



FORESTRY, FIRE & STATE LANDS REQUEST FOR GRANT APPLICATION Cover Sheet



Project Title	Quantifying Farmington Bay dust composition from source to sink		
Lead Project Sponsor	Utah State University		
Project Contact	Name Janice Brahney		
	Mailing Address Dept. of Wshed Sci, 5210 Old Main Hill, Logan, UT		
	Phone Number 435-797-4479		
	Fax Number		
	E-Mail Address janice.brahney@usu.edu		
Project Description / Abstract	<p>Persistent drought and water use have driven the level of Great Salt Lake (GSL) to the lowest seen in >50 years. Since a high stage that occurred mid-1980's, the lake area has shrunk by ~50%, exposing vast areas of lakebed to erosion. The composition of the GSL dust is of high concern due to potential ecosystem and human health consequences. Dusts from the GSL may contain toxic heavy metals and the remnants of cyanotoxins from algal blooms. Further, industrial and organic pollutants can adhere to dust particles through transport, potentially increasing the exposure of Utahns to these contaminants. Here we propose to measure potential human and ecosystem exposure to these toxins from Farmington Bay dust by quantifying these pollutants in dusts from source to downwind areas. Second, we will characterize the dust erosion and contaminant deposition history using sediment cores taken from seepage fans along the Wasatch Front. This research will provide a clear picture of recent changes in dust emission rates associated with decreasing lake levels in GSL and the identification of potential health or ecosystem concerns downwind.</p>		
Project Funding			
	Amount Requested	Matching Funds	Total Project Cost
	\$ 26,635	\$	\$ 26,635