T and T Consulting Services, Inc.
Storefront WORKING Personas

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OVERVIEW

Background

As part of our efforts to make a product recommendation for the NESDIS Storefront, Team T&T has developed working personas for review, evaluation and confirmation.

CONSIDERATION:
While all users are critical for the final Storefront, we have prioritized these on immediate needs.

Primary Users (Direct Stakeholders):

- NOAA Scientists & Researchers – Users who rely on NESDIS data for climate, weather, and environmental studies.
- Government Agencies (e.g., NASA, FEMA, DoD, EPA) – Users who integrate NESDIS data into national security, disaster response, and environmental policy.
- Academics & Research Institutions – Universities and research centers using NESDIS datasets for scientific analysis and educational purposes.
- Commercial Users (Private Sector & Tech Companies) – Businesses utilizing NESDIS data for applications like agriculture, energy, and insurance.

Target Audiences

Secondary Users (Influencers & Decision-Makers):

- Policy Makers & Legislators – Those who use NOAA's data to inform regulatory decisions and climate policies.
- State & Local Emergency Management Officials – Users who depend on NESDIS data for preparedness and response strategies.

Target Audiences

End Consumers (General Public & Indirect Users):

- Citizen Scientists & Enthusiasts – Individuals using NESDIS data for personal or hobbyist research.
- Media & Journalists – Those who translate NOAA's data into news and reports for public awareness.

WORKING Personas

Primary Users

Dr. Samuel Ortiz
NOAA Atmospheric Scientist

Samuel has spent the last 15 years modeling large-scale climate patterns for NOAA. As his models grow more sophisticated, he's realized that NESDIS provides the high-resolution temporal datasets he needs—but navigating that data is time-consuming and frustrating. He's hoping the Storefront can streamline this process.

Goals: Conduct long-range climate modeling using satellite records

Needs: High-resolution, real-time and historical data in easily filtered formats

Current Tools: Python scripts, AWS S3 (possible), NetCDF
—needs confirmation

Pain Points: Poor metadata, unclear file structures, inconsistent spatial resolution
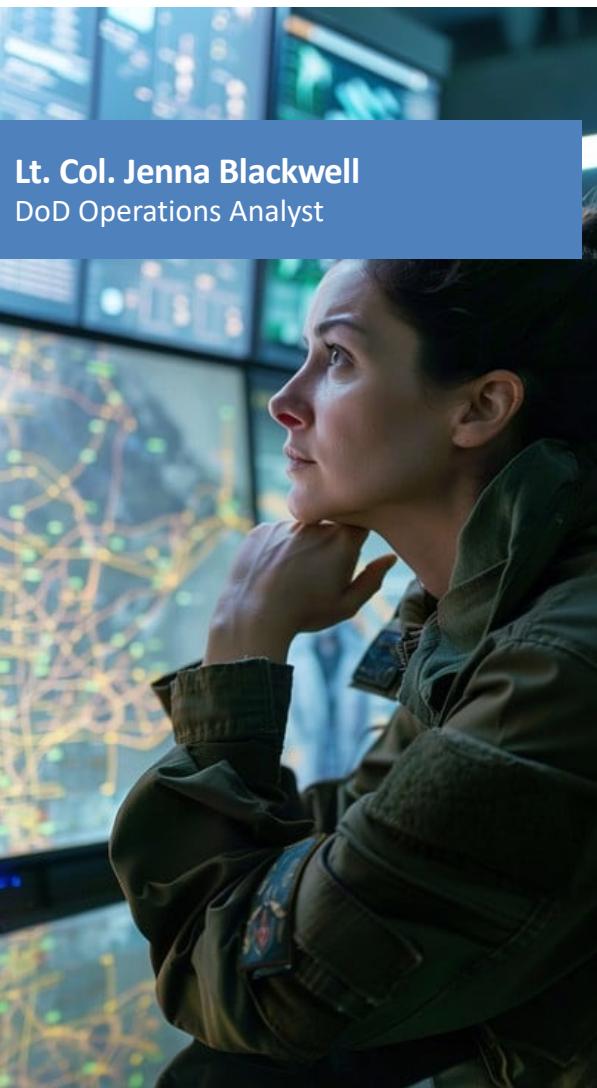
Unknowns

What formats are most efficient for his workflow?

Does he rely on external repositories (e.g., NASA)?

Lt. Col. Jenna Blackwell
DoD Operations Analyst

Jenna is part of a rapid-response analysis team supporting national defense logistics. She was introduced to NESDIS through a NOAA liaison, intrigued by the timeliness of their satellite feeds. She's interested in automating data pulls into classified systems.

