

Western States Water Council
Casper, WY
June 25, 2013



**WYOMING UPDATE: WATER
RIGHTS FOR HYDRAULIC
FRACTURING**

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Water Acquisition



- **How much water is used**
 - Estimated 4 to 10 acre-feet of water per well used for drilling, fracturing, dust abatement, and construction
 - WOGCC statewide “called in spuds”:
 - ✦ WY-12 – 602
 - ✦ WY-11 – 1339
 - Estimated water used per year statewide:
 - ✦ 2,408 to 6,020 acre-feet (2012)
 - ✦ 5,356 to 13,390 acre-feet (2011)
- **Sources of water**
 - Same aquifers utilized for drinking water (e.g., tertiary aquifer systems)
 - ✦ WOGCC requires potable water be used to set surface casing through potable water zones or aquifers
 - Tendency to target “known” sources of water (i.e., quality/quantity)

Water Acquisition



- Obtain a new water right
- Enlarge an existing water right
- Apply for a Temporary Water Use Agreement (TWUA)
- Purchase an existing water right and petition the BOC for a change in use
- Temporary water haul from surface water source
- Exception: Laramie County Control Area
 - ✦ State Engineer's Temporary Order Adopting Well Spacing Requirements within the Laramie County Control Area

Time Limited Groundwater Supply Permits



- Time-limited new permits and enlargements of existing permits
 - Miscellaneous Use for oil and gas-related activities (drilling, fracturing, dust abatement and construction)
 - ~363 approved permits (2009 to present)
 - Average production
 - ✦ ~100 – 140 gallons per minute

Temporary Water Use Agreements



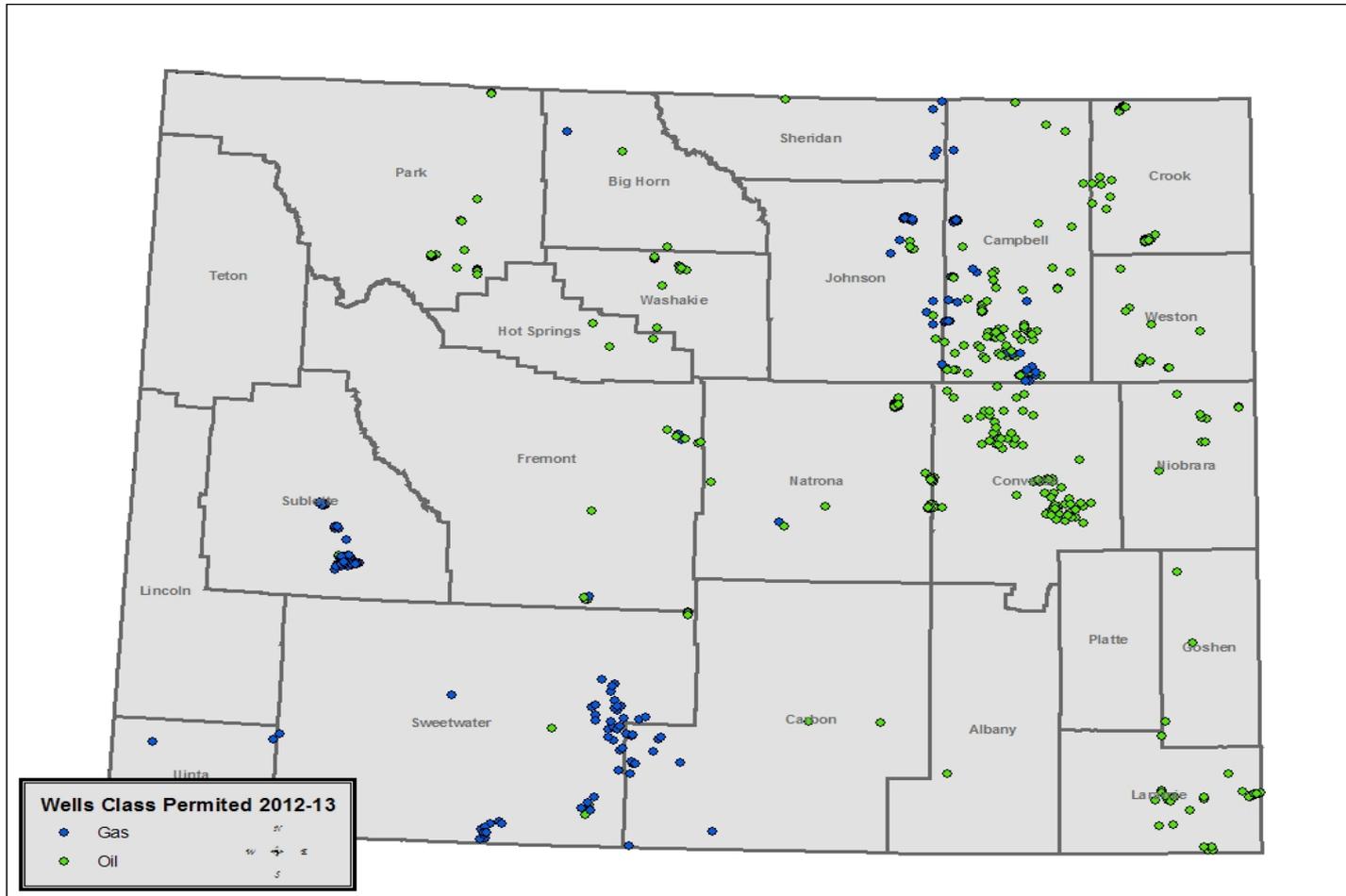
- W.S. § 41-3-110. Right to acquire temporary water rights....
 - Allows temporary change of use
 - Water right must have history of consumptive use
 - Only consumptively used portion can transfer
 - Appropriator must forego permitted use during transfer
 - Maximum of 2-yrs allowed
 - Shall not injure another appropriator

