USFS HQ
Program Perspective

NASA Wildland Fire Applications Team Meeting
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Talking Points

- The National Remote Sensing Program
- Big Changes at RSAC
- Budget Challenges
- Programmatic Challenges
- Data Challenges
- Opportunities
But First...

Quotes:

“Any sufficiently advanced technology is indistinguishable from magic” – Asimov

“A vision without resources is hallucination” – Robert Zitz / Leidos

“In times of turmoil and uncertainty, look for opportunity” – Tom Bobbe
Approaching New Technology
The National Remote Sensing Program provides critical subject matter expertise to a wide range of agency business areas including; Engineering, Fire & Aviation Management, Forest Health Protection, Research and Law Enforcement & Investigations.

The position provides remote sensing leadership and guidance to the GMO Program Managers, Assistant Program Managers, and Geospatial Centers, as well as Forest Service regions and field units.
Big Changes at RSAC

- The Remote Sensing Applications Center (RSAC) is integrating with merging with the Geospatial Service & Technology Center (GSTC). Result: Geospatial Technology Applications Center (GTAC)
  - What are the impacts to remote sensing support in the integrated center?

- Loss of key personnel at RSAC & GSTC

- Moving to a new facility in downtown SLC
  - Looking for a home for the X-Band antenna
  - Loss of direct access to aerial film at APFO. Both a good thing and a bad thing.....
Budget Challenges

• We continue to see downward pressure on funding for all program areas resulting in:

  - Inability to recruit and fill key positions
    • The Forest Service desperately needs young creative minds to effectively support our mission going forward. Institutional knowledge is critical.

  - RSAC Program Support – funding from sponsors for contract support continues to decline.

  - Decreased ability to fully support key programs: NAIP, Alaska Mapping Initiative, USDA Satellite Imagery Archive, USGS 3DEP, etc.

  - Decreased ability to research and evaluate new technologies.

  - INABILITY TO TRAVEL AND PARTICIPATE IN CONFERENCES!!
    • It’s all about “optics”

  - We seem to spend more time on justifying and documenting actions and expenditures than we do in actual productive work.
Programmatic Challenges

- With reduced funding, personnel and travel, we are limited in our ability to keep up with technology and new ways of doing business.
Data Challenges

Comparing High-Velocity Data & Big Data

High-Velocity Data
- Real-Time
- Performance & Volume Challenges
- Use Cases: Operations & Analytics

Big Data
- Batch Process
- Volume Challenge
- Use Case: Analytics
Data Challenges

• How do we manage and efficiently exploit the exploding sources of earth observation data?
  ▪ Enable – Provide consistent and reliable access to data sources
  ▪ Equip – Provide Forest Service analysts with the needed technology (hardware and software)
  ▪ Provide – Streamlined capabilities (cloud? Storage, viewing, exploitation and analysis)
  ▪ Establish – On-the-fly solutions
  ▪ Develop – New tools / Crowdsourcing?

Sue Gordon / Deputy Director NGA - Move toward anticipatory analysis (disaster support, wildfire support, climate change, etc.)
Opportunities

“In times of turmoil and uncertainty, look for opportunity” – Tom Bobbe

Working with other agencies is clearly on the increase

- Collaboration / Coordination on data collection
- Communication – Sharing of expertise and best practices

Technology is ripe for the picking

- Accessibility / Consistency / Accuracy / Reliability of (digital) authoritative data sources is rapidly increasing
- Cloud Services is looking more attractive

Growing support for a NASA – Forest Service Forum in 2016

- Intent: Put FS needs and priorities on the table and look for more efficient interaction between the two agencies.
Where We Want To Be

Forest Service as a World Class Purveyor of Information

DATA EVENTS

SOCIAL MEDIA

FIRE & LAW

DECISION MAKERS

RANGER

FIELD WORKER

CONSUMERS

VISITORS

GEO ENABLED DATA

Forest Service
Chief Information Office
YOU’VE GOT TO STOP THINKING THAT EVERY SOUND YOU HEAR IS A BEAR.
Contact Information

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