

NATIONAL

# Alarmist Headlines Obscure Context of Duke Study on Water Use and Fracking

BY [DAN ALFARO](#) AUG. 17, 2018 2

Shares

---

A [new report](#) by researchers from Duke University has triggered some unnecessarily alarmist media reports. Popular Science, for example, ran a story under the [headline](#) “*New fracking wells are using hundreds of times more water than their predecessors.*” While headlines about the report are alarmist, most media accounts fail to put the data into context or note the cause of the increase in water use.

Though it’s true that today’s horizontal wells use more water than their predecessors they also produce *significantly* more energy. [Record-breaking energy](#), in fact.

And despite the alarmist headlines, the data still confirm that water usage from oil and natural gas development amounts to a remarkably small percentage overall usage.

## Water Usage for Hydraulic Fracturing

The Duke report stresses the increase in the amount of water used per well from 2011 to 2016 — years when the U.S. was producing much more per well — across six different shale plays.

One way that producers have increased output in each well is use of horizontal laterals significantly longer than those used in the earlier years of shale development. The increase in length allows for a single well to extract more oil or natural gas while minimizing surface impact.

Naturally, the longer the lateral, the more water is required to hydraulically fracture the well. This is something the authors of the Duke study clearly acknowledge at the onset of their report:

“Over the period of 2011–2016, the median **length of lateral section of horizontal wells also increased**, most likely due to technological development and economic considerations to increase the extraction yields from individual wells

2 COMMENTS



WILLIAM P. FRANKLIN

Posted at 00:23h, 21 August [REPLY](#)

The article fails to mention one other factor which explains the increase in water usage per lateral: The article mentions the fact of longer laterals, however, it fails to mention that some companies (one that I am personally aware of is Cabot, in Susquehanna Co., PA) are using closer (shorter) spacing for the length between the frack stages . It may be more useful to use the metric of "frack stages for each lateral", instead of (only) the "overall length of each lateral". Each Frack stage within a given lateral well bore uses a certain similar amount of water and propant.



JAN HORNER

Posted at 23:00h, 08 September [REPLY](#)

Doesn't fracking poison the water, unlike irrigation.

POST A COMMENT

Write your comment here...

Your full name

E-mail address

Website

I'm not a robot

reCAPTCHA  
Privacy - Terms

**SUBMIT**

[Tweets by @EnergyInDepth](#)

## GET EMAIL ALERTS

Enter Your Email

**SIGN UP**