

**The Accokeek, Mattawoman, Piscataway Creeks Communities Council,
Inc.**

**Public Comments on Water Obstruction and Encroachment Permit
Applications for the Atlantic Sunrise Project**

August 1, 2016

Pennsylvania Department of Environmental Protection
Northcentral Regional Office
Waterways and Wetlands Program
208 West Third Street
Williamsport, PA 17701

Re: Water obstruction and encroachment permit applications

To Whom It May Concern,

The Accokeek, Mattawoman, Piscataway Creeks Communities Council, Inc. (“AMP Creeks”), by and through undersigned counsel, hereby submits its public comments to the water obstruction and encroachment permit applications for Transcontinental Gas Pipe Line Company, LLC (“Transco”) in the counties of Columbia and Northumberland. Transco seeks these permits to construct the Atlantic Sunrise Project (ASP), a natural gas pipeline expansion project that crosses through Pennsylvania, Maryland, Virginia, North Carolina, and South Carolina.

The Pennsylvania Department of Environmental Protection should not issue the permits for Columbia and Northumberland Counties. ASP as a whole will have negative environmental and economic impacts, and those impacts will also be felt in Pennsylvania counties. Transco seeks to expand its pipeline infrastructure to reach more customers including an export terminal. Although ASP may benefit Transco’s business interests, the social and environmental costs of ASP will outweigh any benefit to Pennsylvania counties.

I. SOCIO-ECONOMICS IMPACTS OF THE ATLANTIC SUNRISE PROJECT

Doctor Lynne Y. Lewis, PhD, Chair of Economics at Bates College, has reviewed FERC’s Draft Environmental Impact Statement (DEIS) on the proposed Atlantic Sunrise Project. Although Dr. Lewis’s analysis was not limited to Pennsylvania, Pennsylvania counties will not be immune to these impacts. The following is her analysis of the socio-economic impacts of ASP.

The socioeconomics as outlined on pages 4-166 - 4-180 [of the DEIS] concludes that

“construction of the project would not have a significant adverse impact on local populations, housing, employment, or the provision of community services.” This analysis is completely void of long-term permanent changes in the local economy. Best practices in cost-benefit analysis discounts short-term effects (construction) because they are short term. For this DEIS to be complete, a long-term analysis must be included. Even for the short term, the arguments that the impacts would be minor or negligible are not substantiated with evidence from other comparable construction projects.

The report cites potential benefits to the economy that are the short term (temporary) benefits to local sales tax revenue and payroll tax revenue. Payroll tax revenues are only relevant if these are new jobs and not simply jobs that are moving from elsewhere in the economy. Again, long-term impacts are completely missing. Also missing from the socioeconomics section are the economic impacts on recreation and wildlife. While these are addressed in other places in the document, the important economic costs are missing from the study. To ignore these economically important costs of the project is fundamentally flawed.

Most importantly, the expected impacts on property values as outlined in the DEIS is biased and misses much of the literature on the effects on property values as outlined in detail below. Given the vast literature on the impacts of these types of projects on property values, it is my expectation that the ASP project will negatively impact residential and recreation land property values.

II. THE ASP WILL DIMINISH PROPERTY VALUES

The DEIS states in section 4.9.4 (pp4-173-174) that there is no indication that the ASP will have an adverse impact on property values adjacent to or near the ASP. There is a substantial **peer-reviewed** literature that finds quite the opposite. I provide a review of that literature here. The DEIS cites to several studies which purport to demonstrate that no such adverse affects on property value exist. However, this conclusion is severely flawed, as is the methodology used in the studies cited in the DEIS is not based on accepted statistical practice. Additionally, the DEIS has chosen to cite only those studies that support this claim, several of which have been prepared by industry that stands to benefit from the pipeline. For FERC not to consider the entire body of literature on this subject, and especially to utilize peer reviewed journal articles, is inherently flawed. In particular, the DEIS, relies on two studies contracted by the Interstate Natural Gas Association of America Foundation (INGAA) to make its case that the effect on property values will be negligible. The most recent (2016) study was prepared by Integra Realty Resources as contracted for by INGAA. (The earlier study was contracted for with Allen, Williford and Seale, Inc. Rights of Way Valuations.) To the best of my

knowledge, neither of these studies was peer reviewed. Clearly this is not an objective study if paid for by a party in favor of expansion. The DEIS is flawed in that regard with its presentation of only a subset of studies. For the DEIS to cite such a study without also citing studies that support alternative scenarios is incomplete. Regardless, the study contains numerous flaws. Two of the study sites they use utilize data from the time period 2008-2015. This time period contains a large downturn in real estate market conditions. The study does not adjust for this structural break in market conditions. The comparison of means method is especially simplistic and does not prove the impacts of location on property values. The statistical (regression) analysis is also extremely simplistic. They do not calculate the marginal willingness to pay for location.

