

## **Virginia Natural Resources Leadership Institute (VNRLI) Think Tank Event**

**Environment Virginia Symposium  
Wednesday, April 4, 2018  
Compilation Document**

### **Introduction**

The VNRLI Think Tank was conceived to harness the collective wisdom of program alumni to address pressing natural resource issues in Virginia. The alumni desired a way to be inclusive, effective, and consider different interests and needs. The results can then be provided to an organization or group working on that issue and could find the outcome useful. We defined that organization or group as the client. At the 2018 Environment Virginia Symposium held annually at the Virginia Military Institute in Lexington, VA, VNRLI alumni facilitated and recorded ideas provided by conference participants during a day-long drop-in session.

Environment Virginia attendees include people working in the public sector (mainly state agencies, with some local government representatives), private sector (industry and consulting firms), and nonprofit sector (primarily environmental organizations and academia, with some citizen activists). They offered insights on three topics, drawing on their professional experience, technical expertise, and local area knowledge.

To foster a safe space for creative thinking about how these challenging topics may be addressed, people were asked to participate in the Think Tank as individuals and not as representatives of their agencies or organizations. VNRLI alumni facilitated the discussions and recorded notes that were later analyzed by the University of Virginia Institute for Environmental Negotiation (IEN).

This document presents synopses of contributions made within the three topic areas, with emphasis on recommendations for advancing and/or improving the issue area within the Commonwealth of Virginia. For reference, transcribed notes from the sessions are provided in Appendix One.

# Topic Synopses

## Topic 1 - Solar Farms

**Prompting Questions:** What issues and concerns should localities consider when they are faced with decisions regarding solar farms? How can or should the public be engaged in decisions about solar farms?

**Client:** Department of Environmental Quality

**Number of people participating:** 30 (in-person), 30 (online)

**Synopsis:** Solar panels on the rooftops of homes might be the most visible, and emblematic, form of solar energy. But it's the solar panels that make up the sprawling farms built on the ground in remote regions of the U.S., selling energy to utilities and big companies that are driving the boom in the solar industry overall this year. According to the analysts at GTM Research, almost 14 gigawatts of solar panels could be installed in the U.S. by the end of 2016, and over 70% of that will come from what they call "utility-scale" solar farms. These solar farms generate energy using thousands—or even—millions of panels, often piping energy long distances to residents and companies to use to power homes and offices. Approximately 14 gigawatts are enough solar energy to power 2.3 million homes and are the equivalent of about 14 large natural gas or coal plants. That number of gigawatts is also 85% greater than the number generated by solar panels installed in all types of systems in the U.S. in 2015.

Think Tank participants expressed many concerns about the land use implications involved in choosing to pursue a solar farm project. Numerous participants focused on the impact to natural resources, including prospects of significant erosion and stormwater runoff, and the need for controls that would ensure these issues were appropriately addressed. Others were concerned about the farmland, forests, and other open spaces that could be lost indefinitely in the creation of solar farms, which inherently have limited lifespans. Respondents suggested that the impact to wildlife, including threatened and endangered (T&E) species, should be considered as these projects could fragment habitat and the low-level hum produced by the apparatus could act as a wildlife deterrent. Several other natural resources considerations were noted, including the mining and other intensive processes involved in the manufacture of solar panels, the possibility that toxic materials (such as cadmium or tellurium) could leach from the panels into runoff when exposed to extreme weather, and that light reflecting off the panels could interfere with the flight of birds.

Natural resources concerns were also noted regarding one specific solar farm project currently being proposed for siting in Spotsylvania County, near Fawn Lake. Respondents suggested that in that circumstance, the project would extract nearly 1/3 billion gallons of water from the local aquifer, which could result in harm to drinking water wells and local springs as well as the water

level of Fawn Lake. Additionally, the thermal island created by the solar farm could cause extreme evapotranspiration with adverse effects on groundwater and the lake.

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Participants provided three recommendations that could enhance citizen involvement in the placement of solar farms. These included:

1. Consider incentives to include solar panels with any new construction activities particularly larger projects.
2. Request DEQ to prepare a Solar Farm Summary document characterizing the activity and standard operating procedures for protecting the environment including stormwater controls, landscaping and other buffers and returning the land to original condition following the life of the solar farm.
3. Request DEQ host community engagement forums where solar farm placement is planned.

## **Topic 2 - Improving the Administrative Process Act (APA)**

**Prompting Question:** How can we improve the community engagement processes required by the Virginia Administrative Process Act?

