

## 10-YEAR VISION



# Reinventing Wingfield Pines

## Creating a Regional Showcase for Floodplain Rehabilitation in a Post-mined Landscape

University of Michigan Landscape Architecture Graduate Students Brian Chilcott, Joel Perkovich, and Mary Walton, have completed a Master Plan for Allegheny Land Trust's Wingfield Pines property. This project was undertaken to fulfill part of the requirements for the Master of Landscape Architecture degree at the University of Michigan. Shown below, right, are Joel, Mary and Brian as they take a break during hands on construction of one of their recommendations to improve the Wingfield Pines Landing Canoe Launch.

"ALT is grateful for the hard work, talent and dedication that Joel, Mary and Brian demonstrated over the past 18 months on developing the Master Plan. Best of luck to them as they launch their professional careers!" said Roy Kraynyk, ALT's Executive Director.

Below are excerpts adapted from the 131-page document, which is available on the Wingfield Pines Overview page at [www.alleghenylandtrust.org](http://www.alleghenylandtrust.org).

The waterways that carve the lushly forested hill country of southwestern Pennsylvania are a celebrated source of the region's natural beauty. However, beneath these picturesque slopes and surface waters lay the earthly ingredients that fueled America's great industrial growth. Pittsburgh, Pennsylvania, as the epicenter of river transport and production, played a pivotal role in the American industrial revolution. The generous coal reserves and navigable, westward leading waters made greater Pittsburgh the largest singular producer of steel in American history.

Wingfield Pines Conservation Area (WPCA) is an accessible case study of historical and currently-emerging cultural attitudes towards natural resources; it effectively narrates its past and now demonstrates the process by which a dedicated people can catalyze the process of recovery. Such opportunities for environmental education and to build public support should be seized, and WPCA is ideally suited to this purpose. The 80-acre floodplain has a storied history of abuse characteristic of the region and is now poised to become a regional showcase of environmental problem solving in southwestern Pennsylvania.

WPCA's landscape legacy is characteristic of the exploitation southwestern Pennsylvania's natural resources have endured through the region's industrial zenith. Collectively, Pittsburgh's people have also endured the externalities of coal mining and steel production. Even though those industries have declined, the after-effects of coal mining in particular still threaten public health on a daily basis. WPCA's AMD treatment system will be a prominent example of progressive AMD problem-solving. The AMD treatment system also provides a stage to illuminate the sacrifices made by the region's people and natural resources.

Given the context of WPCA's location—within one of Pennsylvania's most impaired watersheds, within an accessible proximity to Pittsburgh's metro population, along the inchoate Chartiers Creek Greenway, and adjacent the ambitious expansion of neighboring Boyce-Mayview Park—its potential cannot be overstated.

From this context must emerge a vision of ecological rebirth that both remembers the cultural legacy to which it is bound and yet effectively reverses the trend of environmental degradation consequent of that legacy. It must operate within the framework of an irrevocably damaged landscape while attempting to reclaim the myriad benefits of the habitats that were lost and to maintain the benefits of those habitats that remain. That vision—the designers' vision—is one of ecological rebirth, of reinvention, perhaps of rehabilitation, but would not conform to any conventional definition of restoration.

This project is a comprehensive design masterplan and ecological rehabilitation plan for [the] 80-acre strip-mined floodplain. The Allegheny Land Trust seeks to recreate this site as a regional showcase for ecological rehabilitation and environmental education. This includes passive treatment wetlands to cleanse iron oxide from abandoned mine drainage (AMD), accelerated succession of forest regeneration and habitat enhancements, site access enhancements, as well as educational signage and program development.

We have herein supplied a vision for WPCA that oversteps the bounds of definition. Rehabilitation is a word frequently cited [in this report] and it conveys a sense of healing. It also suggests a process of correction and guidance. WPCA is not, of course, guilty of error; it is a landscape wronged by its keepers. It is a landscape that has been stripped not only of its surface, but of its highest and best use—its biological diversity and its ecological services. Clearly, this is a subjective realm, and an industrialist or a golf enthusiast might disagree with that claim. We must, however, approach our goals and visions from the perspective of our acknowledged client, with whom we are lucky to share a common ethos. We are also lucky that ALT aims to serve the greater public good in its preservation of special lands. We can therefore confidently state that our vision of WPCA truly aims for its highest and best use, and rehabilitates on multiple levels.

The ecological services provided by WPCA are impossible to quantify, but if native species have intrinsic value—and we believe they do—our enhancements of native biodiversity vastly increase the value of the site. In this way, the deliberate and designed re-introduction of native communities facilitates healing. The management of invasive species—for the same long-term objective—is the correction and guidance that will keep the healing process moving forward. And the encouragement of natural ecosystem processes is the physical medicine, the buffer against contrary forces. The floodplain is in constant changing relations with Chartiers Creek; it accepts the excess of the creek, keeping it stable and protecting the web of life that depends on it. But the favor is returned; Chartiers Creek gives to the floodplain its fertility and hence, its biodiversity. If these relationships continue to heal WPCA and Chartiers Creek, rehabilitation should succeed.



Joel Perkovich, Mary Walton and Brian Chilcott rest after rebuilding the canoe launch at Wingfield Pines.