

**SUMMARY OF MINUTES
BOARD OF DIRECTORS
MUSKINGUM WATERSHED CONSERVANCY DISTRICT
Held at Kent State University Tuscarawas, New Philadelphia, Ohio
December 16, 2016, 9:00 a.m.**

A meeting of the Board of Directors of the Muskingum Watershed Conservancy District was held at the Science and Technology Center, Kent State University Tuscarawas, 330 University Drive NE, New Philadelphia, Ohio, on Friday, December 16, 2016, at 9:00 a.m., pursuant to notice duly given all Directors, and the general public in accordance with law.

1. ROLL CALL

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

Present from MWCD staff were Barbara Bennett, Mary Burley, Jim Cugliari, Tom Fisher, John Hoopingarner, Ted Lozier, Karen Miller, John Olivier, and Boris Slogar.

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

2. INTRODUCTION OF VISITORS AND PUBLIC COMMENT

Also in attendance for all or portions of this meeting were: J.D. Long (*Harrison News Herald*); Terry Fercana (*Environmental Design Group*); a Wayne County resident; Hal Sheaffer, Gordon Black and Lee Phillips (*Johnny Appleseed Center*); and Sean Logan (*Sean Logan & Associates, LLC and Woolpert*).

3. APPROVAL OF MINUTES

On motion by Ms. Limbach, seconded by Mr. Sprang, the minutes of the November 18, 2016, meeting of the Board of Directors were approved.

4. FINANCIAL

Mr. Cugliari presented the financial report for the period ending November 30, 2016. The total operating revenue is \$20,217,425.00 with operating expenses of \$13,208,609.00 resulting in an excess of revenue over expense of \$7,008,816.00.

General Fund

- Total revenues are 87.09% of budget.
- The Use of Water Assets revenue line item is 88.28% of budget and approximately \$100,000 from meeting budget.
- Interest on Investments is 83.78% of budget, up 55.80% from 2015. It is anticipated that this line item will fall short of meeting budget.
- Total expenses are 81.40% of budget and up 8.59% from 2015. All line items are currently within budget projections.

Conservation Fund

- Total revenues are 98.43% of budget.
- Timber Harvesting revenue is currently 60.38% of budget and Pine and Pulpwood is 82.35% of budget. It is anticipated that budget will be met with revenues forthcoming in both areas.
- Farm Operations/Sharecrops revenue is 93.64% of budget and it is anticipated that budget will be met.
- Mineral Operations – Gas and Oil Royalties revenue has met and exceeded budget. The Utica shale royalty has met, and exceeded by approximately \$160,000.00, the projected \$6.5 million revenue for 2016 through November.

- Total expenses are 72.92% of budget and down 2.23% from 2015.

Recreation Fund: Parks

- Total revenue is 99.92% of budget and up 3.59% from 2015.
- All the major revenue line items have met and exceeded budget except for the Alive Festival. There will be a payment reported in December, but it is still anticipated that we will fall short of budget.
- Total expenses are 87.82% of budget, up 2% from 2015, with the anticipation that we will be within budget expectations.

Revenue Fund: Non-Parks

- Total revenue is 101.24% of budget with nearly all revenue line items meeting budget.
- Total expenses are 85.02% of budget and down 3.26% from 2015.

Recreation Improvement Fund

- Total expenses are 30.94% of budget and down 6.33% overall from 2015.
- Park Master Planning is 30.50% of budget and 43.26% ahead of 2015.

Maintenance Assessment Fund

- Total expenses are 76.52% of budget and 53.32% ahead of 2015. The major area of increase from 2015 is the Sediment Removal line item.

As the year ends, from an overall budget perspective, revenue is at 97.95% and expenses are 56.97% of budget. The main variance on the expense side is in the Recreation Improvement Fund.

On motion by Mr. Sprang, seconded by Ms. Limbach, the financial report was accepted as presented.

5. PAYMENT OF BILLS

On motion by Ms. Limbach, seconded by Mr. Sprang, report of the payment of bills for the period ending November 30, 2016, was approved as presented.

