

Las Placitas: Pipeline Exposure a Regional Public Health and Safety Issue– Presentation FAQ sheet

Consulting-USA; LLC has been in collaboration with Common Grounds Rising, regarding Safety and Prevention issues. Consulting – USA: LLC, created a presentation seeking community support, and wrote a proposal letter to Federal agencies and Owner's (CEOs and Board of Directors) of the five pipelines that are in the Placitas area – moving in the direction of the San Juan Basin and to El Paso, TX. **These pipelines carry: Jet fuel, gasoline, diesel fuel, crude oil, natural gas liquid, ethane, propane, butane, natural gas, and carbon dioxide (FAQs).** They are over 60 years of age. **Statistically, ALL pipelines explode or, leak after the age of 40 years.** There are collaboration facts generated with ES-CA-Eastern Sandoval Community Association and Consulting – USA: LLC. The proposal letter and presentation is supported by ES-CA, along with the San Antonio de Las Huertas Land Grant, Bernalillo School District, and Common Grounds Rising. Supporting documentation of investigation report on one pipeline that has State Authority via Public Regulations Commission [Enterprise pipeline (1)]. This strategic plan is to present to community, officials, and as mentioned to Federal agencies, and the Owner's of the pipelines, to bring legislation to the table, for antiquated policies in the Title 49 USCs and to enforce for prevention and safety. A Bill has been drafted and a resolution in collaboration with Common Grounds Rising is in the process of moving forward, by notifying all stakeholders in New Mexico. There is a State of Emergency issue on the safety and for 'our' drinking water, via the possible explosion/leak to occur if, pipelines are not removed and replaced.

FAQ:

- **Elementary school approx. 100 feet away; and school bus pick/drop offs are less than 25 feet away**
- **Community/Senior Center and residential houses in the path of pipelines. San Antonio de Las Huertas Land Grant less than 100 feet away**
- **Las Huertas de San Antonio Acequia (creek) water right grant, (pipelines directly passing in and out through the acequia. (State of Emergency alarm.)**
- **Albuquerque water basin is threatened with a State of Emergency due to the 2 Placitas aquifers that supply the acequias and the Santa Fe Group Water basin.**
- **Pipelines passing under the Rio Grande, will impeade an explosion that would cause catastrophic consequences for the entire water shed.**
- **Flow rates of ALL five pipelines: HIGH LEVEL RATES FROM 60,000 BBL/DAY TO 175,000 BBL/DAY CARRYING 42 GALLONS PER BBL WITH PIPE DIAMETERS OF 8-16 INCHES.**
- **HIGH CONSEQUENCE AREA; per documentation submitted per PRC**
- **Per Mr. Lowry, Community Assistance and Technical Services Liaison for the USDOT, Pipeline and Hazardous Materials Safety Administration (PHMSA) correspondence conflicting with inspection reports and Title 49 USCs: (Inspection report is a document within the Proposal letter, given by PRC and title 49 USCs are listed in proposal letter and in legislation bill that has been drafted – a conclusion issue.)**
 - On Apr 27, 2016, at 9:33 AM, John < wrote:

- >>> Here's a response from the federal community liaison for pipelines. Jason apparently forwarded my list of questions to him. I'm going to review the links. We'll probably want to call him back. Why don't you review them as well, we'll put our heads together sometime this week and outline some discussion before calling him back. When's a good time for you? -John-
- >>> ----- Forwarded Message -----
- >>> Subject: RE: Pipeline questions
- >>> Date: Wed, 27 Apr 2016 15:17:55 +0000
- >>> From: Lowry, Bill (PHMSA) <Bill.Lowry@dot.gov>
- >>> To: john
- >>> CC: Lerma, Isaac, PRC <Isaac.Lerma@state.nm.us>, Gaume, Patrick (PHMSA) <Patrick.Gaume@dot.gov>, Montoya, Jasonn <jasonn.montoya@state.nm.us>
- >>> Mr Mcnerney,
- >>> My name is William Lowry and I am a Community Assistance and Technical Services Liaison for the USDOT Pipeline and Hazardous Materials Safety Administration (PHMSA). I will attempt to answer your questions but I suspect a phone call may be in order, my number is 7132722845.
- >>> 1.PHMSA does not necessarily know the “exact” pressure in a pipeline at any given time and pressures do fluctuate to a certain extent depending on the characteristics of the line. Pipeline operators are required to establish maximum allowable operating pressures for a pipeline and maintain operational pressure in accordance with pressure limits. As well we do not maintain flow rate data, and the pipeline contents are broadly defined as natural gas, hazardous liquids, carbon dioxide as per the regulatory definitions at 49 CFR 190-199. (see eCFR.gov as per below)
- >>> 2.Pipeline operators are not required to have a control room but I believe these companies do, I believe that the relevant control rooms may be in Houston or New Mexico depending on the operator. Operators have different leak detection methods and limits depending on rates and pressures, type of commodity, etc.
- >>> 3.I don't have operation data readily available for a specific valve. See 192.145, 192.179, 195.116, 195.258, and 195.260 at eCFR and also the comment below about integrity management requirements.
- >>> 4.Inspection intervals are determined by data analysis and not necessarily uniform.
- >>> 5.Reportable incidents are in 49CFR191.3 for gas and 195.52 for hazardous liquids and CO2 available at eCFR (www.ecfr.gov <<http://www.ecfr.gov>>).
- >>> You may also wish to review the integrity management requirements since I would suspect that your area may be in a high consequence area (HCA). This is in 192.901 et al and 195.450 and 195.452.
- >>> Some useful links are:
 - >>> <http://www.phmsa.dot.gov/pipeline/initiatives/stakeholder>
 - >>> <https://primis.phmsa.dot.gov/comm/>

- >>> <https://www.npms.phmsa.dot.gov/>
- >>> www.ecfr.gov <<http://www.ecfr.gov>> - look for Title 49 parts 190-199 esp 192 gas and 195 Haz Liquids
- >>> <https://www.npms.phmsa.dot.gov/> National Piping Mapping System
 - >>> I hope this helps and I am happy to discuss further.
 - >>> William Lowry
 - >>> USDOT PHMSA
 - >>> 7132722845
- >>> ----- Original message -----
 - >>> From: John <<mailto:>>
 - >>> Date: 4/25/16 7:22 PM (GMT-07:00)
 - >>> To: "Montoya, Jason N, PRC" <JasonN.Montoya@state.nm.us> <<mailto:JasonN.Montoya@state.nm.us>>>
 - >>> Subject: Pipeline questions
 - >>> Here's my questions.
 - >>> There are 5 pipelines that run through Placitas. Western Refining has
 - >>> one, 16 inch running crude oil at about 800psi. Enterprise has 3, one 18
 - >>> inch running NGL, one 18 inch running petroleum distillates, and one 12
 - >>> inch running gasoline/Diesel fuel. Exact pressures unknown, but 'high.'
 - >>> Presumably, there is likely little or no difference between NGL and
 - >>> petroleum distillates, ie, they are running essentially the same product
 - >>> in 2 of their pipelines. And Morgan Kinder has one 36 inch running CO2
 - >>> at unknown pressure.
 - >>> 1- What are the exact pressures, flow rates, and products running in
 - >>> these pipelines?
 - >>> 2- How are they monitored for safety, ie, leaks and other failures?
 - >>> There was some mention of control rooms which monitor pressures 24/7.
 - >>> Who are they? Where are they located? How many lines are being monitored
 - >>> at one time? What kind of drop in pressure will alert those monitoring
 - >>> of a problem? What action might be taken in case of a leak, and how long
 - >>> to implementation? And if some vendors do not have a control room for
 - >>> this purpose, what methods are they using?
 - >>> 3- Connected to #2, are there safety valves that can turn off the flow
 - >>> in case of emergency? If so, how many are there? Where at they located
 - >>> in Placitas? Can they be shut off remotely or does there have to be
 - >>> someone on the site to do it? Will they shut down automatically if there
 - >>> is a significant loss of pressure?
 - >>> 4- You indicated some sort of auditing process that watchdogs the
 - >>> pipeline vendors, how often are the audits, and what kind of compliance