Goals: Use real-time satellite observations for battlefield weather forecasting

Needs: Secure access to near real-time environmental conditions; overlays with mission maps

Unknowns

What bandwidth/security constraints are in place?

Is API access feasible in her ops environment?

Current Tools: Unknown—may use specialized military software
—needs confirmation

Pain Points: NESDIS interface does not support operational urgency or layered display needs

Dr. Hannah Lin
University Climate Researcher

Hannah discovered NESDIS while comparing satellite datasets for a grant-funded urban resilience project. She sees potential in NESDIS archives but is concerned about data consistency and student usability.

Goals: Publish peer-reviewed studies on urban heat islands using historical satellite records

Needs: Long-term temporal consistency; download and export in formats for statistical modeling

Current Tools: ArcGIS, custom-built models
—needs confirmation

Pain Points: Data filtering is overly complex; source provenance unclear

Unknowns

What sources are cross-referenced with NESDIS?

Is she training graduate students on these tools?

Jordan Myers
Environmental Risk Analyst at Global Reinsurance Firm

Jordan's firm has started incorporating earth observation data into long-term risk pricing models. After reviewing NESDIS during a climate risk briefing, he saw potential in the data but flagged several legal and format hurdles. He's open to funding access if value and clarity are proven.

Goals: Use NESDIS satellite data to assess risk profiles for weather-related insurance portfolios

Needs: Predictive models powered by historical and real-time satellite inputs; API feeds for proprietary platforms
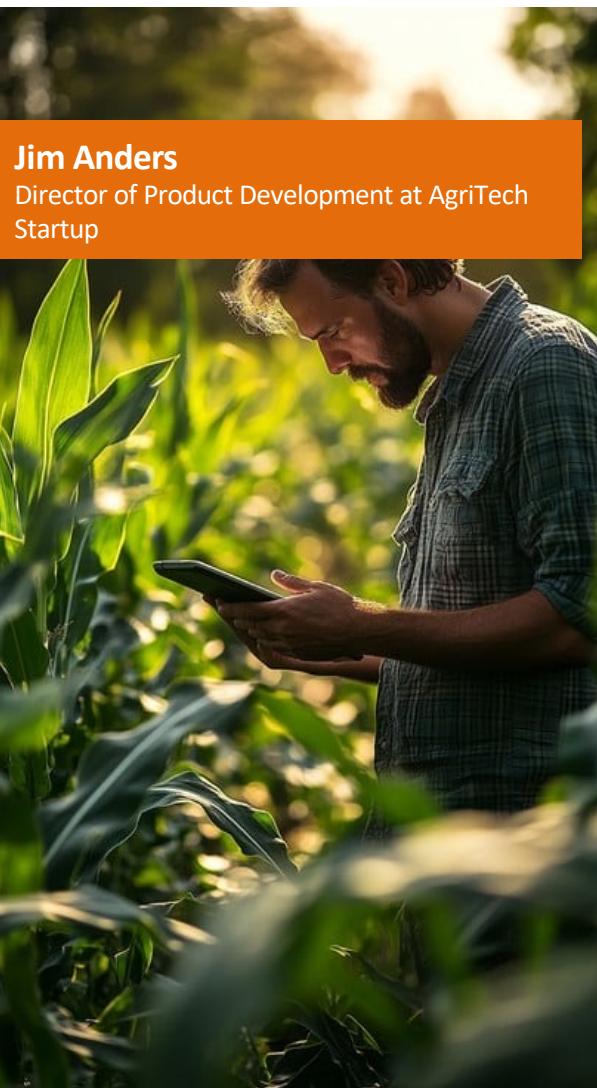
Unknowns

What would make NESDIS data monetizable or contract-viable for reinsurance modeling?

Would they pay for premium access?

Current Tools: Internal actuarial software, commercial climate models
—needs confirmation

Pain Points: Licensing limitations; uncertain data reliability for financial-grade decisions

Jim Anders
Director of Product Development at AgriTech Startup

Jim's team builds AI models for crop yield prediction, and after learning about NESDIS through an industry newsletter, he wants to explore integrating satellite-derived indicators. The potential is clear—but onboarding seems steep.

Goals: Integrate NESDIS drought, soil moisture, and vegetation data into yield forecasting tools

Needs: Seamless data ingestion; ability to tailor views to regional farm zones

Unknowns

Would they consider a cost-sharing agreement or API licensing deal with NESDIS?