6. BUSINESS

6.01a LEASE TRANSACTIONS

On motion by Mr. Pryce, seconded by Ms. Limbach, the assignments, cancellations, new leases, farm leases, mortgage consent and agreement cancellations, and mortgage consent and agreements were approved and execution by the proper officers of the MWCD authorized.

6.01b AT&T CELLULAR TOWER – AMENDMENT TO AGREEMENT

On motion by Mr. Pryce seconded by Mr. Moorehead, an amendment to the existing agreement with AT&T for a cellular tower at Atwood Lake Park, as recommended and set forth in the above memorandum, was approved.

6.01c NEW MARINA LEASE

On motion by Ms. Limbach, seconded by Mr. Moorehead, language in paragraph 37 will be revised as follows: “That it will maintain during the term of this Lease General Liability coverage in the amount of \$3,000,000, combined single limit...” – increasing the amount from \$1 million to \$3 million.

On motion by Mr. Moorehead, seconded by Ms. Limbach, a new marina lease form, as recommended and set forth in the above memorandum, was approved as revised.

6.01d SHORT-TERM WATER SUPPLY AGREEMENT – CHESAPEAKE ENERGY/LEESVILLE

On motion by Ms. Limbach, seconded by Mr. Sprang, a short-term water supply agreement with Chesapeake Energy for water from Leesville Reservoir, as recommended and set forth in the above memorandum, was approved.

6.01e PURCHASE OF PROPERTY

This matter was discussed in executive session.

On motion by Ms. Limbach, seconded by Mr. Pryce, the Executive Director was authorized to move forward with the purchase of property as represented in executive session.

6.01f JOHNNY APPLESEED HERITAGE CENTER, INC.

Mr. Hoopingarner reported that representatives of the Johnny Appleseed Heritage Center, Inc., have contacted MWCD with the intent to transition the property where that facility is located back to the MWCD. Staff and legal counsel (a charter group has been formed with MWCD staff) are in the process of reviewing the situation and more information will be presented as available. The facility, located near Charles Mill Reservoir, has a 1,500-seat outdoor amphitheater and several outbuildings, including a 95-seat auditorium that was donated by The Smucker Company. Several liens on the property will need to be resolved.

Mr. Sheaffer addressed the Board on behalf of the Johnny Appleseed group. As related to a timeline, he stated that they would like to have the matter resolved as soon as possible.

6.02a BUDGET ADJUSTMENTS

On motion by Mr. Pryce, seconded by Ms. Limbach, budget adjustments made during the third quarter of 2016, as recommended and set forth in the above memorandum, were approved.

6.02b BUDGET REVISIONS

On motion by Ms. Limbach, seconded by Mr. Moorehead, proposed budget revisions, as recommended and set forth in the above memorandum, were approved.

6.03a HUMAN RESOURCES SUMMARY

On motion by Mr. Pryce, seconded by Ms. Limbach, human resources activities, as recommended and set forth in the above memorandum, were approved.

6.03b LEXIPOL POLICY 1006 UPDATE – RANGER UNIFORMS

On motion by Mr. Sprang, seconded by Mr. Moorehead, proposed revisions to the Lexipol Policy 1006, Ranger Uniforms, as recommended and set forth in the above memorandum, were approved to be effective January 1, 2017.

6.03c UPDATED SALARY RANGE SCHEDULE

On motion by Mr. Pryce, seconded by Ms. Limbach, an updated pay range schedule for non-bargaining unit employees, as recommended and set forth in the above memorandum, was approved effective December 16, 2016.

**6.04a LONG TERM MAINTENANCE DREDGING PROGRAM – TAPPAN LAKE
 GMP AMENDMENT #4 WITH PCi DREDGING**

On motion by Mr. Sprang, seconded by Ms. Limbach, amendment #4 to the contract with PCi Dredging for the Tappan Lake project, as recommended and set forth in the above memorandum, was approved.

