Des Plaines River Watershed Workgroup
Executive Board
2/18/2016
11AM – 12PM
Lake County Central Permit Facility
500 W. Winchester Road, Libertyville IL 60048
(2nd Floor SMC Conference Room)

Outcomes:

- Approve 2016 Budget
- Approve Suburban Labs Contract Amendment
- Discuss Nutrient Trading as Five-Year Workplan Item

Agenda

1. Call the meeting to order
2. Approve Previous Meeting minutes
3. Public Comment
4. Action Item: Approve 2016 Budget
5. Action Item: Approve Suburban Labs Amendment
6. Discussion Item: Water Quality/Nutrient Trading Future Work Plan Suggestion
7. Next Executive Board March 3rd – 11AM
8. Adjourn

Des Plaines River Watershed Workgroup
Executive Board
1/6/2016
11:30 AM-12:30 PM
Lake County Central Permit Facility, 500 Winchester Road, Libertyville IL 60048
Meeting Minutes

1. Call the meeting to order: Brian Dorn called the meeting to order.
2. Approve Previous Meeting minutes. Michael Talbett made a motion to approve the minutes from the December 10th Executive Board meeting, Paul Kendzior seconded the motion. The motion passed unanimously.
3. Public Comment: none.
4. Treasurer's Report/DRWW Membership update: Mike Warner said that after today's meeting the B&M contract $39,600. Geosyntec's contract is for $33,000. MBI's is for $165,000. Budget projections will be presented at next Executive Board meeting and he will show how that will affect budget for years to come. It looks like we are within budget and dues projection. Peter asked about sending out invoices for membership dues. Mike W will send out cover letter and invoice. There will be a different letter for existing and potential members. Andrea will develop a one page annual summary to be included and also send along the delegate form.
5. Action Item: Discuss Bioassessment Contract Scope: Joe summarized the Monitoring Committee meeting. All sampling will conducted in 2016. There is a cost savings by doing it this way. There will be a bioassessment kickoff meeting at the June Monitoring Committee meeting.
6. Next General Membership Meeting February 11th at 10 AM at NSWRD. Brian will talk to Fred Andes about presenting at the meeting about the proposed chloride variance. Mike W will have annual budget projections. Andrea will do an annual summary of activities and a work plan. Andrea asked Joe about monitoring summary. Patty wants someone to do a watershed planning status update.
   Peter asked about membership access to the raw data. He suggested Dropbox. Andrea will send a sample SharePoint site to the Executive Board and Monitoring Committee. Mike Adam announced that the Lakes Committee will meet January 28th. Scott will work with Al to discuss Impairments/MS4 committee.
7. Next Executive Board Meeting February 18 – 11:00AM at CPF. Monitoring Committee at 9:30.
8. Adjourn: Joe made a motion to adjourn. Paul seconded the motion. The motion to adjourn was approved unanimously.

Executive Board Members Present:
Brian Dorn, NSWRD
Michael Talbett, Kildeer
Paul Kendzior, Libertyville
Scott Pippen, Lincolnshire
Joe Robinson, NSWRD
Mike Adam, Lake County Health Department
Peter Kolb, Lake County Public Works (via phone)
Other Attendees:
Jim Bland, Sierra Club
Andrea Cline, Geosyntec
KC Doyle, Lake County
Rob Flood, NSWRD
Austin McFarlane, Lake County Public Works
Steve Vella, Libertyville
Mike Warner, Lake County SMC
Patty Werner, Lake County SMC

Des Plaines River Watershed Workgroup 2016 BUDGET AND FUTURE PROJECTED REVENUE AND COSTS		Adopted FY2015	FY2015 Actual	Fund Recommendations FY2016	Projected FY2017	Projected FY2018	Projected FY2019
REVENUE/Description	**Account #**						
Dues/Membership dues	775-4220010-46010	$ 210,000	$ 230,986	$ 225,000	$ 225,000	$ 225,000	$ 225,000
Expendable Carryover Addition	775-4220010-46010			$ 172,523	$ 98,997	$ 57,410	$ 23,655
Other State Funds/Illinois EPA 319 Grant	775-4220010-45350	$ 47,500	$ -	$ 47,500			
Other					-	-	-
Total Revenue		**$ 257,500**	**$ 230,986**	**$ 445,023**	**$ 323,997**	**$ 282,410**	**$ 248,655**
EXPENSES/Description							
Consultants/Technical Coordinator (GeoSyntec) **PO 154955**	775-4220010-71150	$ 37,564	$ 22,058	$ 48,506	$ 90,000	$ 90,000	$ 90,000
Consultants/Technical Coordinator	775-4220010-71150	$ 12,287	$ -	$ 55,000	$ -	$ -	$ -
Consultants/Monitoring Statistics and Prioritization (Future)	775-4220010-71150		$ -		-	-	$ 27,000
Field Reconaissaance (**Bland**)	775-4220010-71150		$ 149				
Monitoring Strategy and QAPP Refinement (2015 RFP)	775-4220010-71170	$ 47,500	$ -	$ 47,500	-	-	-
Laboratory Fees/Water Chemistry Monitoring - (Suburban Labs - June 2016)	775-4220010-71310	$ 66,508	$ 36,256	$ 38,252			
Laboratory Fees/Water Chemistry Monitoring (July - November 2016)	775-4220010-71311			$ 40,000	$ 75,000	$ 75,000	$ 75,000
Pollutant Load Flow Analysis - (**Burns and McDonnell**)	775-4220010-71310		$ -	$ 39,600	$ 13,755	$ 13,755	
MBI - Bioassessment Monitoring/Sediment Collection	775-4220010-71310		$ -	$ 77,168	$ 87,832	$ 80,000	$ 80,000
Projected Expenses		**$ 163,859**	**$ 58,463**	**$ 346,026**	**$ 266,587**	**$ 258,755**	**$ 272,000**
Projected Unexpended Carryover		$ 105,396	$ 172,523	$ 98,997	$ 57,410	$ 23,655	$ (23,345)
							Dues Dependent

MEMORANDUM

Date February 12, 2016
TO: Des Plaines River Watershed Workgroup
FR: Mike Warner, DRWW Administrative Agent
RE: Contract Amendment for Suburban Labs

ACTION REQUESTED: Discussion at 2/18/16 Monitoring Committee
Approval of Contract Amendment at 2/18/16 Executive Board

SMC has had several discussion with Suburban Labs on changing the excel file deliverable in their current contract to match the data formatting required by the IEPA grant (STORET format) that is supported by DRWW monitoring efforts. An example excel file is attached.

