Landsat Advisory Group (LAG) Status Report

NGAC Meeting
December 6, 2018

Frank Avila
LAG Chair

Roberta Lenczowski
LAG Vice-Chair
Agenda

- LAG Mission
- LAG Membership
- Task #3 Status Update
- New Tasks
- Questions / Discussion
LAG Mission

*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 2018 Membership

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frank Avila (LAG Chair, NGAC Member)</td>
<td>National Geospatial-Intelligence Agency (NGA)</td>
</tr>
<tr>
<td>Roberta Lenczowski (LAG Vice-Chair, NGAC Member)</td>
<td>Roberta E. Lenczowski Consulting, LLC</td>
</tr>
<tr>
<td>Rebecca Moore (NGAC Member)</td>
<td>Google, Inc.</td>
</tr>
<tr>
<td>Kevin Pomfret (NGAC Member)</td>
<td>Centre for Spatial Law and Policy</td>
</tr>
<tr>
<td>Kass Green</td>
<td>Kass Green &amp; Associates</td>
</tr>
<tr>
<td>Peter Becker</td>
<td>ESRI</td>
</tr>
<tr>
<td>Tony Willardson</td>
<td>Western States Water Council</td>
</tr>
<tr>
<td>Steven Brumby</td>
<td>Descartes Labs</td>
</tr>
<tr>
<td>Walter Scott</td>
<td>MAXAR Technologies/DigitalGlobe</td>
</tr>
<tr>
<td>Joanne Gabrynowicz</td>
<td>University of Mississippi</td>
</tr>
</tbody>
</table>

Federal Contact: Tim Newman and Peter Doucette (USGS)
LAG Task #3 — Cost sharing models for Landsat data

- DOI leadership has requested that USGS\(^1\) consider new prospects for cost sharing of Landsat data to support USGS’s role toward the Sustainable Land Imaging model.

  - Recognizing that aspects of this issue were investigated by the Landsat Advisory Group (LAG)\(^2\), DOI leadership is seeking to better understand economic and data policy considerations and impacts in relation to user needs, as well as the potential for public-private partnering (P3), with respect to various cost sharing models for Landsat data.

  - USGS is requesting that the Landsat Advisory Group (LAG) review the findings of [2, 3], and other potentially relevant studies, to consider a range of possible Landsat data cost sharing models that may include, but are not limited to:
    - resource leveraging for data processing, management, and distribution;
    - resource leveraging for satellite ground mission development and operations;
    - various forms of fee recovery models for different market sectors. The LAG should consider pros and cons of the cost sharing models investigated.
Status Update
LAG Task #3 – Cost sharing models for Landsat data

- Task Team Lead – Kevin Pomfret

- USGS [Ft. Collins] Study was closed on 7 NOV 2018
  - Over 3,000 completed surveys submitted
  - Study is professionally designed to support critical analysis
  - Preliminary results expected to be available to LAG by January 2019

- Projected LAG report timelines:
  - Spring 2019 NGAC Meeting: Present final report to NGAC for adoption

[1] sustainablelandimaging.gsfc.nasa.gov/
Status Update
LAG Task #3 – Cost sharing models for Landsat data

- Team is finalizing draft report focusing on three areas:
  - Charging for “traditional” data
  - Charging for value-added products and services
  - Private-public partnership (P3) structures

- USGS and LAG have received over 30 letters advocating for the importance of free and open data policy
  - State entities
  - Academia (professors and students)
  - Non-profit groups
  - Professional and International user community groups
  - Private industry
  - Public citizen
New LAG Tasking

- Task 2018-01: Formulation of a Deep Learning Challenge for Land Imaging Time-Series Data
  - USGS is exploring establishing a Government Challenge to investigate the utility and efficacy of deep learning methods that can exploit the temporal and spectral content of Landsat data applied toward time-series analysis and Land change forecasting. Algorithms explored may consider complementary data sets, as well as machine learning algorithms in general, as needed.

- The LAG is crafting recommendations on how to structure a Government Challenge to incentivize exploration into the utility and efficacy of deep learning methods to exploit Landsat Analysis Ready Data for time-series analysis and land change forecasting
Draft LAG Tasking

  - PL 102-555 repealed the Land Remote-Sensing Commercialization Act of 1984, and established the function of the National Satellite Land Remote Sensing Data Archive at USGS.

- LAG is holding off on making recommendations on this proposed task until current Task #3 is completed.
Questions?