**Client:** Secretariat of Agriculture and Forestry

**Number of People Participating:** 25 (in-person), 10 (online)

**Synopsis:** Under Virginia's Administrative Process Act (APA), Section 2.2 of the *Code of Virginia*, a regulatory agency must provide *notice* of the planned regulation to the Registrar of Regulations that describes the planned regulation. After the agency provides notice, it must post the proposed regulation publicly on the Virginia Regulatory Town Hall for at least 30 days so that anyone can comment on it. The Virginia Regulatory Town Hall can be accessed at <http://townhall.virginia.gov>, where interested parties can view agency meeting schedules, and browse and comment on proposed regulations.

After the proposed regulation is filed, if there are substantial changes to the proposed regulation before it is *published as a final regulation*, then any person may petition the agency within 30 days of publication to request another opportunity for comment on the changes to the regulation. If at least 25 people make this request then the agency must halt the regulatory process for 30 days and provide another open comment period for the public. Proposed and final regulations are also subject to review by the General Assembly and the Governor's office.

Historically, the sentiment expressed by citizens, local governments and stakeholders is that the APA does not lend itself to an open and transparent public process. For new regulations or

changes to existing ones, there is no mandatory public meeting process in which citizens can participate. Impacted parties may have to put in considerable effort to discover any pending regulatory changes and how it affects them. State regulations are passed with little or no public scrutiny. Please find below the public participation guidelines excerpted from the Code of Virginia:

**§ 2.2-4007.02. Public participation guidelines.**

*A. Public participation guidelines for soliciting the input of interested parties in the formation and development of its regulations shall be developed, adopted, and used by each agency pursuant to the provisions of this chapter. The guidelines shall set out any methods for the identification and notification of interested parties and any specific means of seeking input from interested persons or groups that the agency intends to use in addition to the Notice of Intended Regulatory Action. The guidelines shall set out a general policy for the use of standing or ad hoc advisory panels and consultation with groups and individuals registering interest in working with the agency. Such policy shall address the circumstances in which the agency considers the panels or consultation appropriate and intends to make use of the panels or consultation.*

*B. In formulating any regulation, including but not limited to those in public assistance and social services programs, the agency pursuant to its public participation guidelines shall afford interested persons an opportunity to (i) submit data, views, and arguments, either orally or in writing, to the agency, to include an online public comment forum on the Virginia Regulatory Town Hall, or other specially designated subordinate and (ii) be accompanied by and represented by counsel or other representative. However, the agency may begin drafting the proposed regulation prior to or during any opportunities it provides to the public to submit comments.*

*2007, cc. 873, 916; 2012, c. 795.*

**§ 2.2-4007.03. Informational proceedings; effect of noncompliance.**

*A. In the case of all regulations, except those regulations exempted by § 2.2-4002, 2.2-4006, or 2.2-4011, the proposed regulation and general notice of opportunity for oral or written submittals as to that regulation shall be posted on the Virginia Regulatory Town Hall and published in the Virginia Register of Regulations in accordance with the provisions of subsection B of § 2.2-4031. In addition, the agency may, in its discretion, (i) publish the notice in any newspaper and (ii) publicize the notice through press releases and such other media as will best serve the purpose and subject involved. The Register and any newspaper publication shall be made at least 60 days in advance of the last date prescribed in the notice for such submittals. All notices, written submittals, and transcripts and summaries or notations of oral presentations, as well as any agency action thereon, shall be matters of public record in the custody of the agency.*

*B. If an agency wishes to change a proposed regulation before adopting it as a final regulation, it may choose to publish a revised proposed regulation, provided the latter is*

*subject to a public comment period of at least 30 additional days and the agency complies in all other respects with this section.*

*C. In no event shall the failure to comply with the requirements of this section be deemed mere harmless error for the purposes of § 2.2-4027.*

Think Tank participants echoed the historical frustration with the APA process. In general, citizens have little appetite for such public processes, and state agency staff often are not trained in stakeholder engagement. In addition, participants indicated there was little use of social media, which could be a positive way to interact with stakeholders and elicit citizen opinion. The idea of going to the affected audience versus trying to draw citizens to a meeting convenient to agency staff was noted. One participant commented that the Town of Blacksburg utilizes an innovative approach to engage citizens by going to public spaces like farmer's markets or recycling centers, a strategy that could be implemented in other localities. Overall, the Think Tank recommended a more robust and inclusive approach to the APA process. There is a distinct and critical need to be more inclusive across gender, race and ethnicity.

