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## Vegetation: A Forgotten Fundamental?

Solve erosion problems  
and save money with  
proper plantings

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When you think of erosion control, what comes to mind? Diversion ditches and sediment ponds? How about hydromulch and turf reinforcement mats? For most people, vegetation establishment is one of the last things to come to mind.

Why is that, when really the great majority of erosion and sediment control problems can disappear with the simple establishment of vegetation? When considering the cost of items such as erosion control nets and mats, riprap, diversion ditches and sediment ponds, a little vegetation establishment to stabilize main areas becomes a no-brainer and is often the only practical answer.

Consider a land development project in which the contractor has spent thousands, if not hundreds of thousands, of dollars in over-lot grading. A large part of the area typically has been graded to a very low slope or to be flat for the later construction of buildings. If the land is left without stabilization to protect it from erosion, all or a large part of the graded area can be ruined with just one large storm event.

Furthermore, the cost of storm water collection ditches and sediment ponds—and their maintenance—can be much higher when a plan does not incorporate vegetation to stabilize the largest areas. Yes, the areas can be stabilized temporarily using tackifiers or soil cements, contour furrowing or straw coverage, for example, but establishing vegetation at a significantly lower cost can reduce or eliminate the need for these types of measures.

Typically, tackifiers and soil cements last for one or two rainfall events; in wet areas, they are questionable to last through the first big event. Straw is labor-intensive to install, and it lasts through only about half of its first big wind event unless it is held down with expensive netting or a tackifier. These measures cost perhaps twice what

seeding and harrowing costs.

Vegetation establishment is critical and a definite cost savings over any other large-scale stabilization method. It also is helpful in stabilizing large earthen dam faces or covers over hazardous waste. These structures must be stabilized over the long term, otherwise the integrity of the facility will be lost and the costs incurred for it will have been wasted.

Often a design engineer does not have the knowledge or understanding of vegetation establishment to feel confident in using it alone to protect his or her design and limit liability. As a result, rock covers, riprap, concrete and other means are overused, which can result in huge costs. There is plenty of research data and proven methods of monitoring, however, that can be used to design vegetative covers to protect the majority of these types of structures at a much-reduced cost.

So why are we not putting vegetation establishment at the front of our focus for erosion and sediment control? Why are we failing to use vegetation as a first means of attack, then finding other means for the most severe areas where nothing else will work? The great truth is that many of us are establishing vegetation, and we are doing it successfully. Only those who have not yet received the word continue to cost their clients too much money.

Vegetation establishment will be a focus in the near future, so stay tuned. Let's all get the word out and start saving. **SWS**

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