

Pipeline Safety & Development Changes

- **File # ZON2007-00014**
- **Proponent Carl Weimer, Whatcom County Council**
- **Docketed Unanimously by the Whatcom County Council in 2007**

Planning Near Transmission Pipelines



USGS DOQQ 1990 Aerial Photo

Most pipelines were put in rural areas

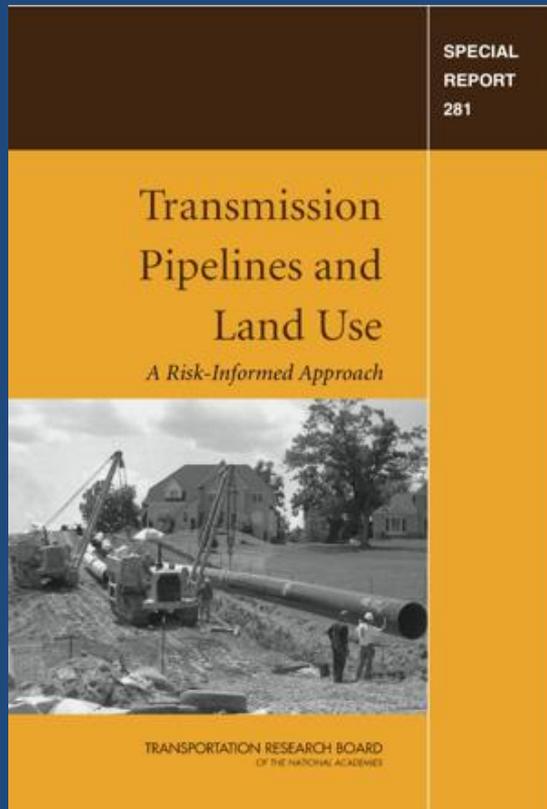
But now growth is encroaching near many pipelines