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Participants provided three recommendations that could enhance citizen involvement in the APA process. These included:

1. Revise the Code of Virginia to strengthen the use of social media to advertise regulatory changes.
2. Utilize more open and transparent participation processes such as holding public forums in the affected localities.
3. Increase staff training in stakeholder engagement processes to facilitate public input.

### **Topic 3 - Enhancing Environmental Justice (EJ) Considerations**

**Prompting Questions:** How could we enhance and better integrate environmental justice considerations throughout Virginia's programs, regulations, policies and procedures?

**Client:** Governor's Advisory Council on Environmental Justice (ACEJ)

**Number of people participating:** 25 (in-person), 6 (online)

**Synopsis:** Environmental justice (EJ) is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. It will be achieved when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work. Among the affected groups of Environmental Justice, those in

high-poverty and racial minority groups have the most propensity to receive the harm of environmental injustice. Poor people account for more than 20% of the human health impacts from industrial toxic air releases, compared to 12.9% of the population nationwide. This does not account for the inequity found among individual minority groups. Some studies that test statistically for effects of race and ethnicity, while controlling for income and other factors, suggest racial gaps in exposure that persist across all bands of income.

In Virginia, Gov. Terry McAuliffe used one of his last executive orders to establish an Advisory Council on Environmental Justice (ACEJ) in October 2017, citing concerns that low-income and minority communities often experience an unequal share of environmental damage and miss out on efforts intended to clean up the environment. The Environmental Protection Agency created a national advisory council for environmental justice in 1993, but Virginia is among the first states to follow suit.

The ACEJ “...will work to ensure that every Virginian has a voice in protecting the quality of our air and water,” McAuliffe said in announcing the executive order. “This council will provide critical advice on how to protect our natural resources and address environmental pollution in a way that is both inclusive and action-oriented.”

Representatives from IEN served as facilitators to kick-off the 15-member council, which includes leaders from academia, business, public service and non-governmental organizations. The council, through recommendations to now Governor Ralph Northam, will ensure environmental policies around major issues like air quality or sea-level rise serve the interest of every Virginian, and that no area or group bears a disproportionate share of the burden of environmental and/or health hazards.

Think Tank participants recognized the importance of EJ as an issue. There are many institutional barriers across governmental entities that constrain the proper level of consideration for this critical topic. Ranging from education in our schools, to housing and environmental projects, EJ must be embedded at every level within government and the private sector to facilitate significant progress. Participants indicated it must be made a household word.

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Participants provided three recommendations that could enhance citizen involvement in EJ. These included:

1. Through the work of state agencies, the following action items need to be addressed:
  - Identify geographic areas already subject to disproportionate environmental impacts.
  - Strengthen the EJ component for any environmental review.
  - Appoint an EJ Coordinator in every appropriate agency.
  - Review agency policy to ensure proper regulatory authority exists to identify and enforce EJ violations.

- Work with the Department of Education to review and revise, if needed, information on EJ within the Virginia Standards of Learning (SOL).
- 2. Implement an EJ training program for governmental staff, outside stakeholders and contractors.
- 3. Incentivize construction projects which properly account for EJ action.

# Appendix One

## Transcribed Notes

The transcribed notes reflected below are presented as they were submitted by the Think Tank participants, without modification. They capture concerns, considerations, suggestions, and ideas. When a number accompanies a bullet, it reflects the number of people who expressed that idea.

### Topic 1 - Solar Farms

#### Concerns and Considerations

- We need to make sure that the scenic resource impacts are considered.
- There needs to be a better treatment under the panels for soil retention.
- Consider plant materials as adequate ground cover to allow for infiltration.
- Size of the 500MW solar power plant covering 6,350 sq. acres of which 3,500 will have 1.8 million panels.
- Ensure native plant species are used under and around panels for low maintenance (low mow, pollinators).
- Nearly 1/3 billion gallons of water to be extracted from the unstable local aquifer will result in harm to drinking water wells and local springs and water level in Fawn Lake.
- The GEO SEER hydro-erosion study confirms the risk of harm and clarifies need to build drainage ditches and holding ponds to prevent tons of soil from eroding into streams/RPAs and the Chesapeake Bay.
- Threatened and endangered species - several possible - will be impacted.
- Widespread timbering on-site has caused soil loss and affected T&E species.
- Increased extreme weather can expose long-lasting toxic materials (cadmium-tellurium) into runoff.
- Serious de-commissioning costs and disposal issues.
- Thermal island created by the panels will cause extreme evapotranspiration with adverse effects on groundwater and Fawn Lake.
- Threat to property values - panels are as close as 58 ft. to residence.
- Takes 8 acres of land to produce about 1MW.
- Concerns about farm and forest lands lost.
- Who will pay to de-commission?
- Material-intensive panels - what mining or other processes go into it?
- Can any agricultural uses be made of this land?



