High

Importing water to Great Salt Lake from the Pacific Ocean (or other sources) is feasible but would be expensive, slow, and controversial.

Summary

Delivery of 500,000 acre-feet per year could be achieved through a 13.3-foot diameter pipeline stretching 700 to 800 miles from the Pacific Ocean, depending on the route. Without the construction of tunnels to bypass higher elevations, the pipeline would need to pump water over the Sierra Nevada mountains (6,500 to 7,000 feet). Figure 17 shows one possible route and the elevation profile along the way. However, nearly unlimited route options exist including from the Gulf of California, or importing freshwater from the Missouri/Mississippi drainage or the Snake River drainage. The latter two options are less likely due to current demands on those sources.

Key Facts and Insights

- Interstate Project The pipeline would be an interstate project crossing California, Nevada, and possibly a portion of Arizona, depending on the route selected. Construction across states and installing an intake structure in the Pacific Ocean would likely require federal involvement. This large pipeline would probably traverse highly developed urban areas.
- High Cost Based on similar completed projects, the total cost could exceed \$100 billion for the studies, design, and construction of a pipeline, depending on the route chosen.
- Intermittent Use During wetter years, the pipeline would likely not be used because natural inflows could supply the demands for Great Salt Lake.
- Unknown Impacts Importing salt water to Great Salt Lake may impact the lake in unanticipated ways. Understanding impacts requires further study of potential treatments for imported water, which would further increase project costs.
- Long Process Project completion would likely take decades. In addition to significant construction time, completion would depend on environmental, cultural, and economic impact studies.





Low Speed of implementation 12345 Legal/regulatory feasibility (1)(2)(3)(4)(5)

Source: Great Salt Lake Strike Team

Policy Options and Tradeoffs

Intake Location Options

- Coast of California
- Gulf of California
- Missouri/Mississippi River basin
- Snake River basin

Tradeoffs

- High costs and complications
- Inter-state (potentially international) project
- Unknown ecological impacts
- Water likely unavailable in river basins because of current demands



Figure 17: Elevation Profile for Importing Water from the Pacific Ocean to Great Salt Lake

Source: Google Earth elevation profile of potential pipeline route from California coast to Great Salt Lake.