

Footprint Buffer distances for energy and infrastructure from the 2013 USGS OFR-1098

Infrastructure (Power lines), table 8, table A1 and page 44

Direct: 200 m footprint (100 m buffer on either side of the power line)

Infrastructure (Communication towers), table 9, table A1 and page 44

Direct: 1 hectare footprint (56.4 m buffer) (BER report)

Infrastructure (other vertical structures), table 9, table A1 and page 44

Direct: 1 hectare footprint (56.4 m buffer) (BER report)

Infrastructure (fences), table A1 (BER referenced Stevens et al. 2012)

No buffer, direct linear miles

Infrastructure (roads), table 6, table A1 and page 31

Direct: These were from SAB chapter 12: "Ecological Influence and Pathways of Land Use in Sagebrush" estimated surface area of roads (pg 216) for interstate highways (73.2 m width); federal and state highways (25.6 m width); and secondary roads (12.4 m width).

Interstate: 73.2 m footprint (36.6 m buffer from mid-line)

Federal and State Highway: 25.6 m footprint (12.8 m buffer from mid-line)

Secondary: 12.4 m footprint (6.2 m buffer from mid-line)

Infrastructure (railroads), table 7, table A1 and page 31

Direct: 9.4 m footprint (4.7 m buffer) Included abandoned and non-abandoned railroads. This was from SAB chapter 12: "Ecological Influence and Pathways of Land Use in Sagebrush" estimated surface area of railroads (pg 216)

Energy (Oil and Gas wells), table 11, table A1 and page 51

Direct: 3 acre footprint (62 m buffer)

Energy (Coal), table 16, table A1 and page 70

Direct: lease polygon area (assumes full development)

Energy (Wind), table 14, table A1 and page 60

Direct: 3 acre footprint (62 m buffer)

Energy (Geothermal), table A1 and page 70

Direct: lease polygon area (assumes full development) (BER cites Johnson et al. 2011 and Taylor et al. 2012 based on an assumption that the effects of geothermal development are similar to non-renewable energy development. No specific references for geothermal).