The Proppant-Production Connection

A Frac Sand Segue

Chris Podetz, P.Geol. | November 28, 2025

An alternative method of proppant forecasting, using a direct correlation between well production and proppant use can reduce many of the uncertainties associated with traditional forecast techniques.

Play(s)	Multiple
Fluid(s)	Gas, Condensate, Oil
Area	Western Canada
Operator(s)	Multiple

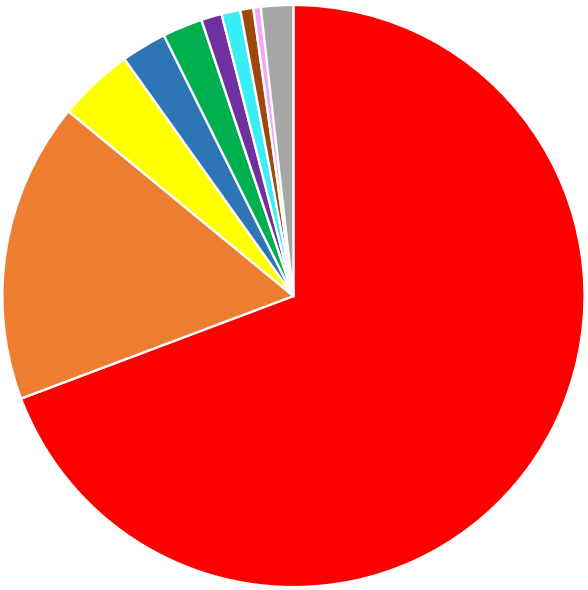
Despite AECO gas prices languishing in the sub-$1/GJ range (and worse) over the middle portion of 2025, they appear to now be on the upswing. With the recent additions of LNG Canada Phase 2 and the Ksi Lisims LNG project to the first tranches of the Federal government's Major Projects list (Government of Canada, 2025a and 2025b), one could be forgiven for having a "rosy" long-term outlook for Western Canadian natural gas development. Along with LNG Canada Phase 2 and Ksi Lisims, two other LNG facilities, Woodfibre and Cedar (Woodfibre LNG, 2025 and Cedar LNG, 2025), are currently being constructed, and LNG Canada Phase 1 began operations earlier this year. These projects alone, at their currently stated capacities, have the potential to increase Canadian natural gas demand by more than 6.5 bcf/d by 2032. Along with anticipated increased power needs for new AI data centres, and recent talk of a new oil pipeline to the BC coast, the potential demand increase for oil and gas will require producers to upscale drilling and completion operations accordingly. A growing concern for operators is sourcing proppant for fraccing operations, and forecasting future requirements. Like predicting gas demand itself, a mind-numbing array of variables can come into play for proppant forecasting, often wellbore-related (well counts, lateral length, and frac intensity, for a few examples). But some of these variables can be eliminated, in a matter of speaking, if proppant use is be tied directly to production.

Image Overleaf
Like Proppant through the Hourglass...
Image ai prompt generated by https://perchance.org

No Flow Without Fracs (Stay Outta This, Multi-Laterals)

Montney operations currently dominate western Canadian frac resource use, accounting for approximately 69% of proppant demand in 2024 *(figure 1)*. Incidentally, Montney gas will also be the dominant feedstock for LNG facilities, and significantly higher volumes will be required in coming years. A fair question, then, is how much proppant is required to "release" one bcf of "new" Montney gas? CDL determined this value on a per-well basis, by dividing the tonnage of proppant used for a frac by the same well's initial one year cumulative gas production (in bcf). The annual median of this value for all Montney wells from 2010 to 2024 is shown in *figure 2*, along with a forecast out to 2032 using the historic trend. The annual increase is striking, with the median

1 2024 Western Canada Proppant Tonnage by Formation



Zone	Tonnage (000 t)	%
Montney	6,108	69.3
Duvernay	1,470	16.7
Spirit River	371	4.2
Viking	222	2.5
Cardium	196	2.2
Bluesky-Glauc	101	1.1
Dunvegan	92	1.0
Charlie Lake	64	0.7
Ellerslie-Gething	36	0.4
Others	158	1.8
Total	**8,817**	**100**

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nearly quintupling between 2010 and 2024. This "tonnes proppant per new bcf" value is the direct link between proppant use and gas production. To convert this value to the rate-related "proppant per new bcf/d", it would be multiplied by 365, as this is what would be required to maintain one bcf of new production every day over an entire year.

A Forecast for Gas

Figure 3 presents historic annual Montney gas production rates from 2010 to 2024, as well as CDL's high, low, and "expected" forecasts for 2025 to 2032, using several independent sources. As previously noted, Montney gas will be the primary feedstock for LNG operations, and all three forecasts assume that the four aforementioned LNG projects will become operational given their advanced state of investment and approval. However, operational timing varies with each forecast, with expected and low case forecasts using start-up dates later than those of the high case. The low case assumes Ksi Lisims will not be operational until after 2032, so it is not included in that particular forecast. Other variables include the addition of increased demand for NG-based power generation for proposed AI data centres (Skapin, 2025), and capacity for LNG projects that are at earlier stages of planning and development, such as the Tilbury Phase 2 expansion in Richmond, BC and the Summit Lake Project in Prince George (Government of Canada, 2025c). A breakdown of the different forecasts is provided in *table 1*.

What's Old is New Again…

Forecasted annual increases in gas production are not the only "new" bcfs to be counted; declines from legacy production also need to be considered. With the Montney running at roughly 28% gas decline annually overall, there is a considerable volume to make up (with new fracs and wells) before additional demand can be met each successive year. The total "new" gas (growth + decline make up) is shown in *table 1*.

Table 1. Montney Production and Proppant Use, Historic and Forecast

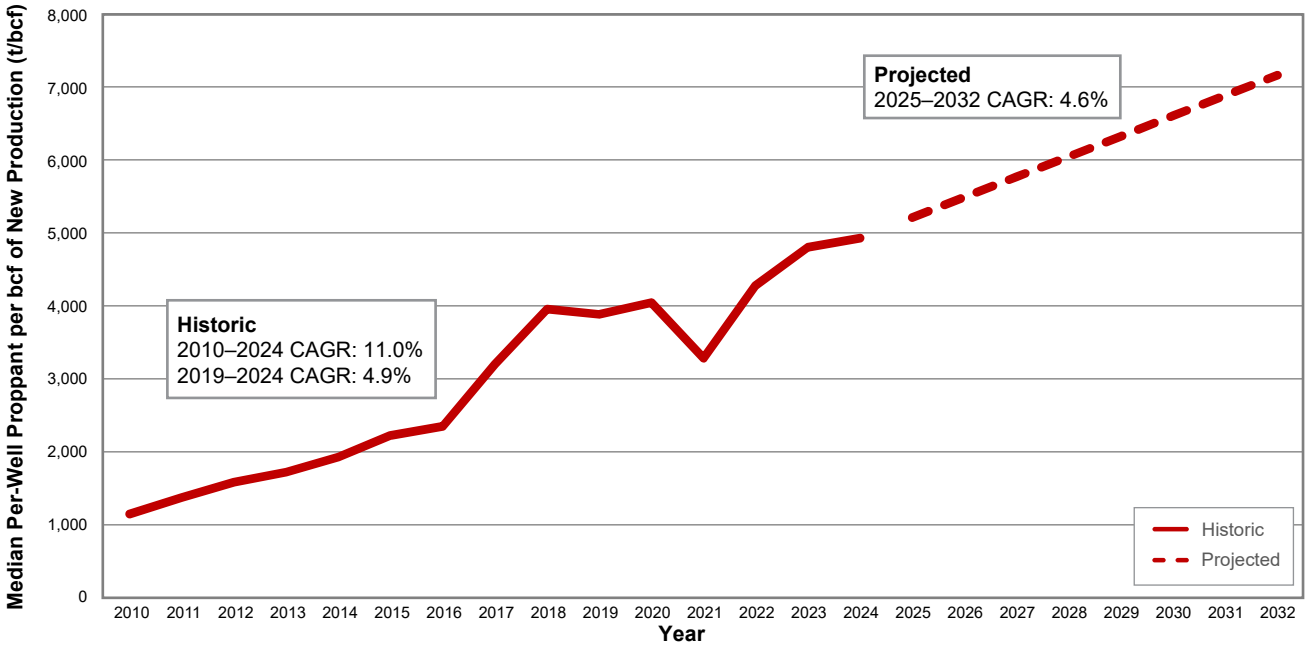
All Montney			2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Annual Prod Rate (bcf/d)	Historic		0.93	1.55	2.06	2.59	3.23	4.06	4.76	5.22	6.41	6.72	6.93	7.61	8.50	9.20	9.83								
	Forecast	(High Case)																10.50	11.50	12.60	13.83	14.83	16.23	18.33	20.53
		(Expected Case)																10.50	11.25	12.25	13.08	13.88	14.68	16.28	17.88
		(Low Case)																10.50	11.00	11.75	12.28	12.93	13.43	14.43	15.53
Median Proppant per new bcf (t/bcf)	Historic		1,153	1,380	1,589	1,730	1,936	2,232	2,356	3,210	3,965	3,895	4,055	3,291	4,289	4,816	4,940								
	Forecast																	5,222	5,501	5,781	6,060	6,339	6,618	6,897	7,176
New Prod (Growth+Decline bcf/d)	Forecast	(High Case)																3.41	4.22	4.63	5.11	5.13	5.95	7.28	7.99
		(Expected Case)																3.41	3.88	4.43	4.48	4.66	4.88	6.18	6.62
		(Low case)																3.41	3.54	4.02	3.93	4.23	4.21	5.02	5.43
Total Proppant Used (000 t)	Historic		393	557	604	894	1,531	1,682	1,331	3,384	3,592	3,135	2,819	4,140	4,366	5,315	6,108								
	Forecast	(High Case)																6,275	8,376	9,727	11,339	11,909	14,567	18,796	21,526
		(Expected case)																6,275	7,654	9,284	9,850	10,772	11,832	15,896	17,755
		(Low Case)																6,275	6,932	8,383	8,594	9,773	10,156	12,831	14,512

