

# NGAC Landsat Advisory Group (LAG) Subcommittee Report



NGAC Meeting  
December 7, 2022

Frank Avila, LAG Chair  
Roberta (Bobbi) Lenczowski, LAG Vice-Chair

# LAG Mission

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***Provide advice** to the Federal Government, through the Department of the Interior National Geospatial Advisory Committee, **on the requirements, objectives and actions of the Landsat Program** as they apply to continued delivery of societal benefits for the Nation and the global Earth observation community*

**LAG was established in April 2012 as a subcommittee under the NGAC.**

# LAG 2022 Membership

Name	Organization
Frank Avila ( <i>LAG Chair, NGAC Member</i> )	<i>National Geospatial-Intelligence Agency (NGA)</i>
Bobbi Lenczowski ( <i>LAG Vice-Chair, NGAC Member</i> )	<i>Roberta E. Lenczowski Consulting</i>
Vasit Sagan ( <i>NGAC Member</i> )	<i>Saint Louis University</i>
Mariel Borowitz	<i>Georgia Institute of Technology</i>
Steven Brumby	<i>Impact Observatory, Inc</i>
Keith Masback	<i>Plum Run, LLC</i>
Anne Hale Miglarese	<i>Miglarese Consulting</i>
Robbie Schingler	<i>Planet</i>
Walter Scott	<i>MAXAR</i>

Federal Contacts: Tim Newman, Tim Stryker, Greg Snyder, Peter Doucette  
*USGS/National Land Imaging Program*

# Published LAG Reports

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[Water's Edge of National Land Imaging Program Scope – September 2022](#)

[Landsat in the Cloud – May 2022](#)

[Revisiting the Land Remote Sensing Policy Act of 1992 – April 2021](#)

[Formulating a Big Data Science Challenge for Land Imaging Time-Series Data – April 2021](#)

[Landsat Data: Community Standard for Data Calibration – October 2020](#)

[Evaluation of a Range of Landsat Data Cost Sharing Models – June 2019](#)

[Landsat Future Mission Recommendations – April 2018](#)

[Landsat Data Cube Feasibility for Forecasting – April 2018](#)

[Analysis of Non-Federal Landsat User Requirements – June 2016](#)

[Sentinel Data Use Policies – December 2015](#)

[The Value Proposition for Landsat Applications – December 2014](#)

[Cloud Computing: Potential New Approaches to Data Management and Distribution – December 2013](#)

[Comments on NRC Report: Landsat and Beyond: Sustaining and Enhancing the Nation's Land Imaging Program – December 2013](#)

[Product Improvement – Advice USGS on Potential Means of Modifying the Current Products to Make Them More Useful to Commercial Information Providers and Value-added Analysts – December 2013](#)

[Statement on Landsat Data Use and Charges – September 2012](#)

[The Value Proposition for Ten Landsat Applications – September 2012](#)

*Documents can be accessed at [www.fgdc.gov/ngac/key-documents](http://www.fgdc.gov/ngac/key-documents)*



# 2022 LAG Task #1 Paper: NLI Future Data Products

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- ❖ Understand the content and continuing population of the EROS data archives with Landsat collections and other acquisitions from international partners and commercial vendors
- ❖ Discuss with EROS the history and anticipated preparation for access and distribution options, especially use of Cloud Services (images, pixels, time series, ...)
- ❖ Examine any evolution or new trends in what data or “product levels” are being requested by users
- ❖ Describe findings and prepare recommendations on what the National Land Imaging Program should offer to users in the 2030 timeframe.  
(content, format, delivery approach, level of processing, predictive and/or analytical support, ...)

# LAG 2022 Activities in Phases (CY 2022 and CY2023) - Status

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## Phase 1 – Prior to January 2023

- Complete 2021 Task 1 and 2 Papers and have published at FGDC/NGAC website -**DONE**
- Present 2021 Task 1 Paper Findings and Recommendations at Pecora 22 **DONE**
- Finalize 2022 Task 1 description statement **IN WORK**
- Assign 2022 Task Paper 1 leads **Mariel Borowitz Metrics Section**
- Refine focus of paper **IN WORK**
- Examine available “metrics” data **Video Call with EROS 1 Dec 2022**

## Phase 2 – During Calendar Year 2023

- Complete 2022 Task Paper 1
- Update LAG Bylaws
- Add new members to LAG
- Establish a 2022 Task 2 description statement
- Assign 2022 Task Paper 2 leads prior to June 2023 NGAC Meeting

# Pecora 22 Conference - Opening the Aperture to Innovation: Expanding Our Collective Understanding of a Changing Earth

- July 23, 2022 was the fiftieth anniversary of Landsat's first launch in 1972. The 22nd William T. Pecora Memorial Remote Sensing Symposium met in Denver, October 23 – 27, to help celebrate the fifty years of continuous collection.
- On Wednesday, the opening plenary panel included Barb Ryan and Kass Green, who both made important pleas to the audience that use of the Cloud was clearly a storage and distribution asset using the commercial sector, but that the "free and open" policy for the collected data must remain intact.
- The LAG paper about Landsat in the Cloud Era was scheduled in an immediately-following technical session, allowing more discussion about how that policy needs reaffirmation but also examination in light of Cloud Services, including egress and/or processing in the Cloud and any fee implications.
- Throughout the week of panel discussions and technical sessions the topic of Cloud Services was repeatedly mentioned. Several agencies have piloted initial ventures; some agencies have awarded contracts. Operational consistency across the various contracts, the numerous data sets, the providers, and the data users is desired.
- The new LAG Task looking forward will continue to expand the work done for the Landsat in the Cloud Era paper.



# LAG/EROS Data Center Briefing

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- Preparatory step to complete the 2022 Task 1 study and report is to understand more completely what metrics for data access and distribution are available for Landsat.
  1. Landsat users have new ways to access the imagery. Are they changing their procedures?
  2. Landsat users have options for how much of any collected scene they might want. What is known about requesters: demographics, location and size and content (by band, e.g.), or intended use?
  3. Has the Cloud affected volume of pixels egressing or in-Cloud processing?
- Discussion initiated with EROS team on 1 December with excellent sharing of information. More meetings to follow.



# LAG – 2022 Timeline/Next Steps

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Name	Date
Subcommittee meeting to approve CY2021 Task 2 paper	July 28, 2022
Subcommittee initial discussions about new CY2022 tasks	July 28, 2022
Meeting to continue discussion on likely CY2022 tasks	August 5, 2022
September 2022 NGAC meeting and LAG status report	September 7-8, 2022
LAG Subcommittee meetings	October 18 and December 1, 2022
December 2022 NGAC meeting and LAG status report	December 6-7, 2022
Next Subcommittee meeting	December or January (tbd)