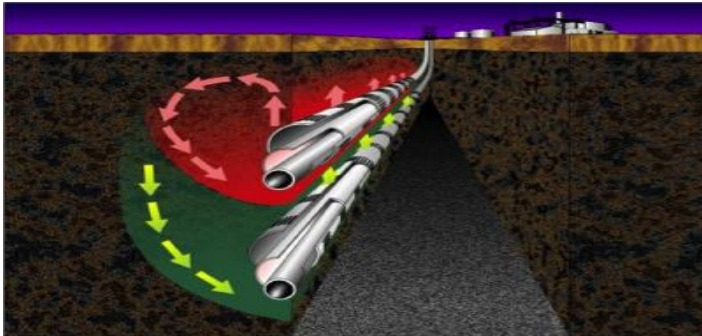


Energy Water Nexus: Resource Industries

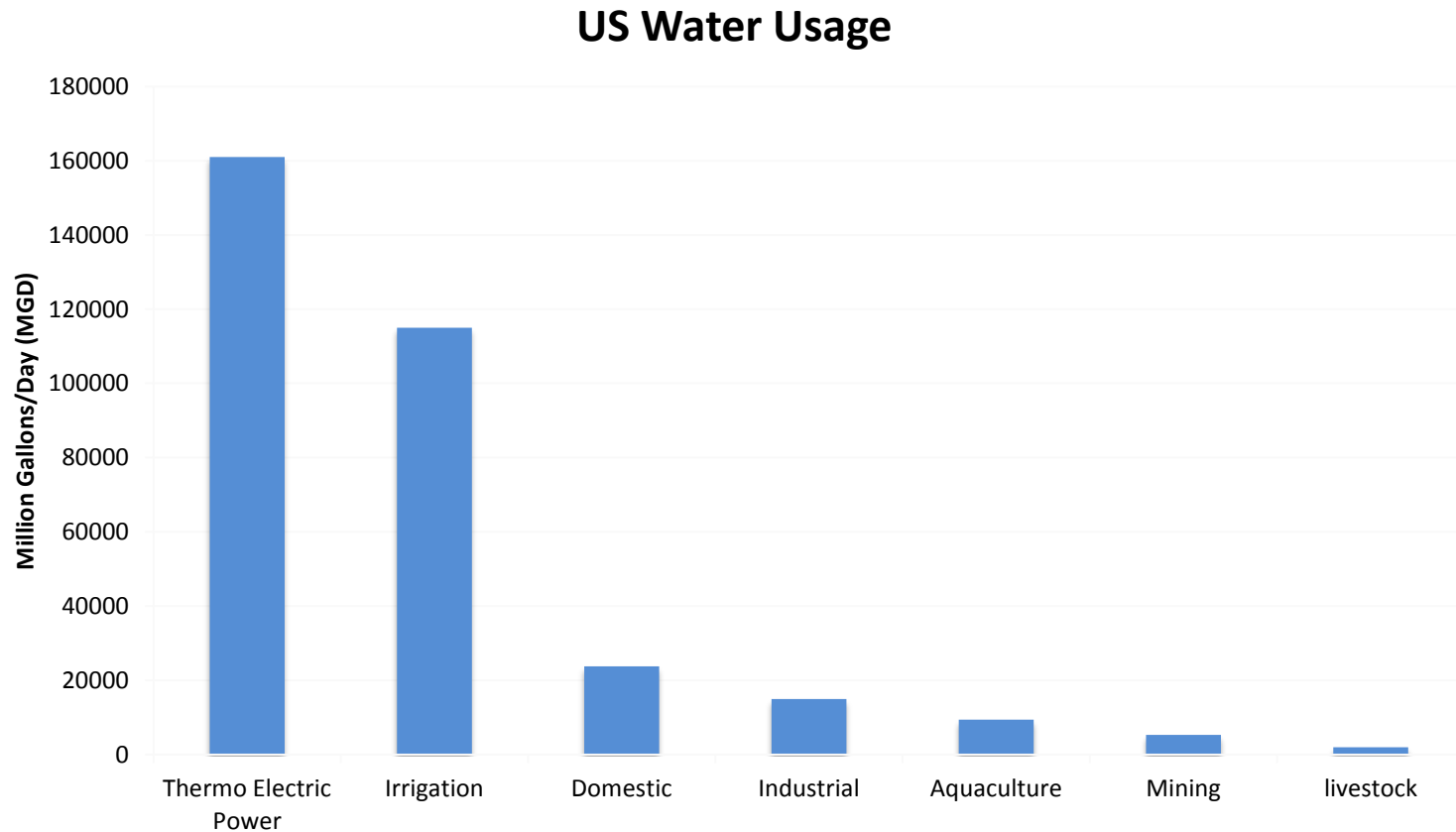
Energy Water Nexus

- Supply/Energy generation
- Process – drilling, extraction
