



Pennsylvania Fish & Boat Commission

Division of Environmental Services

450 Robinson Lane
Bellefonte, PA 16823
Phone: 814-359-5133
Fax: 814-359-5175

May 28, 2015

Ms. Michele Tate, Executive Director
DEP Citizens Advisory Council
Rachel Carson State Office Building
400 Market Street, 13th Floor
Harrisburg, PA 17105-8459

Re: Comments on University of Pittsburgh Report: Effects of Mine Subsidence Resulting From Underground Bituminous Coal Mining, 2008-2013

Dear Ms. Tate:

The Pennsylvania Fish and Boat Commission has reviewed the subject report and would like to offer some comments on the report and the history of the underground mining program before and after Act 54 Amendments. We realize the time period for formal comment on the report has ended, but offer the following brief statement for benefit of the Citizen's Advisory Council. The Fish and Boat Commission appreciates your consideration of our comments.

Prior to Act 54 legislation in 1994, underground coal mining, particularly longwall mining, was having extensive impacts on overlying aquatic resources. It was difficult to seek restoration for affected resources and much time was spent on topics such as whether overlying streams were intermittent, were of value, and whether anything should be done. In 1994, Act 54 made it clear that affected resources should be addressed. Resource mitigation and restoration improved significantly and our agency worked closely with industry and DEP to develop technical guidance to address stream impacts from underground mining. Application of guidance and techniques to "repair" streams improved over the next decade. I have observed some of these impacts and remedies. Gate cutting to repair impounded areas, as the report indicates, has proven effective. We agree that period of years may elapse before the remedy is complete. Subsequent return of biological indicators to baseline is heartening. Dewatering is a more serious impact. Grouting the stream bed can work, but a coating to retain surface water over fractured geology that made streams disappear is a tenuous solution with a rather poor success rate and an unproven future. Industry and DEP have developed better predictive capability on what impacts may occur and are better prepared when they do.

The University of Pittsburgh 4th assessment provides a good summary on data base shortcomings with recommendations for improvement. Table VII-7 details impacts on 51 miles of streams that were undermined, showing that 77% were impacted, but future fate is unknown. It would be helpful to develop a clean report card of stream fate (unimpacted, remediated or lasting impacts) to help the public understand long term resource impacts. We do not view Act 54 as a totally ineffective vehicle for resource protection due to the history we provided above. However, our agency does see aquatic resource impacts with underground mining that go beyond those we see in other regulated activities. We recommend more effective resource protection be provided using predictive capabilities that have been developed and avoidance of settings characterized by poor resource restoration, particularly loss of flow.

Our Mission:

www.fish.state.pa.us

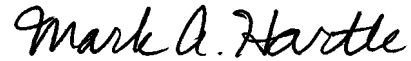
To protect, conserve and enhance the Commonwealth's aquatic resources and provide fishing and boating opportunities.

Ms. Michele Tate
May 28, 2015
Page 2

We do not have the breadth of expertise to propose more comprehensive fixes that would result in better resource protection, but believe that results could be improved.

Please contact Dave Spotts or me if the Council has any questions. My e-mail is mhartle@pa.gov and I may be reached by telephone at (814) 359-5133.

Sincerely,

A handwritten signature in black ink that reads "Mark A. Hartle". The signature is written in a cursive style with a large initial 'M' and 'H'.

Mark A. Hartle, Chief
Aquatic Resources Section
Division of Environmental Services

c: D. Spotts, T. Schaeffer