NSSI Data Sources – Infrastructure and Landownership (2/27/2019)

**Infrastructure:** Pipelines and Roads
Agency: NSSI – North Slope Science Initiative
Date: January 2019

**Roads:** North Slope Infrastructure (v3) Update 01/14/2019
Agency: NSSI – North Slope Science Initiative
Date: January, 2019
Link: [http://catalog.northslopescience.org/catalog/entries/8691](http://catalog.northslopescience.org/catalog/entries/8691)

**Pipelines:** North Slope Infrastructure (v3) Update 01/14/2019
Agency: NSSI – North Slope Science Initiative
Date: January, 2019
Link: [http://catalog.northslopescience.org/catalog/entries/8691](http://catalog.northslopescience.org/catalog/entries/8691)

**Wells**
Agency: AOGCC – Alaska Oil and Gas Conservation Commission, ADNR – DOG – Alaska Department of Natural Resources, Division of Oil and Gas
Date: February 2019
Link: [http://doa.alaska.gov/ogc/data.html](http://doa.alaska.gov/ogc/data.html) - DATA EXTRACT
Converted table to ArcMap GIS dataset using x/y coordinate fields:
*Wellhead_Calculated_Longitude_NAD83* and *Wellhead_Calculated_Latitude_NAD83*,
Selected features where AREA field = “ARCTIC SLOPE” OR “ARCTIC FOOTHILLS” or “ARCTIC OCEAN, ST.” OR “ARCTIC OCEAN, FED.”
Selected and removed features where Current_Class field <> “Permit expired” AND <> “Permit cancelled”
Field named “General_Category” was generated by UAA – Alaska Center for Conservation Science to categorize wells into four categories. The categorization was based upon following interpretation of values in the Alaska Oil and Gas Conservation Commission’s well database field Current_Status and Current_Class

**Development/Production/Service:** 4539 wells, (Current_Status <> 'Plugged & Abandoned' AND Current_Status <> 'Administratively abandoned' AND Current_Status <> 'Shut In' AND Current_Status <> 'Suspended well') AND ( Current_Class = 'Development' OR Current_Class = 'Service')

**Exploratory:** 44 wells, Current_Class = 'Exploratory' AND( Current_Status <> 'Plugged & Abandoned' AND Current_Status <> 'Administratively abandoned' AND Current_Status <> 'Shut In' AND Current_Status <> 'Suspended well' )

**Inactive:** 199 wells, (Current_Status = 'Administratively abandoned' OR Current_Status = 'Shut In' OR Current_Status = 'Suspended well')

**Plugged & Abandoned:** 2403 wells, Current_Status = “Plugged & Abandoned”
Note: 84 wells had Current_Status classified as "Unknown", these wells were placed in the General Categories according to their Permitted Class value.
<table>
<thead>
<tr>
<th>CATEGORY (NSSI) / Current Status (AOGCC)</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Development / Production / Service</strong></td>
<td>4539</td>
</tr>
<tr>
<td>Disposal injection well, Class 1</td>
<td>17</td>
</tr>
<tr>
<td>Disposal injection well, Class 2</td>
<td>31</td>
</tr>
<tr>
<td>Gas injection, single completion</td>
<td>61</td>
</tr>
<tr>
<td>Gas well, single completion</td>
<td>24</td>
</tr>
<tr>
<td>Information well</td>
<td>1</td>
</tr>
<tr>
<td>Observation well</td>
<td>7</td>
</tr>
<tr>
<td>Oil well, dual completion</td>
<td>1</td>
</tr>
<tr>
<td>Oil well, single completion</td>
<td>2948</td>
</tr>
<tr>
<td>Sqzd orig hole w/mult laterals</td>
<td>4</td>
</tr>
<tr>
<td>Unknown</td>
<td>67</td>
</tr>
<tr>
<td>Water alt gas injection</td>
<td>907</td>
</tr>
<tr>
<td>Water injection, single completion</td>
<td>441</td>
</tr>
<tr>
<td>Water injection, single pool, two tbg strings</td>
<td>14</td>
</tr>
<tr>
<td>Water supply well</td>
<td>16</td>
</tr>
<tr>
<td><strong>Exploratory</strong></td>
<td>44</td>
</tr>
<tr>
<td>Gas injection, single completion</td>
<td>1</td>
</tr>
<tr>
<td>Observation well</td>
<td>18</td>
</tr>
<tr>
<td>Oil well, single completion</td>
<td>8</td>
</tr>
<tr>
<td>Unknown</td>
<td>17</td>
</tr>
<tr>
<td><strong>Inactive</strong></td>
<td>199</td>
</tr>
<tr>
<td>Administratively abandoned</td>
<td>24</td>
</tr>
<tr>
<td>Shut In</td>
<td>1</td>
</tr>
<tr>
<td>Suspended well</td>
<td>174</td>
</tr>
<tr>
<td><strong>Plugged &amp; Abandoned</strong></td>
<td>2403</td>
</tr>
<tr>
<td>Plugged &amp; Abandoned</td>
<td>2403</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>7185</td>
</tr>
</tbody>
</table>

