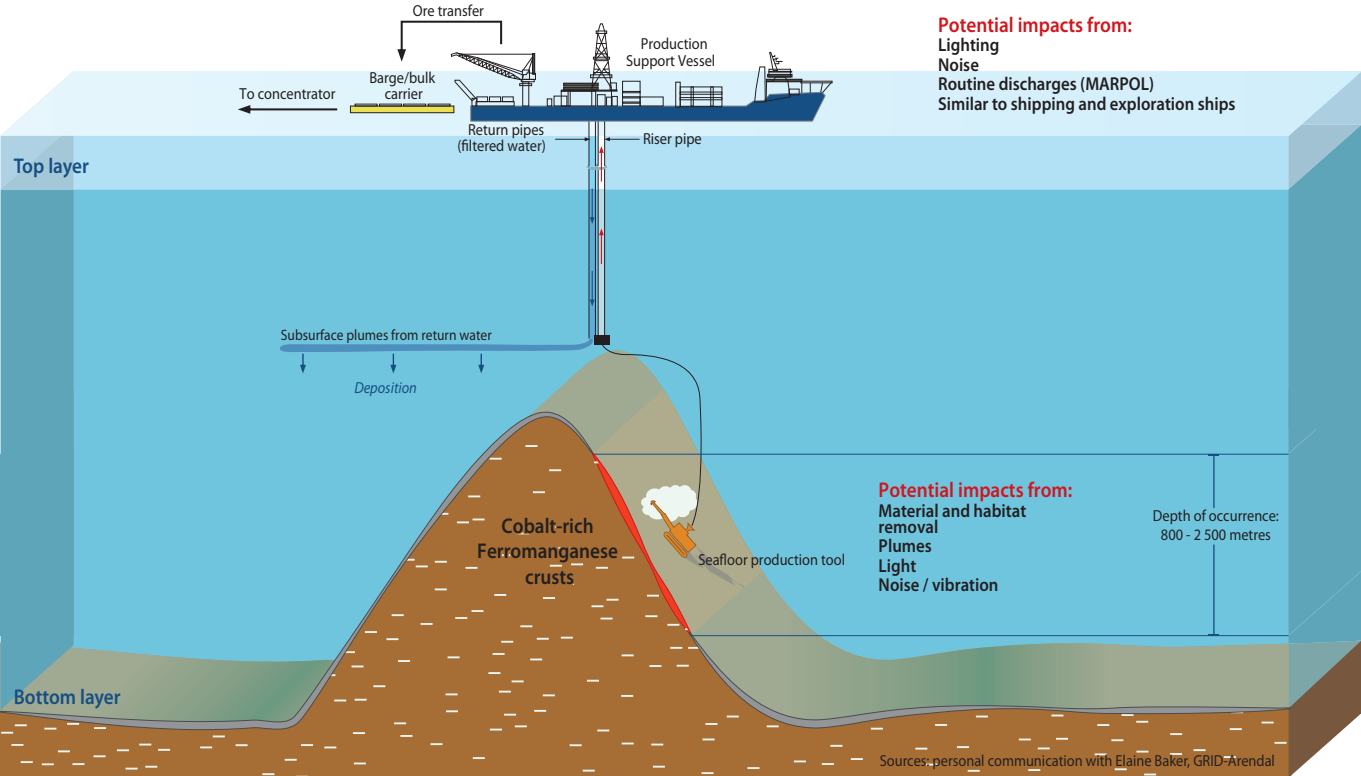

Ore transfer
Production Support Vessel
To concentrator
Barge/bulk carrier
Return pipes (filtered water)
Riser pipe
Potential impacts from:
Lighting
Noise
Routine discharges (MARPOL)
Similar to shipping and exploration ships
Top layer
Subsurface plumes from return water
Deposition
Cobalt-rich Ferromanganese crusts
Seafloor production tool
Potential impacts from:
Material and habitat removal
Plumes
Light
Noise / vibration
Depth of occurrence: 800 - 2 500 metres
Bottom layer
Sources: personal communication with Elaine Baker, GRID-Arendal