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**A Practitioners Perspective: Integration of Balance Accepted Sampling, Nadir Photography and the SamplePoint Platform into an AML Reclamation Monitoring Program**

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Vegetation monitoring is critical to assess outcomes of reclamation efforts associated with Abandoned Mine Lands. Traditional transect-based monitoring systems are time consuming and costly to implement, which often leads to an insufficient number of sample points to appropriately characterize a site, let alone the variation of performance across larger sites. Tetra Tech has worked with Dr. Curran of Abnova Ecological Solutions to design and implement a new reclamation monitoring system for the Wyoming Abandoned Mine Land Program, utilizing a balance accepted sampling (BAS) approach to distribute sample locations across sites, ground-based nadir image capture at the sample locations, and the photo plot sample platform, SamplePoint, to analyze the images collected. The marriage of these components in our monitoring system has allowed us to collect substantially more statistically valid vegetation/ground cover data, per unit of field time, than would be possible from traditional transect-based approaches. This talk will highlight the architecture of the monitoring system, equipment and staffing needs to implement it, lessons learned during implementation, and the programmatic opportunities that are manifesting due to its implementation, such as development of data-driven analysis and decision management system to improve reclamation approaches and performance within the program.
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