EIA adapts to changing market dynamics for propane and other hydrocarbon gas liquids (HGL)















Prepared for: Congressional Propane Caucus

Oct. 19, 2015



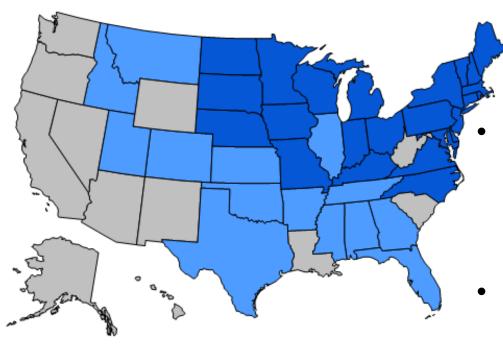
Key takeaways

- EIA is responding to rapidly changing markets with expanded data, tools, and analysis
- Healthy propane inventories coming into winter 2015-16
- Buildout of transportation and storage is continuing to meet growing demand
- Stronger international market linkages reduce volatility in prices

EIA has implemented a number of changes and improvements that complement activity in the industry

- Continuously improving forecasting tools, including
 - Short Term Energy Outlook (STEO) and annual Winter Fuels Outlook
 - Annual Energy Outlook and International Energy Outlook
- Widening data offerings while limiting the amount of new data collected through surveys
 - Inventory surveys in 2016 proposed to split out consumer-grade propane
 - Crude by Rail soon to be Energy by Rail
 - Gradual roll-out of separate data series for alkanes (propane) and olefins (propylene), including historical revisions
 - International data, including commodity flows
- Improving data access through the EIA Application
 Programming Interface (API) and interactive web pages

State Heating Oil and Propane Program (SHOPP) updates



SHOPP is a collaborative program between states and EIA that provides weekly wholesale and retail prices for heating oil and propane at the state level

- to 14 additional states
- EIA will continue providing granular data to states on a weekly basis during the upcoming winter
- New winter fuels page provides easier access to state information:
 www.eia.gov/special/heatingfuels

