



Fact Sheet:

Oil Production and Aquifer Exemptions

What is an aquifer?

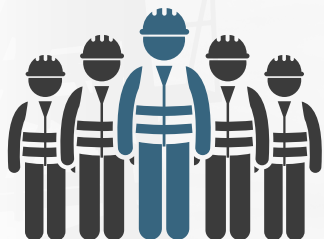
The U.S. Environmental Protection Agency (EPA) defines an aquifer as any below ground formation that contains water and is capable of yielding significant amounts of water to a well or spring. Oil and gas reservoirs contain a significant volume of water and therefore can be considered “aquifers” although the industry refers to them as oil and gas reservoirs.

Why is exemption needed?

The U.S. EPA has undergone a reevaluation of their past practices and is requiring some oil and gas reservoirs to be formally “exempted” from being considered an Underground Source of Drinking Water (USDW), prior to injection of produced water or steam. Exemptions are not a gift or a pass for the industry and are granted only after rigorous review confirming that the stringent standards are met. These reservoirs are facing a February 2017 exemption deadline.

What happens if exemptions are not granted by February 15, 2017?

The **loss** of over
20,000 jobs



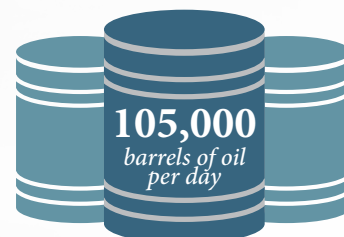
The **loss** of between

**\$1.4 and
\$2.8 billion**

in Kern's Economy



The **loss** of



(20% of the state's oil production)
including at least 60,000 barrels per day
located in Kern County

*...and a greater **reliance on foreign oil***

**Safety and protection of the environment
are Top Priorities for the industry.**

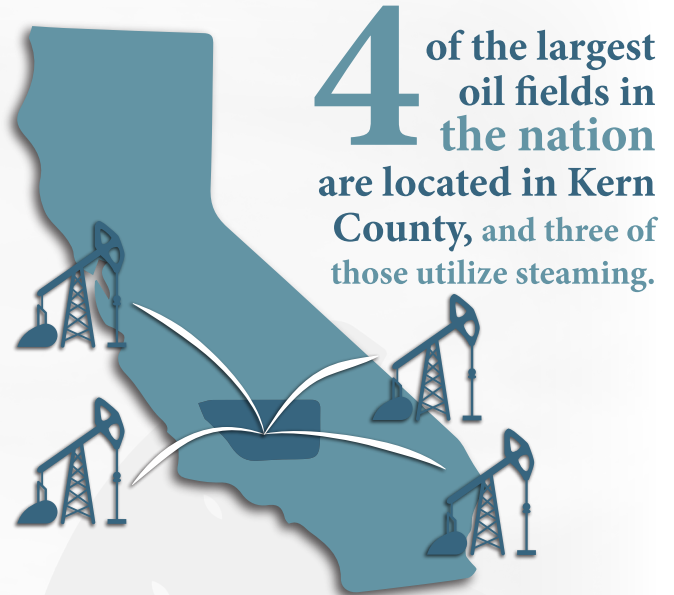
Not a single State or Federal regulatory agency has determined that any source of drinking water has been adversely impacted in the **50+ years** of oil field operations. During the review process, the Division of Oil, Gas and Geothermal Resources (DOGGR) has stated that there are **no risks to groundwater associated with the current program in California**, yet the Kern economy is at additional risk.



Steam reservoirs may never recover without exemption

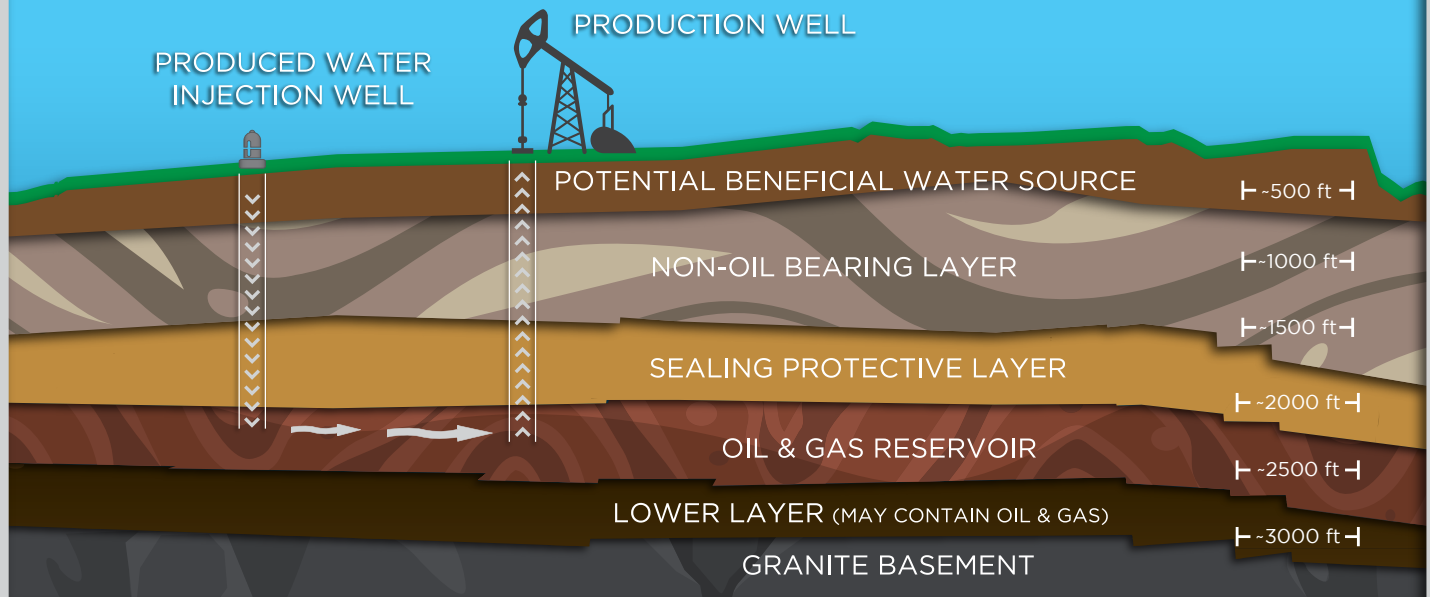
Steaming, an enhanced recovery technique using steam to heat up the oil in a reservoir, is very common in Kern County and has been used since the 60's. Steam reservoirs are affected by aquifer exemption because steam is injected into the oil reservoir and therefore must have an approved aquifer exemption if the water quality in the formation is below a certain point.

Four of the largest oil fields in the nation are located in Kern County, and three of those utilize steaming. Once steam injection ceases in a field, the field may never recover. ***If an aquifer exemption is not granted, there will be devastating impacts to thousands of reservoirs as well as Kern's economy.***



AQUIFER PROTECTIONS

In Kern County, oil is typically located thousands of feet below the surface and separated by many layers that do not allow migration of fluids into the overlying groundwater.



Say NO
to reliance on foreign oil in California

37% Domestically Produced Oil

California's Current Oil Consumption

63% Imported Foreign Oil

Learn More

www.KernCitizensforEnergy.com

