



# Aerial Surveying Services

## A Suppliers Perspective

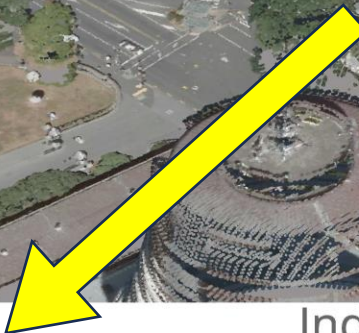
### Industries We Work With





# Aerial Surveying Services

## A Suppliers Perspective



### Industries We Work With





- Aerial Survey Services for Forestry
  - Quoting
  - Sales
  - Capture
  - Processing
  - Future Services
    - GeoSmart3D™
    - Forestry Specific Services

- Request for Quotation:
  - LiDAR &/or Imagery
    - Option 1
    - Option 2
    - Option 3
    - Option 4
  - 4 x Effort
    - Flight Plans
    - Pricing Models
  - Proposal with 4 Options

- Request for Quotation:
  - LiDAR &/or Imagery
    - Option 1
    - Option 2
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**Client's  
Expectations**



**Client's  
Budget**



- Request for Quotation:
  - LiDAR &/or Imagery
    - Option 1
    - Option 2
    - Option 3
    - Option 4
  - 4 x Effort
    - Flight Plans
    - Pricing Models
- Proposal with 4 Options

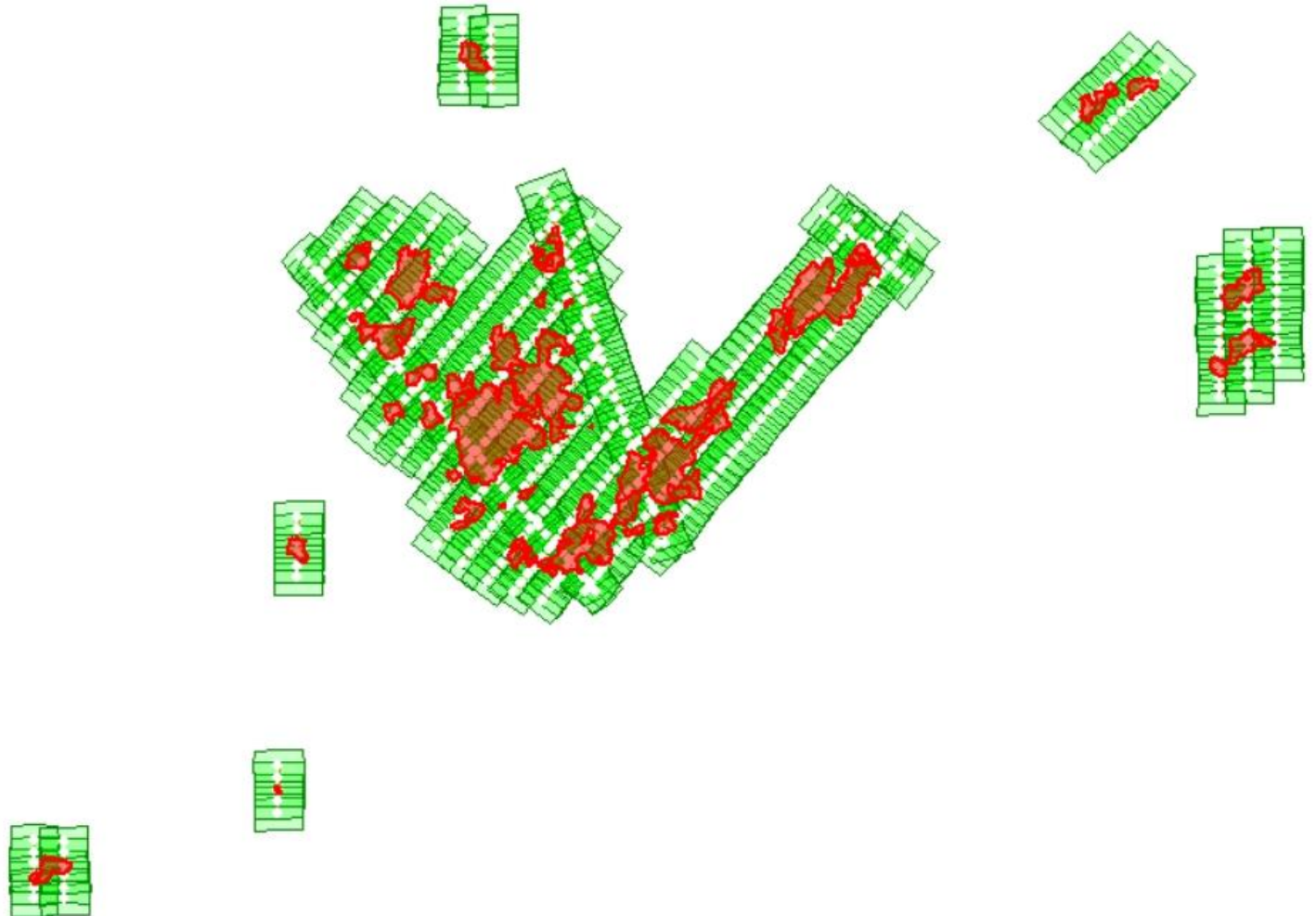
- Request for Quotation & \$\$ Range:
  - LiDAR &/or Imagery
    - Option 1 – easy, could expand area
    - Option 2 ✓
    - Option 3 ✓
    - Option 4 – nope, must reduce area
  - 2 x Effort
    - Flight Plans
    - Pricing Models
- Proposal with 2 Options

