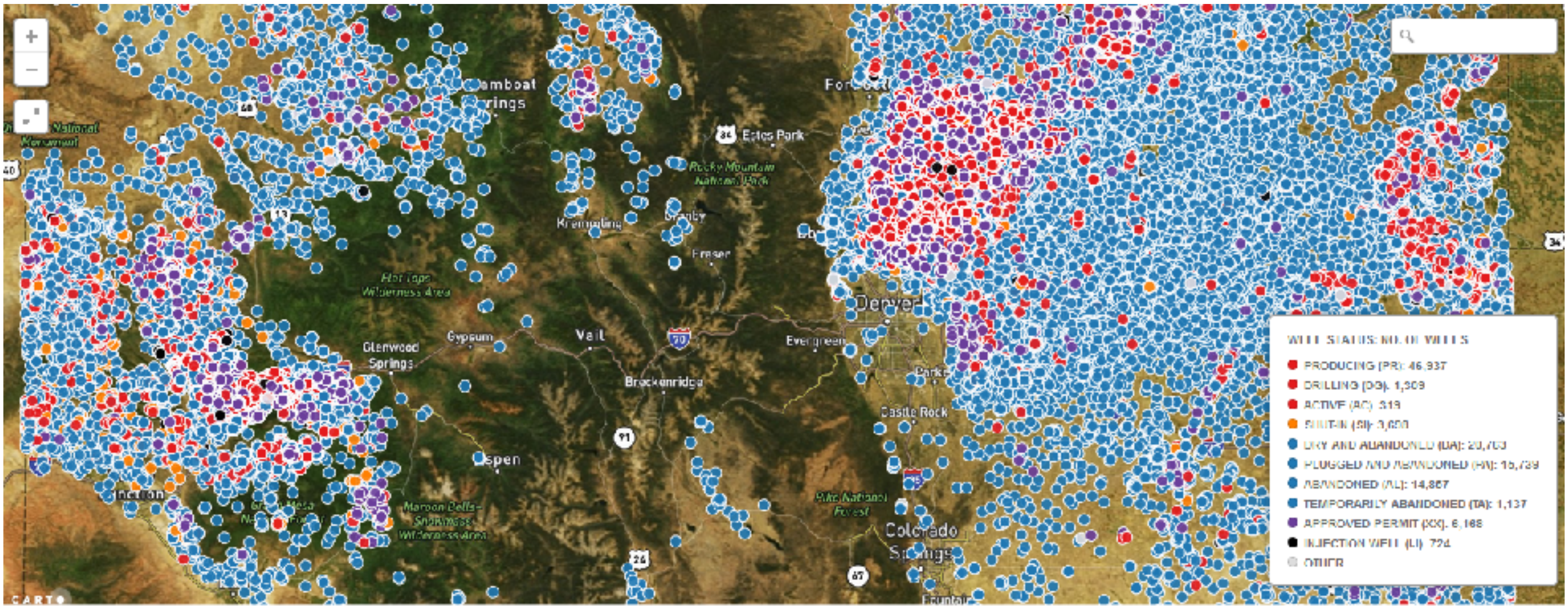
SUBMITTED BY JAN ROSE (VOLUNTEER, CLIMATE REALITY)

FA ORPHANED WELL ANALYSIS (QUESTIONS 9,10,12,14,15)

Source: Denver Post, November 2018
COGCC Daily Activity Dashboard



Where we are in 2020?
Analysis of OWP Report FY '20

- (T1 and T4) 454 wells/sites on the list
  - 215 wells to be plugged (+ reclaim)
  - 239 sites requiring remediation
- 185 on the schedule
- 72 labeled complete but still have work to be performed in FY 21
- 23 wells 'finished'
- (T2) Remaining bond balance = $416,756
- (T3) Remaining $ in OWP HB18-1336 = $259K

Examples of Comments in ‘Completed’ Wells (Page T1-9)

