# CCUS TAX REVENUE IMPACTS IN CONVERSE, SWEETWATER, LINCOLN, AND CAMPBELL COUNTIES, WYOMING

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For

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## EXECUTIVE SUMMARY

### Purpose of Report

MISI previously assessed the job impacts on Campbell, Converse, Lincoln, and Sweetwater counties in Wyoming (Table EX-1) of CCUS retrofits of coal power plants in the counties and compared those to the jobs impacts of the PacifiCorp scenario which involve early closing of coal plants.

**Table EX-1: Basic Demographic and Labor Force Estimates for Campbell, Converse, Lincoln, and Sweetwater Counties as of January 2020**

| County and Power Plant | Population | Labor Force | Employed | Unemployed | Unemployment Rate |
|---|---|---|---|---|---|
| **Campbell, Wyodak** | 47,880 | 23,768 | 22,857 | 911 | 3.8% |
| **Converse, Dave Johnson** | 14,010 | 9,045 | 8,770 | 275 | 3.0% |
| **Lincoln, Naughton** | 17,960 | 8,878 | 8,507 | 371 | 4.2% |
| **Sweetwater, Jim Bridger** | 45,267 | 21,378 | 20,213 | 1,165 | 5.4% |

In this report, MISI estimates the impacts of CCUS retrofits on each power plant compared to the PacifiCorp scenario of plant retirements on the tax revenues for Campbell, Converse, Lincoln, and Sweetwater counties. MISI estimated the likely direct and indirect impact on local tax revenues, over the period 2022-2038, of the CCUS retrofits compared to the PacifiCorp scenario for each of the four counties.

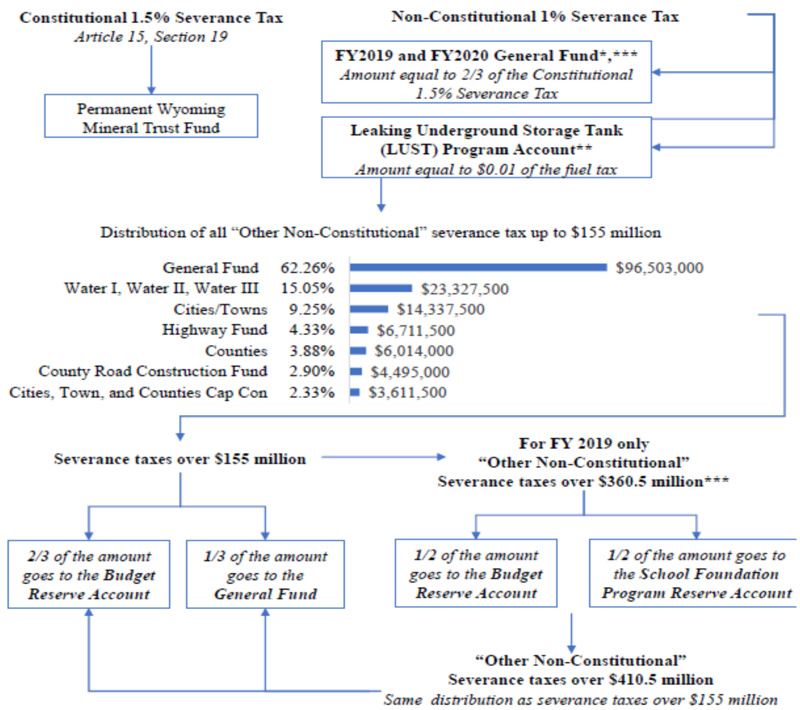
### Findings

The major findings derived here include: 1) In Wyoming, coal directly generates government revenues through four main instruments: Property taxes, federal mineral royalties, coal lease bonuses, and severance taxes; 2) coal generates substantial indirect government revenues via economic and jobs benefits; 3) however, the generation, flow, and distribution of the direct revenues to local governments is complex and often difficult to discern. The complex distribution of severance taxes among Wyoming sub-state entities is illustrated in Figure EX-1.

Thus:

- As the Lincoln County Treasurer noted, “Because Lincoln County uses a complicated formula to determine the property tax owed on any individual property, it is not possible to condense it to a simple tax rate.”
- As the Sweetwater County Treasurer noted, “The taxation process is extremely complex.”

**Figure EX-1: Distribution of FY 2019 Wyoming Severance Taxes**




*The "2/3 equivalent" of the Constitutional Severance Tax diversion references severance tax amounts received from surface and underground coal (39-14-104(a)(i) and (b)(i)) and from oil and gas (35-14-204(a)(i)).
**This amount is "swapped" with a like amount of fuel tax, meaning the gas tax is directed to WYDOT and the severance tax is directed to the LUST account.
***Per 2018 Wyoming Session Laws, Chapter 134, Section 314.

Coal is an important source of income and taxes for Wyoming, and is the second largest source of tax revenue for state and local government. Coal mining companies pay tax and royalty payments to all branches of government, federal, state, and local. In Wyoming, coal contributes over $1 billion annually in revenue to state and local governments. Wyoming coal mining provides a significant portion of the tax revenues that support state and local jurisdictions, and coal benefits Wyoming state and local governments through Federal royalties, severance taxes, Abandoned Mine Land Distributions, ad valorem taxes on production and property, Federal mineral bonus payments, sales and use taxes, and state royalties and rents.

Wyoming is heavily dependent on mineral taxes to fund state and local government services. The state receives more than half of its total revenue from taxes on mineral extraction, and the impacts are severe on county budgets and services when mineral production taxes decrease or cannot be collected.

Commissioners in all four counties are deeply concerned not only with the job losses resulting from the PacifiCorp scenarios but also with the enormous losses in local tax revenues that would occur. The coal power plants, coal mines, and associated infrastructure are major sources of direct and indirect local tax revenues. The commissioners fear that the fiscal impacts would be devastating in all four counties. In addition, the CCUS retrofits would generate additional local tax revenues since the CCUS retrofits will substantially increase tax valuations and assessments. The fiscal and jobs impacts of the scenarios have become an increasingly relevant and contentious issue in Wyoming.

Over the past half-century, Wyoming has developed a tax-and-revenue structure that not only narrowly relies on extractive industries such as coal to fund basic state and local government services, but actually works against any economic diversification beyond extractive industries. Basically, the citizens of Wyoming are beneficiaries of a system from which they receive about $6,000 worth of service but only pay less than $2,000 in taxes.

Over the past decade, Wyoming counties have experienced several boom and bust cycles. The cumulative impact of these has been substantial, leaving counties across the state with significant funding deficits. Counties with active mineral extraction have been affected by loss of local jobs, loss of ongoing tax collection, and, in many cases, uncollectable taxes that were previously assessed. Counties are particularly hard hit during mineral downturns. Most Wyoming counties normally operate on tight budgets, so shortfalls are felt immediately. To make matters worse, counties collect taxes long after they are accrued, unlike the state, which collects severance taxes on a monthly basis.

The fiscal position of each of the four counties analyzed will be severely affected if the PacifiCorp scenario is implemented instead of CCUS. The differences in tax revenues between the CCUS retrofits and the PacifiCorp scenario results primarily from: 1) The property taxes paid by the CCUS infrastructure, beginning in 2026; 2) the differences in property taxes due to the closures of the power plant and mines; 3) the difference in coal severance taxes; 4) the differences in property taxes due to different levels of employment and income; 5) the differences in sales, use, and related taxes due to different levels of employment and income.

Figure EX-2 shows the percent differences in cumulative tax revenues, 2022-2038, between the CCUS and the PacifiCorp scenarios. It illustrates that over this period CCUS compared to the PacifiCorp scenario results in: 1) Over 8% more tax revenues in Campbell County; 2) 14% more tax revenues in Converse County; 3) nearly 20% more tax revenues in Lincoln County; 4) 21% more tax revenues in Sweetwater County.

The data in Figure EX-2 are for the entire period 2022-2038. The fiscal situation is even more distressing in certain years for each county, as shown in Figure EX-3. This figure shows the maximum annual percent difference in incremental tax revenues between the CCUS and the PacifiCorp scenario for each county, which is: 1) 9.5% in Campbell County in 2028; 2) 26% in Converse County in 2026; 3) 24% in Lincoln County in 2026; 4) 30% in Sweetwater County in 2037. Over the period 2022-2038, CCUS compared to the PacifiCorp scenario will result in increased cumulative tax revenues in the four counties of more than $1.5 billion (2019 dollars).

**Figure EX-2: Percent Differences in Cumulative Incremental Tax Revenues, 2022-2038, Between the CCUS and the PacifiCorp Scenarios**

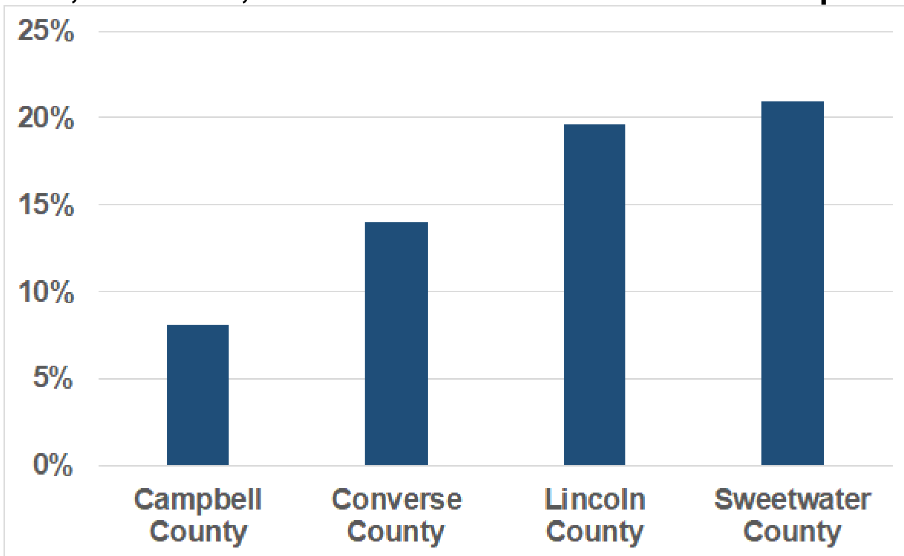
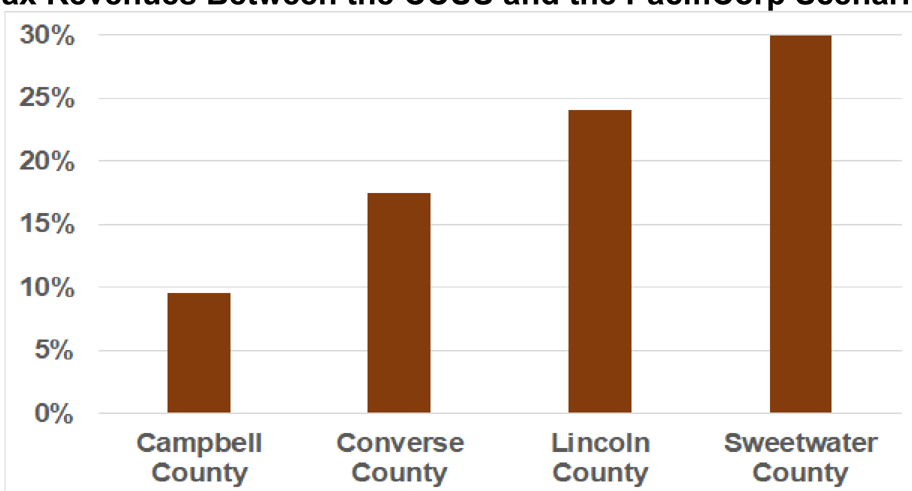



**Figure EX-3: Maximum Annual Percent Difference in Incremental Tax Revenues Between the CCUS and the PacifiCorp Scenarios**




## Conclusions

The major conclusion derived here is that implementation of the PacifiCorp scenario will have devastating impacts on the tax revenues and fiscal positions of Campbell County, Converse County, Lincoln County, and Sweetwater County. If the PacifiCorp scenario is implemented without consideration of CCUS retrofits, taxing jurisdictions in these counties would have to eventually increase tax revenues from other sources by between 8% and 21%. In some years, the fiscal deficit could approach 25% to 30%.

More realistically, if the PacifiCorp scenario is implemented instead of CCUS retrofits, tax districts and authorities in each county would have three unpalatable options:

1. They could remedy the fiscal deficit solely by increasing taxes by the necessary amounts.
2. They could remedy the fiscal deficit by reducing expenditures and services provided.
3. They could remedy the fiscal deficit by some combination of tax increases and reductions in expenditures and in services provided.

In all likelihood, the county taxing authorities will rely on some version of option 3, and each tax district will be forced to develop its own strategy for accommodating the revenue shortfalls. In addition, the counties could request increased funding from the state government. However, this is problematic since Wyoming itself is heavily dependent on the energy industries for state revenues, and other Wyoming counties will also be seeking increased state financial assistance.

Whatever options the tax authorities choose, the result is likely to be a downward economic cycle of increasing taxes and decreasing services in each county causing continued economic distress, job losses, declining property values, and out-migration. This has ominous implications for each county and for the state of Wyoming.

# I. INTRODUCTION

MISI previously assessed the job impacts on Campbell, Converse, Lincoln, and Sweetwater counties, Wyoming (Table 1) of CCUS retrofits of coal power plants in the counties and compared those to the jobs impacts of the PacifiCorp scenario which involve premature closing of coal plants.[1] The impacts of three scenarios were assessed: 1) a CCUS scenario that assumed that the $CO_2$ captured would be used for a combination of EOR and saline storage; 2) a CCUS scenario that assumed that the $CO_2$ captured would be sequestered in saline storage; 3) the PacifiCorp IRP scenario under which there would be no CCUS, no $CO_2$ EOR, and no $CO_2$ saline storage. DOE is interested in assessing the impacts on tax revenues in these counties of the CCUS retrofits compared to the PacifiCorp scenario.

**Table I-1**
**Basic Demographic and Labor Force Estimates for Campbell, Converse, Lincoln, and Sweetwater Counties as of January 2020**

| County and Power Plant | Population | Labor Force | Employed | Unemployed | Unemployment Rate |
|---|---|---|---|---|---|
| **Campbell, Wyodak** | 47,880 | 23,768 | 22,857 | 911 | 3.8% |
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| **Sweetwater, Jim Bridger** | 45,267 | 21,378 | 20,213 | 1,165 | 5.4% |

Source: Wyoming Department of Workforce Services.

In this report, MISI estimates the impacts of the CCUS retrofits compared to the PacifiCorp scenario on the tax revenues for Campbell, Converse, Lincoln, and Sweetwater counties.[2] In this research, MISI followed the conventions and estimates published in the LTI report "Wyoming Carbon Capture, Utilization, and Storage (CCUS) Study,"[3] which analyzed the retrofit of nine units at four power plants in Wyoming owned by Rocky Mountain Power, a PacifiCorp subsidiary, with CCUS technology. Two scenarios for permanent $CO_2$ storage, identified below, were evaluated as potential

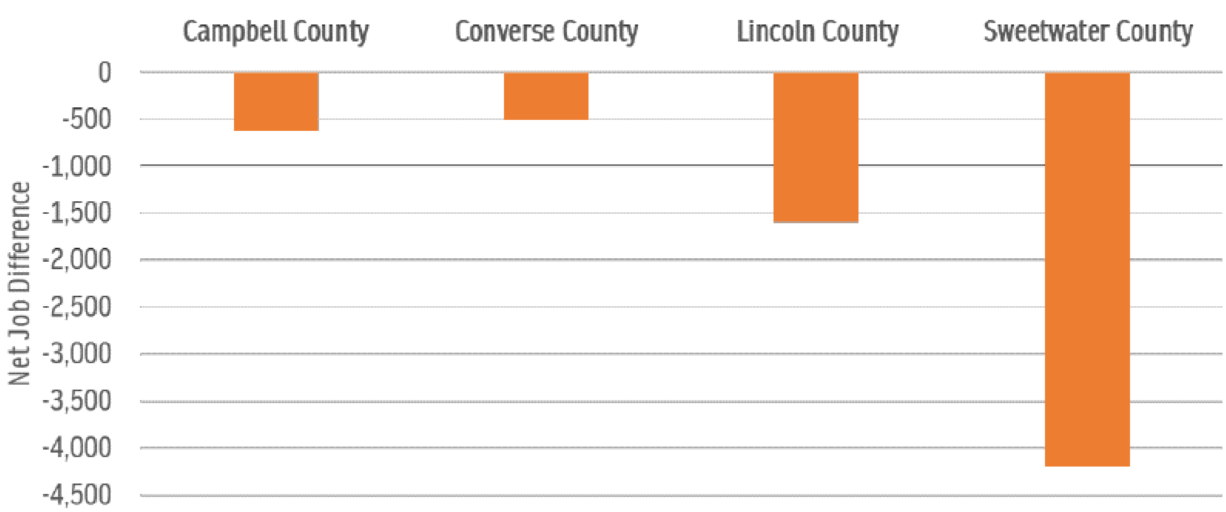
[1]Leonardo Technologies, Inc., "Wyoming Carbon Capture, Utilization, and Storage (CCUS) Study," prepared for the United States Department of Energy Office of Fossil Energy, August 2020.
[2]The tax revenue impacts on the counties of the two CCUS scenarios are very similar and the differences are not statistically significant. Thus, here only one average fiscal estimate for the CCUS retrofits is presented.
[3]Leonardo Technologies, Inc., op. cit.

options to reduce $CO_2$ emissions. In both scenarios it was assumed all of the flue gas from the units was treated to capture 90% of the $CO_2$ in the exhaust stream:

- $CO_2$ Sale to EOR (Scenario A): In this scenario, the $CO_2$ captured from each power plant is sold for use in EOR to the maximum extent practical, and the remainder of the $CO_2$ stored in saline aquifers in Wyoming.
- $CO_2$ Saline Storage (Scenario B): In this scenario, the $CO_2$ captured from each power plant is exclusively stored in subsurface saline aquifers in Wyoming.

These two scenarios were compared to the Baseline IRP2 which included accelerated retirement of units at three of the four coal plants (from 2020 to 2038) considered in the study. As part of this study, MISI analyzed the potential job impacts on local economies associated with these projects and the scenarios mentioned above as compared to the Baseline IRP scenario.[4] It was determined that Scenarios A and B create about three to five times as many jobs as the IRP baseline, which projects activities through 2038 – Figure I-1.

**Figure I-1**
**Average Annual Net Job Differences of Baseline IRP Scenario (2026-2038)**




Source: Management Information Services, Inc. and Leonardo Technologies, Inc.

Commissioners in all four counties are deeply concerned not only with the job losses resulting from the PacifiCorp scenario but also with the enormous losses in local tax revenues that would occur. The coal power plants, coal mines, and associated infrastructure are major sources of direct and indirect local tax revenues. The commissioners fear that the fiscal impacts would be devastating in all four counties. In addition, the CCUS retrofits would generate additional local tax revenues since the CCUS retrofits will substantially increase tax valuations and assessments. The fiscal and jobs

[4] Ibid.

impacts of the scenarios have become an increasingly relevant and contentious issue in Wyoming.[5]

Accordingly, MISI estimated the likely direct and indirect impact on local tax revenues, over the period 2022-2038, of the CCUS retrofits compared to the PacifiCorp scenario for:

- Campbell County
- Converse County
- Lincoln County
- Sweetwater County

In the analysis and forecasting, MISI followed the conventions in the U.S. Energy Information Administration's *Annual Energy Outlook 2020* (*AEO 2020*), and all dollar estimates are expressed in terms of constant 2019 dollars.[6] The other standard conventions of the EIA AEO reports were adhered to. In addition, the conventions of the required BLS, BEA, Census, and Wyoming State and local government data bases were be followed.

In this report:

- Chapter II discusses the fiscal dependence of Wyoming State and local governments on coal and the complex and difficult manner in which taxes from the coal sector are distributed among local tax jurisdictions.
- Chapter III assesses and forecasts the fiscal impacts in Campbell County.
- Chapter IV assesses and forecasts the fiscal impacts in Converse County.
- Chapter V assesses and forecasts the fiscal impacts in Lincoln County.
- Chapter VI assesses and forecasts the fiscal impacts in Sweetwater County.
- Chapter VII discusses the findings and conclusions derived.

