A major natural gas pipeline company is bankrolling re-search in Georgia in an attempt to defeat a disease that is destroying bat populations, a model of partnerships across corporate, government and academic boundaries that might spread to other states.

Frustrated by the usual fights with regulators and environ-mental advocates, Williams Cos. Inc. teamed up with the U.S. Fish and Wildlife Service, the Georgia Department of Natural Resources, and researchers at Georgia State and Kennesaw State universities to find a way to control white-nose syndrome, a fungus-caused disease in bats.

“All of these partners, despite their specific goals that might not always be shared, have come together and worked very efficiently to get the job done,” research scientist Chris Cor-nelison said in an interview. Cornelison helped launch the program at Atlanta’s Georgia State and has since brought much of the program with him to the nearby Kennesaw State.

Williams President and CEO Alan Armstrong highlighted the bat mitigation program among the company’s environmental projects Jan. 25 during a talk at the Hart Energy Marcel-lus-Utica Midstream Conference in Pittsburgh. “One of the hardest things for me to watch as a CEO is to see the amount of money that is going into the hands of law firms and legal funds and fights, when that money could actually be spent on improving our environment and making real differences in the environment,” he said.

Population of bats in Black Diamond Tunnel in Georgia 2010-2016

Source: Georgia State University, based on data from the Georgia Department of Natural Resources
The idea for the bat program came when Williams’ Transcontinental Gas Pipe Line Co. LLC was developing the Dalton gas pipeline project. The proposed route went through an area where bats lived, and the Fish and Wildlife Service told Transco that it would have to detour around the area.

“It was going to be a very, very expensive reroute in that area,” Armstrong said in his talk. “So rather than just fighting that, we said: ‘Why don’t we just understand this? Instead of spending the money on rerouting in a way that we don’t think is going to help the species that much, is there something we can do?’”

Williams contributed about $200,000 for field tests of a treatment to control the outbreak of white-nose syndrome. The tests are being conducted on a bat population in the Black Diamond Tunnel, an abandoned railway tunnel in northeastern Georgia that once housed more than 5,000 tri-colored bats, the largest recorded colony of the bats in the state. White-nose syndrome, described as “one of the most devastating wildlife diseases ever witnessed in human history” on the website of the Georgia State program, has mostly destroyed the bat colony there, dropping the number of bats from 5,517 in 2013 to 220 in March 2016.

Cornelison said the amount might not sound like much compared to money going toward cancer research, but the dollars Williams provided are directly applied to field tests. There are no papers or exploratory research. “It’s a little bit different than the traditional grant,” Cornelison said. “For money for white-nose syndrome, it’s quite a bit.”

The amount of money may be expanded. Cornelison’s team is talking with Williams about more funding. “They have a fantastic corporate grant program,” he said. “As we identify additional sites, they may be willing. They are fully behind this, not just from a standpoint that it helps them through this mitigation issue for their disturbance, but because, in my conversations with their ecologists, they really believe in trying to do good for the environment.”

In addition, Cornelison said, the Williams grant lends weight to his program. “Just the fact that we have money makes us more competitive in the traditional programs,” he said.

**Bats in Black Diamond Tunnel**

The money is for repeated tests of a white-nose syndrome treatment over four winters, from 2016 to 2020, when the bats are hibernating. Cornelison and his team work with biologists at the Fish and Wildlife Service and the state Department of Natural Resources. The four years of testing will allow the researchers to build up a record of data to support their treatment, which uses a device that releases a timer-based spray of volatile organic compounds that inhibit the growth of the fungus that causes the disease. The tunnel is an ideal spot to test the treatment for several reasons, including the fact that a single tunnel, without the side chambers of some natural caves, keeps the bats in one area.

The program is the first test of a cure in Georgia, Cornelison said, and only a few other states have tried mitigation. “So even nationally, this is one of the first three or four field trials to ever occur,” he said. “It is very much on the forefront of trying to battle this disease.”

Cornelison admitted that such efforts have a long way to go before the scientists can say they have the upper hand on the disease and bat populations are stable. “But we will never get there without these trials,” he said. “You can’t get to the advanced stages until you do the early work.”

The Williams contribution has been a big help jump-starting the project, Cornelison said. The typical grant process can take a year from the time an agency requests proposals to when money is awarded, which is too long when wildlife populations are crashing.

“I was first approached about this project in May, and the money was in an account at Georgia State in August,” Cornelison said. “We were hitting the ground.”
The success of the program will not just be measured in the reduction of white-nose syndrome in bats, Cornelison said. It will also lie in how well the technology performs in the field. “We are already considering the initial phase a success because we have had no logistical problems, we've had no functional issues or performance issues with any of the technology,” he said. “From that standpoint, our system has demonstrated it is quite robust.”

A model

Armstrong said the partnership with the wildlife agencies and university labs has worked well. One measure of the program’s success for the pipeline company is that the Dalton project overcame environmentalist challenges and initial Fish and Wildlife concerns in the FERC review and moved into the construction phase.

“The Fish and Wildlife Service got on board with it; Georgia State University was excited about it; and when groups like the Sierra Club came calling, trying to stop the [Dalton pipeline] project, we had allies because we were actually finding a way to make a difference,” the CEO said.

Neither the Sierra Club nor the National Wildlife Federation answered requests for interviews.

Cornelison said his team, along with Williams and the wildlife agencies, hope the program can be a model for other states and other partnerships between private-sector development and conservation efforts. The Fish and Wildlife Service has allocated millions of dollars per year toward a white-nose syndrome grant program, but the money is used quickly in intensive research.

“If you can increase that total footprint by allocating specific mitigation dollars from various states and allow those wildlife biologists in conjunction with federal biologists to target their conservation needs,” Cornelison said, “now you are able to start building some [momentum] and really have some greater impacts.”

Anytime agencies perform experimental treatments on wild animals in the environment, “you are putting your neck out,” Cornelison said. “There are lots of things that can go wrong with that.” There is always the temptation to do nothing and not take a political risk. The Georgia program partners understand this, he said, and “we are hoping that courage is contagious.”

Researchers and wildlife managers talk with a landowner at Black Diamond Tunnel in Georgia.

Source: Kyle Gabriel, Georgia State University