What value would justify it?
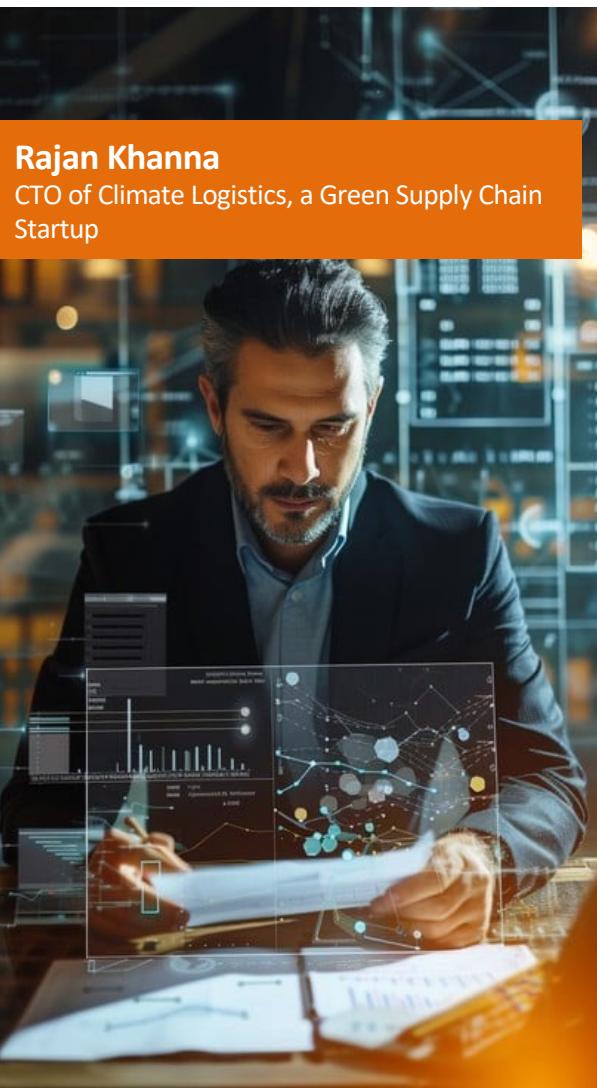
Current Tools: Google Earth Engine, Mapbox, custom dashboards
—needs confirmation

Pain Points: Inconsistent delivery formats; lack of support for small-to-mid-size enterprise onboarding

Rajan Khanna
CTO of Climate Logistics, a Green Supply Chain Startup

Rajan learned of NESDIS through an academic partnership and now sees a business opportunity to license satellite-driven insights for route planning. He's evaluating commercial APIs from both public and private sources.

Goals: Use near-real-time satellite data to optimize global freight routing for emissions and storm resilience

**Needs:** Storm path prediction models, sea ice maps, high-res temperature data

Unknowns

Would NESDIS offer tiered access for commercial partners?

How can monetization support both open and enterprise uses?

Current Tools: Proprietary ML platform, NOAA + third-party APIs
—needs confirmation

Pain Points: Licensing terms and SLAs are vague; latency and update frequency limits value

Rebecca Adams
VP of Strategic Development at GeoMarkets Intelligence

Rebecca's firm resells data-backed insights to financial firms. She believes NESDIS's consistent datasets could underpin a new ESG (environmental, social, governance) signal package. She sees an opportunity if NESDIS can offer SaaS-style access where commercial partners can layer custom APIs and create tailored interfaces using core NESDIS data streams.

Goals: Bundle satellite-derived insights into market trend products for energy and commodities clients

Needs: Aggregated environmental impact signals, historical trends, white-labeled visualization tools, SaaS API access for layering private analytics

Current Tools: Tableau, Snowflake, Earth Engine
—needs confirmation

Pain Points: Data granularity not matched with financial market zones; unclear monetization roadmap; limited customization options without self-service APIs

Unknowns

Can NESDIS offer SaaS partnerships with flexible data licensing and custom API endpoints?

What constraints exist around derivative data products built by partners?

Can NESDIS offer SaaS partnerships or attribution-based usage tiers? What constraints exist around derived works?

Secondary Users

Derek sits on an environmental policy subcommittee and was introduced to NESDIS by a coastal mitigation consultant. He's intrigued but overwhelmed by the sheer scale of data. He hopes the Storefront can translate science into policy language.

Goals: Advocate for climate adaptation policy based on clear, localized data

Needs: Interactive maps, infographics, policy summaries using satellite data

Unknowns

What's his preferred briefing method?

Does he engage directly with raw data or rely on interpretation?

Current Tools: Unknown—likely uses dashboards or PDFs from advisors
—needs confirmation

Pain Points: Data complexity blocks communication with constituents

Councilman Derek Ruiz
Local legislator, Coastal District

Claire leads seasonal planning sessions for rural counties. She discovered NESDIS through an NWS workshop but hasn't used it directly due to interface complexity. She's eager for a tool her staff can navigate quickly during emergencies.