STORET Data Formatting: Based on discussions and going back and forth with revisions to the excel format, that effort has been quantified and format tentatively approved. The cost to execute and amendment is also attached. Final approval will need to be in a contract amendment with Suburban Labs increasing their contract for a one time system modification of $3000 from $66,508 to $69,508, approved by the Executive Board. There is funding available for this amendment.

Contract End Date: The start of the six (6) contractual samplings was moved back from the original contract date of July 2015 to September 2015 due to delays in the RFP process and finalizing monitoring locations. Suburban Labs was able to complete 3 samplings in 2015 starting in September 2015 and is planning on starting sampling (weather permitting) in March 2016. To accommodate the collection of the three additional samplings, this letter of agreement would extend the original contract through the end of June 2016, and Suburban labs would provide three (3) additional samplings during the period of March 2016 to June 2016.

Signature of this agreement amendment cover document will constitute agreement with the extension and additional cost associated with data management.

For the DRWW: Attest:

_____ _____ _____
Peter Kolb, President Date: Signature, Title

Suburban Labs

_____ _____
Dan Galeher Date
Vice President of Sales and Service Suburban Laboratories, Inc.

SUBURBAN LABORATORIES, Inc.

1950 S. Batavia Ave. Ste. 150, Geneva, IL 60134
Tel. (708) 544-3260 • Toll Free (800) 783-5227
Fax (708) 544-8587
www.suburbanlabs.com

January 29, 2016

Mike Warner
Des Plaines River Workgroup

Subject: Amendment to Agreement for Des Plaines River Sampling

Mike Warner with the Des Plaines River Workgroup has inquired with Suburban Labs for formatting a spreadsheet (STORET form) for analytical results for the Des Plaines River sampling. The price for completion of this is $3,000.

Please sign below, agreeing to the quoted price.

