

WEST VIRGINIA BROWNFIELDS ASSISTANCE CENTER AT MARSHALL UNIVERSITY

July–December 2009 Newsletter

The West Virginia Brownfield Assistance Center at Marshall University is a state-mandated program within Marshall University's Center for Environmental, Geotechnical and Applied Sciences, Serving 22 Central and Southern West Virginia Counties

Solar Power Evaluation Could Bring New Life for Former Industrial Properties in Southern West Virginia

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West Virginia has long been known for its extensive energy production. Coal and natural gas have played significant roles in the shaping of our nation, that continues to rely on West Virginia energy today. As new fossil fuel and alternative energy forms are being developed, solar energy has not been viewed as having significant value in West Virginia. Recent studies have indicated that solar, while not expected to be a major energy source in the region, may indeed have value if generated from marginal lands. Lands that have minimal value due to past use and present conditions, such as former industrial properties, are now being evaluated for potential solar energy development.

The EPA's Repowering America Program has selected the Nitro, WV area as a study project to evaluate the potential for solar

energy development. The West Virginia Brownfields Assistance Center at Marshall University (BAC) compiled and submitted this proposal through the EPA Region III Brownfield Program office. This proposal was based on site inventory work conducted as part of an ongoing EPA brownfield assessment project by the City of Nitro. The Nitro solar evaluation project is 1 of 13 nationwide projects selected by EPA headquarters and will be performed in partnership with the Department of Energy's National Renewable Energy Laboratory (NREL). This study will determine the potential solar energy that can be generated from abandoned and underutilized properties currently existing in the Nitro area. Results of this study will be useful for the Nitro area and will serve as a base study for much of central and southern West Virginia.

"The Nitro solar evaluation project is 1 of 13 nationwide projects selected by EPA Headquarters and will be performed in partnership with the Department of Energy's National Renewable Energy Laboratory"



A worker checking on solar panels on a solar farm near Toledo, Ohio. A similar installation could eventually be considered on one or more of the many vacant former industrial properties in the Nitro, WV area.

The project was announced in the Summer of 2009, and officially started with a November kick-off teleconference. A December site visit has been scheduled to evaluate sites in the area and obtain background site information. The WV BAC will be providing assistance to EPA and NREL throughout the project which is expected to be completed sometime in 2010. Results will be made public via EPA, NREL and West Virginia BAC websites.

2009 West Virginia Brownfields Conference Expands Horizons; Charts Future of Brownfields Redevelopment

The 5th Annual West Virginia State Brownfields conference occurred on September 1st and 2nd at the Waterfront Hotel and Conference Center, located in Morgantown, WV. This event was attended by over 190 people from industry, academia, regulatory and various private sectors, and built on the extensive success of past conferences. The theme of this year's conference, "Re-energizing Communities", included information sessions on a variety of topics, including: Brownfields tax incentives, abandoned property redevelopment, an EPA assessment grant writing workshop, and regional case studies. The keynote speaker was WV Department of Commerce Secretary Kelley Goes. Mary Hunt-Lieving of the Claude Worthington Benedum Foundation was the lunch speaker, who awarded five grants to communities for environmental assessment and related activities. These awards are part of the Foundation for Overcoming Challenges and Utilizing Strengths program, or FOCUS, being provided by the Claude Worthington Benedum foundation, and administered by the Northern WV Brownfield Assistance Center at West Virginia University.

Day Two of the conference included a half-day workshop entitled "Bring Your Own Brownfield", or BYOB. A panel of experts from a variety of fields, including regulatory, banking, real estate, and community planners, were present to evaluate selected community project redevelopment plans and provide feedback on how to strengthen those projects, by identifying

potential project hurdles and providing ideas and suggestions for how they might be overcome.

Conference presentations are available on the West Virginia Brownfields website, located at: www.wvbrownfields.org. Next years conference is already in the works, tentatively planned for September 8th and 9th of 2010 in Charleston. Conference details will be available in spring 2010.