- Client A:
  - Forest Estate
  - Budget Range





- Client A:
  - Forest Estate
    - Flight Plan
    - Pricing
    - Proposal
    - Contract Signed
  - Project (Sale)



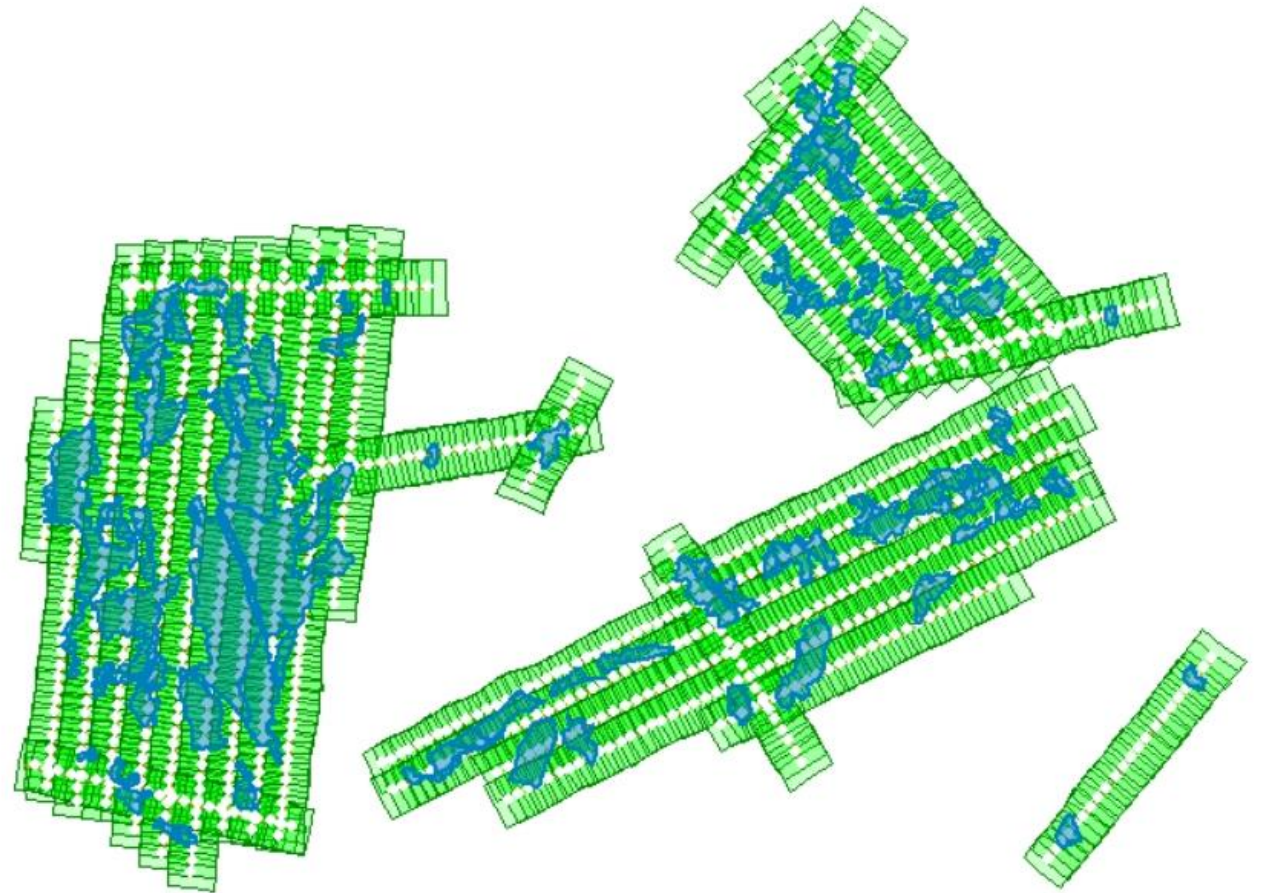


