,600,000	\$429,400,000	\$176,200,000	\$82,000,000	\$54,600,000	\$33,700,000	\$10,100,000	\$4,400,000	\$0	\$106,400,000	\$1,062,400,000
2019	\$159,800,000	\$430,300,000	\$184,700,000	\$67,800,000	\$54,600,000	\$33,700,000	\$10,100,000	\$4,400,000	\$0	\$46,000,000	\$991,400,000
2020	\$160,300,000	\$434,700,000	\$190,000,000	\$66,100,000	\$54,600,000	\$33,700,000	\$10,100,000	\$4,400,000	\$0	\$46,000,000	\$999,900,000
2021	\$160,400,000	\$439,900,000	\$195,400,000	\$64,800,000	\$54,600,000	\$33,700,000	\$10,100,000	\$4,400,000	\$0	\$46,000,000	\$1,009,300,000
2022	\$160,800,000	\$445,900,000	\$201,200,000	\$64,800,000	\$54,600,000	\$33,700,000	\$10,100,000	\$4,400,000	\$0	\$46,000,000	\$1,021,500,000

- (1) 2016 Wyoming Session Laws, Chapter 31, Section 325 diverted revenue from the statutory one percent severance tax from the Permanent Wyoming Mineral Trust Fund (PWMTF) to the General Fund for approximately half of the 2016 fiscal year (approximately \$33.6 million). The same section also diverted the portion of severance taxes traditionally directed to the Highway Fund to the General Fund for the 2017-2018 biennium (approximately \$6.7 million/year).
- (2) Chapter 14, 2000 Wyoming Session Laws established an investment income spending policy for the PWMTF. Investment earnings from the PWMTF in excess of the spending policy are appropriated from the General Fund to the Permanent Wyoming Mineral Trust Fund Reserve Account (PWMTF RA). Chapter 195, 2015 Wyoming Session Laws amended the spending policy by requiring the State Treasurer to transfer unobligated funds in the PWMTF RA to the General Fund as necessary to ensure that 2.5% of the previous five (5) year average market value of the PWMTF is available for expenditure annually, beginning in FY17. The PWMTF income amounts shown in the table above reflect total investment earnings from the PWMTF, including the investment earnings in excess of the 2.5% directed to the Strategic Investments and Projects Account (SIPA) and the Legislative Stabilization Reserve Account (LSRA), and in excess of the spending policy amounts appropriated to the PWMTF RA. PWMTF income is projected at 2.5% of the spending policy in FY18-FY22.
- (3) The State Treasurer implemented an accounting change in April 2009 (with an effective date of July 1, 2008), which directs interest and dividend income to be distributed to the General Fund on a monthly basis. Under this policy, capital gains and losses are held until the end of the fiscal year, at which time capital gains in excess of capital losses will be distributed. If capital losses exceed capital gains from the PWMTF, the net capital loss will be carried forward until such time it is offset by future capital gains. If capital losses exceed capital gains from the Pooled Income (State Agency Pool), the net capital loss will reduce the cash balance in the General Fund until it is offset by future capital gains but is not recognized in this table.
- (4) This category includes Cigarette Tax (revenue code 1201) and all other 1200 series tax revenue; Inheritance Tax (revenue code 1401); License & Permit Fees (2000 revenue series); Property & Money Use Fees (4000 revenue series); and Non-Revenue Receipts (9000 revenue series).
- (5) 2016 Wyoming Session Laws, Chapter 31, Section 326 diverted the portion of federal mineral royalties traditionally directed to the Highway Fund to the General Fund for the 2017-2018 biennium (approximately \$60.1 million /year).

### Table 2 General Fund Revenues Biennial Collections by Source

Biennium	Severance Tax	Sales and Use Tax	PWMTF Income	Pooled Income	Charges - Sales and Services	Franchise Tax	Revenue from Others	Penalties and Interest	Federal Aid and Grants	All Other	Total
	(1)		(2), (3)	(3)						(4), (5)	
Historical:											
1997-98	\$140,464,016	\$449,909,489	\$193,498,496	\$47,598,672	\$35,967,625	\$26,778,797	\$11,177,754	\$12,367,361	\$22,423,309	\$28,889,959	\$969,075,478
1999-00	\$142,540,766	\$497,064,113	\$224,330,528	\$51,514,091	\$39,132,346	\$25,067,099	\$21,838,620	\$11,682,082	\$18,482,206	\$84,200,398	\$1,115,852,249
2001-02	\$256,289,929	\$609,419,900	\$187,888,588	\$63,964,658	\$41,428,525	\$32,129,111	\$17,618,383	\$12,972,937	\$19,824,701	\$48,630,142	\$1,290,166,874
2003-04	\$333,957,708	\$627,579,179	\$156,758,170	\$47,931,198	\$44,727,991	\$41,343,119	\$13,514,822	\$19,163,806	\$22,242,036	\$62,019,433	\$1,369,237,462
2005-06	\$465,530,763	\$785,284,777	\$211,742,012	\$104,389,595	\$51,194,461	\$48,851,599	\$11,516,417	\$28,724,759	\$18,577,638	\$84,196,297	\$1,810,008,318
2007-08	\$471,823,721	\$983,783,621	\$471,844,872	\$196,157,248	\$59,936,360	\$54,416,282	\$17,005,663	\$21,692,179	\$20,649,718	\$92,899,433	\$2,390,209,097
2009-10	\$444,575,697	\$905,288,732	\$274,715,026	\$207,265,798	\$67,035,003	\$47,784,471	\$27,708,524	\$25,841,131	\$19,845,992	\$90,829,726	\$2,110,890,100
2011-12	\$451,466,753	\$968,589,263	\$451,602,803	\$203,071,379	\$73,721,750	\$47,657,167	\$37,156,926	\$23,230,332	\$21,454,069	\$100,959,578	\$2,378,910,020
2013-14	\$444,837,309	\$1,002,533,992	\$761,973,188	\$276,258,950	\$80,037,462	\$63,146,926	\$12,210,930	\$20,840,200	\$0	\$101,742,542	\$2,763,581,499
2015-16	\$386,211,170	\$976,038,730	\$644,057,672	\$203,070,984	\$90,419,309	\$74,755,196	\$13,549,031	\$17,700,892	\$0	\$104,537,775	\$2,510,340,759
Projected:											
2017-18	\$332,612,242	\$836,715,823	\$474,990,011	\$167,972,480	\$109,209,497	\$68,492,975	\$19,167,348	\$8,841,920	\$0	\$217,443,801	\$2,235,446,097
2019-20	\$320,100,000	\$865,000,000	\$374,700,000	\$133,900,000	\$109,200,000	\$67,400,000	\$20,200,000	\$8,800,000	\$0	\$92,000,000	\$1,991,300,000

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2021-22	\$321,200,000	\$885,800,000	\$396,600,000	\$129,600,000	\$109,200,000	\$67,400,000	\$20,200,000	\$8,800,000	\$0	\$92,000,000	\$2,030,800,000	
2019-20	\$320,100,000	\$805,000,000	\$374,700,000	\$133,900,000	\$109,200,000	\$67,400,000	\$20,200,000	\$8,800,000	20	\$92,000,000	\$1,991,300,000	

- (1) 2016 Wyoming Session Laws, Chapter 31, Section 325 diverted revenue from the statutory one percent severance tax from the Permanent Wyoming Mineral Trust Fund (PWMTF) to the General Fund for approximately half of the 2016 fiscal year (approximately \$33.6 million). The same section also diverted the portion of severance taxes traditionally directed to the Highway Fund to the General Fund for the 2017-2018 biennium (approximately \$6.7 million/year).
- (2) Chapter 14, 2000 Wyoming Session Laws established an investment income spending policy for the PWMTF. Investment earnings from the PWMTF in excess of the spending policy are appropriated from the General Fund to the Permanent Wyoming Mineral Trust Fund Reserve Account (PWMTF RA). Chapter 195, 2015 Wyoming Session Laws amended the spending policy by requiring the State Treasurer to transfer unobligated funds in the PWMTF RA to the General Fund as necessary to ensure that 2.5% of the previous five (5) year average market value of the PWMTF is available for expenditure annually, beginning in FY17. The PWMTF income amounts shown in the table above reflect total investment earnings from the PWMTF, including the investment earnings in excess of the 2.5% directed to the Strategic Investments and Projects Account (SIPA) and the Legislative Stabilization Reserve Account (LSRA), and in excess of the spending policy amounts appropriated to the PWMTF RA. PWMTF income is projected at 2.5% of the spending policy in FY18-FY22.
- (3) The State Treasurer implemented an accounting change in April 2009 (with an effective date of July 1, 2008), which directs interest and dividend income to be distributed to the General Fund on a monthly basis. Under this policy, capital gains and losses are held until the end of the fiscal year, at which time capital gains in excess of capital losses will be distributed. If capital losses exceed capital gains from the PWMTF, the net capital loss will be carried forward until such time it is offset by future capital gains. If capital losses exceed capital gains from the Pooled Income (State Agency Pool), the net capital loss will reduce the cash balance in the General Fund until it is offset by future capital gains but is not recognized in this table.
- (4) This category includes Cigarette Tax (revenue code 1201) and all other 1200 series tax revenue; Inheritance Tax (revenue code 1401); License & Permit Fees (2000 revenue series); Property & Money Use Fees (4000 revenue series); and Non-Revenue Receipts (9000 revenue series).
- (5) 2016 Wyoming Session Laws, Chapter 31, Section 326 diverted the portion of federal mineral royalties traditionally directed to the Highway Fund to the General Fund for the 2017-2018 biennium (approximately \$60.1 million /year).

