Report on 2016 Great Lakes Restoration Conference Sandusky, Ohio Sept. 21, 2016

Panel discussion with Verna Harrison (co-founder of the Chesapeake Bay Funders Network, Ass't. Sec. of the MD DNR under three MD governors), Bobby Whitescarver (VA cattle farmer, environmental consultant and watershed restoration specialist), Jeff Corbin (environmental restoration consultant, former U.S. EPA official), and Cassandra Pallai (Geospatial project manager for Chesapeake Conservancy), Moderated by Carol Contrada, Lucas Co. Commissioner

Contrada started by asking the panelists to hold this question in mind: would you recommend a TMDL for the Western Basin of Lake Erie, and if not, why?

Verna Harrison:

"One of the things that is different in the Chesapeake region is we have very, very specific allocations of the amount of pollution and where it comes from." So the difference between our 40% (reduction goal) and yours is the ability to decide what needs to be done if the water quality isn't returning.

We thought this was going to be easy in 1983 when we started. In 2000, we finally said 'OK, if we don't reach our 40% goal – and remember, it's very specifically allocated – we will do a TMDL. In the meantime we had already done state-required impairment designations and water quality criteria. That was never an issue; never an argument in our region. It was just fact. You did these things.

So by the time 2010 came, we recognized that we hadn't moved the ball forward and EPA released the TMDLs. It was not that much horror as we'll hear from Jeff.

But also, in 2008 there was a nudge, the use of litigation, to move the EPA forward. It was joined by (various) environmental groups. It was ultimately settled with EPA, they didn't even take it to court.

There are many, many benefits of the TMDLs. Here's one from just last week, Ag. Secretary Vilsac stated that we have the largest Federal funding for conservation practices restoration in the U.S., in our region.

Jeff Corbin

"I'm not here to tell you to do a watershed-wide TMDL. You certainly can. What I want to tell you is why it's working in the Chesapeake and why it took us so long to get there. And why I think it's going to work. It will work. We've got the pieces in place to make sure it works."

"Lot of similarities between your area and the Chesapeake (multiple states etc). You have target reductions (40% eg); we've had a plethora of target reductions over the decades. You have "domestic action plans" we had many, many rounds of what we called "tributary strategies." We had a very detailed consultation process—you're going to need one. We had a very detailed allocation process – you're going to need one. You have a voluntary commitment; we had stacks and stacks of voluntary commitments."

"40 years we've been at this in the Chesapeake, under a voluntary approach. We had the highest levels of political support. We had governors, mayors, EPA administrators, support from the White House, over decades. We had world-class data. I'd say the Chesapeake is probably the best-studied body of water on the planet. We have incredible modeling tools. We have high-level voluntary agreements dating back to 1983, '87, '92, 2000, and 2014. We had all those things going for us and we made it about half-way...over 40 years."

"I think it was because we didn't know exactly what the end-point was, so we set goals...and we didn't quite make it to the goals, so we set another goal, we had an agreement, we didn't make that goal...etc. We kind a lost some of our sense of urgency because of that."

A TMDL doesn't do that. A TMDL tells you what your ultimate goal is. So you need to determine if you want interim goals or do you want to take a TMDL approach that actually gets you to Clean Water Act-defined clean water.

We knew the TMDL was coming. We didn't want to do the TMDL. The EPA didn't want to do the TMDL. None of the states wanted to. The goal was to avoid doing the TMDL for 40 years. That's a pretty good reason to make voluntary agreements work, if you think a TMDL is a scary thing.

"In the Chesapeake 2000 agreement, the main water quality goal was to reduce N, P and sediment enough to de-list the Bay and the rivers and avoid doing a TMDL. And after 25 years leading up to that 2000 agreement, we gave ourselves another decade – and we still didn't get there."

So how is the Chesapeake TMDL different? TMDLs can look a lot different depending on how they're done. In the Chesapeake, here's what it brought.