- Client B:
  - Forest Estate
  - Budget Range

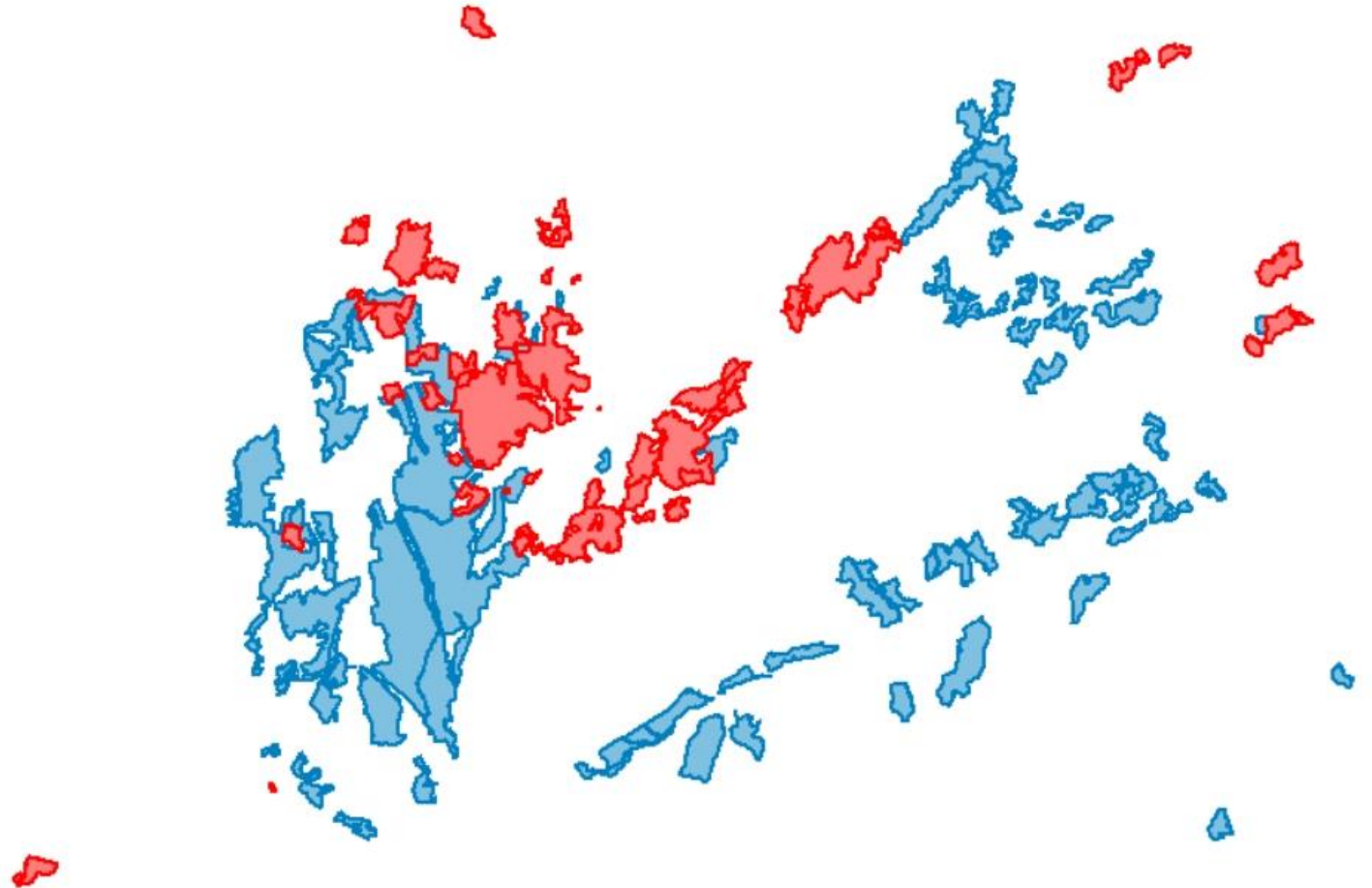




- Client B:
  - Forest Estate
    - Flight Plan
    - Pricing
    - Proposal
    - Contract Signed
  - Project (Sale)