- >>> have you seen in correcting shortcomings?
- >>> 5- What kind of public reporting on incidents is in place. I recall the
- >>> news of a spill in South Dakota about 3 weeks ago, it was not widely
- >>> reported because the parameters of the spill did not meet some pre-set
- >>> conditions. No one was hurt, for eg, and the spill was below a certain
- >>> amount. I know the XL Keystone Pipeline is not one that runs through our
- >>> state, but this report begs the question of how bad it would have to be
- >>> to be "reportable" in some sense.
- >>> <http://money.cnn.com/2016/04/07/news/keystone-oil-spill-south-dakota/>
- >>>
- >>> These are the questions I have. Please answer those to which you know or
- >>> can find out the answers. Also, please give me contact information on
- >>> your counterpart in ICC who might be able to answer them.
- >>>
- >>> Thank you. -John-
- >> .

This correspondence is a reflection of the process of legislation and working with the Federal Government and the Owner's to ratify, antiquated policies and to enforce policies that are not being enforced, an infrastructure that would be beneficial for all citizens. A Bipartian solution.

- **Conclusion:**

- **Mandate record keeping for the public on all inspections, inadequate record keeping and presentation to the public**
- **Double walled pipelines for 'all' water pipes**
- **After 40 years of age pipelines should be removed and replaced to avoid explosion/leaks**
- **A monitoring system (valves every 8-10 feet apart) to monitor flow pressure rates for corrosion and leak awareness (this needs further research).**
- **Human Rights Act: Article 17 1. Everyone has the right to own property alone as well as in association with others. 2.No one shall be arbitrarily deprived of his property. Article 27 1. Everyone has the right freely to participate in the cultural life of the community...**
- **Authority over all lines interstate and intrastate, via State and Federal protections with Operators validating and overseeing at all times, both mandating the safety at all times not a division of inter/intrastate, for the purpose of pointing the finger to "I don't have jurisdiction" see example of correspondence attached regarding this where State PRC agency declining the other Pipelines operating Authority.**

This is correspondence Consulting – USA; LLC requested from John McNerney, who's a member of Eastern Sandoval Citizens Association: ESCA; this is listed in objectives above as a flaw to policy concerning Intra and Interstate. This policy gives only State permission to operate one pipeline and if, one of the other pipelines is malfunctioned it will not be responsible for it, although it is in the same location as the others, will be an oversight and is unethical this flaw in policy from the Direction of the US Secretary of Transportation is an oversight and disrupts the obligation to Citizens in communities that are in the direct front lines of these pipelines and are not valued as Human Rights Issues in our own Government the US where this is mandated to be a just practice.

johnTo

Montoya, Jason N, PRC

Sep 1 at 8:56 AM

Thank you. -John McNerney-

Montoya, Jason N, PRC wrote:

> John,

>

> We have jurisdiction over one of the Enterprise pipelines located
> within the Placitas area. We do not have an agreement with PHMSA to
> oversee any of the interstate pipelines. Our only jurisdiction of all
> underground utilities is complying with the States excavation damage
> prevention laws.

>

> /*Jason N. Montoya, P.E.*/

> Pipeline Safety Bureau

>

>

> ----- Original message -----

> From: John <

> Date: 8/31/16 10:18 PM (GMT-07:00)

> To: "Montoya, Jason N, PRC" <JasonN.Montoya@state.nm.us>

> Subject: Pipeline question

>

> I know that there are 5 pipelines running through Placitas/Sandoval
> County, 3 owned by Enterprise, and 1 each owned by Kinder Morgan and
> Western. I also know that unless there is a terminal in the State, the
> Feds have jurisdiction over them, in other words, if they are
> interstate. My question is, which if any of these pipelines have
> terminals in the State and therefore intrastate and under your
> jurisdiction? And if none or 1, do you have some sort of agreement or
> contract with the Feds that you monitor pipelines under their
> jurisdiction for them?