- Waste – Disposal, reinjection, reuse





Industrial Water Usage (United States)

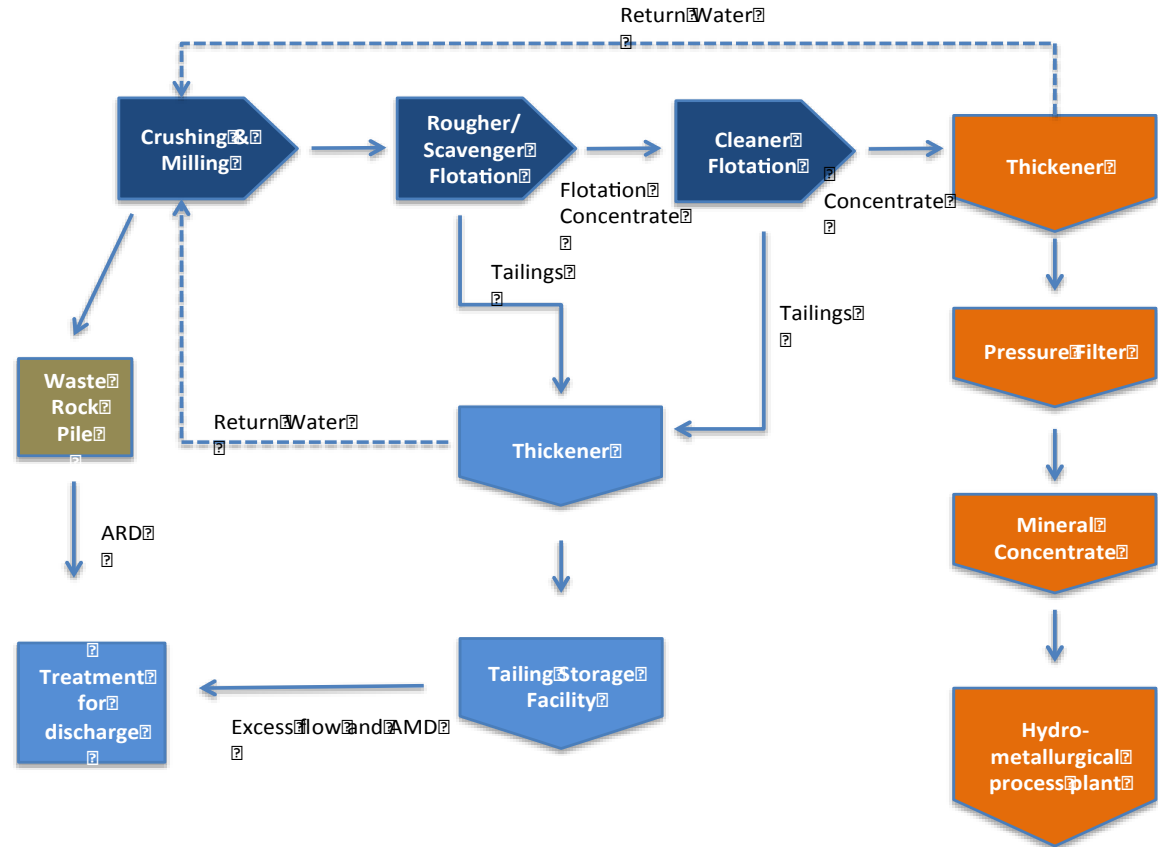


Source: USGS – Water Usage in the United States (2010). Published Nov 2014.

