



“Envisioning Our Future”

Societal Growth – Part I

(Emphasizing land redevelopment; waste; aging infrastructure)

Session D on Wednesday, April 10, at 9:45 – 11:00 a.m. in Moody Hall, Activities Room
Environment Virginia Symposium 2013

Conveners: Jeffery Steers, DEQ Land Protection and Revitalization Division Director
Harry Gregori, Waste Associates LLC, Chief Compliance Officer
Steven Yob, Henrico County Director of Public Works

Sub-issues suggested by stakeholders in previous interviews with DEQ staff:

- Waste reduction, recycling, reuse, and disposal practices
- Redevelopment of contaminated sites (brownfields & similar)
- Aging infrastructure
 - Electric grid – potential failures have ramifications for energy supply, water and sewer treatment, health & safety, national security
 - Dams, especially related to reservoirs – funding to maintain and repair
 - Funding to repair sewer systems - even when EPA grants funded construction of sewer systems, funding for maintenance and repair is a problem for local governments
 - Inadequate sewer systems – older systems not always constructed to accommodate industrial discharges
 - Roads, highways, bridges – funding and environmental impacts (E&S, for example) related to construction and repair

*If you have further ideas to contribute, please email them to carol.wampler@deq.virginia.gov.
Thank you for contributing to the dialogue on our FUTURE.*

ENVISIONING: SOCIETAL GROWTH I CONVENERS

JEFFERY STEERS

Jeff Steers has nearly 30 years of environmental policy and operational experience in public service.

Prior to joining DEQ, Jeff spent 20 years with the Ohio Environmental Protection Agency working in the Agency's water and waste programs as well as serving as the Assistant Chief of a District Office. He also managed an office for a Midwestern ecological consulting firm.

Jeff holds a Bachelor of Science degree in Civil Engineering from the University of Toledo. He is currently the President of the Association of State and Territorial Waste Management Officials, while also serving as a Board Member of the Virginia Chapter of the Solid Waste Management Association of North America (SWANA).

HARRY E. GREGORI, JR.

Harry Gregori has more than 35 years' experience in professional environmental management positions including Chief Compliance Officer for Waste Associates LLC; faculty of Virginia Tech's Center for Organizational and Technological Advancement, as well as Virginia Commonwealth University, and the University of Virginia; President of Gregori Consulting, LLC; Director the Virginia Hazardous Waste Facility Siting Council; senior management for the Virginia Department of Waste Management and the Virginia Department of Environmental Quality. Harry also served on the Board for Waste Management Facility Operators with the Virginia Department of Professional and Occupational Regulation.

Harry holds a Master of Public Administration from Virginia Commonwealth University; Master of Regional Planning from The Pennsylvania State University; Bachelor of Science, Community Development, from The Pennsylvania State University; and a Certificate as a trained ISO14001 Environmental Management System Lead Auditor. Harry is a veteran having served as an Analyst for the United States Army Security Agency in Berlin, Germany, and South Korea.

STEVEN J. YOB, P.E.

Steven Yob is the Henrico County Director of Public Works. He has over 25 years of experience in environmental programs, construction and development. Prior to the County of Henrico he worked for 17 years for one off the largest public solid waste companies in the U.S.

Steven is a licensed professional engineer in Virginia and a licensed Class II Waste Management Facility operator. He has an MBA from Virginia Tech and has both an MS and a BS in civil engineering from Michigan State University. Steven is also engaged in the following other activities: Chairman of the Commonwealth of Virginia Waste Management Board, Chairman of the County of Henrico Local Emergency Planning Committee, Past President of the Virginia Chapter of the Solid Waste Association of North America.

REPORTER: Tammy Stephenson, Department of Environmental Quality, Program Coordinator, Office of Water Supply

SESSION NOTES:

Carol Wampler welcomed attendees on behalf of DEQ and introduced co-host of the Envisioning track, Tammy Stephenson, as well as the session conveners. She explained that the “Envisioning Our Future” sessions are part of DEQ’s seeking stakeholder input regarding future environmental and energy priorities. The Virginia General Assembly formed DEQ in 1993 by joining four agencies – State Water Control Board, Department of Air Pollution Control, Department of Waste Management, and Council on the Environment, which was responsible for long-range planning. Now, at Environment Virginia, expert conveners will facilitate discussion among attendees to get information on how DEQ and other parties should plan for the next 30-50 years. The session reporter, attorney Andrea Wortzel, will capture comments. Summaries will be posted on DEQ’s and VMI’s websites and will form the basis of white papers to be submitted to DEQ’s Director and the Secretary of Natural Resources.

