



LEAGUE OF WOMEN VOTERS® of Tarrant County

The League of Women Voters of Tarrant County thanks the City of Fort Worth for the opportunity to participate in these educational public forums. This presentation represents our views and is not in conjunction with any corporation, community or civic organization.

**Judy Wood, President
Panelist Presentation at City of Fort Worth Public Forums: Salt Water Disposal Wells
January-February 2012**

PREAMBLE / LWV POSITION

Tonight, we are discussing whether the City of Fort Worth should permit the disposal of contaminated drilling water within our city limits. The League of Women Voters of Tarrant County opposes the granting of that permission.

The League of Women Voters is not opposed to safe drilling that respects the environment. We are, however, opposed to the destruction of our most valuable and increasingly threatened natural resource—water—by its contamination and injection into disposal wells.

Far too much water used for gas drilling is "lost forever to the water cycle." We encourage the reuse of as much drilling water as possible for further extraction activities, and we encourage recycling for other uses. In a region with limited water supplies, no water should be lost this unnecessarily.

Many people often express a concern for debts passed on to our children and grandchildren. Do they feel that same concern for causing an increasing deficit of drinkable water, especially as population increases...especially in times of drought such as we now face?

PROBLEM EXPLANATION

Gas drilling industry data indicate that the vast amount of water consumed is necessary to their production process. Once contaminated by drilling chemicals and extreme natural salt, this water becomes useless in that form. The current, prevalent, method of disposal for such contaminated water is to inject it deep into the earth—so deep it can never seep, never be used again for any purpose—never again to fall back as rain or to flow through an accessible aquifer. The gas drilling industry's so-called "produced" water is not productive. Unless recycled, recaptured or reclaimed in some way, water used for gas drilling has been totally destroyed.

We see this as a seven-part problem.

1. The permanent loss of irreplaceable water because of drilling is immense and ever increasing.

A figure of five million gallons per well comes from Chesapeake's own Web site within the past few months. Quote: "The 5 million gallons of water needed to drill and fracture a typical deep shale gas or oil well is equivalent to the amount of water consumed by," for example, "New York City in approximately seven minutes or 7.5 acres of corn in a season." They then add, "While these represent continuing consumption, the water used for a natural gas or oil well is a one-time use."

Yes – a one-time use. Water used once, never to be used again.

We hear repeatedly that the gas drilling industry only uses 1% of our water. We see the tiny sliver on the City of Fort Worth's Water Usage pie chart. But remember: the other 99% is largely borrowed water...returned to the cycle. The gas drilling industry's 1% is destroyed and eliminated. Gone. And this loss goes on and on. Lose 1% this year...lost 1% last year...another 1% the year before... where is this heading?! The amount of water completely lost is staggering.

2. The City of Fort Worth has no detailed, enforceable incentives for drilling-water recycling, and no penalties for its destruction.

For example: Fort Worth city water costs the largest-volume residential user \$4.20 for a hundred cubic feet of water above 30 units (22,440 gallons). Gas drillers are only charged \$4.50 for that same amount of water—and are charged the same rate for all the millions of gallons of water they consume beyond that. In spite of the huge consumption...in spite of the impacts on City infrastructure and residents' lives...in spite of the road damage for trucking that water...in spite of the fact that the water they take is not just used but destroyed—they pay only seven cents more on the dollar. <http://fortworthtexas.gov/water/info/default.aspx?id=79858>

3. Residents pay for, with our taxes, unfunded damage to city streets from water trucking, both in and out.

Disposal wells could only impact, at best, half the problem: outbound trucking of contaminated drilling water. Disposal wells would have no bearing on inbound trucking of massive amounts of water to the drill site. Furthermore, much the road damage has already happened. With 20,000-plus existing gas wells all around us, there are currently only about 50 active rigs.

4. We see no master plan for disposal pipeline regulation—even though long-term goals are critical to avoiding infrastructure problems and mistakes.

5. We see no definite controls proposed over the environmental hazards of groundwater contamination from disposal wells in a densely populated area, or a means to rectify damage.

6. We see no regulatory positions for protecting land use from pipelines and disposal wells, or for preventing and rectifying environmental damage from spills or line ruptures.

7. We see no city or state studies or regulation concerning potential earthquake or fault line hazards. We hear only that these concerns must be studied and addressed from state or federal levels.

WHAT CAN BE DONE NOW?

Right now, the City of Fort Worth can encourage water recycling and other conservation alternatives through its price for drilling water sold. Water that is used one time and destroyed should cost more than water that is returned to the hydrologic cycle. The price increase might reduce the amount of water used and the amount of water trucked, and the income could be applied to road repair and maintenance.

The gas drilling industry contends that the recycling process is too expensive. Yet, recycling is expensive to gas drillers only because of their tremendous water consumption—and because they currently receive it from the City so cheaply.

A frequent figure is that recycling runs about 40-percent more costly than disposal wells. This cost difference is actually only pennies per gallon. Devon, for example, reports recycle costs of \$3.35 per barrel and conventional disposal wells as \$2.00 to \$2.50 per barrel—that's 8-cents per gallon versus 6-cents per gallon—**TWO cents per gallon more for recycling.**

- Basin Oil & Gas, July 2008: <http://fwbog.com/index.php?page=article&article=18> [link still active 2/7/12]

- Taking a Proactive Approach to Water Recycling in the Barnett Shale. Barnett Shale News: Jay Ewing: *Fort Worth Business Press* Barnett Shale Symposium. February 28, 2008. <http://www.barnettshalenews.com/documents/EwingPres.pdf>

CONCLUSION

There is no question that we need the energy of this natural gas resource. The cost-benefit of its production may be debatable. The gas drilling industry's enormous consumption of water for one-time use is our prime concern.

The population of Texas has grown immensely, with no signs of lessening. Our growing population must have water for survival. More people consume more food, and food production demands more water. Our recent drought—and knowledge that there will always be droughts—warns us that a continued supply of natural water cannot be taken for granted.

Each of the 20,000-plus permitted gas wells in our immediate area consumes three to five million gallons of this precious resource—and the drilling is not over yet. Every one of those wells will generate millions of gallons of contaminated wastewater, unfit for human or animal consumption, unfit for agriculture, unfit even for irrigation of our lawns.

Whether that contaminated water is delivered to a disposal well by trucks that damage our roads or pipelines that consume land and carry their own risks makes little difference. The point is that these billions of gallons of irreplaceable water are destroyed—gone.

The total and final loss of billions of gallons of water is not debatable or even a question. That irreplaceable loss is a fact.

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