SOouthern FORestry GIS: A Consultant’s Perspective

SOFOR GIS
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Outline
- Background
- Things We Have Learned – Trends
- What is Happening Now?
- A Couple of Client Case Studies
- Final Thoughts

Background
- Founded in 1998
  - Purpose is to help foresters improve management through technology
- Business Lines
  - 1998 - 2019: Sales
  - 2000 - 2008: Mapping Services
  - 2001 - Consulting

Things We Have Learned – Trends
Early years (1998 – 2005)
- Foresters need technical help
- GPS was huge
- Electronic data recording was getting underway
- Foresters not willing to pay very much
Things We Have Learned – Trends

Mid years (2005 – 2012)
• Foresters need technical help
• GPS sales began to level out
• GIS started picking up
• Electronic data recording making strides
• Foresters not willing to pay very much

Latest years (2012 –)
• Foresters need technical help – but not as much
• GPS integrated with more solutions
• Software-as-a Service emerges with GIS as the platform
• Modern operating systems for mobile (Android, iOS)
• Foresters not willing to pay very much

Things We Have Learned – Trends

What is Happening Now?
• Stumpage prices are decreasing
What is Happening Now?

- Stumpage prices are decreasing
- However, due to increased efficiencies management costs are decreasing
- The TIMO business model has matured
  - Opportunity to focus on management
- Public lands management
  - Employee counts are either steady or coming down
- Overall many forester job openings vs. few available hires

A Couple of Client Case Studies

- Anderson Tully and The Forestland Group
- Northwest Florida Water Management District

Anderson Tully (ATCO)

- F4 Tech client since 2003 – acquired by The Forestland Group (TFG) in 2005
- Manage predominantly hardwood forest types along the Mississippi River
- Strata level forest inventory
  - Accurate classification of strata is critical for accurate inventory results
- Legacy custom growth and yield system – RDS
  - Black box solution lacking transparency
Anderson Tully – The Forestland Group

- Fund is at the end of term
  - Ownership is going through a series of dispositions
  - Staff managing ownership has been reduced – divided between 2 separate consulting groups
- Need more efficient way to maintain inventory to support dispositions and financial statements
- Desired one central repository for inventory data

Anderson Tully – The Forestland Group

- The Forestland Group System of Record
  - Orbis Forest Information Portal (FIP)
    - Land Records
    - Property Taxes
    - Forest Management
    - Budgeting
    - Accounting
    - Timber Depletion
    - Forest Carbon
- Desired Forest Inventory and Growth and Yield system to integrate directly with FIP

Anderson Tully – The Forestland Group

- Solution
  - Upgrade to latest version of SilvAssist Suite
    - SilvAssist Inventory Manager with Growth and Yield
    - SilvAssist Mobile for Android

Anderson Tully – The Forestland Group

- Solution
  - Integration with Orbis Forest Information Portal (FIP)
    - Stand layer hosted in ArcGIS Enterprise/FIP and Synchronized to SilvAssist Inventory Manager
    - Strata level inventory data for ownership synchronized to FIP
Anderson Tully – The Forestland Group

• Conclusions
  – Greater efficiencies given current situation of limited staff
  – One data repository with fewer touch points leading to better quality data
  – Transparency in data and processes

Northwest Florida Water Management District

• Addressed critical business decisions regarding sustainable harvests
  – Now on short and long term harvest schedules, given environmental and land stewardship constraints
  – Managers are able to track land management activities on any device
  – Near real time reporting and analytics

Northwest Florida Water Management District

• The planning process has allowed the NWFWMD to identify inefficiencies in their process and make necessary improvements
  – Rolling inventory, operated by staff
  – Access to reproducible reports and maps, providing clear, error-free and updated information
  – “More time in the woods, less time in the office”

Northwest Florida Water Management District - Alternative Model Comparison

<table>
<thead>
<tr>
<th>Model Period (Starts in 2017)</th>
<th>Gross Harvest Revenue ($)</th>
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</thead>
<tbody>
<tr>
<td>Alternative Model 2: $980,000 to $1 million</td>
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<tr>
<td>Alternative Model 3: $750,000</td>
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<tr>
<td>Alternative Model 1: $550,000</td>
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<td>Baseline Model: $315,000</td>
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Northwest Florida Water Management District

- Bottom line business outcomes
  - Understand with greater certainty what sustainability looks like for their land base
  - Better able to communicate with governing board, state legislature and public about their management and budgets
  - Consolidation of methods, standards, formats, etc. has transformed the way they are able to conduct business

Final Thoughts

- GIS is MUCH more powerful and easy to use than in the past
- Forest inventory will continue to improve in new ways
- Continued pressure to increase efficiencies in operations
- Foresters will pay for VALUE!