Convener Jeff Steers asked everyone to introduce themselves.

Mr. Steers gave a presentation on Brownfields and Property Reinvestment (PowerPoint), and made the following points:

Development Stressors (brownfields v greenfields)

Sprawl, Preserving Greenspace, Protecting Water Quality and Ecosystems, Property Values

Brownfields: The U.S. EPA defines brownfields as “abandoned, idled, or under-utilized industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.”

Redeveloping Brownfields (Advantages)

Limits the Stressors of Development, Existing Utilities, Oftentimes brings new or expanded job opportunities in economically challenged areas, Reduces crime and blight, increase in tax base

Managing Risk

Real and perceived risk from contamination, regulatory-driven federal programs under Superfund and RCRA, Alternative voluntary programs that link future property use to appropriate cleanup standards, tools exist to manage risk

Questions

How to we leverage federal/state/local/private funding to promote redevelopment of brownfields?

Development is time sensitive – How can government ensure risk is properly managed with minimal oversight?

Is there value in creating local brownfield corridor inventories in order to remain competitive? How would we do this?

How do stakeholders engage decision makers?

Does it make sense to work with community based organizations in setting local brownfield priorities and strategies?

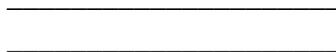
Communication tools that tell a story: Education of local citizenry, state and local officials.

Mr. Steers completed his presentation and opened the floor for comments.

A consultant – Last bullet most important, engaging state and local elected officials, educating the General Assembly on investing money for these programs, which are truly economic development investments. If we can start looking at successful brownfield sites, they can feel more comfortable with more investment.

State agency representative -- said that we should find ways to strengthen state and local government relationships with economic development agencies, including VEDP. Once a prospect is brought to a community, the prospect has generally narrowed down the search for a location to two or three states. They are generally looking for greenfields, but we need to educate them on shovel-ready brownfield sites so they are not the exception, but the rule. The localities would be thrilled to see this turned around. Mr. Steers agreed, adding how important it is to have an inventory of these sites, understanding the risk you need to manage in the future.

An industry representative -- added that we need to find a way to combine the brownfield issue with the storm water issue, so additional problems are being addressed with the cleanup.



Convener Harry Gregori gave a presentation on Virginia solid waste management and highlighted the following points:

Source reduction = resource management paradigm

- *Resource Management – demand for “sustainable” products means changing product inputs and therefore means reducing waste per product and increasing available waste streams for reuse, recycling and energy? Technology changes? Cross Media?*
- *Increases from 2011 to 2050?*

Issues

- *Consumer product demand and retailer/purchaser requirements (Wal-Mart, Pengaton, etc.) look like they will push producers to make products with more sustainable materials and less toxic inputs.*
- *Where do the used technology “units” go when the new next generation units arrive?*
- *What will happen if fuel cost increases significantly – operational costs for collection soar – does this drive different approaches to reuse, recycling, waste to energy and collection/treatment for disposal? Change results in cross media impacts?*
- *Source reduction : >*

*Reuse**

- *New sustainable based by-products create new opportunities for reuse? (compost/mulch?)*
- *Per cent 2011: @3.0*
- *Per cent 2050: >*
**Per cent based on DEQ 2011 Solid Waste Management Report*

Issues

- *More by-products will be reused in production systems increasing profitability and improving environmental impact*

Recycling

- *New sustainable based by-products create new opportunities for recycling?*
- *Per cent 2011: 5.76*
- *Percent 2050: >*

Issues

- *More recycling could take place...will the infrastructure be in place to manage collection, processing and marketing efficiently?*

Energy Recovery

- *Greater movement to capture energy from what is left over, decreased air emissions?*
- *Per cent 2011: 12.7%*
- *Per cent 2050: >*

Issues

- *Cleaner by-products will improve BTU value and reduce air pollution. Will demand for more waste-to-energy operations result?*

Disposal (MSW/C&D 20 year life)

- *Disposal declines because other categories will increase or disposal will continue to increase due to population growth?*
- *Per cent 2011: 74.52*
- *Per cent 2050: < or =*

Issues

- *Disposal may decline slightly or stay even as percent of hierarchy options but will remain a key element in hierarchy due to population growth and will not “go away” as much as some might hope.*

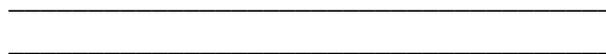
Mr. Steers asked what the role of federal and state government should be in waste reduction.

