

# 2015 Winter Preparedness

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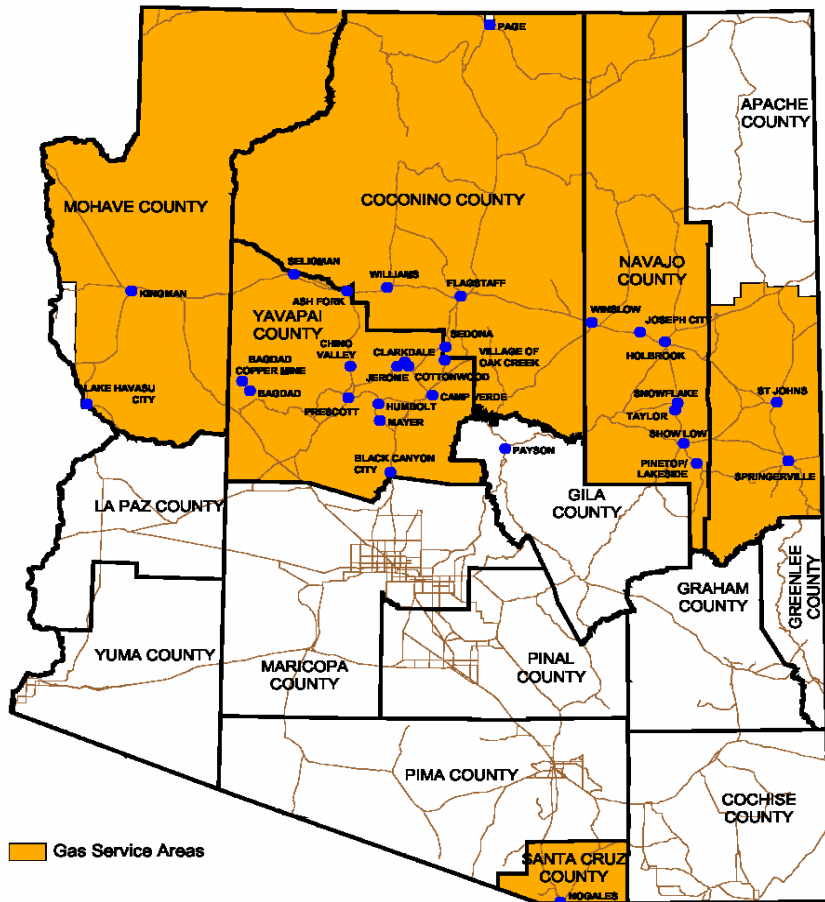
UniSource Energy  
SERVICES

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October 29, 2015

# UNS Gas Service Area



- 5 Counties / 33 Communities
- 150,000 customers
- 31 miles transmission pipeline
- 3,031 miles distribution main
- 1,222 miles distribution services