BC Montney (Forecast Data Only)			2025	2026	2027	2028	2029	2030	2031	2032
Annual Prod Rate (bcf/d)	Forecast	(High Case)	7.14	7.82	8.57	9.41	10.09	11.04	12.47	13.96
		(Expected Case)	7.14	7.65	8.33	8.90	9.44	9.98	11.07	12.16
		(Low Case)	7.14	7.48	7.99	8.35	8.79	9.13	9.81	10.56
Median Proppant per new bcf (t/bcf)	Forecast		3,595	3,895	4,195	4,495	4,795	5,095	5,395	5,695
New Prod (Growth+Decline bcf/d)	Forecast	(High Case)	2.11	2.54	2.78	3.07	3.13	3.57	4.30	4.74
		(Expected Case)	2.11	2.37	2.67	2.73	2.86	3.00	3.68	3.97
		(Low case)	2.11	2.20	2.45	2.44	2.61	2.63	3.06	3.30
Total Proppant Used (000 t)	Forecast	(High Case)	2,766	3,606	4,258	5,031	5,470	6,647	8,463	9,847
		(Expected case)	2,766	3,364	4,087	4,483	5,000	5,576	7,254	8,246
		(Low Case)	2,766	3,122	3,759	4,003	4,574	4,884	6,016	6,859

AB Montney (Forecast Data Only)			2025	2026	2027	2028	2029	2030	2031	2032
Annual Prod Rate (bcf/d)	Forecast	(High Case)	3.36	3.68	4.03	4.43	4.75	5.19	5.87	6.57
		(Expected Case)	3.36	3.60	3.92	4.19	4.44	4.70	5.21	5.72
		(Low Case)	3.36	3.52	3.76	3.93	4.14	4.30	4.62	4.97
Median Proppant per new bcf (t/bcf)	Forecast		7,395	7,743	8,090	8,437	8,785	9,132	9,480	9,827
New Prod (Growth+Decline bcf/d)	Forecast	(High Case)	1.30	1.69	1.85	2.05	2.01	2.38	2.99	3.26
		(Expected Case)	1.30	1.52	1.76	1.74	1.80	1.88	2.50	2.65
		(Low case)	1.30	1.35	1.57	1.49	1.62	1.58	1.97	2.13
Total Proppant Used (000 t)	Forecast	(High Case)	3,509	4,770	5,469	6,308	6,439	7,920	10,333	11,679
		(Expected case)	3,509	4,290	5,197	5,367	5,772	6,256	8,642	9,509
		(Low Case)	3,509	3,810	4,624	4,591	5,198	5,272	6,815	7,653

Data supplied by geoLOGIC

2 Montney Proppant per bcf of New Gas, Annual Historic Median



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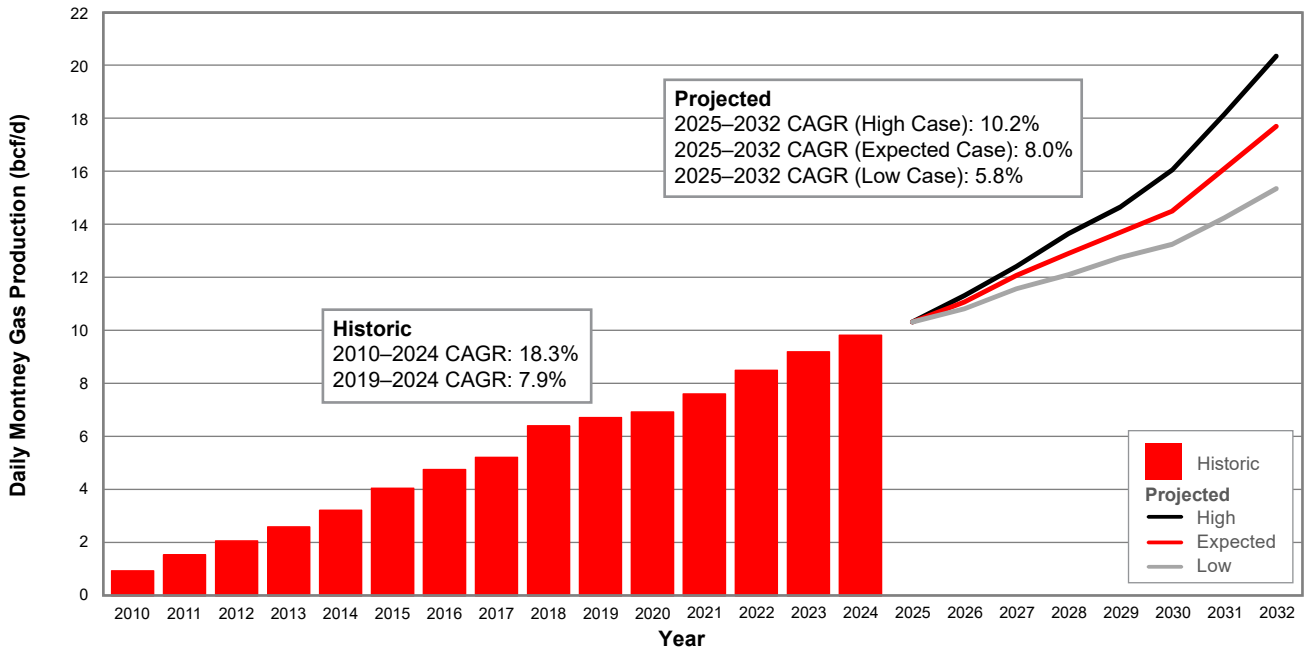
A Tale of Two Provinces

Table 1 also provides a breakdown of all the previously mentioned Montney completion and production metrics between BC and Alberta, to account for the production split between the two provinces (currently sitting at 68% BC and 32% AB). There is a significant difference in the median proppant required per new bcf in each province. Alberta average per-well values of proppant per bcf are higher than in BC because the Wild Rose province hosts a larger proportion of oil and liquids-rich wells with relatively low methane production. For example, a well fracced with 9,000t of proppant that produced 1.2 bcf and no liquids over its first 12 months would have a proppant per new bcf value of 7,500 t/bcf. Another well that was fracced with 9,000t of proppant but had initial 12 month production of 0.6 bcf and 250,000 bbls of condensate would have a value of 15,000 t/bcf.

BOE vs BCF?

Would it not be more appropriate, then, to use proppant per BOE (instead of a pure gas unit) as the relation factor between proppant and production for the Montney? If all produced fluid phases are included, we would have a lower tonnage per BOE due to the high liquids content of many Montney wells. However, only gas can meet LNG demand, so it should remain the main factor in proppant forecasting, at least for the Montney, as it will be the primary driver for development. As noted, liquids-rich wells typically produce less gas than their dry gas counterparts and therefore have a higher proppant/bcf value. The high value of the liquid components, however, continue to provide strong economics for liquids-rich wells.