**6.04b GEOTECHNICAL ENGINEERING AND
 CONSTRUCTION MATERIAL TESTING SERVICES**

On motion by Ms. Limbach, seconded by Mr. Sprang, additional funding in a cumulative amount not to exceed \$550,000 for four geotechnical engineering and construction testing contracts, as recommended and set forth in above memorandum, was authorized.

6.04c MASTER PLAN IMPLEMENTATION – ms CONSULTANTS CONTRACT EXTENSION

On motion by Mr. Pryce, seconded by Ms. Limbach, extension of the term of a contract with ms Consultants through December 31, 2018, with a “not to exceed” fee of \$1,080,000 for services provided in 2017, as recommended and set forth in the above memorandum, was approved.

6.04d 2016-2017 SHORELINE STABILIZATION PROJECTS

Bids were recently received for five upcoming shoreline stabilization projects, located at Atwood Lake, Charles Mill Lake, Leesville Lake, Piedmont Lake, and Pleasant Hill Lake. These projects were presented at the September 23, 2016, Board meeting at which authorization was granted to enter into contracts with the lowest, most responsive and responsible bidders at costs not to exceed the amounts shown in the tables below. The following is a summary of the bids received.

COMPANY	LOCATION	TOTAL BID PRICE
ATWOOD STATE ROUTE 542 AREA SHORELINE STABILIZATION PROJECT		
ENGINEER'S ESTIMATE: \$256,449.00		
Tucson, Inc.	New Philadelphia, OH	\$207,955.50
Freedom Construction Enterprises, Inc.	New Concord, OH	\$212,802.00
Cross Roads Construction Inc.	Cambridge, OH	\$230,656.00
United Earthworks	Deerfield, OH	\$237,626.50
Beaver Excavating Company	Canton, OH	\$246,968.00
Wenger Excavating, Inc.	Dalton, OH	\$265,744.85
Rudzik Excavating	Struthers, OH	\$270,323.20
Stanley Miller Construction Co.	East Sparta, OH	\$277,146.00
Brannon Contracting & Maintenance Inc.	Duncan Falls, OH	\$288,617.00
Glenn O. Hawbaker, Inc.	State College, PA	\$323,908.00
Environmental Remediation Contractor	Columbus, OH	\$392,183.00
LEESVILLE LAKE – GLENS AREA SHORELINE STABILIZATION PROJECT		
ENGINEER'S ESTIMATE: \$189,825.00		
Tucson, Inc.	New Philadelphia, OH	\$159,796.00
Brannon Contracting & Maintenance Inc.	Duncan Falls, OH	\$168,680.00
Cross Roads Construction Inc.	Cambridge, OH	\$182,170.00
United Earthworks	Deerfield, OH	\$223,962.50
Freedom Construction Enterprises, Inc.	New Concord, OH	\$513,455.00

PIEDMONT LAKE – GOODRICH COTTAGE AREA SHORELINE STABILIZATION PROJECT		
ENGINEER'S ESTIMATE: \$334,273.00		
Cross Roads Construction Inc.	Cambridge, OH	\$262,802.00
Tucson, Inc.	New Philadelphia, OH	\$278,867.00
Brannon Contracting & Maintenance Inc.	Duncan Falls, OH	\$281,422.75
Freedom Construction Enterprises, Inc.	New Concord, OH	\$308,852.00
Glenn O. Hawbaker, Inc.	State College, PA	\$359,789.75