This creates an increased risk that communities should consider when planning

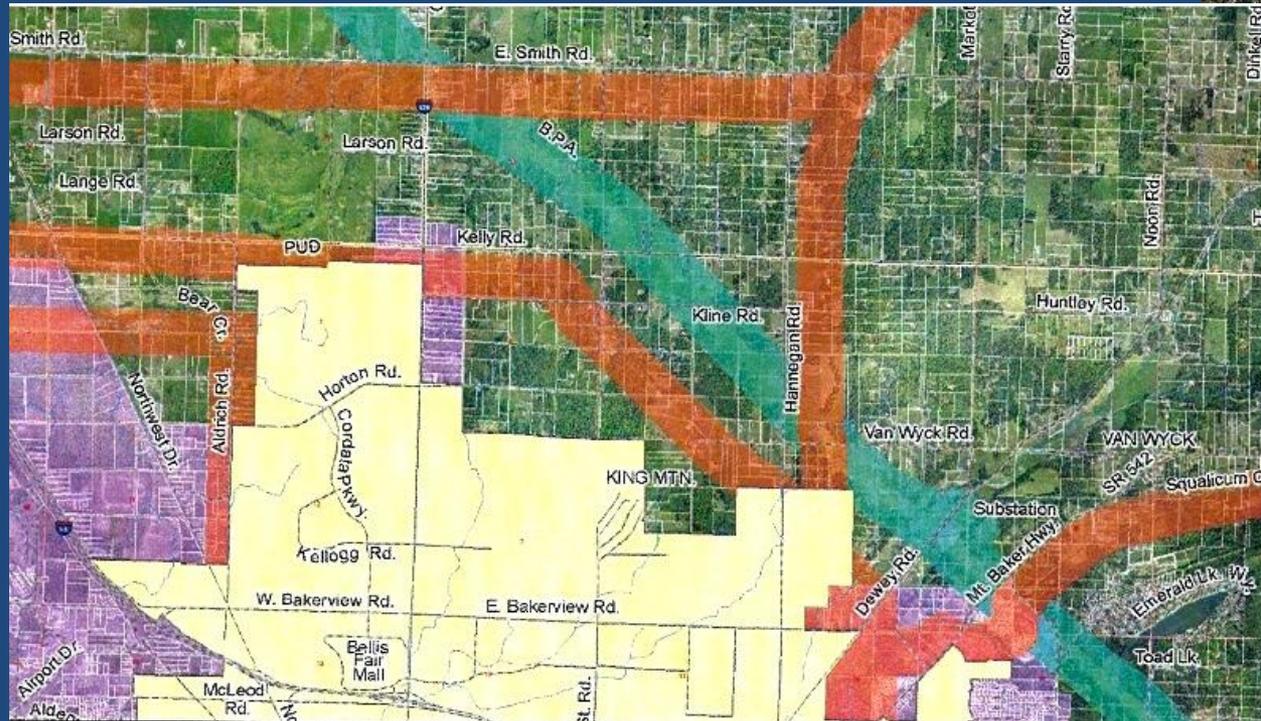


Growing Recognition of This Problem



- Special Report from the Transportation Research Board of the National Academy of Science in 2004
Transmission Pipelines and Land Use – A Risk Informed Approach
- Report from the Washington Transportation & Utilities Commission in 2006 - **Land Use Planning In Proximity to Natural Gas and Hazardous Liquid Transmission Pipelines in Washington State**
- U.S. Department of Transportation, Pipelines and Hazardous Materials Safety Admin. – 2008 to Present - **Pipelines and Informed Planning Alliance**
— a national multi-stakeholder process to develop recommended practices for planning near pipelines

Local recognition of the problem



How much risk is there?

- The chance of a pipeline failing in any one specific place is extremely small.
- But if a pipeline does fail the consequences can be catastrophic.



Significant Pipeline Incidents

Washington State 1999 - 2009

Name	Date	County	Cause	Property Damage	Gallons Spilled	Gallons Recovered
NORTHWEST PIPELINE	2/26/1999	SKAMANIA	BODY OF PIPE	\$4,970,414		
OLYMPIC PIPE LINE	6/10/1999	WHATCOM	OTHER	\$55,917,160	229950	9828
OLYMPIC PIPE LINE	8/29/1999	KING	OTHER	\$372,781	3360	1764
TIDEWATER, INC	7/21/2000	FRANKLIN	CORROSION	\$974,400	37800	0
TRANS MOUNTAIN PIPE LINE	10/26/2000	WHATCOM	INCORRECT OPERATION	\$389,760	27090	26376
NORTHWEST PIPELINE	4/16/2002	COWLITZ	BODY OF PIPE	\$198,809		
NORTHWEST PIPELINE	5/1/2003	PIERCE	BODY OF PIPE	\$116,795		
NORTHWEST PIPELINE	5/29/2003	SKAMANIA	JOINT	\$208,127		
NORTHWEST PIPELINE	12/13/2003	LEWIS	BODY OF PIPE	\$138,082		
OLYMPIC PIPE LINE	5/23/2004	KING	MATERIAL / WELD FAILURES	\$693,827	1890	840
NORTHWEST PIPELINE	5/24/2006	LINCOLN	BODY OF PIPE	\$159,216		
EXXONMOBIL PIPELINE CO	11/3/2008	SPOKANE	INCORRECT OPERATION	\$580,170	3570	588
NORTHWEST PIPELINE	1/8/2009	SNOHOMISH	OTHER	\$128,035		
Totals =				\$64,847,576	303660	39396

Consequences of natural gas pipeline failures



Explosions & Fires

Pressure Impacts



Consequences of spills from crude oil and product pipelines



Potential large liability to local government,
businesses, property owners

Contamination and expensive clean up to private property, groundwater and the environment



Explosions and Fires



Edison, N.J. Pipeline Explosion
EMS Staging Area #1
1320 hrs, 3/24/94



Two ways to protect communities

- Protect the pipelines from damage so they stay safe.
- Protect people near pipelines in case something happens.