Task Status	Orphaned Site Work and Planning Comments (by Location ID)
Completed	FY2019-20 (Completed): Plugged well and abandoned flowlines; FY2020-21 (Planned): Commence final reclamation
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Completed	FY2019-20 (Completed): Plugged well and disconnected flowlines; FY2020-21 (Planned): Abandon flowlines and commence reclamation
In Progress	FY2019-20 (Completed): Plugged well and abandoned flowlines, soil sampling and analysis for reclamation design; FY2020-21 (Planned): Commence final reclamation
In Progress	FY2019-20 and FY2020-21 (In Progress): Abandon flowlines, decommission production equipment, commenced interim reclamation
Completed	FY2018-19 (Completed): Installed stormwater controls and performed weed control; FY2019-20 (Completed): Abandoned flowlines; FY2020-21 (In Progress): Decommission production facility, sampling and analysis
In Progress	FY2018-19 through FY2020-21 (In Progress): Remove junk and debris from former storage yard
Completed	FY2019-20 (Completed): Abandoned flowlines, decommissioned production equipment; FY2020-21 (Planned): Sampling and analysis
Completed	FY2019-20 (Completed): Plugged well, abandoned flowlines; FY2020-21 (Planned): Commence final reclamation
Completed	FY2019-20 (Completed): Plugged well, abandoned flowlines; FY2020-21 (Planned): Commence final reclamation
Completed	FY2019-20 (Completed): Plugged well, abandoned flowlines; FY2020-21 (Planned): Commence final reclamation

