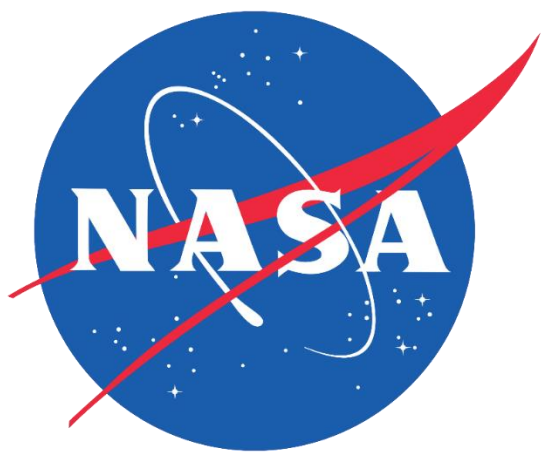


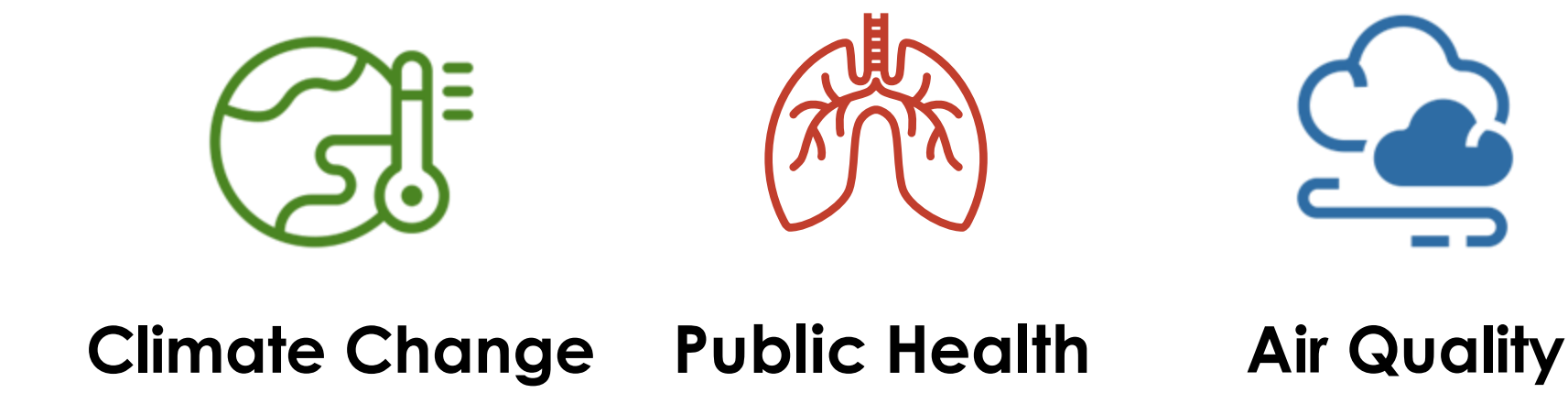


Great Salt Lake Health & Air Quality

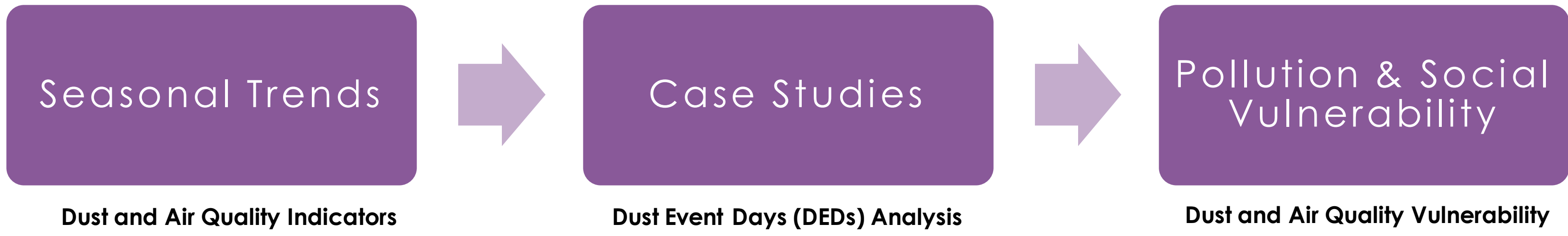
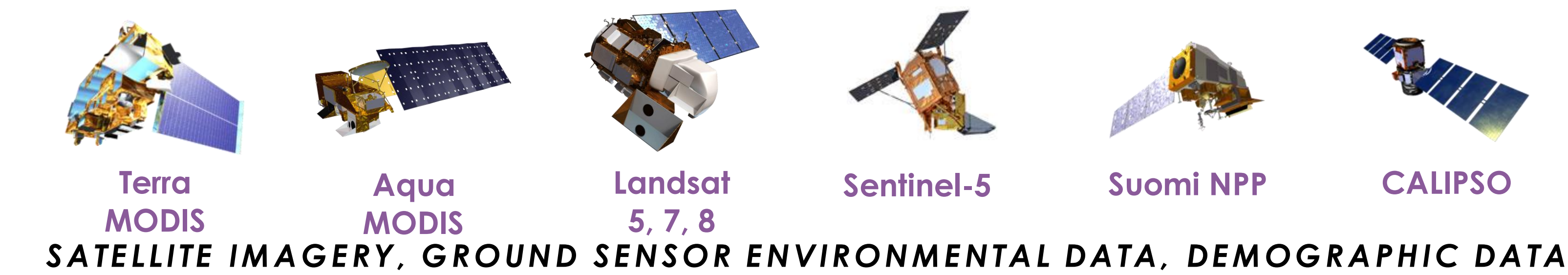
Monitoring Lakebed Exposure and its Impact on Air Quality and Environmental Hazards in the Great Salt Lake Watershed



