

Crude Oil Transport on the Hudson



Photo: Waterkeeper Alliance

New York's Virtual Pipeline

Putnam County Legislature Health, Social, Educational & Environmental
Committee Meeting

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Crude Oil = Unrefined Petroleum

**Bakken crude is volatile.
It floats. (North Dakota)**



**Tar sands crude is heavy.
It Sinks. (Alberta, Canada)**



Hudson Valley Transport

Up to 6.3 billion gallons shipped Per Year

~10 million gallons per day

Exxon Valdez spilled 11 million gallons (NOAA)

- 2 unit trains/day on CSX Hudson line
 - Approx. 3M gal. per train → Philadelphia-area refineries
- 1 barge/day from Global Partners Albany terminal
 - Approx. 4M gal. per barge → New Jersey refinery
- 1 tanker/week from Buckeye Partners Albany terminal
 - Approx. 8M gal. per tanker → New Brunswick, Canada, refinery



Crude Oil Transport Risks

Train derailment of Bakken crude oil

...could lead to devastating explosions and fire.

On-Water Spill of Bakken crude oil

... best case spill response would only recover 20-25% of the oil.

On-Water Spill of Tar Sands crude oil

...best case spill response for heavy, sinking oil would be 5% recovery.

Crude-by-Rail



Photo: Matt Kierstead



Dangerous DOT-111s on the Tracks

**1991 NTSB Finds
DOT-111s puncture
prone**

**82% of tank cars
travelling through
New York are
inadequate**

**Comprehensive spill
response plans are
not required by law
for crude by rail.**



Photo: Chad Gomes / Riverkeeper



