An Introduction to PUF Lands & the UL Organization

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The PUF Lands & University Lands (UL) Organization

- Surface and mineral rights of 2.1 million acres of “PUF Lands”
- History of land dates back to 1838; first oil discovery in 1923
  - 20,000 wells drilled to-date
  - 9,000 wells currently producing
  - >25,000 identified locations
  - 4,000 leases, 250+ operators
- Surface leases:
  - Pipelines and power lines
  - Grazing and ranching
  - Renewables - wind and solar
  - Groundwater sales
  - Environmental programs
- Primary revenue driver is mineral royalty revenue
- Revenues support UT & A&M Systems via the “PUF” and “AUF”
The Permanent University Fund (PUF)

- Benefits 25 institutions across UT and A&M Systems with ~337,000 students
- $21.9 Billion Market Value
  - ~5% annual distribution
    - 2/3 to UT System
    - 1/3 to A&M System
- Surface revenue goes into separate fund (AUF), which is immediately available to the schools that year
“Texas holds embedded in its earth rocks and minerals which now lie idle because unknown, resources of incalculable industrial utility, of wealth and power. Smite the earth, smite the rocks with the rod of knowledge and fountains of unstinted wealth will gush forth.”

- Ashbel Smith, M.D., first U. T. Board of Regents Chairman at the dedication of the University of Texas, 1881

**Economic Impact Today:**
- 7,400 Full time equivalent “personnel” are at work on PUF Lands every day, with thousands more spending part of their day there.

- Each year since 2012, commercial activity on PUF lands has generated:
  - $3.5 billion in gross product
  - 33,000 indirect jobs across Texas
  - $176 million in state tax revenue
  - $40 million in local tax revenue
  - School districts containing PUF lands accrued $16 million, or $166 per student!

Source: The Perryman Group
Strong Ranching Heritage Balanced with Evolving Energy Development

- 111 – Grazing Leases & 36,000 Head of Livestock
- 3,500 – Oil & Gas Leases
- 5,200 – Easements (Pipelines & Power Lines)
- 2,000 – Commercial Surface Leases
- Recent Renewable Energy Projects
- Other Activities:
  - Geophysical Permitting
  - Environmental Management
  - Antiquities Compliance
  - Wildlife Management
New University Lands’ Strategy

- Create a more commercial, forward-looking organization
- Increase technical knowledge of the resources
- Work with operators to promote continuous development through commodity swings by diversifying, incentivizing and enforcing contractual rights
- Better integrate water and renewable energy into business model
- Collaborate with operators and regulatory bodies to enhance environmental stewardship
- Assess internal organizational structure and statutory framework to determine best structure for land management, stewardship and value-creation
UL Organizational Structure

University Lands Advisory Board
- 5 UT Representatives
- 3 A&M Representatives
- Texas Land Commissioner

Board for Lease
- Texas Land Commissioner (Chair)
- 2 UT Regents
- 1 A&M Regent

~65 Full Time Employees
University Lands:
Economic Development Opportunities

Effective Corporate Structure

Oil and Gas

Water Resources & Infrastructure

Solar and Wind

Other Surface Activities

Excellent Environmental Stewardship
Historical AUF and PUF Revenue vs. Oil Price

Projected $92
PUF Lands’ Oil and Gas Resource

- Total Net Reserves, Aug. 2018
  - 2 billion barrels of oil equivalent (BOE)
  - >25,000 future potential drilling locations
  - ~9,000 Producing Wells
    - ~3,200 Horizontal wells
    - ~4,800 wells drilled since 2011

- 2018 Daily Production (60% oil)
  - ~257,000 BOE gross per day
  - ~52,000 BOE net per day (20% royalty)
  - ~90% of production from “modern” wells
    - Wells drilled since 2011
PUF Lands – Gross Monthly Production

- Record oil production of 5.3 million barrels in July 2018
- YE 2011 to November 2018 combined production up 170%
Horizontal Drilling is Reducing Surface Footprint

### Avg. Lateral Length by Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Avg. Lateral Footage</th>
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<tbody>
<tr>
<td>2014</td>
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<tr>
<td>2015</td>
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<tr>
<td>2016</td>
<td>8,500</td>
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<tr>
<td>2017</td>
<td>9,000</td>
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<tr>
<td>2018</td>
<td>9,500</td>
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</tbody>
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*2018 through Nov.*

### Wells & Lateral Footage Drilled

- **# of Wells**
  - 2009: 500
  - 2010: 600
  - 2011: 700
  - 2012: 800
  - 2013: 900
  - 2014: 1,000
  - 2015: 1,100
  - 2016: 1,200
  - 2017: 1,300
  - 2018: 1,400

- **Total Perf’d Footage**
  - 2009: 500,000
  - 2010: 600,000
  - 2011: 700,000
  - 2012: 800,000
  - 2013: 900,000
  - 2014: 1,000,000
  - 2015: 1,100,000
  - 2016: 1,200,000
  - 2017: 1,300,000
  - 2018: 1,400,000

- **Avg. Lateral Footage**
  - 2009: 200
  - 2010: 300
  - 2011: 400
  - 2012: 500
  - 2013: 600
  - 2014: 700
  - 2015: 800
  - 2016: 900
  - 2017: 1,000
  - 2018: 1,100
Pending and Prospective Pipelines
Improving Permian Takeaway Capacity

10 different major pipelines currently being constructed across University Lands
University Lands Water Management

- Sales of Fresh Water to Midland, Andrews County and the Colorado River Municipal Water District
- 2012 – Initiated a Formal Groundwater Management Plan – continues to evolve
  - Includes 3D modeling of all major and minor aquifers
  - Preservation of Fresh Water Aquifers -
    - Ogallala
    - Trinity/Edwards
    - Pecos Alluvium
  - Prudent Utilization of Brackish Aquifers
    - Dockum/Santa Rosa Aquifers
  - Promote recycling of produced water
Promote a more consolidated & holistic approach to oilfield water management

- The water business is very fragmented, oil and gas companies plus over 40 “water companies” and over 700 small water companies and ranchers involved
- UL is facilitating the development of more integrated water production, recycling and disposal systems
- Leverage UL size & scale to produce economies of scale in water-related infrastructure development
- Reduce costs for operators
- Increased efficiency of mineral development
  - Beneficial for Industry, Environment & Texas
Since 2017, 8 new leases signed for 67,000 acres of wind and solar energy development for 1,000 megawatts of power

- Renegotiated/extended 2 existing wind farm leases
- Significant carbon offset potential
- Oil companies also considering employing renewables to power their operations
Environmental Stewardship a Top Priority

- Strong relationships with regulators
  - Railroad Commission, TCEQ, EPA

- Active “boots on the ground” lease inspection program
  - Includes Infrared imaging program

- Unique policies that surpass regulatory requirements

- New emissions-reductions cost-share program alignment with and promotion of The Environmental Partnership

- Endorse “Dark Skies” program for operators

- Increased monitoring of seismicity related to water injection through participation in TexNet

- Focus on initiatives that reduce truck traffic and promote shared infrastructure across operators
University Lands: 20 Year Vision

- **Oil and Gas production will still be predominant revenue source**
  - Drilling inventory of 30+ years at normalized rates
  - Assuming consistent development activity and continued technical momentum, production levels could increase 50-100% over time
  - Technology enhancements in all areas of operating activity, including environmental performance

- **Stewardship of water resources will be a significant contributor to infrastructure improvement and development in West Texas**

- **Solar and wind energy continue to be developed across PUF Lands**
Thank You