Yours very truly,

1/29/16

Kaleb Meihls
Suburban Labs

Mike Warner
Des Plaines River Workgroup

ClientSampID	Analyte	Units	EDDFinalQual	MDL	9/21/2015 12:54:00 PM	10/22/2015 10:54:00 AM	12/1/2015 11:35:00 AM
13-2	Conductivity	umhos/cm			1298	1257	1221
13-2	Dissolved Oxygen	mg/L			8.79	8.59	8.31
13-2	pH, Field	pH			8.11	8.15	8.24
13-2	Temperature	C			20.61	14.17	6.79
13-2	Chloride	mg/L		20	102	170	106
13-2	E. Coli	MPN/100mL		1	236	816	326
13-2	Mercury	ng/L		0.5		1.21	
13-2	Nitrogen, Ammonia (As N)	mg/L	ND	0.1	0.1	0.1	0.1
13-2	Nitrogen, Kjeldahl, Total	mg/L	J	0.5	1.2		0.97
13-2	Nitrogen, Kjeldahl, Total	mg/L	JS	0.5		0.83	
13-2	Orthophosphate (As P)	mg/L		0.026	0.17		0.16
13-2	Orthophosphate (As P)	mg/L		0.13		1	
13-2	Residue, Non-Filterable	mg/L		0.2	8.2	6	16.4
13-2	Sulfate	mg/L		2	32.2		
13-2	Sulfate	mg/L		4			46.4
13-2	Sulfate	mg/L		10		75.6	
13-2	Total Nitrates (Nitrate+Nitrite)	mg/L		0.05	1.3	0.454	
13-2	Total Nitrates (Nitrate+Nitrite)	mg/L		0.1			2.78
13-2	Total Organic Carbon	mg/L	ND	1	1	1	
13-2	Total Organic Carbon	mg/L	ND	1.43			1.43
13-2	Turbidity	NTU		0.1		5.21	30.1
13-2	Turbidity	NTU	H	0.1	9.36		
13-2	Volatile Suspended Solids	mg/L	J	0.2	2.8	1.4	4.4
13-2	Arsenic	mg/L		8E-04		0.00939	
13-2	Calcium	mg/L		0.015		72.2	
13-2	Copper	mg/L		0.001		0.00166	
13-2	Hardness (As CaCO3)	mg/L		0.05		313	
13-2	Iron	mg/L		0.012		0.354	
13-2	Magnesium	mg/L		0.011		32.1	
13-2	Manganese	mg/L		0.002		0.0638	
13-2	Nickel	mg/L		4E-04		0.00134	
13-2	Phosphorus	mg/L		0.02	0.236	1.06	0.183
13-2	Sodium	mg/L		0.1		96.5	
13-2	Zinc	mg/L		0.005		0.00753	
13-2	1,1,1-Trichloroethane	µg/L	ND	1		1	
13-2	1,1,2,2-Tetrachloroethane	µg/L	ND	1		1	
13-2	1,1,2-Trichloroethane	µg/L	ND	1		1	
13-2	1,1-Dichloroethane	µg/L	ND	1		1	
13-2	1,1-Dichloroethene	µg/L	ND	1		1	
13-2	1,2-Dibromo-3-chloropropane	µg/L	ND	1		1	
13-2	1,2-Dichlorobenzene	µg/L	ND	1		1	
13-2	1,2-Dichloroethane	µg/L	ND	1		1	
13-2	1,2-Dichloropropane	µg/L	ND	1		1	
13-2	1,3-Dichlorobenzene	µg/L	ND	1		1	
13-2	1,4-Dichlorobenzene	µg/L	ND	1		1	
13-2	2-Butanone	µg/L	ND	10		10	
13-2	2-Chloroethyl vinyl ether	µg/L	ND	10		10	
13-2	2-Hexanone	µg/L	ND	25		25	
13-2	4,4´-DDD	µg/L	ND	0.05		0.05	
13-2	4,4´-DDE	µg/L	ND	0.05		0.05	
13-2	4,4´-DDT	µg/L	ND	0.05		0.05	
13-2	4-Methyl-2-pentanone	µg/L	ND	25		25	
13-2	Acenaphthene	µg/L	ND	0.1		0.1	
13-2	Acenaphthylene	µg/L	ND	0.1		0.1	
13-2	Acetone	µg/L	ND	25		25	
13-2	Acrolein	µg/L	ND	25		25	
13-2	Acrylonitrile	µg/L	ND	25		25	
13-2	Aldrin	µg/L	ND	0.025		0.025	
13-2	alpha-BHC	µg/L	ND	0.025		0.025	
13-2	alpha-Chlordane	µg/L	ND	0.025		0.025	
13-2	Anthracene	µg/L	ND	0.1		0.1	
13-2	Aroclor 1016	µg/L	ND	0.1		0.1	
13-2	Aroclor 1221	µg/L	ND	0.1		0.1	
13-2	Aroclor 1232	µg/L	ND	0.1		0.1	
13-2	Aroclor 1242	µg/L	ND	0.1		0.1	
13-2	Aroclor 1248	µg/L	ND	0.1		0.1	
13-2	Aroclor 1254	µg/L	ND	0.1		0.1	
13-2	Aroclor 1260	µg/L	ND	0.1		0.1	
13-2	Benzene	µg/L	ND	1		1	
13-2	Benzo(a)anthracene	µg/L	ND	0.1		0.1	
13-2	Benzo(a)pyrene	µg/L	ND	0.1		0.1	
13-2	Benzo(b)fluoranthene	µg/L	ND	0.1		0.1	
13-2	Benzo(g,h,i)perylene	µg/L	ND	0.1		0.1	
13-2	Benzo(k)fluoranthene	µg/L	ND	0.1		0.1	
13-2	beta-BHC	µg/L	ND	0.025		0.025	
13-2	Bromodichloromethane	µg/L	ND	1		1	
13-2	Bromoform	µg/L	ND	1		1	
13-2	Bromomethane	µg/L	ND	1		1	
13-2	Carbon disulfide	µg/L	ND	1		1	
13-2	Carbon tetrachloride	µg/L	ND	1		1	
13-2	Chlordane	µg/L	ND	0.1		0.1	
13-2	Chlorobenzene	µg/L	ND	1		1	
13-2	Chloroethane	µg/L	ND	1		1	
13-2	Chloroform	µg/L	ND	1		1	
13-2	Chloromethane	µg/L	ND	1		1	
13-2	Chrysene	µg/L	ND	0.1		0.1	
13-2	cis-1,2-Dichloroethene	µg/L	ND	1		1	
13-2	cis-1,3-Dichloropropene	µg/L	ND	1		1	
13-2	delta-BHC	µg/L	ND	0.025		0.025	
13-2	Dibenzo(a,h)anthracene	µg/L	ND	0.1		0.1	
13-2	Dibromochloromethane	µg/L	ND	1		1	
13-2	Dichlorodifluoromethane	µg/L	ND	1		1	
13-2	Dieldrin	µg/L	ND	0.05		0.05	
13-2	Endosulfan I	µg/L	ND	0.025		0.025	
13-2	Endosulfan II	µg/L	ND	0.05		0.05	
13-2	Endosulfan sulfate	µg/L	ND	0.05		0.05	
13-2	Endrin	µg/L	ND	0.05		0.05	
13-2	Endrin aldehyde	µg/L	ND	0.05		0.05	
13-2	Endrin ketone	µg/L	ND	0.05		0.05	
13-2	Ethylbenzene	µg/L	ND	1		1	
13-2	Fluoranthene	µg/L	ND	0.1		0.1	
13-2	Fluorene	µg/L	ND	0.1		0.1	
13-2	gamma-BHC	µg/L	ND	0.025		0.025	
13-2	gamma-Chlordane	µg/L	ND	0.025		0.025	
13-2	Heptachlor	µg/L	ND	0.025		0.025	
13-2	Heptachlor epoxide	µg/L	ND	0.025		0.025	
13-2	Indeno(1,2,3-cd)pyrene	µg/L	ND	0.1		0.1	
13-2	m,p-Xylene	µg/L	ND	2		2	
13-2	Methoxychlor	µg/L	ND	0.25		0.25	
13-2	Methyl tert-butyl ether	µg/L	ND	1		1	
13-2	Methylene chloride	µg/L	ND	5		5	
13-2	Naphthalene	µg/L	ND	0.1		0.1	
13-2	o-Xylene	µg/L	ND	1		1	
13-2	Phenanthrene	µg/L	ND	0.1		0.1	
13-2	Pyrene	µg/L	ND	0.1		0.1	
13-2	Styrene	µg/L	ND	1		1	
13-2	Tetrachloroethene	µg/L	ND	1		1	
13-2	Toluene	µg/L	ND	1		1	
13-2	Total Xylenes	µg/L	ND	2		2	
13-2	Toxaphene	µg/L	ND	0.2		0.2	
13-2	trans-1,2-Dichloroethene	µg/L	ND	1		1	
13-2	trans-1,3-Dichloropropene	µg/L	ND	1		1	
13-2	Trichloroethene	µg/L	ND	1		1	
13-2	Trichlorofluoromethane	µg/L	ND	1		1	
13-2	Vinyl chloride	µg/L	ND	1		1	

TECHNICAL SERVICES AGREEMENT between the
DES PLAINES RIVER WATERSHED WORKGROUP
and
SUBURBAN LABORATORIES, INC. for
WATER CHEMISTRY MONITORING

This is an agreement (Agreement) by and between the DES PLAINES RIVER WATERSHED WORKGROUP, 500 West Winchester Road, Libertyville, Illinois 60048 (DRWW) and SUBURBAN LABORATORIES 1950 S Batavia Avenue, Geneva, IL 60134 (Subcontractor).

