

TALKING POINTS TO HELP PREPARE FOR DEQ 401 PERMIT HEARINGS JULY 18 (Fayetteville) and JULY 20, (Rocky Mount)

WETLANDS

Construction of the Atlantic Coast Pipeline would dig up, cut through, or clear cut more acres of wetlands than the state of North Carolina permits for the entire state in a year. The draft permit requires no monitoring or reporting to ensure that wetlands actually remain wetlands. There is no mitigation plan for offsetting the so-called “temporary” loss of forested wetlands for the next 30 years.

Nearly 600 acres of forested wetlands would be cleared for construction, which could take up to 30 years to regrow, creating long-term adverse impacts to the ecologic functions of those wetlands. Those impacts should not be considered temporary due to the extended time required for regeneration of mature forested wetlands.

Wetlands provide natural water filtration and protect and replenish surface waters. It would require more money and resources to recreate the same benefit from local water treatment facilities to accomplish what the existing wetlands are doing for free.

Making an 8 foot deep trench for the pipeline through wetlands creates a preferential flow path for contaminants to reach downstream waters.

Loss of forested wetlands and clearing upland forests creates fragmentation of forest that threatens the habitat of many endangered and threatened birds, reptiles, amphibians and bats. The deforestation from creating 75-foot wide rights of way through wetlands will cause a loss of shade, more evaporation and unsuitable temperatures for animals that live in the wetlands such as fish, amphibians and aquatic insects.

STREAMS, BUFFERS, CROSSINGS AND BIOLOGICAL IMPACTS

The Atlantic Coast Pipeline project will cross nearly 7 miles of streams and destroy nearly 28 acres of forests and riverside (riparian) vegetation, which serve as buffers to prevent polluted runoff into those streams. These impacts are dismissed in the application as “temporary,” despite the lack of meaningful analysis of their combined effects downstream and the lack of any sites identified for riparian buffer mitigation.

In its 401 certification application, ACP, LLC acknowledges the project includes or is adjacent to riparian buffers identified by the NC Riparian Buffer Protection Rule, but fails to include a “diffuse flow plan” to reduce erosion and sedimentation, saying it would be developed under their Sedimentation and Erosion Plan. As of July 11, DEQ reports they have not received a complete Sedimentation and Erosion Plan, so the ability to protect downstream water quality can’t be evaluated in the absence of a plan to ensure diffuse flow over disturbed buffer areas.

The ACP application says that refueling and lubrication of equipment will generally occur at least 100 feet from water bodies, with exceptions for stationary equipment such as pumps. There must be far more detail on rigorous protections for procedures less than 100 feet from water bodies, and detailed procedures to prevent contamination of land and groundwater, too.

The Horizontal Directional Drilling method is proposed for use under the Roanoke River, Fishing Creek, Swift Creek, Tar River, Contentnea Creek, Little River, Cape Fear River and a large number of wetlands. There is not adequate consideration of the range of factors that can cause uncontrolled release of drilling fluids (referred to as “inadvertent return”) similar to what happened dramatically on the Rover Pipeline project this year, causing FERC to partly halt work.

In the Updated Waterbody Crossing Table, the Neuse River and Rocky Swamp are now listed as being crossed using a “cofferdam,” which is a significant improvement over the “open cut” crossing method, which was more likely to cause massive downstream sedimentation. However, this crossing location is at a very wide place in the floodplain, thus increasing damaging impacts of any crossing method to aquatic species and habitat, streambank destabilization, and extensive destruction to bottomland hardwood forests. The location of this crossing should be moved to a narrower point in the floodplain.

Blasting is likely to cause loud noise and other impacts to local residents, drinking water wells, springs, wetlands and local hydrology, but no measures are specified to minimize or prevent those impacts. In Northampton and Halifax counties, the application identifies 13 open cut crossings with potential blasting, but fails to describe how blasting will be conducted at open cut stream crossings. Any blasting that can’t be avoided must be conducted using dam and pump, or flume. If blasting is required at an open cut crossing, the crossing method should be changed to a method with fewer impacts.

The pipeline would impact rivers known to carry a wide variety of endangered, threatened or species of concern, further impacting limited habitats of these species (such as the Carolina Madtom catfish, many species of mussels, and numerous plants.)

Streams and wetlands impacted by the ACP may lose the ability to “support” or reach their best uses or highest potential to allow for fishing, swimming and health of aquatic species due to sedimentation, loss of forested buffers and other impacts. Streams and wetlands crossed by the ACP also flow into major river basins which are sources for the Pamlico-Albemarle Estuary, the second largest estuary in the United States. The estuary supports not only NC’s fisheries but many mid-Atlantic coastal fisheries. Impacts to any of these headwaters could negatively impact our fisheries and the economy of the state.

The pipeline would have a negative impact on areas designated by the state as Primary Nursery Areas that are important for the early growth and development of a wide range of fish and crustacean species in the Cape Fear, Roanoke, and Neuse River.