What this proposal tries to accomplish

- Ensure awareness of transmission pipelines (Inclusion on plats)
- Ensure communication between developers and pipeline companies early on (Consultation Zone)
- Ensure developers think about proximity to transmission pipelines early on (SEPA Checklist)
- Protect pipeline rights-of-way (Pipeline Corridor Protection Section)
- Restricts high occupancy, hard to evacuate development (schools, nursing homes, hospitals) from within 500 feet of a transmission pipeline. (Land Use compatibility section)

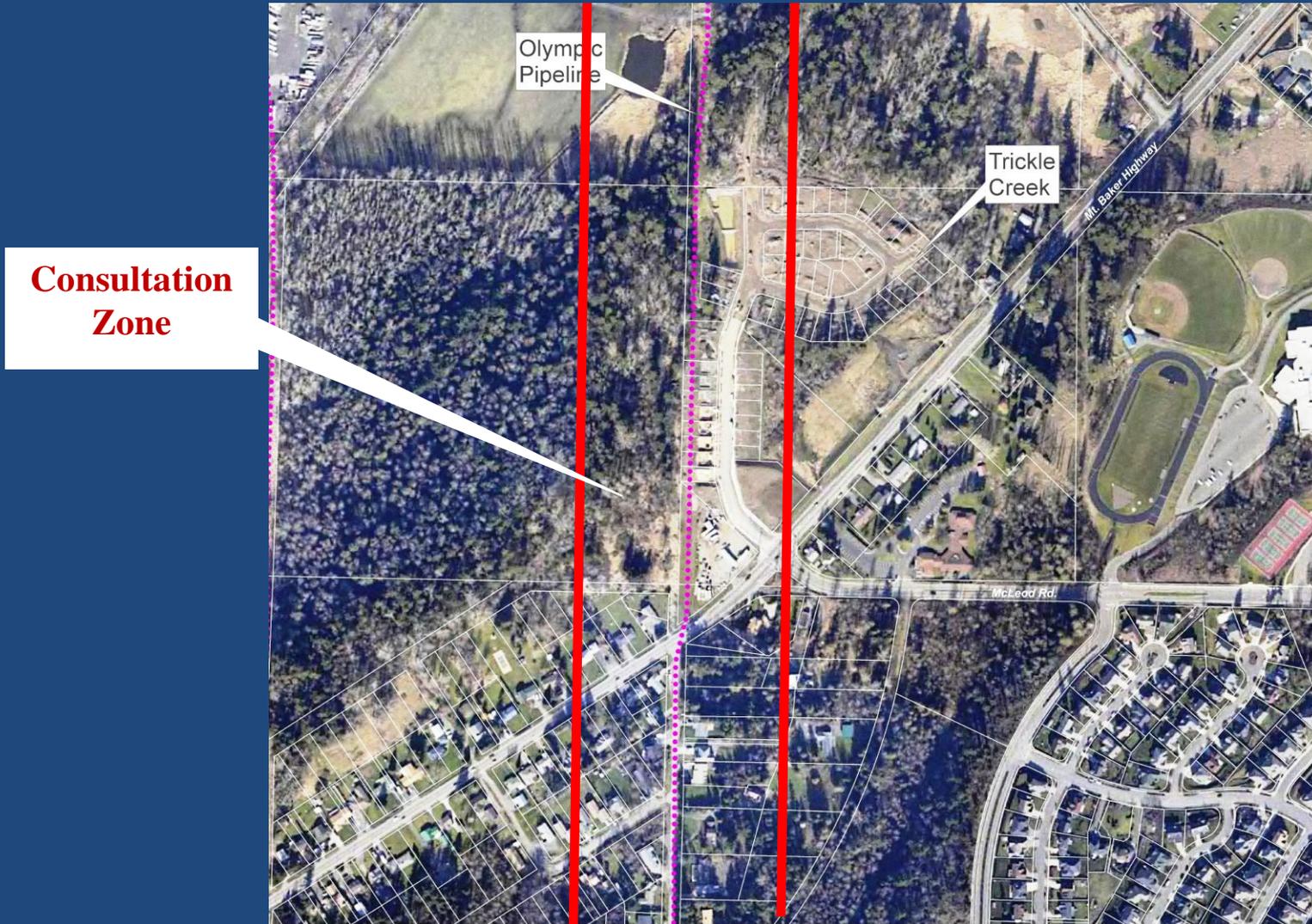


Supported by

Whatcom County Comprehensive Plan

- Policy 5M-3: Develop information/education and notification programs to alert the public of pipeline location and safety considerations when making land purchase or development decisions adjacent to transmission pipelines.
- Policy 5N-7: For natural gas transmission pipelines, encourage siting of critical facilities and high occupancy facilities pursuant to the regulations of WAC 480-93-020, and 480-93-030 (not closer than 500' from a 500 psi pressure or greater pipeline, not closer than 100' from a pipeline with a pressure between 250 and 499 psi) and as hereafter amended.
- Policy 5N-3: Transmission pipeline are discouraged in urban growth areas, small towns, crossroads commercial, and other areas of intense rural development which would render such pipeline siting inappropriate.