# System Planning

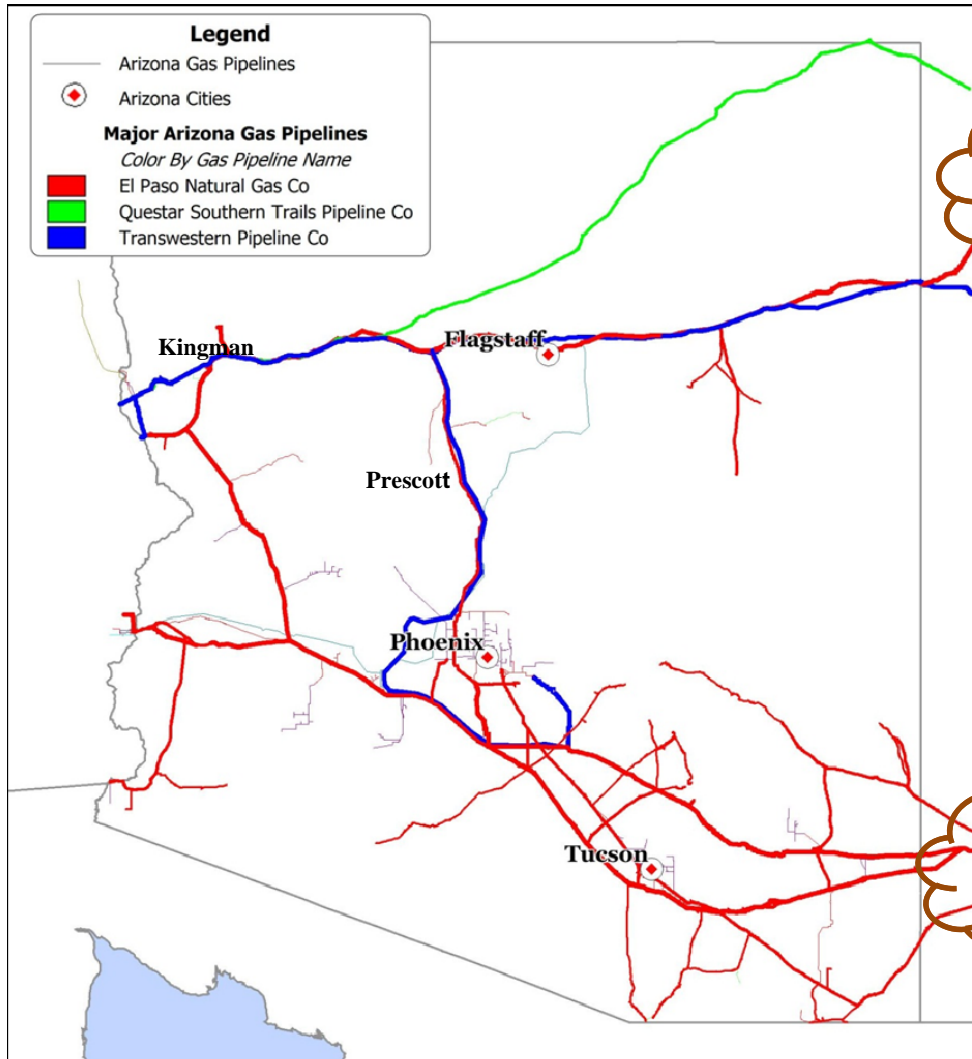
## Planning for winter preparedness - A year-round activity

- Engineers utilize computer hydraulic modeling for design and build of natural gas systems serving our customers
  - During peak winter conditions, data from the field is obtained and used to verify accuracy of system models



- Systems have sufficient capacity to deliver required gas volumes
- Any necessary system reinforcement work has been identified and completed in advance

# Interstate Pipeline Supply



**No Natural Gas Storage**

- Largest cities have dual gas supply
  - Flagstaff
  - Kingman
  - Prescott

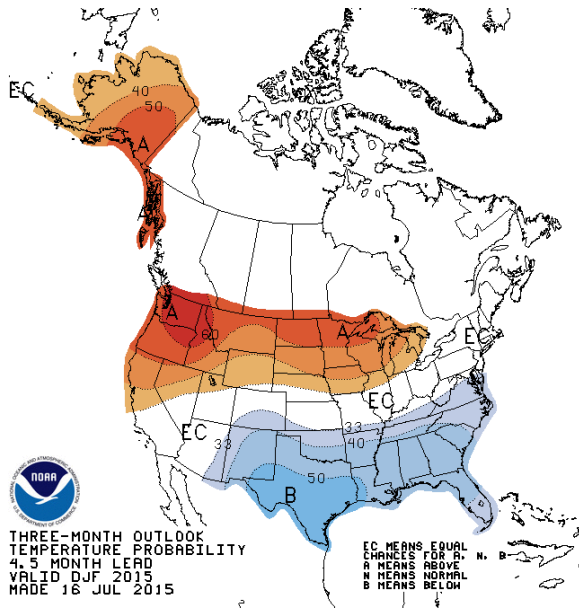
# Planning & Coordinating

- **EPNG (Kinder Morgan) / Transwestern Pipeline**
  - Winter preparedness meeting – Sept 16th – Flagstaff
    - Reviewed supply taps and delivery settings
    - Operations and maintenance activities associated with suppliers have been completed
- **Gas supply plan**
  - Provided to commission and reviewed upon request
- **Winter supply**
  - Firm agreements with combined capacity sufficient to meet customer load requirements.

