

NGAC Landsat Advisory Group (LAG) Subcommittee Report



NGAC Meeting
December 4, 2024

Frank Avila, LAG Chair
Vasit Sagan, LAG Vice-Chair

LAG Mission

Provide advice to the Federal Government, through the Department of the Interior National Geospatial Advisory Committee (NGAC),
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 Membership – as of December 2024

Name	Organization	Name	Organization
Frank Avila (Chair)*	National Geospatial-Intelligence Agency (NGA)	R. Douglas Ramsey	Utah State University
Vasit Sagan (Vice Chair)*	St. Louis University	Kashif Mahmud	Midwestern State University
Holli Howard*	Google Maps	Yufang Jin	University of California - Davis
Devaki Raj*	Saab, Inc.	Nirav Patel	Defense Innovation Unit (DIU)
Keith Masback	Plum Run LLC	David Case	National Geospatial-Intelligence Agency (NGA)
Anne Miglarese	Miglarese Consulting	Matt Hancher	Google Earth Engine
Maribel Borowitz	Georgia Institute of Technology		

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

***NGAC Members**



Published LAG Reports

[Resolution on the 2030 Earth Observation Data Challenge: Interagency Operational Efficiencies – April 2024](#)

[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](#)

*18 reports in
12 years!*

Documents can be accessed at www.fgdc.gov/ngac/key-documents

Current LAG Task 1 - NLI Future Data Products



2025 LAG Tasks 1 : Updated Scope and Outline

Change of Scope: Based on recommendations from USGS, we decided to develop our LAG Task 1 paper based on the Water's Edge paper published in 2022 ([link](#)) and incorporate new data, as well as Level 3 or 4 products to be generated from Landsat Next.

Task Lead: Vasit Sagan

Goal: Present final report to NGAC at Spring 2025 meeting

Current Status: Review past LAG papers, future data products, and scoping the paper

2025 LAG Tasks 1 : Updated Scope and Outline

Title: Beyond the Water's Edge: an in-depth look at the National Land Imaging Program

Outline:

1.Executive Summary

- Brief overview of the white paper's goals and recommendations
- Key opportunities and challenges for the USGS National Land Imaging Program in building global Earth observation resources

2.Introduction

- The Earth Observation Landscape
- the NLI and highlights from "Water's Edge" white paper
- Importance of NLI for addressing pressing global issues such as climate change, environmental monitoring, and sustainability

3.The National Land Imaging Program

- Overview of the NLI's current assets (e.g., Landsat program)
- Summary of existing data access initiatives, partnerships, and collaborations

4.The Changing Landscape of Earth Observation Data

- Technological advancements driving Earth observation, such as AI, cloud computing, and emerging satellite platforms
- The proliferation of commercial and international satellite imagery providers and their implications for NLI
- The need for level 4 and level 5 data products
- Commercial vs Landsat Next: differentiation, values

2025 LAG Tasks 1 : Updated Scope and Outline

5. Challenges in Building a Global Commons for Earth Observation Data

- Data integration and interoperability barriers
- Legal and policy considerations, including data sharing agreements and licensing
- Funding and resource constraints
- Ensuring the quality, accuracy, and security of open-access Earth observation data

6. Opportunities for Growth and Expansion in the NLI Program

- Leveraging new data sources, including commercial satellites and citizen science initiatives
- Building stronger public-private partnerships and international collaborations
- Enhancing access through cloud-based solutions, open data repositories, and advanced analytics platforms
- Strengthening user engagement and addressing diverse stakeholder needs

7. Strategic Recommendations for the NLI Program

- Enhancing interoperability and data integration standards
- Policy recommendations for improved data governance and sharing frameworks
- Requirements for analysis ready products at Level 4 and beyond

8. Use Cases Highlighting the value of Landsat Next data

- Applications in climate resilience, disaster response, sustainable development, agriculture, and resource management
- Examples demonstrating the economic and societal value of open and accessible Earth observation data

9. Future Vision for the NLI and Earth Observation Data Commons

- Strategic roadmap for the NLI to lead and contribute to a global Earth observation commons
- Vision for next-generation Landsat missions and beyond
- Call to action for collaboration among government agencies, academia, private industry, and international bodies

10. Conclusion

- Summary of the NLI's potential to lead in the global commons of Earth observation
- Reaffirmation of key recommendations and next steps for expanding NLI's impact

Timeline

Date	Milestone
12/19/2024	<ul style="list-style-type: none">• LAG members will meet virtually• The outline is finalized and each member is assigned with writing tasks
1/6/2025	LAG members will complete their writing sections
1/13/2025	First draft paper will be distributed for review
1/24/2025	LAG members will meet virtually to discuss the draft
2/3/2025	The draft will be distributed to NGAC members for comment

***NGAC Members**