Consultation Zone – Area within which developers are required to communicate plans to the pipeline company





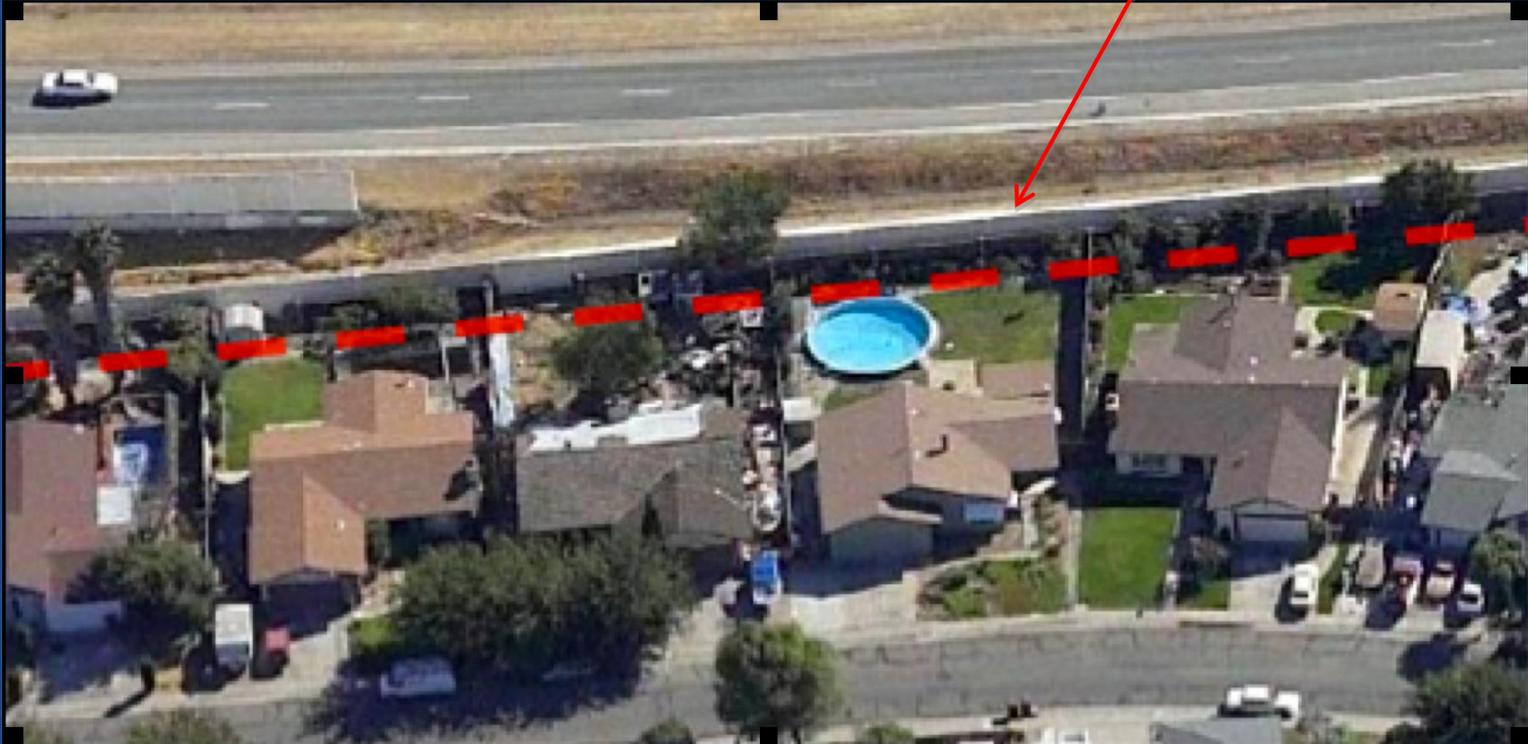
Stormwater detention pond with failing slope