The Great Salt Lake (GSL) is a terminal saline lake located in northern Utah, USA. Water inflow has declined rapidly over the last forty years due to human withdrawals and climate change. Lake levels have been lowered which has exposed over 50% of the lakebed to erosion. There is a public health risk tied to the subsequent increased frequency and intensity of regional dust storms caused by airborne lakebed dust under specific meteorological conditions.

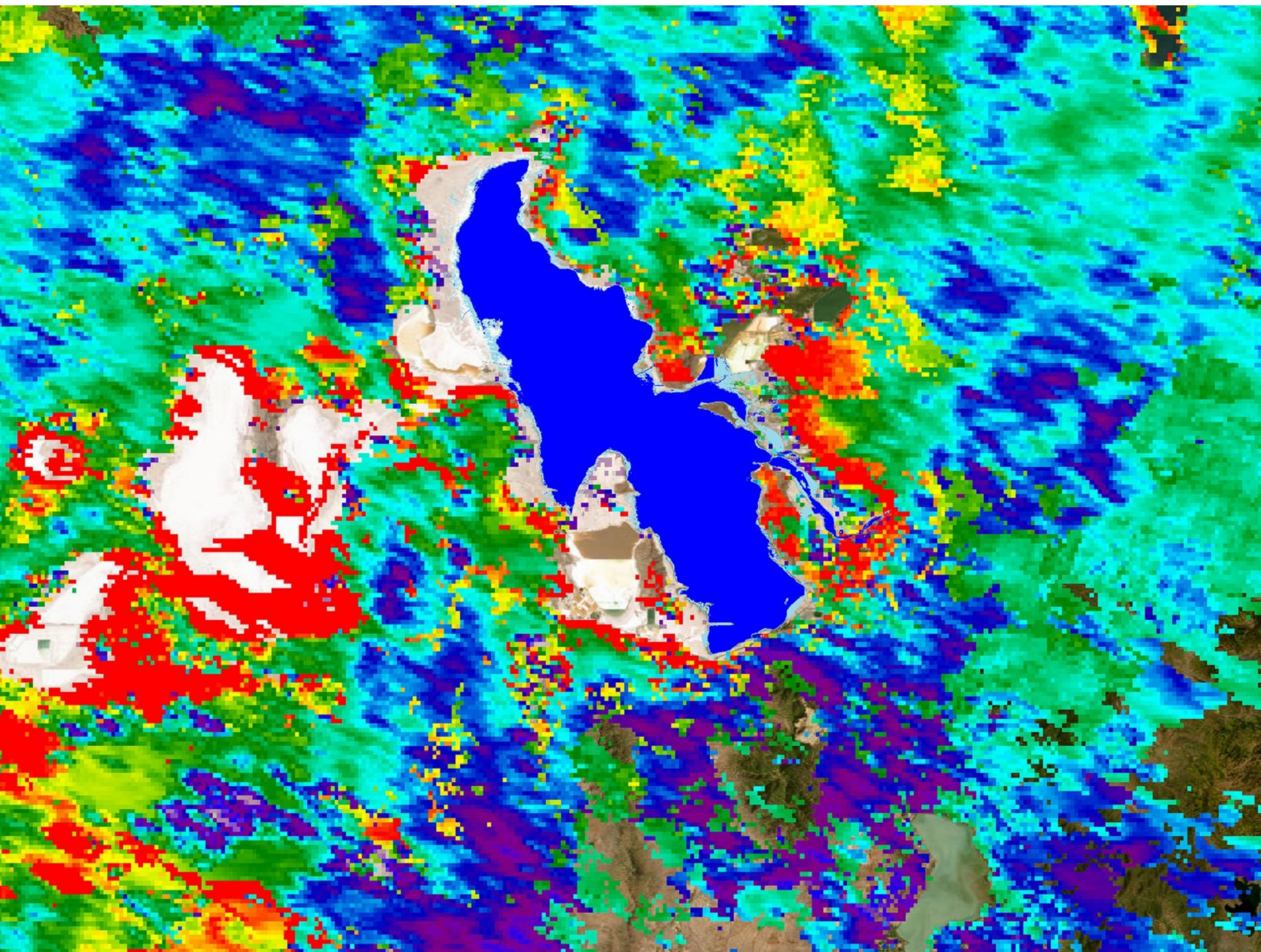


NASA DEVELOP is using Earth observations to better understand **dust, air quality, lakebed exposure**, alongside **community vulnerability**, at the **Great Salt Lake**.