[5]See Camille Erickson, "Wyoming Public Service Commission Delays Investigation into State's Largest Utility," *Casper Star Tribune*, September 9, 2020.

[6]U.S. Energy Information Administration, *Annual Energy Outlook 2020*, January 2020.

# II. ESTIMATING LOCAL FISCAL IMPACTS OF COAL IN WYOMING

## II.A. Complex and Difficult Funding Mechanisms

In Wyoming, coal directly generates government revenues through four main instruments: Property taxes, federal mineral royalties, coal lease bonuses, and severance taxes. In addition, coal generates substantial indirect government revenues via economic and jobs benefits. However, the generation, flow, and distribution of the direct revenues to local governments is complex and often difficult to discern. Some coal-related revenue is distributed directly to local governments, whereas coal-related revenues to the state are distributed via various trust funds to a myriad of sub-state jurisdictions.[7] Some funds are targeted to specific local expenditure categories, and some are contingent on whether a certain revenue threshold is exceeded.[8] Even the Wyoming counties themselves admit that "The taxation process is extremely complex,"[9] and that "Because Lincoln County uses a complicated formula to determine the property tax owed on any individual property, it is not possible to condense it to a simple tax rate."[10]

There are often many entities within a county that have taxing authority – sometimes 30 or more. The taxing entities determine the funds they require, based on their budget requests to the County Commissioners. These entities annually submit for a levy from the Board of County Commissioners. The requested mills are based on a proposed budget (projected revenues and expenditures) of the entity and what it needs in tax dollars to adequately fund the services it provides to its taxpayers.[11] The mill assessment differs depending on the type of property and the tax district.

As an example of the complexity of the distribution of property taxes in Wyoming, severance taxes are paid by extractive industries to the State of Wyoming for the privilege of removing, extracting, severing or producing any mineral.[12] Severance tax rates are between 2% to 7%.[13] The complex distribution of severance taxes among Wyoming sub-state entities is illustrated in Figure II-1.

As another example, the State of Wyoming receives coal lease bonuses from payments made to the federal government by extractive industries for coal leases on federal land within Wyoming. The coal lease bonuses are typically distributed evenly between the federal government and State, after payment of an administrative fee and potential federal sequestration, and portions of the lease bonuses are distributed to local governments – Figure II-2.[14]

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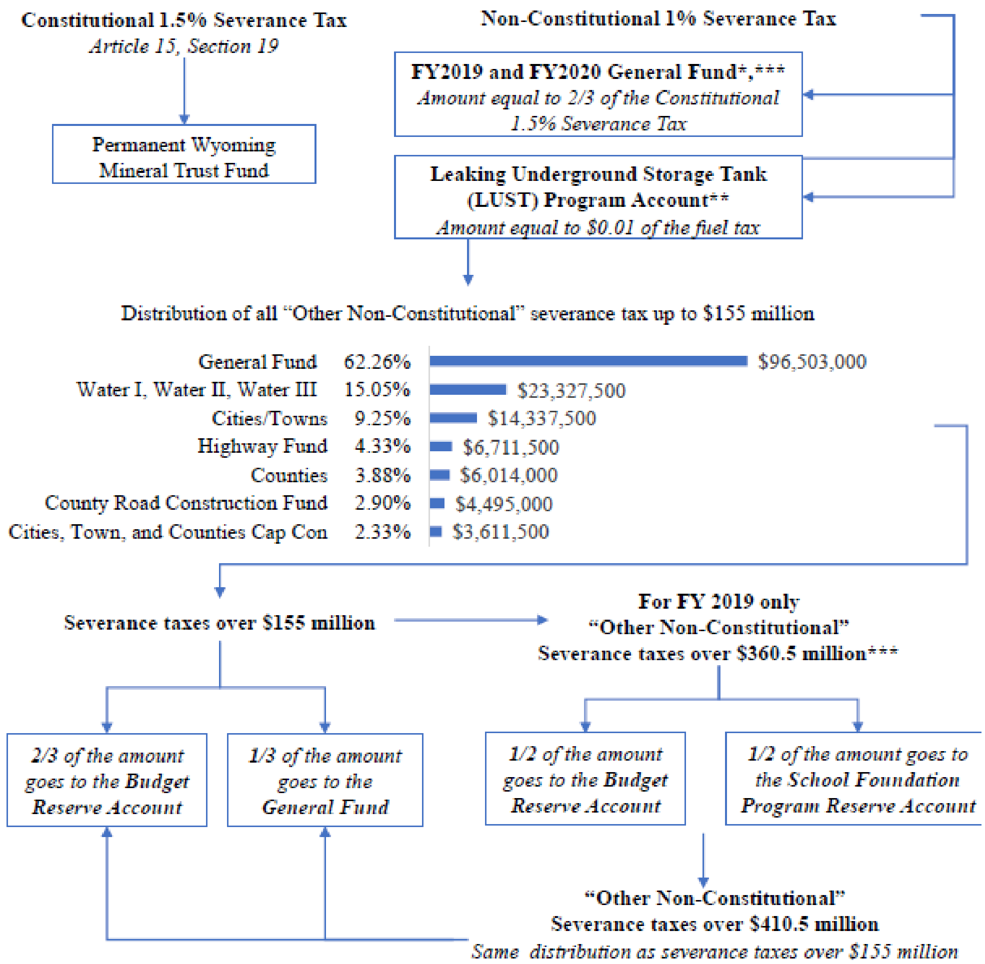
[7]Wyoming Legislative Service Office, "2019 Budget Fiscal Data Book," December 2018.
[8]Adele Morris, Noah Kaufman, and Siddhi Doshi, "Revenue at Risk in Coal-Reliant Counties," National Bureau of Economic Research, Working Paper 27307, June 2020.
[9]Sweetwater County Treasurer, "Mill Levies," www.sweet.wy.us/departments/treasurer/mill_levies.php.
[10]http://www.tax-rates.org/wyoming/lincoln_county_property_tax.
[11]A mill is one one-thousandth of a dollar and in property tax terms is equal to $1.00 of tax for each $1,000 of assessment.
[12]Pursuant to W.S. 39-14-101 through 711.
[13]Collected funds are distributed pursuant to W.S. 39-14-801.
[14]Wyoming Legislative Service Office, op. cit.

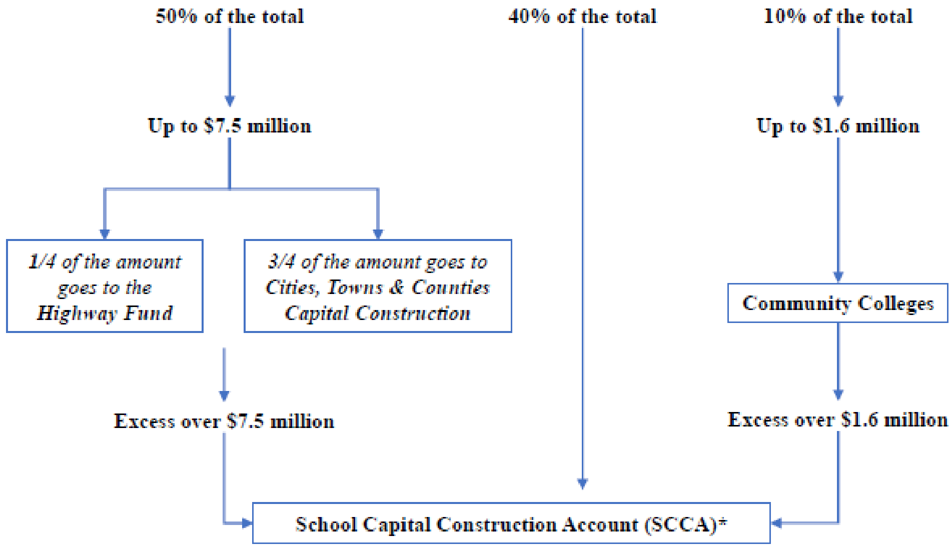
## Figure II-1
## Distribution of FY 2019 Wyoming Severance Taxes




*The "2/3 equivalent" of the Constitutional Severance Tax diversion references severance tax amounts received from surface and underground coal (39-14-104(a)(i) and (b)(i)) and from oil and gas (35-14-204(a)(i)).
**This amount is "swapped" with a like amount of fuel tax, meaning the gas tax is directed to WYDOT and the severance tax is directed to the LUST account.
***Per 2018 Wyoming Session Laws, Chapter 134, Section 314.

Source: *Wyoming 2019 Budget Fiscal Data Book.*

## Figure II-2
## Distribution for FY 2019 Wyoming Coal Lease Bonus




Source: *Wyoming 2019 Budget Fiscal Data Book.*

## II.B. Fiscal Dependence on Coal

Coal is an important source of income and taxes for Wyoming, and is the second largest source of tax revenue for state and local government.[15] Coal mining companies pay tax and royalty payments to all branches of government, federal, state, and local. In Wyoming, coal contributes over $1 billion annually in revenue to state and local governments. Wyoming coal mining provides a significant portion of the tax revenues that support state and local jurisdictions, and coal benefits Wyoming state and local governments through:[16]

- Federal royalties -- these royalties help pay for schools and contribute to the Budget Reserve Account.
- Severance taxes -- coal contributes to the overall Permanent Wyoming Mineral Trust Fund, which provides for the state when minerals are not profitable to extract and the taxes become a smaller portion of government revenue.
- Abandoned Mine Land (AML) Distributions -- these grants are used for mine site reclamation projects on lands and water mined or affected by coal mining processes.
- Ad valorem taxes on production and property -- ad valorem taxes are a tax on the property value of the mineral leases.
- Federal mineral bonus payments -- funds from federal mineral bonus payments help fund Wyoming schools, and funds from coal bonus bids have built new schools in every county in Wyoming.

[15]Wyoming Mining Association, "Economics of Mining in Wyoming," 2014.
[16]Ibid.

- Sales and use taxes -- a sales tax is a tax on the sale, transfer, or exchange of a taxable item or service; a use tax is a tax on the storage, use, or consumption of a taxable item or service on which no sales tax has been paid.
- State royalties and rents -- a royalty is a legally-binding payment made for the ongoing use originally-created assets; a rent is payment made in return for the use of property or to an owner in return for the use of machinery, equipment, etc.

More generally, Wyoming is heavily dependent on mineral taxes to fund state and local government services. The state receives more than half of its total revenue from taxes on mineral extraction, and the impacts are severe on county budgets and services when mineral production taxes decrease or cannot be collected. The Wyoming Legislative Revenue Committee has repeatedly discussed the problem facing counties in collecting these debts and considered various proposals for reforming administration and imposition of ad valorem taxes. The current lag time in collections means that when companies declare bankruptcy counties are left with debts that can be years old. In recent years, several "too big to fail" companies operating within Wyoming have sought bankruptcy protection. In an economy already weakened by national and global downturns in demand for coal, Wyoming cannot afford to continue policies that allow county tax revenues to go uncollected.[17]

The overriding problem is that over the past half-century, Wyoming has built a tax-and-revenue structure that not only narrowly relies on extractive industries such as coal to fund basic state and local government services, but actually works against any economic diversification beyond extractive industries.[18] Wyoming's structural tax-and-revenue conundrum can be summed up in this dataset: The average household of three with an income of $60,000 and a home valued at $200,000 in Casper, Wyoming paid $3,070 in state taxes in 2017 but received $27,500 in public services. That is the result of the state's reliance on mineral extraction to pay the bulk of government services -- 52.2% of the state budget in 2017. Thus, even if Wyoming is successful in growing its non-mining industries, those new businesses and employees will be more of a drain on the budget than a contributor to it without reforms to the state's tax and revenue structure. As Wyoming Taxpayers Association Executive Director Ashley Harpstreith states "This is just a difficult question because they're not going to replace coal revenue. Until we change our tax structure, there's no way to replace that revenue."[19]

Basically, "The people of Wyoming are beneficiaries of a system from which they receive about $6,000 worth of service but only pay less than $2,000 in taxes. The people and the government are going to have to learn to live with a reduction of this 60% subsidy to their taxes. This discrepancy occurred because of the high prices for energy and the

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[17]The synchronization and streamlining of the payment of ad valorem and severance taxes is the policy change that would provide the greatest benefit to counties regarding the collection of ad valorem debt. Powder River Basin Resource Council, "Ad Valorem Taxes in Wyoming: Proposed Improvements," August 2018.
[18]Dustin Bleizeffer and Mason Adams, "Reckoning in Coal Country: How Lax Fiscal Policy Has Left States Flat-Footed as Mining Declines," *Energy News Network*, August 11, 2020.
[19]Ibid.

coal bonus prices, which are in a steep decline. We have built some of the finest schools in the nation but are starting to have trouble maintaining them."[20]

At the state level, severance taxes (collected when minerals are severed from the ground) are collected on a regular, monthly basis, as minerals are produced. However, at the county level ad valorem taxes (taxes on mineral production) are collected only annually, with an average lag time of around 18 months from the time of mineral extraction to tax collection. In recent years, a number of coal companies in Wyoming have declared bankruptcy within that 18 month period and have made it difficult or impossible for the counties to collect the tax revenues. A study of delinquent mineral production taxes by county found that Campbell County and Converse County were two of the most seriously affected counties.[21]

Statewide, Wyoming schools are facing a projected $400 million dollar shortfall in 2019-2020.[22] This estimate does not take into account capital construction or major maintenance shortfalls, current and predicted, which are also primarily funded by mineral production and lease revenues.[23] An additional $400 million deficit is forecast for 2021-2022. Because so much of school funding comes from mineral production taxes and severance taxes, bust cycles cause significant harm to Wyoming schools and weaken the entire state.

For example, the Wyoming School Foundation Program – which assures equal educational opportunity for all public school students regardless of local resources – faces an especially difficult fiscal situation. The reasons are complex and long standing.

There are four major sources of funding for the foundation program:

- Federal mineral royalties (FMRs) account for 32% of the program's revenue.
- The state property tax of 12 mills for schools funds 31%.
- Earnings from the common school permanent land fund contribute 25%.
- School district recapture accounts for 10%.

The foundation program suffers from an obvious over reliance on the mineral industry. Nearly one-third of the foundation program depends directly on FMRs. Approximately one-third of FMRs have historically come from coal, which implies that 10% of the School Foundation Program is dependent on coal industry FMRs. As of early 2020, coal FMR delinquencies indicated that about $65 million was delinquent. Given that about $80 million in coal royalties were budgeted for 2019 and 2020, these missed tax payments are a significant problem for this crucial program.[24]

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[20]Don Thorson, "Wyoming Taxes: Minerals Industry Can No Longer Pay For Everything," *Cowboy State Daily*, June 24, 2020.
[21]Powder River Basin Resource Council, op. cit.
[22]State of Wyoming, "Biennium Budget Request, 2019-2020," December 2017.
[23]Joint Education Committee, Subcommittee on Education Deficit Reduction Options, "Wyoming K-12 Education Funding Deficit Whitepaper," 2016.
[24]Michael Madden, "The Ailing Canary in Wyoming's Mineral Revenue Mine," *WyoFile*, February 7, 2020.

Compounding the problem, coal ad valorem taxes comprise 12% of the property taxes that fund Wyoming schools, and these property taxes are the second largest source of school foundation funding, behind only the suddenly questionable FMRs. Further, school district recapture funds the fourth leg on the school funding stool and are also heavily dependent on coal ad valorem taxes.

The way the funding system is structured, school districts from areas that generate more money than the model estimates they need to spend have to turn over, i.e. recapture, the surplus to the state which redistributes those funds to less-well-off districts. Thus, for example, the Campbell County school district is a major recapture district thanks largely to coal ad valorem taxes. In the current budget cycle the surplus districts are designated to contribute about $84 million per year. At least half of that is supposed to come from the Powder River Basin coal industry. If coal production falls or if companies fail to pay their ad valorem taxes, recapture funds will also decline. Any reduction in recapture funding must be made up for elsewhere -- most likely from the state's general funds or the legislative stabilization account, the "rainy day fund."[25]

Thus, of the $800 million annual School Foundation Program budget, about 20% depends on coal-related taxes: $80 million from FMRs, $32 million from ad valorem taxes and another $42 million from recapture. When millions of dollars in ad valorem and now federal mineral royalties are delinquent, it is clear that the School Foundation Program is threatened.[26]

Over the past decade, Wyoming counties have experienced several boom and bust cycles. The recent coalbed methane and oil and gas downturn, and the subsequent coal downturn, were particularly severe. The cumulative impact of these busts has been substantial, leaving counties across the state with significant funding deficits. Counties with active mineral extraction have been affected by loss of local jobs, loss of ongoing tax collection, and, in many cases, uncollectable taxes that were previously assessed. The deficits faced by counties are significant and, given current laws, are certain to increase. If left unchecked, these debts are likely to mount to crisis level.

Counties are particularly affected during mineral downturns. Most Wyoming counties normally operate on tight budgets, so shortfalls are felt immediately.[27]

[25]Ibid.
[26]Ibid.
[27]Counties collect taxes long after they are accrued, unlike the state, which collects severance taxes on a monthly basis. Due to these differences, the state may be left with a few months of uncollectable back taxes, but counties can be owed years of delinquent tax debt. For example, Cloud Peak Energy Corporation's 2019 Chapter 11 bankruptcy filing left Campbell County with potentially over $25 million in unpaid taxes. Greg Johnson, "Tax Collections Uncertain Amid Wyoming Coal Bankruptcies," *AP News*, June 9, 2019.

## III. FISCAL IMPACTS IN CAMPBELL COUNTY

### III.A. The Wyodak Power Plant

The Wyodak Power Plant is in Campbell County, which has a population of 47,880. Campbell County is home to the largest coal mine in the world,[28] and mining is its largest sector, directly employing about 20 percent of the county's labor force.[29] The nearest town is Gillette, the county seat, which as a population of 31,900; the nearby town of Wright has a population of 1,735.

Campbell County, known as the energy capital of the nation, is located in the heart of the resource rich Powder River Basin. Over 30% of the nation's coal is produced in area surface mines. Over 25% of Campbell County jobs are mineral-based, directly attributed to coal mining, oil and gas extractions, and supporting operations. Campbell County has the second highest portion of coal employment among counties in the U.S. The only U.S. county with a higher share is Boone County, West Virginia, with a 22% share. The next two counties are Oliver County, North Dakota, which has an 18% share, and McDowell County, West Virginia, which has a 17% share.[30]

Thus far, PacifiCorp has not announced a shutdown timeline for the Wyodak plant. The PacifiCorp 2019 IRP states that the Wyodak plant will continue to operate until 2039.[31] Therefore, in the PacifiCorp alternative scenario MISI assumes that it continues to operate through 2038, but without CCUS.

Under the Wyodak CCUS EOR/Saline Storage scenario, the total (direct plus indirect) local jobs impacts – in Campbell County -- would be the result of:[32]

- O&M jobs retained at the Wyodak plan, 2023-2055
- CCUS construction, 2023-2025
- CCUS O&M, 2026-2055
- Pipeline construction, 2024-2025
- Pipeline O&M, 2026-2055
- EOR construction – if any in Campbell County
- EOR O&M – if any in Campbell County, 2026-2055
- Saline storage construction – if any in Campbell County
- Saline storage O&M – if any in Campbell County, 2026-2055
- Wyodak Mine jobs retained, 2023-2055

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[28]Mining Technology ranked the North Antelope Rochelle coal mine as the biggest in the world in 2012. https://www.mining-technology.com/features/feature-the-10-biggest-coal-mines-in-the-world/.

[29]Campbell County Board of County Commissioners, "A Campbell County Profile: Socioeconomics," April 2017, https://www.wyo-wcca.org/files/4015/0462/2986/Socioeconomic_profile__-_Campbell_County_March_2017.pdf.

[30]Adele Morris, Noah Kaufman, and Siddhi Doshi, "Revenue at Risk in Coal-Reliant Counties," National Bureau of Economic Research, Working Paper 27307, June 2020.