>

> Thanks, John McNerney, Eastern Sandoval Citizens Association, ES-CA.

Solutions:

- Local and Federal policy changes - Legislation (Bill has been drafted).
- New regulations for antiquated Title 49 USC; for Integrity Risk Management and all safety policy within the USCs
- State of Emergency: Pipelines over 40 years of age to be removed and replaced (Technology addressed in Legislation Bill)

2013 Mayflower Oil Spill

Approximately 500,000 US gals



This is the Exxon Pegasus crude oil pipeline break 2013. The Pegasus line was a 65 year old line that had it's pressure increased by 50% one year before the break.

Placitas has the 60 year old Western crude oil pipeline running by homes and our elementary school. BLM gave Western permission to increase the pressure on this line to 800psi WITHOUT ANY PUBLIC COMMENT.

Appendix A. (from proposal letter-FAQ on all five pipelines)

Placitas Pipeline Facts

As of March 2016

There are 2 pipeline corridors running through the Placitas area, a north and a south right of way.

There are three pipeline operators: Enterprise subsidiary Mid-America Pipeline Co LLC, Kinder Morgan, and ERC Western Refining.

ERC Western Refining has one pipeline running along the southern branch in Placitas.

Pipeline name: Tex-New Mex Pipeline

Product: Crude Oil

Diameter of pipe: 16 inch

Age: Constructed 1956

Operation Pressure: 800 psi

Max Flow Rate: 100,000 bbl per day (42 gallons per bbl)

Shutoff Valves: 2 valves, 15 miles apart, locations provided to 1st Responders

Monitoring: 2 locations monitor flow and pressure,

Other safety protocols: Cathodic protection, smart pig technology

Kinder Morgan has one pipeline running along the northern branch in Placitas.

Pipeline name: Cortez Pipeline

Product: Carbon Dioxide

Diameter of pipe: ?

Age: 1984

Operating pressure: High

Flow rate: 1.3 billion cubic feet/day

Remote shutoff valves: ?

Monitoring: Control room in Houston, air patrol bi-monthly, ground inspection frequently for built up areas

Public education, mailings and brochures

Other safety protocols: Cathodic protection, KMAP smart pig technology

http://www.kindermorgan.com/pages/ehs/pipeline_safety/default.aspx

<http://www.kindermorgan.com/pages/kmap/default.aspx>

http://www.kindermorgan.com/pages/business/co2/pipelines/transport_cortez.aspx

Enterprise (as Mid-America Pipeline) has 3 pipelines along the northern branch in Placitas.

Pipeline #1 Name: Four Corners Lateral Loop

Product: Natural Gas Liquid (NGL) Y-Grade. Ethane, propane, butane, and natural gasoline

Diameter of pipe: 12 inch

Age: ?

Operating pressure: High

Flow rate: 175,000 bbl/day *

Remote shutoff valves: Yes, both automated and manual valves, locations unknown

Monitoring: Yes, 24/7 monitoring, both automated and visually by air and ground

Pipeline #2 Name: Four Corners Pipeline

Product: Natural Gas Liquid (NGL) Y-Grade. Ethane, propane, butane, and natural gasoline

Diameter of pipe: 12 inch

Age: ?

Operating pressure: High

Flow rate: 175,000 bbl/day *

Remote shutoff valves: Yes, both automated and manual valves, locations unknown

Monitoring: Yes, 24/7 monitoring, both automated and visually by air and ground

Pipeline #3 Name: Four Corners Lateral - White Lake to Kutz

Product: Gasoline, jet fuel, diesel fuel

Diameter of pipe: 8 inch

Age: ?