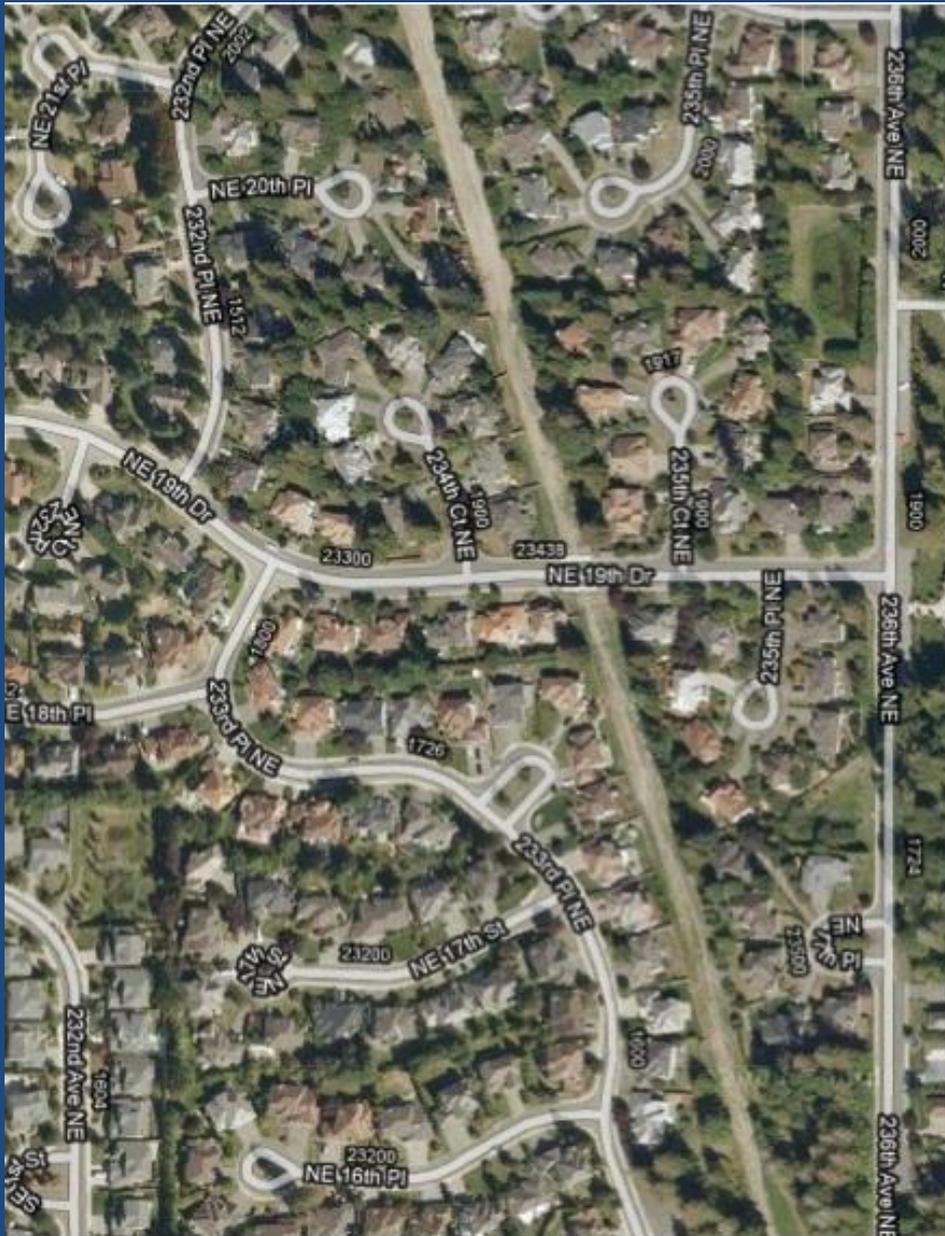
Expensive fix that could have been avoided with early communication



Jet fuel pipeline in people's backyards.
Multiple communication failures.

Sound wall





Consultation
can be a Win,
Win, Win

The Bottom Line - Better planning can help ensure safe fuel transport and avoid tragedies