Temporary Water Use Agreements

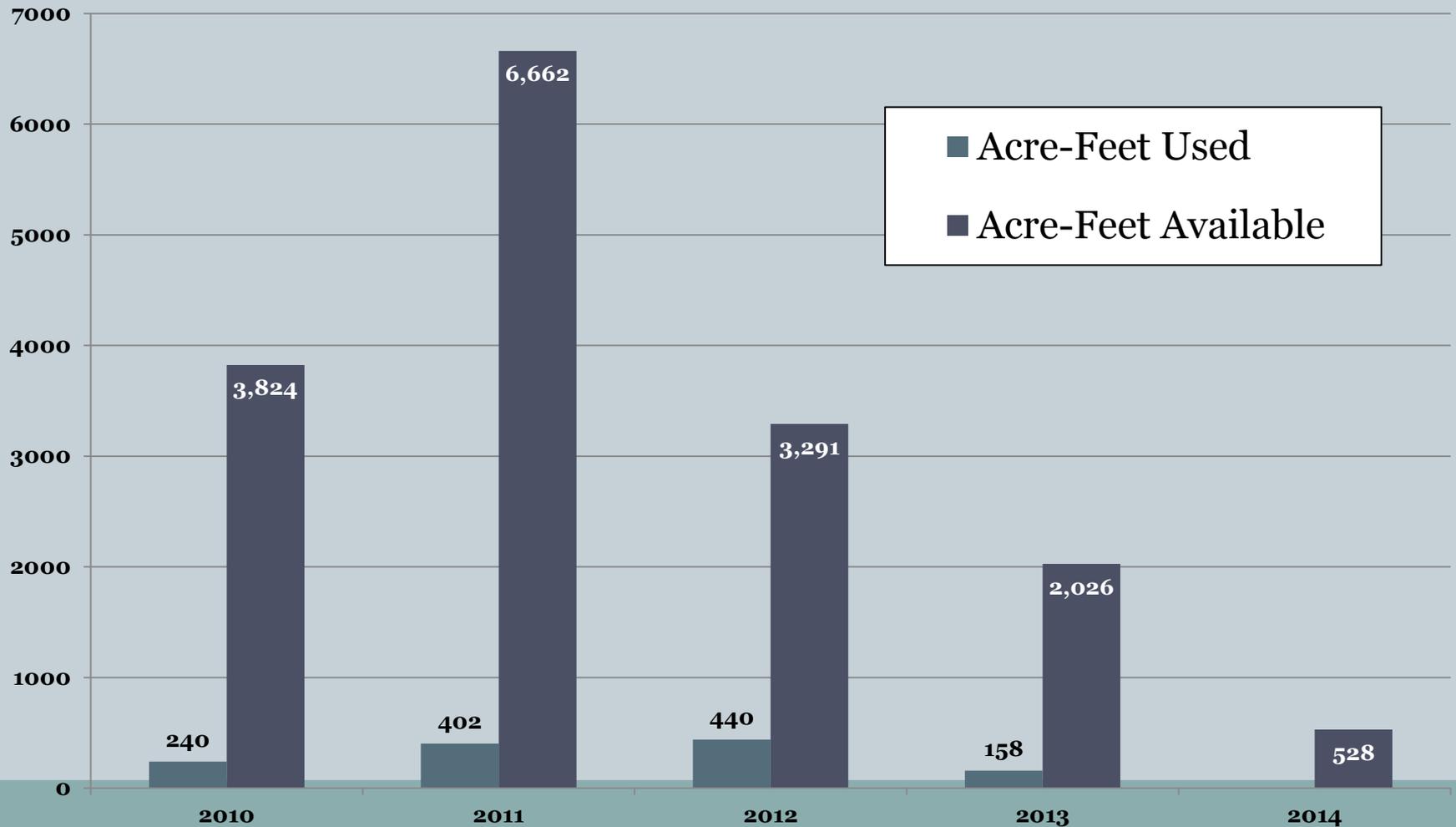


- **New Temporary Water Use Agreements Issued for Oil and Gas Development**
 - ~167 approved (2009 to present)
 - ✦ Laramie County, WY ~ 91
 - ✦ Goshen County, WY ~ 22
 - ✦ Converse County, WY ~ 17
 - ✦ Rest of State ~ 37
 - 16,331 acre-feet made available (2010 to present)
 - 1,240 acre-feet used (2010 to present)