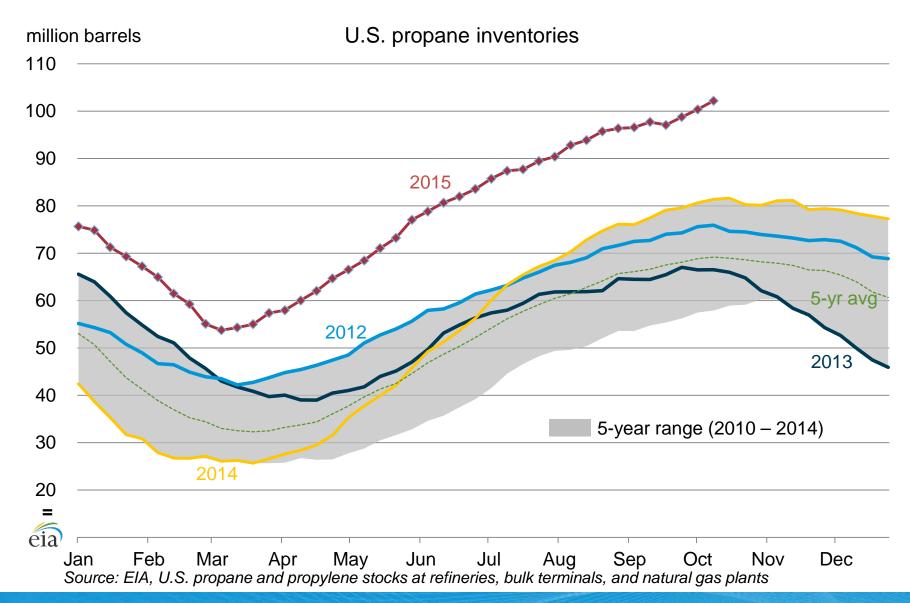
SHOPP status

States participating pre-2014

2014 new states

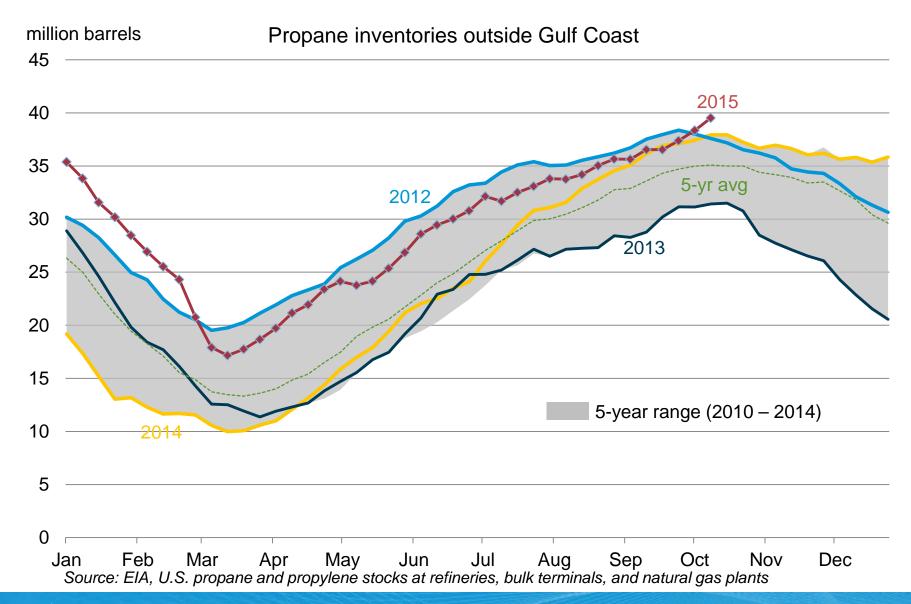
Not participating

U.S. total inventories currently above 5-year range



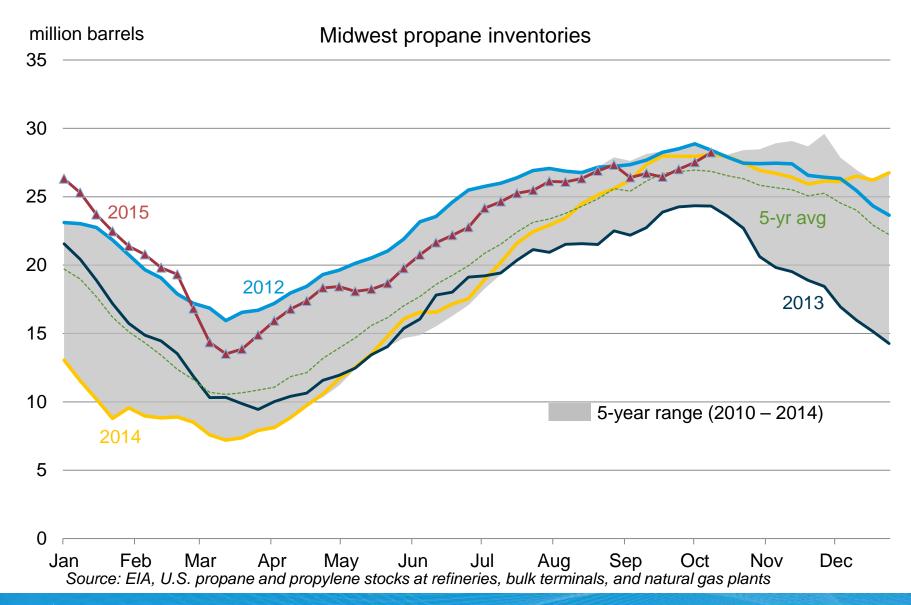


U.S. excluding PADD 3 inventories follow seasonal path



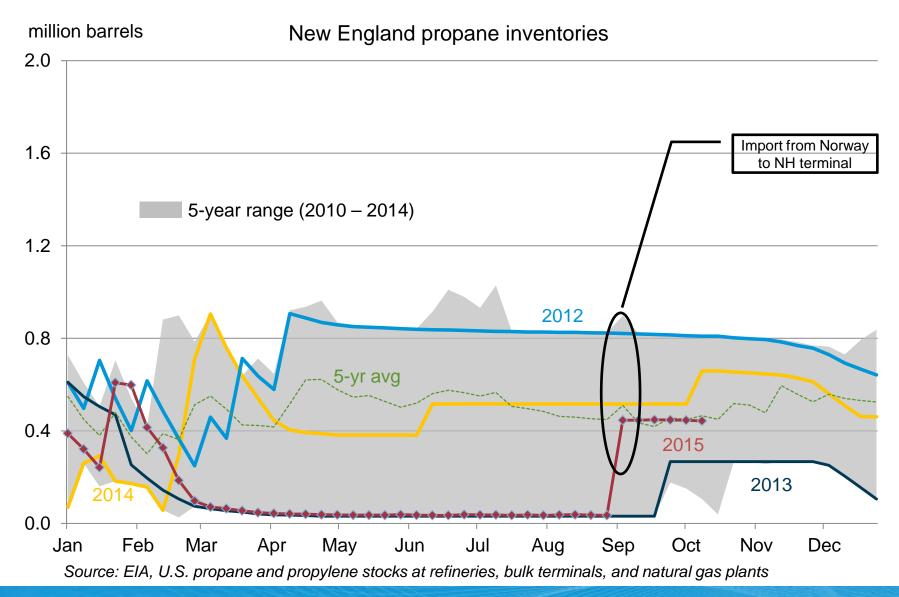


PADD 2 inventory build within 5-year range





New England storage at marine terminals builds with overseas imports





Propane delivery infrastructure links production and consumers Increasing rail from Canada Distributors adding on-Increasing Northeast site storage; improving Rockies & Bakken production seeking