[31]PacifiCorp IRP Resource Planning, op. cit.

[32]Leonardo Technologies, Inc., op. cit.

Under the Wyodak CCUS Saline Storage scenario, the total (direct plus indirect) local jobs impacts – in Campbell County -- would be the result of:

- O&M jobs retained at the Wyodak plan, 2023-2055
- CCUS construction, 2023-2025
- CCUS O&M, 2026-2055
- Pipeline construction, 2024-2025
- Pipeline O&M, 2026-2055
- Saline storage construction – if any in Lincoln County
- Saline storage O&M – if any in Lincoln County, 2026-2055
- Wyodak Mine jobs retained, 2023-2055

Under the PacifiCorp scenario the total (direct plus indirect) local jobs impacts – in Campbell County -- would be the result of:

- O&M jobs retained at the Wyodak plant, 2023-2038
- Wyodak Mine jobs retained, 2023-2038

CCUS retrofits were assessed on the Wyodak Plant. The construction schedule was developed from the NETL CCS retrofit plant construction schedule and was estimated to be as shown in Table III-1.[33]

**Table III-1**
**CCS Retrofit Plant Construction Schedule**

| Year 1 | Year 2 | Year 3 |
|---|---|---|
| 0.25 | 0.40 | 0.35 |

Source: Management Information Services, Inc. and U.S. National Energy Technology Laboratory.

The construction schedule in 2019 dollars is given in Table III-2. The Wyodak Plant retrofit construction costs in 2019 dollars thus total $1,052.9 million. This $1,052.9 million is assumed to be the estimated fair market value of the CCUS retrofits.[34]

**Table III-2.**
**CCUS Retrofit Plant Construction Expenditures**
**(Millions of 2019 dollars)**

| Plant | Year 1 | Year 2 | Year 3 |
|---|---|---|---|
| Wyodak Plant | $263.2 | $421.2 | $368.5 |

Source: Management Information Services, Inc., U.S. National Energy Technology Laboratory, and Leonardo Technologies Inc.

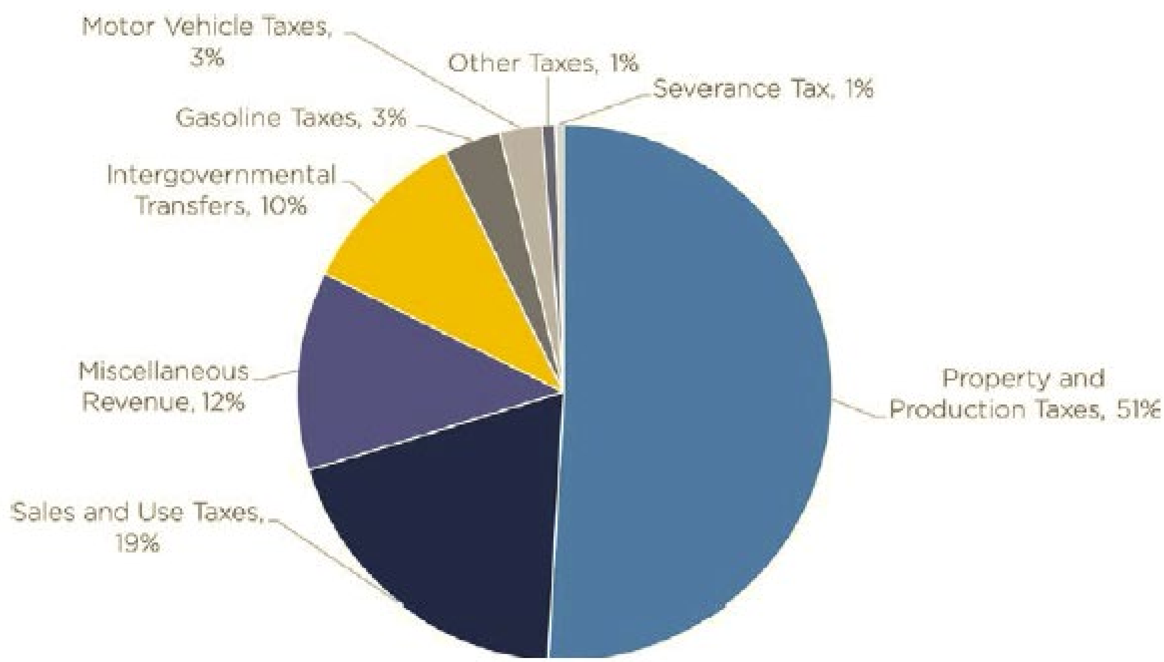
[33]See Management Information Services, Inc., "Employment Impact Analysis of Coal Carbon Capture and Sequestration Retrofits," prepared for National Energy Technology Laboratory, August 2015.
[34]It was assumed that the valuation and assessment of the CCUS facilities would be similar to that of other power plant facilities in the county.

### III.B. Taxation in Campbell County

The percent of ad valorem taxes earmarked for education varies from county to county. It can also vary from year to year depending on the mill rate for education and the mill rate allocated for other purposes. According to Carol Seeger, deputy attorney for Campbell County, the percent of ad valorem taxes that goes to schools in Wyoming is high in all counties. In Campbell County, for example, about 75% of ad valorem tax collected goes toward education.[35]

The composition of 2018 revenues to the Campbell County government is given in Figure III-1.[36] Property taxes generates more than half of the county's tax revenue. It includes the county tax on assessed property values and an ad valorem tax on the value of minerals extracted in the county, including coal, natural gas, and oil. The next-largest revenue sources are the sales and use tax and intergovernmental transfers.

**Figure III-1**
**Campbell County Revenue Sources, Fiscal Year 2018**




Source: *Campbell County Financial and Compliance Report* ending June 30, 2018.

The coal-specific share of the wedges in Figure III-1 are difficult to determine precisely, but they include the coal share of the property and production tax, the coal-related share of sales and use tax proceeds, and some of the transfers from the state and

[35]"Current Mill Levies in Campbell County Wyoming," August 15, 2017, www.ccgov.net/DocumentCenter/View/11589
[36]*Campbell County Financial and Compliance Report* ending June 30, 2018.

federal governments. According to the county's 2018 audit statement, mineral production taxes comprise about 81 % of the property and production tax, but how much was from coal is not specified.[37]

A 2017 special report by the Campbell County Board of Commissioners determined that of the $5.3 billion in total county assessed property valuation (which includes the value of minerals produced) in the 2016–17 fiscal year, 89% was oil and gas production and coal mining and their associated production and transportation facilities.[38] More narrowly, 79% was from mineral production, and coal was 75% of that, meaning in that year, about 59% of the county's overall property and production valuation was directly associated with coal mining.[39] In that same year, 29% of the county's total sales and use tax revenue came from mining, but the share from coal per se is not reported. Similarly, it is unclear what shares of intergovernmental transfers flow from state coal-related revenues.

Coal revenues have been declining. In 2018, including revenues to the county government, the school system, and other special districts within the county, the property and production tax in Campbell County raised over $266 million. This was a significant decline from 2016, when those collections totaled over $317 million.[40]

Campbell County officials recognize the challenge of a declining coal-related tax base. The county's fiscal year 2017–18 report addressed the issue directly: Assessed valuation for the 2015–2016 fiscal year (derived from 2014 calendar year production and property) was $6.2 billion. The assessed valuation for the 2016–2017 fiscal year declined to $5.3 billion and then to $4.2 billion for the 2017–2018 fiscal year. Proactive decisions by this board, and previous boards, helped to make this transition as painless as possible because of substantial investments in savings and reserves, a relatively new age of facilities and plants, and an early retirement incentive that lowered employment expenses.[41]

To prepare for a future with lower coal production, the county established reserve and maintenance funds for capital replacement, vehicle fleet management, buildings, and recreation facilities. Nonetheless, concerns are increasing that coal production in Wyoming is declining faster than the area can absorb.[42] Natural gas prices remain low, and layoffs at Powder River Basin coal mines correspond to pandemic-driven declines in power demand.

Campbell County has experienced the costs of coal-related bankruptcies, and more could be forthcoming. The 2015 bankruptcy of coal producer Alpha Natural Resources left Campbell County with over $20 million in unpaid taxes. Campbell County

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[37]*Campbell County Financial and Compliance Report* ending June 30, 2018.
[38]Campbell County Board of County Commissioners, *A Campbell County Profile: Socioeconomics (2017)*.
[39]Ibid.
[40]Wyoming Department of Revenue *2018 Annual Report*.
[41]Campbell County FY 2017–18 *Annual Report.*
[42]Heather Richards, "Wyoming Coal is Likely Declining Faster Than Expected," *Star Tribune*, April 8, 2019.

litigated and collected most of the money, but its legal expenses were significant. Subsequently, local leaders have called for changes in laws and tax collection structures in Wyoming to place the interests of taxing entities above investors and creditors.[43]

Similarly, Cloud Peak Energy Corporation's 2019 Chapter 11 bankruptcy filing also had Campbell County officials worried about the future of the company's three basin mines and the 1,200 people who work at them.[44] They also attempted to salvage even a small fraction of the millions of dollars left owed to the people of Campbell County and Wyoming. There was a potential $25 million-plus the county may never collect, not counting tax on coal mined through the first six months of 2019. Commissioner Mark Christensen stated "It's a huge amount of money for any entity to have to write off. We've seen this before and didn't do anything about it (at the state level) to rectify the potential for these bankruptcies. Whether we want to admit it or not, we did this to ourselves to a large degree. And at this point, there really is not much we can do. The reality is, we're in a spot where we have these bankruptcies where (money) isn't coming back.[45]

Thus: "An increasing number of bankruptcies by energy companies has required the county to spend substantial resources protecting ad valorem taxes due in bankruptcy courts across the United States. Over $1 million was spent protecting over $20 million of tax revenues owed by Alpha Natural Resources to the county and other taxing entities. Years of substantial legal expenses are likely necessary until such time as necessary changes to Wyoming statute, to rightly place the interests of taxing entities above investors and creditors, are enacted."[46] Accordingly, "It is important for Campbell County to effectively plan for a future with significantly less coal production and the ad valorem taxes that it pays."[47]

Through statutes, the Campbell County's Assessor's Office values all real and personal property at fair market value for highest and best use. Every year, the office assesses a portion of the county, covering the entire vicinity in a four- to six-year period. The County Assessor sets the value for each property every year. Residential and commercial property are valued at 9.5% of market, industrial property is valued at 100% of market, and minerals are valued at 100% of market (since they only are extracted once). The County Commissioners set the mills for the county and the Weed & Pest Board. Other tax entities set their own mills in accordance with State Statutes, but the county is responsible for collecting their taxes. The County Treasurer distributes funds received at their proportionate rate to the taxing authorities. For most tax bills, approximately 17% of the monies are kept by Campbell County (11.388 mills), with the remainder distributed to other entities.[48]

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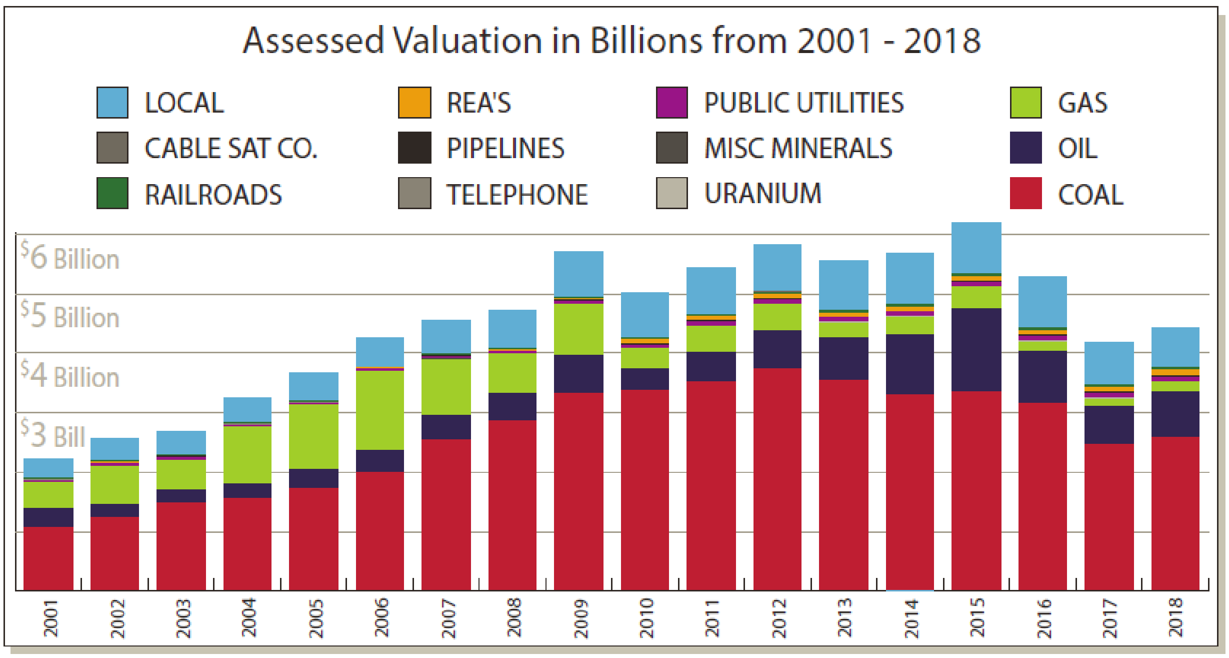
[43]Cooper McKim, "How the Alpha Bankruptcy Could Lead to Change in the Law." *Wyoming Public Media,* June 29, 2018; Campbell County, *Fiscal Year 2017-18 Report*, 2018.
[44]Greg Johnson, "Tax Collections Uncertain Amid Wyoming Coal Bankruptcies," *AP News*, June 9, 2019.
[45]Ibid.
[46]Campbell County, "2017-2018 Campbell County Annual Report."
[47]Ibid.
[48]https://www.ccgov.net/130/Assessors-Office.

Figure III-X illustrates several important aspects of property tax valuation in Campbell County:[49]

- Valuations have increased significantly since 2001.
- Over the past decade, valuations have fluctuated widely.
- Fossil fuels have accounted for well over 80% of the county's assessed valuations.
- Coal has accounted for over 60% of the county's total assessed valuations.

The total assessed valuation for 2017 in Campbell County was $4,182,623,053, as compared to $5,288,502,849 in 2016.[50] Table III-3 shows the 2017 tax distributions levels of assessment, and levies for Campbell County.

**Figure III-2**




Source: Campbell County.

In Campbell County, 2020 property tax revenues among 22 tax districts totaled $254.8 million, mill levies varied between 11.276 and 0.454, and assessed valuation totaled $4.242 billion – Table III-4.[51]

[49]Campbell County, "2017-2018 Campbell County Annual Report;" Campbell County Treasurer, "County Treasurer's Abstract Statement," April 2018.
[50]Campbell County, "2017-2018 Campbell County Annual Report."
[51]https://www.ccgov.net/DocumentCenter/View/17391/Mill-Levy-Distribution

## Table III-3
## Tax Dollar Distribution Paid to Campbell County, 2017

| | Levy | LOA 9.5% |
|---|---|---|
| Campbell County Government: | 11.170 | $212.23 |
| Cooperative Higher Educ Serv: | 0.500 | $9.50 |
| Unified School - Recreation | 1.000 | $19.00 |
| Cnty Hosptial Dist Trust Fund: | 3.000 | $57.00 |
| Cnty Unified Spec Dist Trst Fd: | 25.000 | $475.00 |
| County Wide School Trust Fund: | 6.000 | $114.00 |
| Cnty Spec Cemetery Board Trust: | 0.629 | $11.95 |
| Cnty Weed & Pest Board Trust: | 0.167 | $3.17 |
| State of WY Found Prg Trst Fnd: | 12.000 | $228.00 |

Source: Campbell County.

## Table III-4
## Campbell County 2020 Property Taxes, Levies, and Valuations

| PURPOSE | | 2020 LEVY | 2020 TAX |
|---|---|---|---|
| State General Fund | | 0.000 | $0 |
| General County Levy | | 11.276 | $0 |
| County Library Levy | | 0.000 | $0 |
| County Fair Levy | | 0.000 | $0 |
| County Airport Levy | | 0.000 | $0 |
| County Museum Levy | | 0.000 | $0 |
| County Health District | | 0.000 | $0 |
| Joint Powers Fire Board | | 0.000 | $0 |
| County Recreation Levy | 11.276 | 0.000 | $47,832,965 |
| County Bond Redem | | 0.000 | $0 |
| County Bond Interest | | 0.000 | $0 |
| County Hospital Dist | | 3.000 | $12,726,046 |
| Special Cemetery Levy | | 0.826 | $3,503,905 |
| Weed & Pest Levy | | 0.454 | $1,925,875 |
| County School Dist | | 25.000 | $106,050,383 |
| County Wide School Levy | | 6.000 | $25,452,092 |
| School Foundation Program | | 12.000 | $50,904,184 |
| School Dist Bond Redem | | 0.000 | $0 |
| School Dist Bond Interest | | 0.000 | $0 |
| School BOCHES | | 0.500 | $2,121,008 |
| School BOCES | | 0.000 | $0 |
| School Recreation Levy | | 1.000 | $4,242,015 |
| **TOTAL** | | 60.056 | $254,758,473 |

| MILL LEVIES | |
|---|---|
| County | 60.056 |
| City of Gillette | 68.056 |
| Town of Wright | 68.056 |

| | |
|---|---|
| ASSESSED VALUATION | $4,242,015,313 |

Source: Campbell County.

### III.C. Fiscal Impacts of the Scenarios in Campbell County

As noted, under PacifiCorp's current plans, the Wyodak Power Plant and the Wyodak Mine would remain open through 2038, but CCUS would not be installed on the power plant. The differences in total annual tax revenues for Campbell County tax districts between the CCUS and the PacifiCorp scenarios result primarily from:

- The property taxes paid by the CCUS and related infrastructure, beginning in 2026.
- The differences in property taxes due to different levels of employment and income. [52]
- The differences in sales, use, and related taxes due to different levels of employment and income.

Figure III-3 indicates that the tax revenue implications of the scenarios for jurisdictions in Campbell County are substantial:

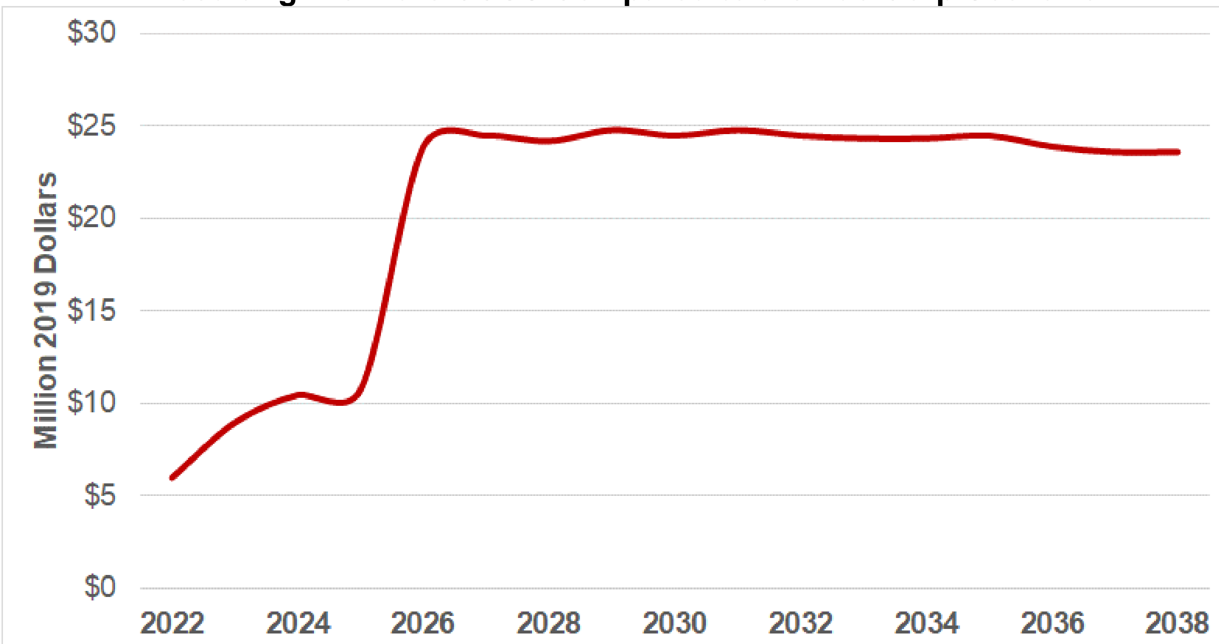
- In 2024, CCUS results in $10.4 million more Campbell County tax revenues than the PacifiCorp scenario.
- In 2026, CCUS results in $23.9 million more Campbell County tax revenues than the PacifiCorp scenario.
- In 2028, CCUS results in $24.2 million more Campbell County tax revenues than the PacifiCorp scenario.
- In 2037, CCUS results in $23.6 million more Campbell County tax revenues than the PacifiCorp scenario.
- Over the period 2022-2038, CCUS results in $351 million more Campbell County tax revenues than the PacifiCorp scenario.

