

From: [Laura Harris](#)
To: [Christine Dougherty](#); [Mary Hodge](#); [Steve O'Dorisio](#); [Erik Hansen](#); [Chaz Tedesco](#); [Eva Henry](#)
Subject: Tollway Site - Request for Public Hearing
Date: Monday, September 17, 2018 9:12:23 AM

Hello Commissioners!

I am an Adams County resident and voter. I am deeply concerned about the impact of co-locating industrial operations with neighborhoods, schools, and parks. I am writing you to request a public hearing on the Tollway Site. The community deserves to understand the scope and scale of the proposed Tollway project and deserves an opportunity to comment on this major industrial project. Please schedule a hearing with the humans that live in the County. Public hearings for major projects should be a mandatory part of the permitting process. I am shocked at the amount of time I have to spend researching projects coming into our area and begging for chance comment on incoming projects.

Thank you.

laura harris
15097 St Paul St
Thornton, CO 80602
303.818.6430

From: [DEBBIE AVANTS](#)
To: [Eva Henry](#); [Steve O'Dorisio](#); [Mary Hodge](#); [Chaz Tedesco](#)
Cc: [Christine Dougherty](#)
Subject: tollway site
Date: Tuesday, September 18, 2018 12:09:12 PM

Hello Adams County Commissioners,

My name is Debra Avants-King and I live at 12415 Columbine Way, Thornton Co 80241.

I am requesting a public hearing on the Tollway Site. Please let me know when the hearing will be taking place.

Thank you

Debra Avants-King

From: [Abbey Palte](#)
To: [Eva Henry](#); [Erik Hansen](#); [Chaz Tedesco](#); [Steve O'Dorisio](#); [Christine Dougherty](#); [Jen Rutter](#)
Subject: Road Degredation
Date: Tuesday, September 18, 2018 1:57:44 PM

Hello Commissioners! I want to thank you, so very much, for hearing our comments last Tuesday morning regarding the Tollway site.

My name is Abbey Palte and I represent FRRESH (Front Range Residents for Environment, Safety, and Health). We are a group of Adams County residents who care about our safety, our health, and our environment. The "our" in that last statement represents all of us. You, me, our families, our loved ones, everyone residing in Adams County and Colorado at large!

I've been doing a bit more research on the impacts of Oil and Gas developments on roads and just learned today that it takes 200 trucks of water for each well! Just as a reminder, the Tollway site will have 30 wells. That's 6,000 truck trips. I don't know that the little stretch of Colorado Blvd north of C470 would do so well with that amount of traffic, do you?

Thanks for your time,
Abbey Palte
13331 Elizabeth Street
Thornton, CO 80241

(303)913-4395

From: [Lori Ascani](#)
To: ehanson@adcogov.org
Cc: [Christine Dougherty](#)
Subject: Public hearing regarding the Tollway Site
Date: Tuesday, September 18, 2018 3:50:06 PM

Good Afternoon Commissioner Hanson

I am a resident of Thornton, CO, and I am requesting a public hearing regarding the Tollway Site.

I am very concerned about the impact of industrial operations within City/County areas of Thornton, which impacts neighborhoods, schools and churches throughout the city.

I am also requesting to have Great Western reveal their proposed plans on the record.

People are moving into this area without any knowledge of future pad sites. This is not fair, This is not right.

Sincerely,
Lori Ascani
12264 Tamarac St
Thornton, CO 80602

From: [Wendy Mckendrick](#)
To: [Christine Dougherty](#); [Mary Hodge](#); [Steve O'Dorisio](#); [Erik Hansen](#); [Chaz Tedesco](#); [Eva Henry](#)
Subject: Public Hearing
Date: Wednesday, September 19, 2018 11:51:10 AM

Hello,

As an Adams County resident, I am requesting a public hearing on the Tollway site. This site is way too close to homes and a school and we deserve a say in this happening right in our backyards. There are traffic issues, air, and water pollution issues as well as noise and light issues. This site needs to be re-evaluated and citizens being affected need to have a say.

