



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



Project Title	Investigating dust production from the Great Salt Lake and the potential human health implications of pathogens, toxins, and cyanotoxins present in the dust		
Lead Project Sponsor	U.S. Geological Survey (USGS)		
Project Contact	Daniel Jones		
	U.S. Geological Survey 2329 W. Orton Circle, West Valley City, UT 84119		
	Phone: (240) 620-7822		
	Fax: (801) 908-5001		
	E-Mail: dkjones@usgs.gov		
Project Description / Abstract	<p>The Great Salt Lake (GSL) continues to desiccate from its historic high stand in 1986 due to ongoing drought conditions and current water diversions. This desiccation is leading to new exposures of lakebed sediments. Recent dust emissions from exposed lakebed sediments in Farmington Bay have raised questions about the source, transport, fate, and health effects of this dust. The proposed study will use passive dust samplers to collect wind-eroded material originating from GSL source areas. Wind-eroded material from GSL sources will be compared to paired surface sediment samples collected from GSL and potential regional dust-source areas to determine the impact of locally derived aeolian material from the GSL on the dust flux and composition in northern Utah. All collected material will be analyzed for microbial ecology, pathogens, and cyanotoxins to assess any human health threats posed by the dust. This work will be the first attempt to quantify the full breadth of human health issues present in dust from the GSL, and will provide a foundation for understanding future health risks posed by lowered lake levels.</p>		
Project Funding	Amount Requested \$ 29,196	Matching Funds \$ 19,461	Total Project Cost \$ 48,657