Indicator number six is wind scour or deposition. In this indicator, we're looking at all of the risk factors that may occur as a result of wind erosion or aeolian erosion and we're looking for a situation here where we have erosion from the interspaces, (i.e.) there is no vegetation, the wind can hit at full force, the very fine soil particles are carried up into the atmosphere and can be carried great distances away from a site. If it's a sand particle, what happens is the wind tends to begin the process of bouncing sand particles along the surface, a process called saltation, but, as the sand particle is elevated it's too heavy to be carried high into the air and gravity pulls it back to the earth and it hits another sand grain when it falls and now you have two sand grains or more than two sand grains that are moving and the first thing you know on a strong wind on the sandy soil, you have this sheet of sand moving across the landscape. Now, that continues until the wind is interrupted by a plant or a rock or a house or anything where that the velocity of the wind is broken, the erosive or soil carrying capacity of the wind is reduced and the soil material that's being carried is dropped out and that's what you see in the deposition under plant and around plants on this particular slide is, is you start having the sand accumulate in and under plants and slowly, but, surely, you start having the plant covered up by the sand. Many plants that are adapted to this condition actually re-root within the sandy material that's accumulating or continue to basically put out new growth above and beyond the shape of the accumulated soil material. So, what you have then is you start having situations where you have a dune fields develop and this again, southern New Mexico and you can see on the slide on the right you can see kind

of bare areas and then the mesquite that you're looking at, the green plants that you're seeing are mostly mesquite and these plants are up on piles of sand that have blown in from somewhere else and as the sand wind velocity was slowed, the ability of that wind to carry the sand any farther was reduced and the sand was then deposited where the trees are and so you have these dune fields, these hammocks of vegetation and accumulated sand. As you can see in the reference state on the left you don't have that condition because the grass plants that are growing there basically never allow the wind to start blowing at the soil surface at such a rate that it can start removing the soil particle materials either sand or dust and carry them away. So, you have vegetative cover as you see on the left and you're pretty safely protected from wind erosion, scour and you then don't have the deposition problem. The attribute that this particular indicator relates to is strictly soil.