Mr. Gregori opened the floor to comments.

An attendee – said that you can do a lot with an older building so not a lot goes into the landfill (reuse of bricks, etc.). Reuse, redistribute items so they don’t go into the landfill – how do we promote that? Is there a possibility for this with electronics, e.g. a recycled tablet? Steven Yob responded that there are facilities that recycle electronics, but much of the time, chips are dated, etc. It does cost money to recycle these things, though. Mr. Steers agreed that the economics are difficult to deal with.

Another attendee – said there’s a movement about these types of things not being recyclable. People are thinking strategically about this. He’s learned this more from watching his kids than from his work. Mr. Steers added that the consumers will drive that. Apple may have to change their business model. Mr. Yob added that flat panel TV’s are much easier to recycle than traditional models.

An attendee – said there should be incentives for battery exchange. Build in a fee when you purchase electronics, such as is done with appliances. We could send some things to less fortunate countries. He asked Mr. Steers if there is a problem with loss of control of how these things are ultimately disposed of.



Convener Steve Yob gave a presentation about Infrastructure (Highways, and Dams, and Bridges, Oh My!). He began with an example about infrastructure. There are 64 bridges in Henrico County. He showed a bridge that is failing, which included a wastewater collection line. Regarding nonpoint source pollution, they have a number of stormwater ponds in Henrico County. He said that pollution can neither be deleted nor destroyed. You have to deal with it, and it costs money to do that. With regard to dams, years ago people thought it was a good idea to build dams. DCR changed the dam regulations, and now they’re all required to have permits. Henrico County roads are not a part of VDOT, so the county maintains its own roads. With buses, the rider only pays 20% cost of these, the rest is paid for by the county. There’s a big cost for mass transit that people don’t always realize, as they think about getting cars off the road, etc. Preventing pollution is a costly exercise. There are certainly health benefits, but they aren’t tangible today.

Mr. Yob opened the floor to discussion.

A representative from a state agency -- said she believes infrastructure isn't something that should just be considered jurisdiction to jurisdiction. She gave an example of having to change buses to get to work because she crosses jurisdictional lines. She added that it's an embarrassment that localities can't work together to eliminate these issues. She doesn't understand why the program has to be subsidized by the government, as it is cheaper than owning a vehicle. They need to work with higher levels of government officials to get initial funding to put this into place.

An attendee -- added that regarding the dam question and Dam Safety Act, the statute assumes that a "one size fits all" regulation is appropriate, but isn't really. In Virginia Beach, it is flat, yet they have to meet the same regulations that those in the mountains and valleys do. They spend a lot of money and time in rebuilding dams, etc., to meet the requirements of the statute that don't really apply to them, and it doesn't work.

A local government representative -- said they switched to rubberized sidewalks, as they are cheaper and easier to maintain. He hopes they can do this with more infrastructure.

An attendee -- said that regarding investment in wastewater treatment plants to meet nutrient reduction requirements for Chesapeake Bay. He believes the rate payers in the state do not understand the implications of this. As we move toward nonpoint sources in TMDL, we need to brace ourselves and look at higher costs. Mr. Yob agreed, adding that people need to understand that it's not free.

A state agency representative -- said that Virginia is losing an average of 16,000 acres of forest land a year. We're looking at aging infrastructure along I-81, etc. Need to do something with the aging infrastructure. There's a lot of value in the forest land. It's a natural resource that is falling on the charts. Need to work with other state agencies to try and address this loss. There is a value of the forest to water quality, but it will be lost, needs to be considered by DEQ when major infrastructure reconstruction projects are done. We need to look at collaborative, voluntary mitigation projects. Mr. Yob said the county agreed to plant "x" amount of trees in an agreement with DOF, working to promote the health of the bay. Mr. Steers, hearing a common theme, added that we need to educate people, federal/state/local/citizenry, to try to come up with solutions. How do we keep these issues moving forward when people aren't completely aware of the impacts?