The large increase in incremental tax revenues in 2026 is primarily the result of the CCUS facility coming on-line in that year.[53] If the PacifiCorp scenario is implemented instead of CCUS, over the period 2022-2038 taxing jurisdictions in Campbell County would have to eventually increase tax revenues from other sources by more than $350 million.

[52]Median household income in Campbell County is about $81,000. http://www.energycapitaled.com/living-here/area-demographics/.

[53]If taxes are assessed on construction work in progress (CWIP), the tax revenue increase could begin as early as 2023. This is potentially a significant factor. For example, the Shoreham Nuclear Power Station in New York State was under construction during the 1970s and 1980s. Even though it never even opened, the taxes Shoreham paid for nearly two decades made the local school district one of the wealthiest in the U.S., and the Shoreham case was a landmark in litigation concerning property tax assessments of power facilities. MISI staff were deeply involved for years in the extensive litigation that resulted from the property tax assessment of the Shoreham plant. See Long Island Lighting Co. v. Assessor and Bd. of Assessment Review for Town of Brookhaven," 246 A.D.2d 156 (2d Dep't 1998).

**Figure III-3**
**Incremental Tax Revenues in Campbell County**
**Resulting From the CCUS Compared to the PaciCorp Scenario**



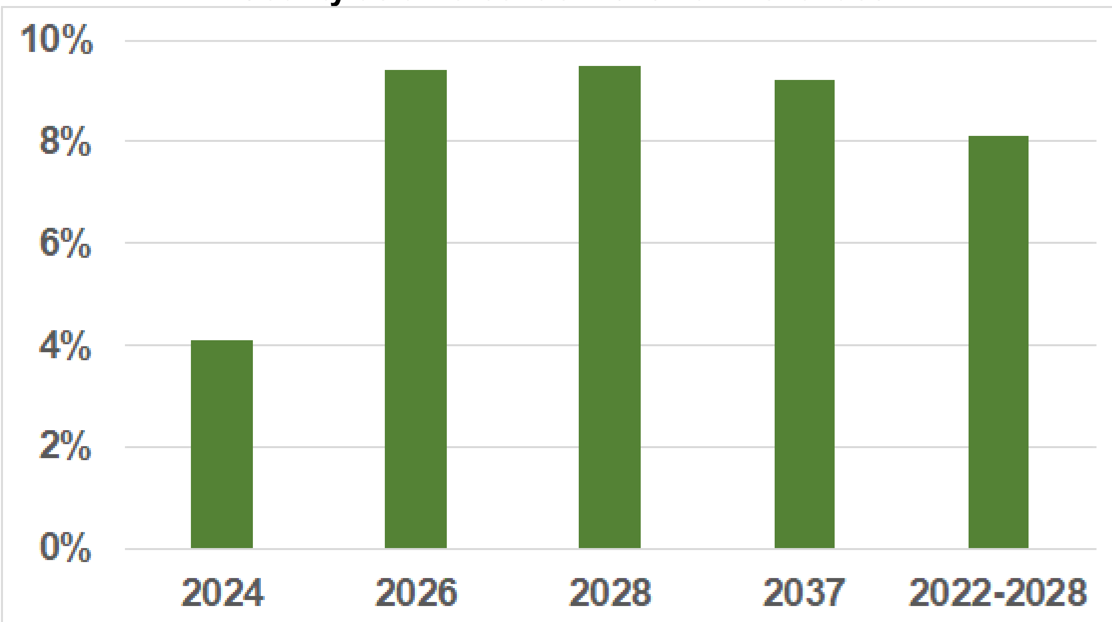

Source: Management Information Services, Inc.

Figure III-4 shows the incremental tax revenues as a percent of the total 2020 tax revenues in Campbell County, and indicates that:

- In 2024, the incremental tax revenues represent 4.1% of the total 2020 tax revenues in Campbell County.
- In 2026, the incremental tax revenues represent 9.4% of the total 2020 tax revenues in Campbell County.
- In 2028, the incremental tax revenues represent 9.5% of the total 2020 tax revenues in Campbell County.
- In 2037, the incremental tax revenues represent 9.2% of the total 2020 tax revenues in Campbell County.
- Over the period 2022- 2038, the cumulative incremental tax revenues represent 8.1% of the total cumulative tax revenues in Campbell County – assuming that the 2020 tax revenues remain constant in 2019 dollars.

Thus, if the PacifiCorp scenario is implemented instead of CCUS, tax jurisdictions in Campbell County would have to eventually increase tax revenues from other sources by more than 8%.

**Figure III-4**
**Incremental Tax Revenues in Campbell County as a Percent of 2020 Tax Revenues**




Source: Management Information Services, Inc.

# IV. FISCAL IMPACTS IN CONVERSE COUNTY

## IV.A. The Dave Johnston Power Plant

The Dave Johnston Power Plant opened in 1959 and is located on the banks of the North Platte River in Glenrock, Wyoming.[54] It has four coal-fired generating units that are capable of producing 922 MW of electricity. The plant was originally a mine-mouth facility, but is now supplied with coal by rail. PacifiCorp owns and operates all four units at the Plant. Under PacifiCorp's current plans, the Dave Johnston Power Plant would be completely decommissioned in 2027.[55]

The Dave Johnston Plant is in Converse County, which has a population of about 14,000. The nearest town is Glenrock, which has a population of about 2,470; the nearby town of Rolling Hills has a population of about 510; the town of Douglas is the County Seat and has a population of about 6,210. In January 2020, there were a total of 8,770 jobs in Converse County.[56]

Local officials fear that closing the Dave Johnston Plant would put hundreds, if not thousands, of people out of jobs. The plant currently employs just under 200 workers, mostly sourced from Glenrock, Douglas, and Casper. If the coal-fired Johnston power plant is closed, Converse County stands to lose its largest industrial property taxpayer and Glenrock stands to lose the town's largest private employer.[57] Further, if the plant is closed, Converse County School District No. 2 (Glenrock schools) will be heavily impacted with respect to revenues, and the Converse County economy and tax base will suffer because of the huge loss of jobs. Glenrock and Converse County officials have been aggressively promoting CCUS and $CO_2$ EOR as a viable economic alterative to closing the plant.[58]

In our analysis, we assumed that CCUS would be retrofit onto Dave Johnston units 3 and 4 (together as single capture system). Units 1 and 2 at Dave Johnston were not be considered in the analysis. Therefore, in our analysis we assumed that Units 1 and 2 at Dave Johnston would be completely decommissioned in 2027 as PacifiCorp currently plans.[59] Thus, in 2027 and thereafter, we assumed that Dave Johnston units 3 and 4 are operating with retrofit CCUS, but Units 1 and 2 at Dave Johnston are closed.

Under the Dave Johnston CCUS/Saline Storage EOR scenario, the total (direct plus indirect) local jobs impacts – in Converse County -- would be the result of:[60]

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[54]Dave Johnston Power Plant https://www.brkenergy.com/ccr/assets/pdf/ppw/DJ/DJ_Ash_Pond/ Operating _criteria/Annual_engineering_inspection/2018%20Annual%20Inspection%20Dave%20 Johnston%20Ash %20Pond.pdf.
[55]PacifiCorp IRP Resource Planning, op. cit.
[56]Wyoming Department of Workforce Services, op. cit.
[57]Converse County Commissioner Jim Willox said he blames the potential closure on the war on coal. See Cinthia Stimson, op. cit.
[58]"Old Plants, New Ideas: Who Might Buy a Retired Coal Power Unit?" *Oil City News*, December 2, 2019.
[59]PacifiCorp IRP Resource Planning, op. cit.
[60]Leonardo Technologies, Inc., op. cit.

- CCUS construction, 2023-2025
- CCUS O&M, 2026-2055
- Pipeline construction, 2024-2025
- Pipeline O&M, 2026-2055
- EOR construction – if any in Converse County
- EOR O&M – if any in Converse County, 2026-2055
- Saline storage construction – if any in Converse County
- Saline storage EOR O&M – if any in Converse County, 2026-2055
- O&M jobs retained at Dave Johnston 3&4, 2023-2055
- O&M jobs retained at Dave Johnston 1&2, 2023-2026

Under the Dave Johnston CCUS Storage scenario, the total (direct plus indirect) local jobs impacts in Converse County would be the result of:

- CCUS construction, 2023-2025
- CCUS O&M, 2026-2055
- Pipeline construction, 2024-2025
- Pipeline O&M, 2026-2055
- Saline storage construction – if any in Converse County
- Saline storage O&M – if any in Converse County, 2026-2055
- O&M jobs retained at Dave Johnston 3&4, 2023-2055
- O&M jobs retained at Dave Johnston 1&2, 2023-2026

Under the Dave Johnston PacifiCorp scenario, the total (direct plus indirect) local jobs impacts – in Converse County -- would be the result of:

- O&M jobs retained at Dave Johnston 3&4, 2023-2026
- O&M jobs retained at Dave Johnston 1&2, 2023-2026

It was assumed that CCUS retrofit construction would begin in 2023 and be completed by 2025, and that operations would begin in 2026. The construction schedule was developed from the NETL CCS retrofit plant construction schedule and was estimated to be as shown in Table IV.1.[61]

**Table IV-1**
**CCS Retrofit Plant Construction Schedule**

| Year 1 | Year 2 | Year 3 |
|---|---|---|
| 0.25 | 0.40 | 0.35 |

Source: Management Information Services, Inc. and U.S. National Energy Technology Laboratory.

[61]See Management Information Services, Inc., "Employment Impact Analysis of Coal Carbon Capture and Sequestration Retrofits," prepared for National Energy Technology Laboratory, August 2015.

The retrofit construction retrofit total overnight capital cost costs and the construction schedule in 2019 dollars is given in Table IV-2. This $1,130 million is assumed to be the estimated fair market value of the CCUS retrofits. [62]

**Table IV-2**
**CCUS Retrofit Plant Construction Expenditures**
**(Millions of 2019 dollars)**

| Plant | Year 1 | Year 2 | Year 3 |
|---|---|---|---|
| Dave Johnston Plant Units 3-4 | $282.5 | $452.0 | $395.5 |

Source: Management Information Services, Inc., U.S. National Energy Technology Laboratory, and Leonardo Technologies Inc.

### IV.B. Taxation in Converse County

In Wyoming, the task of collecting property taxes is delegated to the County Treasurer's Office. The taxes fund hospitals and schools, health departments, and airports and help build and maintain roads. A property tax in Wyoming is an ad valorem tax. Therefore, the more a property is worth, the higher the taxes are. In order to tax the property, a taxable value must be determined. The Converse County Assessor assigns the property a fair market value, and the fair market value is multiplied by a taxation rate to calculate the taxable value.[63] The taxation rate depends on how the Assessor classifies the property. Properties are classified in one of three areas:

- Gross production of minerals and mine products (taxed at 100%)
- Property used for industrial purposes (taxed at 11.5%)
- All other property, Real and Personal (taxed at 9.5%)

There are a variety of taxation districts in Converse County, including:

- Converse County
- School Districts
- State School Foundation
- Senior Citizens
- Special Solid Waste
- Special Cemetery
- Special Hospital
- Weed and Pest Control
- Soil Conservation
- Municipalities

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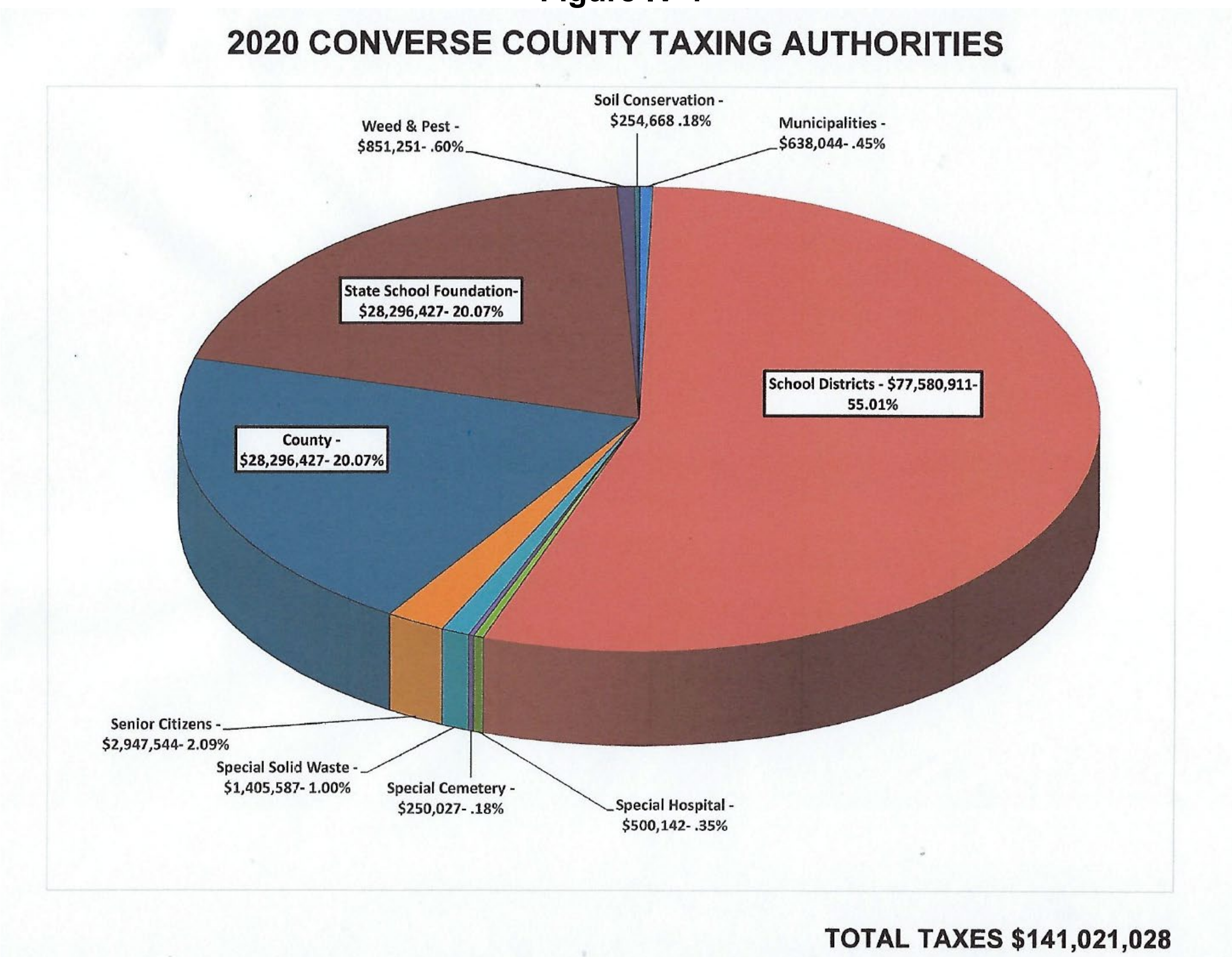
[62]It was assumed that the valuation and assessment of the CCUS facilities would be similar to that of other power plant facilities in the county.
[63]https://conversecounty.org/367/Understanding-Property-Taxes.

As shown in Figure IV-1, the county and schools collect over 95% of the tax revenues in Converse County.[64] This figure shows the taxing authorities for the 2020 tax year. These are the districts that apply mills, which then receive the allotted property tax payment amounts. It illustrates that the schools (including the School Districts and the State Foundation Fund) comprise 75.08% of Converse County taxing authorities. The percent of taxes allocated to fund the county government is 20.07%. The percent of taxes allocated to fund all other taxing districts is less than 5%.

**Figure IV-1**




Source: Converse County, 2020.

Converse County's ten largest taxpayers account for approximately 83% of the County's total assessed property valuation. Eighty percent of the ten taxpayers are involved in the mineral extraction industry, one is a power producer, and one is a railroad company. In FY 2018, the County received approximately 31% of its total revenues from these taxpayers. The mining sector, which includes industries in support of mining and oil and gas, accounted for 44% of all sales tax revenues and provided 170% more

[64]https://conversecounty.org/232/Where-Tax-Money-Goes

revenue in FY 2018 compared to FY 2017.[65] The health of that industry cascaded to other sectors, with the wholesale trade sector increasing 135% and the retail sales sector increasing 10% from the prior year.

The county's taxable valuations varied widely on an annual basis over the past decade:[66]

- 2018 Taxable Value was $1,360,264,100
- 2017 Taxable Value was $1,110,252,314
- 2016 Taxable Value was $1,521,897,271
- 2015 Taxable Value was $1,833,614,182
- 2014 Taxable Value was $1,407,977,674
- 2013 Taxable Value was $1,168,956,285
- 2012 Taxable Value was $1,003,112,636
- 2011 Taxable Value was $851,310,494

The valuation increases and decreases were due to the cyclical nature of the extraction industry, where increased production drives prices down until the industry contracts and demand outpaces production. At that point, prices rise and expansion and production increase again.

In recent years, Converse County mineral valuations fluctuated widely on an annual basis – Table IV-3.

**Table IV-3**
**Converse County Mineral Valuations, 2016-2018**

| Mineral | 2016 Value | 2017 Value | 2018 Value |
|---|---|---|---|
| Coal | $231,733,939 | $158,189,068 | $115,908,856 |
| Oil | $694,956,316 | $395,523,045 | $620,394,836 |
| Gas | $ 89,110,848 | $ 50,499,834 | $121,730,817 |
| Uranium | $ 23,657,637 | $ 9,478,854 | $ 2,580,068 |

Source: Porter, Muirhead, Cornia & Howard.

Even as the energy sector in Converse County began to recover in FY 2018, revenues remained flat, with a less than 1% variance in collections from FY 2017 to FY 2018. This was mostly due to the lag in property taxes, where soft oil and gas prices caused the overall county valuation to fall from $1.52 billion in tax year 2016 to $1.1 billion in tax year 2017, or 27%. The valuation decrease resulted in a commensurate decrease in revenue to the General Fund, which received $18.2 million in FY 2017 and $13.4 million

[65]Porter, Muirhead, Cornia & Howard, "Converse County, Wyoming Financial and Compliance Report Casper, Wyoming March 25, 2019
[66]Ibid.

in FY 2018. However, sales tax collections, driven by expansion in the energy sector, increased 80%, offsetting some of the loss from property taxes. In FY 2018, the General Fund received $8.3 million in sales tax revenues, compared to $4.6 million in FY 2017. The additional $3.7 million in sales tax revenue was largely unexpected and unplanned. The county budgeted $5.1 million in sales tax revenue to the General Fund in FY 2018, a slight decrease from the $5.1 million budgeted in FY 2017.[67]

As revenues remained flat from FY 2017 to FY 2018, so did general governmental spending, which went largely unchanged. The county spent $10.1 million on general government operations in FY 2017 and $10.0 million in FY 2018.

Table IV-4 shows the FY 2018 Converse County budget. It indicates that in FY 2018, property taxes provided 51% of the county General Fund budget.