Mining – Water Usage



Chilean copper mines
supplied by seawater

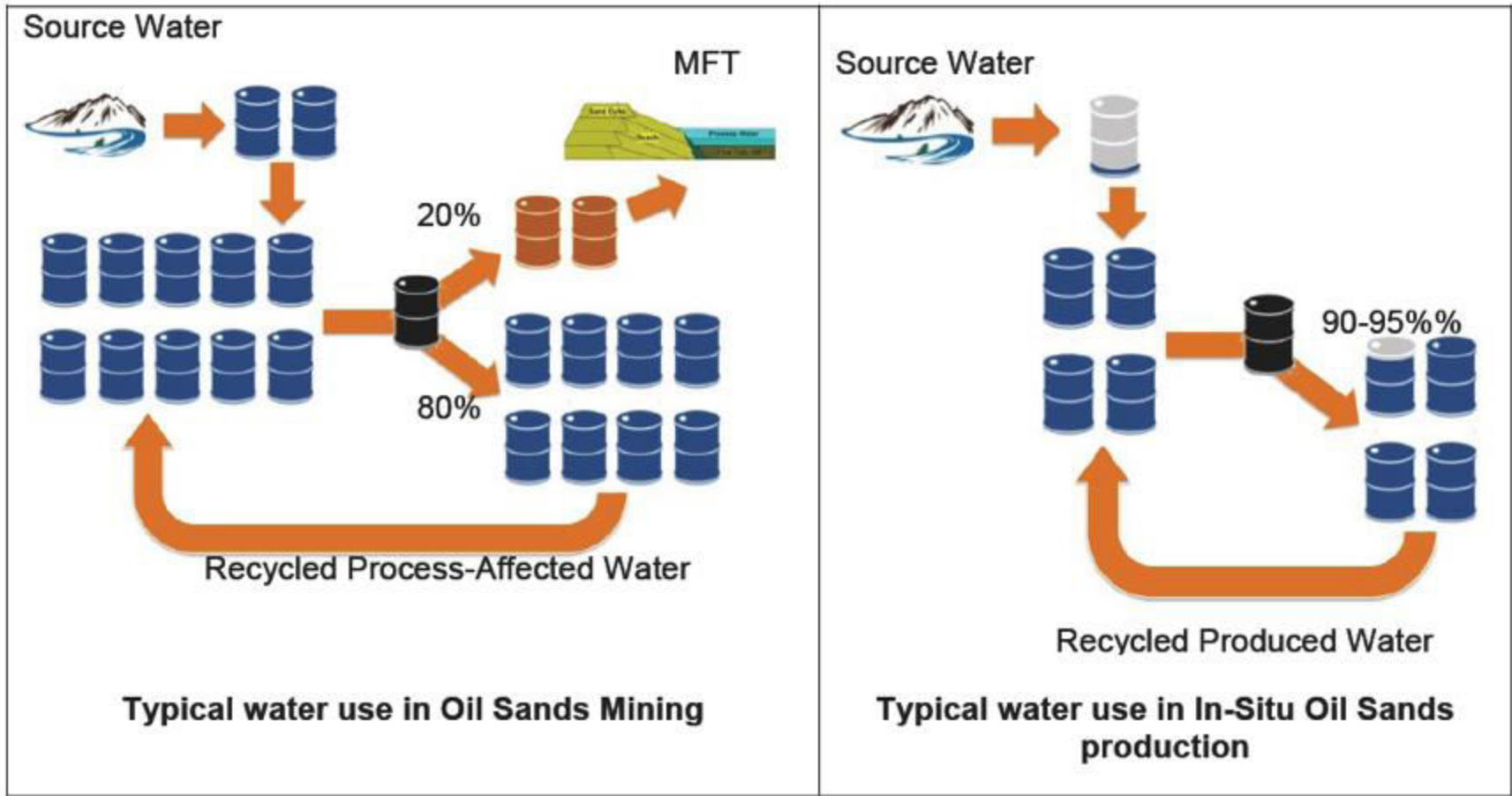


Oil and Gas Sector Overview

- Produced Water: from “upstream” processes, exploration and oil production
- Downstream processes: oil refining and petrochemical products