COMPANY	LOCATION	TOTAL BID PRICE
CHARLES MILL LAKE PARK – BEACH AREA SHORELINE STABILIZATION PROJECT		
ENGINEER'S ESTIMATE: \$216,844.00		
Mark Haynes Construction Inc.	Norwalk, OH	\$196,666.00
Albatross Management LLC	Lakeville, OH	\$198,044.00
Tucson, Inc.	New Philadelphia, OH	\$204,874.00
Cross Roads Construction Inc.	Cambridge, OH	\$208,075.00
Elite Excavating Co. of Ohio, Inc.	Mansfield, OH	\$229,994.00
Wenger Excavating Inc.	Dalton, OH	\$232,368.50
Brannon Contracting & Maintenance Inc.	Duncan Falls, OH	\$236,360.00
Adena Corporation	Mansfield, OH	\$237,121.79
Glenn O. Hawbaker, Inc.	State College, PA	\$238,473.75
Peterson (PCI)	Minocqua, WI	\$276,011.32
Freedom Construction Enterprises, Inc.	New Concord, OH	\$290,702.70
Stanley Miller Construction Co.	East Sparta, OH	\$334,668.00
Environmental Remediation Contractor	Columbus, OH	\$359,486.00
PLEASANT HILL LAKE – RICHLAND COTTAGE AREA SHORELINE STABILIZATION PROJECT		
ENGINEER'S ESTIMATE: \$531,571.00		
Mark Haynes Construction Inc.	Norwalk, OH	\$426,312.00
G.E. Baker Construction, Inc.	Shreve, OH	\$446,546.00
Glenn O. Hawbaker, Inc.	State College, PA	\$455,990.00
Brannon Contracting & Maintenance Inc.	Duncan Falls, OH	\$477,479.00
Cross Roads Construction Inc.	Cambridge, OH	\$490,131.00
Tucson, Inc.	New Philadelphia, OH	\$498,371.50
Freedom Construction Enterprises, Inc.	New Concord, OH	\$510,400.00
Buds, Inc.	Nashport, OH	\$522,488.50
Shrock Premier Custom Construction	Loudonville, OH	\$524,411.00
Elite Excavating Co. of Ohio, Inc.	Mansfield, OH	\$542,243.00
Wenger Excavating, Inc.	Dalton, OH	\$545,884.30
Rudzik Excavating	Struthers, OH	\$577,714.78

This memo is for informational purposes only and requires no action from the Board.

6.04e PLEASANT HILL PARK – VILLAGE OF PERRYSVILLE WASTEWATER AGREEMENT

On motion by Ms. Limbach, seconded by Mr. Moorehead, an agreement with the Village of Perrysville for wastewater treatment services at Pleasant Hill Park, as recommended and set forth in the above memorandum, was approved.

6.05 SCHEDULE OF RECORDS RETENTION AND DISPOSITION – CONSERVATION GROUP

On motion by Mr. Sprang, seconded by Ms. Limbach, a proposed retention schedule for Conservation records, as recommended and set forth in the above memorandum, was approved.

6.06 SCHEDULE OF RECORDS RETENTION AND DISPOSITION – FINANCE GROUP

On motion by Ms. Limbach, seconded by Mr. Moorehead, a proposed retention schedule for Finance records, as recommended and set forth in the above memorandum, was approved

OTHER BUSINESS

Mr. Slogar reported that the application review process has begun for the Partners in Watershed Management funding. The technical review advisory group (TRAG) will be review the applications in late January. Members of the TRAG are: Cynthia J. Crecelius, CFM, CC Consults, Westerville, area of expertise is floodplain management; Elizabeth L. Buchanan, Ph.D, Buchanan, Consulting Services, LLC, Mantua, area of expertise is forestry/biology/aquatic ecology; Joe Bonnell, Ph.D., Program Director, Ohio Watershed Network, OSU Extension, Columbus, area of expertise is watershed management; Robert J. Kirkbride, P.E., Senior Association/Project Manager, Stantec, Columbus, area of expertise is dam safety engineering/water resources; and Kari Mackenbach, CFM, BCES, ENV SP, Project Manager-Green Initiatives Practice Leader, ms Consultants, Columbus, area of expertise is green bmp's/floodplain management.

7. REPORTS

7.01 MARINAS REPORT

- Marina staff attended the Docks Expo in St. Charles, Missouri, the week of November 29. Great information was gained regarding new changes to the National Electric Code affecting the marina industry, insurance benefits for marinas designated as “Clean Marinas,” a new residential-use kayak launch system, marina-specific on-line training programs now available, and perhaps most significantly, an hour-long discussion with the developers of a new marina/park management/reservation software program.