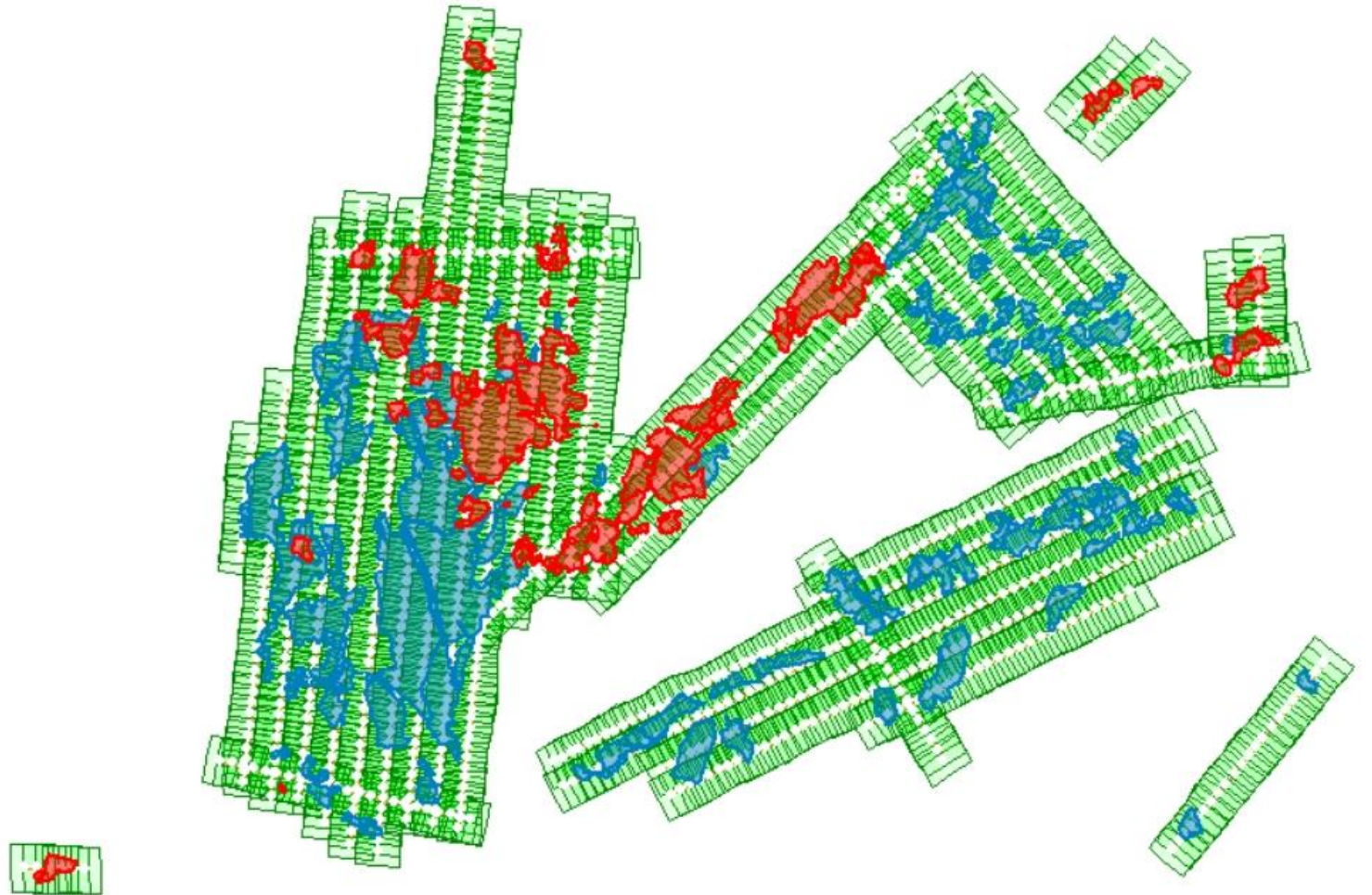


- Client A & B  
Collaborating:
  - Forest Estates A&B

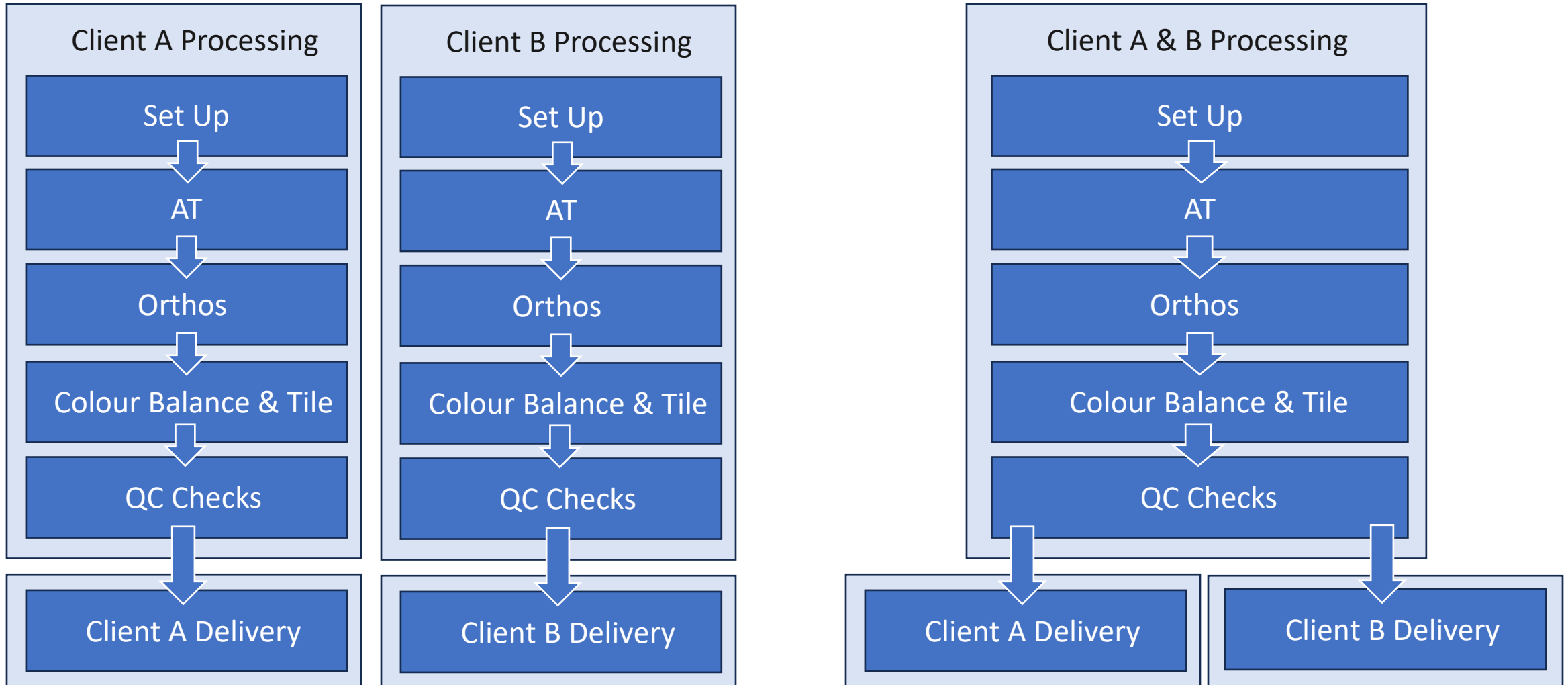




- Client A & B:
  - Forest Estates A&B
    - Flight Plan
    - Pricing
    - Proposal
    - Contracts x 2
  - Combined Project
    - Reduced Cost
    - Client Savings