### Table 3 Severance Tax Assumptions: Price & Production Levels for Major Mineral Commodities

	Crude Oil (1)		Natural Gas (2)		Surface Coal (3)		Trona (4)	
Calendar		Production		Production		Production		Production
Year	Price	(Bbls)	Price	(Mcf)	Price	(Tons)	Price	(Tons)
2017	\$45.00	71,000,000	\$3.00	1,730,000,000	\$12.75	320,000,000	\$75.00	20,500,000
2018	\$45.00	71,000,000	\$3.10	1,687,000,000	\$12.75	310,000,000	\$75.00	21,000,000
2019	\$50.00	71,700,000	\$3.10	1,645,000,000	\$12.75	310,000,000	\$75.00	21,000,000
2020	\$50.00	72,400,000	\$3.15	1,604,000,000	\$12.50	300,000,000	\$75.00	21,000,000
2021	\$52.00	73,100,000	\$3.25	1,572,000,000	\$12.50	300,000,000	\$75.00	21,500,000
2022	\$52.00	73,800,000	\$3.25	1,541,000,000	\$12.50	290,000,000	\$75.00	21,500,000

(1) - Price is the average gross sales price for all Wyoming oil production. Production is the total volume of all oil produced in Wyoming, including stripper, tertiary, other oil, and lease condensate.

- (2) Price is the average gross sales price for all Wyoming natural gas production. Production is the total volume of all gas produced in Wyoming, including methane, carbon dioxide, natural gas liquids, and all other related products.
- (3) Price is the average gross sales price for all Wyoming surface coal production. Production is the total volume of all surface coal produced in Wyoming.
- (4) Price is the average gross sales price for all Wyoming trona production. Production is the total volume of all trona ore produced in Wyoming.

#### Table 4 Mineral Severance Taxes Fiscal Year Distribution by Account

								ibulion by / loood							
Fiscal Year	General Fund (1)	Budget Reserve Acct	PWMTF (1), (2)	One Percent Severance Tax Account (1)	Water I	Water II	Water III	Highway Fund (3)	Cities and Towns	Counties	School Foundation/ Community Colleges (3)	Cities, Towns, Counties & Special Districts Capital Construction	County Road Const. Fund	Others (4)	Totals (5)
Historical:	¢70.000.040	¢00 400 470	<b>MEO 747 04 4</b>	<b>C</b>	¢40.000.000	¢0.000.007	¢0	<b>MT 570 004</b>	¢47 507 050	<b>M7 405 007</b>	¢40 500	<b>COM 740</b>	¢4 504 450	¢0 504 075	\$000 770 070
1997	\$70,906,043	\$33,499,478	\$56,747,014	\$0	\$16,902,063	\$3,908,387	\$0	\$7,572,081	\$17,587,656	\$7,135,927	\$16,589	\$5,334,713	\$4,584,152	\$8,584,975	\$232,779,078
1998	\$69,557,973	\$33,150,457	\$54,876,669	\$0	\$19,794,771	\$3,400,755	\$0	\$7,117,864	\$15,303,290	\$6,384,654	\$148,843	\$3,293,381	\$4,487,973	\$10,018,785	\$227,535,415
1999	\$58,924,423	\$28,164,693	\$48,664,636	\$0	\$18,123,904	\$2,753,030	\$0	\$0	\$12,388,590	\$5,321,530	\$4,818,787	\$3,395,400	\$4,438,397	\$9,465,814	\$196,459,204
2000	\$83,616,343	\$39,082,122	\$69,719,687	\$0	\$18,040,045	\$4,779,071	\$0	\$9,108,600	\$21,506,037	\$8,559,273	\$1,416,010	\$4,346,563	\$4,898,265	\$10,050,960	\$275,122,976
2001	\$139,104,482	\$57,915,048	\$112,995,802	\$0	\$20,783,056	\$9,391,114	\$0	\$28,530,106	\$33,130,343	\$15,640,647	\$26,744	\$4,982,504	\$5,593,506	\$19,879,926	\$447,973,278
2002	\$117,185,445	\$39,270,594	\$72,269,085	\$0	\$19,319,789	\$3,435,755	\$0	\$7,435,471	\$15,101,587	\$6,334,307	\$0	\$4,386,530	\$4,495,040	\$10,200,358	\$299,433,961
2003	\$149,549,109	\$105,317,276	\$104,690,345	\$0	\$19,242,468	\$3,323,943	\$0	\$6,950,287	\$14,628,852	\$6,136,020	\$0	\$4,400,000	\$4,500,000	\$10,387,922	\$429,126,222
2004	\$184,408,599	\$171,441,376	\$136,108,467	\$0	\$19,858,973	\$3,412,847	\$0	\$7,717,057	\$15,004,762	\$6,293,694	\$0	\$4,386,528	\$4,495,031	\$10,439,594	\$563,566,928
2005	\$225,275,895	\$251,580,640	\$176,579,787	\$0	\$19,274,886	\$3,570,457	\$0	\$7,958,111	\$15,671,001	\$6,573,145	\$0	\$4,386,525	\$4,495,025	\$11,291,382	\$726,656,854
2006	\$240,254,868	\$279,579,500	\$406,945,374	\$0	\$19,200,918	\$3,660,548	\$775,114	\$8,269,185	\$16,162,339	\$6,622,389	\$0	\$3,611,540	\$4,495,031	\$11,500,112	\$1,001,076,918
2007	\$213,964,458	\$228,678,827	\$346,588,461	\$0	\$20,038,040	\$3,493,592	\$775,143	\$8,159,373	\$15,410,957	\$6,371,940	\$0	\$3,611,545	\$4,495,042	\$12,211,542	\$863,798,920
2008	\$257,859,263	\$323,214,288	\$443,081,307	\$0	\$19,297,547	\$3,229,980	\$775,217	\$6,610,973	\$14,224,389	\$5,976,585	\$0	\$3,611,614	\$4,495,110	\$11,575,738	\$1,093,952,011
2009	\$217,580,767	\$240,383,694	\$350,004,682	\$0	\$19,297,501	\$3,343,659	\$775,104	\$7,065,973	\$14,736,265	\$6,147,028	\$0	\$3,611,541	\$4,495,030	\$11,211,918	\$878,653,162
2010	\$226,994,930	\$260,982,942	\$371,323,873	\$0	\$19,297,696	\$3,254,961	\$775,191	\$6,711,030	\$14,336,803	\$6,014,028	\$0	\$3,611,625	\$4,495,107	\$10,163,192	\$927,961,378
2011	\$230,313,366	\$268,948,372	\$377,241,649	\$0	\$19,285,983	\$3,204,909	\$775,157	\$6,503,125	\$14,111,700	\$5,938,934	\$0	\$3,611,586	\$4,495,078	\$10,868,256	\$945,298,115
2012	\$221,153,387	\$249,299,443	\$354,101,873	\$0	\$19,298,164	\$3,255,068	\$775,112	\$6,711,978	\$14,337,527	\$6,014,160	\$0	\$3,611,559	\$4,495,050	\$10,655,179	\$893,708,500
2013	\$210,280,486	\$227,555,007	\$332,856,161	\$0	\$19,297,500	\$3,255,000	\$775,000	\$6,711,500	\$14,337,500	\$6,014,000	\$0	\$3,611,500	\$4,495,000	\$10,644,267	\$839,832,921
2014	\$234,556,823	\$276,107,687	\$379,858,599	\$0	\$19,297,500	\$3,255,000	\$775,000	\$6,711,500	\$14,337,500	\$6,014,000	\$0	\$3,611,500	\$4,495,000	\$10,631,229	\$959,651,338
2015	\$200,734,679	\$208,463,390	\$308,438,273	\$0	\$19,297,500	\$3,255,000	\$775,000	\$6.711.500	\$14.337.500	\$6,014,000	\$0	\$3,611,500	\$4,495,000	\$10,809,343	\$786,942,685
2016	\$185,476,491	\$110.875.432	\$168,906,202	\$0	\$19,297,500	\$3,255,000	\$775,000	\$6,711,500	\$14,337,500	\$6,014,000	\$0	\$3,611,500	\$4,495,000	\$9,865,813	\$533,620,938
2017	. , ,	\$127,595,502	\$134,142,344	\$89,399,148	\$19,297,500	\$3,255,000	\$775,000	\$0	\$14,337,500	\$6,014,000	\$0	\$3,611,500	\$4,495,000	\$10,404,031	\$580,338,767
Projected:		• ,,	• - / /-	• , , -	• -, - ,	•	• • • • • • •	• •	• , ,	• • • • • • • • • • •	• -	•	• ,,	• • • • • • • •	
2018	\$165.600.000	\$124,800,000	\$131,400,000	\$87,600,000	\$19,300,000	\$3,300,000	\$800,000	\$0	\$14,300,000	\$6,000,000	\$0	\$3,600,000	\$4,500,000	\$10,300,000	\$571,500,000
2019	\$159,800,000	\$126,600,000	\$221,300,000	\$0 \$0	\$19,300,000	\$3,300,000	\$800,000	\$6,700,000	\$14,300,000	\$6,000,000	\$0	\$3,600,000	\$4,500,000	\$10,400,000	\$576,600,000
2020	\$160,300,000	\$127,600,000	\$223,100,000	\$0	\$19,300,000	\$3,300,000	\$800,000	\$6,700,000	\$14,300,000	\$6,000,000	\$0	\$3,600,000	\$4,500,000	\$10,600,000	\$580,100,000
2020	\$160,400,000	\$127,900,000	\$223,700,000	\$0	\$19,300,000	\$3,300,000	\$800,000	\$6,700,000	\$14,300,000	\$6,000,000	\$0	\$3,600,000	\$4,500,000	\$10,800,000	\$581,300,000
2022	\$160,800,000	\$128,600,000	\$224,800,000	\$0	\$19,300,000	\$3,300,000	\$800,000	\$6,700,000	\$14,300,000	\$6,000,000	\$0	\$3,600,000	\$4,500,000	\$10,900,000	\$583,600,000
LULL	ψ100,000,000	φ120,000,000	Ψ <b></b> ,000,000	ψυ	φ10,000,000	φ0,000,000	ψ000,000	ψ0,100,000	Ψ17,000,000	$\psi_{0},000,000$	ΨŪ	ψ0,000,000	ψ-,000,000	ψ10,000,000	<i>4000,000,000</i>