3 Average Daily Montney Gas Production by Year, Historic and CDL Forecast



Data supplied by geoLOGIC

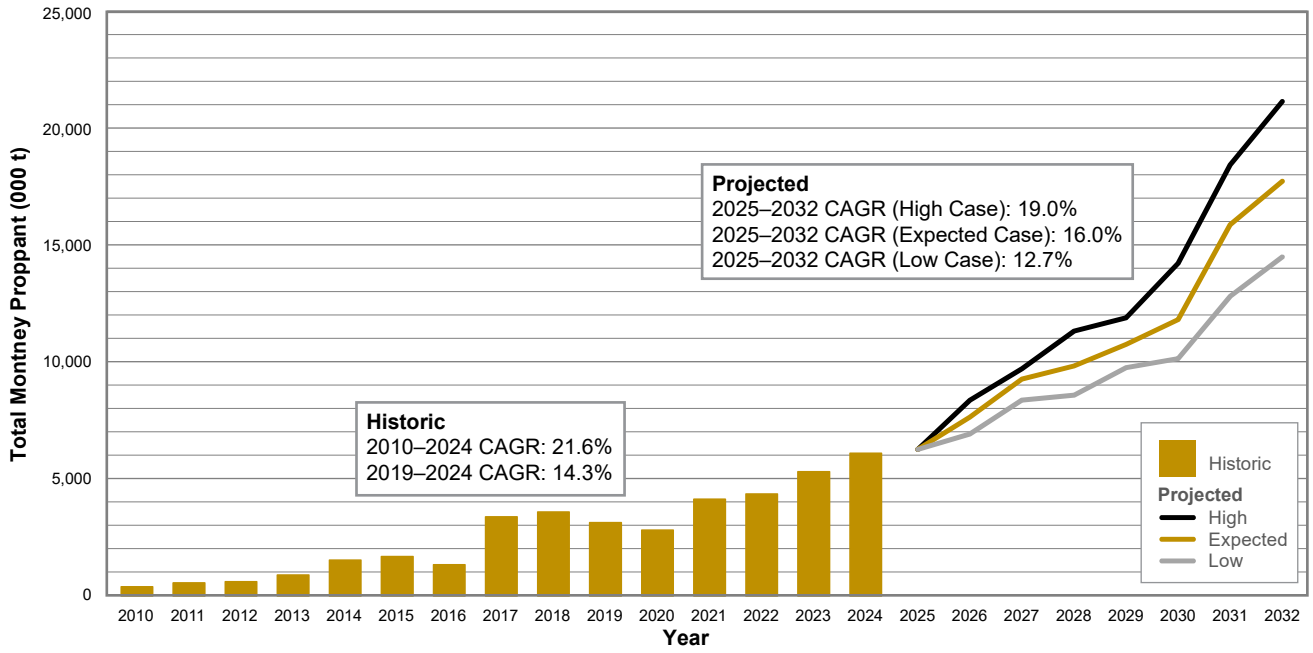
Bringing it Back Together

With forecasts of new Montney production and proppant per unit of new production for both Alberta and BC at the ready, estimates of the total proppant tonnage required per year can be calculated. *Figure 4* shows historic annual Montney proppant use from 2010 to 2024, and the three forecast cases from 2025 to 2032. At first glance, the growth in proppant use may be surprising, even considering the new LNG demand; the Expected case results in a near-tripling of Montney proppant tonnage between 2025 and 2032, with a total annual demand of over 17.7 Mt at the end of the projection period. However, the compound annual growth rate (CAGR) of the Expected case over the forecast period, at 16.0%, is only slightly higher than the historic CAGR between 2019 and 2024 (14.3%). The longer term historic CAGR, between 2005 and 2024, is 21.6%, higher than that of even the High case 2025–2032 projection (19.0%).

What Drives the Rise in Proppant per New Production Unit?

Referring back to *Figure 2*, the consistent rise in proppant per new bcf values is an economically important phenomenon. The higher it gets, the more it will cost (at least in terms of proppant) to bring new production on stream. So why is it happening? Production degradation is one reason. A plot of completion intensity versus 12-month cumulative production for all Montney wells since 2005 reveals a positive, but non-linear relationship between the two metrics *(figure 5)*; as intensity increases, the concomitant growth in production gets smaller. Admittedly, there is a lot of scatter in the plot shown, as may be expected from such a large and complex sample as the entire Montney, but the relationship is more clearly defined when subsets of the Montney are considered, such as the prolific Sunrise area of northeast BC *(figure 6)*. On the whole, Montney operators have increased

4 Montney Proppant per Year, Historic and CDL Forecast



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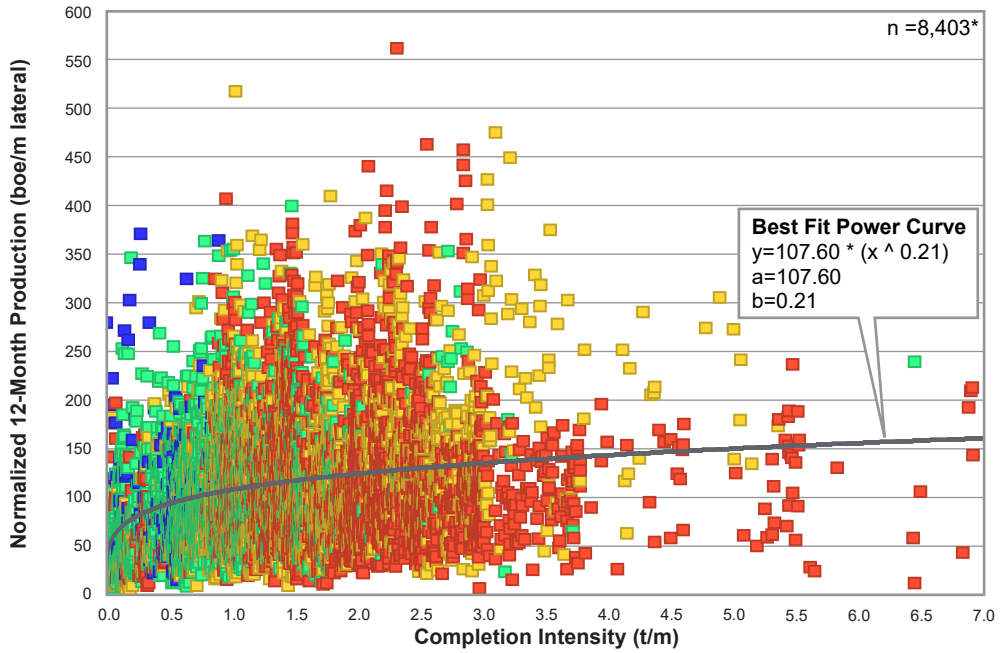
proppant intensity over time in an attempt to optimize completions; the ongoing battle against parent-child well interference and moving to lower-tier reservoir have also contributed to higher intensities. Similar relationships can also be seen in US plays. As long as the increase in production is enough to economically justify higher frac intensities, these trends will continue.

Another reason for the proppant per bcf increase in the Montney, not directly related to frac intensity, is the move into more liquids-rich areas by some operators in response to low gas prices. As noted previously, lower methane production in these wells (assuming the use of similar proppant tonnages) will lead to higher proppant per bcf values.

5 Completion Intensity vs Normalized 12-Month Cumulative Production, Montney Wells 2005–2024



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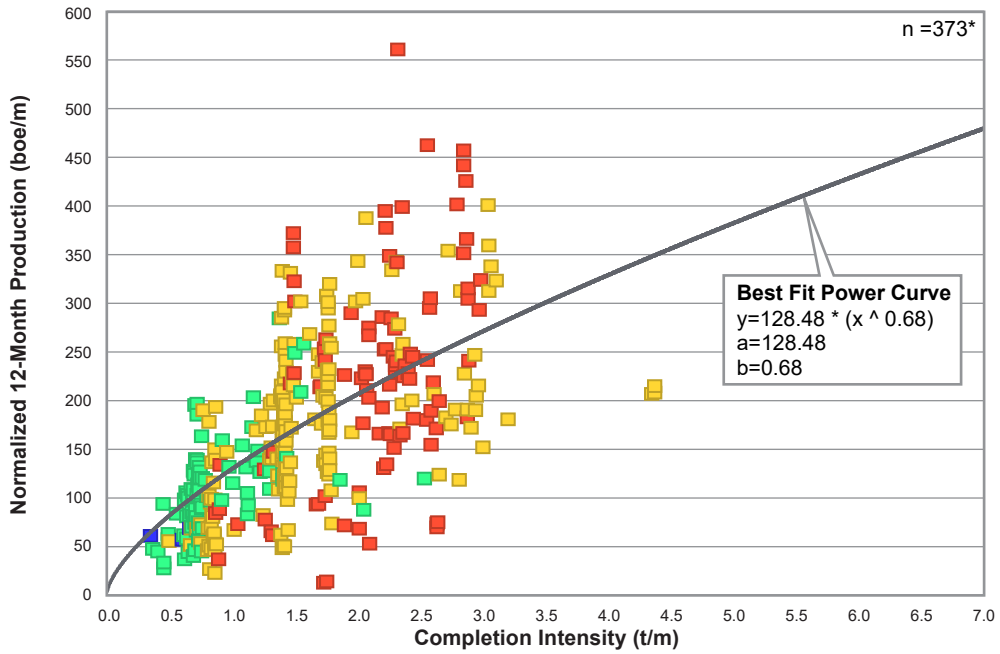
6 Completion Intensity vs Normalized 12-Month Cumulative Production, Sunrise Montney Wells 2005–2024