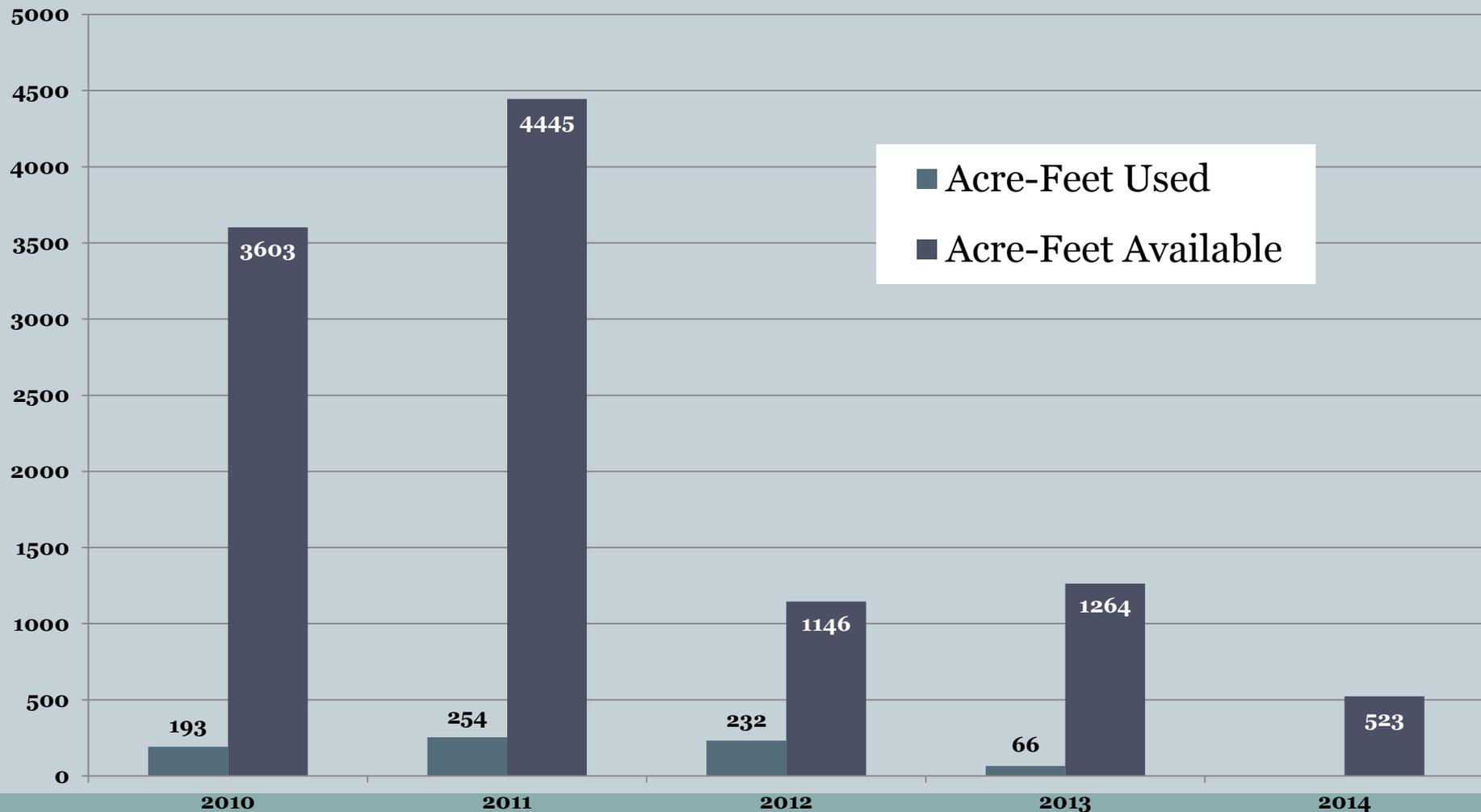
2012 Spudded Oil and Gas Wells



