

depleted the inventory of potential future leases for sale and it takes several years for new leases to be identified and approved for sale.

Using known coal-lease payments from historic sales, and using a revenue model developed for this project based on state revenues from severance taxes, royalties and other sources, a set of projections were made regarding SFD funding through 2022. With respect to royalty income, the findings of this report indicate that because of the nature of the State’s distribution formulas and the scale of Wyoming’s energy commodity production, there is almost no foreseeable scenario in which mineral royalties ear-marked for the SFD will fall below \$26.6 million in any future biennium. Due to the same distribution rules, however, there is also no foreseeable scenario in which royalty revenues will exceed \$26.6 million in any biennium unless legislation is enacted to change Wyoming’s revenue distribution practices, therefore we see royalty payments remaining very stable throughout the period we were asked to consider regardless of how total royalty payments to the state fluctuate.

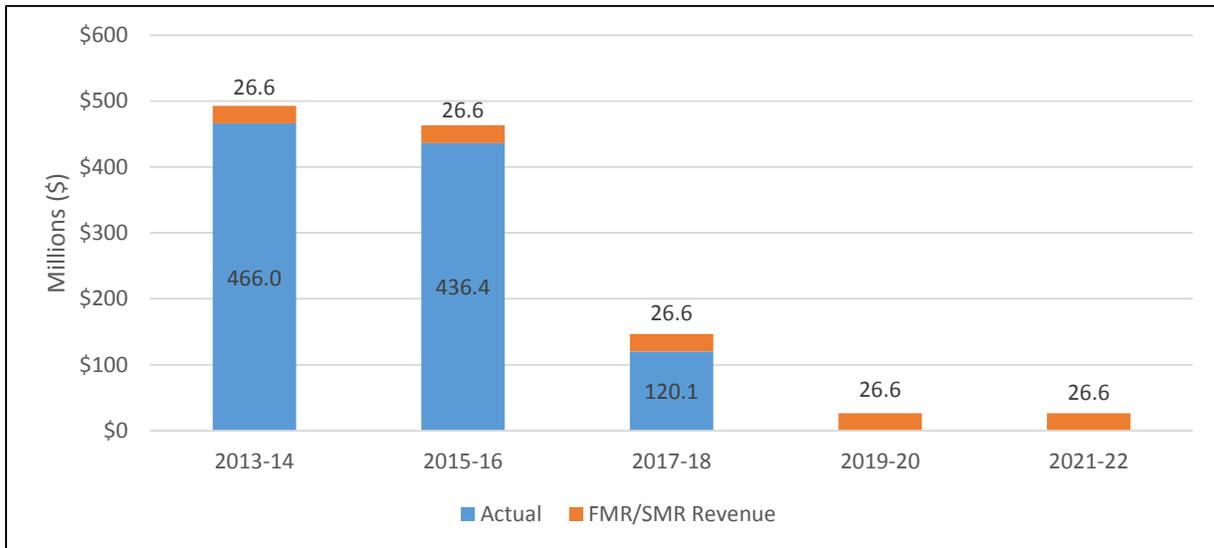


**Figure ES-1: Past and Anticipated Coal Lease Bonus Payments to Wyoming**

Coal lease bonus (CLB) revenues, however, are a major source of concern. As shown in Figure ES-1, these revenues are anticipated to end in 2017 if no new sales occur, reducing the SFD revenue stream by approximately 95 percent from levels experienced in the 2013-14 biennium. As shown in Figure ES-2, CLB revenues will remain strong through 2015-16, but as the payments end in 2017, revenue falls significantly. Since CLB revenues only persist for 5 years after a lease is sold, unless new sales of coal leases are pending in the near future, almost the entire SFD revenue stream will disappear.

Our analysis of the coal market and the inventory of available new leases for sale suggests that while there is a possibility of new leases being sold, there is not enough potential revenue in new sales should they occur to make up the decline in revenues expiring coal lease bonus payments will cause. We consider several scenarios and find that at best and using the most optimistic

market assumptions, potential new coal lease sales combined with mineral royalties funding available in 2017-2018 could at best provide only 51 percent of the revenues that were available in 2013-14. These revenue streams in the most optimistic scenarios would drop further, to approximately a quarter of 2013-14 revenue levels by the 2019-2020 biennium. Later outcomes are even more pessimistic and, while the nature of the actual revenue profile experienced will depend on the timing and price of any future lease sales, in all cases we foresee a significant decline in SFD-earmarked revenues using the current state revenue distribution model.



**Figure ES-2: Forecast SFD Biennial Revenue Streams assuming no new CLB Sales through 2022.**

Part 2 of this report describes the construction of the inside model, which required the creation of an econometric model of SFD expenditures to identify the primary variables affecting these costs and their effects on SFD expenditure. The inside model predicts three components: (i) new capital construction, (ii) major maintenance of existing buildings, and (iii) minor maintenance and operating expenses. New capital construction is the largest component of overall costs and depends on the Facilities Condition Index (FCI) of existing buildings, as well as district-level enrollment projections. Major maintenance expenses feedback into new capital expenses by helping to improve the FCI. Figure ES-3 shows a simple schematic structure of the inside model created.

New construction expenditures, the largest share of recent SFD budgets, are driven by the state’s policies used to determine when new construction is warranted. Determination of the timing or necessity of new construction is based on facility condition (as proxied by the FCI measure), and future enrollment expectations. Additionally, necessary expenditures are also sensitive to construction cost assumptions. To derive expenditure estimates, recent historic patterns regarding facility condition, enrollment capacity and new construction were estimated and used to project future expenditure needs assuming a future construction price of \$250 per square foot. A spreadsheet tool has been provided along with this report to allow SFD personnel, other