The editor of *Marina Dockage*, one of the industry’s leading publications, presented results from a nationwide survey, (in which MWCD participated), covering trends in the industry. The strong US economy is certainly having an impact on the marina industry with virtually all aspects trending upwards. Both MWCD owned and operated marinas, and our leased marinas are in line with those trends. A synopsis is attached and can also be found at: http://marinadockage.com/downloads/TrendsAnnualReport_2016.pdf

- The marina building renovation project at Piedmont, which includes the addition of ADA accessible restrooms, a new, more efficient floor plan, outdoor deck, an innovative self-contained bait tank, and self-serve food area, has begun. Most of the interior of the building has now been gutted. The same temporary building used at Atwood Lake Park during construction of the Welcome Center, has been moved to Piedmont, where it will serve as temporary office space during construction.
- The renovation project involving the storage buildings purchased near Piedmont Marina was completed. Repainting, new siding, doors and lighting, and the removal of an unusable building, combined to make a positive difference to the site. It is good to note that the buildings, in only their second season of use, are at capacity with stored boats.
- Design work has been completed on the improvements to the fueling systems at both Seneca and Piedmont marinas. Work is scheduled for early 2017. The Piedmont project will entail the removal of the old,

underground storage tank, and replacing it with an above-ground tank. This eliminates compliance issues inherent with the use of underground tanks, and will make Piedmont’s fueling system easier to use and monitor.

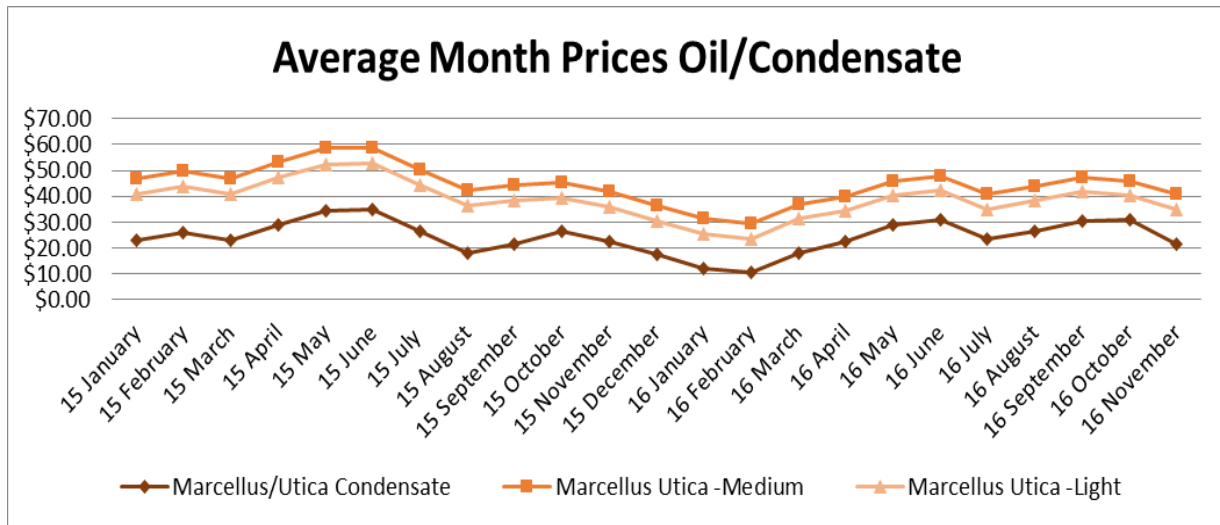
- The Purchase Agreement for Leesville Petersburg Marina is being finalized. The actual transaction should close in early January. Meetings are scheduled with Keith Ott, owner/operator of Leesville South Fork Marina, for the potential operation of our new acquisition. Keith responded to our recent RFP.