Thank you for letting me know when and where this hearing will take place.

Wendy McKendrick

Thornton resident

From: [L.Wells](#)
To: [Christine Dougherty](#); [Mary Hodge](#); [Steve O'Dorisio](#); [Erik Hansen](#); [Chaz Tedesco](#); [Eva Henry](#)
Subject: Tollway site
Date: Wednesday, September 19, 2018 12:09:20 PM

Hello Commissioners! My name is Lawrence Wells. As someone who is concerned about the impacts of oil and gas operations on climate change, I am requesting a public hearing regarding the Tollway Site. Please let me know when the public hearing will be happening. Thank you very much!

- LAW

From: [Christy Chady](#)
To: [Christine Dougherty](#); [Mary Hodge](#); [Steve O'Dorisio](#); [Erik Hansen](#); [Chaz Tedesco](#); [Eva Henry](#)
Subject: Tollway site hearing request
Date: Wednesday, September 19, 2018 1:23:39 PM

Hello Commissioners! My name is Christine Chady and I live in Adams County. I am requesting a public hearing regarding the Tollway Site. Please let me know when the public hearing will be happening. Thank you very much!

Christine

From: [Cindy Wakefield](#)
To: [Steve O'Dorisio](#)
Cc: [Christine Dougherty](#)
Subject: public hearing on tollway site
Date: Thursday, September 20, 2018 5:11:25 AM

Commissioner D'Orisio,

I appreciated your comments during the 9/11 meeting, regarding the land use concerns of the proposed oil and gas Tollway site at 156th and Colorado. Please convene a public hearing for the site before making any decisions.

I'm extremely concerned about the increased heavy truck traffic on our residential roads that were not built for industry traffic. And when citizen traffic is mixed in with industrial traffic, our safety is at risk.

A public hearing on the land use for the proposed Tollway site will be a responsible next step. The Adams County Commissioners can and should slow down the runaway proliferation of oil and gas fracturing operations in our county.

Thank you.
Cindy Wakefield
Thornton resident

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Cindy
cindywakefield12@gmail.com

From: [Courtenay Bratten](#)
To: [Steve O'Dorisio](#); [Abbey Palte](#)
Cc: [Christine Dougherty](#)
Subject: Tollway site
Date: Thursday, September 20, 2018 9:23:38 AM

Hey Mr. O'Dorisio!

Sounds like my neighborhood and the surrounding area are slated to be severely impacted by the 30 pad oil and gas situation called the Tollway site!

We as the public you serve DEMAND a PUBLIC HEARING on this proposed Tollway Site at E 156th and Colorado Blvd.

Let me know when this hearing is on the books! SAFETY FIRST....

Courtenay Bratten

From: [ginnie](#)
To: [Christine Dougherty](#); [Mary Hodge](#); [Steve O'Dorisio](#); [Erik Hansen](#); [Chaz Tedesco](#); [Eva Henry](#)
Subject: Public Hearing on the Tollway Site
Date: Thursday, September 20, 2018 5:25:09 PM

To My Elected County Commissioners:

My name is Virginia Wray, and I live at 12924 Columbine Circle in Adams County. I also own several rental properties that are in neighborhoods that are affected by both the Tollway and the Ivey sites. I've been following the oil and gas issue for several years now, and have become more and more concerned as time goes by. As a result, I think it important for there to be more oversight. I am requesting a public hearing regarding the Tollway Site. Please let me know when the public hearing will be happening.

Thank you,
Virginia Wray

From: [Danielle Cornejo](#)
To: [Christine Dougherty](#); [Mary Hodge](#); [Steve O'Dorisio](#); [Erik Hansen](#); [Chaz Tedesco](#); [Eva Henry](#)
Subject: PUBLIC HEARING on the proposed Tollway Site
Date: Friday, September 21, 2018 9:08:08 PM

Hello Commissioners! My name is Danielle Cornejo and I live in Adams County. I am requesting a public hearing regarding the Tollway Site. Please let me know when the public hearing will be happening.
Thank you very much!