Bakken-to-East Coast Virtual Pipeline Route Crude Oil Trains, Barges and Ships

MAJOR NORTHEAST BOUND OIL TRANSPORT ROUTES



Sources: Energy Information Administration; BNSF; Canadian Pacific; CSX

GRAPHIC BY GUILBERT GATES AND JOE BURGESS

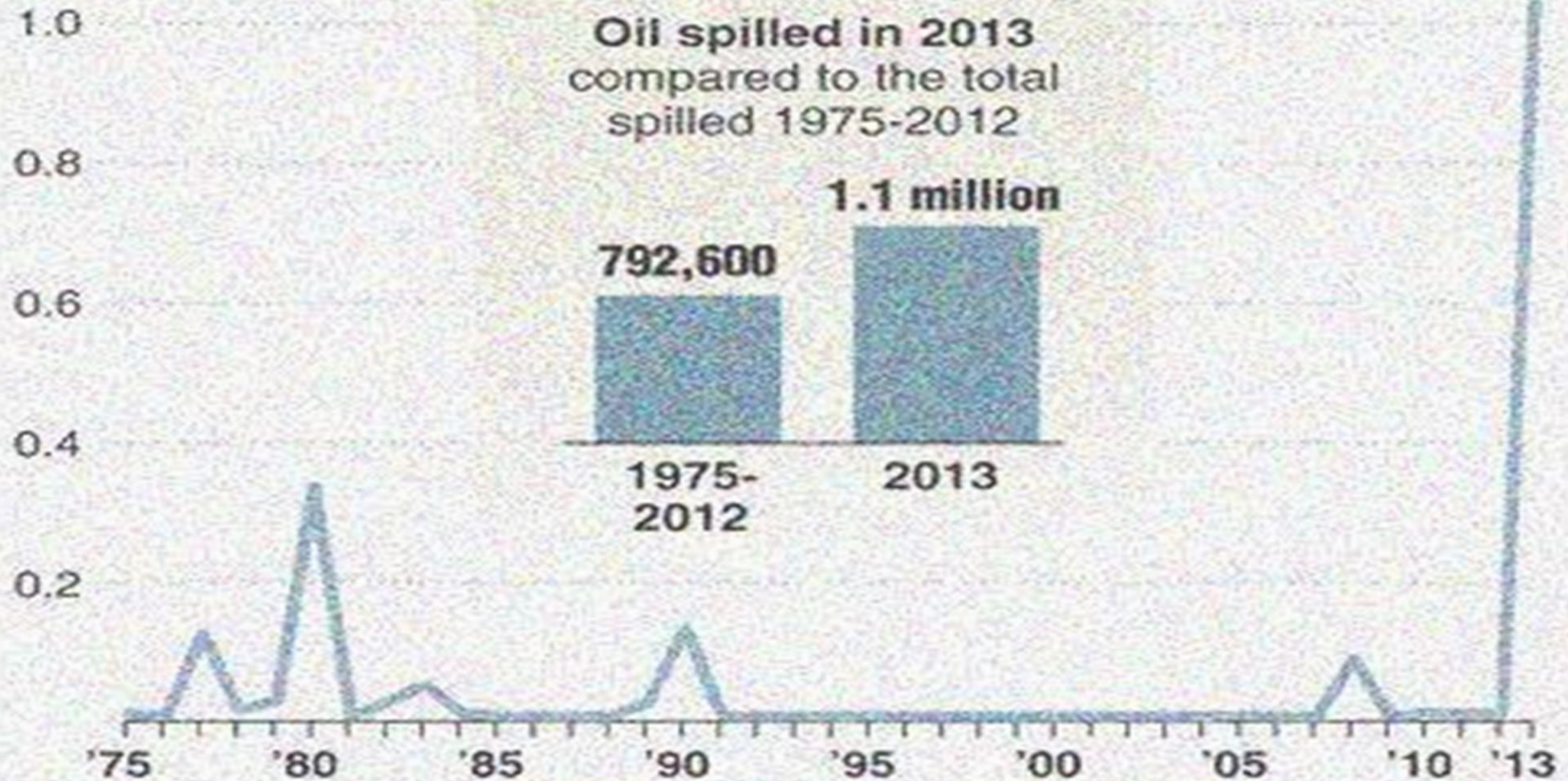
Photo: New York Times



Spike in oil spills from trains

More crude oil was spilled in U.S. rail incidents in 2013 than the total spilled from 1975-2012. Amount spilled per year, in millions of gallons:

2013
1.1 million



Lac- Mégantic, Quebec

July 2013

*Train Derailment
& Explosion of
Bakken Crude Oil*

*47 people killed,
downtown
buildings leveled*



Photo: Sûreté du Québec



Lynchburg, Virginia

April 2014 – Train derailment of Bakken crude oil on CSX line



Photo: James
Riverkeeper





Aliceville, Alabama

November 2013

*Train Derailment
& Spill of Bakken
Crude Oil*

*Four months after
derailment,
Associated Press
reports "oil still
oozing."*

Photo: John Wathen, Hurricane Creekeeper



Casselton, North Dakota

*December 2013
– Train
Derailment of
Bakken Crude
Oil
Thousands of
residents were
evacuated from a
5-mile radius*



Crumbling Concrete - Failing Bridges? Hudson River at Risk From Crude Oil





Photo: Russ Cusick

River Vessels



Upper Hudson River, *December 2012*

Stena Primorsk tanker (12 million gallons) runs aground near the Port of Albany



Mississippi River, Feb. 2014

Barge-on-Barge Collision, Bakken Crude Oil Spill

65 miles of river closed

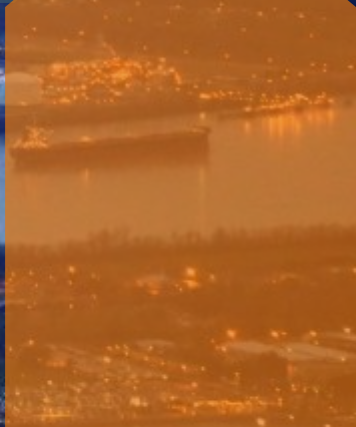
34,000 gallons spilled/95 gallons recovered.