7.02 UTICA ROYALTY REVENUE REPORT

Utica royalty revenue is currently generated by 50 wells on adjacent private property. The MWCD’s proportional share of the wells varies significantly see attachment for more detail.

There were no specific items to note, and the monthly Utica royalty revenue decreased about 4.5% from October 2016 (\$549,936.40) to November 2016 (\$524,829.72).

- The Ohio Market Report prices posted for \$/barrel of Ohio Oil/Condensate on December 7, 2016
 - Marcellus - Utica Medium \$36.65
 - Marcellus - Utica Light \$30.65
 - Marcellus - Utica Condensate \$17.65



- The Henry Hub Natural Gas Spot Price for December 2, 2016: \$2.96

7.03 OPRA AWARD – WELLNESS PROGRAM

Ms. Burley reported that the MWCD has received notification that we received a first place award through the Ohio Parks and Recreation Association (OPRA) for the MWCD Wellness Program. The awards ceremony will be held on February 14, 2017, at the OPRA Conference.

7.04 2016 GOALS

Mr. Hoopingarner provided an update on the status of accomplishment of the 2016 goals.

7.05 MASTER PLAN UPDATE

Mr. Slogar distributed a written report to the Board on the Master Plan Implementation.

Program Status

- Detailed design continues for the following projects:
 - Atwood: Special event parking improvements
 - Charles Mill: Boat storage lot
 - Piedmont: Water and electric utility improvements
 - Pleasant Hill: Sanitary system improvements
 - Seneca: P-13 and P-21 Campgrounds
 - Tappan: East campground, WWTP Phase 1 improvements
- The following projects are in the scope development or fee negotiation process and will be under design in FY17:
 - Atwood: Main campground improvements, Phase I
 - Charles Mill: Water and wastewater treatment plants, main campground redevelopment Phase I
 - Piedmont: Campground redevelopment Phase I
 - Pleasant Hill: Seasonal campground redevelopment Phase I, Area 27 Cabin Road and utilities
 - Seneca: Area M-10 campground (south)
 - Tappan: Campground renovation Phase I
- Agreements have been reached with the Village of Perrysville for wastewater treatment from Pleasant Hill Lake Park and with the Village of Senecaville for wastewater treatment from Seneca Lake Parkside. Board of Directors approval for the Village of Senecaville agreement was granted at the October meeting.

Individual Projects Status

- **Atwood Area 20 Campground:** The contractor, Beaver Excavating Company, is currently performing earthwork and sanitary sewer installation. Substantial completion is scheduled for September, 2017 with an interim milestone date of June 30, 2017 for completion of 75 campsites and the restroom/shower building.
- **Tappan ADA Restroom and Shower House:** CCI Construction has completed installation of all wood and glulam trusses as well as all rough plumbing and electrical work. Installation of roofing materials is nearly complete and interior finish work is ongoing. The project will be substantially completed prior to the 2017 camping season.
- **Seneca Lake Park – Terminal Pump Station and Force Main to Senecaville:** The project was advertised on November 21st with bids to be opened December 21st. The project involves the replacement of the existing terminal Parkside Pump Station located near the middle shower house and construction of approximately 11,500 feet of 6-inch force main across MWCD property and along Hatchery Road to the Senecaville Wastewater Treatment Plant. The engineer's estimate for construction is \$1,060,000. Substantial completion is scheduled for April 30, 2017.
- **Atwood Sanitary Sewer System:** Advertising for this project began November 21st with bids to be opened December 21st. The project will construct just over 3,000 feet of sanitary sewer from the proposed Campground Area 20 to the existing main lift station located near Camp Area B. The engineer's estimate for construction is \$ 397,405. The project is scheduled for substantial completion on May 26, 2017.
- **Pleasant Hill Area 22 Campground:** Bids were opened on December 14th and are currently under review. The project will include 59 full-hookup RV campsites, a CXT restroom/shower building, picnic shelter and playground to be located on the east side of the park near existing Camp Area E. The engineer's estimate for construction is \$3,400,000. Substantial completion is scheduled for October 30, 2017.
- **Seneca Beach Concession/Restroom Building:** Bids were opened December 1st and Brannon Contracting & Maintenance Services LLC is the apparent low bidder with a bid of \$303,261.60. The project includes demolition of the existing concession building and site work and utility installation for a new concession and restroom building to be purchased from Public Restroom Company under a separate contract. The project is scheduled for substantial completion on April 30, 2017.