"It brought accountability. It brought assurance that you're going to get these reductions, with a detailed structure in place to make sure that happens. And part of it is step-wise progress. This is where political leadership came in. It was irreplaceable. You've got to have political leadership if you're going to take on a region-wide TMDL."

And it wasn't just liberal environmentally-leaning Democrats (bipartisan, R' governor – do it so we don't have to do a TMDLs) and my boss, Tim Kane, gov. of VA, he was the chair of the executive council (governors, EPA administrator, DC mayor) and he stood up at one of our annual meetings and said, "I'm not agreeing to any more 10-year agreements. I'm not agreeing to anything today that two governors down the road are going to be responsible for implementing."

"So we picked a process that put us on two-year milestones. Give me two-year chunks to get from where you are now to a TMDL, that way a governor and other leaders can coordinate it with a two-year budget, a two-year legislative plan. And EPA evaluates those two-year milestones. They're going through it right now. Is that plan enough to keep you on track and at the end of two years did you do what you said you're going to do?"

The ultimate date for the TMDL was 2025, the mid-point was 2017. It's an incredibly transparent process – you want to know what any federal agency or state agency is doing, or what agriculture is doing, it's there. You can track the progress on our Chesapeake Bay Program website.

The last part, the big scary part, are these federal backstops that the EPA could take. It's key to the accountability and the assurance that if a state falls behind, if a sector (like ag) falls behind, there

are things EPA can do - and has done already - to step in and make sure we get on track. These are not new statutes, they're not new regulations. They're things we can do under our permitting authority, things we can do with the funds we have available.

Probably the scariest thing under the Chesapeake TMDL, if a state falls behind or a sector falls behind, which is happening in PA, then we can figure out where those reductions need to come from. If you can't give us a plan that shows us where you're going to get those reductions, then you've got to get them from somewhere else.

"So that means you're going to go back to regulated sources – agriculture or wastewater or industry. Is that fair, if those sectors have already gotten their reductions? No. but it is a process that could kick in. And that puts the pressure on making sure you get those reductions in all the various sectors."

"So we have to stop this fear of the TMDL, where it's some Cyclops coming in from outer space that's going to make farmers go out of business, going to make sure there'll be no more new development, stymie economic growth...it's none of those things. But that's what you hear."

I wish I had an hour to talk about what TMDLs can do for you...but basically, what it does, it assigns responsibility. It allows for an equitable allocation process. It shows you where the end zone is. I kept hearing from agriculture for 20 years, "no more voluntary agreements. No more targets. Stop changing the targets. Stop moving the end zone. Tell me where I got to get to and then give me some time and give me some flexibility. Ironically, because agriculture was one of the sectors that sued us over the TMDLs, that's just what TMDLs do – it sets the end point and then gives you time and flexibility to get there.

Finally, we were never able to talk about the benefits of a TMDL. You heard all the time about the perceived economic damage – what's gonna happen to agriculture; what's gonna happen to municipalities? None of it really documented, but that's what dominated the conversation. One documented economic study was done, less than two years ago. Wish it would've happened 20 years ago. Forget the fact that if you have polluted water you're going to stifle the economy. But with TMDLs you get \$25 billion additional in economic growth in the Bay states and tons and tons of jobs to make sure the implementation occurs. So there's one – one documented economic study out there and it shows huge economic benefits not adverse impacts.

http://www.chesapeakebay.net/blog/post/bay_foundation_estimates_economic_benefits_of_a_restor ed_chesapeake

So my conclusion is simple. As you move forward, there's so much we can translate from our experience. I would say we're 20 years ahead of where you are now. With all these similarities, learn from what we did. Learn from what we didn't do. If you choose this mission, you've got to eliminate the fear. You have to do this early on. Eliminate the fear, the misinformation and the perceived losses and focus on the benefits.

Bobby Whitescarver

I'm from Swoope, Virginia, in the Shenandoah Valley. I'm a beef cattle farmer. We have a TMDL that goes right through one of our farms. This is Middle River. It's a TMDL for both e.coli and sediment and it's been an impaired stream since 1994.