PURPOSE

The DRWW wishes to engage the Subcontractor to provide technical services to assist the DRWW in conducting water chemistry monitoring in the Des Plaines River watershed located in central Lake County, Illinois. The water chemistry monitoring will satisfactorily collect and process water column chemistry monitoring samples within the service area. The group has selected approximately 44 sampling locations within the Des Plaines River watershed in Lake County, Illinois.

SERVICES

The Subcontractor will conduct water column chemistry sampling by collecting samples, analyzing the samples collected, and providing the data to the DRWW based on the approve DRWW Quality Assurance Project Plan. The Scope of Services to be provided by the Subcontractor to accomplish the DRWW's objectives for the water column chemistry monitoring is set forth in Attachment A, Suburban Laboratories Quote.

COMPENSATION

1. The Subcontractor agrees to perform the Scope of Services and furnish the items included in the Scope of Services for a fee (Agreement Amount) not to exceed $66,508 according to the rates in the Project Budget Attachment B.

2. The DRWW agrees to pay the Subcontractor for a total project cost not to exceed $66,508 using the compensation schedule identified in Attachment B. The final ten percent of the Agreement Amount shall be retained by the DRWW until the project is successfully completed and all deliverables have been received and approved.

3. The Subcontractor shall furnish the DRWW with an itemized invoice on a monthly basis. Invoices shall describe the work completed; show the actual number hours worked by team member; and actual travel and other expenses that have occurred. Payments by the DRWW shall be made within 60 days of receipt of the invoice from the Subcontractor.

SCHEDULE AND DELIVERABLES

All sampling shall be completed by March 30, 2016. The project, including all reporting, shall be completed by April 15, 2016 and proceed according to the schedule details outlined and as follows. Generally, sampling will be conducted at all sites within one week per month and approximately the same week every month.

Sampling Schedule

- July 2015
- August 2015
- September 2015
- November 2015
- March 2016

Project Deliverables:

- Monthly reports including electronic data deliverables (EDDs) and the sample results in an editable Microsoft Excel file.
- A final report consisting of a pdf file of all analytical results, analytical methods, chain(s) of custody, and a field log. Any sampling or testing observations which may have affected accuracy will be noted in the report narrative. Any applicable data qualifiers (e.g., matrix spike failure) will also be noted in the project specific comments portion of the report narrative page.

TERMS and CONDITIONS

1. The DRWW may, by written Order, make changes in the scope of work if such changes are within the general scope of the Agreement. If such changes cause an increase or decrease in the Subcontractor's cost or the time required to complete the project, the parties hereto shall agree to an adjustment in the Agreement Amount, prior to issuance of the Change Order. Adjustment of the Agreement Amount shall be based on the estimated change in the number of staff hours required plus any changes in the Subcontractor's expense. The Subcontractor will not be compensated for additional services performed without an approved Change Order.

2. The DRWW may at any time terminate this Agreement in whole or in part by ten day written or telegraphic notice or verbal notice confirmed in writing. Upon termination for convenience of the DRWW, the DRWW will assume responsibility for services rendered and costs incurred prior to notification. Any and all services, property, publications or materials provided during or resulting from the Subcontractor shall be the property of the DRWW.

3. This Agreement shall be governed by and construed according to the laws of the State of Illinois.

4. The Subcontractor agrees to comply with the Conditions/Certifications outlined in Lake County Stormwater Management Commission's (SMC's) grant agreement #3191506 with the Illinois Environmental Protection Agency. The Certifications/Conditions are provided in Attachment C. Please note that "Recipient" refers to SMC, not the Subcontractor.

Paap/Hey Outline - Establishing a Water Quality [Trading] Market

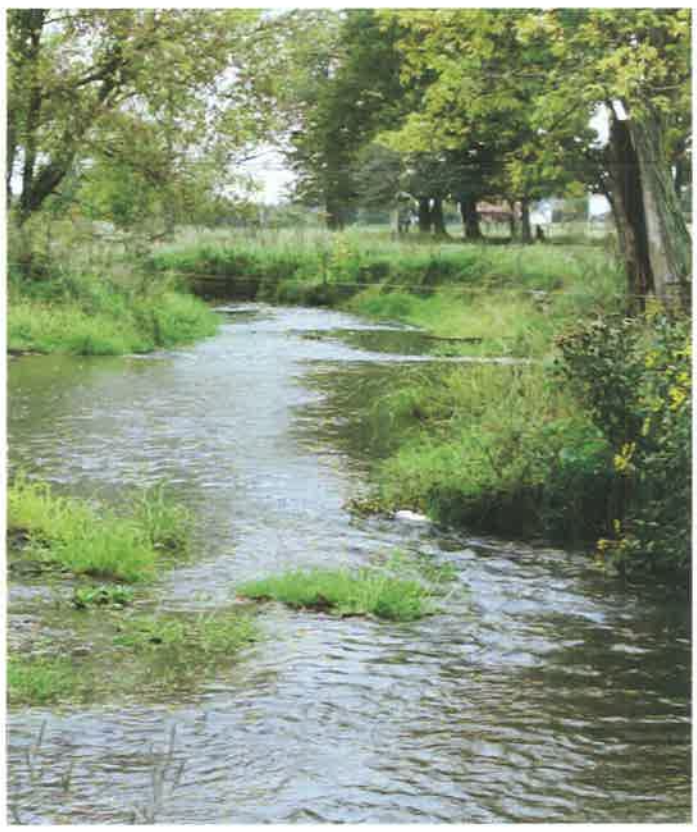
1. Codify construction, operation and maintenance practices
    a. Establish market constituents
        i. Nitrogen
        ii. Phosphorous
        iii. Carbon
        iv. Suspended solids
        v. Dissolved solids
        vi. Pharmaceuticals
    b. Incorporate wetland mitigation banking
    c. Establish techniques, scale, value and authority of flood easements
    d. Identify regulatory agencies
2. Document financial conditions
    a. Annualized cost of construction and operation
    b. Annualized income from various ecosystem functions
3. Evaluate energy budget
4. Develop constituent advocacy association
    a. Water reclamation districts
    b. Municipalities
    c. Watershed planning and management associations
        i. Des Plaines River Working Group
        ii. Preserve Lake County
    d. Forest Preserve Districts
    e. Professional organizations
        i. Wetlands Initiative
        ii. Society of Wetland Managers
        iii. Society of Floodplain Managers
        iv. American Society of Civil Engineers
        v. American Society of Chemical Engineers
    f. Environmental organization
        i. Environment Illinois
        ii. The Nature Conservancy
        iii. Prairie Rivers Network
    g. Possible Individuals
        i. Kathy Ryg
        ii. Albert Ettinger
        iii. Kristy Kovarik
5. Establish political and legal support
    a. Illinois congressional (senators and representatives) endorsement
    b. Gubernatorial endorsement
    c. Enabling legislation (for profit and non-for profit)
6. Appeal to the IEPA
7. Appeal to the Pollution Control Board
8. Establish regulatory oversight
    a. USDA
    b. Illinois Department of Agriculture
    c. Army Corps of Engineers
    d. Illinois Natural History Survey
    e. Illinois Water Survey
    f. IEPA
    g. UDEPA
    h. USFWL
9. Present example contract for purchase and sale of credits