- **Atwood Lake Bridge and Trail Phase II:** The project is substantially complete. Staining of the abutment walls took place in November.

7.05 DREDGE PROGRAM STATUS – TAPPAN LAKE DREDGING PROJECT

- Hydraulic dredging is now complete in all areas. The final contract volume for the original dredging work near the east end of Tappan Lake is 328,636 cubic yard. With the additional 15,000 cubic yards dredged near Tappan Park, the total for the entire project is 343,636 cubic yards at a cost of \$10,429,610.85.
- Crews have begun removal of the booster pump stations, as well as the dredge piping from the lake. Restoration work will continue at the Addy Road DMRA, as well as at the Deersville Road DMRA, into next summer.
- During the winter drawdown, we are also planning to mechanically dredge one additional area near a cluster dock in Y-Bay. Dock users have been having difficulty accessing their docks due to shallow water depths, so we will remove between 1,000-1,500 cubic yards of material to restore the area to an adequate depth.

7.06 USACE PROJECTS STATUS REPORT

Dover Dam

- Real estate work continuing over the next few months (ODOT easement at the right abutment and a potential mineral rights easement at the left abutment).
- Project will be closed out by the end of the federal fiscal year (September 2017).

Bolivar Dam

- Four of the six gates are replaced and completely rehabbed with the final two to be replaced by the end of February.
- Final restoration and pavement work on the dam have been postponed until Spring because of weather. Road over the dam will remain closed until then but will be available for emergency access including when necessary during times of flooding.
- Left abutment restoration will take place next year along with the installation of additional piezometers to monitor the performance of the seepage barrier. In addition, the relief wells will be cleaned out next year.

Mohawk Dam

- Initial Performance Review and Initial Compliance Review reports will be completed this month.
- A request for a Resolution of Support from MWCD has been received and is under review.
- Federal funding for either Mohawk and Zoar is unlikely before 2019 in the anticipated federal budgets. This may move the request for MWCD funding back one year.

Zoar Levee

- Detailed design is ready to begin and the creation of a detailed project schedule and estimate is underway.
- The plan is to install an internal erosion interception trench and two berms with filters at the pump station ponding area and along the landward toe of the levee.
- Project scoping and real estate preparatory work are underway.

7.07 IMMEDIATE OR PENDING LITIGATION

No business at this time.

8. SUBDISTRICTS

8.01 BLACK FORK SUBDISTRICT UPDATE

Mr. Slogar reported that meetings have been held with key stakeholders, legislators, and business owners. In January, the plan is to reach out to property owners. He recently met with a group from the agricultural community, along with township trustees. Efforts will be focused on public involvement and education as the ultimate decision to move forward with the Black Fork Subdistrict project will be determined by the local community.

9. EXECUTIVE SESSION

On motion by Ms. Limbach, seconded by Mr. Sprang, the Board of Directors entered into executive session at 11:40 a.m. to discuss matters related to ORC §121.22 (G) (2). On roll call: Ms. Limbach-yes; Mr. Maupin-yes; Mr. Moorehead-yes; Mr. Pryce-yes; and Mr. Sprang-yes. The executive session ended at 12:05 p.m.

10. ADJOURN

There being no further business, on motion by Mr. Sprang, seconded by Mr. Moorehead, the meeting of the Board of Directors was adjourned. The next regularly scheduled meeting is Friday, January 20, 2017, at 9:00 a.m. at the Kent State University Tuscarawas, Science and Technology Center.

*12.16.2016,km
Approved 01.20.2017*