According to CPW, average cost to conduct surface remediation is ~$35K

$5M from HB18-1338 +

(T3) $1.8M from bonds = $6.8M

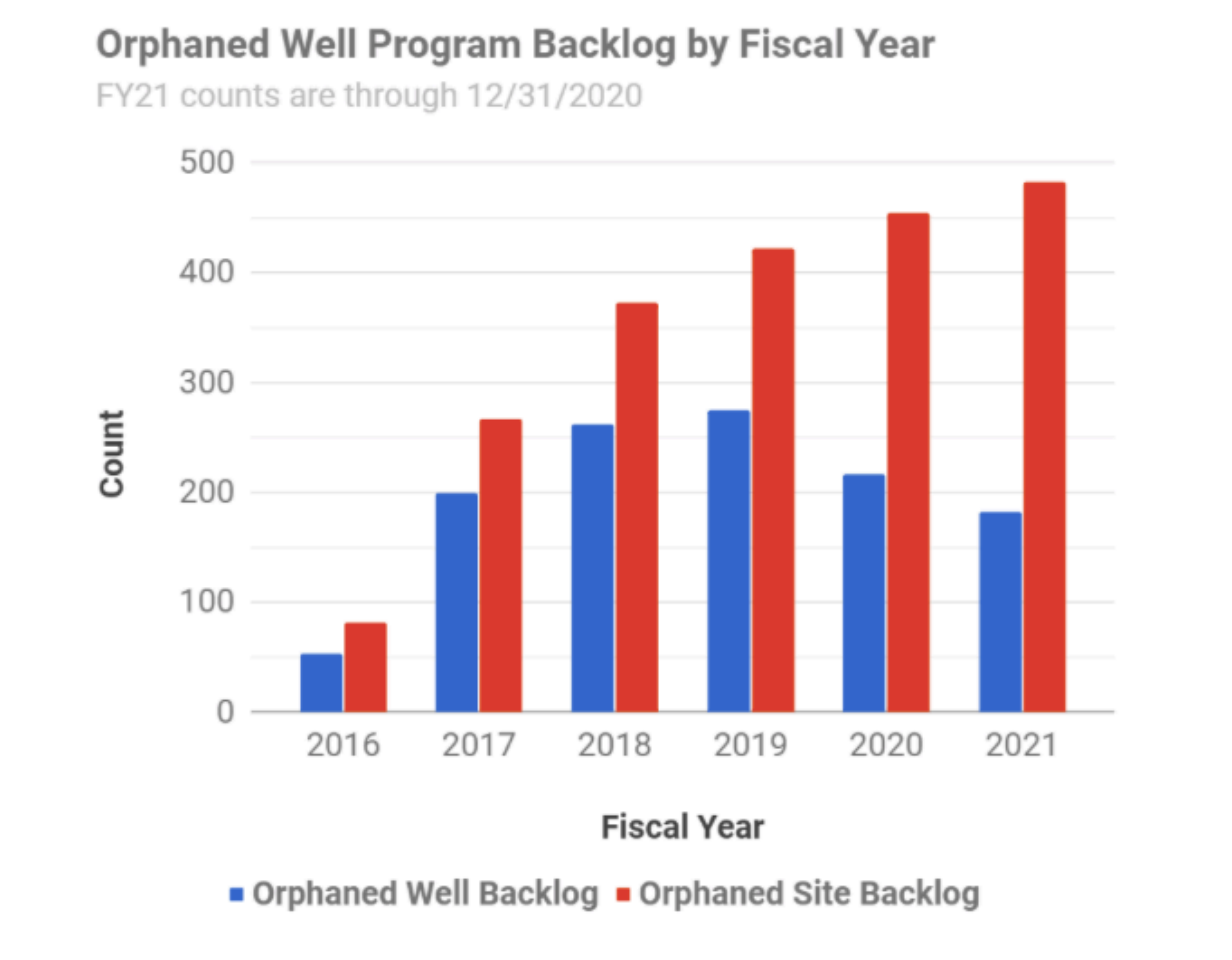
(T2) Amount remaining in bonds: $416K

Wells/sites 'finished' 23 =

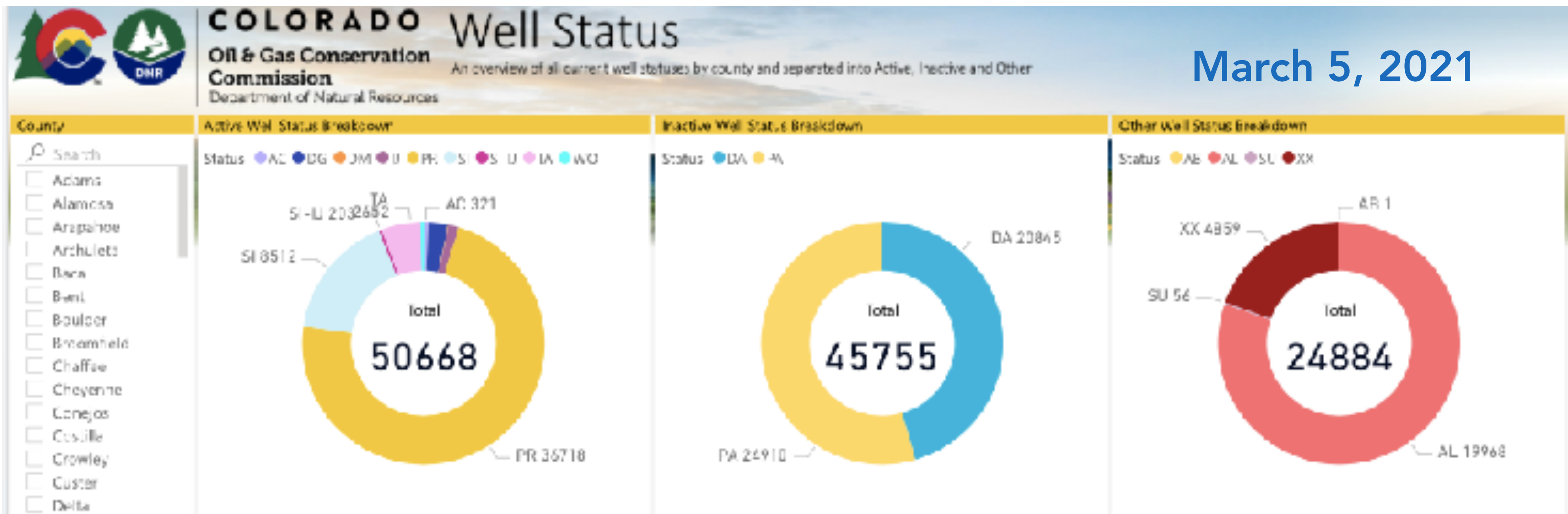
Average cost to P&A an Orphan

$256,937

This chart matches no Table



Wells and Status in CO
Total Inactive/Abandoned = 49,794
(removed dry abandoned of 20,845)
x $256K = $12.7B



