

CREDIT OPINION

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McKenzie (County of) ND

Credit analysis following initial A3 special tax rating

Summary

[McKenzie County's](#) (A3) location within the Bakken Shale Play has driven rapid, but volatile growth in oil and gas revenue. Since 2011, the county has experienced strong economic and revenue growth related to technological gains in the oil and gas industry, and the resulting increases in oil and gas production in the county. While trends have been positive, the county is left with higher exposure to a single industry and a few taxpayers. Debt service coverage is extremely strong, although we expect continued revenue volatility due to fluctuations in oil and gas production. Legal protections on the certificates are adequate with a 3x additional bonds test and a debt service reserve funded at the lesser of the standard 3-prong test.

On November 30, 2018, we assigned an A3 rating to the county's oil and gas gross production tax certificates and a Aa3 issuer rating to the county.

Credit strengths

- » Strong debt service coverage
- » Rapid debt amortization
- » Adequate legal covenants

Credit challenges

- » Top taxpayer concentration
- » Revenue volatility

Rating outlook

Outlooks are not usually assigned to local governments with this amount of debt.

Factors that could lead to an upgrade

- » Lessening of revenue volatility
- » Moderation of top oil and gas taxpayer concentration

Factors that could lead to a downgrade

- » Decline in pledged revenue that drives decrease in debt service coverage
- » Significant leveraging of pledged revenue
- » Substantial deterioration in the county's general credit profile

Key indicators

Exhibit 11

McKenzie County, ND					
Credit Background					
Pledged Revenues		Oil and gas tax			
Legal Structure					
Additional Bonds Test		3x			
Open or Closed Lien		Open Lien			
Debt Service Reserve Fund Requirement		DSRF funded at lesser of standard 3-prong test			
MADS Coverage					
2023 MADS Coverage (x)		12.6x			
Trend Analysis					
	2019	2020	2021	2022	2023
Debt Outstanding (\$000)	32,200	28,705	25,070	21,290	17,360
Revenues (\$000)	60,288	60,288	60,288	60,288	60,288
Annual Debt Service Coverage (x)	12.6x	12.6x	12.6x	12.6x	12.6x

Revenue is based on 2018 collections as of October 2018.

Source: McKenzie County, ND offering documents and audited financial statements, Moody's Investors Service

Profile

McKenzie County is located in northwestern [North Dakota](#) (Aa1 negative) along the [Montana](#) (Aa1 stable) border. It is in the heart of the Bakken Shale Play, and its population was estimated at 10,718 in 2016.

Detailed credit considerations

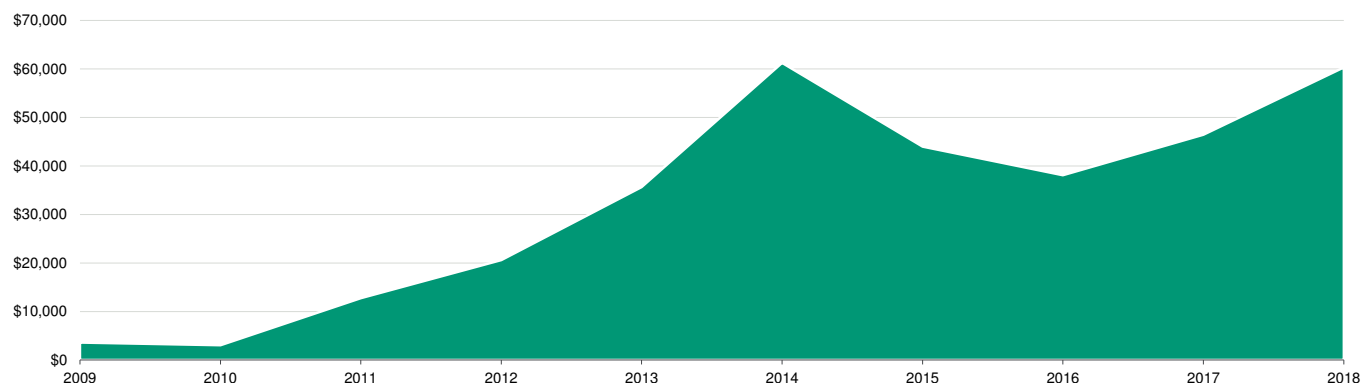
Tax base and nature of pledge: robust but concentrated special tax base in the oil and gas sector

The pledged revenue, which consists of the county's share of the state distributed Oil and Gas Gross Production Tax (OGGPT), will be subject to volatility. The county's allocation is based on oil and gas production within the county under a state controlled formula. The county receives about 30% of the OGGPT levied in the county, which is an increase from its prior 25% share prior to 2015. The state levies a 5% tax on the gross value of oil produced, with certain exceptions, and a gross production tax on gas based on an annually adjusted rate. There are no legal restrictions on the use of funds, and the county has typically used excess OGGPT revenue for capital improvements and general operations.