**Table IV-4**
**Converse County Schedule of Revenues, Expenditures, and Changes in Fund Balance-- General Fund Year Ended June 30, 2018**

| | Budget Amounts | | | Variance with Final Budget Positive |
|---|---|---|---|---|
| | Original | Final | Actual | (Negative) |
| Revenues | | | | |
| Tax - property | $ 14,126,083 | $ 14,126,083 | $ 14,378,977 | $ 252,894 |
| Tax - other | 6,888,096 | 6,888,096 | 10,575,269 | 3,687,173 |
| Intergovernmental revenues | 719,436 | 719,436 | 524,286 | (195,150) |
| Charges for services | 817,950 | 817,950 | 1,344,832 | 526,882 |
| Investment income | 88,300 | 88,300 | 195,879 | 107,579 |
| Economic development | 5,000 | 5,000 | 681 | (4,319) |
| Miscellaneous revenues | 1,071,289 | 1,071,289 | 1,315,441 | 244,152 |
| Total revenues | 23,716,154 | 23,716,154 | 28,335,365 | 4,619,211 |

Source: Porter, Muirhead, Cornia & Howard.

Table IV-5 shows the total Converse County 2020 valuations and mill levies. It shows that in 2020, total valuation among 12 tax districts totaled $2.358 billion and generated $141 million in taxes based on mill levies that ranged from 0.108 for soil conservations to 25 for special schools.

[67]Ibid.

**Table IV-5**
**Total Converse County 2020 Valuations and Mill Levies**

| DISTRICT | 100 | 101 | 103 | 104 | 150 | 151 | 200 | 201 | 202 | 204 | 205 | 250 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,358,035,588 | RURAL/DIST#1 | RURAL/DIST#1 | Ridgewater I&S D | Sundance Meadows | DOUGLAS/DIST#1 | LOST SPRINGS/DIST#1 | RURAL/DIST#2 | RURAL/DIST#2 | ROLLING HLS#2 | RURAL/DIST#2 | Rolling Hills#3 | GLENROCK/DIST#2 | |
| VALUATIONS | 1,827,159,295 | 17,799 | 2,734,716 | 1,164,992 | 58,208,608 | 221,055 | 281,383,425 | 163,490,705 | 3,550,075 | 403,769 | 1,704,348 | 17,996,781 | 2,358,035,588 |
| | | | | | | | | | | | | | |
| STATE | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| COUNTY GENERAL | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | |
| FOUNDATION | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | |
| COUNTY WIDE SCHOOL | 6.000 | 6.000 | 6.000 | 6.000 | 6.000 | 6.000 | 6.000 | 6.000 | 6.000 | 6.000 | 6.000 | 6.000 | |
| SPECIAL SCHOOL | 25.000 | 25.000 | 25.000 | 25.000 | 25.000 | 25.000 | 25.000 | 25.000 | 25.000 | 25.000 | 25.000 | 25.000 | |
| BOCES-COOP ED SD#1-EWC | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | | | | | | | |
| BOCES-COOP ED SD#1-Gillette | 0.400 | 0.400 | 0.400 | 0.400 | 0.400 | 0.400 | | | | | | | |
| BOCES-COOP ED SD#1-Thermop | 0.100 | 0.100 | 0.100 | 0.100 | 0.100 | 0.100 | | | | | | | |
| BOCES-COOP ED SD#2- | | | | | | | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | |
| RECREATION-SCHOOLS | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | |
| MUNICIPALITIES | | | | | 8.000 | | | | 8.000 | | | 8.000 | |
| WEED & PEST CONTROL | 0.361 | 0.361 | 0.361 | 0.361 | 0.361 | 0.361 | 0.361 | 0.361 | 0.361 | 0.361 | 0.361 | 0.361 | |
| SOIL CONSERVATION | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | 0.108 | |
| CC SENIOR CITIZENS | 1.250 | 1.250 | 1.250 | 1.250 | 1.250 | 1.250 | 1.250 | 1.250 | 1.250 | 1.250 | 1.250 | 1.250 | |
| GELNROCK SOLID WASTE | | 0.000 | | | | | 3.000 | 3.000 | 3.000 | 3.000 | 3.000 | 3.000 | |
| SPECIAL HOSPITAL | | 2.678 | | | | | | 2.678 | 2.678 | | 2.678 | 2.678 | |
| SPECIAL CEMETERY | | | | | | | | 1.336 | 1.336 | 1.336 | 1.336 | 1.336 | |
| SCH DIST #2 BOND | | | | | | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| SCH DIST #2 BOND INTEREST | | | | | | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| TOTAL MILL LEVIES | 58.719 | 61.397 | 58.719 | 58.719 | 66.719 | 58.719 | 61.219 | 65.233 | 73.233 | 62.555 | 65.233 | 73.233 | |
| | | | | | | | | | | | | | |
| STATE & COUNTY | 24.000 | 24.000 | 24.000 | 24.000 | 24.000 | 24.000 | 24.000 | 24.000 | 24.000 | 24.000 | 24.000 | 24.000 | |
| SCHOOL DISTRICTS | 33.000 | 33.000 | 33.000 | 33.000 | 33.000 | 33.000 | 32.500 | 32.500 | 32.500 | 32.500 | 32.500 | 32.500 | |
| MUNICIPALITIES | | 0.000 | 0.000 | 0.000 | 8.000 | 0.000 | 0.000 | 0.000 | 8.000 | 0.000 | 0.000 | 8.000 | |
| SPECIAL DISTRICTS | 1.719 | 4.397 | 1.719 | 1.719 | 1.719 | 1.719 | 4.719 | 8.733 | 8.733 | 6.055 | 8.733 | 8.733 | |
| | | | | | | | | | | | | | |
| | 58.719 | 61.397 | 58.719 | 58.719 | 66.719 | 58.719 | 61.219 | 65.233 | 73.233 | 62.555 | 65.233 | 73.233 | |
| | | | | | | | | | | | | | |
| TAXES LEVIED | 107,288,967 | 1,093 | 160,560 | 68,407 | 3,883,620 | 12,980 | 17,226,012 | 10,664,989 | 259,983 | 25,259 | 111,180 | 1,317,958 | 141,021,027 |

Source: Converse County, 2020.

## IV.C. Fiscal Impacts of the Scenarios in Converse County

As noted, under PacifiCorp's current plans, the Dave Johnston Power Plant would be closed in 2026. The differences in total annual tax revenues for Converse County tax districts between CCUS and the PacifiCorp scenario result primarily from:

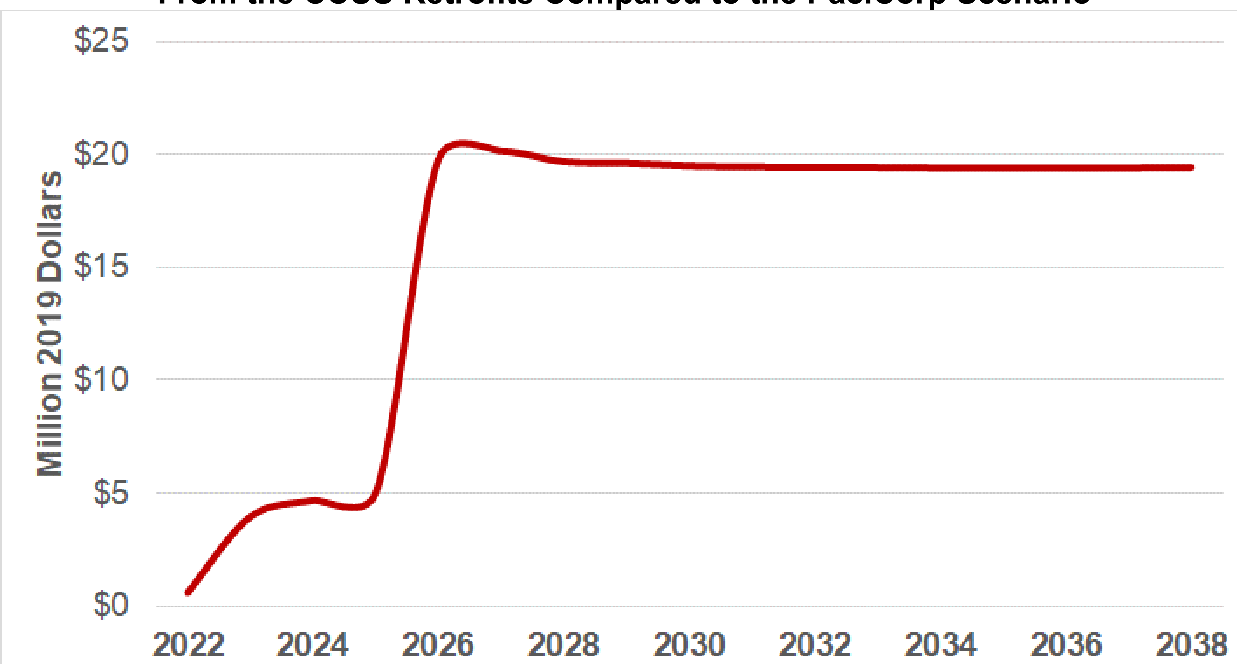
- The property taxes paid by the CCUS and related infrastructure, beginning in 2026.
- The differences in property taxes due to the closures of the power plant under the PacifiCorp scenario.
- The difference in coal severance taxes.
- The differences in property taxes due to different levels of employment and income. [68]
- The differences in sales, use, and related taxes due to different levels of employment and income.

[68]Average earnings per job (AEPJ), which includes employer paid benefits, varies substantially by sector. In 2016, AEPJ in Converse County totaled $121,000 in the utilities sector. "A Converse County Profile: Socioeconomics," Converse County Board of County Commissioners, June 2018.

Figure IV-2 indicates that the tax revenue implications of the scenarios for jurisdictions in Converse County are significant:

- In 2024, CCUS results in $4.7 million more Converse County tax revenues than the PacifiCorp scenario.
- In 2026, CCUS results in $19.8 million more Converse County tax revenues than the PacifiCorp scenario.
- In 2028, CCUS results in $19.7 million more Converse County tax revenues than the PacifiCorp scenario.
- In 2037, CCUS results in $19.4 million more Converse County tax revenues than the PacifiCorp scenario.
- Over the period 2022-2038, CCUS results in $268 million more Converse County tax revenues than the PacifiCorp scenario.

**Figure IV-2**
**Incremental Tax Revenues in Converse County Resulting From the CCUS Retrofits Compared to the PaciCorp Scenario**




Source: Management Information Services, Inc.

The large increase in incremental tax revenues in 2026 is primarily the result of the CCUS facility coming on-line in that year and the closure of the Dave Johnston Plant under the PacifiCorp scenario.[69] If the PacifiCorp scenario is implemented instead of

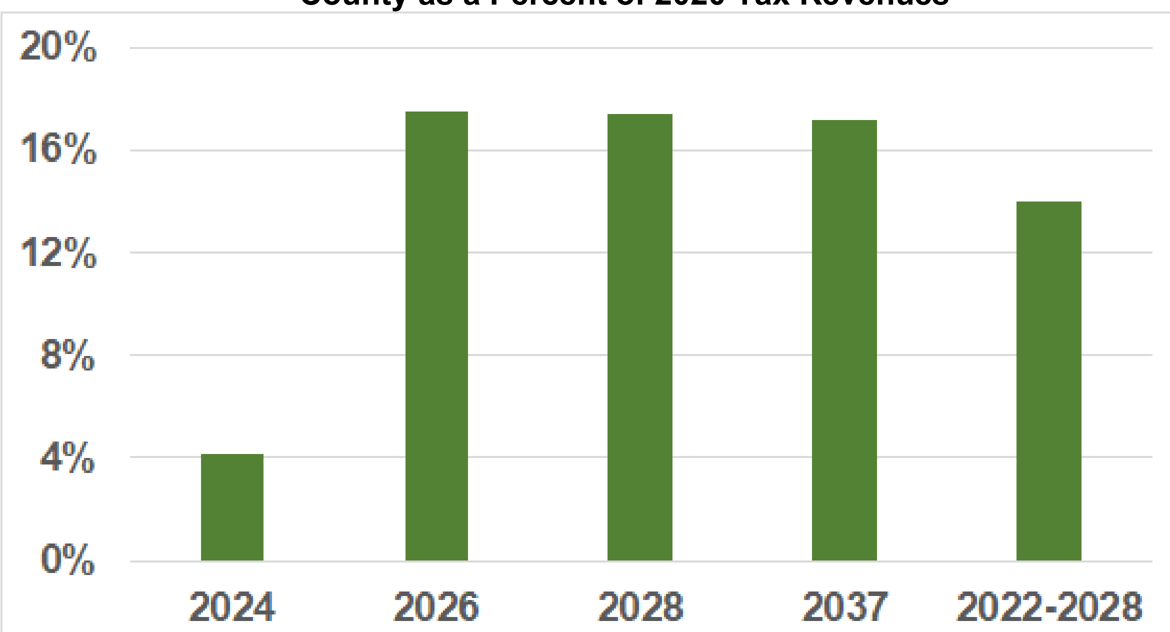
[69]If taxes are assessed on construction work in progress (CWIP), the tax revenue increase could begin as early as 2023. This is potentially a significant factor. For example, the Shoreham Nuclear Power Station in New York State was under construction during the 1970s and 1980s. Even though it never even opened, the taxes Shoreham paid for nearly two decades made the local school district one of the wealthiest in the U.S., and the Shoreham case was a landmark in litigation concerning property tax assessments of power

CCUS, over the period 2022-2038 taxing jurisdictions in Converse County would have to eventually increase tax revenues from other sources by nearly $270 million.

Figure IV-3 shows the incremental tax revenues as a percent of the total 2020 tax revenues in Converse County, and indicates that:

- In 2024, the incremental tax revenues represent 4.1% of the total 2020 tax revenues in Converse County.
- In 2026, the incremental tax revenues represent 17.5% of the total 2020 tax revenues in Converse County.
- In 2028, the incremental tax revenues represent 17.4% of the total 2020 tax revenues in Converse County.
- In 2037, the incremental tax revenues represent 17.2% of the total 2020 tax revenues in Converse County.
- Over the period 2022- 2038, the cumulative incremental tax revenues represent 14% of the total cumulative tax revenues in Converse County – assuming that the 2020 tax revenues remain constant in 2019 dollars.

**Figure IV-3**
**Incremental Tax Revenues in Converse County as a Percent of 2020 Tax Revenues**




Source: Management Information Services, Inc.

facilities. MISI staff were deeply involved for years in the extensive litigation that resulted from the property tax assessment of the Shoreham plant. See Long Island Lighting Co. v. Assessor and Bd. of Assessment Review for Town of Brookhaven," 246 A.D.2d 156 (2d Dep't 1998).

Thus, if the PacifiCorp scenario is implemented instead of CCUS, taxing jurisdictions in Converse County would have to eventually increase tax revenues from other sources by 14%.

# V. FISCAL IMPACTS IN LINCOLN COUNTY

## V.A. The Naughton Power Plant

The Naughton Power Plant is located about four miles southwest of Kemmerer in Lincoln County. Naughton is comprised of two pulverized coal units with a total net total capacity of 361 MW:

- Naughton Unit 1 commenced operation in 1963 and is rated at 160 MW.
- Naughton Unit 2 commenced operation in 1968 and is rated at 201 MW.

The plant receives much of its coal via conveyor belt from adjacent Westmoreland Coal mining operations. Unlike Westmoreland Coal Company's other mines that use draglines for mining, Kemmerer is a truck and shovel operation. The Kemmerer Mine is a 13,400-acre mine complex that supplies coal to the Naughton Power Station by overland conveyor and to a number of industrial customers either by rail or truck.

Lincoln County has a population of 17,960. The nearest town is Fontenelle, with a population of 15; the nearby of Diamondville has a population of 740; Oakley is a "census designated place" with a population of 50; Kemmerer is the largest city in county, is the county seat, and has a population of 2,750. In January 2020, there were a total of 8,507 jobs in Lincoln County.[70]

Under the PacifiCorp plan, the Naughton Plant Unit Numbers 1 and 2 would be retired in 2025 instead of 2029.[71] The Naughton Plant Unit Number 3 was shut down in February 2019, and is being converted to natural gas.

Lincoln County Commissioners compiled a detailed list of financial losses associated with proposed closure of the Naughton Power Plant facilities. They warned that the decision would result in the displacement of up to 450 workers with direct jobs at the plants and at the associated Kemmerer mine, as well as indirect jobs in the community. The coal mine employs nearly 300 people, and the power plant employs about 125. Referencing the job losses, the commission estimated that the loss would total over $45 million per year in wages and would also result in substantial tax revenue losses. The Commissioners also warned of the impending closure of the Kemmerer coal mine, if the power plants close. Noting that coal contracts from the power plant are only made one year in advance, any significant decrease in those orders could lead to early closure of the mine, which could accelerate and prolong the burdens of the power plant closures. The Commission recommended that the Naughton Units 1 and 2 maintain operations until 2029 in order to give Lincoln County more time to diversify its economic base while keeping the power grid much more resilient until renewable energy sources and their technologies can get up to speed.[72]

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[70] Wyoming Department of Workforce Services, op. cit.

[71] PacifiCorp IRP Resource Planning, op. cit.

[72] "Lincoln Commissioners Detail Losses From Plant Closure," *Wyoming News Exchange*, January 29, 2020.

Lincoln County Commissioner Kent Connelly warned that an early retirement date for the Naughton units meant that the county was already in "disaster planning mode" for budgets. He stated that "The power plant and the mine contribute taxes that constitute well over 50 percent of Lincoln County's budget. If you take these plants down, we've got to deal with what you leave us."[73]

Kemmerer coal mine general manager Rob Piippo expressed several concerns about the potential for an early retirement date of the Naughton units. The Kemmerer coal mine supplies Naughton Units 1 and 2 with coal, and the mine is facing its own uncertainty. Piippo stated "I have 280 people that I'm terrified for. My job is to lead them. I understand that life is about change and all things come to an end, but we need to know what those changes are. Traditionally, we've always been told that Naughton was one of the lowest cost providers in the PacifiCorp fleet, so how did we get from there to retiring early?"[74] He echoed the concern about what an early plant shutdown would do to funding for the county, communities, and school districts that currently benefit, stating "There is nothing in these communities to replace that money."[75]

PacifiCorp contends that the Naughton Plant shutdown of Unit 3 was a casualty of environmental regulations and market forces beyond its control: Restrictions imposed by the Clean Air Act, state regulations, an abundant supply of natural gas, new solar and wind power sources, and customer preferences.[76] The Naughton Plant employs approximately 126 workers, down about 25 percent -- about 31 workers -- through attrition over the past five years, according to Plant Managing Director Rodger Holt.[77]

Under the PacifiCorp default scenario, the Naughton Plant Unit Numbers 1 and 2 close in 2025 instead of 2029.

Under the Naughton CCUS EOR/Saline Storage scenario, the total (direct plus indirect) local jobs impacts – in Lincoln County -- would be the result of:[78]

- CCUS construction, 2023-2025
- CCUS O&M, 2026-2055
- Pipeline construction, 2024-2025
- Pipeline O&M, 2026-2055
- EOR construction – if any in Lincoln County
- EOR O&M – if any in Lincoln County, 2026-2055
- Saline storage construction – if any in Lincoln County
- Saline storage EOR O&M – if any in Lincoln County, 2026-2055
- O&M jobs retained at Naughton 1&2, 2023-2055
- Kemmerer Mine jobs retained, 2023-2055

[73]Davis, op. cit.
[74]Ibid.
[75]Ibid.
[76]"Wyoming: PacifiCorp Closes Unit 3 at Naughton Coal Plant," *Gillette News Record*, February 1, 2019.
[77]Ibid.
[78]Leonardo Technologies, Inc., op. cit.