**Oil and Gas Management**: Leases, Production Areas, Lessees
Agency: ADNR – DOG – Alaska Department of Natural Resources, Division of Oil and Gas
Date: November, 2018
Link: [https://dog-soa-dnr.opendata.arcgis.com/](https://dog-soa-dnr.opendata.arcgis.com/)

**Oil and Gas - Notification (Primary) Lessee** – agent to receive notices from State of Alaska for a given lease
Agency: ADNR – DOG – Alaska Department of Natural Resources, Division of Oil and Gas
Date: November, 2018
Link: [https://dog-soa-dnr.opendata.arcgis.com/datasets/26d8c350c0cf4965b034785c79ef8ae_0](https://dog-soa-dnr.opendata.arcgis.com/datasets/26d8c350c0cf4965b034785c79ef8ae_0)
**Oil/Gas Leases – ADNR – Jan2019** - current state oil and gas leases  
Agency: ADNR – DOG – Alaska Department of Natural Resources, Division of Oil and Gas  
Date: November, 2018  
Link: [https://dog-soa-dnr.opendata.arcgis.com/datasets/cfbf84f123944166a14dd32820cd3ddc_0?geometry=-320.761%2C54.023%2C10.938%2C77.337](https://dog-soa-dnr.opendata.arcgis.com/datasets/cfbf84f123944166a14dd32820cd3ddc_0?geometry=-320.761%2C54.023%2C10.938%2C77.337)  
Current lease polygons were dissolved into a single feature by UAA – Alaska Center for Conservation Science.

**Oil/Gas Leases – BLM – Jan2019** - current federal oil and gas leases  
Agency: BLM – Bureau of Land Management  
Date: November, 2018  
Links:  
1999-2016 Leases: Authorized Oil and Gas Leases within the National Petroleum Reserve - Alaska  
[https://sdms.ak.blm.gov/metadata/npra_lease_sales.html](https://sdms.ak.blm.gov/metadata/npra_lease_sales.html)  
Current lease polygons were merged together and then dissolved into a single feature by UAA – Alaska Center for Conservation Science.

**Oil and Gas – Participating Area Boundaries**  
Agency: ADNR – DOG – Alaska Department of Natural Resources, Division of Oil and Gas  
Date: November, 2018  
Link: [https://dog-soa-dnr.opendata.arcgis.com/datasets/1c15d3d7622c403199b0449d446e8cff_0](https://dog-soa-dnr.opendata.arcgis.com/datasets/1c15d3d7622c403199b0449d446e8cff_0)

**Oil and Gas – Unit Boundaries**  
Agency: ADNR – DOG – Alaska Department of Natural Resources, Division of Oil and Gas  
Date: November, 2018  
Link: [https://dog-soa-dnr.opendata.arcgis.com/datasets/3edaf88af6b5473e8084a9c72131ab87_0](https://dog-soa-dnr.opendata.arcgis.com/datasets/3edaf88af6b5473e8084a9c72131ab87_0)

**NPRA Special Areas**: National Petroleum Reserve Alaska  
Agency: BLM – Bureau of Land Management  
Date: January, 2017  
Link: [https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage&currentPageId=14707](https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage&currentPageId=14707)  
Notes: Special Use Areas from NPRA_Integrated Activity Plan (IAP) Environmental Impact Statement (EIS) – Alternative B-2.

**Land Management**: Surface management composite  
Agency: BLM – Bureau of Land Management  
Date: January, 2019  
Notes combined general land status layer, mapped to nearest Section with detailed NPRA and US Fish Wildlife Service boundaries to create detailed surface land management layer

**Native Allotments:**
Agency: BLM – Bureau of Land Management  
Date: January, 2019  