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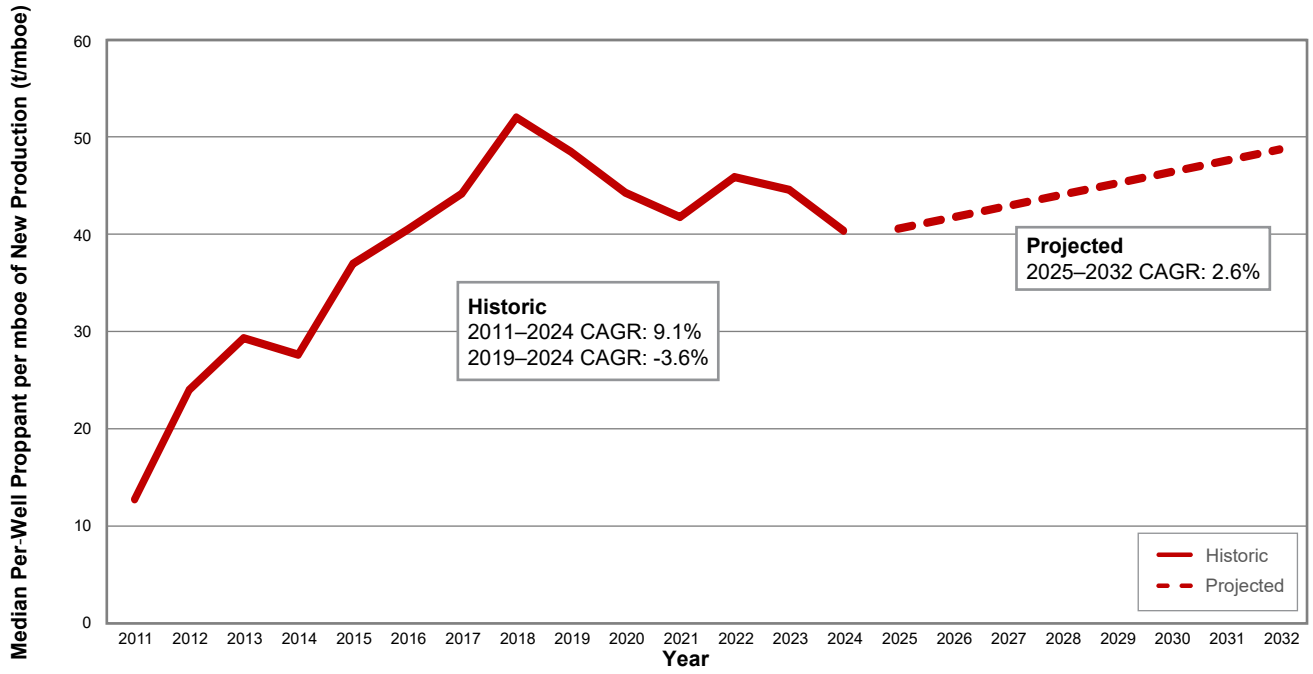
7 Duvernay Proppant per mboe of New Production, Annual Historic Median



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Other Zones

Duvernay

While the Montney accounts for roughly 2/3 of western Canadian proppant demand, the Duvernay is also a significant consumer of frac sand, and sits at the top of the list on a per-well basis. Production-based forecasting can also be completed for Duvernay proppant demand, with one key difference from the Montney; Duvernay production is proportionally more liquids-rich. And while Duvernay gas can provide LNG feedstock and potential AI data centre power, liquids demand will also be a strong driver for future Duvernay activity (BOE, 2025 and Enverus, 2025). Impressive results from recent wells in the largely underdeveloped, liquids-rich West Shale Basin (Wong, 2025) indicate this is one key area primed for growth. For these reasons, a proppant tonnage per "new" mboe, instead of per bcf, was used as the relation factor. This takes into account demand for ALL production phases.

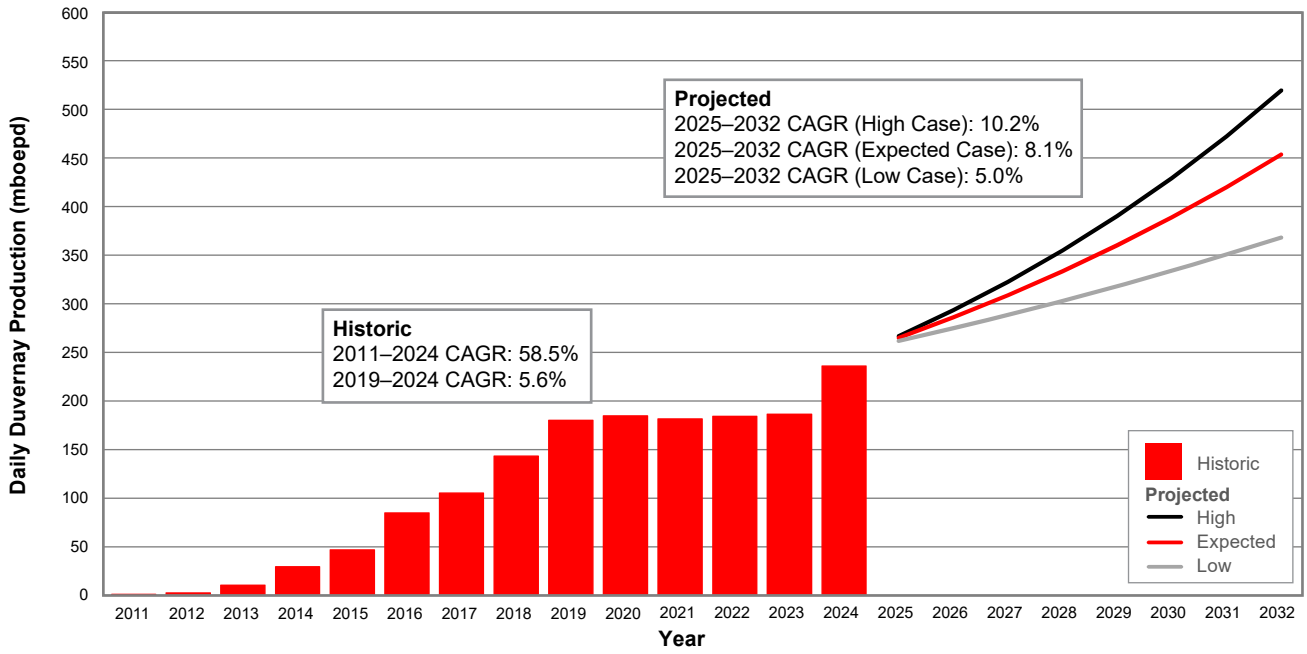
When historic metrics are compared *(figure 7 and table 2)*, unlike the consistent growth observed in the Montney, Duvernay proppant per production unit peaked at 52t per mboe in 2018, and has been on a slow decline since then. Because the Duvernay value includes liquids content, this could be a sign of operators increasing activity in relatively undeveloped but prolific areas such as the West Shale Basin. However, as the "hotspots" in the Duvernay are drilled up, it would be unreasonable to assume that this decline in average per-well proppant use will continue indefinitely, for the reasons discussed in a preceding section of this article. CDL has instead projected a gradual