American Farmland Trust

AMERICAN FARMLAND

INSIDE THIS ISSUE

Water Defenders • Jen Filipiak • Save The Bees • How Water Quality Trading Works



LEFT: *A stream on the Ohio farm of Ken Merrick.* RIGHT: *(Left to right) Bret, Elton and Dale Lowmiller, participants in the pioneering Ohio River Basin water quality trading program.*

Water Defenders

A new water quality trading program—the first of its kind in the nation—is helping farmers protect the rivers and streams of the Ohio River Basin.

Elton Lowmiller knew there was a problem that needed fixing on his family's northeastern Ohio dairy farm. When it rained hard, water flowed through the farm's barnyard, carrying cow manure and wastewater from the milkhouse down a hill toward a small stream.

"I was hunting with my cousin one time. He said, 'You know, I've never seen the dogs drink out of that stream,'" Elton recalls. "That was on my mind. I knew we needed to do something."

The potential pollution of the nearby stream, which drains into the Tuscarawas River, weighed on Elton, his brother Bret and father Dale. The three men work together on Lowmiller Farms, milking 130 cows. They had implemented many other conservation practices on their farm, including measures to protect against soil erosion. But it was tough to find the money they needed to redirect the flow of water through their farm.

The Lowmillers—along with other family farmers in Ohio, Kentucky and Indiana—recently found the help they needed to make farm conservation improvements through an award-winning pilot program underway in the Ohio River Basin.

There, the Electric Power Research Institute (EPRI), American Farmland Trust and other partners recently established the nation's first interstate water quality trading market, which allows industries to purchase water quality "credits" from farmers in the watershed. In turn, farmers use the funds to pay for conservation practices that reduce the amount of fertilizer running off their fields and barnyards.

The Lowmillers—working with their local soil and water conservation district—used the funding from the water quality trading program to build a catch basin where barnyard and milkhouse waste is contained and pumped into a lagoon. They established grass waterways to filter water before it reaches the stream, and put in a "heavy-use pad" that helps them keep the barnyard clean.

"The stream is a lot cleaner now," says Elton. "And the project really made our operation a lot easier."

In the first year of the pilot program, 29 farms made improvements that kept an estimated 12,000 pounds of nitrogen and 3,800 pounds of phosphorus out of the Ohio River.

WATER DEFENDERS, *continued on page 4*

> "This program is unique in that it gets out to the small farmers. You can make a big difference that way."
>
> —KEN MERRICK, beef farmer, East Rochester, Ohio

HOW WATER QUALITY TRADING WORKS

A farmer implements a conservation practice that reduces soil erosion and nutrient runoff, generating a financial credit. Possible practices include cover crops, grass waterways, conservation tillage and fencing of livestock from waterways.

A buyer (for instance a municipal wastewater facility that operates under a permit limiting their discharge into a stream) purchases these water quality improvements, or credits, from farmers. The buyer might be doing so to meet their permit requirements, or to improve their overall sustainability.

The entire watershed benefits: the transaction compensates the farmers for the costs of their conservation practices while improving the overall health of the environment.

FROM THE LEADERSHIP

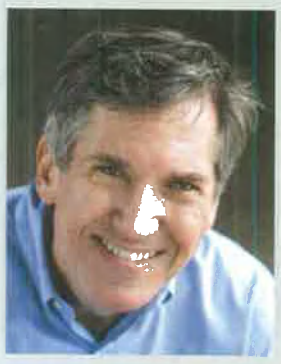
Winter now blankets our farms and ranches with snow in many parts of the country, where fields lie fallow until spring. But it is not a time of rest for many of the nation's family farmers and ranchers. After the holiday celebrations subside, the new year brings much planning for the months ahead.

Farmers and ranchers use the winter season to crunch numbers and plan budgets, get equipment ready for spring, purchase seed, attend agricultural meetings and workshops, market their products, and tackle chores like hauling grain or feeding livestock.

Here at American Farmland Trust, we're busy this winter too, reviewing our successes in 2015 and setting our sights on our carefully considered priorities for the coming year. Several successes from 2015 have made me especially proud of our hardworking staff at AFT—and of you, our members, for your support that made those and other successes possible.

In 2015, AFT made great strides in protecting our precious land, soil, water and family farmers and ranchers:

- Our project with Electric Power Research Institute to establish the nation's first interstate water quality trading market in the Ohio River Basin was awarded the 2015 United States Water Prize by the U.S. Water Alliance.
- We expanded our national outreach program to women landowners in Maryland and Virginia. So far, our Conservation Learning Circles have taught over 300 women landowners about conservation techniques on their farms.
- In California, AFT drafted and co-sponsored legislation creating the new Sustainable Agricultural Land Conservation Program, which will fund farmland protection using revenue from the state's Global Warming Solutions Act.
- Thanks to efforts by AFT's New York office, the New York state budget included record levels of funding for farmland protection—including $15 million for New York's Farmland Protection Program and $20 million for the protection of Hudson Valley farmland.



