

Esri News for Forestry

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Mapping Forest Data Workflows

Hessen-Forst Enterprise Updates Its GIS Data Management System

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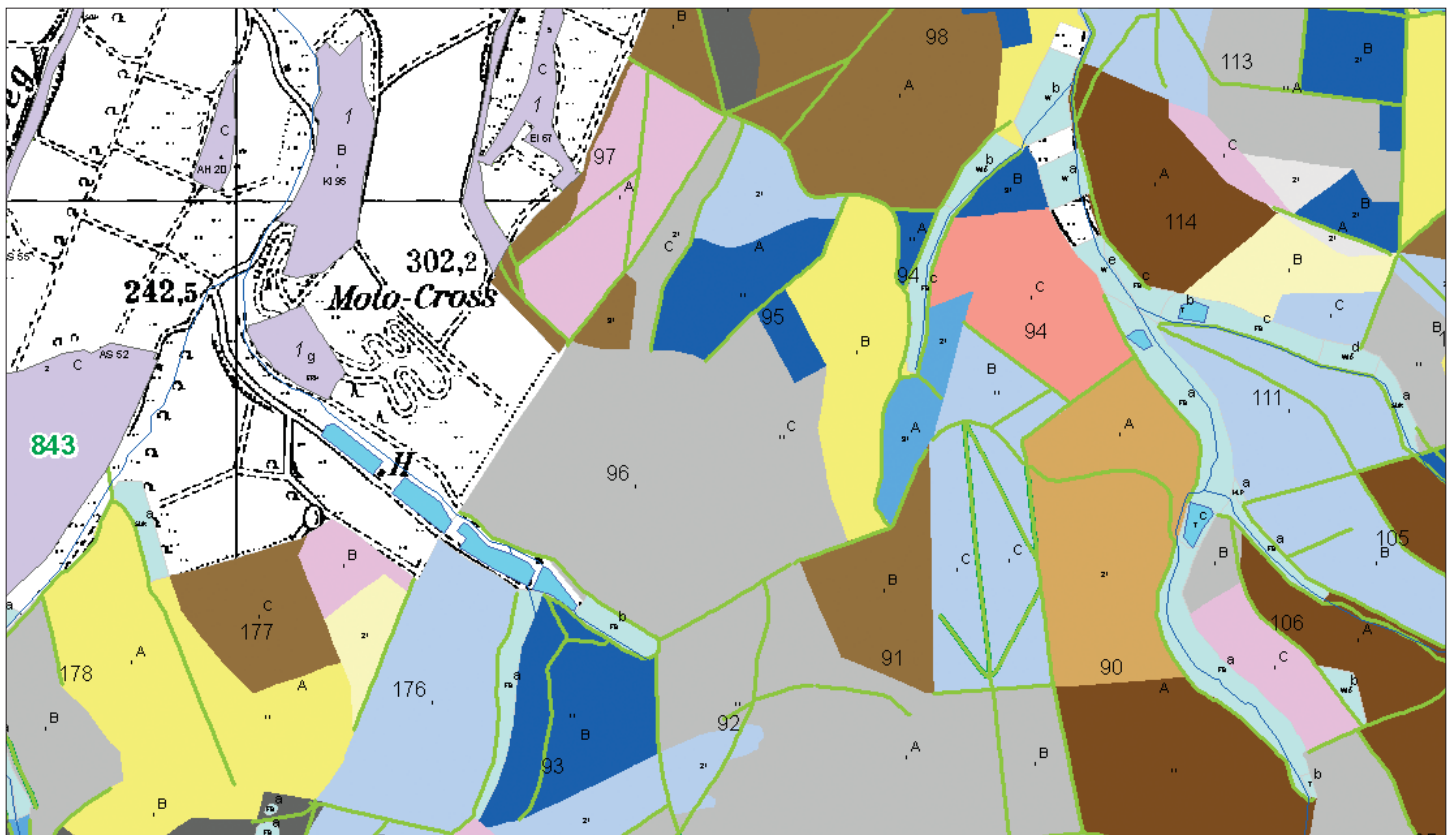
Creating maps about the volume and condition of forest stands begins with good data. A data management workflow that includes collecting, managing, handling, and provisioning forest data is integral for ensuring quality and accuracy within forestry management plans.

Hessen-Forst Enterprise is one of the largest forest organizations in western Europe. Its managers wanted to implement a workflow management system for

GIS data collection and editing processes. This would save time, reduce costs, and improve data quality. So Hessen-Forst asked Esri partner con terra GmbH to build a GIS data management workflow application specifically for its inventory processes. To do this, the GIS service company used Esri's ArcGIS Workflow Manager, an ArcGIS for Desktop extension, to customize an automated job tracking system to help users successfully

complete the organization's forest inventory processes. The workflow tools were combined with the forestry business's basic GIS tools package, FoBIS, and a data model.