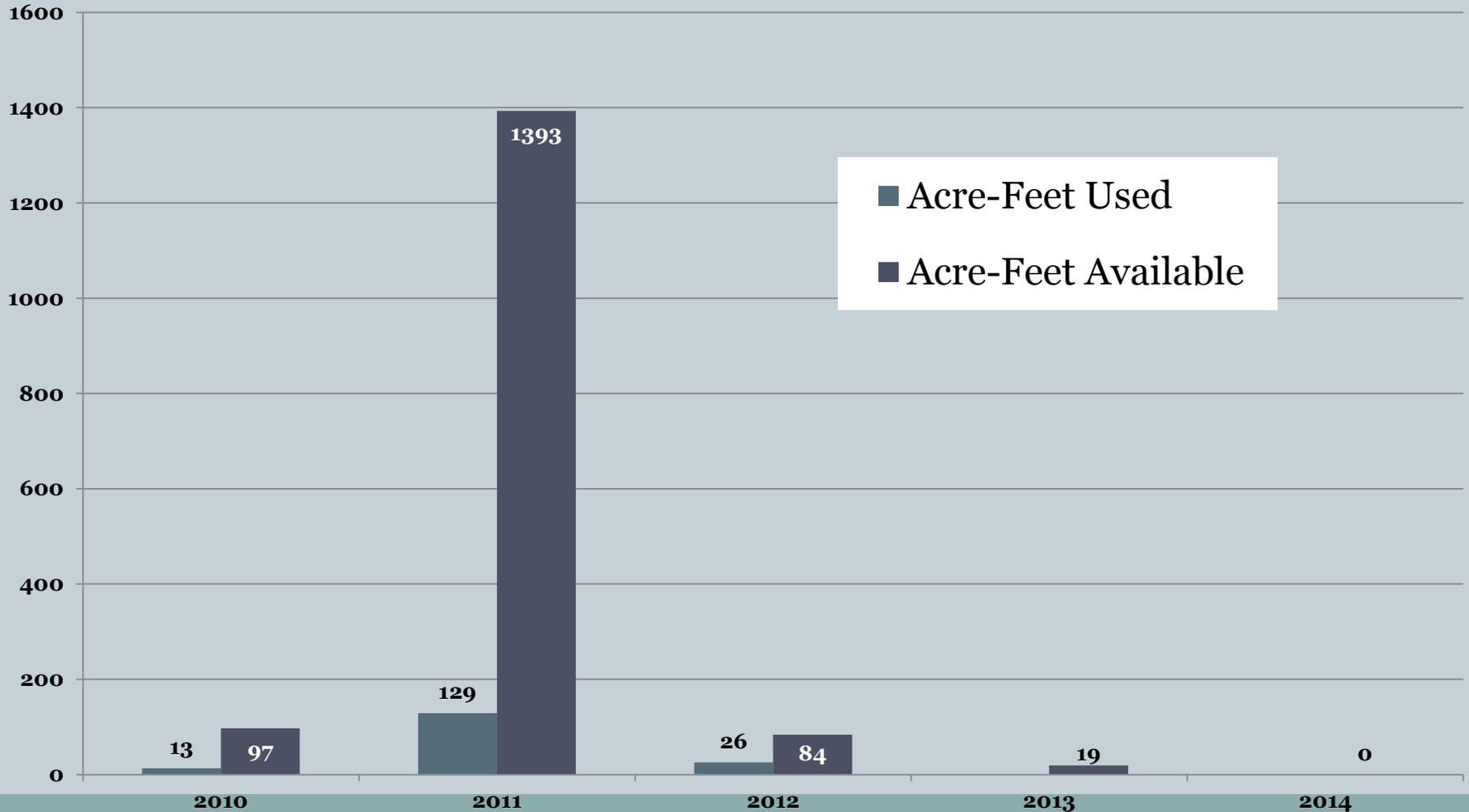
WY Water Available vs. Sold via TWUAs