- AFT's staff in Washington state worked with local partners to achieve the highest state funding for farmland protection ever—$14 million, nearly double the previous year's amount.
- AFT's Working Lands Alliance in Connecticut restored over $35 million in Community Investment Act funding for farmland preservation, farm viability and open space projects.

In 2016, we will continue our work to pioneer the cutting-edge conservation that AFT is known for—and that we have spent decades refining. In the coming year, we will advance our mission to protect farmland, promote environmentally sound farming practices, and keep farmers on the land through a proven mix of programs to:

- **ADVOCATE:** *AFT will continue to be the voice for family farmers.* We will lead the fight to restore state farmland protection funding to pre-recession levels across the country. In states like Maryland, New York, California and other hotspots around the country, we have a strong network of activists ready to take action to protect some of the nation's most threatened family farms.
- **INVESTIGATE:** *The State of America's Farmland.* In the year ahead, we will complete the first phase of our ambitious and comprehensive national initiative to document the emerging threats to U.S. farm and ranch land, and to identify solutions that reverse these dangerous challenges. This authoritative and once-a-generation assessment will ignite a new conversation on the future viability of America's agricultural resources.
- **EDUCATE:** *Cultivating next generation farmers.* Resources that help new farmers get access to land are sorely lacking. We are literally "writing the book" on how to help first-time farmers get access to land by developing a comprehensive curriculum to train land transition facilitators. Using this resource, we will launch a national network of trainers and service providers to help more first-time farmers start fulfilling careers in agriculture.
- **INNOVATE:** *Growing Food Connections.* We are strengthening local food systems from the ground up in eight communities across the country. These communities are proving grounds for new programs and policies that alleviate hunger while promoting a vibrant future for family farms.
- **COLLABORATE:** *Promoting healthy soil and safeguarding water quality.* By working directly with farmers, we are helping them improve the health of some of the most threatened waterways in America. And by connecting landowners to the right resources, we are protecting the precious soil that is the foundation of the food that feeds us all.

As our partners in the ongoing fight to save the nation's farm and ranch land, we could not do this work without you. Thanks so much for your dedication and support.

Buzz Thompson
Board Chair

AFT VOICES

Jen Filipiak, Associate Midwest Director

Iowa is the birthplace of Aldo Leopold, the famed ecologist and wildlife biologist known as a founder of the modern conservation movement. His landmark 1949 book *A Sand County Almanac* advocated Leopold's concept of a "land ethic"—a responsible relationship between people and the land.

When AFT's Associate Midwest Director Jen Filipiak moved to Iowa for a job with The Nature Conservancy in 2007, she learned firsthand about the intimate connection between farmers and their land.

"When I moved to Iowa, I was surprised at how strong the land ethic was," Jen says. "Farmers were really exhibiting Leopold's land ethic. They have an emotional connection to the land, and they want to be good stewards of the land."

Jen had spent much of her childhood in the urban and suburban environs of Chicago. "I was a typical city kid that didn't really understand what farming was all about," she says. But with a bow-hunter for a father, she spent a lot of time in the woods searching for antler sheds, bird-watching and examining animal tracks.

"I learned at an early age about ecology and wildlife and natural resources," she says. With degrees in biology and wildlife ecology, Jen's conservation career eventually brought her to Iowa—a state where over 85 percent of the land is in farming.

"That's where my agricultural education came from," she says. "I was impressed by how complex farming is, and how tightly woven farming is to family and community. I knew when I left Iowa that I wanted to keep working on conservation issues with the agricultural community. I have a lot of optimism about farmers as conservation partners."

Since joining AFT in 2013, Jen has brought her optimism to Illinois and Indiana, where she works with farmers on projects that rebuild soil health and improve farm environmental performance.

She leads a new program in Illinois that is training a cadre of soil ambassadors who can reach out to farmers with the latest information about farming practices that support the living world of healthy soil.

In Illinois she also oversees major water quality projects in two agricultural watersheds—the Vermilion River Headwaters and Upper Macoupin Creek—that have been

JEN FILIPIAK, *continued on page 4*

Save the Bees

A NEW AFT PROJECT HELPS FARMERS PROTECT THE POLLINATING INSECTS THAT WE ALL DEPEND ON.

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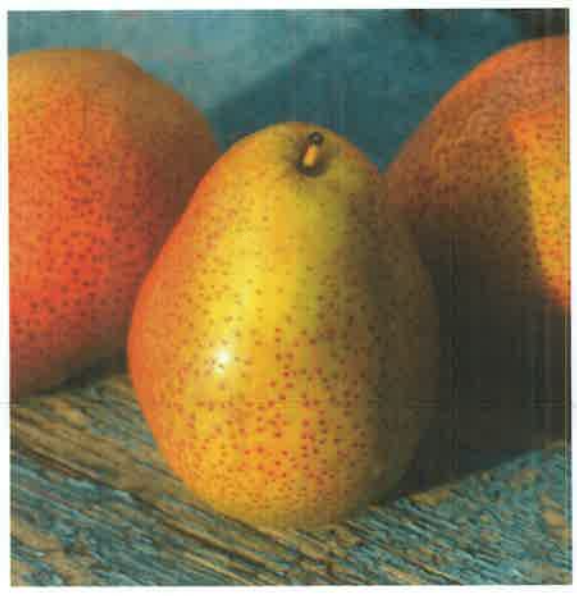


NORMA JEAN GARGASZ/ALAMY

DERRELL MCCAIN/ALAMY

One-third of the world's crops depend on pollinators, including these onions in Idaho (LEFT), *pears* (CENTER), *and almonds in California's Central Valley* (RIGHT).

