

Pipeline Safety Project

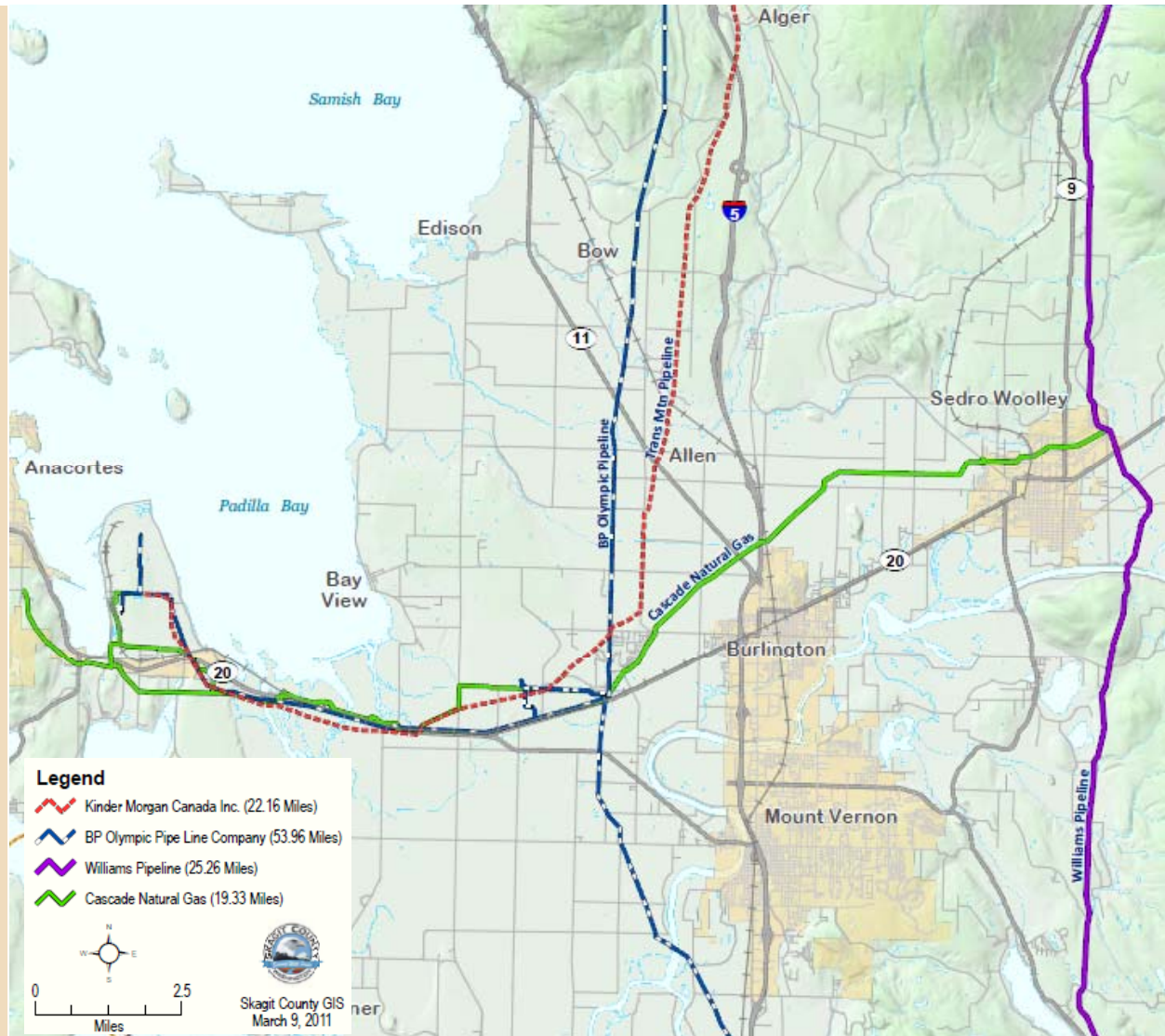


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Skagit County Planning & Development Services

Background

- PDS applied for and received a \$50,000 grant from the US Department of Transportation (PHMSA)
 - Pipeline Safety and Hazardous Materials Administration
- Pipeline operators and affected landowners will be directly contacted and included as we open a dialog regarding pipeline safety in Skagit County.
- Municipal Research Center drafted model ordinance.
- Washington jurisdictions of Whatcom County, City of Redmond and City of La Center have adopted pipeline safety standards.