Table 2. Duvernay Production and Proppant Use, Historic and Forecast

All Montney			2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Annual Prod Rate (mboepd)	Historic			1	2	10	29	47	85	105	143	180	185	182	184	186	236								
	Forecast	(High Case)																267	294	323	355	391	430	473	520
		(Expected Case)																265	286	309	334	361	390	421	454
		(Low Case)																262	275	289	303	318	334	351	369
Median Proppant per new bcf (t/mboe)	Historic			12.9	24.1	29.4	27.7	37.0	40.5	44.2	52.0	48.5	44.3	41.8	45.9	44.6	40.4								
	Forecast																	40.6	41.8	42.9	44.1	45.2	46.4	47.6	48.7
New Prod (Growth+Decline mboepd)	Forecast	(High Case)																104	109	120	132	146	160	176	194
		(Expected Case)																102	103	112	121	130	141	152	164
		(Low case)																99	94	99	104	109	115	120	126
Total Proppant Used (000 t)	Historic			4	57	180	313	601	675	1,091	1,576	1,361	748	740	968	1,142	1,470								
	Forecast	(High Case)																1,542	1,669	1,887	2,132	2,407	2,715	3,061	3,449
		(Expected case)																1,513	1,576	1,750	1,941	2,151	2,383	2,638	2,918
		(Low Case)																1,467	1,438	1,552	1,673	1,803	1,942	2,090	2,248

Data supplied by geoLOGIC

8 Average Daily Duvernay Production by Year, Historic and CDL Forecast

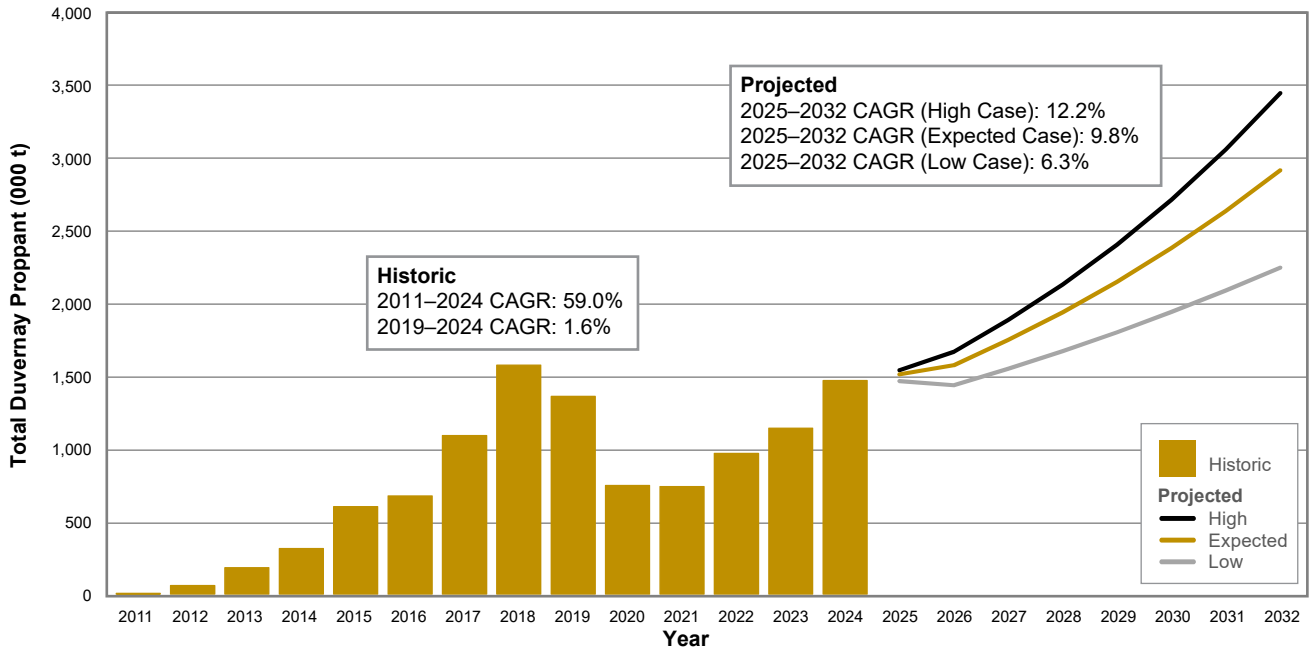


Data supplied by geoLOGIC

increase from 2025 to 2032. A future Digest article, comparing proppant/production values between WCSB reservoirs and more mature US analogues will provide more insight into how these metrics might change over longer time frames.

Average Duvernay daily production essentially flat-lined between 2018 and 2023, but 2024 and 2025 (to date) saw significant upswings *(figure 8)*. If we use a High case production forecast with a 10% CAGR (considerably more modest than the 19% of the past two years), total Duvernay proppant use would more than double between 2025 and the end of the forecast period in 2032 *(figure 9)*. The High case proppant CAGR of just over 12% is still significantly lower than that for the historic growth in Duvernay proppant between 2020 and 2024, which sits at 18%. Expected and Low Case projections assume smaller, but still consistent, annual levels of Duvernay gas and liquids demand growth to 2032. Variables include the aforementioned LNG/power centre requirements, the need for diluent (gas liquids) in the oil sands, and potential oil pipeline expansions.

9 Duvernay Proppant per Year, Historic and CDL Forecast



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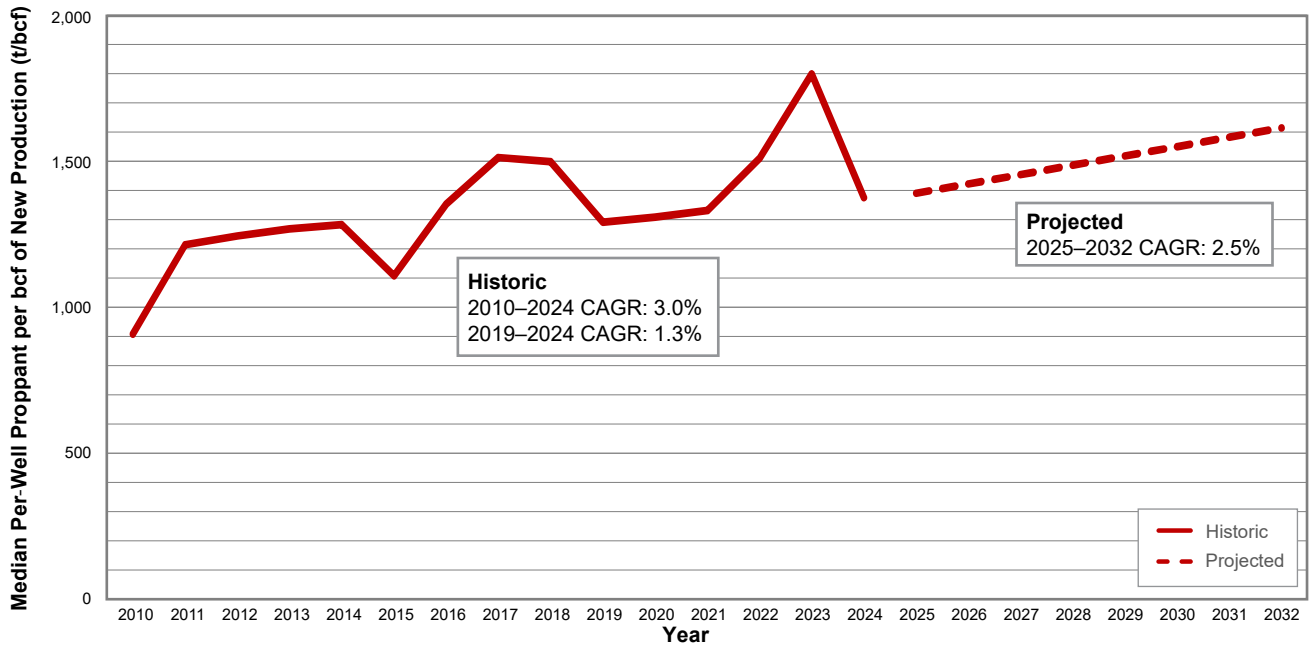
10 Spirit River Proppant per bcf of New Gas, Annual Historic Median