Under the Naughton CCUS Saline Storage scenario, the total (direct plus indirect) local jobs impacts – in Lincoln County -- would be the result of:

- CCUS construction, 2023-2025
- CCUS O&M, 2026-2055
- Pipeline construction, 2024-2025
- Pipeline O&M, 2026-2055
- Saline storage construction – if any in Lincoln County
- Saline storage O&M – if any in Lincoln County, 2026-2055
- O&M jobs retained at Naughton 1&2, 2023-2055
- Kemmerer Mine jobs retained, 2023-2055

Under the Naughton PacifiCorp scenario, the total (direct plus indirect) local jobs impacts – in Lincoln County -- would be the result of:

- O&M jobs in Lincoln County retained at Naughton 1&2, 2023-2024
- Kemmerer Mine jobs in Lincoln County retained, 2023-2024

The conversion of Naughton 3 to natural gas will also slightly reduce the number of O&M workers required. However, this will have no differential jobs impact since it occurs in all of the CCUS and PacifiCorp scenarios.

As noted, CCUS retrofits were assessed on the Naughton Plant Units 1 and 2 (together as single capture system). It was assumed that CCUS retrofit construction would begin in 2023 and be completed by 2025, and that operations would begin in 2026. The construction schedule was developed from the NETL CCS retrofit plant construction schedule and was estimated to be as shown in Table V-1.[79]

**Table V-1**
**CCS Retrofit Plant Construction Schedule**

| Year 1 | Year 2 | Year 3 |
|---|---|---|
| 0.25 | 0.40 | 0.35 |

Source: Management Information Services, Inc. and U.S. National Energy Technology Laboratory.

The retrofit construction costs and the construction schedule in 2019 dollars is given in Table V-2.

**Table V-2**
**CCUS Retrofit Plant Construction Expenditures**
**(Millions of 2019 dollars)**

| Plant | Year 1 | Year 2 | Year 3 |
|---|---|---|---|
| Naughton Plant Units 1-2 | $354.8 | $567.6 | $496.7 |

Source: Management Information Services, Inc., U.S. National Energy Technology Laboratory, and Leonardo Technologies Inc.

[79]See Management Information Services, Inc., "Employment Impact Analysis of Coal Carbon Capture and Sequestration Retrofits," prepared for National Energy Technology Laboratory, August 2015.

The retrofit construction costs in 2019 dollars thus total $1,419.1 million. This $1,419.1 million is assumed to be the estimated fair market value of the CCUS retrofits.[80]

## V.B. Taxation in Lincoln County

Lincoln County follows Wyoming State Statute 39-13-103, which states “All taxable property shall be annually listed, valued and assessed for taxation in the county in which located and in the name of the owner of the property on January 1.”[81] This includes real property defined as land and improvements (buildings or structures) permanently fixed to the land. It also includes personal property, and all tangible personal property used in a business is taxable and must be listed. This includes (but is not limited to) all furniture, fixtures, machines, computers, software, equipment, telephone systems, tools, manuals or libraries, unlicensed vehicles, mobile machinery, along with any small items used in a business. Leasehold improvements must be reported, but listed separately and clearly identified. Leased equipment must be listed in detail along with the name and address of the lease company. Inventory held for resale and licensed vehicles should not be reported.

The level of assessment is the percentage of the market value that determines the assessed value. In Wyoming, the level of assessment for minerals is 100%, industrial use properties is 11.5%; and all other properties 9.5%. This percentage is determined by the legislature. The mill levy is the number of dollars in taxes that a property owner must pay for every $1,000 of assessed value. Lincoln County Commissioners establish the total mill levy for each tax district based on budget requests from the various taxing entities within the district's boundaries.[82]

In order to determine the mill levy for each tax district, taxing entities must submit their final budget requests. The budget, less anticipated revenues from non-property tax sources, is divided by the assessed value to obtain the tax rate or mill levy. Assessed values determined by the assessor and values of state assessments (those industries valued by the Department of Revenue, such as utilities, minerals, etc.) are combined to determine the total assessed value within the taxing entities boundaries. An individual assessed value is multiplied by the total mill levy for the tax district to obtain an individual tax amount. Tax districts are the geographic area on which a taxing entity has the right to levy taxes. These entities include school districts, counties, cities, water or sewer districts, fire districts or other specially formed districts as designated by state statute.

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[80] It was assumed that the valuation and assessment of the CCUS facilities would be similar to that of other power plant facilities in the county.

[81] https://law.justia.com/codes/wyoming/2011/title39/chapter13/section39-13-103/#:~:text=Imposition.,-Universal%20Citation%3A%20WY&text=(a)%20Taxable%20event.&text=thereof%20if%20known.-,The%20books%20and%20records%20of%20the%20public%20or%20private%20warehouse,and%20any%20political%20subdivision%20thereof.

[82] https://www.lcwy.org/departments/assessor/information.php.

The Lincoln County Assessor establishes the fair market value for property within the county with the exception of State Assessed Properties.[83] State assessed properties include utilities, transportation and minerals. The value of property for assessment purposes is based on fair market value; lands being utilized for agricultural use are valued based on productivity. Because Lincoln County uses a complicated formula to determine the property tax owed on any individual property, it is not possible to condense it to a simple tax rate.[84]

Fair market value is defined as the amount of cash or terms reasonably equivalent to cash that a well-informed buyer is justified in paying for a property and a well-informed seller is justified in accepting, assuming neither party to the transaction is acting under undue compulsion, and assuming the property has been offered in the open market for a reasonable time. The procedure for determining fair market value for assessment purposes is Mass Appraisal, which is the process of valuing a universe of properties as of a given date, utilizing standard methodology, employing common data, and allowing for statistical testing.

The ownership and physical characteristics of property are gathered by the Assessor's Office. The Lincoln County Assessor's Office is required to physically review property every six years.

All property is placed in a Land Economic Area (LEA). LEA boundaries are developed based on physical, economical, governmental and social factors, and market activity. The LEA boundaries are utilized in the sales analysis in determining market adjustment factors. After a market value is determined, the market value is applied to a level of assessment. The level of assessment is the percentage of the fair market value that determines assessed values. Residential and Commercial properties have a level of assessment of 9.5%, industrial and state assessed properties are 11.5%, and Minerals are valued at 100% of Market.

The assessed value is then applied to the mill levy. A mill is literally, one thousandth. For tax purposes, $1.00 of taxes for every $1000 in assessed valued. The Mill Levy is determined by the budgets of the various political entities with the legal power to levy taxes. In Lincoln County, there are over 30 of these entities and they include County, School District, Weed and Pest, Cities, Towns, and Special Districts such as Cemetery, Fire, Water, and Sewer and Improvement Districts. The Mill Levy that is applied to a property is dependent upon which tax district the property is located in. The formula for calculating the taxes based on the assessed value is: Market value x (assessment ratio) x mill levy/1000 = taxes. Assessment ratios are 9.5% for residential/commercial/agricultural, 11.5% for industrial property, and minerals are taxed at 100% of value.

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[83]http://www.tax-rates.org/wyoming/lincoln_county_property_tax.
[84]Ibid.

Table V-3 lists the ten major 2020 Lincoln County tax assessments and illustrates that virtually all of them are energy-related.[85] Table V-4 shows the Lincoln County 2020 tax levies for its major School Districts 1, 2, and 9.[86] Table V-5 shows the total 2020 property taxes levied in Lincoln County and illustrates that in 2020:

- The property taxes levied in the county totaled $47.7 million.
- Excluding state taxes, the property taxes levied in the county totaled $38.8 million.
- Of the $38.8 million county taxes, 63% -- $24.5 million, were school district taxes.

In Lincoln County there are 34 special tax districts that in 2020 received property tax revenues ranging from very little to nearly $2 million for the South Lincoln Hospital.[87]

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[85]Lincoln County Assessor, "Lincoln County Tax District and Authority Report For Tax Year 2020," August 5, 2020.
[86]http://www.tax-rates.org/wyoming/lincoln_county_property_tax.
[87]Ibid.

## Table V-3
## Major 2020 Lincoln County Tax Assessments

| TAXYEAR | NAME1 | Assessed Value |
|---|---|---|
| 2020 | KEMMERER OPERATIONS LLC | 128,113,685 |
| 2020 | EXXONMOBIL CORP | 74952742 |
| 2020 | HILCORP ENERGY COMPANY | 68502891 |
| 2020 | ENTERPRISE GAS PROCESSING LLC | 33565717 |
| 2020 | ROCKY MTN POWER (AKA PACIFICO | 31492072 |
| 2020 | WILLIAMS GAS PROCESSING | 24662011 |
| 2020 | UNION PACIFIC RAILROAD CO | 13058778 |
| 2020 | XTO ENERGY INC | 12123424 |
| 2020 | KERN RIVER GAS TRANSMISSION CC | 8349074 |
| 2020 | JONAH GATHERING COMPANY | 8287202 |
| | | |
| **School District #1** | | |
| TAXYEAR | NAME1 | Assessed Value |
| 2020 | KEMMERER OPERATIONS LLC | 128,082,513 |
| 2020 | EXXONMOBIL CORP | 72634566 |
| 2020 | HILCORP ENERGY COMPANY | 57119060 |
| 2020 | ENTERPRISE GAS PROCESSING LLC | 33565717 |
| 2020 | WILLIAMS GAS PROCESSING | 22016820 |
| 2020 | UNION PACIFIC RAILROAD CO | 8391201 |
| 2020 | KERN RIVER GAS TRANSMISSION CC | 8346724 |
| 2020 | JONAH GATHERING COMPANY | 8287202 |
| 2020 | RUBY PIPELINE LLC | 6944570 |
| 2020 | DOMINION ENERGY OVERTHRUST PI | 5927306 |
| | | |
| **School District #2** | | |
| TAXYEAR | NAME1 | Assessed Value |
| 2020 | ROCKY MTN POWER (AKA PACIFICO | 27133260 |
| 2020 | HILCORP ENERGY COMPANY | 5503017 |
| 2020 | UNION PACIFIC RAILROAD CO | 4667577 |
| 2020 | LOWER VALLEY ENERGY | 4024701 |
| 2020 | ALPINE AIRPARK REFUGE INC | 1283696 |
| 2020 | HUDSLOAN LAND COMPANY LLC | 1210467 |
| 2020 | ALPINE INVESTMENTS LLC | 1176514 |
| 2020 | RICHARDSON OPERATING COMPAN | 1101496 |
| 2020 | BRIDGE-TARGHEE PLACE LLC | 883038 |
| 2020 | RIDGE CREEK INVESTMENT CO | 743646 |
| | | |
| **School District #9** | | |
| TAXYEAR | NAME1 | Assessed Value |
| 2020 | XTO ENERGY INC | 12092255 |
| 2020 | EOG RESOURCES INC | 6411912 |
| 2020 | HILCORP ENERGY COMPANY | 5880814 |
| 2020 | WILLIAMS GAS PROCESSING | 2538455 |
| 2020 | EXXONMOBIL CORP | 2318176 |
| 2020 | FOUNDATION ENERGY MANAGEMEI | 1554303 |
| 2020 | EXXONMOBIL OIL CORP | 1261555 |
| 2020 | ROCKY MTN POWER (AKA PACIFICO | 1233027 |
| 2020 | PINEDALE INVESTMENTS INC | 659502 |
| 2020 | URBAN OIL & GAS GROUP LLC | 444014 |

Source: Lincoln County Tax Assessor.

## Table V-4
## Lincoln County 2020 Tax Levies for School Districts 1, 2, and 9

| LINE | PURPOSE OF LEVY | LEVY | TAXES LEVIED |
|---|---|---|---|
| | **SCHOOL DISTRICT LEVIES** | | |
| | ***SD#1 (all districts start with (01)*** | **VALUATION** | $403,375,699.00 |
| 301 | OPERATING LEVY (25 MILLS MANDATORY) | 25.000 | 10,084,392 |
| 302 | BOARD OF COOPERATIVE EDUCATIONAL SERVICES (2.5 MILLS MAXIMUM) | 0.500 | 201,688 |
| 302a | BOARD OF COOPERATIVE EDUCATIONAL SERVICES (2.5 MILLS MAXIMUM) | 0.100 | 40,338 |
| 302b | BOARD OF COOPERATIVE EDUCATIONAL SERVICES (2.5 MILLS MAXIMUM) | | - |
| 303 | VOCATIONAL, TERM. CONTINUATION & ADULT ED. (2.5 MILLS MAXIMUM) | | - |
| 304 | BUILDING FUND | | - |
| 305 | RECREATION (1 MILL MAXIMUM) | 1.000 | 403,376 |
| 306 | BONDS & INTEREST (TOTAL) | 1.800 | 726,076 |
| **310** | **TOTALS** | **28.400** | **11,455,870** |
| | ***SD#2 (all districts start with (02)*** | **VALUATION** | $296,870,457.00 |
| 311 | OPERATING LEVY (25 MILLS MANDATORY) | 25.000 | 7,421,761 |
| 312 | BOARD OF COOPERATIVE EDUCATIONAL SERVICES (2.5 MILLS MAXIMUM) | | - |
| 312a | BOARD OF COOPERATIVE EDUCATIONAL SERVICES (2.5 MILLS MAXIMUM) | | - |
| 312b | BOARD OF COOPERATIVE EDUCATIONAL SERVICES (2.5 MILLS MAXIMUM) | | - |
| 313 | VOCATIONAL, TERM. CONTINUATION & ADULT ED. (2.5 MILLS MAXIMUM) | | - |
| 314 | BUILDING FUND | | - |
| 315 | RECREATION (1 MILL MAXIMUM) | | - |
| 316 | BONDS & INTEREST (TOTAL) | | - |
| **320** | **TOTALS** | **25.000** | **7,421,761** |
| | ***SD#9 (all districts start with (09)*** | **VALUATION** | $42,301,192.00 |
| 321 | OPERATING LEVY (25 MILLS MANDATORY) | 25.000 | 1,057,530 |
| 322 | BOARD OF COOPERATIVE EDUCATIONAL SERVICES (2.5 MILLS MAXIMUM) | 0.500 | 21,151 |
| 322a | BOARD OF COOPERATIVE EDUCATIONAL SERVICES (2.5 MILLS MAXIMUM) | 0.200 | 8,460 |
| 322b | BOARD OF COOPERATIVE EDUCATIONAL SERVICES (2.5 MILLS MAXIMUM) | | - |
| 323 | VOCATIONAL, TERM. CONTINUATION & ADULT ED. (2.5 MILLS MAXIMUM) | | - |
| 324 | BUILDING FUND | | - |
| 325 | RECREATION (1 MILL MAXIMUM) | 1.000 | 42,301 |
| 326 | BONDS & INTEREST (TOTAL) | | |
| **330** | **TOTALS** | **26.700** | **1,129,442** |

Source: Lincoln County Tax Assessor.

## Table V-5
## Total 2020 Property Taxes Levied in Lincoln County

| | **GRAND TOTALS** | |
|---|---|---|
| 601 | LINE 110, TOTAL STATE TAXES LEVIED | 8,910,568 |
| 602 | LINE 250, TOTAL COUNTY TAXES LEVIED | 8,910,569 |
| 603 | LINE 392, TOTAL SCHOOL DISTRICT TAXES LEVIED | 24,462,357 |
| 604 | LINE 399, TOTAL COMMUNITY COLLEGE TAXES LEVIED | - |
| 605 | LINE 450, TOTAL MUNICIPAL TAXES LEVIED | 798,120 |
| 606 | LINE 550, TOTAL SPECIAL DISTRICT TAXES LEVIED | 4,617,154 |
| **610** | **GRAND TOTAL, ALL TAXES LEVIED** | **47,698,768** |

Source: Lincoln County Tax Assessor.

## V.C. Fiscal Impacts of the Scenarios in Lincoln County

Under the PacifiCorp plan, the Naughton Plant Unit Numbers 1 and 2 would be retired in 2025 instead of 2029.[88] The Naughton Plant Unit Number 3 was shut down in February 2019, and is being converted to natural gas.[89]

The differences in total annual Lincoln County tax district revenues between CCUS and the PacifiCorp scenario result primarily from:

- The property taxes paid by the CCUS infrastructure, beginning in 2026.
- The differences in property taxes due to the closures of Naughton 1 & 2 power plant units and the Kemmerer Mine under the PacifiCorp scenario in 2024.
- The difference in coal severance taxes.
- The differences in property taxes due to different levels of employment and income. [90]
- The differences in sales, use, and related taxes due to different levels of employment and income.

Figure V-1 indicates that the tax revenue implications for jurisdictions in Lincoln County are substantial:

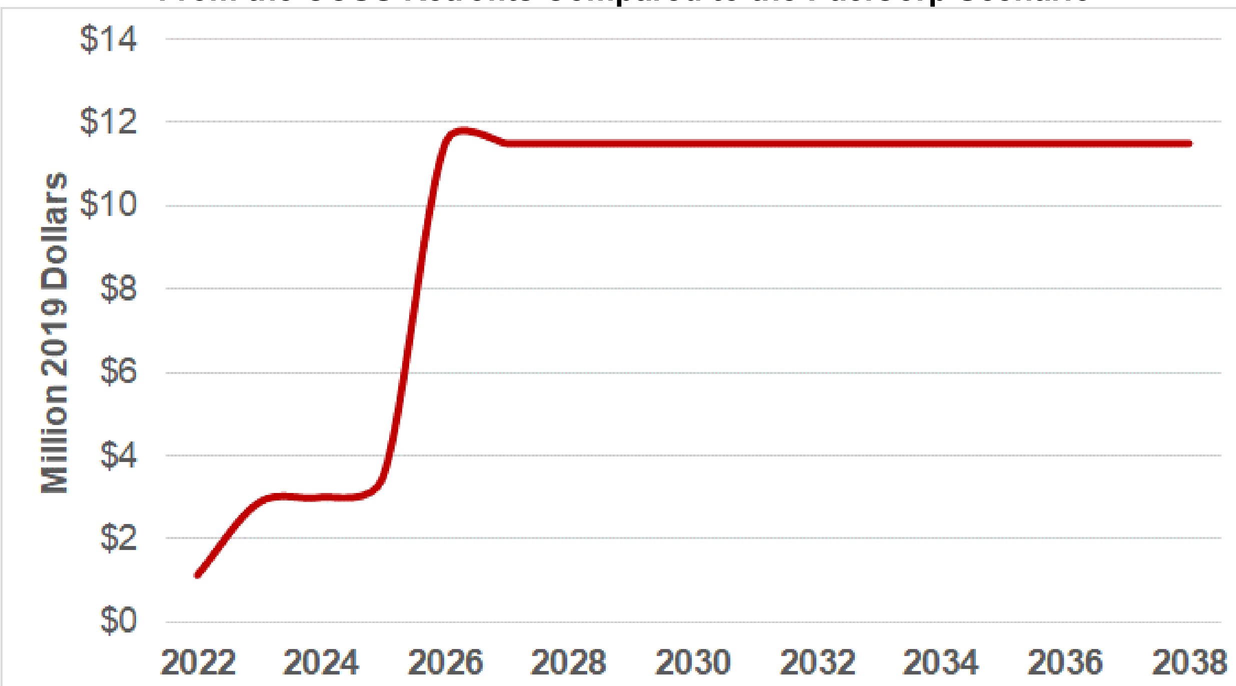
- In 2024, CCUS results in $3 million more Lincoln County tax revenues than the PacifiCorp scenario.
- In 2026, CCUS results in $9.2 million more Lincoln County tax revenues than the PacifiCorp scenario.
- In 2028, CCUS results in $9.2 million more Lincoln County tax revenues than the PacifiCorp scenario.
- In 2037, CCUS results in $9.2 million more Lincoln County tax revenues than the PacifiCorp scenario.
- Over the period 2022-2038, CCUS results in $128 million more Lincoln County tax revenues than the PacifiCorp scenario.