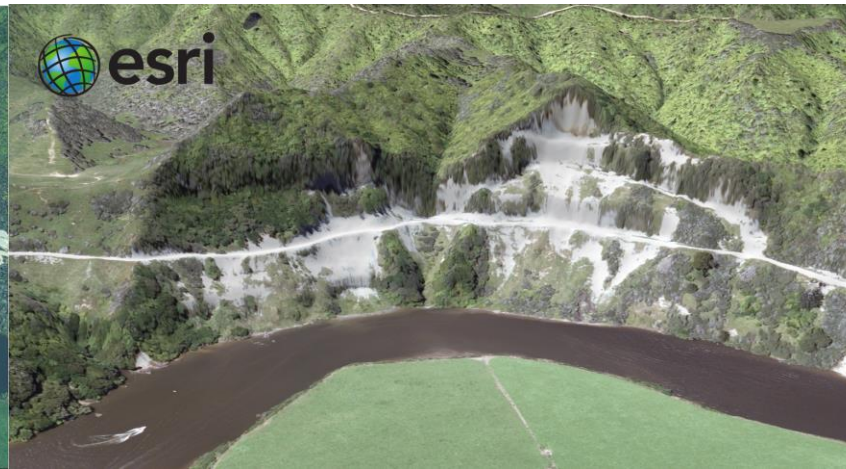


- 2 x Separate Projects
  - Combined Sales of ~\$70K
  - Combined Time to Complete Capture ~7 hours
- Combined Project
  - Sales of ~\$50K – around \$20K savings – shared between clients
  - Time to Complete Capture ~5 hours – 2 hours saving in capture
- Wait ! What? We Just Lost \$20K in Sales!
  - Additional Money Not Spent (~\$10K) on aircraft/crew/fuel/landings
  - Freed up 2 Hours to Work on other Projects – Increased Productivity
  - 2 Engine Hours Saved
    - Aircraft Checks – 50, 100 & 200 hours



- Talk to Your Immediate Neighbours
  - There Could be Savings in Working Together
  - You're Not in Competition With Each Other
  - Don't all band together to create a monster project
    - Time Delays Due to Weather
    - Time Delays Due to Amount of Data
  - “Bite-Size” pieces
    - 1 to 2 days Capture
    - Allows Rapid Timely Delivery

- GeoSmart3D™
  - High-Quality 3D Base Layer of New Zealand
    - Using Existing Overlapping Stereo Vertical Imagery
    - Photogrammetric Process to Create a Realistic 3D Mesh
    - Rural Applications
    - Limited Image Warping/Stretching and Long Shadow Obscurity






- How this product will work:
  - Hosted 3D tile layer. Can be viewed in ARC Pro, QGIS and other Cesium viewers
  - Pricing will be subscription based so no large upfront cost
  - Layers will be available per region, so you only pay for the region you need
  - Mesh will be updated as suitable new imagery becomes available
  - Product is focused on providing 3D for rural regions

## Get There Without Going There!

- Key Value Propositions of **GeoSmart3D**
  - **Cost Benefit** – 3D from existing Capture. Limit the need for physical site inspections
  - **Oblique Views** – 3D provides oblique views without requiring bespoke capture
  - **Quality Accuracy** – 3D adds vertical heights for buildings and vegetation
  - **Versatility** – These 3D layers can be used in multiple applications
  - **Functionality** – Do more and see more from your desk
  - **Presentation** – Present geographic information in a more dynamic way