Of course, when we started the TMDL process back then, the farmers were saying, "Oh, it's not us. It's not us." And the state did bacteria source tracking that proved that 94% of the e.coli in Middle River comes from cattle.

Now, because we're a TMDL, we're seeing increased funding to all kinds of BMP (Best Management Practices) installations. It's still a voluntary thing and we're not finished. This picture was taken just two years ago; you can see how brown the water is. You wouldn't want to put your kid in there to wade. If they went in there and put their fingers in their mouths they'd get sick.

What did the TMDL do for us?

It brought in a lot of money to help farmers implement BMPs and that money employed a lot of contractors – fencing contractors, excavation companies to put in watering troughs and pipelines for watering systems, tree planters...so it employed a lot of people.

At least for the farmers who did this, it made us proud that we not only produced food, we produced clean water. We're proud of that.

We're not done yet. But one day, in that stream right there, we're gonna put brook trout in it! That's our canary in the mine. We've done that in some watersheds in the Chesapeake Bay. We have done it all...they are off the impaired waters list.

Now, I retired from NRCS (Natural Resource Conservation Service, USDA) in 2011. I worked with thousands of farmers in Virginia and throughout the Bay. We worked with farmers to put in cover crops...and by the way, in Virginia about 90% of our row crops have cover crops. Now what is it around here? I've got farm friends up here...2% maybe, 5%. You got a long way to go.

Cover crops are a pretty simple practice. I've never had a single farmer tell me they regretted improving their soil and improving their water. I often heard them say, "I wish we'd done it sooner." That's what you're gonna hear.

Now I'm a writer. Got a little blog goin', and I remember reading an article from the Prairie Farmer Magazine. Never heard of it. Somebody sent me the article. It was about the Illinois Soybean Association sending a bunch of soybean growers to the Chesapeake Bay to find out what was goin' on.

Well, they came and they went to some farms and the writer said, this is a quote out of the magazine, "The Illinois farmers were spooked by the extensive required nutrient management records on all the fields, the equally extensive Best Mgt. Practices needed and the educational and regulatory oversight requirements."

Well, I wanted to find out where they went, so I googled the farm, looked 'em up. I called the farmer up, out on the Delmarva Peninsula. Didn't know him. Told him who I was. I read him the quote. Talked about it. He said, "Bobby, we're proud of what we're doin'. That reporter got it wrong."

I graduated from Virginia Tech in 1979, in agronomy. And I needed a job. So Funk's Hybrid Seed Corn in Worthington, Illinois wanted to interview me. So they flew me up there and we drove around looking at their corn and soybeans and they asked me a bunch of questions. And I looked at

the ditches. And they were full of soil. And I asked 'em this question, I said, "What's up with all the soil in these ditches?"

He said, "We don't care about soil erosion because our soils are six feet deep."

"Well, that's the problem. Not that your soil is six feet deep, but your ditches are full of soil, that's one of your problems here and cover crops can fix that."

So 37 years later I went back and there's still soil in those ditches. And I talked to the commissioner and said, "Ya'll have to pay to get this soil out of your ditches. And I think it's a pretty big budget.

One thing that I want to...a lesson I want to be sure and bring out and that's with nutrient management.

We built billion-dollar bureaucracies over nutrient management. We put so much money in delaying the inevitable. We pay the researchers to build these Phosphorus indexes and Phosphorus management tools and all that did was delay the inevitable. I think it was just a bureaucratic and political way to do nothing.

Because the farmers can still apply Phosphorus, even with the Phosphorus index voodoo, up to crop uptake even when their soils are very, very, very high in Phosphorus. Well, nutrient management is pretty simple. If your soil is too high in Phosphorus, you don't apply any more Phosphorus. It's that simple. And that's all I have.

Oh! That's my web site: www.gettingmoreontheground.com

Cassandra Pallai

(Cassandra explained how the Chesapeake Conservancy uses satellite imagery to assist Chesapeake Bay restoration, particularly with NGOs and county governments that don't have money to have GIS specialists on staff.)