The large increase in incremental tax revenues in 2026 is primarily the result of the CCUS facility coming on-line in that year and the closures of Naughton 1 & 2 power plant units and the Kemmerer Mine under the PacifiCorp scenario.[91] If the PacifiCorp scenario is implemented instead of the CCUS retrofits, over the period 2022-2038 taxing

[88]PacifiCorp IRP Resource Planning, op. cit.
[89]This will have no differential tax revenue impact since it occurs in the CCUS and PacifiCorp scenarios.
[90]Average household income in Lincoln County is approximately $78,400, and the average annual wage in the mining industry in the county is $100,400 (2019$). https://kemmerergazette.com/article/lincoln-county-by-the-numbers.
[91]If taxes are assessed on construction work in progress (CWIP), the tax revenue increase could begin as early as 2023. This is potentially a significant factor. For example, the Shoreham Nuclear Power Station in New York State was under construction during the 1970s and 1980s. Even though it never even opened, the taxes Shoreham paid for nearly two decades made the local school district one of the wealthiest in the U.S., and the Shoreham case was a landmark in litigation concerning property tax assessments of power facilities. MISI staff were deeply involved for years in the extensive litigation that resulted from the property tax assessment of the Shoreham plant. See Long Island Lighting Co. v. Assessor and Bd. of Assessment Review for Town of Brookhaven," 246 A.D.2d 156 (2d Dep't 1998).

jurisdictions in Lincoln County would have to eventually increase tax revenues from other sources by nearly $130 million.

**Figure V-1**
**Incremental Tax Revenues in Lincoln County Resulting From the CCUS Retrofits Compared to the PaciCorp Scenario**

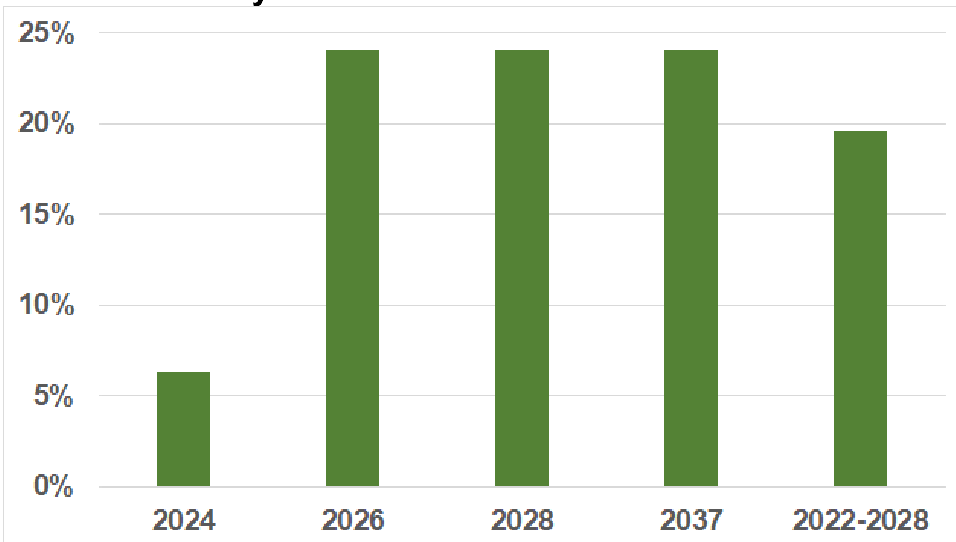



Source: Management Information Services, Inc.

Figure V-2 shows the incremental tax revenues as a percent of the total 2020 tax revenues in Lincoln County, and indicates that:

- In 2024, the incremental tax revenues represent over six percent of the total 2020 tax revenues in Lincoln County.
- In 2026, the incremental tax revenues represent 24% of the total 2020 tax revenues in Lincoln County.
- In 2028, the incremental tax revenues represent 24% of the total 2020 tax revenues in Lincoln County.
- In 2037, the incremental tax revenues represent 24% of the total 2020 tax revenues in Lincoln County.
- Over the period 2022- 2038, the cumulative incremental tax revenues represent nearly 20% of the total cumulative tax revenues in Lincoln County – assuming that the 2020 tax revenues remain constant in 2019 dollars.

**Figure V-2**
**Incremental Tax Revenues in Lincoln County as a Percent of 2020 Tax Revenues**




Source: Management Information Services, Inc.

Thus, if the PacifiCorp scenario is implemented instead of CCUS, taxing jurisdictions in Lincoln County would have to eventually increase tax revenues from other sources by nearly 20%.

# VI. FISCAL IMPACTS IN SWEETWATER COUNTY

## VI.A. The Jim Bridger Power Plant

The Jim Bridger Power Plant is located in Sweetwater County 10 miles north of Point of Rocks, Wyoming.[92] The plant is home to four coal-fired units, whose nameplate output capacity is 2,441 MW, making it one of the largest coal-fired power plants in the western U.S. Units 1 through 4 have output capacities of around 608 MW apiece, becoming operational in 1974, 1975, 1976, and 1979 respectively. Three nearby mines, Bridger surface, Bridger underground, and Black Butte, provide the majority of the plant's coal, while the Green River (via a 50-mile-long pipeline) supplies its water. A neighboring 345,000 volt transmission line connects the plant to the larger electrical grid, distributing the power produced there to customers in Utah, Idaho, Oregon, Washington, and portions of Northern California. The plant is operated by majority owner PacifiCorp, a subsidiary of Berkshire Hathaway Energy Company. In 2019, PacifiCorp reaffirmed its intention to close Units 1 and 2 in 2028 and 2032 respectively, while Units 3 and 4 will continue to operate through 2037.[93]

Sweetwater County has a population of about 45,270. The nearest town of Point of Rocks has a population of three; nearby Rock Springs has a population of 23,100; Green River is the County Seat and has a population of 12,000. In January 2020, there were a total of 20,313 jobs in Sweetwater County.[94]

The following indicate the importance of coal mines and coal-fired power plants to Sweetwater County:[95]

- In 2017, Jim Bridger Coal Mine, Black Butte Coal Mine, and the Jim Bridger Power Plant employed about 929 workers. New studies show that for each coal job created, three non-coal jobs were added to the economy.
- Coal employment added $167,454,000 in wages to Sweetwater County alone.
- Coal employment supports, on average, 5,103 county residents – approximately 12% of the Sweetwater County population.
- Coal employees own approximately 1,394 single-family homes in Sweetwater County.
- Coal employees contribute approximately $27,000,000 to the total assessed value of property in Sweetwater County.
- In 2019, the assessed value of all land, equipment, and infrastructure for the Black Butte coal mine and Jim Bridger coal plant and mine is $242,757,938. Coal production from the Black Butte and Jim Bridger mines added another $203,176,076. Coal related taxes for the assessed value of the coal plants, mines, and production in Sweetwater County in 2019 generated $323,104,507 and

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[92]"Jim Bridger Power Plant, Wyoming," https://www.clui.org/ludb/site/jim-bridger-power-plant.
[93]PacifiCorp IRP Resource Planning, op. cit.
[94]Wyoming Department of Workforce Services, "Wyoming Labor Force Trends," March 2020.
[95]"Public Invited to Hearings On Investigation into PacifiCorp Coal Plant Shutdowns," *Wyoming Digital News Collaboration*, January 24, 2020.

$22,248,955 in ad valorem taxes. Sweetwater County coal produced $14,795,555 to Wyoming education funds.

- Sweetwater County received $2,446,854 in sales and use taxes in 2019 from Jim Bridger and Black Butte coal mines.
- In 2018, Wyoming received about $203 million in federal royalty payments from coal produced on federal land and about $9.14 million of this amount was distributed to Sweetwater County. U.S. Department of the Interior, Natural Resources Revenue Data, Explore Data/Wyoming (last visited July 17, 2019), https://revenuedata.doi.gov/explore/WY/.
- Sweetwater coal mines paid $12,549,259 in severance taxes to the State and Sweetwater County received a share of these taxes as well.
- Coal mines in Sweetwater County contributed $724,911 to the Wyoming Office of State Lands.
- Sweetwater County received $43,500,000 in Federal Abandoned Mine Land funds in 2018

The 2019 Rocky Mountain Power (RMP) IRP does not address the economic impacts to the State of Wyoming or Sweetwater County. RMP instead recommends wind power as the "least cost, least risk" option necessary to replace coal and aging coal-fired power plants. RMP also notes the $1/MW in taxes paid to the State of Wyoming -- which represent pennies on the dollar when compared to coal revenues.[96]

The Jim Bridger Power Plant has about 360 employees, and the mines have a total of about 570 employees. Under the PacifiCorp scenario:

- The Jim Bridger Plant Unit Number 1 closes in 2023 instead of 2037.
- The Jim Bridger Plant Unit Number 2 closes in 2028 instead of 2037.

Accordingly, at the plant, about 90 employees would lose their jobs in 2023, and about another 90 in 2028. Since three nearby mines, Bridger surface, Bridger underground, and Black Butte, provide the majority of the plant's coal, under the PacifiCorp scenario employment reductions would also occur in these mines. We assumed that ¼ of the mine employees – about 140 – would lose their jobs in 2023, and about another ¼ of the mine employees – about 140 – would lose their jobs in 2028.[97]

PacifiCorp currently plans to close Jim Bridger plants 3 & 4 in 2037, and these closures would represent additional job losses at the plant and the mines beginning at that time. Since under the CCUS scenario both of these plants are being retrofitted, in the CCUS scenario we assumed that both plants will stay in operation through 2055.

The job impacts from the Jim Bridger plant under the CCUS/EOR/Saline Storage CCUS scenario derive from:[98]

- CCUS Construction

[96]Ibid.
[97]Leonardo Technologies, Inc., op. cit.
[98]Ibid.

- CCUS plant O&M
- Pipeline construction
- Pipeline O&M
- EOR/Saline Storage construction
- EOR/Saline Storage O&M
- Jim Bridger 1 jobs retained
- Jim Bridger 2 jobs retained
- Jim Bridger 3 jobs retained
- Jim Bridger 4 jobs retained
- Coal mine jobs retained

The job impacts from the Jim Bridger plant under the CCUS/Saline Storage Only scenario derive from:

- CCUS Construction
- CCUS plant O&M
- Pipeline construction
- Pipeline O&M
- Saline Storage construction
- Saline Storage O&M
- Jim Bridger 1 jobs retained
- Jim Bridger 2 jobs retained
- Jim Bridger 3 jobs retained
- Jim Bridger 4 jobs retained
- Coal mine jobs retained

The job impacts from the Jim Bridger plant under the PacifiCorp scenario derive from:

- Jim Bridger 1 jobs retained through 2020
- Jim Bridger 2 jobs retained through 2027
- Jim Bridger 3 jobs retained through 2020
- Jim Bridger 4 jobs retained through 2028
- Coal mine jobs retained through 2028

### VI.B. Taxation in Sweetwater County

As noted, a mill is 1/10 of $.01 or $.001 (one thousandth), and a mill levy is the number of dollars a taxpayer must pay for every $1,000 of assessed value. The taxing entity determines the amount of dollars, based on its budget request to the County Commissioners. There are many entities that have taxing authority in Sweetwater County – Figure VI-1. These entities annually submit for a levy from the Board of County Commissioners. The requested mills are based on a proposed budget (projected revenues and expenditures) of the entity and what it requires needs in tax dollars to adequately fund the services it provides to its taxpayer.[99]

**Figure VI-1**
**2020 Budgets of Major Sweetwater County Tax Jurisdictions**

| Taxing Jurisdiction | 2020 Budget (millions) |
|---|---|
| Sweetwater County | $47.1 |
| School District No. 1 | $107.8 |
| School District No. 2 | $57.4 |
| Fire District No. 1 | $1.8 |
| Solid Waste Disposal District 1 | $1.9 |
| Solid Waste Disposal District 2 | $1.7 |
| Joint Travel and Tourism Board | $0.8 |
| Weed and Pest Control District | $1.1 |
| Ten Mile Water and Sewer District | $0.2 |
| West Side Water and Sewer District | $0.8 |
| White Mountain Mile Water and Sewer District | $1.1 |
| Total, All Jurisdictions | $221.7 |

Source: Sweetwater County

The taxation process in Sweetwater County is extremely complex. Taxation begins with the County Assessor's Office determining value of properties. To determine the value of a property, the assessor uses fair market value, the value a property should sell for on the open market. Once the valuation is complete, the assessor transfers the value to the County Treasurer's Office. The county treasurer is then responsible for the billing and collection of the county tax roll.[100]

A property tax is an ad valorem tax: A tax imposed according to the value of the property. Once the Sweetwater County Assessor has determined fair market value, this value is multiplied by the level of assessment determined by the legislature. Currently, the level of assessment is 11.5% for industrial property and 9.5% for all other property. The result is assessed valuation. The assessed value is then multiplied by the mill levy (set by the County Commission) to derive the tax dollar amount due. The county treasurer then has the duty to collect the tax due.

Table VI-2 shows the top 30 taxpayers in Sweetwater County in 2019. It indicates that in 2019, PacifiCorp Bridger Coal and Lighthouse Resources Inc. – Black Butte Coal were, respectively, the fourth and the tenth largest taxpayers in Sweetwater County and paid nearly 10% of the County’s taxes. Further, this table also indicates that virtually all of the largest Sweetwater County taxpayers are energy-related.

[99]“Mill Levies,” https://www.sweet.wy.us/departments/treasurer/mill_levies.php.
[100]“Property Taxes,” https://www.sweet.wy.us/departments/treasurer/property_taxes.php.

Sweetwater County has a 1% sales tax and a 2% lodging tax rate.[101]

**Table VI-2**
**Top 30 Taxpayers in Sweetwater County in 2019**

| | COMPANY | TAXES PAID | % OF TOTAL |
|---|---|---|---|
| 1 | BP AMERICA PRODUCTION CO | $16,559,042.45 | 9.757% |
| 2 | GENESIS ALKALI WYOMING LP | $13,881,796.43 | 8.180% |
| 3 | SOLVAY CHEMICALS | $10,143,284.79 | 5.977% |
| 4 | PACIFICORP - BRIDGER COAL | $9,981,667.75 | 5.882% |
| 5 | FDL OPERATING | $9,404,828.76 | 5.542% |
| 6 | SOUTHLAND ROYALTY CO | $9,174,284.11 | 5.406% |
| 7 | TATA CHEMICALS | $8,315,966.51 | 4.900% |
| 8 | CINER WYOMING LLC | $7,956,960.09 | 4.689% |
| 9 | WEXPRO | $7,033,427.28 | 4.144% |
| 10 | LIGHTHOUSE RESOURCES INC- BLACK BUTTE COAL | $6,437,684.83 | 3.793% |
| 11 | AMPLIFY ENERGY OPERATING LLC | $5,239,671.41 | 3.087% |
| 12 | ROCKY MOUNTAIN POWER | $4,071,758.74 | 2.399% |
| 13 | SIMPLOT | $3,377,857.25 | 1.990% |
| 14 | UNION PACIFIC RAILROAD CO | $2,559,150.12 | 1.508% |
| 15 | HILCORP ENERGY COMPANY | $2,317,876.89 | 1.366% |
| 16 | SAMSON RESOURCES CO | $2,156,440.37 | 1.271% |
| 17 | WAMSUTTER GATHERING & PROCESS | $1,795,274.02 | 1.058% |
| 18 | DOMINION ENERGY OVERTHRUST PIPELINE CO | $1,354,138.44 | 0.798% |
| 19 | IDAHO POWER CO | $1,329,991.69 | 0.784% |
| 20 | WGR OPERATING | $1,327,315.20 | 0.782% |
| 21 | CROWHEART ENERGY LLC | $1,147,026.41 | 0.676% |
| 22 | ANDEAVOR FIELD SERVICES | $1,097,819.43 | 0.647% |
| 23 | HRM RESOURCES LLC | $865,232.00 | 0.510% |
| 24 | EXXON MOBILE CORP | $864,949.49 | 0.510% |
| 25 | BREITBURN ENERGY | $782,465.96 | 0.461% |
| 26 | URBAN OIL & GAS GROUP LLC | $749,996.08 | 0.442% |
| 27 | OVERLAND PASS PIPELINE CO LLC | $685,449.73 | 0.404% |
| 28 | ROCKIES EXPRESS PIPELINE LLC | $637,291.17 | 0.376% |
| 29 | ENTERPRISE JONAH GAS GATHERING CO LLC | $631,294.48 | 0.372% |
| 30 | WYOMING INTERSTATE CO LLC | $578,946.19 | 0.341% |
| | TOTAL | | 78.050% |
| | TOTAL TAXES LEVIED IN SWEETWATER COUNTY TAX YEAR 2019 | $169,709,230.00 | 100.000% |

Source: Sweetwater County Treasurer.

[101]Wyoming Department of Revenue, Excise Tax Division, "Sales/Use and Lodging Tax Rates by Locality Effective 10/01/20," 2020.

### VI.C. Fiscal Impacts of the Scenarios in Sweetwater County

As noted, CCUS retrofits were assessed on the Jim Bridger Plant units 1-4. It was assumed that CCUS retrofit construction would begin in 2023 and be completed by 2025, and that operations would begin in 2026. The construction schedule was developed from the NETL CCS retrofit plant construction schedule and was estimated to be as shown in Table VI-3.[102]

**Table VI-3.**
**CCS Retrofit Plant Construction Schedule**

| Year 1 | Year 2 | Year 3 |
|---|---|---|
| 0.25 | 0.40 | 0.35 |

Source: Management Information Services, Inc.

It was assumed that CCUS retrofit construction would begin in 2023 and be completed by 2025, and that operations would begin in 2026. The construction schedule in 2019 dollars is given in Table VI-4.[103]

**Table VI-4**
**CCUS Retrofit Plant Construction Expenditures**
**(Millions of 2019 dollars)**

| Plant | Year 1 | Year 2 | Year 3 |
|---|---|---|---|
| Jim Bridger Plant Unit 1: | $319.5 | $511.1 | $447.2 |
| Jim Bridger Plant Unit 2: | $321.7 | $514.8 | $450.4 |
| Jim Bridger Plant Unit 3: | $313.5 | $501.6 | $438.9 |
| Jim Bridger Plant Unit 4: | $311.5 | $498.4 | $436.1 |

Source: Management Information Services, Inc., U.S. National Energy Technology Laboratory, and Leonardo Technologies Inc.

The retrofit construction costs of the Jim Bridger Plant in 2019 dollars thus total $5,065 million. This is assumed to be the estimated fair market value of the CCUS retrofits.[104]

Under the Jim Bridger PacifiCorp scenario, the total (direct plus indirect) local jobs impacts – in Sweetwater County -- would result from:

- O&M jobs lost at Jim Bridger 1, 2023-2055
- O&M jobs lost at Jim Bridger 2, 2028-2055

[102]See Management Information Services, Inc., “Employment Impact Analysis of Coal Carbon Capture and Sequestration Retrofits,” prepared for National Energy Technology Laboratory, August 2015.
[103]Management Information Services, Inc., “Assessment of the Jobs Impacts of CCUS Retrofit of Four Coal Power Plants in Wyoming,” op. cit.
[104]It was assumed that the valuation and assessment of the CCUS facilities would be similar to that of other power plant facilities in the county.

- O&M jobs lost at Jim Bridger 3, 2038-2055
- O&M jobs lost at Jim Bridger 4, 2038-2055
- Jim Bridger Coal Mine and Black Butte Coal Mine jobs lost, 2023-2055

The Jim Bridger Power Plant has about 360 employees, and the mines have a total of about 570 employees. Under the PacifiCorp scenario:

- The Jim Bridger Plant Unit Number 1 closes in 2023 instead of 2037.
- The Jim Bridger Plant Unit Number 2 closes in 2028 instead of 2037.
- Jim Bridger 3 and Black Butte Coal Mine closes in 2037
- Jim Bridger 4 closes in Black Butte Coal Mine 2037

Accordingly, at the plant, about 90 employees would lose their jobs in 2023, and about another 90 in 2028. Since three nearby mines, Bridger surface, Bridger underground, and Black Butte, provide the majority of the plant's coal, under the PacifiCorp scenario employment reductions would also occur in these mines. We assume here that ¼ of the mine employees – about 140 – would lose their jobs in 2023, and about another ¼ of the mine employees – about 140 – would lose their jobs in 2028.

PacifiCorp currently plans to close Jim Bridger plants 3 & 4 in 2037, and these closures would represent additional job losses at the plant and the mines beginning in 2038. Since under the retrofits both of these plants are being retrofitted, in the retrofits we assumed that both plants will stay in operation through 2055. The differences in jobs under the CCUS and the PacifiCorp scenarios result in different levels of county incomes, 2022 – 2038, and also in different levels of county property tax and sales, use, and related tax revenues over these years.