storage pipeline and rail capacity production flows to Conway **Marcus Hook** Conway PADD 4 PADD 2 Exports and storage **UT** storage dominates PADD 4 at Marcus Hook **PADD** Increasing focus on moving volumes south AZ storage serves PADD 5 Legendeia = Market hub = Propane pipeline flow →= Y-grade pipeline flow →= Y-grade & propane pipeline flow Production to Mont Belvieu -→= Rail for fractionation and storage Mont Belvieu Most infrastructure buildout focused on Gulf Coast



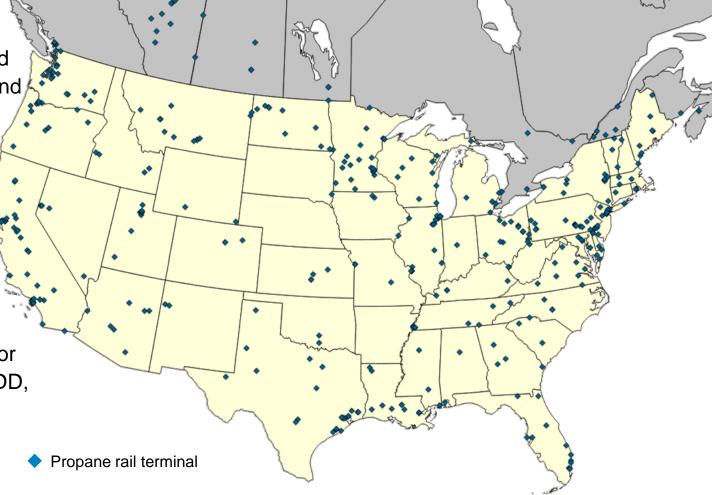
Expanding rail movements data from crude by rail to energy by rail

First energy-by-rail
 products to be reported
 will be coal, ethanol, and
 propane