- How much land (working lands) will need to be developed into solar farms to meet state goals?
- Land use opportunity costs - is there a better use of the land? How about vertical panels on building facades - this already exists.
- What happens when a hurricane/tornados strike? (other bad weather events)
- Sit them on existing developed land (for ex. Landfills, reclaimed mines) vacant lots, parking facilities.
- Incentives for including them on new construction.
- Could they be built higher, so they could serve a dual purpose?
- [Something was crossed out here.] Animals may not like to graze nearby because "e-hum"
- Benefits (if any) of letting land lay fallow, with grass and grass clippings maintained, for 20-30 years of solar farm life?
- Use rainwater capture and reuse for water needs onsite (construction, O&M).
- Prioritize installation on existing structures - e.g., parking lots, rooftops (no net increase of impervious surface).
- Put on roofs of state buildings.
- Permit by Rule Process\* identifies potential environmental, cultural, and historic impacts (if any) that will be addressed. \*Rocky Forge was 1st (Apex). [Someone crossed out the asterisk language and wrote "wind".]
- At County planning level the public is encouraged to participate in the process.
- Floating (West Coast) & Anchored (East Coast) Offshore Solar Panels?
- Legality of non-farms producing more than they can use?
- Utility is a barrier to putting excess generation on the grid 0 look to copy what other states are doing (CA, MA)
- Terra Power - Self-sustaining station re-use of spent fuel from nuclear power generation; clean option.
- Resiliency better with individual residential systems; sell excess to grid
- Essex Co. had trouble with stormwater runoff/management had to add BMPs to rectify issue (DEQ be vigilant during planning phase); leveled land
- Loss/gain in tax revenue, how this affect productive agricultural land, how this affects loss of natural resources.
- Erosion and Sediment Control is a big concern as well as clearing of the is a major issue.
- Stormwater management, habitat destruction, carbon sequestration, using capped landfills. n/a Consideration of the Commonwealth's carbon mitigation goals and those laid out in SB 966 should be kept top of mind, as well as the desire to foster a clean energy economy.
- Stormwater runoff, we need to address this now before solar begins booming in Virginia. Microsoft's project will be a testament to this.

- Citizens input at the county level is most important. WE really need to consider incentivizing the location of solar farms in brownfields or on flat roofs in industrial areas instead of taking over useful farmland or undeveloped land.
- Why not have power production close to the large users? does the property owner want to place solar on their property or not. Isn't that the most central issue?
- Stormwater runoff.
- Proper accounting of impermeable panel surfaces for BMP selection/sizing.
- Loss of forested land. Consumption of agricultural land for energy purposes. Removal of forests for energy purposes.
- Restoration of land once useful life of solar farm is expired (approx. 30 - 35 years). Info on just how much energy is produced in relation to the amount of land used for the purpose, and a comparison to other energy sources (e.g., natural gas, coal, electric) - is solar a more efficient/less destructive use of the land? Public meetings should be held to voice all concerns.
- In the end, DEQ and/or the locality should prepare a comment response document similar to what is done for EPA rulemakings. Ultimately, the DEQ/locality will need to jointly decide if the benefits and costs outweigh the negatives for the solar farm, and the best for the community. Other states seem to be way ahead of VA regarding solar farms, and VA may benefit from studying how other states have handled this issue. (Other states have also limited the size of the solar farms to give some small farmers an opportunity to participate in the programs and decrease (and/or disperse?) stormwater impacts. VA may want to investigate this policy.)
- Solar farms are ok provided forest is not clear to create this use.
- Why not let the landowner do what he wants? If there is an eyesore issue, require landscaping buffers. If there are other issues, mandate solutions, but let them go ahead.
- Long-term fiscal impacts on local govts. and the liability for de-commissioning the panel arrays. Potential deforestation impacts without any mitigation requirements.
- Stormwater runoff impacts throughout construction and operating life of the project. unregulated water runoff Impact on spectrum of environmental concerns - wildlife, runoff, best resource use - as well as impact on local community life (social and economic).
- Opportunity to vote on regulations requiring new developments to meet of specific environmental standards. burn, reflectance, flight interferences with planes-birds Yes, the public should be involved in siting of large solar farms and the benefits/costs associated with this type of decision
- Stormwater runoff. How can these sites include go stormwater practices while still meeting energy goals?
- Public education on the benefits and costs is important. A means of comparing the social impact of alternative energy compared to that of carbon-based fuels should be provided.
- Virginia should meet progressive energy conservation goals before inflicting the impact of energy production on localities.