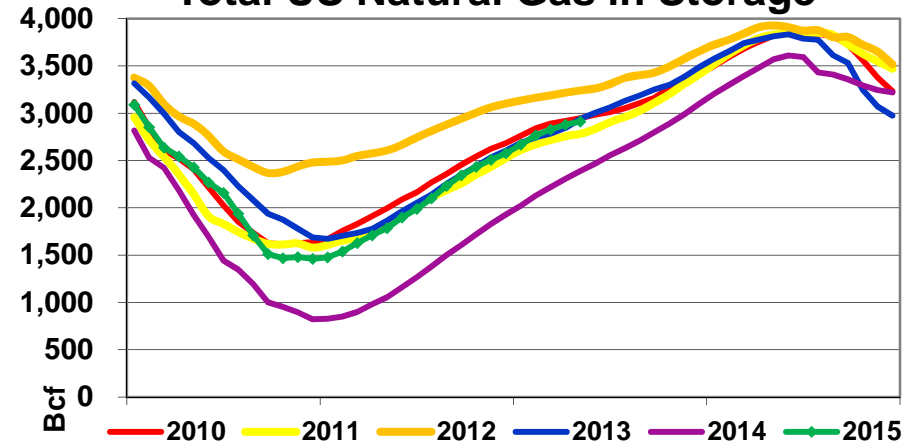


# NOAA 2015 Winter & Supply Forecast

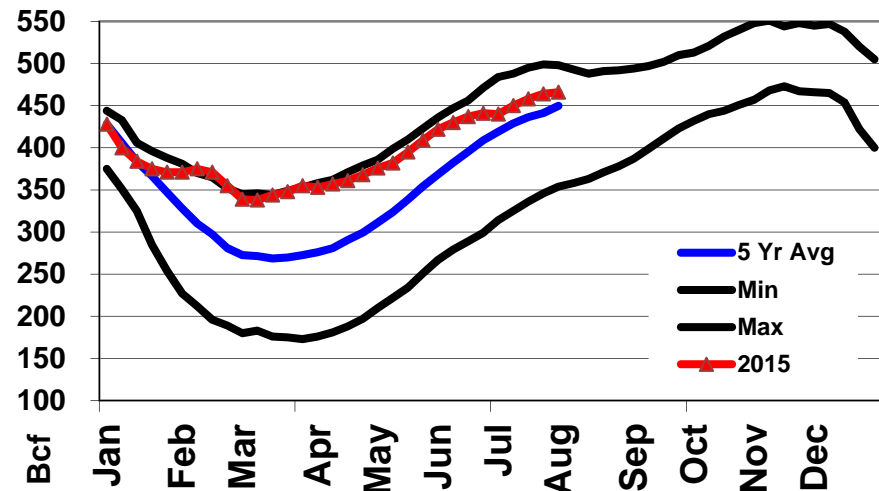
- **US-wide average storage levels**
  - Matches 5-year average
- **West storage**
  - Above 5-year average
- **Weather forecast**
  - Equal chance of normal weather is expected in SW