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Spirit River

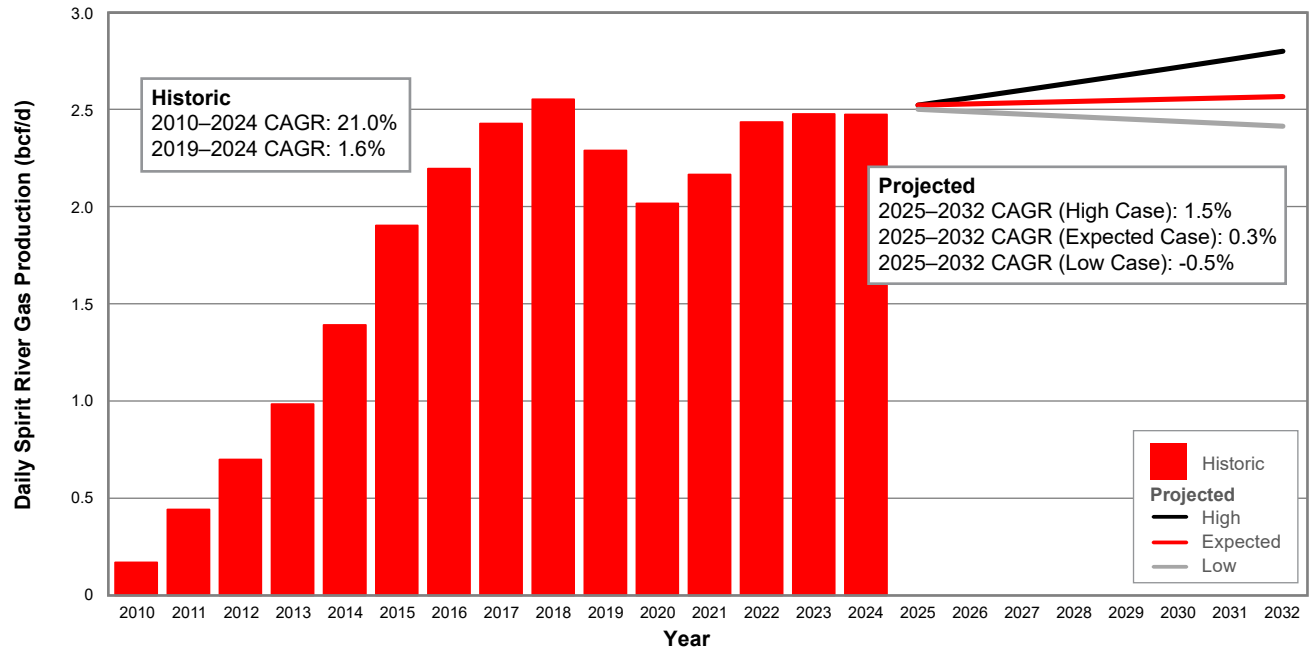
Production in the Spirit River is gas-rich, with a relatively low liquids-content. Natural gas demand is by far the largest driver in its development, even more so than the Montney. Proppant per "new" bcf values have been somewhat erratic since 2010, but the overall trend has been one of growth *(figure 10 and table 3)*. Spirit River daily gas production peaked in 2018, and after a few years of decline has rebounded back to hold steady at just under 2.5 bcf/d for the last couple of years, with recent data suggesting 2025 will see a slight production increase. The primary restricting factor for future Spirit River development (outside of abysmal gas prices) is that most of its current operators also hold assets in the Montney, Duvernay and/or heavy oil. Even with a strong overall rise in gas demand, operators would likely focus on increasing liquids-prone Montney and Duvernay development before building up the Spirit River. Peyto is a notable exception, with its operations based exclusively in the Deep Basin and extra capacity in its facilities (Peyto, 2025). CDL's High case projection for Spirit River production assumes very modest growth, even with increased gas demand and sustained price support. The Expected case assumes an essential hold on the current production rate, while the Low projection forecasts a slight overall decline *(figure 11)*. In terms of annual proppant use, all cases predict minor increases in Spirit River proppant tonnages (owing to higher proppant per production unit values) by the end of the forecast period, with only the High case passing the 500,000t mark by 2032 *(figure 12)*.

Table 3. Spirit River Production and Proppant Use, Historic and Forecast

All Montney			2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Annual Prod Rate (bcf/d)	Historic		0.17	0.44	0.70	0.99	1.39	1.91	2.20	2.43	2.55	2.29	2.02	2.17	2.44	2.48	2.48								
	Forecast	(High Case)																2.53	2.56	2.60	2.64	2.68	2.72	2.76	2.80
		(Expected Case)																2.53	2.53	2.54	2.54	2.55	2.56	2.56	2.57
		(Low Case)																2.50	2.49	2.48	2.47	2.45	2.44	2.43	2.42
Median Proppant per new bcf (t/bcf)	Historic		916	1,224	1,254	1,279	1,293	1,117	1,364	1,524	1,510	1,302	1,319	1,342	1,521	1,812	1,386								
	Forecast																	1,201	1,233	1,266	1,298	1,330	1,362	1,394	1,426
New Prod (Growth+Decline bcf/d)	Forecast	(High Case)																0.79	0.80	0.81	0.82	0.83	0.84	0.86	0.87
		(Expected Case)																0.79	0.76	0.77	0.77	0.77	0.77	0.77	0.78
		(Low case)																0.77	0.74	0.73	0.73	0.73	0.72	0.72	0.72
Total Proppant Used (000 t)	Historic		51	110	115	200	319	370	327	516	350	176	223	353	389	416	371								
	Forecast	(High Case)																405	416	432	448	464	481	499	516
		(Expected case)																405	400	410	420	430	440	450	460
		(Low Case)																393	386	393	400	406	413	419	425

Data supplied by geoLOGIC

11 Average Daily Spirit River Gas Production by Year, Historic and CDL Forecast



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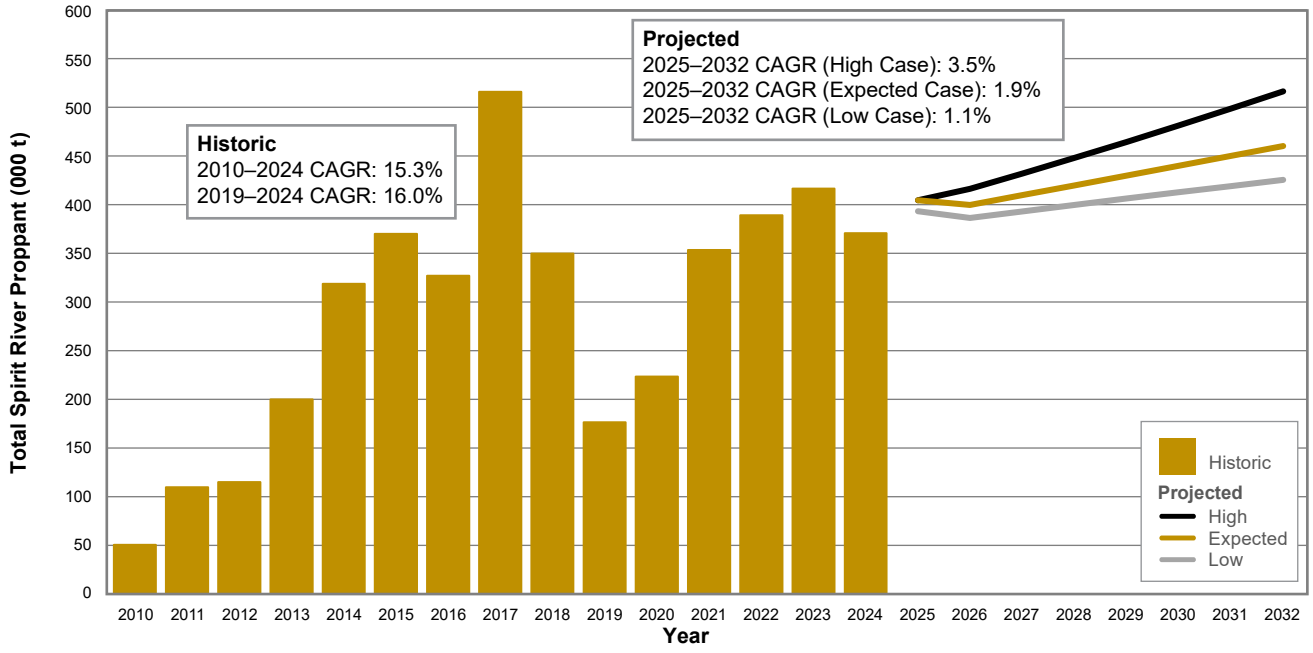
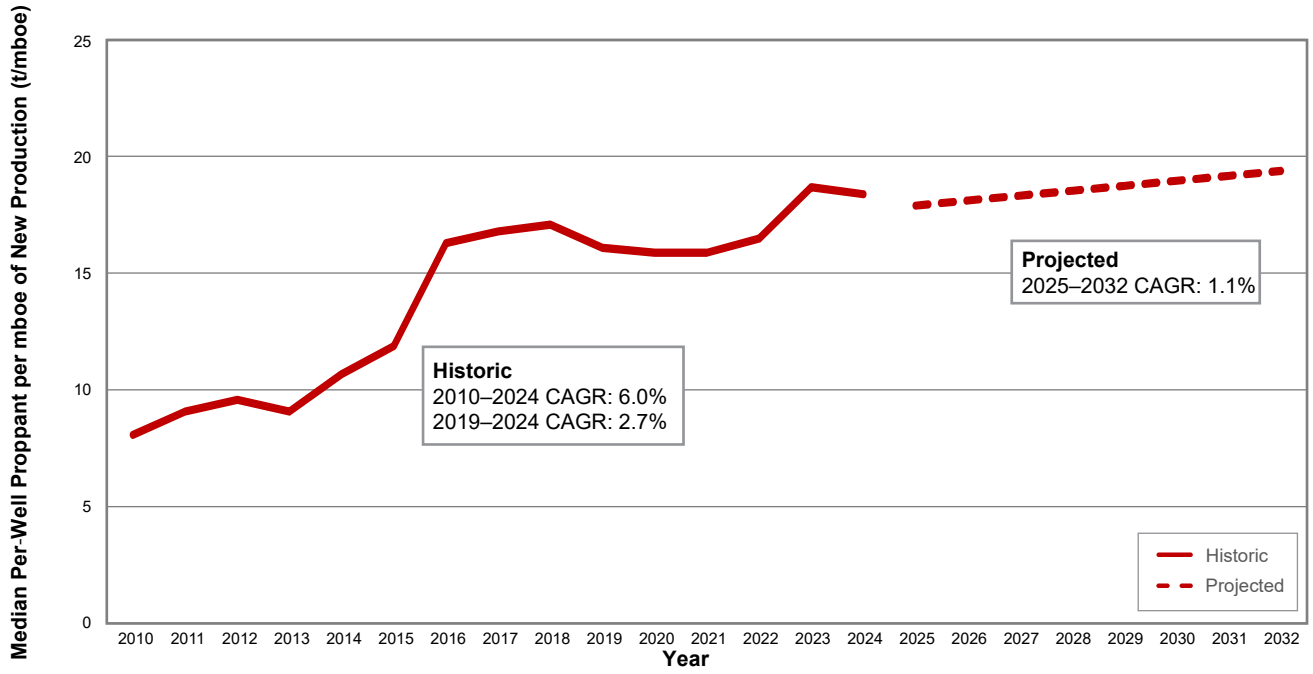
12 Spirit River Proppant per Year, Historic and CDL Forecast