The differences in total annual Sweetwater tax revenues between CCUS and the PacifiCorp scenario results primarily from:

- The property taxes paid by the CCUS infrastructure, beginning in 2026.
- The differences in property taxes due to the closures of the power plant and mines.
- The difference in coal severance taxes.
- The differences in property taxes due to different levels of employment and income. [105]
- The differences in sales and use taxes due to different levels of employment and income.

Figure VI-1 indicates that the tax revenue implications of the scenarios for jurisdictions in Sweetwater County are significant:

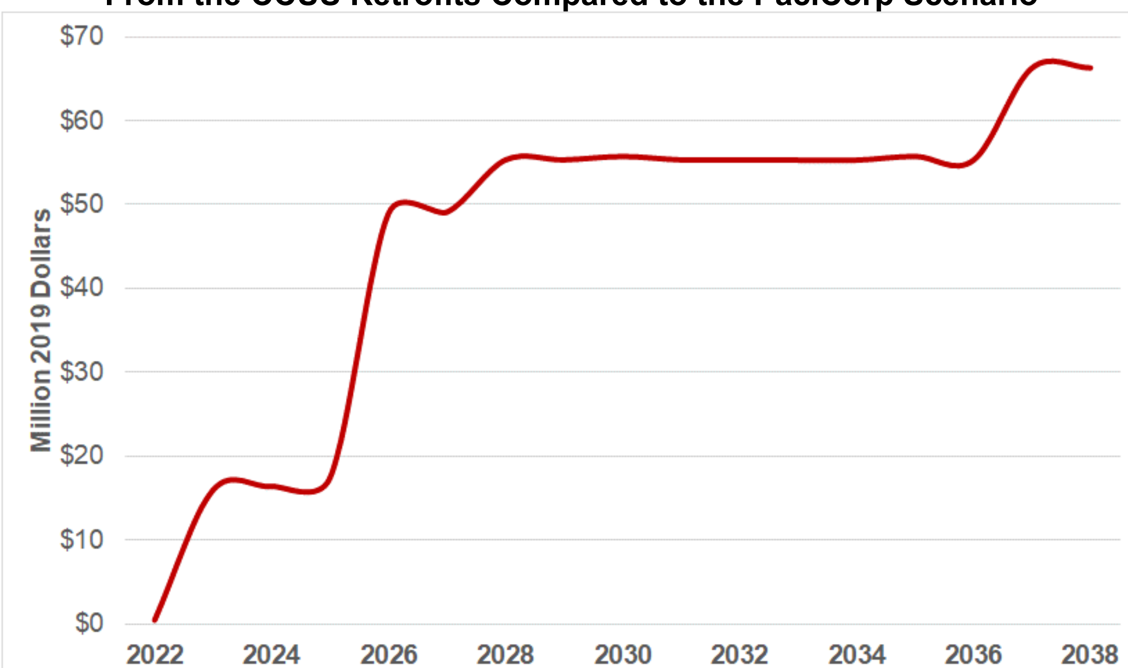
- In 2024, CCUS results in $16.4 million more Sweetwater County tax revenues than the PacifiCorp scenario.
- In 2026, CCUS results in $49 million more Sweetwater County tax revenues than the PacifiCorp scenario.

[105]Average earnings per job in Sweetwater County is approximately $75,700 (2019$). Headwaters Economics, "A Profile of Socioeconomic Measures, Sweetwater County, WY, September 16, 2020.

- In 2028, CCUS results in $55.3 million more Sweetwater County tax revenues than the PacifiCorp scenario.
- In 2037, CCUS results in $66.3 million more Sweetwater County tax revenues than the PacifiCorp scenario.
- Over the period 2022-2038, CCUS results in $780 million more Sweetwater County tax revenues than the PacifiCorp scenario.

The large increase in incremental tax revenues in 2026 is primarily the result of the CCUS facility coming on-line in that year.[106] The increase in incremental tax revenues in 2027 is primarily the result of the Closure of Jim Bridger 3 & 4 and the Black Butte Coal Mine. If the PacifiCorp scenario is implemented instead of CCUS, over the period 2022-2038 taxing jurisdictions in Sweetwater County would have to eventually increase tax revenues from other sources by nearly $800 million.

**Figure VI-1**
**Incremental Tax Revenues in Sweetwater County Resulting From the CCUS Retrofits Compared to the PaciCorp Scenario**




Source: Management Information Services, Inc.

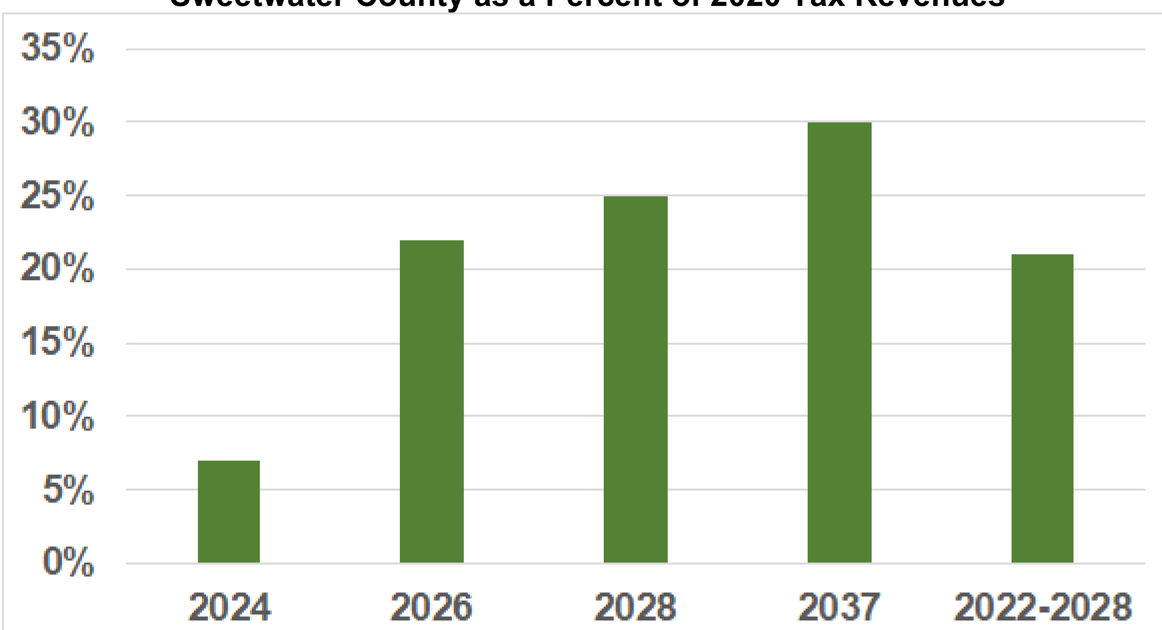
[106]If taxes are assessed on construction work in progress (CWIP), the tax revenue increase could begin as early as 2023. This is potentially a significant factor. For example, the Shoreham Nuclear Power Station in New York State was under construction during the 1970s and 1980s. Even though it never even opened, the taxes Shoreham paid for nearly two decades made the local school district one of the wealthiest in the U.S., and the Shoreham case was a landmark in litigation concerning property tax assessments of power facilities. MISI staff were deeply involved for years in the extensive litigation that resulted from the property tax assessment of the Shoreham plant. See Long Island Lighting Co. v. Assessor and Bd. of Assessment Review for Town of Brookhaven," 246 A.D.2d 156 (2d Dep't 1998).

Figure VI-2 shows the incremental tax revenues as a percent of the total 2020 tax revenues in Sweetwater County, and indicates that:

- In 2024, the incremental tax revenues represent 7% of the total 2020 tax revenues in Sweetwater County.
- In 2026, the incremental tax revenues represent 22% of the total 2020 tax revenues in Sweetwater County.
- In 2028, the incremental tax revenues represent 25% of the total 2020 tax revenues in Sweetwater County.
- In 2037, the incremental tax revenues represent 30% of the total 2020 tax revenues in Sweetwater County.
- Over the period 2022- 2038, the cumulative incremental tax revenues represent 21% of the total cumulative tax revenues in Sweetwater County – assuming that the 2020 tax revenues remain constant in 2019 dollars.

Thus, if the PacifiCorp scenario is implemented instead of CCUS, taxing jurisdictions in Sweetwater County would have to eventually increase tax revenues from other sources by about 21%.

**Figure VI-2**
**Incremental Tax Revenues in**
**Sweetwater County as a Percent of 2020 Tax Revenues**




Source: Management Information Services, Inc.

## VII. FINDINGS AND CONCLUSIONS

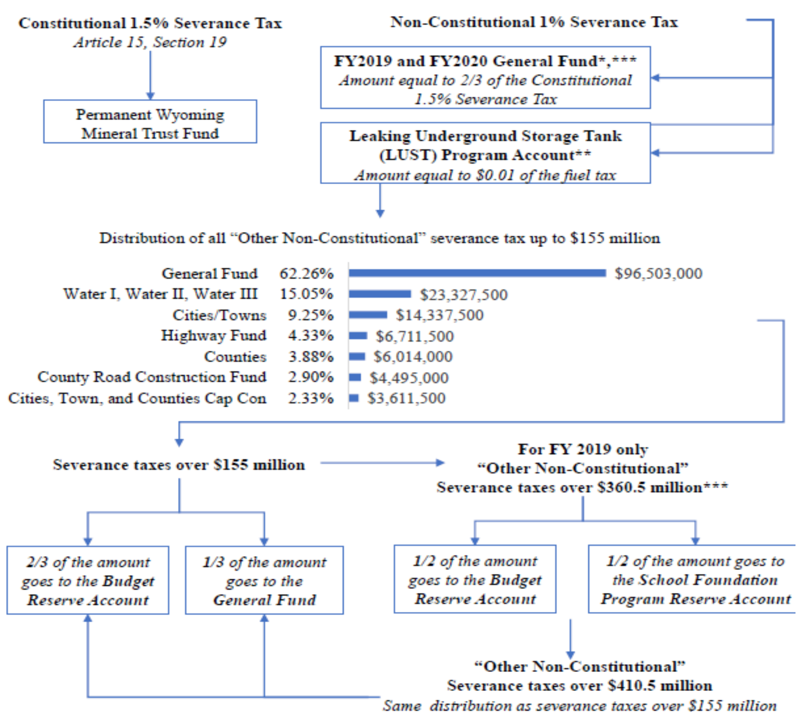
### VII.A. Findings

The major findings derived here include:

- In Wyoming, coal directly generates government revenues through four main instruments: Property taxes, federal mineral royalties, coal lease bonuses, and severance taxes.
- Coal generates substantial indirect government revenues via economic and jobs benefits.
- However, the generation, flow, and distribution of the direct revenues to local governments is complex and often opaque.

The complex distribution of severance taxes among Wyoming sub-state entities is illustrated in Figure VII-1.

**Figure VII-1**
**Distribution of FY 2019 Wyoming Severance Taxes**




*The "2/3 equivalent" of the Constitutional Severance Tax diversion references severance tax amounts received from surface and underground coal (39-14-104(a)(i) and (b)(i)) and from oil and gas (35-14-204(a)(i)).
**This amount is "swapped" with a like amount of fuel tax, meaning the gas tax is directed to WYDOT and the severance tax is directed to the LUST account.
***Per 2018 Wyoming Session Laws, Chapter 134, Section 314.

Source: *Wyoming 2019 Budget Fiscal Data Book.*

Coal is an important source of income and taxes for Wyoming, and is the second largest source of tax revenue for state and local government. Coal mining companies pay tax and royalty payments to all branches of government, federal, state, and local. In Wyoming, coal contributes over $1 billion annually in revenue to state and local governments. Wyoming coal mining provides a significant portion of the tax revenues that support state and local jurisdictions, and coal benefits Wyoming state and local governments through Federal royalties, severance taxes, Abandoned Mine Land Distributions, ad valorem taxes on production and property, Federal mineral bonus payments, sales and use taxes, and state royalties and rents.

Wyoming is heavily dependent on mineral taxes to fund state and local government services. The state receives more than half of its total revenue from taxes on mineral extraction, and the impacts are severe on county budgets and services when mineral production taxes decrease or cannot be collected.

Commissioners in all four counties are deeply concerned not only with the job losses resulting from the PacifiCorp plan but also with the enormous losses in local tax revenues that would occur. The coal power plants, coal mines, and associated infrastructure are major sources of direct and indirect local tax revenues. The commissioners fear that the fiscal impacts would be devastating in all four counties. In addition, the CCUS retrofits would generate additional local tax revenues since the CCUS retrofits will substantially increase tax valuations and assessments. The fiscal and jobs impacts of the PacifiCorp plan have become an increasingly relevant and contentious issue in Wyoming.

The overriding problem is that over the past half-century, Wyoming has constructed a tax-and-revenue structure that not only narrowly relies on extractive industries such as coal to fund basic state and local government services, but actually works against any economic diversification beyond extractive industries. Basically, "The people of Wyoming are beneficiaries of a system from which they receive about $6,000 worth of service but only pay less than $2,000 in taxes."[107]

Over the past decade, Wyoming counties have experienced several boom and bust cycles. The cumulative impact of these has been substantial, leaving counties across the state with significant funding deficits. Counties with active mineral extraction have been affected by loss of local jobs, loss of ongoing tax collection, and, in many cases, uncollectable taxes that were previously assessed. Counties are particularly hard hit during mineral downturns. Most Wyoming counties normally operate on tight budgets, so shortfalls are felt immediately. To make matters worse, counties collect taxes long after they are accrued, unlike the state, which collects severance taxes on a monthly basis.

The fiscal position of each of the four counties analyzed will be severely affected if the PacifiCorp scenario is implemented instead of CCUS. The differences in tax revenues between the CCUS and the PacifiCorp scenario results primarily from:

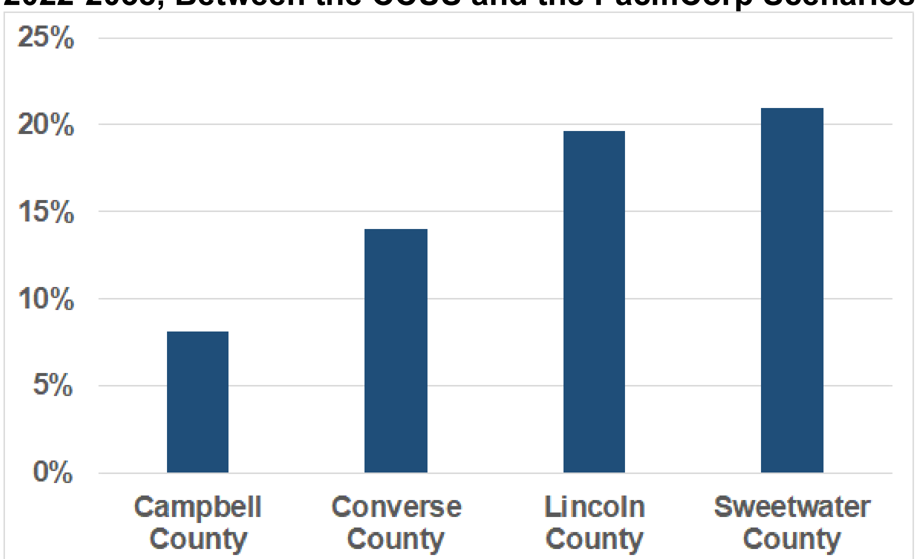
[107]Don Thorson, op. cit.

- The property taxes paid by the CCUS infrastructure, beginning in 2026.
- The differences in property taxes due to the closures of the power plant and mines.
- The difference in coal severance taxes.
- The differences in property taxes due to different levels of employment and income.
- The differences in sales, use, and related taxes due to different levels of employment and income.

Figure VII-2 shows the percent differences in cumulative tax revenues, 2022-2038, between the CCUS retrofits and the PacifiCorp scenario. It illustrates that over this period CCUS compared to the PacifiCorp scenario results in:

- Over 8% more tax revenues in Campbell County
- 14% more tax revenues in Converse County
- Nearly 20% more tax revenues in Lincoln County
- 21% more tax revenues in Sweetwater County

**Figure VII-2**
**Percent Differences in Cumulative Incremental Tax Revenues, 2022-2038, Between the CCUS and the PacifiCorp Scenarios**



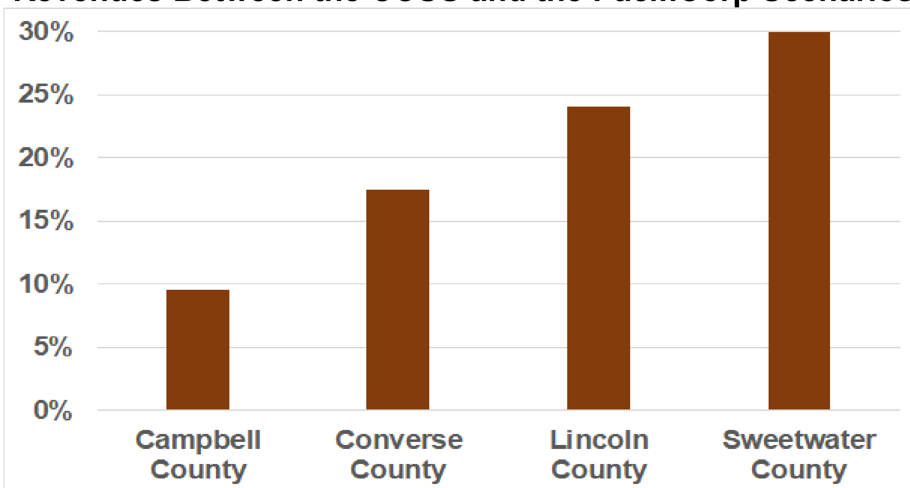

Source: Management Information Services, Inc.

The data in Figure VII-2 are for the entire period 2022-2038. The fiscal situation is even more distressing in certain years for each county, as shown in Figure VII-3. This figure shows the maximum annual percent difference in incremental tax revenues between the CCUS retrofits and the PacifiCorp scenario for each county, which is:

- 9.5% in Campbell County in 2028.
- 26% in Converse County in 2026.
- 24% in Lincoln County in 2026.
- 30% in Sweetwater County in 2037.

Over the period 2022-2038, CCUS compared to the PacifiCorp scenario will result in increased cumulative tax revenues in the four counties of more than $1.5 billion (2019 dollars).

**Figure VII-3**
**Maximum Annual Percent Difference in Incremental Tax Revenues Between the CCUS and the PacifiCorp Scenarios**




Source: Management Information Services, Inc.

## VII.B. Conclusions

The major conclusion derived here is that implementation of the PacifiCorp scenario instead of CCUS will have devastating impacts on the tax revenues and fiscal positions of Campbell County, Converse County, Lincoln County, and Sweetwater County. If the PacifiCorp scenario is implemented instead of CCUS, taxing jurisdictions in these counties would have to eventually increase tax revenues from other sources by between 8% and 21%. In some years, the fiscal deficit could approach 25% to 30%.

More realistically, if the PacifiCorp scenario is implemented instead of CCUS, tax districts and authorities in each county would have three unpalatable options:

1. They could remedy the fiscal deficit solely by increasing taxes by the necessary amounts.
2. They could remedy the fiscal deficit by reducing expenditures and services provided.
3. They could remedy the fiscal deficit by some combination of tax increases and reductions in expenditures and in services provided.

In all likelihood, the county taxing authorities will rely on some version of option 3, and each tax district will be forced to develop its own strategy for accommodating the revenue shortfalls. In addition, the counties could request increased funding from the state government. However, this is problematic since Wyoming itself is heavily dependent on the energy industries for state revenues, and other Wyoming counties will also be seeking increased state financial assistance.

Whatever options the tax authorities choose, the result is likely to be a downward economic cycle of increasing taxes and decreasing services in each county causing continued economic distress, job losses, declining property values, and out-migration. This has ominous implications for each county and for the state of Wyoming.

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