(1) - 2016 Wyoming Session Laws, Chapter 31, Section 325 diverted revenue from the statutory one percent severance tax previously directed to the Permanent Wyoming Mineral Trust Fund (PWMTF) to the General Fund for approximately half of the 2016 fiscal year (approximately \$33.6 million). Additionally, the one percent severance tax is diverted from the PWMTF to the One Percent Severance Tax Account for the 2017-2018 biennium. The same section also diverted the portion of severance taxes traditionally directed to the Highway Fund to the General Fund for the 2017-2018 biennium (approximately \$6.7 million/year).

(2) - Chapter 62, 2002 Wyoming Session Laws made permanent the diversion of PWMTF revenues to the Severance Tax Distribution Account, and repealed the language of Chapter 99, 2000 Wyoming Session Laws requiring a larger proportion of coal bed methane revenues to be deposited into the PWMTF. Chapter 80, 2005 Wyoming Session Laws diverted additional severance taxes (equal to two-thirds of the PWMTF distribution required by Wyoming Constitution) from the Severance Tax Distribution Account to the PWMTF, beginning in FY06. One-half of the additional severance taxes to the PWMTF (\$74,264,775) was diverted to the PWMTF Reserve Account in FY10.

(3) - In FY99 and FY00, mineral severance taxes and federal mineral royalties were diverted from the Highway Fund to the School Foundation Program until \$20 million was received. This revenue diversion from the Highway fund was offset with additional fuel tax revenue. In FY01 and FY02, the diversion of revenues from these sources continued, however, the amount was not limited to a fixed dollar amount, but was a dollar for dollar swap in the amount raised by the fuel tax.

(4) - Beginning in FY92, the totals shown in this column have included diversions from the Highway Fund to the Leaking Underground Storage Tank (LUST) accounts (Financial Responsibility and Corrective Action accounts). Amounts from \$10.3 to \$10.9 million per year are projected to be diverted to these accounts in FY18 through FY22.

(5) - FY98 revenues include \$8.0 million in previously protested severance taxes on coal from prior production years. FY06 and FY07 revenues include \$19.5 million and \$13.3 million respectively, in previously protested severance taxes on natural gas from prior production years. FY15 revenues were reduced by roughly \$10 million due to a refund of overpaid severance taxes on natural gas resulting from the resolution of a tax issue with a major natural gas producer.

#### Table 5

### Mineral Severance Taxes

#### Biennial Distribution by Account

											School	Cities, Towns,			
				One Percent							Foundation/	Counties and Specia	I		
	General	Budget	:	Severance Tax				Highway	Cities and		Community	Districts Capital	County Road		
Biennium	Fund	Reserve Acct	PWMTF	Account	Water I	Water II	Water III	Fund	Towns	Counties	Colleges	Construction	Const. Fund	Others	Totals
	(1)		(1), (2)	(1)				(3)			(3)			(4)	(5)
Historical:															_
1997-98	\$140,464,016	\$66,649,935	\$111,623,683	\$0	\$36,696,834	\$7,309,142	\$0	\$14,689,945	\$32,890,946	\$13,520,581	\$165,432	\$8,628,094	\$9,072,125	\$18,603,760	\$460,314,493
1999-00	\$142,540,766	\$67,246,815	\$118,384,323	\$0	\$36,163,949	\$7,532,101	\$0	\$9,108,600	\$33,894,627	\$13,880,803	\$6,234,797	\$7,741,963	\$9,336,662	\$19,516,774	\$471,582,180
2001-02	\$256,289,927	\$97,185,642	\$185,264,887	\$0	\$40,102,845	\$12,826,869	\$0	\$35,965,577	\$48,231,930	\$21,974,954	\$26,744	\$9,369,034	\$10,088,546	\$30,080,284	\$747,407,239
2003-04	\$333,957,708	\$276,758,652	\$240,798,812	\$0	\$39,101,441	\$6,736,790	\$0	\$14,667,344	\$29,633,614	\$12,429,714	\$0	\$8,786,528	\$8,995,031	\$20,827,516	\$992,693,150
2005-06	\$465,530,763	\$531,160,140	\$583,525,161	\$0	\$38,475,804	\$7,231,005	\$775,114	\$16,227,296	\$31,833,340	\$13,195,534	\$0	\$7,998,065	\$8,990,056	\$22,791,494	\$1,727,733,772
2007-08	\$471,823,721	\$551,893,115	\$789,669,768	\$0	\$39,335,587	\$6,723,572	\$1,550,360	\$14,770,346	\$29,635,346	\$12,348,525	\$0	\$7,223,159	\$8,990,152	\$23,787,280	\$1,957,750,931
2009-10	\$444,575,697	\$501,366,636	\$721,328,555	\$0	\$38,595,197	\$6,598,620	\$1,550,295	\$13,777,003	\$29,073,068	\$12,161,056	\$0	\$7,223,166	\$8,990,137	\$21,375,110	\$1,806,614,540
2011-12	\$451,466,753	\$518,247,815	\$731,343,522	\$0	\$38,584,147	\$6,459,977	\$1,550,269	\$13,215,103	\$28,449,227	\$11,953,094	\$0	\$7,223,145	\$8,990,128	\$21,523,435	\$1,839,006,615
2013-14	\$444,837,309	\$503,662,694	\$712,714,760	\$0	\$38,595,000	\$6,510,000	\$1,550,000	\$13,423,000	\$28,675,000	\$12,028,000	\$0	\$7,223,000	\$8,990,000	\$21,275,496	\$1,799,484,259
2015-16	\$386,211,170	\$319,338,822	\$477,344,475	\$0	\$38,595,000	\$6,510,000	\$1,550,000	\$13,423,000	\$28,675,000	\$12,028,000	\$0	\$7,223,000	\$8,990,000	\$20,675,156	\$1,320,563,623
Projected:															

2017-18	\$332,612,242 \$252,395,502	\$265,542,344 \$176,999,148	\$38,597,500	\$6,555,000	\$1,575,000	\$0	\$28,637,500	\$12,014,000	\$0	\$7,211,500	\$8,995,000	\$20,704,031	\$1,151,838,767
2019-20	\$320,100,000 \$254,200,000	\$444,400,000 \$0	\$38,600,000	\$6,600,000	\$1,600,000	\$13,400,000	\$28,600,000	\$12,000,000	\$0	\$7,200,000	\$9,000,000	\$21,000,000	\$1,156,700,000
2021-22	\$321,200,000 \$256,500,000	\$448,500,000 \$0	\$38,600,000	\$6,600,000	\$1,600,000	\$13,400,000	\$28,600,000	\$12,000,000	\$0	\$7,200,000	\$9,000,000	\$21,700,000	\$1,164,900,000

(1) - 2016 Wyoming Session Laws, Chapter 31, Section 325 diverted revenue from the statutory one percent severance tax previously directed to the Permanent Wyoming Mineral Trust Fund (PWMTF) to the General Fund for approximately half of the 2016 fiscal year (approximately \$33.6 million). Additionally, the one percent severance tax is diverted from the PWMTF to the One Percent Severance Tax Account for the 2017-2018 biennium. The same section also diverted the portion of severance taxes traditionally directed to the Highway Fund to the General Fund for the 2017-2018 biennium (approximately \$6.7 million/year).

(2) - Chapter 62, 2002 Wyoming Session Laws made permanent the diversion of PWMTF revenues to the Severance Tax Distribution Account, and repealed the language of Chapter 99, 2000 Wyoming Session Laws requiring a larger proportion of coal bed methane revenues to be deposited into the PWMTF. Chapter 80, 2005 Wyoming Session Laws diverted additional severance taxes (equal to two-thirds of the PWMTF distribution required by Wyoming Constitution) from the Severance Tax Distribution Account to the PWMTF, beginning in FY06. One-half of the additional severance taxes to the PWMTF (\$74,264,775) was diverted to the PWMTF Reserve Account in FY10.

(3) - In FY99 and FY00, mineral severance taxes and federal mineral royalties were diverted from the Highway Fund to the School Foundation Program until \$20 million was received. This revenue diversion from the Highway fund was offset with additional fuel tax revenue. In FY01 and FY02, the diversion of revenues from these sources continued, however, the amount was not limited to a fixed dollar amount, but was a dollar for dollar swap in the amount raised by the fuel tax.

(4) - Beginning in FY92, the totals shown in this column have included diversions from the Highway Fund to the Leaking Underground Storage Tank (LUST) accounts (Financial Responsibility and Corrective Action accounts). Amounts from \$10.3 to \$10.9 million per year are projected to be diverted to these accounts in FY18 through FY22.