From: [Suzanne Brundage](#)
To: [Eva Henry](#); [Steve O'Dorisio](#); [Chaz Tedesco](#); [Mary Hodge](#); [Erik Hansen](#); [Christine Dougherty](#); [Jen Rutter](#)
Subject: Public Hearing Request for Tollway Site
Date: Tuesday, September 25, 2018 10:43:42 AM

Hello Commissioners!

My name is Suzie Brundage, and I live in Cherrywood Park in Thornton. The drilling for the Tollway site will occur under my home, and my minerals have been force pooled. I am writing you today to request a public hearing regarding the Tollway Site. It is important that there are public and transparent processes for decisions that impact the public. Residents deserve to have a chance to voice their needs, questions, and concerns. A public hearing would also allow residents to learn more about the details of an industrial site that will be impacting them and their neighbors, especially considering the fact that Great Western has declined to return phone calls to answer questions.

Please let me know when the public hearing will be happening.

Thank you very much!

From: [chris brundage](#)
To: [Christine Dougherty](#); [Mary Hodge](#); [Steve O'Dorisio](#); [Erik Hansen](#); [Chaz Tedesco](#); [Eva Henry](#)
Subject: Public Hearing Request for Tollway Site
Date: Tuesday, September 25, 2018 11:05:30 AM

Hello Commissioners!

My name is Chris Brundage, and i live in Cherrywood Park in Thornton. I am writing you to request that you hold a public hearing on the Tollway Site. The community deserves to have a say, and to have Great Western put tier proposed plans on the record.

Please let me know when the public hearing will be happening.

Thank you

--

Chris Brundage
Cell: 720.519.9660

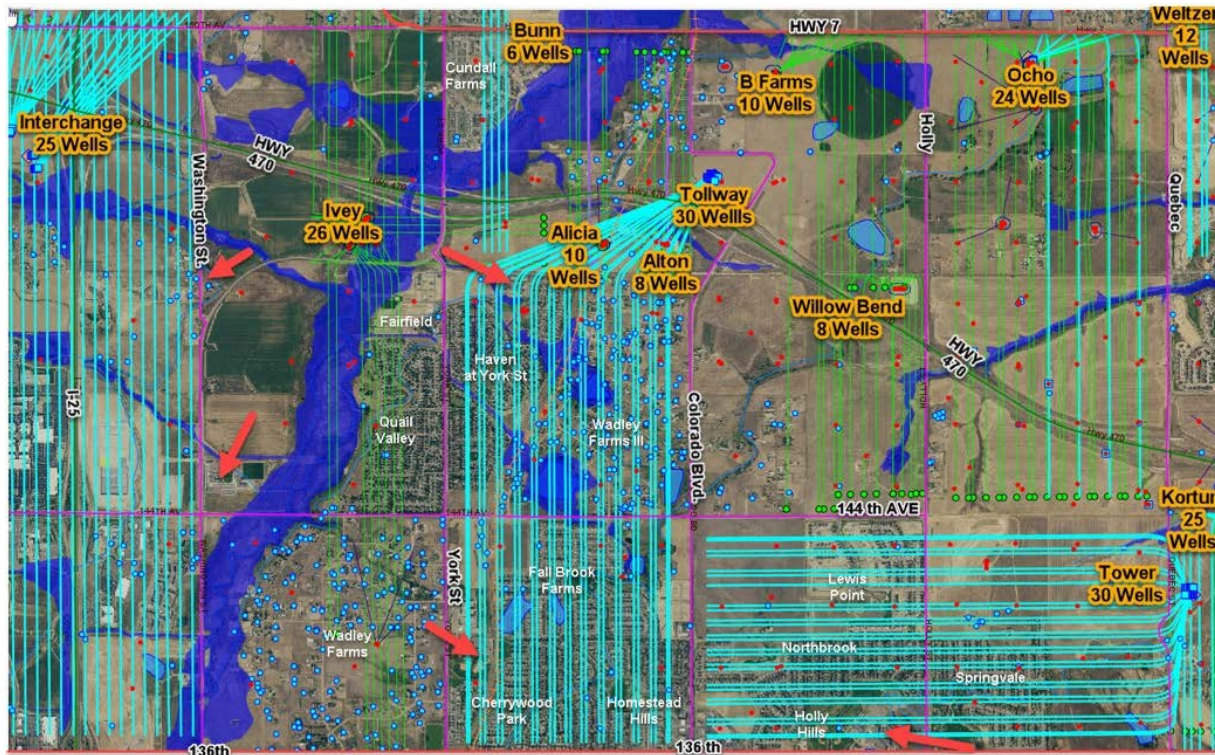
From: [Web Service](#)
 To: [Eva Henry](#); [Steve O'Dorizio](#); [Chaz Tedesco](#); [Mary Hodge](#); [Erik Hansen](#); [Jen Rutter](#); [Christine Dougherty](#); [Kristin Sullivan](#)
 Subject: Proposed Tollway Oil and Gas Site
 Date: Wednesday, September 26, 2018 6:38:04 PM

