



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



Project Title	How do changes to the causeway in Utah’s Great Salt Lake affect water and salt flow in Gilbert and Gunnison Bays?		
Lead Project Sponsor	Utah State University		
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Project Description / Abstract	<p>Proposed changes to the Great Salt Lake’s railroad causeway will affect water and salt flow between Gilbert and Gunnison Bays. In turn, these changes are likely to affect lake ecosystems and productivity, as well as economic benefit derived from the lake, including brine shrimp harvest and mineral extraction. However, Great Salt Lake managers and stakeholders lack information on how the proposed causeway bridge will change interflow and salinity in the Great Salt Lake. This project will update USGS’ Great Salt Lake Fortran Model to simulate water and salt flow with proposed changes to the railroad causeway (including a trapezoidal bridge opening and removal of existing culverts). This work will directly aid the Division of Forestry, Fire & State Lands to understand, anticipate, and plan for likely interflow and salinity changes from the proposed causeway bridge, as well as to highlight flow and salinity data collection needs to improve model simulations. Results from this research will help the Division of Forestry, Fire & State Lands and other stakeholders manage and protect the ecological and economic resources of the Great Salt Lake.</p>		
Project Funding			
	Amount Requested \$58,919	Matching Funds --	Total Project Cost \$58,919