

Questions for the Record by Democratic Members

Questions from Rep. Lowenthal for Mr. Dawes, Executive Director Foundation for Pennsylvania Watersheds

1. Mr. Dawes, what will having access to the \$11.3 billion in infrastructure funds mean for acid mine drainage treatment? How much cleanup do you think your state will be able to accomplish? What will that mean for communities in Pennsylvania?

Response of R. John Dawes:

The \$11.3 billion together with Secretary Haaland, Department of the Interior determination that states can use the funds to build, operate, maintain, and rehabilitate acid mine drainage (AMD) treatment systems will result in an historic level of AMD treatment in Pennsylvania. I believe we will be able to treat more AMD in the next 15 years than Pennsylvania has been able to treat in the past half century. Maybe as much as one quarter to one half of the 5,500 plus miles of polluted streams can be restored. The infrastructure funds will, for the first time ever, also ensure there are funds to operate, maintain, and rehabilitate (OM&R) every one of the more than 340 AMD treatment systems for the next 15 years. This will create jobs to preserve clean water infrastructure and hundreds of miles of restored streams. AMD is the biggest water quality problem in Pennsylvania and we will be able to address much of the pollutant.

This means many communities will have clean water for the first time in more than 50 years. They will once again have streams that are fishable and swimmable. It will mean communities will be able to recover from the scourges of polluted water. There will be millions of dollars of local revenues generated each year from fishing and other recreation. It will mean many communities can further recover from the loss of coal mining jobs that occurred when the coal was exhausted and their water polluted by coal mining.

2. Mr. Dawes, you referenced a need for more operation and maintenance funding and claim those activities will create jobs. You referenced a Foundation funded study on operation and maintenance for water treatment in a basin in PA. What were the recommendations of that study, and how will the STREAM Act help achieve those recommendations?

Response of R. John Dawes:

The study you referenced is entitled: Kiski-Conemaugh Basin Treatment System Operation and Maintenance Assessment Report, December 2017, prepared by Stream Restoration Incorporated and BioMost, Inc. This study reviewed all 60 AMD treatment systems that had been constructed in the Kiskimimetas and Conemaugh Rivers Basin in southwest Pennsylvania. The Kiski-Conemaugh River Basin covers 1,887 square miles. The highlights of the Study's recommendations include:

- (a) AMD treatment systems should be regularly monitored and inspected to document water

- treatment effectiveness and identify maintenance costs.
- (b) An OM&R plan should be created for every AMD passive treatment system and should provide for the systems to be inspected and monitored on a monthly basis.
 - (c) Semi-active AMD treatment systems, such as lime dosers, etc., should be inspected at least twice per week.
 - (d) The most sustainable option is to conduct monitoring and inspection of AMD treatment systems with dedicated, well-trained, locally based watershed organization members or non-profit organizations with paid professional staff or contracted consultants in order to preserve this clean water infrastructure and produce better results. Supervision of the volunteers should be performed by an individual experienced with water monitoring and inspection of AMD treatment systems and who can also evaluate the data.
 - (e) Water monitoring should measure pH, alkalinity, iron, and flow and full funding for monitoring should be made available.
 - (f) Technical assistance and capacity building programs like WPCAMR's (Western Pennsylvania Coalition of Abandoned Mine Reclamation) Quick Response and Stream Restoration, Inc.'s Operation and Maintenance Programs should continue to be funded to provide much needed assistance to the volunteer watershed groups.
 - (g) Water monitoring data needs to be compiled and made available in an online database such as Datashed (www.datashed.org) in order to provide public access to the data.
 - (h) OM&R funds need to be available to watershed organizations, non-profits, municipalities, and county conservation districts to preserve existing and new AMD treatment systems. The funds should be sufficient to cover all OM&R costs of existing and new AMD treatment systems.
 - (i) The OM&R funds should be set aside in AMD treatment trust funds that earn returns in order to perpetually fund OM&R as this is the most efficient and less costly proven approach.

The STREAM Act will enable these recommendations to be implemented. It will enable the restored streams and the AMD treatment clean water infrastructure to be preserved. The STREAM Act will fund long-term jobs to implement the above recommendations in communities that were polluted and then abandoned by the coal industry. The STREAM Act will help these communities build a new future and overcome the decades of AMD polluted water. It will help the water in these communities to be fishable and swimmable which will create clean water recreation and local revenues that they generate.

3. Coal communities are on the frontlines of the energy transition, and we need to make sure the transition is just and equitable. Part of that is putting former miners and community members back to work in reclamation. Cleaning up former mines and water pollution so they communities can attract new investment.
Mr. Dawes, your Foundation has collaborated on several large reclamation and acid mine drainage projects. Can you give us an example of a project you worked on that had an outsized impact for the community?

Response of R. John Dawes:

A good example of AML and AMD work that had outsized impact is the Ehrenfeld Refuse Pile, located along Rt. 219, Cambria County, north of Johnstown. The refuse Pile 1 (55.8 acres) and Refuse Pile 2 (7.7 acres) were located close to residential housing and throughout its 75-year history, caught fire, causing health impacts to residents. The degradation diminished the value of real estate in the town, and no new homes were built. The population, while loyal seldom had a child return to the community. The town is close to the “Johnstown Path of the Flood Trail” located nearby. Ref. All pile areas were comprised of loose unconsolidated shale and coal refuse with extremely high and steep slopes. At times, eroding coal fines from Refuse Pile 1 would clog the unnamed tributary to the Little Conemaugh River. In addition, all pile areas were leaching highly acidic water that would drain and add to the impairment of the streams. The air quality of the local area was being degraded by burning areas of the Refuse Pile 1 that vented hazardous fumes. Intense site visitation of ATV and motorcycle trails as well as camping areas were evident throughout all pile areas. The closest home was five feet (5’) away from Refuse Pile 1’s unstable sliding base.

The Ehrenfeld Surface Mine Permit Refuse Disposal plan included the disposal of approximately 3,448,697 cubic yards of acidic coal refuse materials from the Ehrenfeld AML site placed within the Ehrenfeld SMP. The coal refuse was transported from the AML site to the SMP site using Caterpillar 777 rock trucks, where it was deposited in the un-reclaimed areas of the mine. The refuse was then spread using Caterpillar D-11 bulldozers into two-foot layers before being covered by an approximate three-inch layer of alkaline addition material (thickness based on volume of alkaline material needed to neutralize the refuse). This layer of refuse and alkaline addition material was then compacted using Caterpillar 815 compactors, then covered by one foot of on-site spoil material. This layering sequence was repeated as necessary to dispose of all the AML site coal refuse materials transported to the SMP site.

The Bureau of Abandoned Mine Reclamation contract went to Rosebud Mining Company, and 40 unemployed miners were put to work. This particular project won [national awards](#) from the Office of Surface Mining Reclamation and Enforcement, and from the National Association of Abandoned Mineland Programs. Pride of place, returned to this community, and the land was returned to ecosystem function. The adjoining waterways stopped receiving AMD with every rain. It is our best example of what can be accomplished, given enough resources.

RJD