Given the number of “listed” and “petitioned” endangered freshwater mussels in waterbodies crossed by the ACP, a far more detailed assessment of impacts on these species must be

required. Two federally endangered mussel species are in streams crossed by the ACP in NC: Tar River spiny mussel and dwarf wedgemussel. The Tar River spiny mussel is only found in four streams in North Carolina: Fishing Creek, Little Fishing Creek, Swift Creek, and Little River. The ACP crosses three of these streams.

During the directional drilling method of crossing, accidents often occur that would release drilling fluids into streams and wetlands, degrading water quality. These are often hard to locate and impossible to reverse. No project with the potential for violations of water quality standards on a short- or long-term basis can be approved by the Div. of Water Resources.

Several structures, such as compressors, metering stations, and valves, are proposed to be built within the 100-year floodplain. While southeastern NC is still recovering from Hurricane Matthew, it is imperative to construct any such structures outside of the floodplain, where they will not impede the natural path of floodwaters or subject the pipeline to damage that may cause dangerous leaks of gas or gas liquids.

Erosion, Sedimentation, and Turbidity

Construction of the proposed project in NC would disturb over 930 acres of wind-erodible soils, 39 of water-erodible soils, over 900 acres of hydric soils as well as 1,740 acres of prime farmland. The ACP would clear a 150 foot wide corridor along the length of the pipeline route during construction with a few exceptions in wetlands. Additionally, the project would convert a significant amount of forested land to herbaceous cover in the 75-foot wide permanent right-of-way, including highly erodible soils. Impacts would include “local modifications of aquatic habitat involving sedimentation, increased turbidity, and decreased dissolved oxygen.”

Those impacts would harm aquatic organisms that rely on the affected streams for their survival. FERC’s earlier conclusion that “constructing and operating the ACP would not significantly impact fisheries and aquatic resources” is unjustified for several reasons: Regulators lack adequate information to determine the impacts associated with the use of the wet open-cut crossing method at rivers and streams crossed by the ACP. Second, there is no evidence that Best Management Practices would successfully minimize sedimentation impacts, and past experience with similar projects in erodible soils demonstrates that they are highly likely to be inadequate. Finally, this conclusion doesn’t account for the increased sedimentation that would result from conversion of mature forest to herbaceous cover in permanent right-of-ways.

In NC, the ACP would cross 8 source water protection watersheds, 3 of which are in Zones of Critical Concern. NC DEQ has must not only require the ACP construction to minimize impacts, but to avoid crossings near these areas, to protect downstream drinking water.

Water needed by the ACP for hydrostatic testing and dust control must be closely quantified, and locations of withdrawals and discharge must be identified. NC DEQ Must require procedures for minimizing impacts of withdrawal for these purposes, flow changes and sediment on source and downstream waters.

In addition to Environmental Inspectors hired by ACP, there would be third party inspectors, accountable only to FERC, to review compliance and prevent accidents or failures. Those inspectors must report directly to the Commission, and inspection results must be available to the public. Inspectors must have the authority to stop work if violations are detected during construction.

Impacts on Groundwater

The ACP 401 application and construction detail fail to acknowledge the likely impacts of construction and pipeline operation on local groundwater or to ensure measures will be taken to prevent them. The project could decrease groundwater recharge, thus decreasing the groundwater discharge to streams and wetlands, as well, thus decreasing stream baseflow and ability to maintain the water level in wetlands during dry periods.

Trench construction and backfill changes the ability of water to flow (conductivity) through impacted soils, which can cause preferential flow of groundwater or blocked flow. Higher conductivity can cause an aquifer to drain more quickly and ease the pathway for contaminants to reach wetlands and streams. Lower conductivity backfill would restrict groundwater flow that intersects the trench, possibly diverting it from its natural discharge point.

For most of its length in NC, the ACP would be located above the Northern Coastal Plain Aquifer system, especially vulnerable to contamination, with uppermost sand aquifers at shallow depths being susceptible to human activities. Given the large number of households within ½ mile of the ACP corridor dependent on well water, construction could impact many household water supplies. Also, areas of shallow bedrock must be surveyed for heavy metals, radioactive materials and acid-producing rocks with potential to contaminate nearby water sources.

There are a large number of private wells within 150 ft. of the pipeline workspace in Nash, Johnston and Cumberland Counties. At the time of the DEIS release, ACP and its contractors had not completed a survey of wells within 150 ft. due to lack of survey access. A 150 ft. buffer between water wells and the construction workspace is not adequate. Approximate locations for wells within 500 feet of construction workplace could be facilitated by GIS location of all residences outside city limits or locations of public water utilities' groundwater sources.

Surface disturbances, clearing and trenching can impact both surface water drainage and groundwater recharge patterns, with the largest impacts to shallow surficial aquifers. No protocols are in place to prevent impacts such as compaction from affecting recharge of shallow aquifers or infiltration of toxic or hazardous materials, including fuels, oils, lubricants, hydraulic fluids, and explosives.