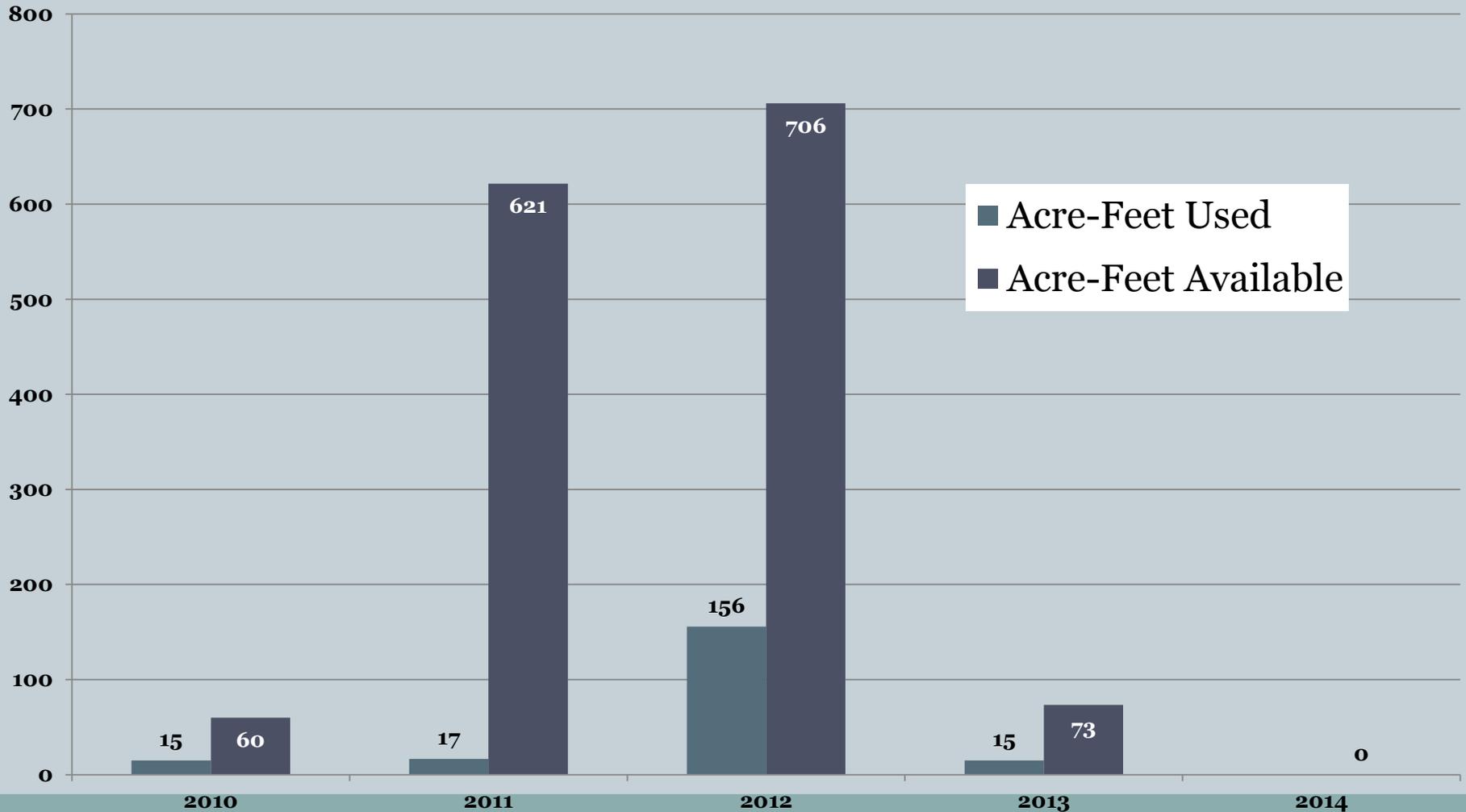
Laramie Co. Water Available vs. Sold via TWUAs



