



**SKYTEC**  
ACQUIRE · ANALYZE · INFORM



**International  
Paper**

**MONITORING WHAT MATTERS™**

# **SKYTEC AND INTERNATIONAL PAPER**

Building a pathway for sustainable harvesting, due diligence and supply chain verification at International Paper



# OVERVIEW

As a global leader in sustainability, International Paper delivers its products through a responsible fiber procurement process empowered by innovative mapping technology and the support of GIS consulting and remote sensing innovations from Skytec LLC.

---

Through International Paper's Vision 2030 strategy, the global leader in fiber-based, renewable products is committed to sourcing 100% of its fiber from sustainably managed forests or recovered fiber while safeguarding forests, watersheds and biodiversity.

Since 2014, Skytec has provided the data analysis and GIS design consultation required to collaboratively build ForSite®, International Paper's innovative mapping tool. ForSite® builds on International Paper's commitment to be the leader in responsible fiber sourcing by ensuring fiber procurement activities do not compromise the environmental values of forests from which we source.

## PROJECT CHALLENGES

**Streamline a GIS tool to establish best in class practices associated with responsible fiber sourcing**

**Build a tool readily integrated into International Paper's enterprise systems and existing Esri-built GIS for as many as 160 users**

**Adopt GIS processes for fiber procurement to maintain the highest level of integrity and sustainability in line with the company's Vision 2030 goals**

**Determine supply chain verification and due diligence of harvests from non-certified forestland**

**Gain insights from spatial data on soil types, topography, hydrology and harvest activity based on weekly satellite imagery updates**

**Identify areas of potential harvest that are sensitive based on biodiversity, species richness, landscape conditions and ecological priorities**

**Demonstrate due diligence on purchases where risk factors may be present**

# RESULTS | IMPACT

Through a partnership with Skytec, International Paper developed ForSite®, an innovative mapping tool used by the company’s Fiber Supply team to verify and track the fiber they source.

In 2015, Skytec and International Paper developed a tool on the Esri platform to identify potential risks in procurement and implement specific best management practices for higher risk harvests. What started as a pilot project in the Southeastern United States grew to encompass procurement and harvesting of timber across North America. The result is International Paper’s ForSite® tool for ensuring that fiber-based products are sustainably sourced.

As a system, ForSite® guides responsible fiber procurement for IP on non-certified forestland in the U.S. It ensures conservation approaches, similar to those practiced on third-party certified lands, are incorporated into forest management and harvest practices on non-certified land.