(5) - FY98 revenues include \$8.0 million in previously protested severance taxes on coal from prior production years. FY06 and FY07 revenues include \$19.5 million and \$13.3 million respectively, in previously protested severance taxes on natural gas from prior production years. FY15 revenues were reduced by roughly \$10 million due to a refund of overpaid severance taxes on natural gas resulting from the resolution of a tax issue with a major natural gas producer.

### Table 6 Mineral Severance Taxes to All Accounts Fiscal Year Distribution by Mineral

Fiscal			,			
Year	Crude Oil	Natural Gas	Coal	Trona	Others	Total
	(1)	(2)	(3)			
Historical:						
1997	\$64,544,014	\$76,010,393	\$80,676,620	\$10,553,905	\$994,148	\$232,779,080
1998	\$43,060,380	\$80,346,880	\$92,985,342	\$10,188,026	\$954,788	\$227,535,416
1999	\$29,660,885	\$73,928,406	\$85,333,688	\$6,547,419	\$988,806	\$196,459,204
2000	\$57,322,887	\$120,540,411	\$85,163,673	\$10,959,901	\$1,156,732	\$275,143,604
2001	\$74,664,462	\$266,647,882	\$97,478,127	\$8,332,546	\$850,262	\$447,973,279
2002	\$56,426,635	\$121,889,265	\$113,711,532	\$6,294,712	\$1,111,817	\$299,433,961
2003	\$69,730,688	\$224,966,204	\$125,434,970	\$7,786,147	\$1,208,213	\$429,126,222
2004	\$72,844,983	\$345,548,531	\$135,956,903	\$7,952,481	\$1,264,030	\$563,566,928
2005	\$102,660,529	\$461,669,565	\$151,379,493	\$9,285,910	\$1,661,357	\$726,656,854
2006	\$135,263,605	\$669,480,959	\$183,112,618	\$9,969,078	\$3,250,658	\$1,001,076,918
2007	\$139,310,375	\$493,200,653	\$215,728,100	\$13,076,121	\$2,483,671	\$863,798,920
2008	\$217,110,229	\$620,501,378	\$238,598,329	\$15,041,023	\$2,701,052	\$1,093,952,011
2009	\$143,285,176	\$444,182,740	\$273,281,570	\$15,636,672	\$2,267,004	\$878,653,162
2010	\$173,078,065	\$468,963,683	\$269,081,349	\$14,090,157	\$2,748,124	\$927,961,378
2011	\$204,334,598	\$427,091,930	\$294,278,928	\$15,554,565	\$4,038,094	\$945,298,115
2012	\$236,554,432	\$342,372,512	\$293,110,118	\$17,169,707	\$4,501,731	\$893,708,500
2013	\$238,394,726	\$296,789,166	\$282,081,447	\$18,256,604	\$4,310,978	\$839,832,921
2014	\$322,191,025	\$340,430,854	\$274,042,449	\$18,488,233	\$4,498,777	\$959,651,338
2015	\$256,104,891	\$237,010,110	\$269,521,346	\$18,863,711	\$5,442,627	\$786,942,685
2016	\$153,285,240	\$139,725,594	\$217,752,042	\$18,858,104	\$3,999,958	\$533,620,938
2017	\$161,071,114	\$179,417,599	\$218,013,154	\$18,696,775	\$3,140,125	\$580,338,767
Projected:						
2018	\$170,700,000	\$171,400,000	\$207,400,000	\$18,700,000	\$3,300,000	\$571,500,000
2019	\$181,500,000	\$168,600,000	\$204,300,000	\$18,900,000	\$3,300,000	\$576,600,000
2020	\$193,100,000	\$165,700,000	\$199,100,000	\$18,900,000	\$3,300,000	\$580,100,000
2021	\$199,100,000	\$165,800,000	\$194,000,000	\$19,100,000	\$3,300,000	\$581,300,000
2022	\$205,100,000	\$165,100,000	\$190,800,000	\$19,300,000	\$3,300,000	\$583,600,000

(1) - The drop in revenues that occurred in FY99 was due, in part, to the reduced taxation rates put in place by Chapter 168 of the 1999 Wyoming Session Laws, "Oil Producers Recovery - 2."

(2) - FY06 and FY07 natural gas revenues include \$19.5 million and \$13.3 million, respectively in previously protested severance taxes from prior production years. FY15 natural gas revenues were reduced by roughly \$10 million due to a refund of overpaid severance taxes resulting from the resolution of a tax issue with a major natural gas producer.

(3) - FY98 coal revenues include \$8.0 million in previously protested severance taxes from prior production years.

						Tabl	e7						
				Fed	leral Mineral R	oyalties (Including	Coal Lease Bon	uses) - Projection:	6				
					F	Fiscal Year Distrib	ution by Account	I					
						Cities, Towns,							
						Counties and Spec.							
Fiscal	University of	School	Highway	Highway Fund	Cities and	Districts Capital	School Dist		Community		Transportation	General Fund	
Year	Wyoming	Foundation	Fund	County Roads	Towns	Construction	Cap Con	LRI/BRA	Colleges	Others	Enterprise	Administrative	Totals
		(1),(2),(5),(6)	(1),(3),(4)			(4)	(4),(5),(6)	(5),(6)	(4)	(2)		(3)	
Historical:													
1997	\$14,835,376	\$91,275,558	\$64,674,013	. , ,	\$19,100,633	\$16,004,140	\$5,500,982	\$18,739,204	\$2,230,370	\$1,402,532	\$0	\$0	\$238,346,960
1998	\$15,018,540	\$89,360,543	\$61,313,911	\$4,487,974	\$18,697,362	\$9,975,145	\$7,709,622	\$14,094,136	\$581,013	\$2,013,448	\$0	\$0	\$223,251,694
1999	\$13,420,020	\$98,499,570	\$48,334,693	. , ,	\$18,638,917	\$13,080,567	\$28,481,977	\$0	\$1,600,000	\$0	\$4,500,000	\$0	\$231,029,084
2000	\$19,885,932	\$101,996,286	\$56,432,177	\$4,902,424	\$19,588,385	\$13,795,708	\$29,154,892	\$46,949,577	\$1,600,000	\$7,545,467	\$7,242,000	\$0	\$309,092,848
2001	\$16,780,519	\$131,302,412	\$50,215,852	. , ,	\$21,028,138	\$14,947,511	\$37,259,164	\$141,647,680	\$1,600,000	\$20,503,245	\$7,242,000	\$0	\$448,120,027
2002	\$13,365,000	\$132,342,234	\$35,059,328	\$4,455,000	\$18,562,500	\$13,050,000	\$73,143,236	\$47,829,775	\$1,600,000	\$0	\$7,242,000	\$2,000,000	\$348,649,073
2003	\$13,365,000	\$156,262,611	\$62,017,500	. , ,	\$18,562,500	\$13,050,000	\$69,880,327	\$135,076,695	\$1,600,000	\$0	\$0	\$2,000,000	\$476,269,633
2004	\$13,365,000	\$191,090,662	\$62,017,500	\$4,455,000	\$18,562,500	\$13,050,000	\$43,514,047	\$204,711,904	\$1,600,000	\$0	\$0	\$2,000,000	\$554,366,613
2005	\$13,365,000	\$201,172,871	\$62,017,500	\$4,455,000	\$18,562,500	\$13,050,000	\$213,121,806	\$285,903,765	\$1,600,000	\$30,525,901	\$0	\$2,000,000	\$845,774,343
2006	\$13,365,000	\$88,704,000	\$62,017,500	\$4,455,000	\$18,562,500	\$13,050,000	\$203,999,794	\$440,092,088	\$1,600,000	\$220,112,064	\$0	\$2,000,000	\$1,067,957,946
2007	\$13,365,000	\$88,704,000	\$62,017,500	\$4,455,000	\$18,562,500	\$13,050,000	\$166,049,329	\$371,530,742	\$1,600,000	\$185,821,106	\$0	\$2,000,000	\$927,155,177
2008	\$13,365,000	\$287,243,293	\$62,017,500	\$4,455,000	\$18,562,500	\$13,050,000	\$181,137,080	\$534,000,228	\$1,600,000	\$68,540,929	\$0	\$2,000,000	\$1,185,971,530
2009	\$13,365,000	\$300,714,799	\$62,017,500	\$4,455,000	\$18,562,500	\$13,050,000	\$209,876,037	\$423,895,060	\$1,600,000	\$0	\$0	\$2,000,000	\$1,049,535,896
2010	\$13,365,000	\$299,236,295	\$62,017,500	\$4,455,000	\$18,562,500	\$13,050,000	\$43,468,169	\$420,967,494	\$1,600,000	\$0	\$0	\$2,000,000	\$878,721,958
2011	\$13,365,000	\$320,455,151	\$62,017,500	\$4,455,000	\$18,562,500	\$13,050,000	\$43,468,006	\$463,393,448	\$1,600,000	\$0	\$0	\$2,000,000	\$942,366,605
2012	\$13,365,000	\$291,863,708	\$62,017,500	\$4,455,000	\$18,562,500	\$13,050,000	\$141,575,795	\$406,218,740	\$1,600,000	\$0	\$0	\$2,000,000	\$954,708,243
2013	\$13,365,000	\$263,033,022	\$62,017,500	\$4,455,000	\$18,562,500	\$13,050,000	\$234,971,046	\$348,580,024	\$1,600,000	\$0	\$0	\$2,000,000	\$961,634,092
2014	\$13,365,000	\$286,403,608	\$62,017,500	\$4,455,000	\$18,562,500	\$13,050,000	\$209,148,871	\$395,306,057	\$1,600,000	\$0	\$0	\$2,000,000	\$1,005,908,536
2015	\$13,365,000	\$251,827,747	\$62,017,500	\$4,455,000	\$18,562,500	\$13,050,000	\$220,955,844	\$326,149,640	\$1,600,000	\$0	\$0	\$2,000,000	\$913,983,231
2016	\$13,365,000	\$182,837,225	\$62,017,500	\$4,455,000	\$18,562,500	\$13,050,000	\$215,827,963	\$188,209,982	\$1,600,000	\$0	\$0	\$2,000,000	\$701,925,170
2017	\$13,365,000	\$215,474,656	\$1,875,000	\$4,455,000	\$18,562,500	\$13,050,000	\$120,633,115	\$253,465,266	\$1,600,000	\$0	\$0	\$62,142,500	\$704,623,037