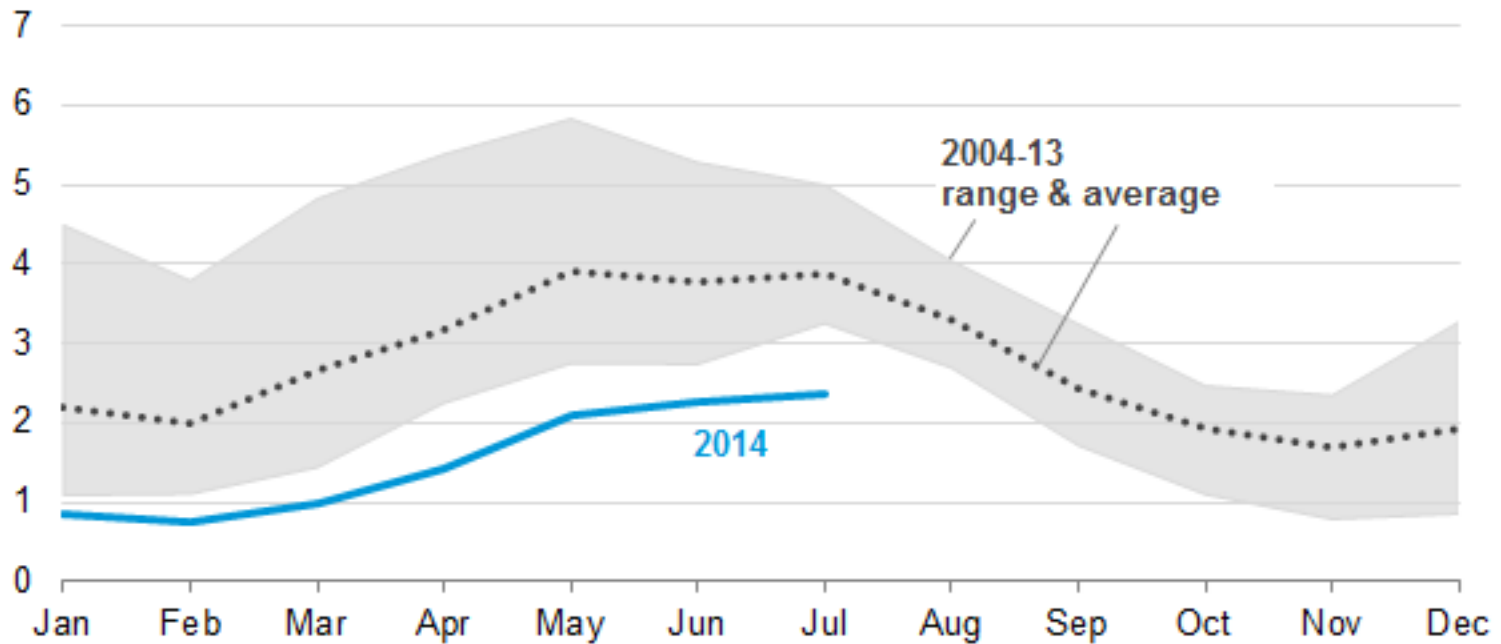


Water Usage in the Alberta Oil Sands



Power and Water – California Drought

California hydropower net generation
million megawatthours



Source: U.S. Energy Information Administration, *Electric Power Monthly*