 Identified over 400 rail terminals handling propane and butane

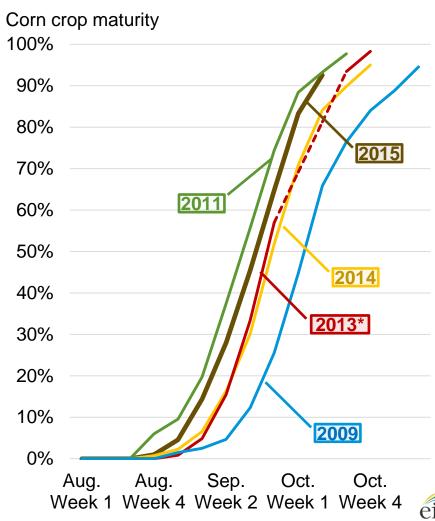
 Mapped nearly 300 terminals handling ethanol

 As with crude by rail, data will be available for movements within PADD, between PADDs, and to/from Canada

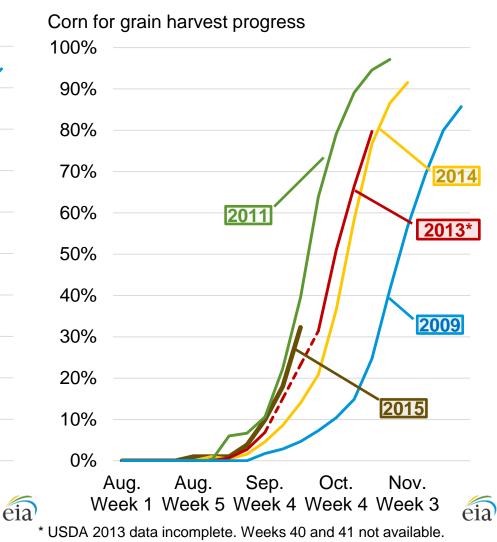


Source: EIA, based on data shared with the Surface Transportation Board

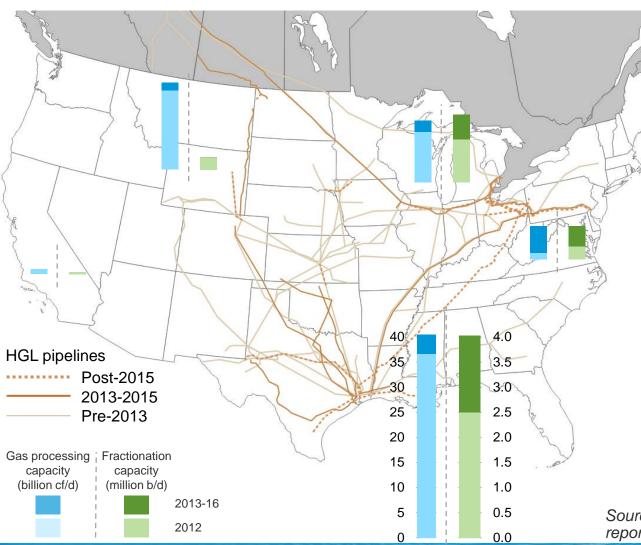
Corn crop maturity and pace of harvest close to 2011 average – a year with minor grain-drying propane demand







U.S. midstream buildout focused on widespread production growth, Gulf-centered consumption



Gas processing capacity (million cf/d) as of

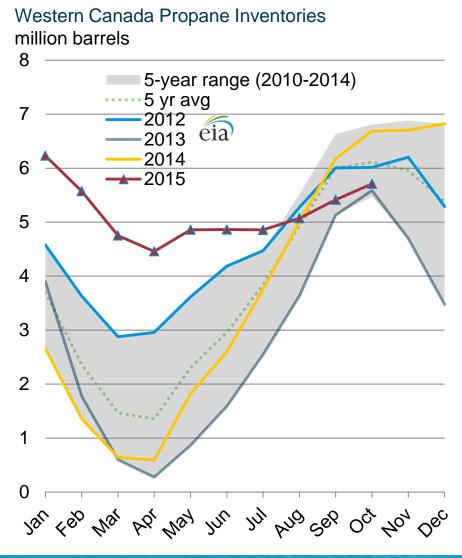
/	PADD	2012	2016	Growth
	1	1,304	6,624	5,320
	2	10,104	12,279	2,175
	3	36,589	40,444	3,855
	4	15,736	17,286	1,550
	5	927	927	0
	TOTAL	64,659	77,559	12,900