## Total US Natural Gas in Storage

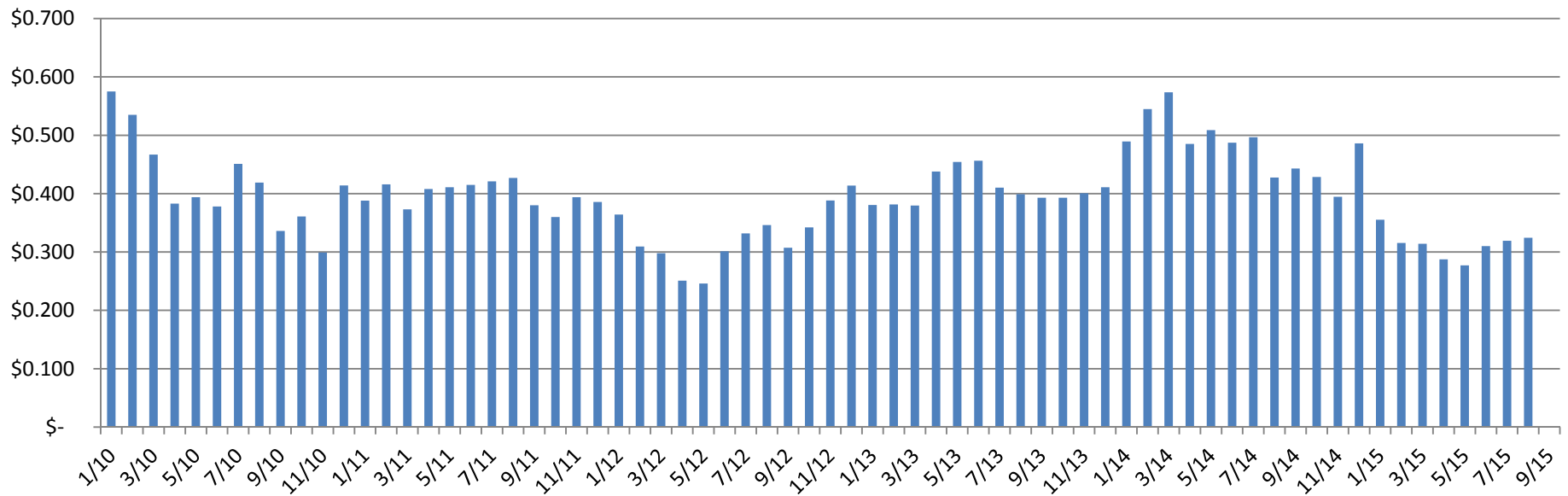


## Consuming West Gas in Storage



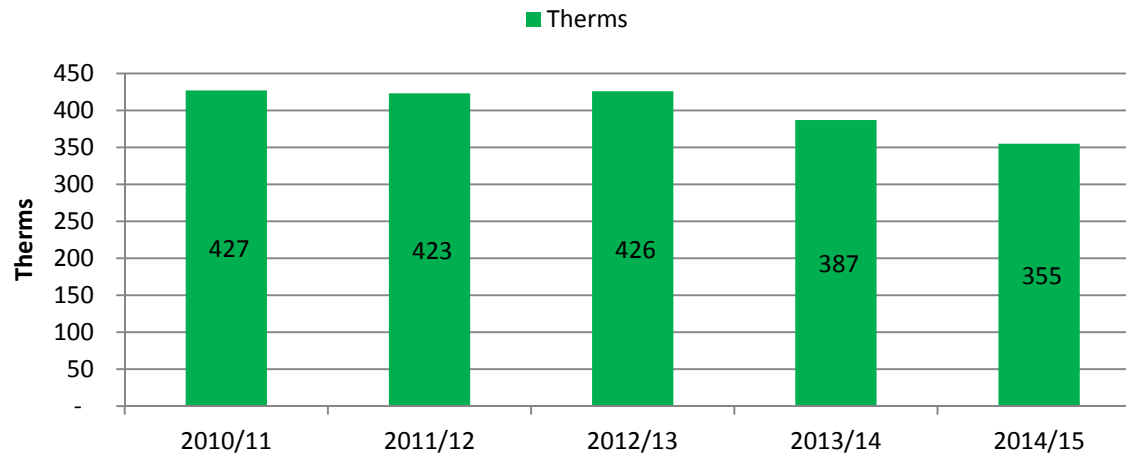
# Commodity Cost – therm

Monthly Base Gas Cost Rate  
Cost of Gas  
\$ (ccf)