Declining lake levels are associated with elevated AOD from dust seasons

Local communities are disproportionately impacted by air pollution

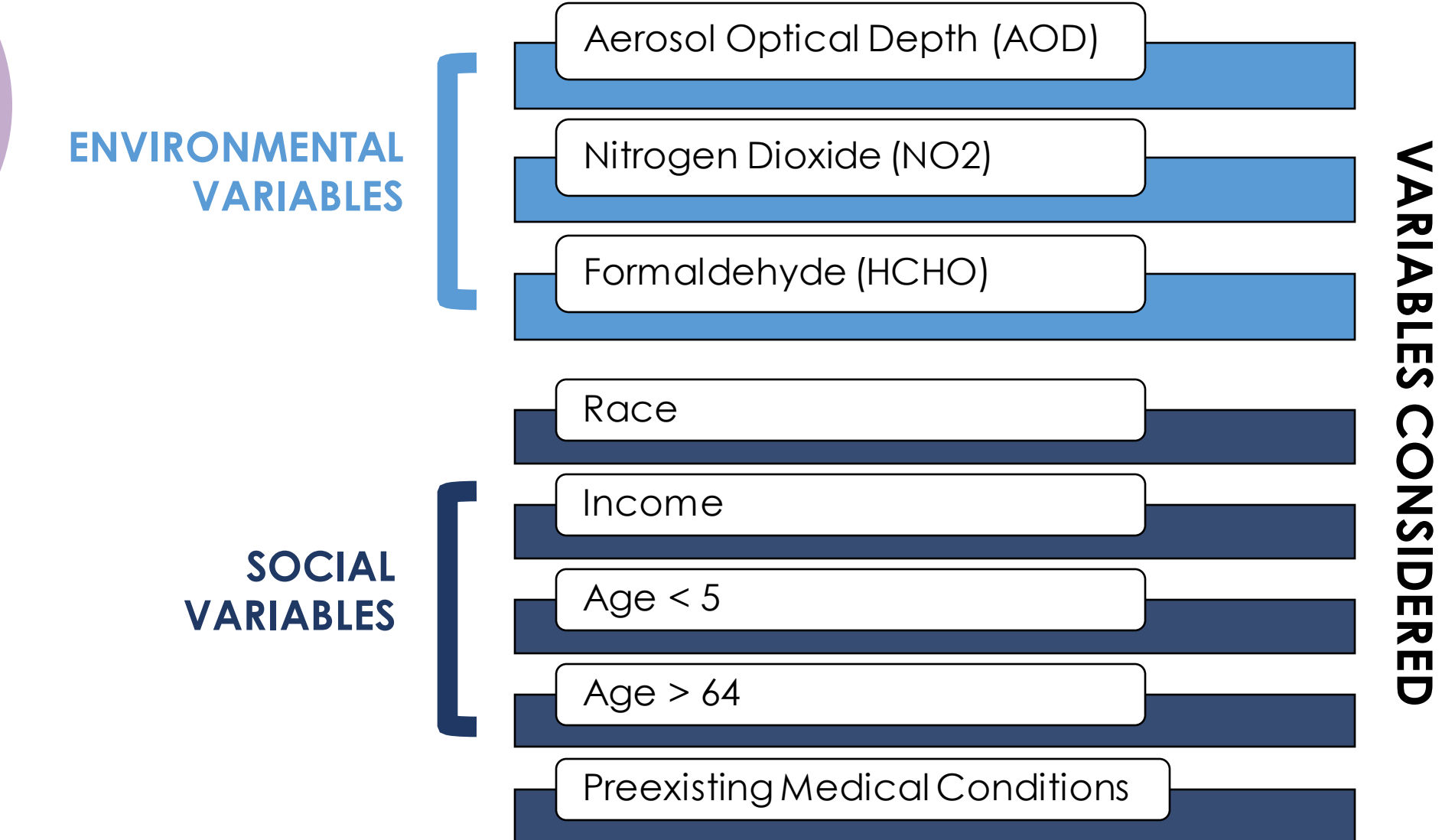


ENVIRONMENTAL JUSTICE

Redlining
Redlining legacy results in inequitable pollution exposure

Industry Pollution
Multiple point-source pollutants impact those near GSL

GSL Dust
GSL dust exacerbates environmental health disparities



High (2011 in light blue) & Low (2021 in dark blue) Lake Surface Area during the study period.

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