\$534,400,000
\$509,600,000
\$506,800,000
\$504,600,000
\$503,500,000
\$ \$

- (1) In FY99 and FY00, mineral severance taxes and federal mineral royalties were diverted from the Highway Fund to the School Foundation Program until \$20 million was received. This revenue diversion from the Highway Fund was offset with additional fuel tax revenue. In FY01 and FY02, the diversion of revenues from these sources continued, however, the amount was not limited to a fixed dollar amount, but was a dollar for dollar swap in the amount raised by the fuel tax.
- (2) Chapter 190, 2005 Wyoming Session Laws diverted federal mineral royalties over the \$200 million cap from the School Foundation Program (SFP) to the Higher Education Endowment Account and Hathaway Endowment Account, beginning in FY05. Amounts diverted were reduced as necessary to ensure an unobligated, unencumbered balance of \$100 million in the SFP as of July 1 of each fiscal year. Of the amounts diverted, 21% was distributed to the Higher Education Endowment Account until the account balance reached \$105 million, and 79% was distributed to the Hathaway Endowment Account until the account balance reached \$400 million. These distributions were completed in FY08.
- (3) 2016 Wyoming Session Laws, Chapter 31, Section 326 diverted the portion of federal mineral royalties traditionally directed to the Highway Fund to the General Fund for the 2017-2018 biennium (approximately \$60.1 million /vear).
- (4) 2016 Wyoming Session Laws, Chapter 31, Section 331 directs the final payment of all sequestered monies received in FY 2018 to be deposited into the School Capital Construction Account, rather than the Highway Fund, Community Colleges, or Cities, Towns, Counties and Special Districts Capital Construction Account.
- (5) Federal legislation was enacted in December 2007 to reduce the state's share of federal mineral royalties by 2%, beginning in FY08. This revenue decrease reduces distributions to the School Foundation Program Account, the School Capital Construction Account, and the Budget Reserve Account. This 2% reduction was made permanent in December 2013.
- (6) The President issued a sequestration order on March 1, 2013 in accordance with the Balanced Budget and Emergency Deficit Control Act as amended. Sequestration has resulted in reductions of FMR and coal lease bonus payments to the State of Wyoming in FY13-FY17, resulting in reduced distributions to the School Foundation Program Account, the School Capital Construction Account, and the Budget Reserve Account. In late October 2013, the Department of Interior began the practice of repaying the state for federal mineral revenues sequestered during the prior federal fiscal year (FFY). The State Treasurer has received repayments of the FFY13 through FFY16 sequesters, and these repayments are included in the FY14 through FY17 revenues presented in the table above. CREG anticipates the sequester withholding and subsequent repayments to continue throughout the forecast period. As a result of this assumption (withholding/payback), no net impact of future federal sequestration is included in the forecast.

#### Table 7(a) Federal Mineral Royalties (without Coal Lease Bonuses) - Projections Fiscal Year Distribution by Account Cities, Towns,

					(	Counties and Spec.						
Fiscal	University of	School	Highway	Highway Fund	Cities and	Districts Capital	School Dist			Transportation	General Fund	
Year	Wyoming	Foundation	Fund	County Roads	Towns	Construction	Cap Con	LRI/BRA	Others	Enterprise	Administrative	Totals
		(1),(2),(4),(5)	(1),(3)					(4),(5)	(2)		(3)	
Historical:												
1997	\$14,835,376	\$91,275,558	\$61,886,051	\$4,584,152	\$19,100,633	\$7,640,253	\$5,500,982	\$9,817,725	\$1,402,532	\$0	\$0	\$216,043,262
1998	\$15,018,540	\$89,360,543	\$60,587,645	\$4,487,974	\$18,697,362	\$7,796,345	\$5,385,568	\$14,094,136	\$2,013,448	\$0	\$0	\$217,441,561
1999	\$13,420,020	\$98,499,570	\$46,459,693		\$18,638,917	\$7,455,567	\$5,368,009	\$0	\$0	\$4,500,000	\$0	\$198,815,116
2000	\$19,885,932	\$101,996,286	\$54,557,177	\$4,902,424	\$19,588,385	\$8,170,708	\$5,882,909	\$46,949,577	\$7,545,467	\$7,242,000	\$0	\$276,720,865
2001	\$16,780,519	\$131,302,412	\$48,340,852	\$5,593,506	\$21,028,138	\$9,322,511	\$6,712,209	\$141,647,680	\$20,503,245	\$7,242,000	\$0	\$408,473,072
2002	\$13,365,000	\$132,342,234	\$33,184,328	\$4,455,000	\$18,562,500	\$7,425,000	\$5,346,000	\$47,829,775	\$0	\$7,242,000	\$2,000,000	\$271,751,837
2003	\$13,365,000	\$156,262,611	\$60,142,500	\$4,455,000	\$18,562,500	\$7,425,000	\$5,346,000	\$135,076,695	\$0	\$0	\$2,000,000	\$402,635,306
2004	\$13,365,000	\$191,090,662	\$60,142,500	\$4,455,000	\$18,562,500	\$7,425,000	\$5,346,000	\$204,711,904	\$0	\$0	\$2,000,000	\$507,098,566
2005	\$13,365,000	\$201,172,871	\$60,142,500	\$4,455,000	\$18,562,500	\$7,425,000	\$5,346,000	\$285,903,765	\$30,525,901	\$0	\$2,000,000	\$628,898,537
2006	\$13,365,000	\$88,704,000	\$60,142,500	\$4,455,000	\$18,562,500	\$7,425,000	\$5,346,000	\$440,092,088	\$220,112,064	\$0	\$2,000,000	\$860,204,152
2007	\$13,365,000	\$88,704,000	\$60,142,500	\$4,455,000	\$18,562,500	\$7,425,000	\$5,346,000	\$371,530,742	\$185,821,106	\$0	\$2,000,000	\$757,351,848
2008	\$13,365,000	\$287,243,293	\$60,142,500	\$4,455,000	\$18,562,500	\$7,425,000	\$5,346,000	\$534,000,228	\$68,540,929	\$0	\$2,000,000	\$1,001,080,450
2009	\$13,365,000	\$300,714,799	\$60,142,500	\$4,455,000	\$18,562,500	\$7,425,000	\$5,346,000	\$423,895,060	\$0	\$0	\$2,000,000	\$835,905,859
2010	\$13,365,000	\$299,236,295	\$60,142,500	\$4,455,000	\$18,562,500	\$7,425,000	\$5,346,000	\$420,967,494	\$0	\$0	\$2,000,000	\$831,499,789
2011	\$13,365,000	\$320,455,151	\$60,142,500	\$4,455,000	\$18,562,500	\$7,425,000	\$5,346,000	\$463,393,448	\$0	\$0	\$2,000,000	\$895,144,599
2012	\$13,365,000	\$291,863,708	\$60,142,500	\$4,455,000	\$18,562,500	\$7,425,000	\$5,346,000	\$406,218,740	\$0	\$0	\$2,000,000	\$809,378,448
2013	\$13,365,000	\$263,033,022	\$60,142,500	\$4,455,000	\$18,562,500	\$7,425,000	\$5,346,000	\$348,580,024	\$0	\$0	\$2,000,000	\$722,909,046
2014	\$13,365,000	\$286,403,608	\$60,142,500	\$4,455,000	\$18,562,500	\$7,425,000	\$5,346,000	\$395,306,057	\$0	\$0	\$2,000,000	\$793,005,665
2015	\$13,365,000	\$251,827,747	\$60,142,500	\$4,455,000	\$18,562,500	\$7,425,000	\$5,346,000	\$326,149,640	\$0	\$0	\$2,000,000	\$689,273,387
2016	\$13,365,000	\$182,837,225	\$60,142,500	\$4,455,000	\$18,562,500	\$7,425,000	\$5,346,000	\$188,209,982	\$0	\$0	\$2,000,000	\$482,343,207
2017	\$13,365,000	\$215,474,656	\$0	\$4,455,000	\$18,562,500	\$7,425,000	\$5,346,000	\$253,465,266	\$0	\$0	\$62,142,500	\$580,235,922
Projected:												
2018	\$13,400,000	\$198,400,000	\$0	\$4,500,000	\$18,600,000	\$7,400,000	\$5,300,000	\$219,400,000	\$0	\$0	\$62,100,000	\$529,100,000
2019	\$13,400,000	\$191,900,000	\$60,100,000	\$4,500,000	\$18,600,000	\$7,400,000	\$5,300,000	\$206,400,000	\$0	\$0	\$2,000,000	\$509,600,000
2020	\$13,400,000	\$191,000,000	\$60,100,000	\$4,500,000	\$18,600,000	\$7,400,000	\$5,300,000	\$204,500,000	\$0	\$0	\$2,000,000	\$506,800,000
2021	\$13,400,000	\$190,200,000	\$60,100,000	\$4,500,000	\$18,600,000	\$7,400,000	\$5,300,000	\$203,100,000	\$0	\$0	\$2,000,000	\$504,600,000
2022	\$13,400,000	\$189,900,000	\$60,100,000	\$4,500,000	\$18,600,000	\$7,400,000	\$5,300,000	\$202,300,000	\$0	\$0	\$2,000,000	\$503,500,000

(1) - In FY99 and FY00, mineral severance taxes and federal mineral royalties were diverted from the Highway Fund to the School Foundation Program until \$20 million was received. This revenue diversion from the Highway Fund was offset with additional fuel tax revenue. In FY01 and FY02, the diversion of revenues from these sources continued, however, the amount was not limited to a fixed dollar amount, but was a dollar for dollar swap in the amount raised by the fuel tax.