Goshen Co. Water Available vs. Sold via TWUAs



Converse Co. Water Available vs. Sold via TWUAs



State Engineer's Temporary Order



- Effective Date: April 11, 2012
- Duration: Until October 1, 2013
- Area Affected: Laramie County Control Area
- Why a Temporary Order?
 - Increasing water demands
 - ✦ Irrigation, municipal, subdivisions, and oil and gas-related activities
 - Limited water resources
 - Continued declining water levels - even after 30 years as a control area

Water Acquisition



- Hydraulic fracturing and other miscellaneous uses are considered “temporary” in nature
 - Approved permits are time limited
 - Approved enlargements to existing permits are time limited
 - TWUAs limited to one or two years

Conditions and Limitations



- Back flow prevention devices
- Metering and reporting due to permitted volumetric limits
- Notification of hydrographer/commissioner prior to first use

Ability to Deny a Permit



- Difficult to deny a permit for water use for oil and gas-related activities
 - Appeals from the State Engineer's Endorsement
 - ✦ 4 Quarters Enlargement application
 - Approved water use for road construction, construction, fire protection use in Laramie County (not Albany County)
 - Denied oil and gas well production and completion use for Laramie and Albany counties
 - ✦ Ruppert application
 - Approved Irrigation Use
 - Denied use for mineral/oil exploration

Affect on Water Availability



- **Laramie County Control Area**
 - Minimize impacts on the aquifer through use of TWUAs
 - Water levels continue to decline
 - Current modeling effort underway to explore water availability
- **Remainder of the state**
 - Encourage industry to minimize number of water wells
 - Companies claim they are using less water and using water more efficiently
 - Industry drilling multiple wells off a single pad
 - Minimal complaints to date

Policy Memos and Guidance



- February 12, 2010 Policy Memorandum: Issuance of Temporary Use Agreements (TWUAs) in Ground Water Control Areas
- July 28, 2010 Policy Memorandum: Control Area Advisory Board Review for Miscellaneous Use Applications in Ground Water Control Areas
- August 2, 2010 Guidance: Obtaining Temporary Water Supplies
- September 23, 2010 Policy Memorandum: Issuance of Temporary Water Use Agreements (TWUAs) Outside the Ground Water Control Areas

Questions?



<http://seo.wyo.gov>

Ground Water Division: (307) 777-6163

Surface Water Division: (307) 777-6475