Pitt data on oil and gas leases gauges local Marcellus Shale activity since 2003

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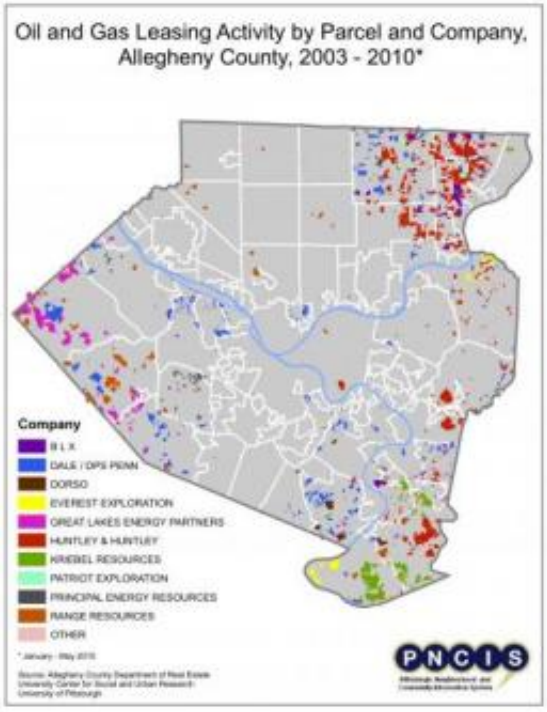

This map indicates parcels under lease since 2003 by company holding the oil and gas rights. Credit: Pitt University Center for Social and Urban Research

As Marcellus Shale activity sweeps Western Pennsylvania, a new University of Pittsburgh database reveals that approximately 7 percent of Allegheny County's land has been leased for drilling and extraction since 2003. In addition, the number of properties in the county leased for oil and gas exploration increased by 322 percent between 2008 and 2009.

Researchers in Pitt's University Center for Social and Urban Research (UCSUR) used leases filed with the Allegheny County Department of Real Estate to create an interactive map of the more than 2,000 parcels in Allegheny County leased for oil and gas exploration between 2003 and May 2010. The map also indicates the people or companies that bought the leases. The map is available on UCSUR's Web site at through the Pittsburgh Urban Blog, or the PUB, a new service established by UCSUR to make research on regional statistics and trends readily available. It was created by the Pittsburgh Neighborhood and Community Information System (PNCIS), Pitt's online database of statistical maps.

Sabina Deitrick, codirector of UCSUR's urban analysis program, said the oil and gas leases reveal a rapidly expanding pursuit of drilling and exploration rights in the county. New oil and gas leases taken out by parcel increased steadily from 30 in 2003 to 273 in 2008. In 2009, the number of leases rocketed to 1,153, one-and-a-half times more than the previous six years combined. The number of leases filed by May 2010 was 475, on pace with last year.

Only a few companies dominate in terms of number of leases held and the amount of acreage claimed. For instance, the company Dale Property Services/DPS Penn holds a lease on 1,654 parcels in the county, nearly half of all properties leased for oil and gas since 2003; the company, an affiliate of the Dale family companies of Dallas, is a leasing agent whose Web site cites a "strategic alliance" with Oklahoma City-based Chesapeake Energy. At the same time, Monroeville-based Huntley and Huntley Inc. can claim the most land area under lease with 10,990 of the 35,393 acres leased in the county since 2003.

Figures showing the increase in filed leases since 2003 as well as the leading companies in terms of leases and acreage held are available on Pitt's Web site at www.news.pitt.edu/news/UCSUR_MarcellusMap.

Bob Gradeck, research project manager for PNCIS, said that as companies lease such parcels as cemeteries—Calvary Cemetery in Hazelwood and St. Mary's in Lawrenceville are both held by Huntley and Huntley—municipalities should consider how to manage the infrastructure a drilling operation needs. Those considerations include approximately 5 acres of land for a drill pad and refuse pond, emergency response management, road capacity to accommodate heavy trucks, water use and treatment, and the effect of pumping water into the ground—a process called hydrofracking—to extract the natural gas.

"These operations are not just someone drilling a hole. When the scale of this activity is considered, it becomes clear that at the local level there needs to be effective planning," Gradeck said. "There's not a lot of history or experience with planning in many of the municipalities where the industry is operating, but these operations are here and people need to be ready."

More information: www.ucsur.pitt.edu/thepub.php

Provided by University of Pittsburgh