Data supplied by geoLOGIC

13 Other Zone Proppant per mboe of New Production, Annual Historic Median



Data supplied by geoLOGIC

All Other Zones

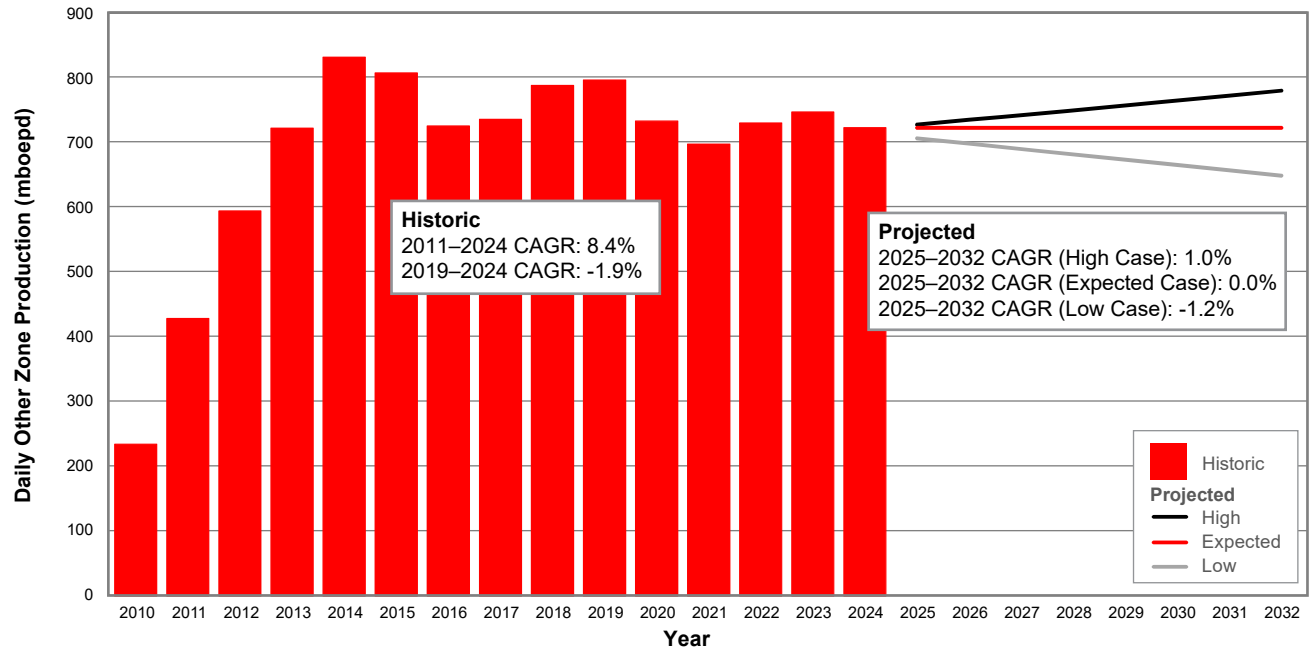
Other fracced zones in Western Canada include the Cardium, Viking, Bluesky/Glauconitic, Ellerslie/Gething, Charlie Lake, Dunvegan and Bakken, along with a plethora of less prolific zones, ranging from the Upper Cretaceous to Lower Devonian in age. Most of these zones are oil-rich. As each zone consumes relatively small amounts of proppant on an annual basis, compared to the Spirit River, Duvernay and Montney, they are grouped together for the purposes of this report. On a proppant per new mboe basis, annual growth of the combined zones has been fairly consistent, sitting at just under 19t per "new" mboe in 2024 (less than half that of the Duvernay) *(figure 13)*. As for production, these zones on a combined basis have been declining since about 2014 *(figure 14)*. Our High case assumes a 1% annual growth rate from 2025 to 2032 (building in some optimism for new play development), the Expected case retains the same daily production as 2024, and the Low case assumes the same decline rate as that observed since 2014 *(table 4)*. Historic combined annual proppant use in these zones has been irregular *(figure 15)*; the High and Expected cases project modest increases, while the Low case models a decrease in total proppant tonnage for these zones over time.

Table 4. Combined Other Zone Production and Proppant Use, Historic and Forecast

			2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Annual Prod Rate (mboepd)	Historic		234	427	593	721	830	806	724	735	787	795	732	696	729	746	722								
	Forecast	(High Case)																726	734	741	748	756	763	771	779
		(Expected Case)																722	722	722	722	722	722	722	722
		(Low Case)																705	697	689	681	672	664	656	648
Median Proppant per new bcf (t/mboe)	Historic		8.1	9.1	9.6	9.1	10.7	11.9	16.3	16.8	17.1	16.1	15.9	15.9	16.5	18.7	18.4								
	Forecast																	17.9	18.1	18.3	18.5	18.8	19.0	19.2	19.4
New Prod (Growth+Decline mboepd)	Forecast	(High Case)																149	153	154	156	157	159	160	162
		(Expected Case)																144	144	144	144	144	144	144	144
		(Low case)																128	133	131	130	128	126	125	123
Total Proppant Used (000 t)	Historic		552	987	1,173	987	1,224	699	549	1,088	1,213	1,033	574	818	1,116	951	869								
	Forecast	(High Case)																981	1,009	1,031	1,054	1,076	1,099	1,123	1,146
		(Expected case)																944	955	966	977	988	999	1,010	1,022
		(Low Case)																879	879	878	877	876	874	873	871