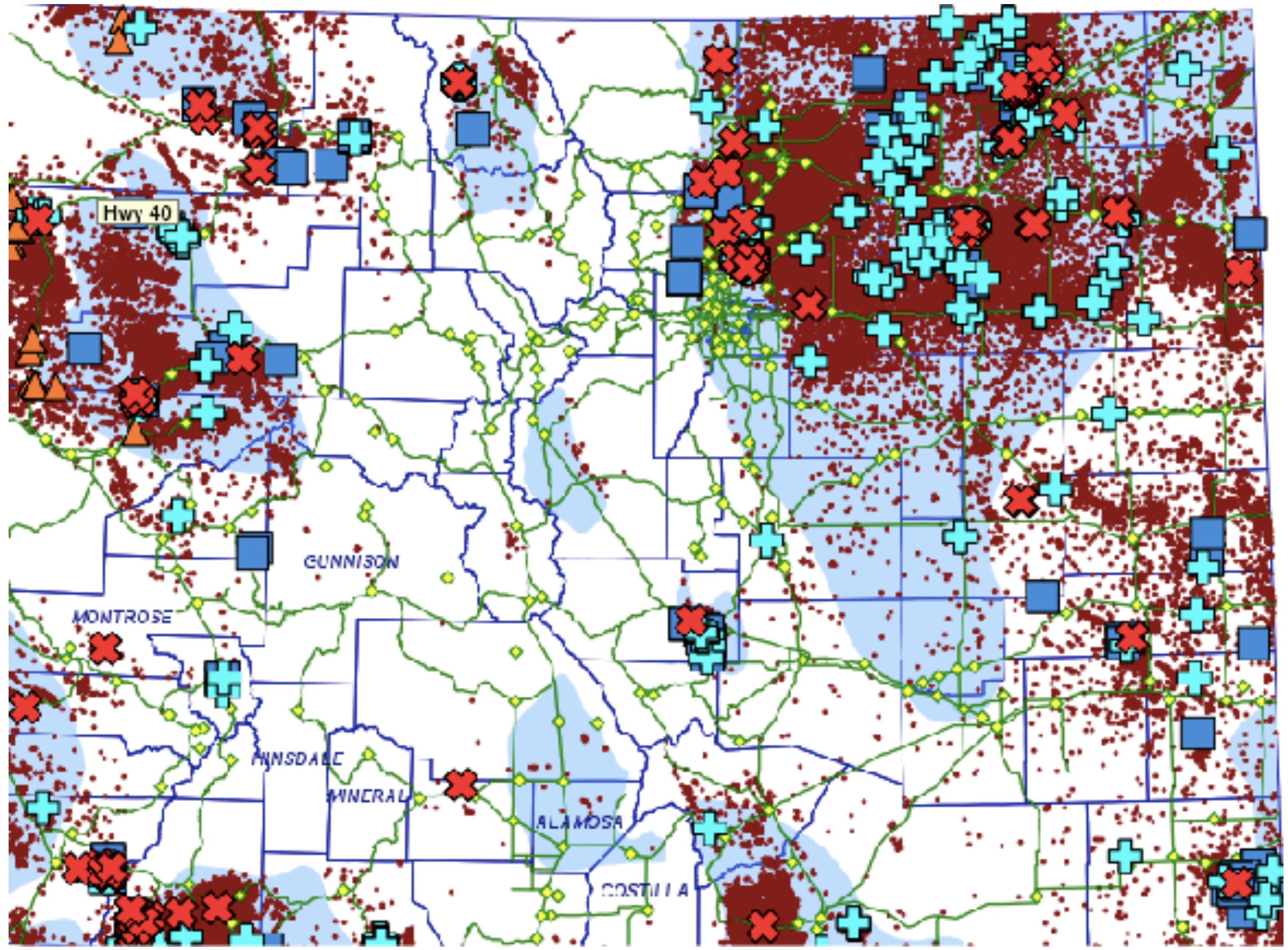
Davis 43-6 alone cost $307K (incomplete) with no bond as an example of a P&A well not even on the list! (T3)

X = ‘in progress’

+ = ‘Planned’

■ = ‘Completed’ (not)

● = Active Wells



COLORADO Oil & Gas Conservation Commission Department of Natural Resources | OWP | Home | Program Purp

OWP Backlog : Current Count

Orphaned Sites with work planned or in progress	**514**
Remaining Wells to Plug on those Sites*	**204**

* Many sites have no wells, the operator already plugged the wells, or COGCC already plugged the wells, and reclamation is planned or in progress.