Dear Commissioners, Ms. Sullivan, Dougherty and Rutter,

I am writing to urge you to please have a public hearing regarding the proposed Tollway site. We have asked about an independent Civil Engineer assessing each proposed site. At a Town Hall meeting, Commissioner O'Dorizio you had made a comment that this would be considered. Has the Tollway site been assessed?

I appreciate that you are all busy and I hope that you will also consider that I and others have done a great deal of research and are greatly concerned about our community and the health and well being of our neighbors.

Please take the time to read the following and consider what is happening to the County we call home.



Correction on the above picture, the Interchange is proposed to have 33 wells. The red arrows point to the schools in the area, red dots are existing wells, blue dots are private water wells. Green lines are approved horizontal fracking, turquoise are proposed, purple are existing.

The following information is from the COGCC, Stuart Ellsworth @ 303-894-2100 ex 5108.

An average well drilled in the Weld/Adams County area.

A 2 mile horizontally drilled well uses approximately 8,020,614 gallons of water. 391,356 gallons is recycled water from a previous frac and 7,629, 258 gallons is fresh water.

A 3-mile lateral well would use approximately 11,835,243 gallons of fresh water plus 195,678 gallons of recycled water.

The Ivey site has been permitted for 3 mile horizontal or lateral drilling, as you can see in the map above.

Referring to the maps above fresh water used, (the following does not include the recycled water):

Interchange 33 (not 25) wells with 3-mile laterals
 requires 11,443,887 per well x 33 = 377,648,271 gallons of fresh water

Ivey (26 wells) 13, 3-mile laterals x 11,835,243 = 153,858,159 gallons of FRESH WATER
 Ivey 13, 2-mile laterals x 7,629,258 = 99,180,354 gallons of fresh water

Tollway 30 wells 2 miles lateral x 7,629,258 = 228,877,740 gallons of fresh water

B Farms 10 wells 2-mile laterals x 7,629,258 = 76,292,580 gallons of fresh water

OCHO 24 wells x 7,629,258 = 183,102,192 gallons of fresh water

Tower 30 wells 2-mile laterals x 7,629,258 = 228,877,740 gallons of fresh water

Kortum 25 wells 2-mile laterals x 7,629,258 = 190,731,450 gallons of fresh water

Total fresh water used for the 6 sites alone is **1,256,285,940** gallons.

This is water that is removed from the ecosystem/water cycle, unlike water that is used for agriculture.

The water is bought by operators from water wells, cities and municipalities.

The following is a picture showing the impacts of the Ivey site, this air inversion area will be increased with the Tollway site and will increase the health risk impacts on the community.