Major Transmission Pipelines in Skagit County



Miles of Transmission Pipelines

Fact:
Skagit County
has approximately
121 miles of
gas/hazardous
liquid pipelines

- ❑ Olympic Pipeline
(British Petroleum): 54 Miles
- ❑ Northwest Pipeline
(Williams): 25 Miles
- ❑ Trans Mountain
(Kinder-Morgan): 22 Miles
- ❑ Cascade Natural Gas: 20 Miles



September 9, 2010
San Bruno, CA

Thursday, 6:11 p.m.

A 30 inch diameter natural gas pipeline explodes





38 homes destroyed
8 lives lost

The fiery inferno caused by the pipeline failure burned at an estimated 2,000 degrees Fahrenheit.

Pipeline Failure destroys heart of San Bruno community

BEFORE

AFTER



- Each dot represents one home reduced to ashes in the blast



Resulting damage from San Bruno pipeline failure









Pipeline failures cause catastrophic damage where high density developments are within pipeline blast radius

Pacific Gas & Electric Co. had released a list of its 100 riskiest transmission pipeline segments.

The segment of pipe that failed in San Bruno was not on the list.

30' section of pipe blown out of the ground with no warning

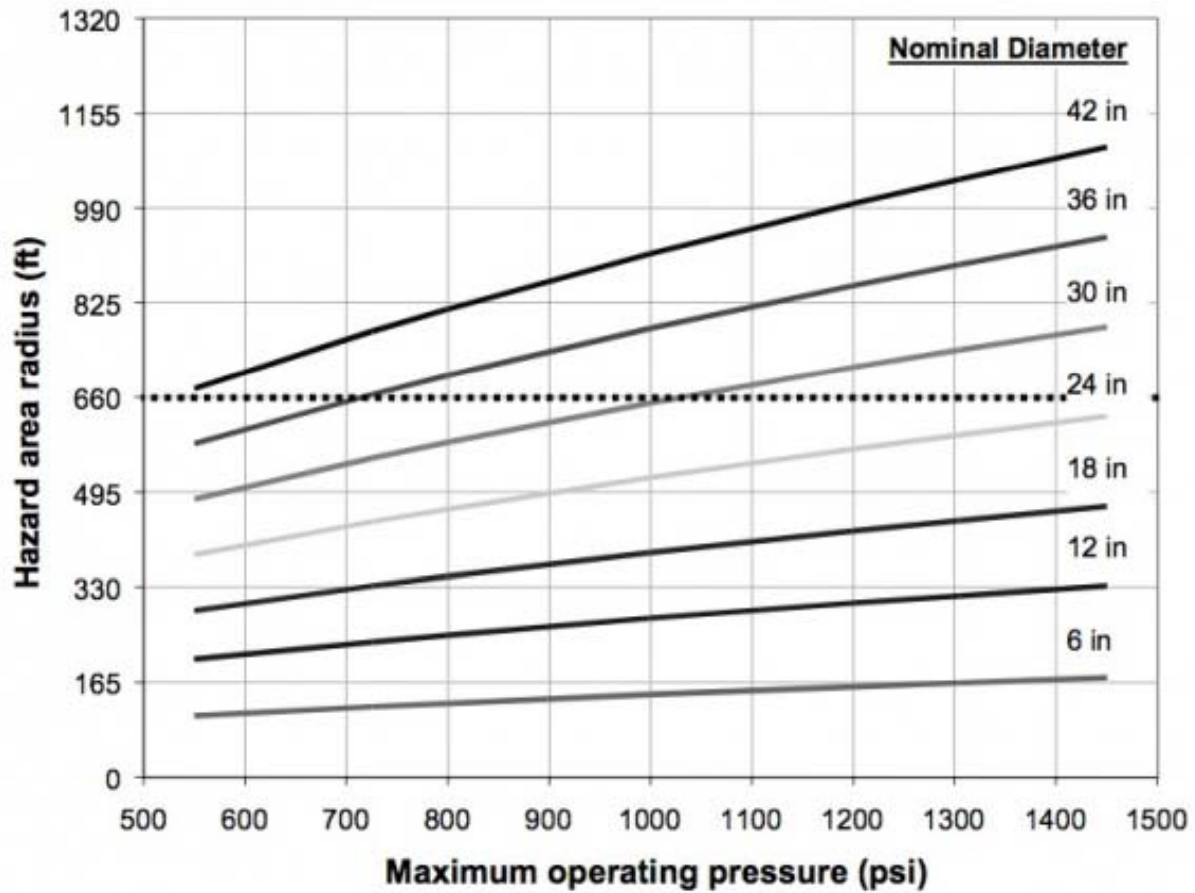
Failed section of pipe lands
100' from explosion site