Gerald Herbert / AP

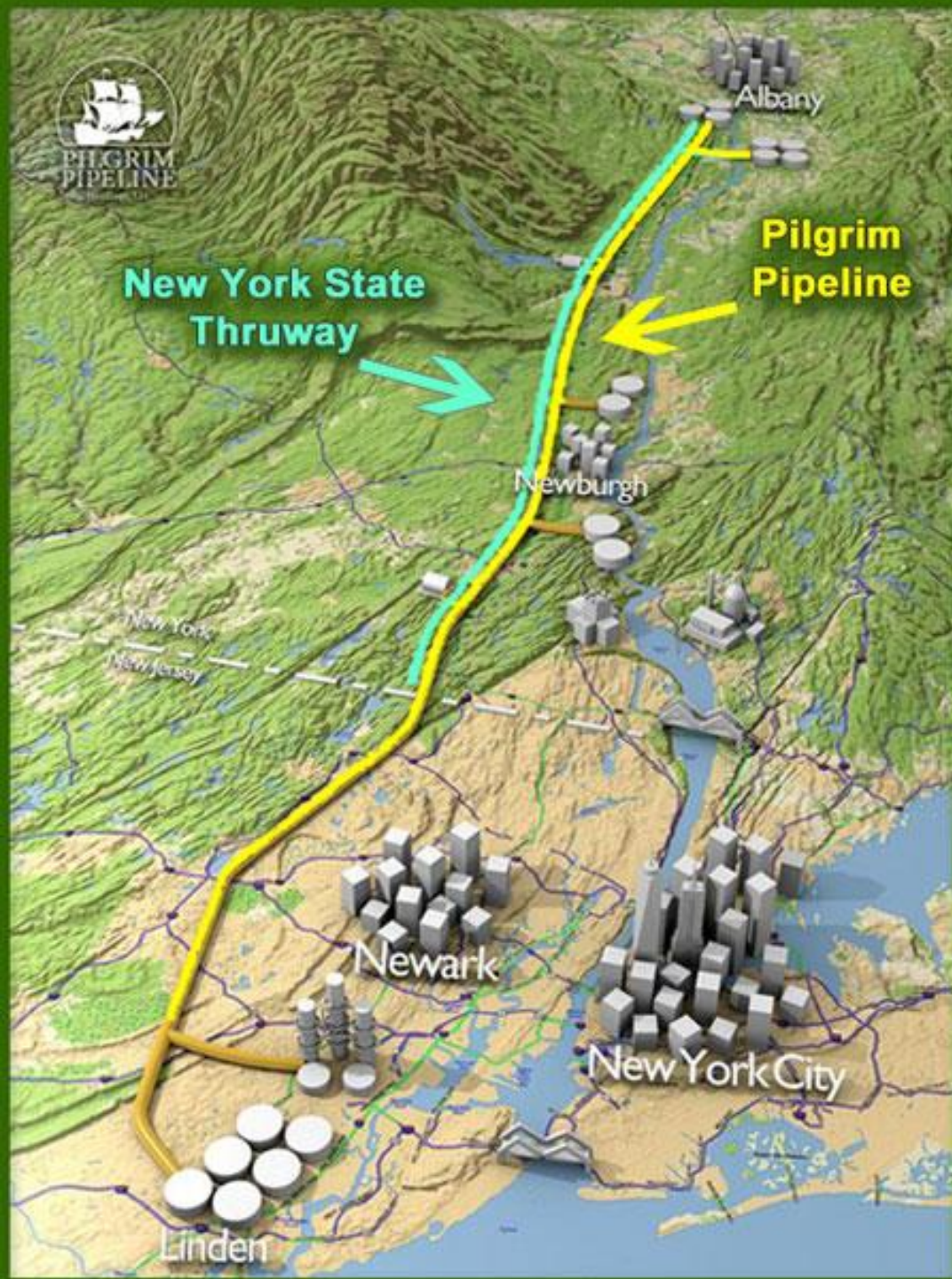


Melissa Phillip/AP



**Galveston Bay,
March 2014
Barge-on-Ship
Collision Bunker
Fuel Oil Spill**

***168,000
gallons of oil
spilled***



Proposed Pilgrim Pipeline

NOTICE



**NO RIVER USE
UNTIL FURTHER NOTICE
DUE TO ONGOING
OIL SPILL RESPONSE**



For more information, please call
Enbridge toll free 1-800-306-6837

**Kalamazoo River
Michigan, 2009**

**843,000 gallons
of tar sands
crude**

35 miles of river

Cleanup at \$2B+

Terry Heatlie, NOAA



What if it Happened Here?

A Bakken oil train explosion and fire in North Dakota in 2013 required an evacuation in a 5-mile radius.

Toxic smoke from a similar oil train derailment and explosion in Orange County, carried west to east on the Hudson's prevailing winds, could force **evacuation** of communities in Putnam County.



Photo: Leah Rae





Local Economies At Risk

- **Tourism: \$4.7 billion industry**
- **Public and private investments in waterfront revitalization, public access and water/sewer infrastructure**
- **Real estate**
- **Recreation (fishing, sailing, kayaking, swimming)**

Drinking Water At Risk

100,000+ people rely on Hudson River drinking water

- **Poughkeepsie** – 75,000

(city, town and other neighboring towns)

- **Hyde Park** – 12,288

(including Harbour Hills and Staatsburg water districts)

- **Rhinebeck** – 5,300

- **Highland** – 5,000

- **Port Ewen** – 4,500

Major industries also at risk – IBM, power plants, and others.



Hudson River At Risk

- **Spawning fish habitat critical to Atlantic populations, many of which already endangered or depleted**
- **Significant bird habitat, including rare and endangered species**
- **Billions invested in toxic cleanup, public access and community waterfronts**
- **40 state-designated significant habitats deemed “irreplaceable”**

EYEWITNESS NEWS INVESTIGATION FINDS BRIDGES IN APPARENT DISREPAIR

Watch: <http://7online.com/447890/>

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Investigative reporter Jim Hoffer has details of an Eyewitness News investigation that found railroad bridges in apparent disrepair.



Expansion Plans

Increase in quantity, plus addition of heavy crude

Port of Albany

- Global Partners application to install boilers to transfer heavy crude oil
- Buckeye Partners vision for Albany and the Hudson River as key virtual pipeline between Canadian tar sands and BORCO terminal in the Bahamas

Actions We Can Take



- **Environmental review before expansion of crude oil terminals**
- **Tougher rail safety regulations and independent inspections**
- **Increase NYS spill fund & Raise Spill Liability caps to the federal maximum**
- **Municipalities speaking out**



Photo: ALLYSE PULLIAM/For the Times Herald-Record