

USGS Oil and Gas Assessments, Alaska North Slope
Activities FY 2018 – FY2019

- Secretarial Order 3352 (signed May 31, 2017) directs the USGS to conduct updated assessments of undiscovered, technically recoverable oil and natural gas resources of the Alaska North Slope, focusing on Federal lands of the National Petroleum Reserve in Alaska (NPR-A) and the Arctic Refuge coastal plain (1002 Area). These assessments are being conducted in technical cooperation/collaboration with BLM and BOEM.
- The USGS completed an updated assessment of NPR-A in December 2017, <https://doi.org/10.3133/fs20173088>
- USGS has proposed completion of an updated assessment of the Arctic Refuge 1002 Area by January 1, 2019
- In preparation for the 1002 Area assessment, the USGS:
 - Conducted field work in and near the 1002 Area in July-August 2017
 - Plans additional field work in and near the 1002 Area in June-July 2018
 - Contracted for reprocessing 1984-1985 2D seismic data from the 1002 Area
 - Is conducting laboratory analyses of field and subsurface samples to improve understanding of key petroleum systems elements (petroleum source-rock and reservoir-rock quality, thermal maturity, uplift and exhumation history, etc.).
 - Plans to integrate results of field and laboratory research with interpretation of reprocessed 2D seismic data to further understand key petroleum systems elements and to evaluate significant uncertainties revealed by previous assessment (reconstruct burial and hydrocarbon-generation history, define potential hydrocarbon migration pathways, delineate number and size of potential hydrocarbon traps, etc.).
- USGS will follow usual oil and gas assessment protocol in completing the 1002 Area assessment, including:
 - Cooperate and collaborate with BLM and BOEM and, as appropriate, communicate and coordinate with Alaska technical agencies, throughout the data collection, analysis, and interpretation workflow.
 - Hold public review meetings in Anchorage and other locations, as appropriate, to (a) explain rationale for conducting, and timeline for completing, assessment; (b) present scientific basis of assessment (e.g., explain framework geology, regional and local petroleum systems, likely reservoir units, trap geometries, and key risk factors that determine the probability that technically recoverable resources are present; (c) present fundamental geological entities (i.e., plays or assessment units) to be assessed; (d) present details of assessment methodology to be used; and (e) seek constructive feedback from knowledgeable scientists.
 - Revise fundamental aspects of the geological framework of the assessment based on constructive feedback from public meetings.
 - Conduct assessment – USGS Alaska project team presents the assessment framework and inputs to USGS National and Global Assessment review panel.

Results from this meeting are subjected to rigorous statistical analysis, which generates probabilistic results.

- Technical reports will be produced that summarize the geological science that forms the foundation of the assessment. The assessment results are then incorporated into non-technical fact sheets summarizing results. These documents are submitted to USGS technical and editorial review as required by USGS Science Integrity Policy. Fact sheets are given priority to assure timely release.
- Assessment results are released to the public by publication of fact sheet. Simultaneous briefings are presented to the Department of the Interior and elsewhere to share results with the Administration, Congress, and the public at large.