Blast Crater from San Bruno explosion



Exhibit 2CV: Pipeline Rupture Site Looking North, 10 Sept 2010 IMG_0097 NTBB Downs



The science of determining blast radius

Hazard area (blast) radius is a function of line diameter and pressure

Pipeline blast zones are unpredictable



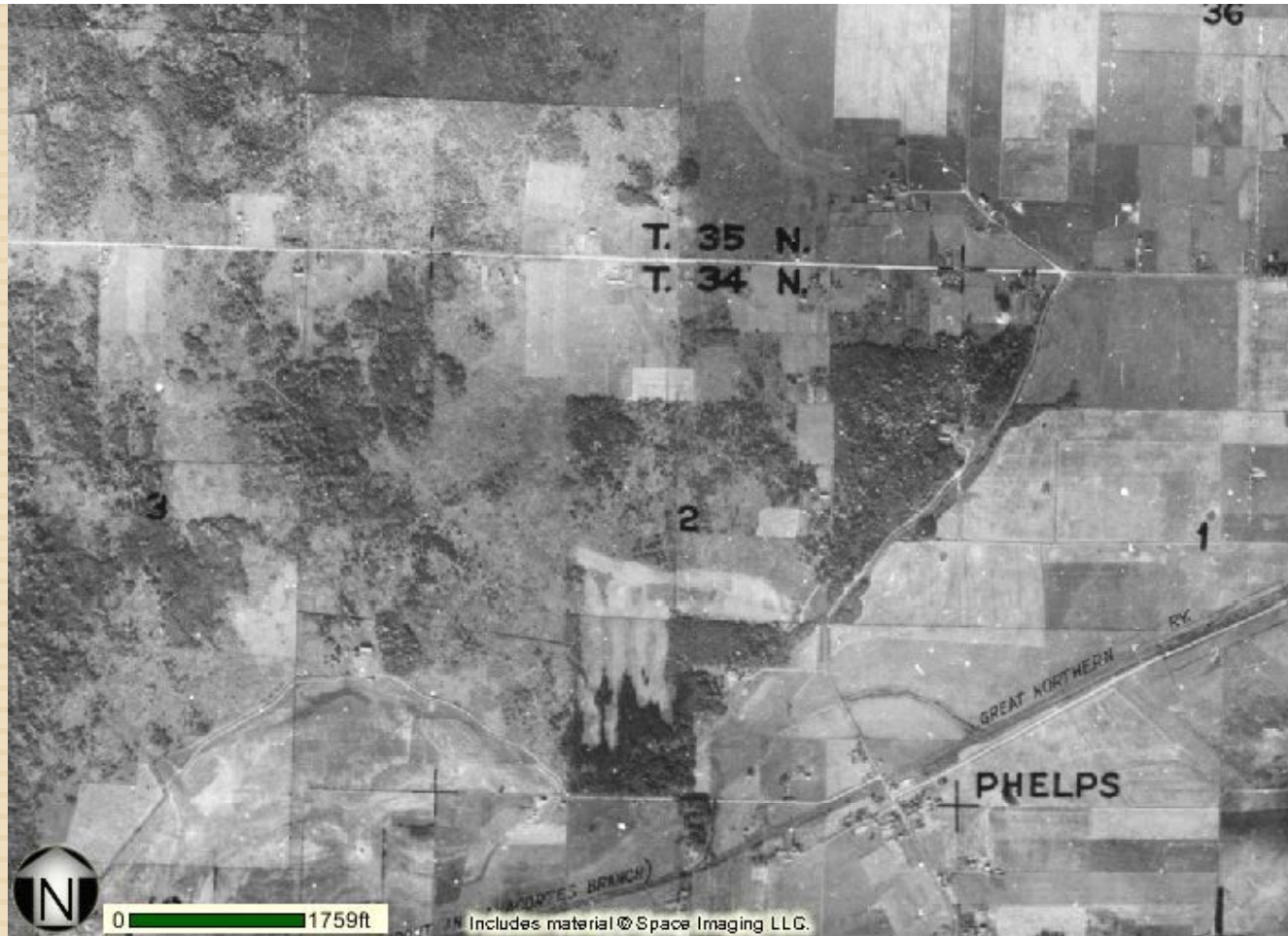
Two different communities, one thing in common...