Once Hessen-Forst implemented the solution, foresters began using the GIS to guide them through processes such as updating the inventory database after a heavy storm. ArcGIS Workflow Manager tracks the status and progress of the job



↑ Foresters use a GIS job tracking program to access data, tools, and symbols for each step in building a forest inventory report.

and generates a detailed history of work activity. Its functions include job tracking, version management, multiple data warehouse support, history tracking, change detection, spatial notifications, and reporting.

To start a job, the user selects from a list of job types and job templates that outline the steps that need to be completed. The set of each job's operational parts is its workflow, which contains the steps required to complete the job. The user navigates the workflow using tools to complete the steps in the process.

For example, following the steps in a process, the user comes to a step and clicks a button to execute a smart launch of ArcMap. ArcGIS Workflow Manager sets up an environment in which the user will complete the relevant GIS and non-GIS tasks and shows an accompanying workflow diagram. When the user clicks a step on the diagram, it launches the tools and automated processes the user needs to finish the step. When done, the user

clicks the Complete button and is ready to move to the next step in the workflow.

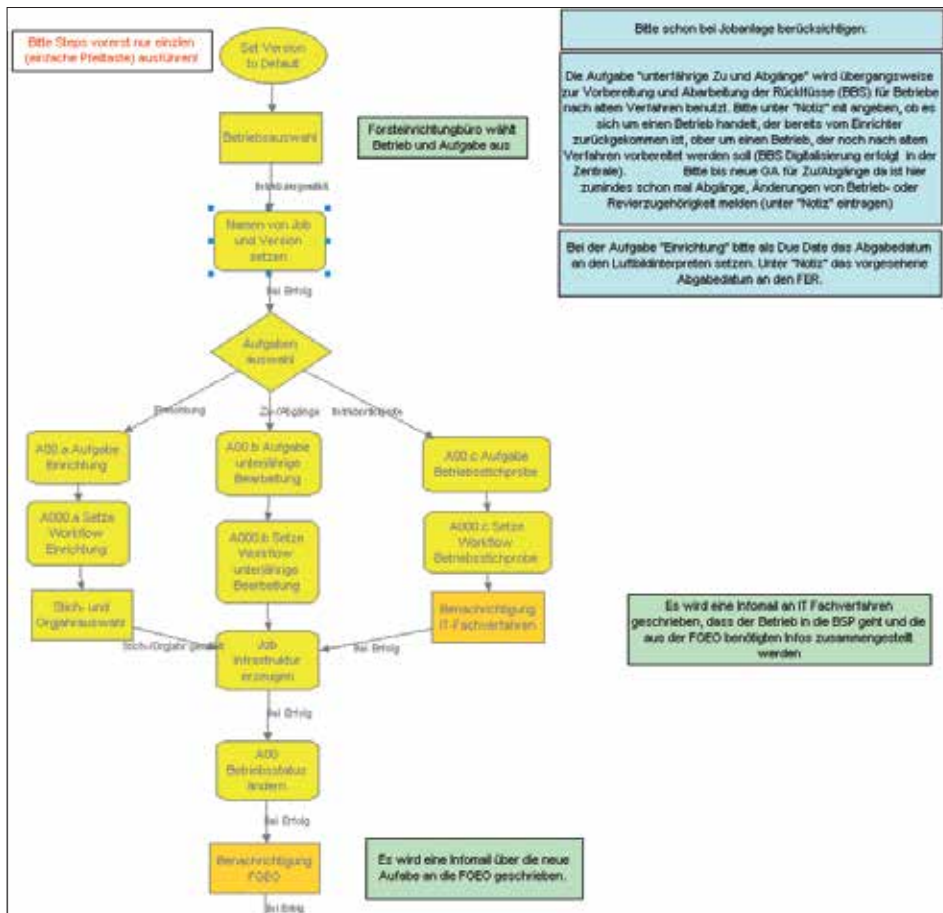
Hessen-Forst has used Esri technologies since it first began digitally managing geodata. Today, all the enterprise's sectors have access to necessary geoinformation using Esri technology. The addition of the ArcGIS extension was easy for users to adopt.

"Because employees are already familiar with core ArcGIS technology, the solution is extremely easy for them to use," said Wolfgang Fischer, head of GIS development at Hessen-Forst. "ArcGIS Workflow Manager enables us to map all inventory processes. It also makes us aware of work processes we need to add as well as those that are no longer necessary. The entire process is documented and transparent."

Hessen-Forst recently launched its next-generation GIS, ForstGIS_NG. Because it too has been built on ArcGIS, staff can continue to use ArcGIS Workflow Manager. Hessen-Forst has expanded its applications of GIS work processes to

perform additional inventories, map storm damage, study forest conditions and surrounding infrastructure, identify suitable areas for industrial timber production, and more. GIS helps the enterprise's forest managers make informed decisions and meet goals for sustainable forest management.

Esri Deutschland GmbH and con terra developed FoBIS. Learn more by visiting the ArcGIS Workflow Manager page at esri.com or contacting Martin Stöcker at m.stoecker@conterra.de, or visit esri.com and search on *ArcGIS Workflow Manager*.



↑ ArcGIS Workflow Manager shows the necessary steps to manage the forest inventory including data management and update.



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