Carl Thompson, WV State Extension Service, presents redevelopment plans for the Meadow River Rail-to-Trail project, one of five community presentations during the "BYOB" segment of the 2009 state brownfields conference

WV Brownfields Assistance Center Activities—update

As interest in redevelopment of brownfield properties continues to expand across the state, the West Virginia Brownfields Assistance Center at Marshall University (BAC) is working hard to keep up with the demand. Small communities, larger towns, and county-based economic developers continue to gain understanding of how to address potentially contaminated properties, redeveloping and/or revitalizing sites into productive use, whether to meet housing needs, provide new recreational opportunities, or for industrial / commercial use. The BAC continues to be involved with a number of conferences and workshops, and continues outreach and education to the region. Recent events and outreach activities include:

- Sponsor and Program Coordination on 2009 State Brownfields Conference, held September 1st and 2nd in Morgantown, WV
 - Participation in several state, regional, national and international conferences, including: Miners Celebration and WV Economic Development Council Annual Meeting (Beckley), Create West Virginia (Huntington), WV Wind Power Working Group (Canaan Valley), Appalachian Regional Commission - "New Energy, New Jobs" (Athens, OH), International Wind Power Conference (Chicago, IL), and National EPA Brownfields Conference (New Orleans, LA)
 - Conducted field reconnaissance for EPA Region III and environmental contractor for 3 Targeted Brownfield Assessment Projects (Ansted, Mount Hope, Webster Springs - see article on last page)
 - Continued support for the City of Huntington, City of Nitro, City of Point Pleasant, City of Ronceverte, Wyoming County and McDowell County community-wide brownfield assessment projects
 - Foundation for Overcoming Challenges and Utilizing Strengths in West Virginia (FOCUS) - Guidance and assistance to new applicants- sponsored by the Claude Worthington Benedum Foundation
 - Provided guidance and assistance on development and submittal of 6 EPA brownfield assessment grant applications, including Point Pleasant, Morris Creek Watershed, Fayette County, Wyoming County, Nitro, and the West Virginia DEP's Land Restoration Section.
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West Virginia-Based Alternative Energy Generation: A Major Expansion of Brownfield Center Activities

Marshall University's West Virginia Brownfield Assistance Center (BAC) continues to expand its activities and areas of assistance. Earlier this year, Marshall University's Center for Environmental, Geotechnical and Applied Sciences (CEGAS), which houses the BAC, entered into a partnering agreement with the West Virginia Division of Energy (WVDE) to provide assistance on county-based land use master plans, now required by WV state law in coal producing counties in the state. CEGAS and its BAC are providing mapping, property evaluation and related research and assistance to the WVDE and coal producing counties throughout central and southern West Virginia.

More recently, CEGAS and the WVDE began finalizing contractual agreements for researching and developing alternative energy projects, with an emphasis on utilizing former and existing surface mine sites. Appalachian Regional Commission (ARC) funding has been secured for this unique project, consisting of two distinct parts. Part 1 will be for performing wind analysis at various locations in southern and central West Virginia to determine commercial and community-scale wind potential for wind energy production. Part 2 will be for up to 6 project grants of up to \$50,000 each for alternative energy development projects.

As part of the wind analysis project, CEGAS will be purchasing Sonic Detection and Ranging equipment, or SODAR, currently used to monitor airport wind speed and direction, and the newest technology available for wind power generation analysis. Instead of using traditional towers with multiple anemometers, which require extensive man-hours, open land and limited results, SODAR technology can produce a wind profile of up to 200 meters above the earth's surface, at significantly reduced costs without expensive tower erections that require removal. SODAR has been used for other wind-related applications, but only in recent years has this technology gained acceptance by the wind energy industry as a viable and cost-effective way to determine initial wind power resources.

CEGAS and its BAC is currently in the initial process of identifying potential surface mine sites of interest for SODAR wind analysis studies.

"...performing wind analysis at various locations in central and southern West Virginia to determine ... wind potential for wind energy production"

"...grants of up to \$50,000 each for alternative energy development projects"



A SODAR unit, similar to the one shown, will be utilized for wind power analysis on former surface mine properties throughout central and southern West Virginia (photo courtesy of Second Wind, Inc.)

