Pipeline Safety Project

Carly Ruacho, AICP, Senior Planner
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

- 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
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...
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
Peaceful pipeline corridor
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
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.
NTSB determines cause of failure.

Damage to pipeline from 1994 excavation of area near pipeline and inadequate oversight, testing, and correction of damage.
Any contact can damage a pipeline and cause a failure, even years later.
Pipeline Safety Project
Anticipated Products

- 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.

"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
## Pipeline Safety Project

### Project Schedule

<table>
<thead>
<tr>
<th>Month</th>
<th>Activities</th>
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<tbody>
<tr>
<td>March/April</td>
<td>Review surrounding jurisdiction regulations</td>
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<tr>
<td></td>
<td>Contact pipeline operators</td>
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<td></td>
<td>Develop regulations</td>
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<td>Internal review of proposal</td>
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<td>May</td>
<td>Finalize proposal</td>
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<td></td>
<td>Issue SEPA Threshold Determination</td>
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<td>Send Notice of Availability for publishing</td>
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<td>Forward to Department of Commerce</td>
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<td>Proposal available for public review</td>
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<tr>
<td>June</td>
<td>Public notification and workshops</td>
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<td></td>
<td>Planning Commission study sessions and Public hearings</td>
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<td>July</td>
<td>Planning Commission Deliberations</td>
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<td>Draft Planning Commission recorded motion</td>
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<td>Study sessions with Board of Commissioners</td>
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<tr>
<td>August</td>
<td>Board of Commissioners final action</td>
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FOR MORE INFORMATION
360-336-9410

CARLY RUACHO
carlyr@co.skagit.wa.us

MICHELE SZAFRAN
micheleqs@co.skagit.wa.us

www.skagitcounty.net/planning