

**SUMMARY OF MINUTES
BOARD OF DIRECTORS
MUSKINGUM WATERSHED CONSERVANCY DISTRICT
Held at Cherry Valley Lodge, Newark, Ohio
March 13, 2015, 9:00 a.m.**

A meeting of the Board of Directors of the Muskingum Watershed Conservancy District was held at Cherry Valley Lodge, Newark, Ohio, on Friday, March 13, 2015, at 9:00 a.m., pursuant to notice duly given all Directors, and the general public in accordance with law.

ROLL CALL

Directors present were: Mr. Horstman, Ms. Limbach, Mr. Maupin, and Mr. Pryce.

Present from MWCD staff were Scott Barnhart, Barbara Bennett, Jim Crandall, Jim Cugliari, Skyler Dewey, Fred Hammon, John Hoopingarner, Anna Miller, Karen Miller, and Mark Swiger.

Mr. Horstman, President of the Board of Directors, presided.

On motion by Ms. Limbach, seconded by Mr. Maupin, Mr. Parham was excused.

INTRODUCTION OF VISITORS AND PUBLIC COMMENT

Also in attendance for all or portions of this meeting were: Sean Logan (*Woolpert*); James Halloran (*Ohio Oil and Gas Association*); Jonathan Dominy (*PNC*); David Nash, Suzanne Fisher Edwards, and Andrea Salimbene (*McMahon DeGulis*); Rich Shank (*former Ohio EPA Director and former Executive Director of the Ohio Chapter, Nature Conservancy*); Dr. Robert Chase (*Professor and Chair of the Department of Petroleum Engineering and Geology, Marietta College*); and DeeAnn Horstman.

WORKSHOP PRESENTATIONS

MWCD Oil and Gas Activities

Presenters: Mark Swiger and Skyler Dewey

A brief history of oil and gas activities on MWCD property was presented. On January 5, 1939, the District executed its first oil and gas lease with a Mr. George Jewell. On April 19, 1939, the District executed its second oil and gas lease to Mr. Jewell on 114.17 acres for \$20.50. These first leases had added protection over and above the general provisions.

Early on, the pattern was set to use oil and gas revenues to help support the operations of the MWCD. In 1943, cash receipts from oil and gas totaled \$13,684.34, which was 9.3% of the total budget.

Prior to the Utica shale, royalty revenue was generated from approximately 277 wells, with 120 of those wells located on MWCD property. The typical bonus payment was \$10 per acre.

A synopsis of offers for Utica shale was reviewed, spanning from an offer of \$75 per acre in May of 2010 to \$1,500 per acre in November of 2010. At that point, MWCD staff determined that it would be beneficial to establish a team of experts to help in the decision making process. Included on this team were Dave Nash and Suzanne Fisher of McMahon Degulis; Steve Grose and Jeff Bynum of Concorde Energy; Tom Tugend of TGT & Associates, LLC; and Dr. Robert Chase of Marietta College.

In March of 2011, an RFP was issued by MWCD to nine producers who had expressed an interest in leasing at Tappan, Clendening and Piedmont reservoir. The market was young and there was upside potential.

MWCD leased 6,468 acres to Gulfport Energy at \$2,400 per acre and 16% royalty, holding approximately 24,600 acres in the eastern reservoirs for the future.

Mr. Swiger and Ms. Dewey then reviewed statistics relative to the current drilling/production on MWCD property.

Energy Trends: Playing Out Unintended Consequences
Presenter: James Halloran

Mr. Halloran gave a PowerPoint presentation entitled, “Energy Trends: Playing Out Unintended Consequences.”

He reviewed and provided an explanation of “primary trend theses” as: 1) the perception of 100-year cheap [\$4] gas supply; 2) the perception that climate change needs action; 3) nuclear and coal power losing to competition; 4) increase globalization of energy markets; 5) hydrocarbons [BTU basis] will converge; and 6) governments will get more rent from energy. Trends run in cycles of approximately 7-10 years.

Intermediate energy trends include: majors cutting back on big projects; oil service – huge pressure to lower costs; massive capital inflow from private equity; expanding infrastructure/production ratio; natural gas less cyclical than oil; and longer completion times versus plans. The period of 2015-2020 is an era of infrastructure.

Natural gas is not as commoditized a market: transition from “hunters” to “gatherers” to “farmers.” Exploration for natural gas is a highly technical process and very few drilling operations are unsuccessful. There is a stressful pricing while awaiting infrastructure and there are mediocre results away from “sweet spots.” U.S. natural gas pricing is a victim of its own success – lots of capital, recession, low interest rates, and too many players.

Mr. Halloran stated his observation that permitting for Utica wells remains fairly constant in Ohio:

Period	Permits Issued
January 2014	68
October 2014	82
November 2014	116
December 2014	79
January 2015	60
February 2015	95

Improved technology brings higher initial production rates, but also steeper declines, hastening arrival of “treadmill.” Regarding Marcellus production per rig, efficiency working harder than rig count reduction. As a result, there is faster drilling plus better initial production.

Gas pipeline infrastructure will take at least three years to complete. Decline rates, volatility, regulation and tax trends are bullish for crude oil. The Utica/Marcellus are key to future for natural gas and NGL markets.

Oil and Gas Regulations Review/Environmental Compliance
Presenters: Suzanne Fisher-Edwards and Dave Nash

Ms. Fisher reviewed the current rules and regulations regarding oil and gas exploration in Ohio as well as some of the new requirements/restrictions that are in place and/or expected to be adopted. These rules and regulations are also included in the language contained in MWCD lease documents; the MWCD lease also

includes language requiring State of Ohio rules and regulations are to be followed.

Mr. Nash stated that the rules that will come out of the State of Ohio will play a very important role in future and ensure success. It is vital to keep the public information stream going.

Ms. Salimbene offered some suggestions for opportunities for resource management and long-term multi-generational benefit. She urged a program of watershed-wide communication efforts to assure “accurate” information being disseminated and how oil and gas activities coincide with the MWCD mission. An educational component involving local entities, classrooms, and/or adult education programs was also suggested.

Mr. Nash commented on the misconception/confusion about the interpretation of “conservation.” Conservation is not only protection of, but the wise use of, natural resources. The term is often confused with the term preservation. Mr. Shank expressed his agreement with Mr. Nash’s comments about the term “conservation,” stating that the approach of the MWCD relative to conservation was one thing that has drawn his interest in the organization.

Utica Shale Energy Development – Industry Review: Activity/Technologies/Terminology/Incidents
Presenter: Dr. Robert Chase

Dr. Chase provided an industry review, including an interesting description of the process of fracking a Utica shale well. His experience has been that today’s drilling companies and the service companies that contract with them put a major emphasis on both worker and environmental safety concerns.

NEXT STEPS

Mr. Pryce suggested that Board members might consider offering some suggestions in order to compile a plan for the future:

- 1) Working on environmental compliance issues
- 2) Financial compliance issues
- 3) Emergency preparedness and incident training
- 4) Working on improvement of access points in case of emergency
- 5) Tappan Reservoir and how to move forward

ADJOURN

There being no further business, on motion by Mr. Pryce, seconded by Ms. Limbach, the meeting of the Board of Directors was adjourned. The next regularly scheduled meeting is Friday, March 20, 2015, at 9:00 a.m. at Tolloty Technology Center, New Philadelphia, Ohio.