In economics, the accepted methodology is a hedonic property value analysis, which estimates sales price as a function of home characteristics. The INGAA study does present a simple linear estimation of home prices, but neglects the locational characteristics including census characteristics such as school quality and crime rates, land use characteristics, distance from the pipeline, etc that have been shown to strongly influence property values. The estimations the INGAA study reports very likely suffers from omitted variable bias since they do not include many of the important locational features that homebuyers look for.

There is now a fairly extensive peer reviewed body of literature that supports the claim that environmental amenities such as clean, free-flowing rivers, good air quality, open space, etc. provide positive value, including to local property values. Conversely, locations in proximity to environmental disamenities such as dirty rivers, landfills, hazardous waste sites, and sewage treatment plants, reduce property values. People are willing to pay more to be further away from those negatives.

With respect to pipelines, the literature is indeed mixed, however, recent literature has found significant negative impacts, and in fact, when homeowners have been made aware of the pipeline as in the ASP case, the (negative) impacts are larger. Hansen et al., 2006 use the hedonic property valuation method to estimate the effect on housing prices of a fuel pipeline in Washington State. While they find no effect prior to a 1999 rupture and explosion, they find a significant negative effect after the explosion suggesting that perceived risk can impact property values. This effect diminishes as you get farther from the pipeline, which is consistent with other literature that uses distance as a dependent variable. Location is a very important factor in real estate valuation.

Hernstadt and Sweeney (2016) examine the opposition to pipeline expansion and find that most homeowners who live near a pipeline are unaware of its existence,

but when made aware of it, the effects on property values go from neutral to negative. In fact, using San Bruno housing data (pre and post explosion and post information letter), they find a significant capitalization effect (negative) on house prices. They find there is ambivalence to the current pipeline network, but a strong and negative reaction to proposed pipeline projects. The information of the existence of a pipeline has a negative impact on property values. The work of Freyboote and Fruit's (2016) work supports this theory. They find (using hedonic property value models) that higher perceived risk from underground natural gas transmission pipelines reduces property values. This work suggests that, given the awareness of the ASP proposal in the region, the impacts on property values will be significant and negative. Hedonic property value models of water quality support this claim. Home buyers are frequently unaware of local water quality conditions, but when made aware, the impact on property values is negative.

Muehlenbachs et al. (2015) use data from Pennsylvania to estimate the impacts on property values from shale gas development. They find large negative impacts on nearby groundwater-dependent homes. They do find that homes with water provision exhibit small positive impacts. This result is important when considering siting and impacts on groundwater. This paper was published in the *American Economic Review*, one of the top 3 journals in Economics.

Winkler and Gordon (2013) examine the impact of the BP Gulf Oil Spill on property values. Not only do they find a 7%-8.8% decline in condominium prices, they find a 50% decline in sales volume. Boxall et al., 2005, find that oil and sour gas facilities located within 4 km of rural residential properties significantly and negatively affect their sale price.

All of these studies are consistent with the extensive literature on the effect of environmental disamenities on property values. Simons et al. (2006) provides a nice summary. They present a meta-analysis of 75 peer reviewed studies that look at the effects on property values of environmental disamenities such as leaking underground storage tanks, superfund sites, landfills, water and air pollution, power lines, pipeline ruptures, nuclear power plants, animal feedlots and several other urban nuisance uses. Unsurprisingly, all of these environmental characteristics have a negative impact on property values.

On the other hand, environmental improvements including dam removal can improve property values. In some of my own work (Lewis et al., 2008), we find a sizable penalty for homeowners living near industrial dam sites, but that penalty disappears post dam removal. Provencher et al., (2008) also finds that small dam removals improve nearby property values. In related work, in a study from Oregon, Netusil (2006) looks at the economic effects of riparian corridors and upland wildlife habitat, found strong evidence that property owners place a premium on lots with

habitat providing the highest ecological values and a discount on lots with lower-valued habitat. The economic benefit of being adjacent to a rivers and streams and high-quality riparian corridors even extended to properties up to ½ mile from the valued resource. In her more recent work, Netusil (2013) also find that environmental amenities have a positive impact on property values. In an early work on this topic, Streiner and Loomis (1995) present results from a hedonic analysis of urban stream restoration projects using seven projects located in three counties in California. The authors' estimate that restoration projects that reduce flood damage and improve fish habitat increase property values by 3 to 13 percent of the mean property price in the study area.

In Dr. Lewis's opinion, these studies offer convincing evidence of, what seems in hindsight, an obvious conclusion-- people place a higher value on property adjacent to environments that are more natural and perceived as being more healthy and vibrant.

Given the evidence in the peer reviewed literature, the ASP can be expected to negatively impact property values in the short term and very likely in the long term as well.

III. REFERENCES CITED IN DR. LEWIS'S ANALYSIS

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Land Economics November. vol. 89 no. 4 614-631

IV. CONCLUSION

For the reasons discussed herein, the Pennsylvania Department of Environmental Protection should deny water obstruction and encroachment permits in Columbia and Northumberland Counties.

Respectfully submitted,

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