Another attendee -- said he keeps hearing reoccurring theme about infrastructure, which always boils down to money. We can't get money without taxes, can't raise taxes, etc. Take the project

about the sewer pipe that needs to be replaced. Why don't you look at what can be done by a voluntary force that could divert funds to another project? Should there be a national effort to get volunteers on a monthly basis, retired folks, teen-agers? Cutting grass, maintaining parks, etc.? Volunteers can't help rebuild a structure, but could do some other efforts within their own community, maybe freeing up some other money for needed projects/infrastructure. Do it one piece at a time. When we have a disaster, the main resource we have is our people – use it. Mr. Steers said these are the types of ideas we're trying to capture. The more momentum you get in talking about it, the better, building synergy. People could take pride in their community. Mr. Yob mentioned Adopt-A-Highway, Adopt-A-Spot, etc. programs are successful. Litter is a problem.

An engineer -- said they should do a true benefit-cost analysis of best management practices. There are people here from DOC, what is the possibility of putting low-risk prisoners out there to pick up litter, etc. Mr. Yob said they use them for that. It takes a deputy sheriff to watch them, transport them, it's successful.

A local government representative -- said that beyond just inmate work crews are probation assignments, where they don't have to have someone oversee. DOC said someone still has to monitor time, etc.

Mr. Steers wanted to encourage people to talk about the challenges we're facing in the long term.

An attendee from Virginia Beach -- had a question about what happens to a brownfield site when property is owned by federal government (military). Mr. Steers explained how the U.S. Army Corps of Engineers manages the cleanup of the sites, some of which are Superfund sites. Priorities are set for which sites need to be addressed. The Corps is funded by the Department of Defense and others to take the responsibility. There are a lot of inappropriate uses of property. It's a challenging thing we need to address in the long term, but there is a process in place for that.

The citizen added that regarding bridges, one of the challenges in oyster reef restoration is there are no reefs left, but we can use concrete from the old bridges to build new reefs. She asked Henrico County to keep them in mind when they take down those bridges.

An attendee from Northern Virginia -- commented that it would be great if we could have an inventory and data gathering for all these programs, consistent definitions. We need to have something so people know what it is if they encounter it.

An attendee -- added that waste-to-energy facilities take a long time to permit. Small modular units could be better, reducing transport of materials, etc., if permitting could be relaxed. Mr.

Steers said it's hard, particularly from an air permitting standpoint (most air requirements are federally mandated).

Another attendee -- said that brownfield studies take a long time, applying for grant, signing contract, etc. You're still left with developing an inventory, needed to get cooperation of private owners, etc. -- still a lot of big challenges there. Mr. Steers agreed, concern about the uncertainty, projects have stopped because of it.

An attendee -- commented that regarding aging infrastructure, in Chesterfield utilities, they had a rate stabilization fund, which was designed for replacement projects. It tends to stabilize the rates over time. In 20 years they aren't faced with a huge liability. It is a good tool to address aging infrastructure.

An industry representative -- said the state can help promote volunteer activities by publicizing them. If there were some coordinated effort, showing how it saves localities money, it could help. Mr. Steers agreed, adding that a lot of it is about telling a successful story, relating it to something they can think about.

A state agency representative -- said she could see DEQ building a website focused on partnerships that already exist. There might be a simple way to get at that. Mr. Steers said that in the social media discussion, there might be a way to use the younger generation and get the message to them.

Another state agency representative -- said that social media tools are great for the public, but not for the state employees, as we cannot access social media sites. The state IT system should allow everyone to access these sites so we can use them. Mr. Steers said DEQ had the same issue.

An attendee -- added regarding aging infrastructure, if there were a database tracking the age of infrastructure to track when maintenance should be done. Mr. Yob said it's done, but not necessarily publicized.

Another attendee -- said that costs of water, waste disposal, etc., are often far less than paying for cell phone bill. People should understand we need to pay a little bit more to maintain water lines, etc.

Carol Wampler awarded the door prize (Cabell Brand's book) to Roy Covington.