- Returning the land to original condition when lease expires. How can we incentivize the use of existing structures or industrial areas for solar farms?
- erosion and sediment control during and after construction. Unexpected consequences!
- It's not as much a locality issue as a statewide issue...the political leaders and DEQ need to realize that local governments need to realize that localities have to address the very real practical impacts of their policies. These large solar farms will have very detrimental effects on specific areas.
- Treating all farm storm water on site. I don't know stormwater native plant plantings to reduce maintenance costs and improve habitat should forests be cleared to make way for solar power plants
- Find ways to keep corporations from taking private land through eminent domain to enrich private companies! See issues around the pipelines--MVP and ACP.
- solar farms should be regulated as a BMP -- None Erosion and Stormwater Management. Citizens need to be better educated.
- Taking advantage of new technologies. Using Europe as a model.

## **Topic 2 - Improving the Administrative Process Act (APA)**

### **Concerns and Considerations:**

- From science perspective – details are critical to “argument”, but most citizens don’t have the time/interest. When you reduce to a sound bite you lose the details.
- When agencies conduct stakeholder engagement, how much do the agency’s field staff contribute to the product?
- Public hearings don’t work.
- How can we more reliably engage moderate stakeholders when the “extremes” are so vocal?
- Community engagement efforts may miss introverted stakeholders.

### **Suggestions and Ideas:**

- (3) There is a role for non-profits to help with communication. State agencies must stick to protocols/laws (APA).
- (2) Need to host meetings at different locations and times and meet the audience where it’s convenient for who you’re trying to reach.
- Hold educational/informal meetings in more informal locations (farmer’s markets, college campuses, etc.)
- Hire and/or maintain existing staff who are conscientious and sympathetic. People who are ethically and morally good people should engage other people, especially those who may potentially be affected by regulations as a matter of course. Focus on the people, not the procedure.
- 1) Push a recorded presentation on social media and solicit public feedback that can be captured electronically and tabulated for determining consensus and outlier issues. 2)

Need to reach people more through electronic social media...people without opinion need to be educated and fair/objective presentation on the issues associated with a public project.

- Broader advertising in media that will reach those who are not already involved/interested in issues.
- By incorporating the public comments into final documents if appropriate
- Do more than just the required minimum for advertisement of citizen input.
- Hold regular public meetings that capture public opinion. Reach out and engage the under-served and the poor (environmental justice)
- Need to brainstorm many options and processes that could insure creative alternatives
- Scheduling and outreach through social media are critical, must be across the spectrum (Facebook, and websites of state and local stakeholder groups).
- Army Corps of Engineers utilizes forums and other “open house” formats in addition to electronic “town halls.” Does the Commonwealth do this?
- Keep it simple with maps, graphics, and other visual aids to help citizens understand complex issues (no jargon).
- Edward Tufte – “Visualization of data” – need to find a way to make complex issues meaningful for the average citizen.
- Currently no requirement to bring all stakeholders together. Don’t silo Sec. 106 and NEPA. Incentivize a process for all to hear all issues.
- Supplement with advisory boards (examples: VDH Health Equity Board, Community Health Assessment). Multi-step process for community engagement – partner with local hospitals.
- Public hearings need to demonstrative they’ve heard and incorporate changes into design “doesn’t seem like state is listening.”
- Need better information on what state agencies can and cannot do within the APA process. Help the public understand the process.
- Linear-corridor projects (pipeline, highway, etc.) are legally exempt from the site-specific environmental/soil study. Does this need to change?
- Use parallel consensus building early in the process, depending on the topic and where it makes sense.
- Provide training for staff who would be able to engage the community
- Consider FOIA requirements in using social media
- Work to develop community interest at rule-making planning stages when there is opportunity to influence the regulations.
- How to inform the public/educate/distribute unbiased information (the current format of informational meeting and public comment doesn’t lend itself to meaningful engagement).
- Schoolhouse rock public relations campaign educating local population about key technical processes or issues including but not limited to the APA process.
- Make the topic simple and fun!
- Good model for collaboration exists in Blacksburg (VA Tech) with sustainability initiatives, programs, and outreach. Farmer’s markets, map of recycling centers.