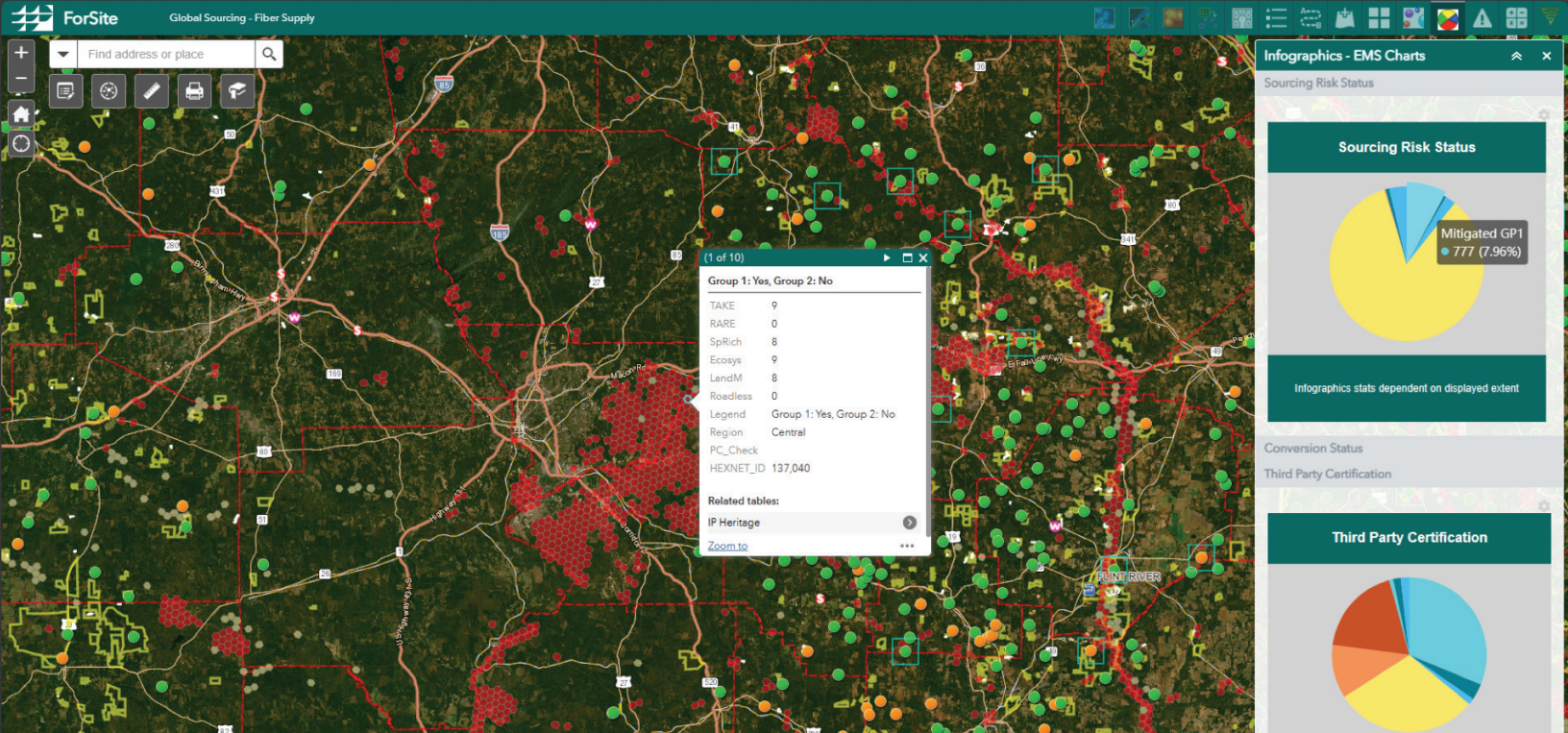


Figure 1: ForSite® application is used to assess fiber procurement risks. Here purchases are screened against a biodiversity and priority ecological systems model. Certification status is viewed on dynamic charts on the right panel.

# SUPPLY CHAIN VERIFICATION

ForSite® uses GIS technology to display and organize spatial data — critical information the Fiber Supply Team uses to make informed decisions before fiber enters the supply chain.

## **SKYTEC DEVELOPED FORSITE® COLLABORATIVELY WITH THE INTERNATIONAL PAPER SUSTAINABILITY AND FIBER PROCUREMENT TEAMS TO SUPPORT THE COMPANY'S SUSTAINABILITY GOALS.**

Skytec mapped areas of biodiversity and high ecological value through collaboration with NatureServe and multiple state-level Natural Heritage Program offices. Next this information was combined with a dynamic database of fiber procurement purchases, where it can be analyzed for sourcing risk, due diligence and best management practices requirements.

ForSite® has changed IP's procurement strategy. Now every non-certified tract is screened through ForSite® before purchase to determine if further due diligence is required before accepting timber from that tract.

ForSite® data includes an array of environmental and spatial attributes, including:

- Rare, threatened and endangered species
- Priority forest types and landscapes
- Soil types, topography and hydrology

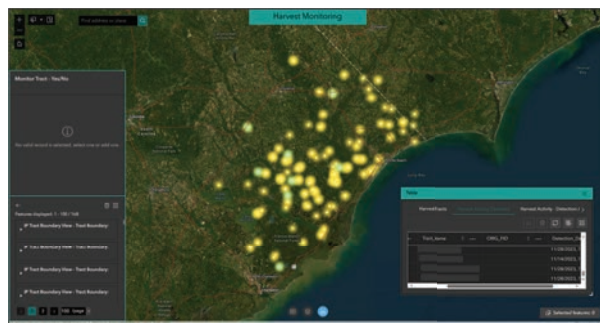


Figure 2: View of a harvest monitoring dashboard showing location of weekly activity updates.