We MUST depend on the regulators to protect us.

The COGCC has never denied an oil and gas permit — that MUST change to control orphan wells

Notable Quotes and Data

Gov. John Hickenlooper Wednesday signed an executive order that directs the COGCC to clean up **some of the state's more than 530 "orphan" oil and gas wells and sites** around the state.

The cost estimated to plug, remediate and reclaim all of the wells is $25 million - $47,169/well

Matt Lepore, who was then the COGCC's executive director, told KDVR-Fox31 last February that it costs about $80,000 to clean up an orphan well and that the COGCC can clean up 10 to 12 wells per year. Hickenlooper's executive order identifies 262 orphan wells that need to be plugged and another 373 that need remediation. (262 wells + 373 sites = 635 so where did we get the number 530? A: from a press release.) vast majority single well locations

262 (Orphaned) x $83.5K = $21.87M   373 (Remediated) x $35K = $13.0M Grand Total = $34.9M

"I worry about the number of future orphan wells," Lepore told KDVR. "To me, the orphan well situation is a little like a hurricane sitting offshore and you know it's out there and you know it's coming ashore, you just don't know if it's going to be a tropical storm or a Category 5."

"This order directs the COGCC to use the money it ALREADY COLLECTS from oil and natural gas taxes to plug and reclaim these wells, which makes a great deal of sense," said Dan Haley, COGA's president and CEO.

Orphaned Well Program

Hickenlooper EO July 18, 2018: $5M Fund
365 Orphaned wells identified
63 High Priority
Estimated cost: $80,000 ea
Total cost: (365x80) = $29.2M

Average cost to P&A an Orphaned Well $256,937 in FY2020

Colorado Oil and Gas Plugging and Abandonment Bonds

Bond Amount	Bond Description
$10,000	Any well less than 3,000 feet deep
$20,000	Any well 3,000 feet deep or more
$60,000	A group of wells under 100
$100,000	A group of 100 or more wells

Source: Colorado Oil and Gas Conservation Commission

Bob Randell, executive director of the Department of Natural Resources, told reporters that the COGCC is working to prioritize a list of the wells, to be **categorized based on criteria such as population density, the proximity of "sensitive resources," and the history of violations at the well site**.

HB 18-1338

Legislative Council Staff

Nonpartisan Services for Colorado's Legislature

FISCAL NOTE

Drafting Number:	LLS 18-1087	**Date:**	March 26, 2018
Prime Sponsors:	Rep. Rankin Sen. Lambert	**Bill Status:**	House Appropriations
		Fiscal Analyst:	Josh Abram | 303-866-3561 Josh.Abram@state.co.us

Bill Topic: REDUCED REVENUE SEVERANCE TAX OPERATIONAL FUND TRANSFERS

Summary of Fiscal Impact:

- ☐ State Revenue
- ☐ State Expenditure
- ☒ State Transfers and Diversions
- ☐ TABOR Refund
- ☐ Local Government
- ☐ Statutory Public Entity

The bill makes various cash funds and General Fund transfers and diversions in support of programs in the Department of Natural Resources that are funded with severance tax revenue.

