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Landform design in mine reclamation: is this the future?

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The practice of landform design in mine reclamation is gaining momentum as an alternative to traditional reclamation techniques which can result in highly stylized and engineered analogues for natural systems. Rigid geometric shapes, uniform slopes, and the use of non-native materials are common design features which certainly are not representative of the natural world. Conversely, landform reclamation borrows from the surrounding landscape to create a reclaimed surface that is similar to nearby undisturbed areas. The features of a particular landscape reflect how it has evolved over time and will continue to evolve based on the prevailing climatological and environmental processes unique to the area. The reclaimed mining landscape must incorporate features that reflect this evolutionary history if reclamation is to be stable and self-sustaining. Using the surrounding landscape as a guide, landform reclamation embodies the architect Louis Sullivan's famous axiom, "*form follows function.*" Our planet is comprised of dynamic and evolving landscapes which hold clues for how reclaimed mine sites will perform over time. We have the tools to begin to make predictions about how these sites will evolve, thereby providing opportunity to enhance our stewardship of these reclaimed lands. Today's presentation examines why the mining community should consider adopting landform design principles as the standard for future mine reclamation.

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