(2) - Chapter 190, 2005 Wyoming Session Laws diverted federal mineral royalties over the \$200 million cap from the School Foundation Program (SFP) to the Higher Education Endowment Account and Hathaway Endowment Account, beginning in FY05. Amounts diverted were reduced as necessary to ensure an unobligated, unencumbered balance of \$100 million in the SFP as of July 1 of each fiscal year. Of the amounts diverted, 21% was distributed to the Higher Education Endowment Account until the account balance reached \$105 million, and 79% was distributed to the Hathaway Endowment Account until the account balance reached \$400 million. These distributions were completed in FY08.

(3) - 2016 Wyoming Session Laws, Chapter 31, Section 326 diverted the portion of federal mineral royalties traditionally directed to the Highway Fund to the General Fund for the 2017-2018 biennium (approximately \$60.1 million /year).

(4) - Federal legislation was enacted in December 2007 to reduce the state's share of federal mineral royalties by 2%, beginning in FY08. This revenue decrease reduces distributions to the School Foundation Program Account and the Budget Reserve Account. This 2% reduction was made permanent in December 2013.

(5) - The President issued a sequestration order on March 1, 2013 in accordance with the Balanced Budget and Emergency Deficit Control Act as amended. Sequestration has resulted in reductions of FMR payments to the State of Wyoming in FY13-FY17, resulting in reduced distributions to the School Foundation Program Account and the Budget Reserve Account. In late October 2013, the Department of Interior began the practice of repaying the state for federal mineral revenues sequestered during the prior federal fiscal year (FFY). The State Treasurer has received repayments of the FFY13 through FFY16 sequesters, and these repayments are included in the FY14 through FY17 revenues presented in the table above. CREG anticipates the sequester withholding and subsequent repayments to continue throughout the forecast period. As a result of this assumption (withholding/payback), no net impact of future federal sequestration is included in the forecast.

#### Table 7(b) Coal Lease Bonuses - Projections Fiscal Year Distribution by Account

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	Cities, Towns,					
	Counties and Spec.					
Fiscal	Districts Capital	Highway		School Dist	Community	
Year	Construction	Fund	LRI	Cap Con	Colleges	Totals
	(1)	(1)		(1),(2),(3)	(1)	
Historic:						
1997	\$8,363,887	\$2,787,962	\$8,921,479	\$0	\$2,230,370	\$22,303,698
1998	\$2,178,800	\$726,266	\$0	\$2,324,054	\$581,013	\$5,810,133
1999	\$5,625,000	\$1,875,000	\$0	\$23,113,968	\$1,600,000	\$32,213,968
2000	\$5,625,000	\$1,875,000	\$0	\$23,271,983	\$1,600,000	\$32,371,983
2001	\$5,625,000	\$1,875,000	\$0	\$30,546,955	\$1,600,000	\$39,646,955
2002	\$5,625,000	\$1,875,000	\$0	\$67,797,236	\$1,600,000	\$76,897,236
2003	\$5,625,000	\$1,875,000	\$0	\$64,534,327	\$1,600,000	\$73,634,327
2004	\$5,625,000	\$1,875,000	\$0	\$38,168,047	\$1,600,000	\$47,268,047
2005	\$5,625,000	\$1,875,000	\$0	\$207,775,806	\$1,600,000	\$216,875,806
2006	\$5,625,000	\$1,875,000	\$0	\$198,653,794	\$1,600,000	\$207,753,794
2007	\$5,625,000	\$1,875,000	\$0	\$160,703,329	\$1,600,000	\$169,803,329
2008	\$5,625,000	\$1,875,000	\$0	\$175,791,080	\$1,600,000	\$184,891,080
2009	\$5,625,000	\$1,875,000	\$0	\$204,530,037	\$1,600,000	\$213,630,037
2010	\$5,625,000	\$1,875,000	\$0	\$38,122,169	\$1,600,000	\$47,222,169
2011	\$5,625,000	\$1,875,000	\$0	\$38,122,006	\$1,600,000	\$47,222,006
2012	\$5,625,000	\$1,875,000	\$0	\$136,229,795	\$1,600,000	\$145,329,795
2013	\$5,625,000	\$1,875,000	\$0	\$229,625,046	\$1,600,000	\$238,725,046
2014	\$5,625,000	\$1,875,000	\$0	\$203,802,871	\$1,600,000	\$212,902,871
2015	\$5,625,000	\$1,875,000	\$0	\$215,609,844	\$1,600,000	\$224,709,844
2016	\$5,625,000	\$1,875,000	\$0	\$210,481,963	\$1,600,000	\$219,581,963
2017	\$5,625,000	\$1,875,000	\$0	\$115,287,115	\$1,600,000	\$124,387,115
Projected:						
2018	\$O	\$0	\$0	\$5,300,000	\$0	\$5,300,000
2019	\$0	\$0	\$0	\$0	\$0	\$0
2020	\$0	\$O	\$0	\$0	<b>\$</b> 0	\$0
2021	\$0	\$O	\$0	\$0	<b>\$</b> 0	\$0
2022	\$0	\$O	\$0	\$0	\$0	\$0

(1) - 2016 Wyoming Session Laws, Chapter 31, Section 331 directs the final payment of all sequestered monies received in FY 2018 to be deposited into the School Capital Construction Account, rather than the Highway Fund, Community Colleges, or Cities, Towns, Counties and Special Districts Capital Construction Account.

(2) - Federal legislation was enacted in December 2007 to reduce the state's share of federal mineral royalties by 2%, beginning in FY08. This revenue decrease reduces distributions to the School Capital Construction Account. This 2% reduction was made permanent in December 2013.

(3) - The President issued a sequestration order on March 1, 2013 in accordance with the Balanced Budget and Emergency Deficit Control Act as amended. Sequestration has resulted in reductions of coal lease bonus payments to the State of Wyoming in FY13-FY17, resulting in reduced distributions to the School Capital Construction Account. In late October 2013, the Department of Interior began the practice of repaying the state for federal mineral revenues sequestered during the prior federal fiscal year (FFY). The State Treasurer has received repayments of the FFY13 through FFY16 sequesters, and these repayments are included in the FY14 through FY17 revenues presented in the table above. CREG anticipates the sequester withholding and subsequent repayments to continue throughout the forecast period. As a result of this assumption (withholding/payback), an estimated \$5.3 million of the coal lease bonus payments anticipated in FY17 would be repaid in FY18.

### Table 8 Federal Mineral Royalties (Including Coal Lease Bonuses) - Projections Biennial Distribution by Account

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						Cities, Towns,							
						Counties and Spec.							
	University of	School	Highway	Highway Fund	Cities and	Districts Capital	School Dist		Community		Transportation	General Fund	
Biennium	Wyoming	Foundation	Fund	County Roads	Towns	Construction	Cap Con	LRI/BRA	Colleges	Others	Enterprise	Administrative	Totals
		(1),(2),(5),(6)	(1),(3),(4)			(4)	(4),(5),(6)	(5),(6)	(4)	(2)		(3)	
Historical:													
1997-98	\$29,853,916	\$180,636,101	\$125,987,924	\$9,072,126	\$37,797,995	\$25,979,285	\$13,210,604	\$32,833,340	\$2,811,383	\$3,415,980	\$0	\$0	\$461,598,654
1999-00	\$33,305,952	\$200,495,856	\$104,766,870	\$9,375,764	\$38,227,302	\$26,876,275	\$57,636,869	\$46,949,577	\$3,200,000	\$7,545,467	\$11,742,000	\$0	\$540,121,932
2001-02	\$30,145,519	\$263,644,646	\$85,275,180	\$10,048,506	\$39,590,638	\$27,997,511	\$110,402,400	\$189,477,455	\$3,200,000	\$20,503,245	\$14,484,000	\$2,000,000	\$796,769,100
2003-04	\$26,730,000	\$347,353,273	\$124,035,000	\$8,910,000	\$37,125,000	\$26,100,000	\$113,394,374	\$339,788,599	\$3,200,000	\$0	\$0	\$4,000,000	\$1,030,636,246
2005-06	\$26,730,000	\$289,876,871	\$124,035,000	\$8,910,000	\$37,125,000	\$26,100,000	\$417,121,600	\$725,995,853	\$3,200,000	\$250,637,965	\$0	\$4,000,000	\$1,913,732,289
2007-08	\$26,730,000	\$375,947,293	\$124,035,000	\$8,910,000	\$37,125,000	\$26,100,000	\$347,186,409	\$905,530,970	\$3,200,000	\$254,362,035	\$0	\$4,000,000	\$2,113,126,707
2009-10	\$26,730,000	\$599,951,094	\$124,035,000	\$8,910,000	\$37,125,000	\$26,100,000	\$253,344,206	\$844,862,554	\$3,200,000	\$0	\$0	\$4,000,000	\$1,928,257,854
2011-12	\$26,730,000	\$612,318,859	\$124,035,000	\$8,910,000	\$37,125,000	\$26,100,000	\$185,043,801	\$869,612,188	\$3,200,000	<b>\$</b> 0	\$0	\$4,000,000	\$1,897,074,848
2013-14	\$26,730,000	\$549,436,630	\$124,035,000	\$8,910,000	\$37,125,000	\$26,100,000	\$444,119,917	\$743,886,081	\$3,200,000	<b>\$</b> 0	\$0	\$4,000,000	\$1,967,542,628
2015-16	\$26,730,000	\$434,664,972	\$124,035,000	\$8,910,000	\$37,125,000	\$26,100,000	\$436,783,807	\$514,359,622	\$3,200,000	\$O	\$0	\$4,000,000	\$1,615,908,401
Projected:													
2017-18	\$26,765,000	\$413,874,656	\$1,875,000	\$8,955,000	\$37,162,500	\$20,450,000	\$131,233,115	\$472,865,266	\$1,600,000	\$0	\$0	\$124,242,500	\$1,239,023,037
2019-20	\$26,800,000	\$382,900,000	\$120,200,000	\$9,000,000	\$37,200,000	\$14,800,000	\$10,600,000	\$410,900,000	\$0	\$0	\$0	\$4,000,000	\$1,016,400,000