San Bruno, CA



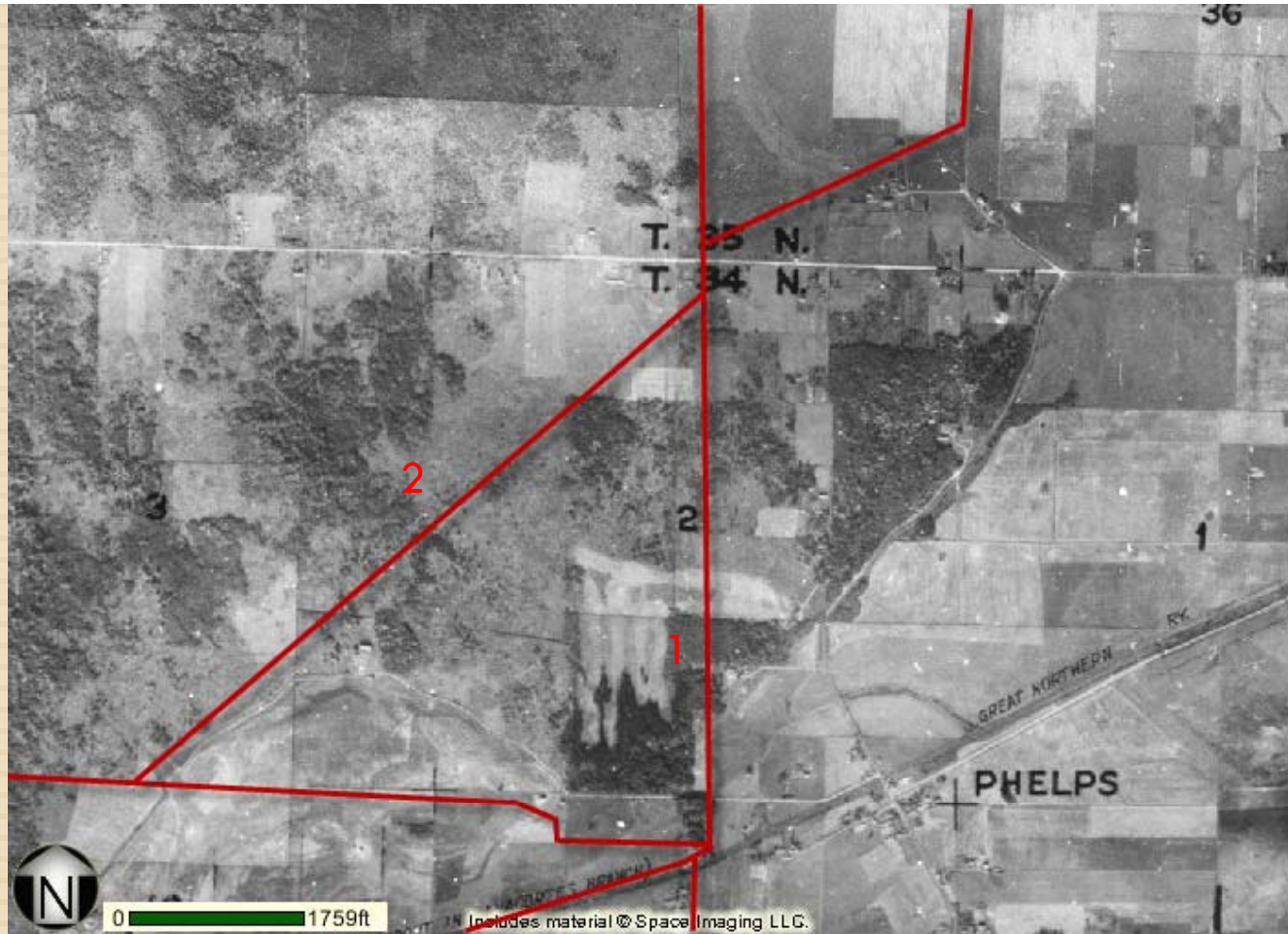
Bayview Ridge, WA





1937

Bayview Ridge area



1950's – 1960's
Pipeline infrastructure installed

- 1 - Olympic Pipeline
- 2 - Trans Mountain Pipeline



1998

High Density Residential Development

Southeastern face of Bayview Ridge developed with 5 major plats from
1960's – 1990's



0 1759ft

Includes material © Space Imaging LLC.