The following slide and assessment of the proposed Ivey site 152nd and York street in Adams County, Colorado was done by Dave Ellison P.E., ENV-SP.

Health

Air Inversions Over The Big Dry Creek Valley Are Very Noticeable Because Of The Fog Bank Trapped In The Valley Floor During Calm, Cool Weather Conditions

Existing air inversion envelope in the Big Dry Creek Valley (Over 2,600 homes and three schools within air inversion envelope – i.e. 8,000 people)

During air inversions, hazardous off-gases from the Ivey Wellpad will mix with the inverted air envelop causing the concentration of hazardous pollutants to significantly increase. **This is a real worry for increased Asthma Attacks requiring hospitalization (see next slide).**

CDOT's limited visibility area warning system on I-25 from 120th Avenue north to E470 to warn of fog due to air inversions in the Big Dry Creek Valley.

Warm wastewater discharged from the Westminister Treatment Facility causes fog to be generated which is trapped by frequent valley air inversions.

Health Risks Associated with Oil and Gas Well Pad Sites

Hydraulic fracturing and infant health: New evidence from Pennsylvania

Currie, J., Greenstone, M., & Meckel, K. (2017). Hydraulic fracturing and infant health: New evidence from Pennsylvania. *Science Advances*, 3(12). doi:10.1126/sciadv.1603021

This study found a significantly higher risk of negative birth outcomes for babies born to mothers living within a kilometer (3280 feet) of oil and gas operations, compared to those whose mothers lived over a 1 kilometer from such operations. "Figure 4 suggests that the infant health index is worse at 0 to 1 km from a fracking site than at higher distances."

This is the largest study of its kind, including data from 1.1 million births.

This data applies to Colorado. Not only did the area studied in Pennsylvania have a lower well density, than often seen in Colorado, but it arguably had better air circulation than Colorado's front range, another risk factor for air borne contaminants from fracking sites.

Childhood Hematologic Cancer and Residential Proximity to Oil and Gas Development

Lisa M. McKenzie, William B. Allshouse, Tim E. Byers, Edward J. Bedrick, Berrin Serdar, John L. Adgate Published: February 15, 2017

University of Colorado study conducted over a 12-year time span (based on registry data).

Included a 10-year latency period.

Included patients within a .9-mile span of wells and drilling.

Demonstrates a 4.3-fold increased risk for patients living within these higher risk zones.

Association Between Unconventional Natural Gas Development in the Marcellus Shale and Asthma Exacerbations

Sara G. Rasmussen, MHS¹; Elizabeth L. Ogburn, PhD²; Meredith McCormack, MD³; et al *JAMA Intern Med.* 2016;176(9):1334-1343. doi:10.1001/jamainternmed.2016.2436

Conducted by researchers at John's Hopkins University, published in the *Journal of the American Medical Association (JAMA)*.

Included 400,000 patients.

This study shows a clear association, up to 4.7x, risk of exacerbation of all forms of asthma within the period of drilling – highest in <3km within drilling operations.

Asthma Costs and Social Impact

Carlos Nunes, Ana Margarida Pereira and Mário Morais-Almeida *Asthma Research and Practice* 2017;3:1 <https://doi.org/10.1186/s40733-016-0029-3> The Author(s). 2017 Received: 13 August 2016 Accepted: 10 December 2016 Published: 6 January 2017

"A lot of studies reported data on asthma costs, either at the individual patient, or on the society (regional or country level), and it can be an average annual per-asthmatic cost of about \$USD 5,000, being much higher in severe asthmatics [21].

Direct cost include asthma management (e.g. visits to emergency services; hospital admissions; medications, including all types of medications, such as over-the-counter and alternative medicines; outpatient visits, including all human resources involved, such as doctors, nurses, paramedics, psychologists...), complementary investigations or treatments (e.g. imaging, skin and blood tests, lung function tests, pulmonary rehabilitation...) and other costs (e.g. domestic or professional preventive measures, assistance in home care, transportation to medical visits...).