(1) - In FY99 and FY00, mineral severance taxes and federal mineral royalties were diverted from the Highway Fund to the School Foundation Program until \$20 million was received. This revenue diversion from the Highway Fund was offset with additional fuel tax revenue. In FY01 and FY02, the diversion of revenues from these sources continued, however, the amount was not limited to a fixed dollar amount, but was a dollar for dollar swap in the amount raised by the fuel tax.

\$10.600.000

\$405.400.000

\$0

\$0

\$0

\$14.800.000

(2) - Chapter 190, 2005 Wyoming Session Laws diverted federal mineral royalties over the \$200 million cap from the School Foundation Program (SFP) to the Higher Education Endowment Account and Hathaway Endowment Account, beginning in FY05. Amounts diverted were reduced as necessary to ensure an unobligated, unencumbered balance of \$100 million in the SFP as of July 1 of each fiscal year. Of the amounts diverted, 21% was distributed to the Higher Education Endowment Account until the account balance reached \$105 million, and 79% was distributed to the Hathaway Endowment Account until the account balance reached \$400 million. These distributions were completed in FY08.

(3) - 2016 Wyoming Session Laws, Chapter 31, Section 326 diverted the portion of federal mineral royalties traditionally directed to the Highway Fund to the General Fund for the 2017-2018 biennium (approximately \$60.1 million /year).

(4) - 2016 Wyoming Session Laws, Chapter 31, Section 331 directs the final payment of all sequestered monies received in FY 2018 to be deposited into the School Capital Construction Account, rather than the Highway Fund, Community Colleges, or Cities, Towns, Counties and Special Districts Capital Construction Account.

(5) - Federal legislation was enacted in December 2007 to reduce the state's share of federal mineral royalties by 2%, beginning in FY08. This revenue decrease reduces distributions to the School Foundation Program Account, the School Capital Construction Account, and the Budget Reserve Account. This 2% reduction was made permanent in December 2013.

(6) - The President issued a sequestration order on March 1, 2013 in accordance with the Balanced Budget and Emergency Deficit Control Act as amended. Sequestration has resulted in reductions of FMR and coal lease bonus payments to the State of Wyoming in FY13-FY17, resulting in reduced distributions to the School Foundation Program Account, the School Capital Construction Account, and the Budget Reserve Account. In late October 2013, the Department of Interior began the practice of repaying the state for federal mineral revenues sequestered during the prior federal fiscal year (FFY). The State Treasurer has received repayments of the FFY13 through FFY16 sequesters, and these repayments are included in the FY14 through FY17 revenues presented in the table above. CREG anticipates the sequester withholding and subsequent repayments to continue throughout the forecast period. As a result of this assumption (withholding/payback), no net impact of future federal sequestration is included in the forecast.

2021-22

\$26.800.000

\$380,100,000 \$120,200,000

\$9.000.000

\$37.200.000

\$4,000,000 \$1,008,100,000

#### Table 8(a) Federal Mineral Royalties (without Coal Lease Bonuses) - Projections Biennial Distribution by Account Cities, Towns,

#### Counties and Spec

						Counties and Spec.						
	University of	School	Highway	Highway Fund	Cities and	Districts Capital	School Dist			Transportation	General Fund	
Biennium	Wyoming	Foundation	Fund	County Roads	Towns	Construction	Cap Con	LRI/BRA	Others	Enterprise A	Administrative	Totals
		(1),(2),(4),(5)	(1),(3)					(4),(5)	(2)		(3)	
Historical:												
1997-98	\$29,853,916	\$180,636,101	\$122,473,696	\$9,072,126	\$37,797,995	\$15,436,598	\$10,886,550	\$23,911,861	\$3,415,980	\$0	\$0	\$433,484,823
1999-00	\$33,305,952	\$200,495,856	\$101,016,870	\$9,375,764	\$38,227,302	\$15,626,275	\$11,250,918	\$46,949,577	\$7,545,467	\$11,742,000	\$0	\$475,535,981
2001-02	\$30,145,519	\$263,644,646	\$81,525,180	\$10,048,506	\$39,590,638	\$16,747,511	\$12,058,209	\$189,477,455	\$20,503,245	\$14,484,000	\$2,000,000	\$680,224,909
2003-04	\$26,730,000	\$347,353,273	\$120,285,000	\$8,910,000	\$37,125,000	\$14,850,000	\$10,692,000	\$339,788,599	\$0	\$0	\$4,000,000	\$909,733,872
2005-06	\$26,730,000	\$289,876,871	\$120,285,000	\$8,910,000	\$37,125,000	\$14,850,000	\$10,692,000	\$725,995,853	\$250,637,965	\$0	\$4,000,000	\$1,489,102,689
2007-08	\$26,730,000	\$375,947,293	\$120,285,000	\$8,910,000	\$37,125,000	\$14,850,000	\$10,692,000	\$905,530,970	\$254,362,035	\$0	\$4,000,000	\$1,758,432,298
2009-10	\$26,730,000	\$599,951,094	\$120,285,000	\$8,910,000	\$37,125,000	\$14,850,000	\$10,692,000	\$844,862,554	\$0	\$0	\$4,000,000	\$1,667,405,648
2011-12	\$26,730,000	\$612,318,859	\$120,285,000	\$8,910,000	\$37,125,000	\$14,850,000	\$10,692,000	\$869,612,188	\$0	\$0	\$4,000,000	\$1,704,523,047
2013-14	\$26,730,000	\$549,436,630	\$120,285,000	\$8,910,000	\$37,125,000	\$14,850,000	\$10,692,000	\$743,886,081	\$0	\$0	\$4,000,000	\$1,515,914,711
2015-16	\$26,730,000	\$434,664,972	\$120,285,000	\$8,910,000	\$37,125,000	\$14,850,000	\$10,692,000	\$514,359,622	\$0	\$0	\$4,000,000	\$1,171,616,594
Projected:												
2017-18	\$26,765,000	\$413,874,656	\$0	\$8,955,000	\$37,162,500	\$14,825,000	\$10,646,000	\$472,865,266	\$0	\$0	\$124,242,500	\$1,109,335,922
2019-20	\$26,800,000	\$382,900,000	\$120,200,000	\$9,000,000	\$37,200,000	\$14,800,000	\$10,600,000	\$410,900,000	\$0	\$0	\$4,000,000	\$1,016,400,000
2021-22	\$26,800,000	\$380,100,000	\$120,200,000	\$9,000,000	\$37,200,000	\$14,800,000	\$10,600,000	\$405,400,000	\$0	\$0	\$4,000,000	\$1,008,100,000

(1) - In FY99 and FY00, mineral severance taxes and federal mineral royalties were diverted from the Highway Fund to the School Foundation Program until \$20 million was received. This revenue diversion from the Highway Fund was offset with additional fuel tax revenue. In FY01 and FY02, the diversion of revenues from these sources continued, however, the amount was not limited to a fixed dollar amount, but was a dollar for dollar swap in the amount raised by the fuel tax.

(2) - Chapter 190, 2005 Wyoming Session Laws diverted federal mineral royalties over the \$200 million cap from the School Foundation Program (SFP) to the Higher Education Endowment Account and Hathaway Endowment Account, beginning in FY05. Amounts diverted were reduced as necessary to ensure an unobligated, unencumbered balance of \$100 million in the SFP as of July 1 of each fiscal year. Of the amounts diverted, 21% was distributed to the Higher Education Endowment Account until the account balance reached \$105 million, and 79% was distributed to the Hathaway Endowment Account until the account balance reached \$400 million. These distributions were completed in FY08.

(3) - 2016 Wyoming Session Laws, Chapter 31, Section 326 diverted the portion of federal mineral royalties traditionally directed to the Highway Fund to the General Fund for the 2017-2018 biennium (approximately \$60.1 million /year).