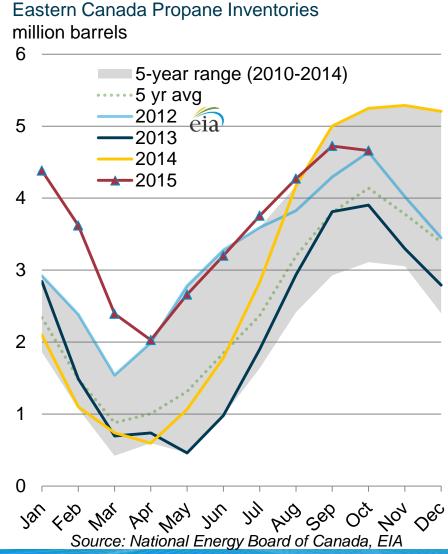
Fractionation capacity (thousand b/d) as of

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PADD	2012	2016	Growth			
1	259	664	405			
2	855	1,355	500			
3	2,501	4,033	1,533			
4	237	247	10			
5	42	42	0			
TOTAL	3,894	6,341	2,447			

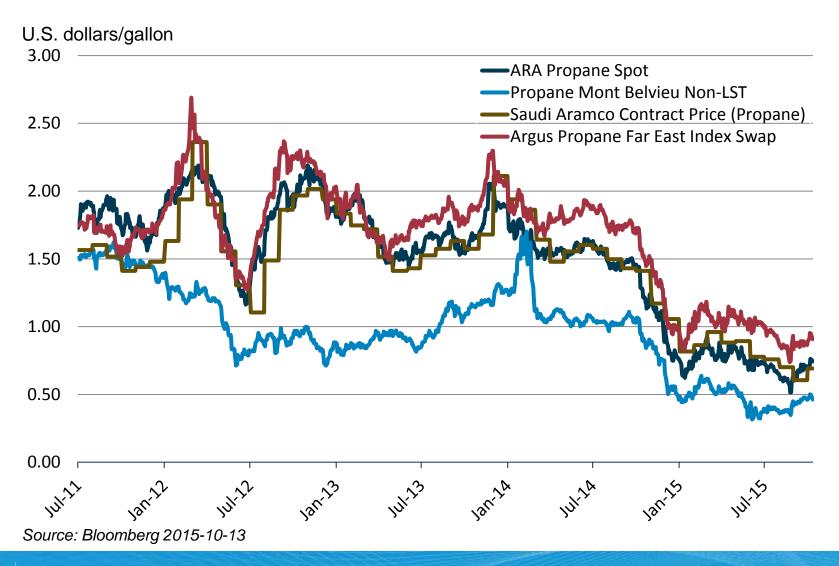
Source: EIA based on survey data, news reports and company filings