Operating pressure: High

Flow rate: 60,000 bbl/day

Remote shutoff valves: Yes, both automated and manual valves, locations unknown

Monitoring: Yes, 24/7 monitoring, both automated and visually by air and ground

Geologic Limitations on Ground-Water Availability in the Placitas Area, Sandoval County, New Mexico

by Peggy S. Johnson, New Mexico Bureau of Mines and Mineral Resources

The Placitas area, situated in the picturesque northern Sandia foothills, has been intensively developed during the past three decades. The region has evolved from a sparsely populated, rural agricultural area, to a mixed suburban environment. Population growth of 85% during the 1970s and from 20% to 30% during the 1980s and early 1990s (Middle Rio Grande Council of Governments, 1992) has relied entirely on development of ground water for a domestic water supply (Fig. 1). Increased ground-water withdrawals combined with a 2-year drought in 1995 and 1996 resulted in numerous dry wells and raised awareness of the potential for over-development of the area's limited ground-water resources. A thorough understanding of the hydrogeology of the Placitas area is essential to achieving sustainable ground-water development. Before detailed geologic mapping of the area in 1995 (Connell et al., 1995) and a comprehensive hydrologic study in 1997–1999 (Johnson, 2000), this understanding was hampered by a general absence of detailed hydrologic and geologic data and by the area's complex geology.

The Placitas area is geologically complex because it straddles the geologic boundary between the Sandia Mountains and the Albuquerque Basin of the Rio Grande rift. Major rift-margin faults, including the San Francisco-Placitas fault zone and numerous smaller faults, cut through much older (360–66 million years old) Paleozoic and Mesozoic sedimentary rocks, rotating them downward (to the north) below younger (23.7 million–700,000 years old) Santa Fe Group basin fill (Fig. 2). These faults behave both as barriers to and conduits for ground-water movement. Older layered rocks have been deformed by some faults into a nearly vertical orientation. In some cases, vertical, low-permeability rock layers such as fine-grained shales and mudstones form stratigraphic barriers that also compartmentalize ground water into small isolated aquifers.

This geologic setting of layered rocks with dramatically different aquifer properties, broken and deformed by faulting, is what makes identification of Placitas' aquifers such a challenge to scientists, well-drillers, developers, and home buyers. These characteristics are not unique to Placitas; they are quite common in other mountainous, developing areas of New Mexico such as the East Mountains and southeast Santa Fe County. By studying surface and subsurface geology, well hydrographs (measurements of ground-water levels over

time), and chemical tracers in ground and surface water, hydrologists have identified an assortment of confined (under pressure) and unconfined (open to the atmosphere) aquifers near Placitas. These aquifers possess a wide range of water quality, productivity, ground-water age, and varying degrees of hydraulic connection and recharge (water replenishing an aquifer).

Placitas' Aquifers

The Placitas area contains three distinct aquifer systems: the Sandia Mountains, the Placitas foothills (known as the Mesozoic ramp), and the Albuquerque Basin (Fig. 3). In general, large supplies of ground water are not available in the mountain system or in the Mesozoic ramp. Only aquifers in the Santa Fe Group deposits that fill the Albuquerque Basin are capable of supporting large-scale ground-water withdrawals.

The most important aquifer in the mountain system is contained in the Madera Limestone, the layered rock that caps the Sandia Mountains. This limestone aquifer stores and transmits water through fractures in the rock as well as small pores, and thus is called a dual-porosity aquifer (Johnson, 1999). Because the flow of ground water is concentrated along discrete fractures or cracks in the rock, its availability is highly variable, and dry holes are relatively common. On a regional scale, the Madera Limestone possesses very high transmissivity (it transmits large volumes of water) but relatively low storage. These are properties that allow the Madera Limestone to efficiently transmit fresh ground water from the Sandia Mountains down towards the basin, but which also limit the amount of water stored in the aquifer.

Exposures of Madera Limestone in the Sandia Mountains form major ground-water recharge areas that are fed by snowmelt, winter-spring precipitation, and surface water from Las Huertas Creek and other drainages. This recharge water flows through the limestone along fracture systems in the subsurface until it is intercepted by a low-permeability barrier such as the Placitas fault zone or a fine-grained rock, where it either discharges as spring flow, or continues on through a few permeable windows in the rock. Tunnel Springs, the Placitas Springs, and Old San Francisco Springs are examples of springs that discharge from the Madera Limestone along a fault barrier. This recharge water also possesses unique water chemistry characterized by dissolved calcium and bicarbonate, low concentrations of total dissolved minerals, a temperature less than 61° F (or 16° C, the area's mean annual temperature), a high dissolved oxygen content, and no significant trace elements. By mapping these chemical characteristics we have identified pathways for ground-water movement and aquifers that are connected to or isolated from sources of recharge.