Table 1
State Fiscal Impacts Under HB 18-1338

		FY 2017-18	FY 2018-19	FY 2019-20
Revenue		-	-	-
Expenditure		-	-	-
Transfers	General Fund	-	($29,508,016)	($14,214,854)*
	Tier 2 Cash Funds	-	$9,477,091	-
	Operational Fund		$20,030,925	$14,214,854*
	Total		**$0**	**$0**
Transfers	Tier 2 Cash Funds	($2,973,869)	-	-
	Operational Fund	$2,390,685	-	-
	General Fund	$583,184		
	Total	**$0**	-	-
Diversion	Severance Tax Trust Fund	-	($40,942,016)*	-
	General Fund	-	$40,942,016*	-
	Total		**$0**	

* *Up to this amount.*

Total from the Taxpayers: $43.7M

Oil and gas production accounted for 94 percent of the State's total severance tax revenue for Fiscal Year 2018, or $96.1 million. Therefore, it is important that there are processes in place to verify the accuracy of the amount of oil and gas extracted, and thus, the amount of severance taxes paid. (Jan 2020 Severance Tax Audit)

Table 6
Effective Severance Tax Rates for Oil and Gas Producers, FY 2016-17

State	Total Oil Production Value	Total Gas Production Value	Total Oil and Gas Production Value	Severance Taxes	Effective Tax Rate (Taxes ÷ Production Value)
Colorado	**$4,382,065,570**	**$4,560,908,619**	**$8,942,974,189**	**$57,856,222**	**0.6%**
Utah	$1,126,872,240	$1,306,586,298	$2,433,458,538	$20,461,434	0.8%
Kansas	$1,441,067,110	$689,069,024	$2,130,136,134	$42,090,000	2.0%
Oklahoma	$6,070,830,030	$7,514,470,135	$13,585,300,165	$441,970,795	3.3%
New Mexico	$5,721,298,680	$3,044,698,023	$8,765,996,703	$338,600,000	3.9%
Texas	$46,277,213,350	$32,382,003,617	$78,659,216,967	$3,090,098,096	3.9%
Wyoming	$2,610,133,120	$4,188,022,602	$6,798,155,722	$340,488,713	5.0%
North Dakota	$13,799,611,680	$1,760,721,444	$15,560,333,124	$1,461,148,461	9.4%
Montana	$820,819,800	$111,128,068	$931,947,868	$98,104,000	10.5%

Source of Severance Tax Collections:
Colorado: Office of the State Controller data.
Utah: Utah State Tax Commission, Revenue Summary 2016-17 (Includes severance tax and conservation fee).
Kansas: Kansas Division of the Budget, November 2, 2017 revenue estimates.
Oklahoma: Oklahoma Tax Commission FY 2016-17 Annual Report.
New Mexico: New Mexico Consensus Revenue Estimating Group, August 15, 2017 revenue estimates.
Texas: Texas Net Revenue by Source, 2017, Window on State Government (Includes both natural gas production tax and oil

We also found that Colorado's approach to oil and gas severance taxes is unusual; only four other oil and gas producing states assess severance taxes on the gross income received by oil and gas interest owners. Compared to these four other states, Colorado produces significantly more oil and gas. (Source: Severance Tax Audit, January 2020)

Table 2
Gross Severance Tax Liability, Ad Valorum Credit Claimed, and Net Tax Liability

Tax Year	Gross Liability	Ad Valorum Credit	Percent of Gross Liability	Net Tax Liability
2008	$430,292,261	$167,485,453	38.9%	$262,806,808
2009	$190,746,539	$160,836,906	84.3%	$29,909,633
2010	$278,207,803	$133,425,931	48.0%	$144,781,872
2011	$307,358,099	$154,480,805	50.3%	$152,877,294
2012	$272,474,720	$163,638,736	60.1%	$108,835,984
2013	$387,642,936	$191,694,173	49.5%	$195,948,763
2014	$547,036,856	$283,429,207	51.8%	$263,607,649
2015	$321,168,898	$296,904,480	92.4%	$24,264,418
2016	$111,587,941	$82,996,240	74.4%	$28,591,701
Average	**$316,279,561**	**$181,654,659**	**57.4%**	**$134,624,902**
Standard Deviation	$121,321,234	$68,463,496		$95,076,885
	38.4%	37.7%		70.6%

Source: Colorado Department of Revenue.