Part 2 of this ARC-funded project involves providing funds for up to 6 mini-grants for alternative energy development projects. Each mini-grant has a maximum amount of \$50,000 and requires 50% matching funds from the grantee. Alternative energy projects may include solar, wind, biomass, or similar applications. Funds can be used for a wide variety of applications, and are available to both public and private entities. Additional information, including RFP's, will be available in early 2010.



View of Mt. Storm wind farm in Tucker County, built partially on former surface mined property

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“Re-Energizing Communities”

Mercer Mingo Monroe Nicholas Pocahontas
Putnam Raleigh Summers Wayne
Webster Wyoming

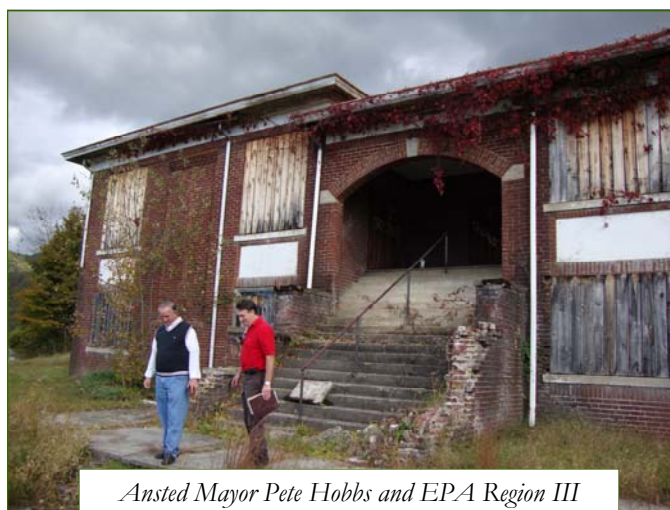
Assessment Activities On-Going on 3 Targeted Brownfield Assessments Under EPA Region III Brownfield Program Direction

The West Virginia Brownfields Assistance Center at Marshall University (BAC) has been working extensively with EPA Region III's Brownfields Program on a number of initiatives, including three targeted brownfield assessments, or TBA's. Under the TBA program, communities can partner with EPA to have environmental assessment work conducted on specific sites with likely redevelopment potential. According to Joe Nowak, EPA Region III Brownfields Project Manager, "EPA's Targeted Brownfields Assessment program provides added flexibility to address environmental concerns for projects with public benefits. This technical assistance, done in cooperation with our States, is provided at no cost to the eligible applicant. Because of additional funds recently provided by the American Recovery and Reinvestment Act of 2009, three TBA task orders were awarded to perform either sampling activities or establishment of cleanup options for future redevelopment".

The three communities with TBA's ongoing include Ansted, Mount Hope, and Webster Springs. Ansted is evaluating the former high school building, abandoned since the 1970's, for potential reuse as city offices, a community center, and small business center. Asbestos and lead paint in the building interior are the main contaminants of concern. In Mount Hope, the Coal Heritage Highway Authority intends to redevelop a former automobile dealership building, now vacant, into a coal museum and office space. Assessment work will be conducted to check on the presence of possible former underground storage tanks and miscellaneous drums with unknown content. In Webster Springs, the majority of assessment work has been completed by the WVDEP on a former

railroad depot building and associated property. The TBA being conducted will determine clean-up requirements of existing environmental impacts, mainly minor levels of petroleum-based contaminants and heavy metals in subsurface soils, for projected redevelopment of the site into a museum, outdoor recreational area, and parking lot for nearby Bakers Island.

Initial site visits were conducted in October of 2009 by representatives of the BAC, EPA Region III Brownfields Program, and the EPA-designated environmental contractor. Additional field work is being scheduled, tentatively planned for early 2010.



*Ansted Mayor Pete Hobbs and EPA Region III
Brownfields Project Manager Joe Nowak inspecting
former Ansted High School building*