The Mesozoic ramp is a region of older (240–60 million year old) sedimentary rock, situated in the Placitas foothills, that is broken and deformed by many faults. Ground water here is limited to isolated sandstone aquifers and rocks that are highly fractured. Rotation of layered rock by up to 65° has created a network of subvertical strip aquifers.

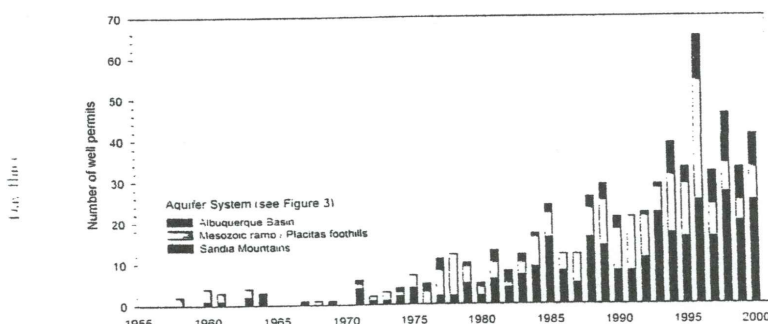


FIGURE 1—Number of wells drilled in the Placitas area, 1958–2000, from records of the New Mexico Office of the State Engineer.

Appendix H.(from proposal letter research-40 years old pipes leak or explode)
<http://www.latimes.com/business/la-fi-pipeline-explosion-bay-area-20160802-snap-story.html>

<http://latimes.com/business/la-fi-pge-san-bruno-pipeline-blast-20160809-snap-story.html>

<http://earthfirtjournal.org/newswire/2016/08/31/pipeline-explosion-kills-10-campers-in-new-mexico/>