Goals: Coordinate preparedness based on seasonal risk patterns (flooding, droughts)

Needs: Interactive maps, infographics, policy summaries using satellite data

Unknowns

What systems does her team currently trust most?

Would she adopt NESDIS tools if customized for local needs?

Current Tools: Regional GIS system; state weather portal
—needs confirmation

Pain Points: Lack of consolidated visual dashboards; must jump between NOAA sources

Claire Jansen
Emergency Management Director, Midwestern State

End Consumers
(General Public & Indirect Users)

Javier Morales
Amateur Weather Enthusiast

Javier has run a small YouTube channel focused on unusual weather since 2019. He's recently discovered NOAA's satellite imagery and wants to incorporate it into his content but needs help interpreting the layers.

Goals: Track global weather anomalies and share visuals with online followers

Needs: Accessible visual satellite products, download/share options

Current Tools: Unknown—likely uses NASA Worldview, Reddit, or X
—needs confirmation

Pain Points: Can't tell what's official vs. experimental data; inconsistent map labels

Unknowns

What platforms does he trust?

Would a NESDIS login dashboard help or intimidate?

Alison Kim
Freelance Science Journalist

Alison covers climate issues for several major news outlets. She relies heavily on NOAA sources but often finds the NESDIS materials too technical. She's looking for high-quality graphics and sourceable figures that require minimal cleanup.

**Goals:** Include verified climate data in mainstream media articles

Needs: Easy-to-understand data visuals, clear sourcing, media-safe downloads

Unknowns

Has she ever used NESDIS directly?

What guidance format would help her navigate it?
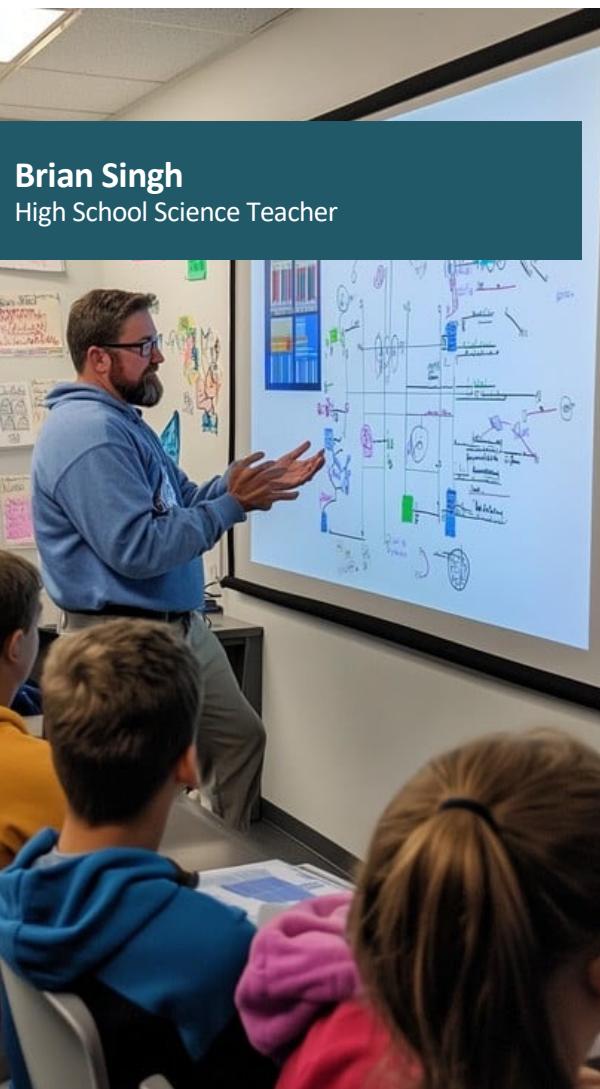
Current Tools: Canva, NOAA press kits, science blogs
—needs confirmation

Pain Points: Struggles with visual consistency and jargon-laden explanations

Brian Singh
High School Science Teacher

Brian runs a STEM club at his public high school and wants to bring authentic data into his lessons. He's explored NASA's education portal and is curious if NESDIS can offer more regionally relevant or interactive tools.

Goals: Create engaging STEM lessons using real-world climate data

Needs: Simple, interactive map tools; downloadable activities; explainers for students

Current Tools: Google Earth, NASA Earth Observatory
—needs confirmation

Pain Points: Most data portals are too technical or overwhelming

Unknowns

What age group does he teach?

Would he use a pre-curated "education view" of the Storefront?

NEXT STEPS

Next Steps

Conduct research to verify, confirm and finalize personas.

THANK YOU.