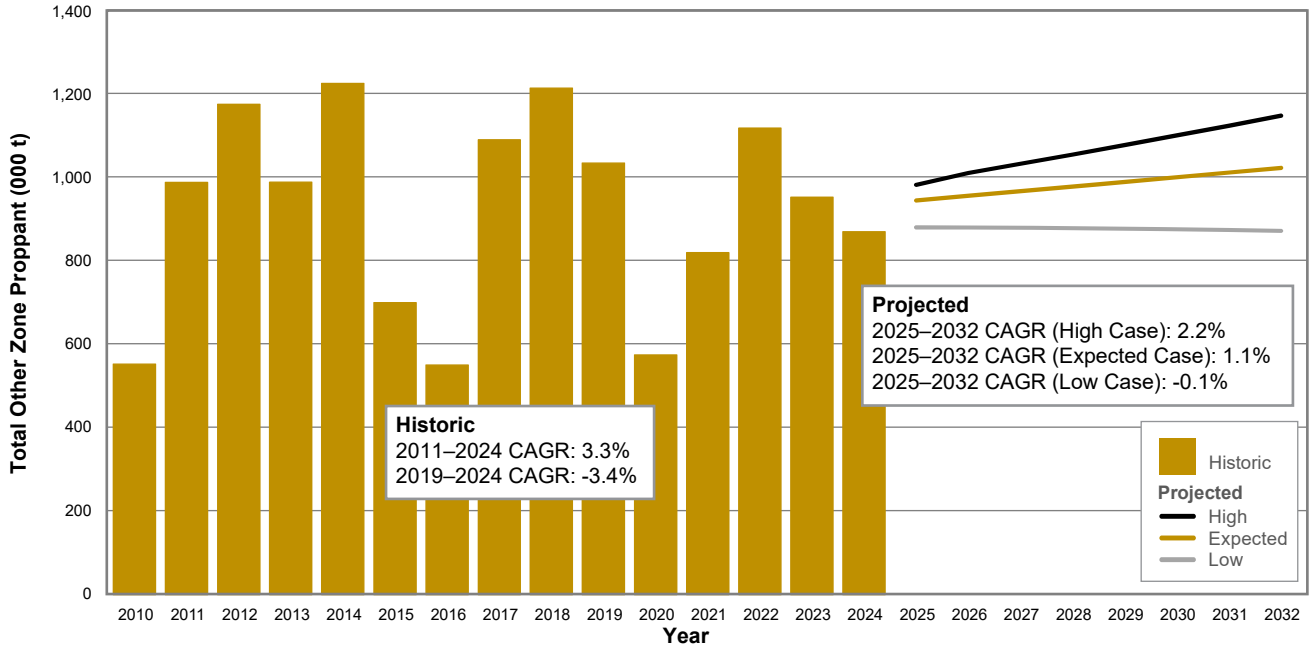
Data supplied by geoLOGIC

14 Average Daily Other Zone Production by Year, Historic and CDL Forecast



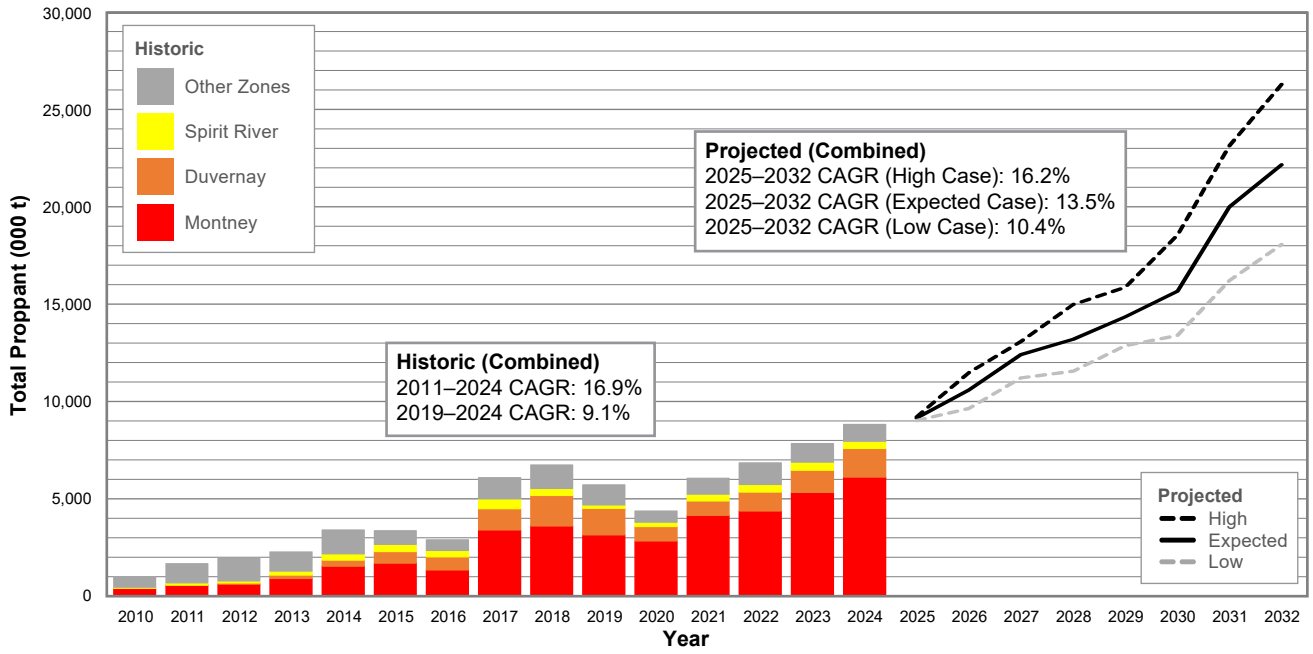
Data supplied by geoLOGIC

15 Other Zone Proppant per Year, Historic and CDL Forecast



Data supplied by geoLOGIC

16 Western Canada Proppant per Year, Historic and CDL Forecast



Data supplied by geoLOGIC

Combining the Forecasts

Figure 16 shows the historic combined total annual proppant tonnage used across Western Canada for the Montney, Duvernay, Spirit River and Other Zones, along with the combined High, Expected, and Low case forecasts from 2025 to 2032. It makes for an admittedly wide range of possible outcomes by the end of the forecast period, with an Expected annual proppant use of 22.2 Mt by 2032 between all zones, with a Low estimate of 18.1 Mt and a High estimate of 26.5 Mt.

Conclusions

Proppant use in the Canadian oil and gas industry is currently dominated by Montney operators. Forecasts using a direct correlation between production and proppant use suggest that, mostly due to increased gas demand through LNG development, the Montney will see significant increases in annual proppant use—over three times 2024 tonnage by 2032. Duvernay tonnages could potentially double over the same time period, while the Spirit River would see a smaller increase, and other zone tonnages would remain relatively stable. This overall growth has the potential to significantly strain the Canadian frac sand market, not only for sourcing, but also for other infrastructure such as loading and transportation. The concentration of proppant demand growth in the Montney and Duvernay could be further compounded by increasing daily demand in these zones brought on by recent pumping efficiencies.

Canadian Discovery Related Technical Studies and Products

- CDL Play Maps, 2025
- Proppant Usage in Western Canada 2005-2016, 2022 (SSHL)
- Frac Sand (Proppant) Forecast Western Canada, 2019 (SPPF)
- Supply and Demand Analysis of Frac Sand Market in AB and SK, 2019 (STFS)

Selected References

- BOE Report, 2025. Gibson Energy and Baytex Energy Announce Pembina Duvernay Infrastructure and Area of Dedication Agreement. Accessed November 2025. https://boereport.com/2025/03/11/gibson-energy-and-baytex-energy-announce-pembina-duvernay-infrastructure-and-area-of-dedication-agreement/
- Cedar LNG, 2025, Corporate Website. Accessed November 2025. https://www.cedarlng.com/
- Enverus, 2025. Duvernay forecasted to reach 200 Mbbl/d by 2030 as Willesden Green ramps up. Accessed November 2025. https://www.enverus.com/newsroom/duvernay-forecasted-to-reach-200-mbbl-d-by-2030-as-willesden-green-ramps-up/
- Government of Canada, 2025a. Major Projects Office of Canada: Initial Projects under Consideration. Accessed November 2025. https://www.canada.ca/en/one-canadian-economy/news/2025/09/major-projects-office-of-canada-initial-projects-under-consideration.html
- Government of Canada, 2025b. Major Projects Office: Second tranche of projects under consideration. Accessed November 2025. https://www.canada.ca/en/one-canadian-economy/news/2025/11/major-projects-office-second-tranche-of-projects-under-consideration.html
- Government of Canada, 2025c. Major Projects Office: Canadian liquified natural gas projects. Accessed November 2025. https://natural-resources.canada.ca/energy-sources/fossil-fuels/canadian-liquified-natural-gas-projects
- Peyto Exploration, 2025. November 2025 Corporate Presentation. Accessed November 2025. https://www.peyto.com/Files/Presentations/2025/Corporate%20Presentation%20November%202025.pdf
- Skapin, J., 2025. DOB Energy: Tourmaline In Early-Stage Data Centre Discussions. Accessed November 2025. https://www.dobenergy.com/news/headlines/2025/11/19/tourmaline-in-early-stage-data-centre-discussions
- Wong, S. 2025. West Basin Bomb: Baytex Drops Huge Duvernay Oil Well at Pembina. Accessed November 2025. https://digest.canadiandiscovery.com/article/9870
- Woodfibre LNG, 2025. Corporate Website. Accessed November 2025. https://woodfibrelng.ca/