Over the last 9 years, the value of the ad valorem tax credit claimed by oil and gas operators has averaged $181.7 million annually, ranging from a high of $296.9 million in 2015 to a low of $83.0 million in 2016. The ad valorum credit has reduced severance taxes by as little as 38.9 percent in 2008 and by as much as 92.4 percent in 2015.

Colorado Supreme Court ruling. On April 26, 2016, the Colorado Supreme Court ruled that oil and gas producers may deduct any costs for transportation, manufacturing, and processing when valuing severed minerals for tax purposes in BP America v. Colorado Department of Revenue. The Supreme Court decision allows oil and gas producers to deduct a broad array of costs, including those listed on the netback expense report forms (NERF) submitted by oil and gas producers to county assessors. These include direct costs and foregone returns on investment as a result of expenditures for the transportation, manufacturing, and processing of oil and gas. The decision allows producers to claim significantly larger deductions than had been allowed previously. Additionally, the decision results in increased state liability for severance tax refunds.

Table 3
Value of Oil and Gas Produced by Stripper Wells

Year	Percent of Exempt Oil	Percent of Exempt Natural Gas	Value of Exempt Production	Percent of Oil and Gas Value that is Exempt
1999	27.7%	14.7%	$320,179,738	16.9%
2000	27.5%	14.3%	$540,387,797	16.4%
2001	28.9%	14.1%	$561,822,150	15.8%
2002	31.7%	13.7%	$474,095,614	17.1%
2003	32.1%	14.5%	$879,621,827	16.7%
2004	35.5%	15.3%	$1,181,095,528	18.1%
2005	37.6%	15.1%	$1,755,640,855	18.1%
2006	38.5%	14.9%	$1,698,912,015	19.0%
2007	36.9%	14.3%	$1,458,917,621	19.6%
2008	37.6%	13.6%	$2,337,107,123	18.9%
2009	39.4%	15.0%	$1,347,239,159	21.0%
2010	38.4%	15.4%	$1,885,425,553	21.8%
2011	37.0%	16.2%	$2,275,361,458	23.8%
2012	30.0%	16.7%	$2,190,369,600	22.5%
2013	18.7%	18.1%	$2,153,828,701	18.4%
2014	10.4%	18.3%	$2,047,601,782	14.0%
2015	7.0%	18.1%	$1,266,348,083	12.6%
2016	7.0%	18.0%	$1,128,235,839	12.6%

Source: Colorado Oil and Gas Conservation Commission, U.S. Energy Information Administration.

EXHIBIT 2.1. MISSING OIL AND GAS MONTHLY WELL PRODUCTION REPORTS PER OPERATOR CALENDAR YEARS 2016 THROUGH 2018

Number of Missing Monthly Well Reports	Number of Operators
1–25	126
26–50	57
51–100	37
101–500	44
501–1,000	4
1,001–5,000	5
Over 5,000	3
TOTAL	276

SOURCE: Office of the State Auditor created from analysis of Colorado Oil and Gas Conservation Commission data.

Colorado Oil and Gas Conservation Commission rules (328/329) currently require operators to maintain calibration information related to measurement equipment. Some inspectors check the calibration of equipment during routine inspections, however, the results of the calibration review are not currently documented in a systematic way. By August 2020, COGCC will develop the documentation process for inspectors to use. The time to implement will enable COGCC to review Bureau of Land Management's processes to see if they can serve as a model for our program.

Alternatively, a new rule may be adopted by the Commission requiring operators to report the calibration, which will require three to six months before the new rule would become effective. (Jan 2020 Severance Tax Audit)

$308M Dollars

$308M Dollars

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The Colorado Oil and Gas Conservation Commission (Commission), within the Department of Natural Resources, does not collect some required oil and gas production information. Of the 420 operators actively producing during Calendar Years 2016 through 2018, 316 operators submitted 1,209 incomplete monthly well reports and/or failed to submit as many as 50,055 required monthly well reports. The Commission did not impose penalties on any of the operators for failing to report.

Had the Commission imposed the maximum $200 per day, per well fine it has set in rules for 30 days, these 316 operators would have been subject to as much as $308 million in penalties for the violations. (Source: Severance Tax Audit, January 2020)