In 2021, Skytec began integration and testing of satellite remote monitoring technologies in ForSite®. By combining Skytec's remote monitoring technology, Ranger™ with ForSite®, the fiber procurement team was able to review satellite imagery updated weekly for harvest change activity monitoring. This high frequency monitoring approach supported timber security, sustainability and general fiber procurement processes with an industry leading awareness.

# FIBER PROCUREMENT FOCUS

International Paper is committed to responsible and transparent fiber procurement. ForSite® builds on that commitment to ensure fiber procurement activities do not compromise the environmental values of forests.

---



**A FIBER SUPPLY TEAM OF MORE THAN 200 PROFESSIONALS WORK TOGETHER TO ENSURE FIBER IS RESPONSIBLY SOURCED.**



**AS A MAPPING TOOL, FORSITE® EXEMPLIFIES TRANSPARENCY, RISK MITIGATION AND TARGETED COLLABORATION.**

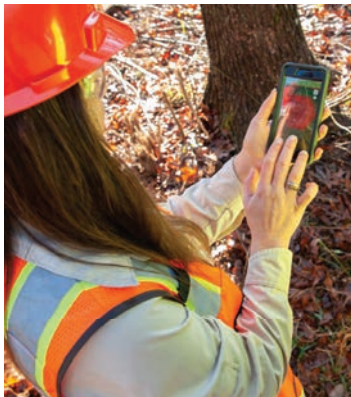


**IP USES THIRD-PARTY CERTIFICATION SYSTEMS, INCLUDING THE FOREST STEWARDSHIP COUNCIL, PROGRAMME FOR THE ENDORSEMENT OF FOREST CERTIFICATION AND SUSTAINABLE FORESTRY INITIATIVE.**

# IMPACT

## **FORSITE® AT WORK:DUE DILIGENCE**

Using ForSite®, the International Paper team worked with fiber suppliers in South Carolina to create wildlife corridors to maintain ecosystems that are home to white-tailed deer, wild turkeys and numerous species of birds, reptiles and amphibians.



***“SKYTEC HAS BEEN AN INVALUABLE PARTNER SINCE THE START OF INTERNATIONAL PAPER’S MAPPING JOURNEY. THE IDEA AND CREATION OF FORSITE’S® ENVIRONMENTAL LAYER (I.E., THE HEXNET) WAS THE CRITICAL FIRST STEP FOR US TO THEN DEVELOP RISK-BASED OPERATIONAL CONTROLS AND PROCEDURES ACROSS OUR SUPPLY CHAIN. WITHOUT SKYTEC AND THEIR INNOVATION/IDEAS, WE SIMPLY WOULD NOT BE IN THE LEADERSHIP POSITION OF SUPPLY CHAIN VISIBILITY THAT WE FIND OURSELVES IN TODAY.” JEREMY POIRIER, SENIOR MANAGER FIBER CERTIFICATION AND SUSTAINABILITY AT INTERNATIONAL PAPER***

## **PROTECTING A THREATENED SPECIES**

In several procurement basins, the Gopher Tortoise, a federally listed threatened species in a portion of its range was identified as a risk factor. Using ForSite®, and on the ground surveys tortoises burrow locations were located, buffered, and protected prior to the forest thinning treatment. The result was habitat improvement for the tortoise and the landowner was able to accomplish their management objectives.



Figure 3: Federally listed Gopher Tortoise is a keystone species of the longleaf pine and savannah ecological systems. Protecting its burrows and habitat are a priority for sourcing fiber in these systems.

# SPOTLIGHT ON INTERNATIONAL PAPER

Since 1898, International Paper has been one of the world's leading producers of fiber-based, renewable products, from planet-friendly packaging to absorbent pulp.

---

**250+**  
facilities operating in  
10 countries and 35 U.S. states

**48M**  
tons of new and recycled  
fiber purchased and used in 2023

**\$18.9B**  
net sales in 2023

**100M**  
boxes made per day

**21K+**  
customers worldwide

**39K+**  
employees globally

**732,000** acres of significant forestland  
conserved and restored since 2020