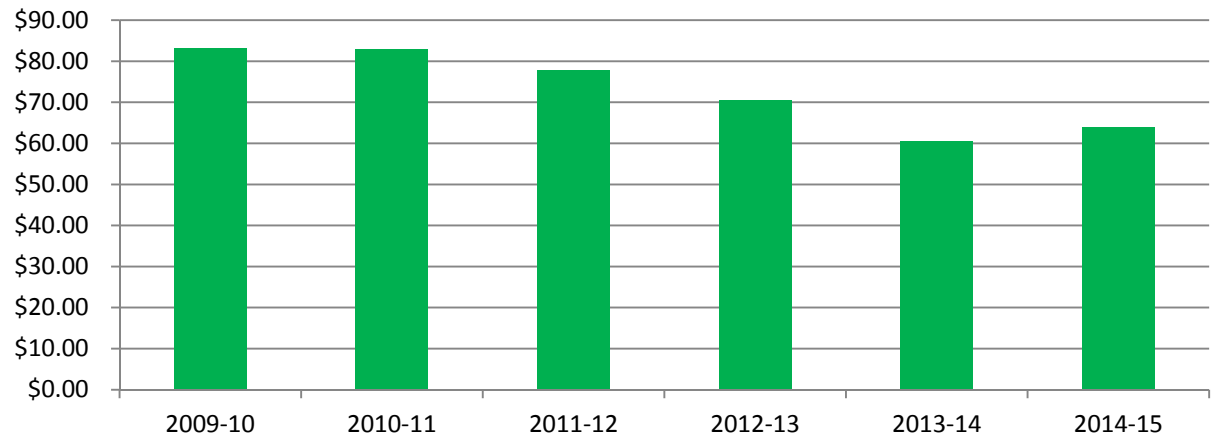


# Customer Bills

## Use Per Customer



## Customer Avg Winter Bill





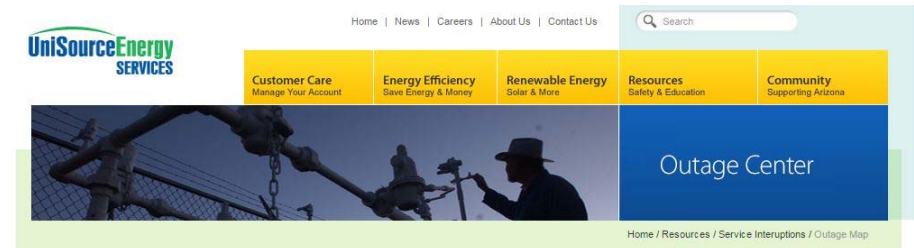
# Customer Communications

## Customer Outreach

- Call center staff available 24x7,
- Information at website – uesaz.com,
- Local office personnel contacts

## Critical Outages and Emergencies

- Provide information through call center staff,
- Outage and service alert information available uesaz.com home page,
- Twitter updates - @UESGas,
- Facebook updates - Facebook.com/UniSourceEnergyServices,
- Provide 24/7 access to media relations staff, press releases and outreach,
- Coordination with state and local emergency agencies and officials,
- Advance notice of scheduled curtailments to large customers, and
- Emergency personnel and equipment available



### RESOURCES

Educational Resources

Safety Information

### Service Interruptions

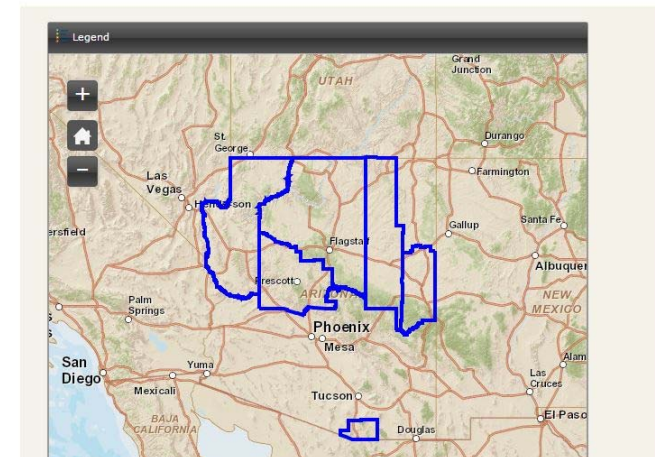
Outage Map

Outage Preparation Tips

Outage and Storm Safety Tips

Outage Center

Outage Map



# Summary – 2015 Winter Readiness

- System planning and validation
- Necessary reinforcement work
- Sufficient and reliable supply with adequate capacity
- Supplier and employee reviews completed



- Emergency response plan in place to respond quickly and efficiently
- Experienced staff and equipment available to respond to natural gas emergencies

# UNS Winter Preparedness

**Questions?**