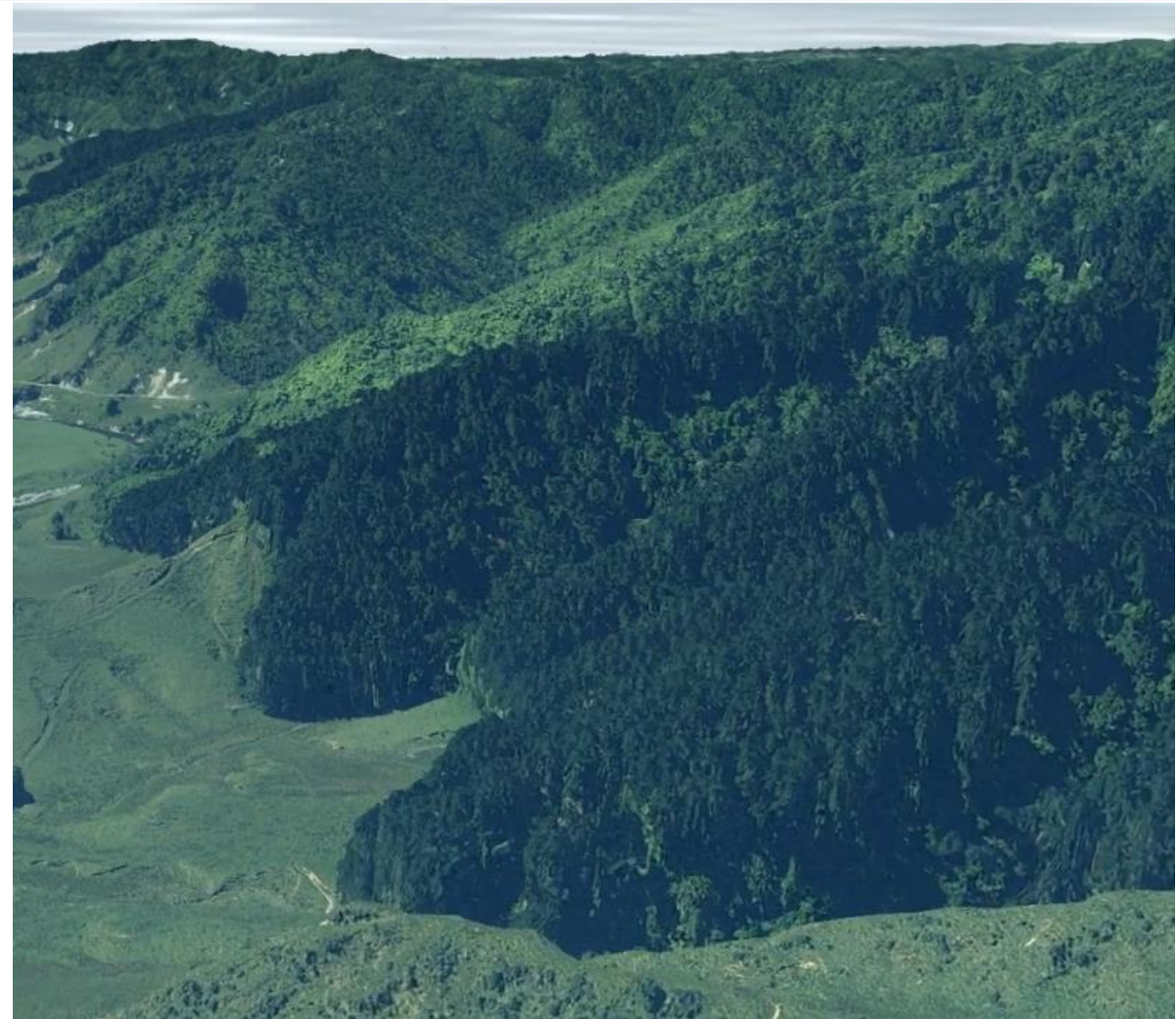
Using spatially accurate 3D Mesh imagery offers several advantages:

- Elevation and Topography
- Hydrological Analysis
- Vegetation Structure
- Change Detection
- Visualisation

	<u>Measure</u>		<u>Analyse</u>		<u>View</u>
	Distance		Flooding		Line of Sight
	Area		Shadow		Viewshed
	Slope		Terrain		Viewshed on Route
	Volume		Elevation Difference		Fly Through
	Contour		Compare		Cross Section



- GeoSmart3D™ for Forestry
  - Forest Estate Imagery
  - Create 3D Mesh of Estate
  - 3D Mesh Delivery
    - Product Supply
      - Fixed Price
    - Hosted
      - Fixed Duration & Price
      - No Subscription
- Future: Replace 2D Orthos?



Thank you!  
Any Questions?

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