"Indirect costs include work-related losses (e.g. temporary disability in terms of partial or total lost-days; early disability; permanent disability...) and early mortality. Finally, intangible costs are those related with unquantifiable losses, such as the decrease in quality of life, increases in pain or suffering, limitation of physical activities and job changes. These costs, unfortunately, are not yet systematically referenced in the literature on asthma costs".

More adults with asthma than adults without asthma have fair or poor health.

https://www.cdc.gov/asthma/asthma_stats/default.htm

A Doctor in Broomfield assessed the impact for the proposed Livingston Well Pad. There are 1,745 people who live 1 mile and 6,217 people who live 2 miles from the proposed Livingston well pad site.

Livingston Well Pad health risk for leukemia

The average risk of leukemia in the population is 0.1 percent, which in this group living within 2 miles would be approximately 6 people over their lifetime from this population.

Given data from UC we expect to see a 4-fold increase in this, at least within those living within 1 mile of the pads.

The oil and gas companies will be long gone before these numbers become statistically significant and can claim ignorance 50 years down the road.

Since the highest risk is in those living within a mile, you are looking about 6-7 extra leukemia cases in this group and about 24 extra over the entire group (though risk falls off a bit in the 2-mile group).

Absolute risk increases of 0.4%, relative risk increases of 4-fold.

Please refer to the following picture and the information below when considering the financial impacts of oil and gas on our community.

Fracking Brings Steep Drops in Home Values in Some Neighborhoods, But Not All

<https://today.duke.edu/2015/12/frackingandhomevalues>

“For homeowners who use well-water, nearby shale wells linked to 13.9 percent dip in home values. The study, conducted in Pennsylvania, found that in areas using well water, home prices dropped by an average of \$30,1676 when shale drilling occurred within a distance of 1.5 kilometers”.

Pollution Fears Crush Home Prices Near Fracking Wells

<https://www.forbes.com/sites/jeffmcmahon/2014/04/10/pollution-fears-crush-home-prices-near-fracking-wells/amp/>

“Properties with private wells suffered a loss in value compared to properties connected to a municipal water system, they found, offsetting gains in value from mineral-rights royalties. The loss varied with distance from the nearest shale-gas well. At 1.5 kilometers, properties with private wells sold for about 10 percent less.

Within 1 km of shale gas wells, properties with private drinking water wells dropped 22 percent in value. Properties connected to public water suffered no losses, but also showed no net gains.

“If you get closer, if you look at the properties that are only 1 km from a shale gas well, then for the ones that are on groundwater we see a 22 percent loss in property values,” Muehlenbachs said, “and for the ones that have access to pipe water, there’s zero gain, so essentially all of the positive benefits get wiped out by these negative externalities of having this well pad nearby.” Such negative externalities include truck traffic, noise, light, and air pollution”.

New report on the growing evidence of fracking's negative impacts on property values and local economies

<https://www.nrdc.org/experts/amy-mall/new-report-growing-evidence-frackings-negative-impacts-property-values-and-local>