Canadian storage supplements U.S. supply





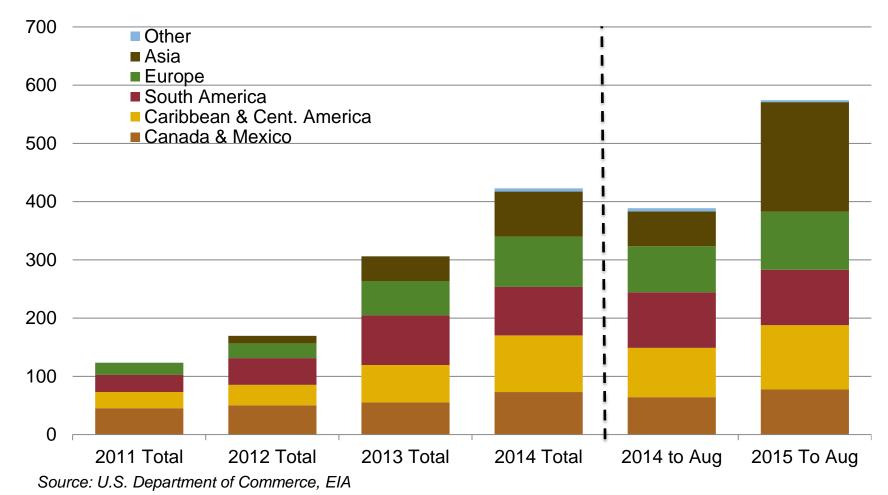
U.S. wholesale propane prices closely track international prices





Asia now the marginal destination for U.S. propane

Propane exports thousand b/d



Propane-related reference products from the EIA

2015 Winter Energy Outlook Conference | http://www.naseo.org/winter-energy-2015-agenda

Hydrocarbon Gas Liquids (HGL): Recent Market Trends and Issues/ http://www.eia.gov/analysis/hgl/

Today in Energy | <u>http://www.eia.gov/todayinenergy/index.cfm?tg=%20propane</u>

Heating Oil & Propane Prices/ http://www.eia.gov/petroleum/heatingoilpropane

Energy Explained - Propane/ http://www.eia.gov/EnergyExplained/?page=propane_home

Energy Explained – Hydrocarbon Gas Liquids (HGL)/ coming soon



Thank you!

U.S. Energy Information Administration home page / www.eia.gov

Short-Term Energy Outlook / www.eia.gov/steo

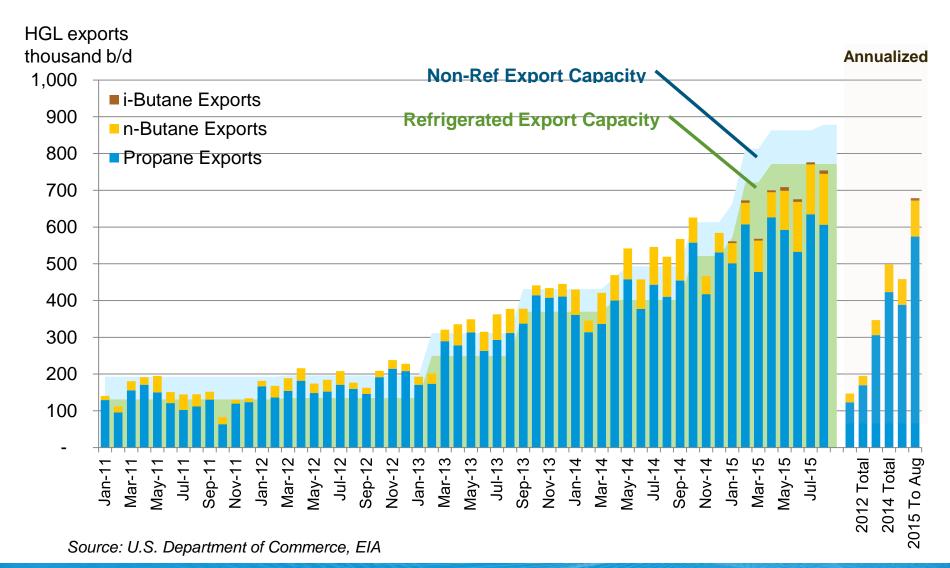
This Week in Petroleum | http://www.eia.gov/oog/info/twip/twip.asp