(4) - Federal legislation was enacted in December 2007 to reduce the state's share of federal mineral royalties by 2%, beginning in FY08. This revenue decrease reduces distributions to the School Foundation Program Account and the Budget Reserve Account. This 2% reduction was made permanent in December 2013.

(5) - The President issued a sequestration order on March 1, 2013 in accordance with the Balanced Budget and Emergency Deficit Control Act as amended. Sequestration has resulted in reductions of FMR payments to the State of Wyoming in FY13-FY17, resulting in reduced distributions to the School Foundation Program Account and the Budget Reserve Account. In late October 2013, the Department of Interior began the practice of repaying the state for federal mineral revenues sequestered during the prior federal fiscal year (FFY). The State Treasurer has received repayments of the FFY13 through FFY16 sequesters, and these repayments are included in the FY14 through FY17 revenues presented in the table above. CREG anticipates the sequester withholding and subsequent repayments to continue throughout the forecast period. As a result of this assumption (withholding/payback), no net impact of future federal sequestration is included in the forecast.

### Table 8(b) Coal Lease Bonuses - Projections Biennial Distribution by Account

Biennium	Cities, Towns, Counties and Spec. Districts Capital Construction (1)	Highway Fund (1)	LRI	School Dist Cap Con (1),(2),(3)	Community Colleges (1)	Totals
Historic:						
1997-98	\$10,542,687	\$3,514,228	\$8,921,479	\$2,324,054	\$2,811,383	\$28,113,831
1999-00	\$11,250,000	\$3,750,000	\$0	\$46,385,951	\$3,200,000	\$64,585,951
2001-02	\$11,250,000	\$3,750,000	\$0	\$98,344,191	\$3,200,000	\$116,544,191
2003-04	\$11,250,000	\$3,750,000	\$0	\$102,702,374	\$3,200,000	\$120,902,374
2005-06	\$11,250,000	\$3,750,000	\$0	\$406,429,600	\$3,200,000	\$424,629,600
2007-08	\$11,250,000	\$3,750,000	\$0	\$336,494,409	\$3,200,000	\$354,694,409
2009-10	\$11,250,000	\$3,750,000	\$0	\$242,652,206	\$3,200,000	\$260,852,206
2011-12	\$11,250,000	\$3,750,000	\$0	\$174,351,801	\$3,200,000	\$192,551,801
2013-14	\$11,250,000	\$3,750,000	\$0	\$433,427,917	\$3,200,000	\$451,627,917
2015-16	\$11,250,000	\$3,750,000	\$O	\$426,091,807	\$3,200,000	\$444,291,807
Projected:						
2017-18	\$5,625,000	\$1,875,000	\$0	\$120,587,115	\$1,600,000	\$129,687,115
2019-20	<b>\$</b> 0	<b>\$</b> 0	\$0	<b>\$</b> 0	\$0	\$0
2021-22	<b>\$</b> 0	\$0	\$0	\$O	\$O	\$0

(1) - 2016 Wyoming Session Laws, Chapter 31, Section 331 directs the final payment of all sequestered monies received in FY 2018 to be deposited into the School Capital Construction Account, rather than the Highway Fund, Community Colleges, or Cities, Towns, Counties and Special Districts Capital Construction Account.

(2) - Federal legislation was enacted in December 2007 to reduce the state's share of federal mineral royalties by 2%, beginning in FY08. This revenue decrease reduces distributions to the School Capital Construction Account. This 2% reduction was made permanent in December 2013.

(3) - The President issued a sequestration order on March 1, 2013 in accordance with the Balanced Budget and Emergency Deficit Control Act as amended. Sequestration has resulted in reductions of coal lease bonus payments to the State of Wyoming in FY13-FY17, resulting in reduced distributions to the School Capital Construction Account. In late October 2013, the Department of Interior began the practice of repaying the state for federal mineral revenues sequestered during the prior federal fiscal year (FFY). The State Treasurer has received repayments of the FFY13 through FFY16 sequesters, and these repayments are included in the FY14 through FY17 revenues presented in the table above. CREG anticipates the sequester withholding and subsequent repayments to continue throughout the forecast period. As a result of this assumption (withholding/payback), an estimated \$5.3 million of the coal lease bonus payments anticipated in FY17 would be repaid in FY18.

### Table 9 Total State Assessed Valuation

Calendar								
Year of					Other	Minerals	Other	Grand
Production	Oil	Gas	Coal	Trona	Minerals	Totals	Property	Totals
(1)								
Historical:								
1997	\$1,094,434,115	\$1,432,024,354	\$1,168,819,736	\$259,007,520	\$63,325,758	\$4,017,611,483	\$3,423,859,455	\$7,441,470,938
1998	\$617,510,781	\$1,306,590,501	\$1,204,528,349	\$242,352,415	\$64,727,912	\$3,435,709,958	\$3,589,768,423	\$7,025,478,381
1999	\$903,869,245	\$1,601,520,736	\$1,265,306,376	\$211,143,740	\$65,617,392	\$4,047,457,489	\$3,849,398,782	\$7,896,856,271
2000	\$1,438,975,976	\$3,365,840,728	\$1,336,115,591	\$206,218,970	\$59,908,980	\$6,407,060,245	\$4,135,036,155	\$10,542,096,400
2001	\$1,080,018,231	\$3,882,089,465	\$1,506,337,295	\$209,191,934	\$61,089,137	\$6,738,726,062	\$4,430,580,865	\$11,169,306,927
2002	\$1,083,555,330	\$2,512,574,992	\$1,760,291,304	\$203,324,146	\$64,567,181	\$5,624,312,953	\$4,715,774,001	\$10,340,086,954
2003	\$1,244,211,776	\$5,265,135,004	\$1,846,983,332	\$195,203,377	\$64,488,534	\$8,616,022,023	\$5,063,514,295	\$13,679,536,318
2004	\$1,634,067,860	\$7,039,052,884	\$2,039,556,051	\$198,943,291	\$72,397,802	\$10,984,017,888	\$5,461,066,596	\$16,445,084,484
2005	\$2,152,842,718	\$10,134,180,366	\$2,280,138,621	\$255,216,361	\$83,997,233	\$14,906,375,299	\$6,072,284,471	\$20,978,659,770
2006	\$2,533,149,964	\$8,770,228,320	\$2,884,925,775	\$299,227,941	\$98,848,458	\$14,586,380,458	\$6,904,886,980	\$21,491,267,438
2007	\$2,843,196,944	\$7,271,144,479	\$3,279,547,772	\$339,684,701	\$111,630,388	\$13,845,204,284	\$8,053,126,913	\$21,898,331,197
2008	\$4,089,269,385	\$12,003,450,988	\$3,760,527,297	\$427,193,253	\$116,440,939	\$20,396,881,862	\$8,822,651,321	\$29,219,533,183
2009	\$2,439,657,555	\$5,861,051,297	\$3,834,477,312	\$350,783,487	\$97,845,933	\$12,583,815,584	\$8,732,662,047	\$21,316,477,631
2010	\$3,272,849,256	\$7,601,436,243	\$4,108,362,906	\$375,999,587	\$134,780,261	\$15,493,428,253	\$8,846,271,979	\$24,339,700,232
2011	\$4,119,591,576	\$7,190,810,473	\$4,284,972,107	\$431,369,858	\$159,937,621	\$16,186,681,635	\$9,055,962,943	\$25,242,644,578
2012	\$4,229,997,989	\$4,470,657,938	\$4,178,694,059	\$451,440,510	\$175,774,950	\$13,506,565,446	\$9,290,528,889	\$22,797,094,335
2013	\$4,861,690,388	\$5,090,310,877	\$3,905,573,027	\$439,786,716	\$165,704,643	\$14,463,065,651	\$9,701,401,874	\$24,164,467,525
2014	\$5,566,696,351	\$5,803,100,895	\$3,983,594,226	\$459,695,778	\$193,164,243	\$16,006,251,493	\$10,051,030,476	\$26,057,281,969
2015	\$3,250,396,372	\$2,922,950,409	\$3,743,608,369	\$482,906,297	\$175,457,452	\$10,575,318,899	\$10,357,469,657	\$20,932,788,556
2016	\$2,465,561,294	\$2,406,788,472	\$2,916,684,373	\$467,615,856	\$134,111,251	\$8,390,761,246	\$10,434,337,957	\$18,825,099,203
Projected:								
2017	\$2,915,400,000	\$2,867,500,000	\$3,034,500,000	\$461,300,000	\$131,800,000	\$9,410,500,000	\$10,538,700,000	\$19,949,200,000
2018	\$2,915,400,000	\$2,845,100,000	\$2,947,600,000	\$472,500,000	\$131,800,000	\$9,312,400,000	\$10,696,800,000	\$20,009,200,000
2019	\$3,271,300,000	\$2,774,200,000	\$2,947,600,000	\$472,500,000	\$131,800,000	\$9,597,400,000	\$10,910,700,000	\$20,508,100,000
2020	\$3,303,300,000	\$2,748,600,000	\$2,799,800,000	\$472,500,000	\$131,800,000	\$9,456,000,000	\$11,128,900,000	\$20,584,900,000
2021	\$3,468,600,000	\$2,779,300,000	\$2,799,800,000	\$483,800,000	\$131,800,000	\$9,663,300,000	\$11,351,500,000	\$21,014,800,000
2022	\$3,501,800,000	\$2,724,600,000	\$2,708,500,000	\$483,800,000	\$131,800,000	\$9,550,500,000	\$11,578,500,000	\$21,129,000,000

(1) - Calendar year represents the calendar year of mineral production.