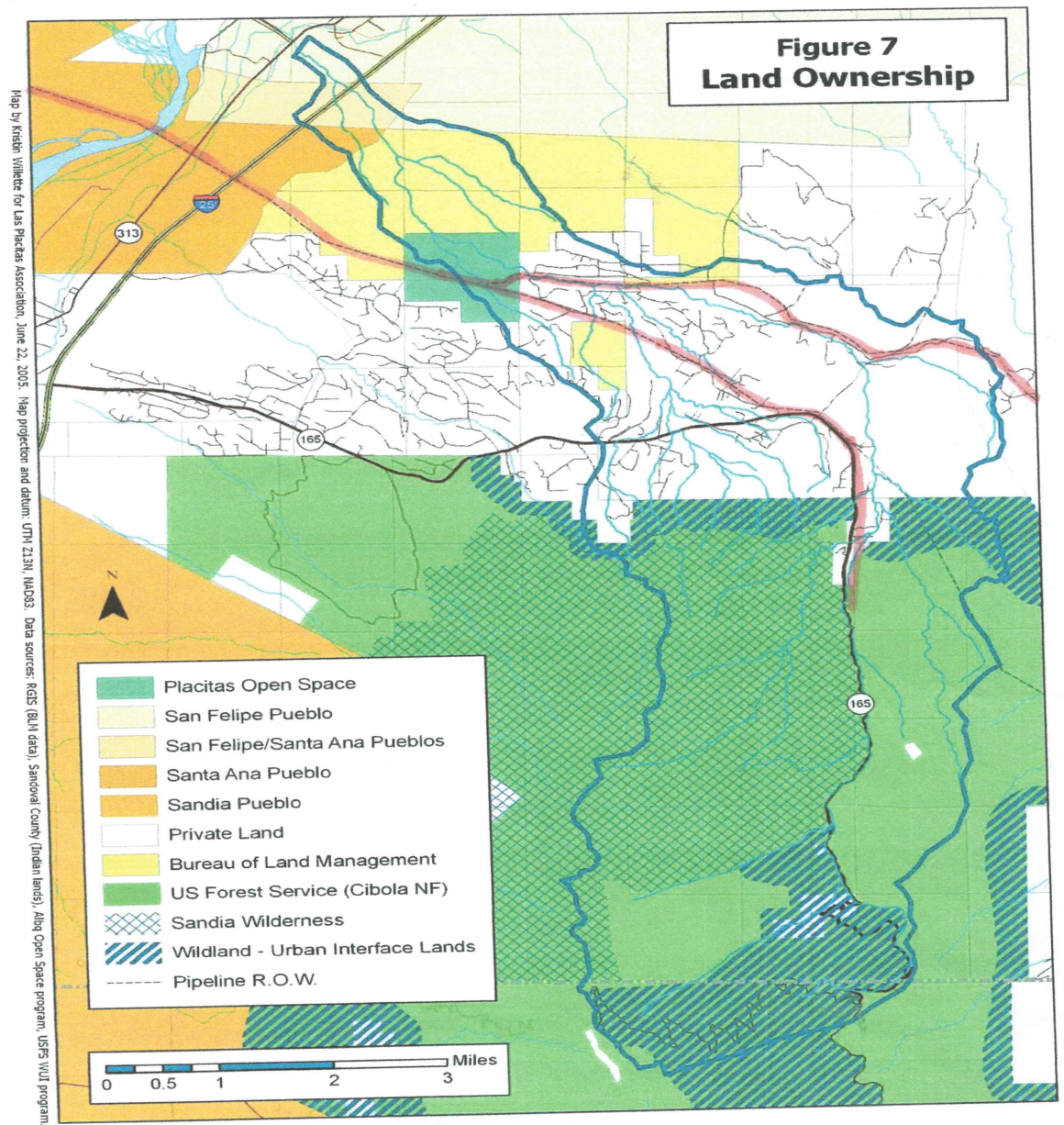
<http://www.eia.gov/todayinenergy/detail.cfm?id=27172>
(see below: attached)

http://www.santafenewmexican.com/news/local_news/report-spills-from-oil-gas-production-up-in-new-mexico/article_7ec4957e-9831-5aa1-911b-c9553d928600.html

<http://cen.acs.org/articles/94/i9/Southern-California-methane-leak-largest.html>

<http://www.truth-out.org/news/item/40751-hilcorp-runs-aground-pipeline-ruptures-expose-fractures-in-billionaire-s-energy-companies>

Land ownership area of water flow and property/water to be affected-one main road a safety issue.



**Paradox-San Juan Basin
Southeastern Portion (Panel 2 of 2)
Oil & Gas Fields by 2001 Gas Reserve Class**

CO
NM

0 10 20 30 40
Miles

Index Map for 2 Paradox-San Juan Panels

UT
CO
AZ
NM

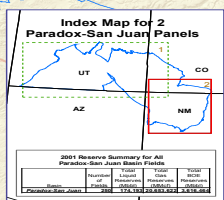
2001 Gas Reserve Summary for All Paradox-San Juan Basins Fields

Basin	Number of Fields	Total Gas Reserves (MMCF)	Total Oil Reserves (MMCF)
Paradox-San Juan	1,000	1,000,000	1,000,000

2001 Gas Reserve Class

- No 2001 gas reserves
- 10.1 - 10 MMCF
- 10.1 - 100 MMCF
- 100.1 - 1,000 MMCF
- 1,000.1 - 10,000 MMCF
- 10,000.1 - 100,000 MMCF
- > 100,000 MMCF
- Basin Outline

U.S. Energy Information Administration



2001 Gas Reserve Class

- No 2001 gas reserves
- 0.1 - 10 MMCF
- 10.1 - 100 MMCF
- 100.1 - 1,000 MMCF
- 1,000.1 - 10,000 MMCF
- 10,000.1 - 100,000 MMCF
- > 100,000 MMCF

— Basin Outline

[illegible]