We need bees to survive. Without them, we would not be able to produce many foods vital to our health and wellbeing—including berries, fruits, vegetables, almonds and other tree nuts. Virtually *one in every three bites of food the we eat comes from crops pollinated by bees.*

But we've all seen the headlines about how bees and other insect pollinators are in trouble. According to the U.S. Department of Agriculture, the total number of managed honey bee colonies in the U.S. decreased from five million in the 1940s to only 2.5 million today. What's causing the decline? Scientists have yet to determine the cause for sure, but studies point to multiple factors, including climate change, pesticides, disease and habitat loss.

A new project by American Farmland Trust is enlisting conserved farms in the fight to help save bees and other pollinators. With a Conservation Innovation Grant from the U.S. Department of Agriculture's Natural Resources Conservation Service, we will be working to establish an innovative program in Michigan that supports farmers who provide pollinator habitat on protected land.

Farms can help native bees by enhancing and protecting the flowering plants and nest sites that pollinators feed on year-round. Other conservation practices that help bees include minimizing tillage, reducing the use of pesticides and protecting natural areas around farms. The AFT program will help farms pay for the cost of such practices by allowing them to achieve "pollinator credits" that can be sold to businesses around Michigan that depend on bees, such as food companies.

"A majority of the crops in Michigan are dependent on pollinators," says Brian Brandt, AFT's director of Agricultural Conservation Innovations. "But we have lost the varied habitat for honeybees that we used to have. We need to get more pollinator habitat back in the landscape."

Participating farms will plant selected species that improve pollinator habitat. The program targets farms that have protected their land with conservation easements, or will do so in the future. "I'm hoping we can eventually expand the program to other areas," says Brandt. "At AFT, we're always asking, 'How do we find innovative ways to bring new funding into agriculture to support conservation?' This is one solution."

NEWS FROM AROUND THE COUNTRY

AFT's **FARMLAND INFORMATION CENTER**, with support from Farm Credit, unveiled free online resources (at www.farmlandinfo.org/beginningfarmers) to help beginning farmers with two of their biggest challenges: finding affordable land and accessing start-up capital.

Roger Rohrer, an organic poultry farmer in Lancaster, Pennsylvania, was awarded AFT's **PENNSYLVANIA FARMLAND PRESERVATION LOCAL HEROES AWARD** for his dedication to environmental stewardship and farmland protection.

AFT's **OHIO RIVER BASIN WATER QUALITY TRADING PROJECT**, a partnership with Electric Power Research Institute (see cover story), was awarded $2 million in public and private funding to expand the scope of the project to improve water quality and reduce greenhouse gases.

The U.S. Department of Agriculture released $350 million in critically needed funding for the **AGRICULTURAL CONSERVATION EASEMENT PROGRAM** (ACEP), in a move applauded by AFT. The popular program protects the nation's farmland, ranchland and wetlands.

AFT's Pacific Northwest Office embarked on a listening tour of **OREGON**, meeting with farmers, ranchers and supporters to find out how AFT can help the many communities that are deeply committed to protecting farmland. Read the recap on our blog: www.farmland.org/blog.

KEVIN SHIELDS/ALAMY

A new grant awarded to AFT from the U.S. Department of Agriculture's Beginning Farmer and Rancher Development Program will jumpstart a nationwide **FARMLAND FOR THE NEXT GENERATION** initiative to help beginning farmers and ranchers secure land and succeed in agriculture.

AFT and other members of the **MAINE FOOD FOR THE UMAINE SYSTEM**—a coalition working to build a stronger and more resilient food system in the state—successfully persuaded the University of Maine to source at least 20 percent of its food service from local farms.

At a sold-out **HARVESTING OPPORTUNITIES CONFERENCE** in November, AFT's New York Office challenged farmers, public officials and concerned citizens to think big about how they can help the next generation of farmers and protect farmland.

AFT's Executive Director of Programs John Larson took to the airwaves urging Congress to reauthorize and fully fund the **LAND AND WATER CONSERVATION FUND**, which protects land for parks as well as helping to conserve our nation's dwindling forest and farm land.

A recent grant from the **NORTH CENTRAL REGION SUSTAINABLE AGRICULTURE RESEARCH AND EDUCATION PROGRAM** (SARE) will allow AFT's Midwest office to train "soil ambassadors" who can bring Illinois farmers the latest science on building healthy soils and protecting water quality.

AFT's Deputy State Director for California, Virginia Jameson, delivered comments at the state's Strategic Growth Council in support of $40 million in funding for the **SUSTAINABLE AG LANDS CONSERVATION** (SALC) Program—the first program in the country that links the protection of agricultural lands to climate change mitigation.

For regular updates about our work around the country, please like American Farmland Trust on Facebook (www.facebook.com/AmericanFarmland)!