- Need to be more inclusive to reach more people – stronger investment with specific outcomes for community outreach and dedicated funding.
- Lack of awareness of the problems = good resources go unused.
- Outreach is only effective with community backing. Find out what local population cares about and cater the information to their concerns.
- Go to where the people are, especially those who don't use social media (schools, churches, bus stops). Need to increase economic, gender, and racial diversity in community working groups.
- The process for state board hearings is broken. Board members are rarely present, there is no board/agency and public interaction. The process fails the public and the board. There needs to be a comprehensive revamp to ensure legitimate public engagement and board member education and participation.

### **Topic 3 - Enhancing Environmental Justice (EJ) Considerations**

#### **Concerns and Considerations:**

- Think about who is missing altogether from the conversation? e. g. private water supply (wells and springs) users - their water supplies aren't regulated at all - how will they get assistance when there is no regulatory authority in the first place about what should be happening? Renters are especially vulnerable.
- Think about what outcomes will be of EJ efforts - what do we want to see? What metrics can we use to know whether it's working? How can we establish a baseline? How will these answers vary place to place?
- Take into consideration zoning (land use code) laws that places low-income development near existing or future hazardous development/land uses.
- How to engage tribal communities /other marginalized groups who might not trust an agency?
- The Big Question that needs resolution: Is there statutory authority - explicit authority to incorporate EJ concerns in natural resource agency regulations and permits - if not, we need to seek legislative change!

#### **Suggestions and Ideas:**

- Every state agency needs to appoint an EJ coordinator and develop a policy for how EJ is incorporated into all decision making.
- In developing policy, agencies should engage EJ SME's (subject matter experts) and communities.
- Develop programs that help community stakeholders with EJ concerns with development and coordination of concerns/ideas/studies that would directly impact their community/livelihood/families.
- Enact legislation that would mandate mitigation from impacts of development from loss of housing, loss of natural resources for citizens and/or health and well-being.

- Identify locations already subject to disproportionate environmental impacts and fund projects that mitigate those impacts (e.g. incentives to improve environmental quality).
- Ensure that all housing provides units for all income levels - the state could create incentives to do this.
- Push to educate the public about the term Environmental Justice. People understand environmental impacts but may not be aware of the rights they have to oppose development that impacts their general well-being, economic status, etc.
- Target young people - educate people of color and disadvantaged groups about EJ through public school outreach.
- Provide balance between the goals of EJ and growth of the economy such that EJ does not further alienate communities but rather works toward a dialogue.
- Don't make all land-uses villains because of the false perceptions of those business uses.
- Make sure that equal voice is given to each side of the issue
- Give the regulatory authority to state agencies and localities to adopt environmental justice model codes/appeals process and enforcement against violators of environmental justice policies.
- Incorporate an EJ component to the state's environmental impact review (EIR)
- Transportation /pedestrian safety- low-income communities and majority/minority areas with no pedestrian facilities. Pedestrian facilities = sidewalks, trails and pedestrian bridges
- Use established community network and look to models where it has been successful.
- Add language to procurement process (RFPs) that asks contractors how EJ will be integrated into the project (state projects) (e.g. in stormwater RFP have contractors state in their proposal vulnerable communities will be considered - could be direct impacts or community engagement).
- Acknowledge a gap in the ability of vulnerable communities to connect with legal aid for environmental issues and find ways to fill the gap
- Inviting diverse audiences to this conference (Environment Virginia), or host one completely focused on EJ policy, legislation, and regulatory impacts (create goals)
- Just as an environmental impact study should be required for all project so too should there be a justice impact study required for all projects. There should be internal training for all staff concerning env. justice and implicit bias as well as training opportunists provided by the state for all contractors, Soil and Water Conservation Districts (SWCD's) and others who can address env. justice issues on the ground.
- Credit for environmental projects should be taken into consideration.

### **Suggested Resources:**

- Look to Maryland - they have been on the forefront of this issue. Resources: MD DNR, Randy Works with Diversity, Chesapeake Watershed Forum, and taking nature back might provide some insight; Mustafi Ali worked for EPA office of environmental justice
- MWCOG already developed an environmental justice toolkit - consult for ideas to adopt.