Due to the narrow nature of the tax, it is concentrated entirely within the oil and gas sectors, and subject to significant volatility. Changes in global oil and gas supply and demand, could have a significant effect on the county's allocation of OGGPT revenue. Technological advancements in hydraulic fracturing ("fracking") and horizontal drilling have allowed oil and gas producers to access the significant oil and gas resources in the county and the rest of the Bakken Shale. These advancements began in fiscal year 2011, leading to a large increase in the county's share of the OGGPT, to \$12.8 million from \$3 million the prior year. Since then, the county's allocations have fluctuated but have peaked over \$60 million. As of October 19, 2018, the state has allocated \$60.3 million to the county.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moody's.com for the most updated credit rating action information and rating history.

Exhibit 2.2

**County OGGPT Revenue Allocations
(\$000s)**

Source: McKenzie County, ND offering documents, Moody's Investors Service

In addition to sector concentration, the tax base is heavily concentrated among top oil and gas taxpayers. The top 10 oil and gas producers in the county accounted for an estimated 81% of total OGGPT revenue over the past 12 months. The county reports stability and expects future growth in the tax base due to further technological improvements in oil and gas extraction. However, the high industry and taxpayer concentration in the tax base will remain a negative credit factor.

The county's population has grown considerably in recent years to an estimated 10,718 in 2016 from 6,262 in 2011. Unemployment is low in the county, which was estimated at 2.1% as of July 2018. Median family income is above average at 144.3% of the US in 2016, up from 97.8% in 2011.

Debt service coverage and revenue metrics: very strong coverage but subject to revenue volatility

Debt service coverage is expected to remain strong, but volatile given strong growth since 2011 and history of large fluctuations. Maximum annual debt service (MADS) coverage on the 2018 certificates, based on 2017 actuals is 9.7x revenue. Coverage is likely to increase in fiscal 2018, which based on year to date collections, is estimated at 12.6x revenue. For the last three fiscal years completed, MADS coverage averaged 9.0x revenue.

The county's very strong coverage trend from recent years provides credit stability despite the likelihood of fluctuating revenue collections over the next few years. Receipts could decline over 90% and coverage would remain over 1x times revenue. Since 2011, when revenue collections began growing rapidly, the largest single year decline has been 28.2% in fiscal 2014. The county expects OGGPT revenue allocations to remain strong for the next several years due to an overall increasing trend of revenue receipts and continued advancements in oil and gas production technology in the region. The installation of the Dakota Access Pipeline in April 2017 has also increased productivity in the Bakken Shale Play, which partially accounts for revenue growth in 2018, which as of October 2018, is exceeding 2017 collections by nearly 30%.

LIQUIDITY

Due to the county's strong OGGPT revenue allocations relative to annual debt service requirements, it expects debt service to be fully funded by its first monthly payment allocation each year. The county maintains very strong liquidity in its general fund, which in fiscal 2016 totaled \$33.8 million or 63.5% of revenue.

Debt and legal covenants: no further debt plans; satisfactory legal protections

The county has no further plans to leverage its OGGPT revenue. Legal protections on the certificates are satisfactory, including a 3x additional bonds test and a cash-funded debt service reserve funded at the standard 3-prong test. The trust agreement provides for monthly deposits of OGGPT revenue for debt service on the certificates. There is no lockbox structure as OGGPT revenue is allocated directly to a county controlled account before transfer to the trustee for debt service.

DEBT STRUCTURE

The 2018 certificates, when issued, will be the county's only debt obligation. They are fixed-rate and long-term bonds with level annual debt service requirements. With the issuance of the 2018 certificates, 100% of OGGPT revenue debt will be scheduled for repayment within 10 years. The 2018 certificates will refund the county's 2015 certificates, which were privately placed with the Bank of North Dakota. The certificates are subject to variable interest rate terms, although they do not pose a significant contingent liability risk to the county given its plans to refund the certificates and the county's limited debt service requirements relative to operating revenue. There are no swaps or demand features on the 2015 certificates.

DEBT-RELATED DERIVATIVES

The county is not party to any derivative agreements.

PENSIONS AND OPEB

We expect the county's pension burden to remain moderate based on its low pension fixed costs. It participates in the North Dakota Public Employees Retirement System, which is a cost-sharing multiple employer pension plan. Annual pension costs will likely grow because statutory contribution levels have not kept pace with growing unfunded pension liabilities. However, the county's pension fixed costs are low, which in 2016 totaled 1.5% of operating revenue. We expect that future increases in pension costs will remain manageable. For a more detailed description on the county's pension liabilities, see the county's issuer rating credit opinion.

Management and governance: moderate institutional framework

North Dakota counties have an Institutional Framework score of Aa, which is high. Institutional Framework scores measure a sector's legal ability to increase revenues and decrease expenditures. The sector's major revenue source, property taxes, are subject to a cap of 60 mills, which can be overridden at the local level with voter approval. Revenues and expenditures tend to be predictable. North Dakota is a Right to Work state, providing expenditure-cutting ability. Across the sector, fixed and mandated costs are modest. The county has benefited from strong OGGPT revenue allocations, which have provided ample funding for its capital needs. It maintains a 5-year capital improvement plan for its road and bridge improvements. It has an informal general fund reserve target of \$20 million. The state could change the OGGPT in the future.

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