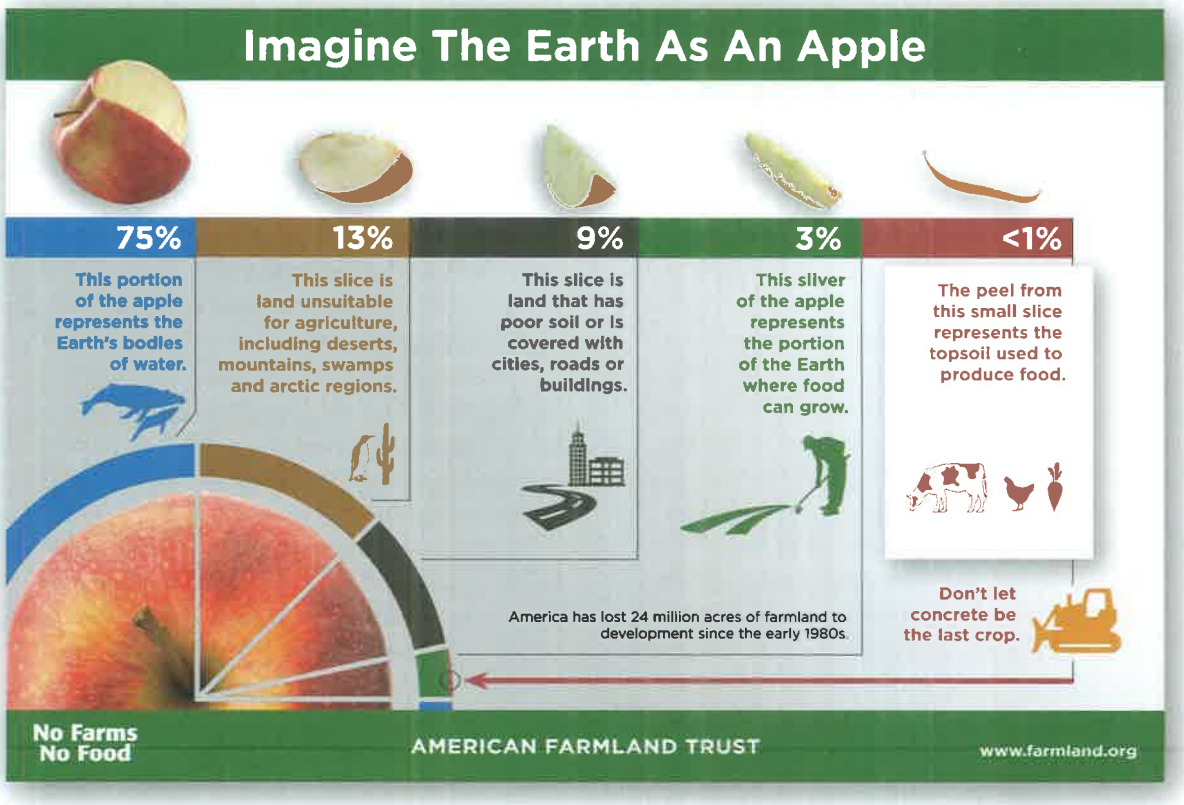
WAYS TO GIVE

We rely on the generosity of our members, who care about protecting the nation's farms for future generations. Your generous support helps us save the land and promote a healthy environment. Here are a few ways you can help…

- **Give online.** It is easier than ever to support our critical work and mission. Visit www.farmland.org/donate to make a gift using your credit or debit card. It's quick, secure and hassle free!
- **Give a gift membership.** An AFT membership is a great gift for anyone who loves the land. They'll receive our tote bag and a one-year subscription to *American Farmland.* Call or go online now.
- **Contribute appreciated securities.** Giving a gift of stock is simple! Transfer stock to AFT to avoid capital gains tax and take a charitable deduction for the full fair-market value. Call (800) 431-1499 or visit www.farmland.org/farmlandforever.
- **Include American Farmland Trust in your estate plans.** Join the Farmland Forever Society by remembering AFT in your will and estate plans. Your legacy contribution will help save America's farm and ranch land for generations to come. Call (800) 431-1499 for more information.

  If you decide to include AFT in your will, please be sure to use the following language in your documentation: American Farmland Trust (Tax ID #52-1190211), a nonprofit 501(c)3 with its principal office located at 1150 Connecticut Ave NW, Suite 600, Washington, DC, 20036.
- **Join Our Friends of Family Farmers.** Our monthly giving club is the simplest, most cost-effective way to help save farm and ranch land. Just pledge to give automatically in affordable monthly installments using your credit or debit card. Call (800) 431-1499 or go to www.farmland.org/Newsletter now to sign up.

If you have questions about how you can support American Farmland Trust, please visit www.farmland.org or call (800) 431-1499.



JEN FILIPIAK, *continued from page 2*

identified as priorities for reducing pollution in the Mississippi River Basin and, ultimately, the Gulf of Mexico.

With the watershed projects, the goal is to build a coalition within the local farming community to work on the problem of nutrient loss together—primarily by helping farmers improve soil health so that nutrients in their soil are less likely to wash away.

"We're not just working with farmers, we're also including their advisors, agricultural retailers, non-farming agricultural landowners and farm managers to work on these solutions," she says. "Farming is complex, and we need everyone at the table."

Jen also coordinates Conservation Learning Circles in the Midwest, which bring together women agricultural landowners in small groups where they can talk with agricultural professionals. "Women who own farmland but don't farm themselves don't always know that there are conservation programs available to them," Jen says. "They get very excited."

In morning sessions, the women talk about conservation and agriculture—especially soil health—and then in the afternoon they visit farms where they can see conservation practices firsthand.

"We say all farming is necessary, and all farming can do better," Jen says of the environmental ethos that arises from the meetings—and is the driver behind all of her work.

"The project made a great big difference in the farm and my life. You can see the difference in the cattle and how much better they look. I'm really grateful."

—CLARA BETH CLAXON,
beef farmer,
Grayson, Kentucky

WATER DEFENDERS, *continued from page 1*

Nitrogen and phosphorus are nutrients that help plants grow on farms but can cause problems in aquatic environments. In the Ohio River, nutrients from farms and other sources like power plants and leaky sewers contributed to a dangerous outbreak of toxic algae last summer that impacted nearly two-thirds of the river.

The Ohio River flows into the Mississippi River and eventually into the Gulf of Mexico, where nutrient runoff from agriculture and other human activities has led to a massive "dead zone" where a lack of oxygen threatens marine life. That's why innovative solutions to reduce nutrients in the Mississippi River and its tributaries are greatly needed.

"AFT and our partners think we've found part of the solution in the Ohio River Basin Trading Project. At full scale, this program could have a significant positive impact on the water quality and health of the watershed," says Brian Brandt, AFT's director of Agricultural Conservation Innovations, who oversees AFT's participation in the program.

Leading water quality experts agree. In 2015, the U.S. Water Alliance awarded the project the U.S. Water Prize for "outstanding achievement in the advancement of sustainable solutions to national water challenges."

For Elton, Bret and Dale, the project was nothing but positive, helping them improve their operation and fulfill their desire to be good environmental stewards. "You've got to take care of the ground," says Bret. "That's what feeds us. If you take care of the land, it will take care of you."

For more information on water quality trading, visit www.farmland.org/WQT.