ACP says it will test wells and springs within 150 feet of the construction workspace (within 500 feet of the construction workspace only in karst terrain). In addition to well yields, water quality parameters to be tested include pH, total suspended solids, total dissolved solids, oil and grease and a range of inorganic contaminants. The well testing, both before and after construction,

must include all water supply wells within 500 feet of the construction workspace (rather than 150) and include ALL substances which could impact groundwater, including explosives, lubricants, and components of natural gas liquids. All well tests must be performed by certified labs to detection levels below NC groundwater (2L) standards. Results must be reported to well owners and DEQ within 20 days, with instructions for initiating a contamination claim.

Possible contaminated sites that could be disturbed during construction include one Superfund site and 3 brownfield sites located in NC close to the main pipeline, as well as 9 leaking underground storage tank sites. These sites must be well marked and well testing within 1,00 feet must include all known contaminants of concern.

All pollution prevention plans prepared by ACP to avoid or minimize impacts during construction and operation must be readily available to the public in plain language, and reviewed as part of the permit. The enforcement of construction violations at all stages must be transparent. Refueling or handling of fuels and other toxic or hazardous materials must be prevented within 500 feet of wetlands, private water supplies or municipal water supply wells.

CUMULATIVE IMPACTS

The application doesn't acknowledge any cumulative impacts due to additional development near the project that could impact downstream water quality. If economic development projected by ACP happens, construction of additional pipeline connections, service roads, industrial sites and other buildings would follow the construction of the ACP, causing major cumulative environmental impacts.

THE NEED FOR THE ACP PROJECT HAS NOT BEEN JUSTIFIED

The ACP is described as a pipeline to “serve the growing energy needs of multiple public utilities and local distribution companies in Virginia and North Carolina.” ACP's statements misleadingly include only estimates of growth in gas fired power demand, while failing to show that overall electric demand for the region during this period has been essentially flat. Studies have shown that the pipeline is not necessary to meet future demands, as projected demand is expected to stay static through 2030. As the renewables market increases, the pipeline becomes even less relevant in future energy generation mixes.

Benefits of the ACP listed by the applicant include “reduced energy costs” for the region. However, Duke Energy and Dominion Resources, the corporations whose affiliates want to build the pipeline to supply their power plants, will both seek major and repeated rate hikes to recover the cost of the pipeline from ratepayers PLUS a high guaranteed rate of return, and the cost of construction for unneeded additional gas-fired power plants.

Alternatives Analysis and Climate Impacts

Transitioning from coal to power generation at plants fueled by natural gas from fracking forces the region to rely on a fossil fuel, methane, whose non-combustion emissions are now known to be substantial from both pipeline operations and the power plants they supply. Methane is over 80 times more powerful, over a 20 year range, as a greenhouse gas than carbon dioxide. NC and VA both have substantial wind and solar resources, as well as the potential for cost effective reduction in demand by 30 to 40 % through efficiency upgrades to residences, businesses and industry. ACP's claim that population growth in VA and NC from 2000 to 2030 is a reason to expect continued growth in demand is not credible. We are already halfway through that period, and, despite significant population growth, overall electrical demand has been essentially flat!

ACP makes the completely unsubstantiated statement that "energy conservation measures alone (or in conjunction with other alternatives) will be unlikely to offset more than a fraction of anticipated demand for the foreseeable future." In fact, the renewables market is growing rapidly in eastern NC and increased energy efficiency measures in homes, businesses and industries have flattened electricity demand in the past decade, despite population increases.

Environmental Justice

Tribal Coordination: ACP describes letters sent to state recognized tribes asking for information related to recognized historical or cultural sites. This is not adequate tribal consultation for either state recognized tribes and completely excludes a non-recognized entity (Tuscarora Nation) that has experienced discrimination even relative to other tribal groups. There has been a complete marginalization of tribal concerns and sites of long-standing tribal use.

The ACP would bring disproportionate impacts to rural, low-income and communities of color as the route proposed runs through some of the most rural and economically depressed counties of the state, most with higher populations of color than the state as a whole.

Dominion states that the construction of the pipeline will lower customers' energy costs, but this is a false hope. Duke and Dominion customers will pay for the construction costs plus profit for the ACP, even if the pipeline is used at a fraction of its full capacity. This creates a further unjustified burden for low-income residents.

Summary

In the past 30 years, FERC has granted "certificates" to all but two U.S. pipeline projects, with no credible assessment of actual need project need. The Commission can't be relied upon to protect the health and environment of North Carolina. The Div. of Water Resources' permit review must conscientiously require measures to protect the waters and existing uses of water resources. Believing it will be impossible to construct the ACP without adverse impacts to streams, rivers, wetlands, groundwater, aquatic life, human health and Environmental Justice, we ask the Div. of Water Resources not to grant a 401 permit for the Atlantic Coast Pipeline.