

	Impact to	From	Activity
35	Air quality	Conventional air pollutants and CO ₂	Compressor operation
	Air quality	Diesel exhaust	Fuel burning equipment on the pad site
	Air quality	Diesel exhaust	On road vehicles
	Air quality	Dust	Construction and traffic on dirt roads
10	Air quality	Methane	Venting of methane during drilling
8	Air quality	Methane	Venting of methane during fracking
36	Air quality	VOCs	Condensate tank, dehydration unit operation
34	Air quality	VOCs	On-site pit or pond storage
25	Community	Industrial landscape	Clearing of land for roads, well pads, pipelines, evaporation ponds, and other infrastructure
29	Community	Noise pollution	Drilling equipment operation at surface
	Community	Noise/vibration	Drilling and compressor stations and engines
31	Community	Road congestion	On-road and off-road vehicle activity during fracking
27	Community	Road congestion	On-road vehicle activity during drilling
26	Community	Road congestion	On-road vehicle activity during site development
28	Community	Road congestion	Transport off-site
23	Community	Seismic vibrations	Deep underground injection
	Community	Visual impact	Drilling, pads, pipelines
	Farmland	Fragmentation	Roads and pipelines
18	Groundwater	Drilling fluids and cuttings	Disposal of drilling fluids, drill solids and cuttings

	Impact to	From	Activity
41	Groundwater	Drilling fluids and cuttings	Drilling equipment operation at surface
3	Groundwater	Flowback and produced water	Stored in on-site pits or ponds
40	Groundwater	Flowback and produced water constituents	Deep underground injection
19	Groundwater	Flowback and produced water constituents	Flowback of reservoir fluids
33	Groundwater	Flowback and produced water constituents	Well production
37	Groundwater	Fracturing fluids	On-site pit or pond storage
39	Groundwater	Fracturing fluids	Storage of fracturing fluids at drill site
	Groundwater	Fracturing fluids and mobilized substances	Transmission through faults or man-made structure (e.g., old gas well)
24	Groundwater	Freshwater withdrawals	Use of surface water and groundwater during drilling
6	Groundwater	Freshwater withdrawals	Use of surface water and groundwater during fracking
30	Groundwater	Intrusion of saline water	Casing and cementing
38	Groundwater	Intrusion of saline water	Drilling of vertical and lateral wellbore
13	Groundwater	Methane	Casing and cement
11	Habitat	Habitat fragmentation	Clearing of land for roads, well pads, pipelines, evaporation ponds, and other infrastructure
	Habitat	Noise/vibration	
	Habitat	Stormwater/sediment	Surface disturbance
15	Surface water	Drilling fluids and cuttings	Disposal of drilling fluids, drill solids, and cuttings
22	Surface water	Drilling fluids and cuttings	Drilling equipment operation at surface

	Impact to	From	Activity
21	Surface water	Drilling fluids and cuttings	Storage of drilling fluids at surface
9	Surface water	Flowback and produced water	Treatment, release by a industrial wastewater treatment plant
2	Surface water	Flowback and produced water	Treatment, release by a municipal wastewater treatment plant
16	Surface water	Flowback and produced water constituents	Application of wastewater fro road deicing, dust suppression
14	Surface water	Flowback and produced water constituents	Flowback of reservoir fluids
	Surface water	Flowback and produced water constituents	Leak or release from tank
1	Surface water	Flowback and produced water constituents	Stored in on-site pits or ponds
17	Surface water	Flowback and produced water constituents	Well production
7	Surface water	Fracturing fluids	On-site pit or pond storage
12	Surface water	Fracturing fluids	Storage of fracturing fluids at drill site
20	Surface water	Fracturing fluids	Treatment, release by municipal wastewater treatment plants
32	Surface water	Freshwater withdrawals	Use of surface water and groundwater during drilling
5	Surface water	Freshwater withdrawals	Use of surface water and groundwater during fracking
4	Surface water	Stormwater flows	Clearing of land for roads, well pads, pipelines, evaporation ponds, and other infrastructure

[Accidents](#)