Today in Energy/ http://www.eia.gov/todayinenergy

Glossary <u>http://www.eia.gov/tools/glossary</u>

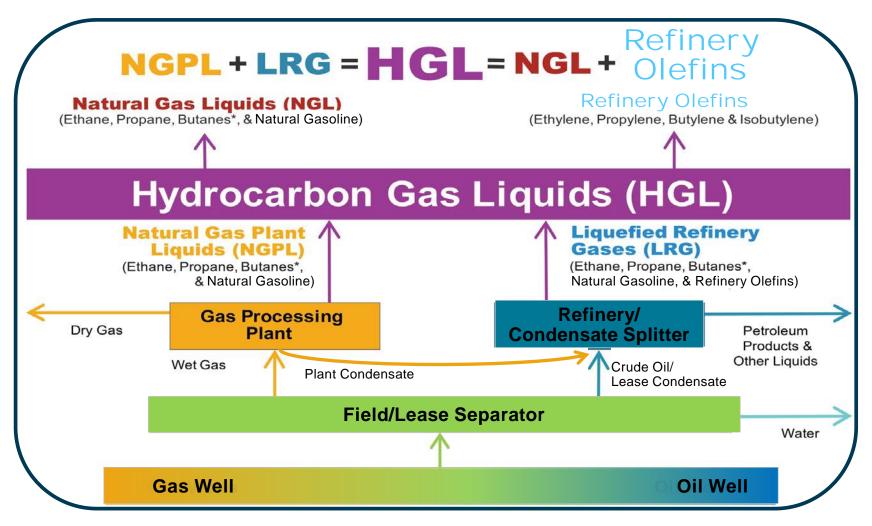
Backup slides

Export volumes continue to track refrigerated capacity





EIA's new HGL terminology bridges how the commodities are supplied, marketed and consumed

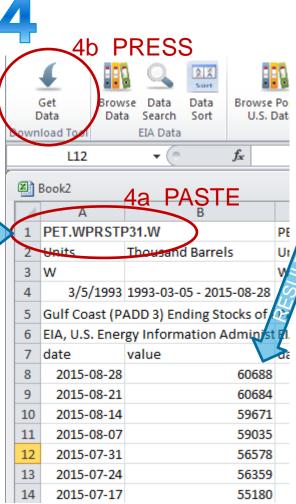


^{*}Butanes include normal butane and isobutane.

Automating EIA data pulls

Download & Install Excel plug-in: http://www.eia.gov/beta/api/excel/

	I Stocks and Barrels)									
Produ	ict: Propane/Propylene					▼ Pe	riod: Weekl	У	•	
 □	Download Series History Definitions, Sources & Notes									
Show Da	ta By: duct ● Area	Graph Clear	07/24/15	07/31/15	08/07/15	08/14/15	08/21/15	08/28/15	View History	
U.S.		\$-11	89,446	90,378	92,792	93,866	95,724	96,344	1993-2015	\
PADD 1		• •• •	4,433	4,424	4,270	4,294	4,314	4,530	1993-2015	
New	England	4	37	35	37	38	36	35	1993-2015	
Cent	tral Atlantic	4	2,830	2,811	2,660	2,671	2,692	2,933	1993-2015	
Lowe	er Atlantic	4	1,566	1,578	1,574	1,585	1,586	1,563	1993-2015	
PADD 2	Q	4 • •	25,467	26,123	26,079	26,327	26,884	27,317	1993-2015	
PADD 3		4 -n	56,359	56,578	59,035	59,671	60,684	60,688	1993-2015	
PADD's	4 & 5	4	3,189	3,252	3,407	2,574	2,842	3,000	2001-2015	5
Click on the source key icon to learn how to download series but Excel, or to embed a chart or map on your website. API Query Browser EIA Data Sets > Petroleum > Surumary > Weekly Supply Estimates > by Area > PADD 3										
API CALL TO USE http://api.eia.gov/series/?api_key=YOUR_API_KEY_HERE&series_id=PET.WPRSTP31.W SERIES Gulf Coast (PADD 3) Ending Stocks of Propane and Propylene, Weekly NAME										
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