Bay Hill

Skagit Golf & Country Club



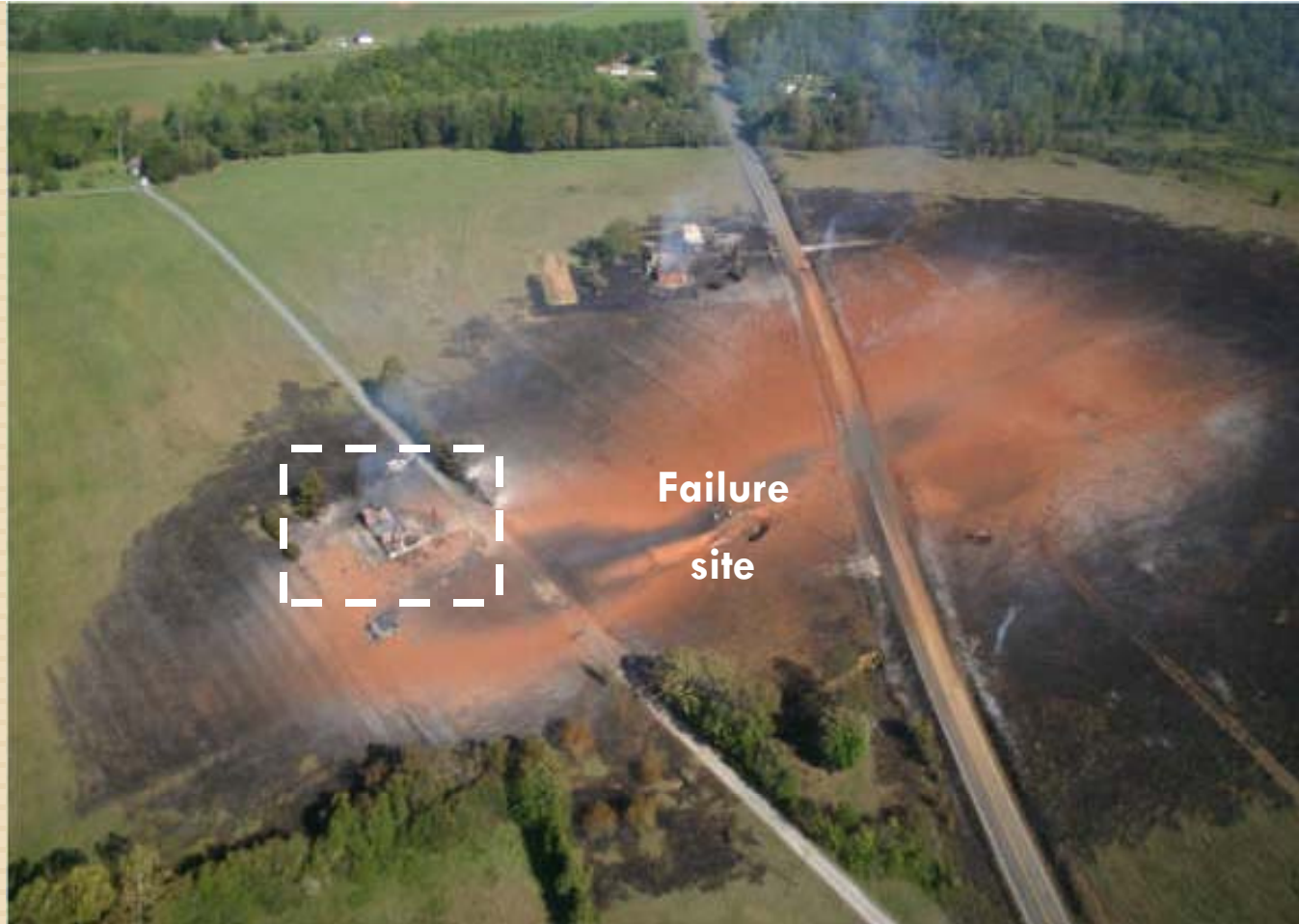
0 660ft

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Peaceful pipeline corridor





Sept 14, 2008
Appomattox Virginia

Explosion of a natural gas transmission line owned by Williams Energy.
NTSB determines cause of failure as corrosion.



5 people injured

100 homes damaged or destroyed.

June, 10, 1999

Olympic pipeline
in Whatcom County
fails
Releasing 237,000
gallons of gasoline
into Whatcom
Creek.

3 Dead
8 Injured





1.5 miles of Whatcom Creek fills with spilled fuel and ignites

Resulting fire burns uncontrollably for over 1 hour.

Smaller fires burn for 4 additional days. Extensive fires burn 25 total acres.

1 residence destroyed, Bellingham Water Treatment Plant significantly damaged.

\$45 million in property damages.



24" damaged section of Olympic pipeline

NTSB determines cause of failure.

Damage to pipeline from 1994 excavation of area near pipeline and inadequate oversight, testing, and correction of damage.



**Know what's below.
Call before you dig.**

811 or 1-800-424-5555

Any contact can damage a pipeline and cause a failure, even years later.

Pipeline Safety Project

Anticipated Products

“Now is the time for us to move ahead, look in the mirror and look at everything else we can do to prevent this from ever happening again.”

Mike Florio,
CPUC

- Notification to all landowners within close proximity of pipeline(s).
- County-wide, parcel level mapping of existing pipelines.
- Consultation forms to facilitate communication between landowners and pipeline operators regarding proposed development.
- Development land use regulations pertaining to pipeline safety.

Pipeline Safety Project

Project Schedule

**March/
April**

Review surrounding jurisdiction regulations
Contact pipeline operators
Develop regulations
Internal review of proposal

May

Finalize proposal
Issue SEPA Threshold Determination
Send Notice of Availability for publishing
Forward to Department of Commerce
Proposal available for public review

June

Public notification and workshops
Planning Commission study sessions and
Public hearings

July

Planning Commission Deliberations
Draft Planning Commission recorded motion
Study sessions with Board of Commissioners

August

Board of Commissioners final action

FOR MORE INFORMATION

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