- “A study published in the *Journal of Real Estate Literature* found that a majority of people surveyed would decline to buy a home near a fracking site and that people who are willing to buy a home near a fracking site **reduced** their offers by **up to 25** percent.
- An economic analysis of communities in six states found that, despite short-term windfalls, over the long-term “oil and gas specialization is observed to have negative effects on change in per capita income, crime rate and education rate.”
- Realtors have reported that some potential home buyers won't look at “anything remotely close to any existing or proposed well sites” and that homes near wellsites “often have to sell at significantly lower prices than when originally purchased” -- and that some buyers won't look at these homes at all, even if they are deeply discounted. Some homes can't be sold at any price if they are already reported to have contaminated water. In one study, just the possibility of contaminated water decreased property values by an average of 24 percent.
- At least 39 states allow forced pooling, which gives oil and gas companies the right to extract someone's oil or gas even if they don't want to sell it. This is also called “mandatory pooling” or “compulsory integration,” and can force a mineral owner to not only sell their minerals but to be liable for further costs.
- Banks in various states won't provide mortgages to properties where mineral rights have been sold. In some cases, a mortgage has been denied when a neighbor has leased, even if the owner of the home for sale has not leased the mineral rights. According to one lender, “gas wells and other structures in nearby lots...can significantly degrade a property’s value” and do not meet underwriting guidelines.
- Federal institutions (FHA, Fannie Mae, Freddie Mac) all have prohibitions against lending on properties where drilling is taking place or where hazardous materials are stored. A drilling lease on a property financed through one of these agencies would result in a “technical default.” FHA’s guidelines also don’t allow it to finance mortgages where homes are within 300 feet of an active or planned drilling site.
- Homeowner's insurance policies generally don't cover industrial damages. Nationwide Insurance specifically states that it won't provide coverage for damages related to fracking under General Liability, Truck Cargo, and auto insurance. But often an oil and gas company's insurance won't cover damages to a private home, so that the only alternative left is for a homeowner to file a lawsuit”.

The following slide and assessment of the proposed Ivey site 152nd and York street in Adams County, Colorado was done by Dave Ellison P.E., ENV-SP.

Urban Neighborhoods Impacted By The Ivey Site¹

Urban Areas Within The Adams County Contact Area (0.5 miles)

- ✓ Orchard Farms (308 Homes)
- ✓ Trailside (280 Homes)
- ✓ Eastcreek Farm (276 Homes)
- ✓ Haven at York St. (522 Homes)
- ✓ Fairfield (108 Homes)
- ✓ Quail Valley (412 Homes)

Total Homes Within Adams Co Contact Area = **1,906**

Estimated Current Real Estate Value = \$760 million

Urban Areas Directly Over The Permitted Fracking Area

- ✓ North Creek Farms (432 Homes)
- ✓ Fairfield (108 Homes)
- ✓ Quail Valley (412 Homes)
- ✓ Wadley Farms (60 Homes)
- ✓ Hunters Glen (416 Homes)
- ✓ York Crossing (114 Homes)
- ✓ Lake Avery Estates (70 Homes)
- ✓ Peach Tree at the Lake (142 Homes)

Total Homes Over Permitted Fracking Area = **1,754**

Estimated Current Real Estate Value = \$700 million

Urban Areas Within Sight Of The Proposed Production Pad

(i.e. Primary Entry = York Street North Of 144th Ave to Route 7)

- ✓ Orchard Farms (308 Homes)
- ✓ Trailside (280 Homes)
- ✓ Eastcreek Farm (276 Homes)
- ✓ Haven at York St. (522 Homes)
- ✓ Fairfield (108 Homes)
- ✓ Quail Valley (412 Homes)

Total Homes Within Sight Of The Proposed Production Pad = **1,906**

Estimated Current Real Estate Value = \$760 million

¹ Existing Homes In Existing Subdivision, Subdivisions Under Construction, + Planned & Permitted Subdivisions

Homes in the urban areas within the Adams County contact area (0.5 miles) and within site of the proposed Ivey production pad is 1,906 with an average home value of \$398,741.00.

As of April 2017, the estimated Real Estate Value of the 1,906 homes = \$760 million.

According to the studies listed above, home value impacts show a loss of 10% = \$39,874.10 to 25% = \$99,685.25 on a home valued at \$398,741.00.

A loss in value due to fracking on the 1,906 homes, on the low-end estimate impact of 10% = \$76,000,000 and on the high end with a 25% decrease impact = \$190,000,000.00

Adams County residents and voters, the people who you are elected to represent, deserve a voice in the matter of industrial activity impacting their health, safety and financial wellbeing.

Respectfully,

Suzanne Cabral
303-909-3450