

Interior Alaska (Tanana Valley) Timber Inventory Update - Phase 2

FY2008 Request: \$250,000
Reference No: AMD41417

AP/AL: Appropriation

Project Type: Planning

Category: Natural Resources

Location: Fairbanks Areawide

Contact: Nico Bus

House District: Fairbanks Areawide

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Estimated Project Dates: 07/01/2007 - 06/30/2009

Brief Summary and Statement of Need:

This would complete the update of the Tanana Valley inventory. The current inventory is seriously out-of-date due to changes in land ownership, changes in forest cover following the huge 2004-2005 wildfires, and the prior lack of ortho-rectified imagery to assure that timber volume data is accurately matched with vegetation classes.

Funding:	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	Total
Gen Fund	\$250,000						\$250,000
Total:	\$250,000	\$0	\$0	\$0	\$0	\$0	\$250,000

<input type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input checked="" type="checkbox"/> Phased - underway	<input type="checkbox"/> On-Going
0% = Minimum State Match % Required		<input checked="" type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill	

Operating & Maintenance Costs:

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	0
Totals:	0	0

Additional Information / Prior Funding History:

An appropriation for \$250.0 was received in SLA06/CH82.

Project Description/Justification:

Several factors render the existing inventory inaccurate. First, the 2004 and 2005 fire seasons burned over 11 million acres in interior Alaska, including large areas in the Tanana Valley, particularly in the Tok and Delta areas. The existing inventory overestimates available timber in these areas. Second, many changes in land status have occurred since the 1980s. The ownership of large areas that had dual state and Native selections has now been settled, some state land has been granted to municipalities, and other land was involved in resolution of Mental Health and University land trust entitlements. A recent analysis of Tanana Valley State Forest lands and forestry classified lands in the Tanana Basin shows that as much as 16 percent of the land base inventoried in the original inventory effort is no longer state land, was reclassified, or has been reconfigured. Third, the accuracy of the original inventory was limited by technological challenges in ortho-rectifying aerial photography to match ground plot data, and by the resolution of the imagery available. Technological advancements in recent decades have resolved these problems; image resolution now available is 16 times greater than the photography used in the previous inventory. Lastly, forests change over time as new stands are established, and existing stands age and die.

DNR is actively proceeding with Phase 1 of the inventory update. New aerial photography and some additional satellite images have been purchased. Additional fieldwork is needed, with a special emphasis on the hardwood timber resources. Once this data is processed and interpreted, a new forest inventory report can be prepared and published. This information will be the basis for updating the allowable cut levels and identifying management opportunities. In the absence of better information, and given uncertainties about the cumulative effects of fires, land status changes, and technological inaccuracies, DNR would have to make very conservative assumptions about the sustained yield and allowable cut on state land to meet out statutory mandate to manage for sustained yield, and our mission to develop, conserve, and enhance state forest resources.

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DNR has been working with the Fairbanks Economic Development Corporation and Tanana Chiefs Conference, Inc. to summarize and disseminate information on timber resources in the Tanana Valley and stimulate new value-added processing businesses. This initiative is called: "New Growth, Prospectus for the Forest Products Industry, Interior Alaska". It has resulted in multiple inquiries about timber supply to support new processing facilities. Potential investors require more detailed and more accurate inventory information before committing to new projects. A solid inventory is the road map to the location, species, quantity, and quality of timber resources. Without this information, it is very difficult to obtain capital to establish or expand businesses.

While this project would not produce direct revenue for the state, it lays the foundation for our future timber sale program in Interior Alaska. Over the past three fiscal years, total volume sold and revenue to the state has increased on a year-to-year basis. The timber sale program has supported local mills and allied business throughout the state and a steady, consistent supply of logs is an essential component for success.

As mandated by law, a sustained yield flow of timber products is required off state land. This "yield" changes as the forest changes and periodic updates must be made to the forest inventory to ensure this number is accurate and defensible in the event of litigation or appeals that challenge timber harvesting programs. A proactive forest management program is more efficient and cost effective than a reactive program, and solid forest inventory information provides the foundation for a proactive program.

There is an opportunity to leverage state funds with some private sector money if the New Growth Prospectus continues to achieve positive results. A number of current private sector project partners are interested in the birch and aspen forest resources in the Interior but the lack of specific inventory data that is statistically significant is hampering the project. These companies may be willing to fund a portion of an inventory project that would look at these hardwood resources in the required detail. To make an investment decision, information like this is required to conduct a feasibility study and assumptions about log volumes directly affect the scale of an operation.

The project does not transfer responsibility to the local or private sector.

Project costs were calculated using acreage and volume data from the 2004 Alaska Fires, Burned Area Emergency Stabilization and Rehabilitation Plan. An interagency group that included the Division of Forestry (DOF) completed this document in October 2004. Cost data was obtained from project files at DOF for similar types of work and activities and were updated by knowledgeable forestry staff.

Several alternatives to accomplish this work were examined. By coordinating with work on other projects, such as the fuels mapping project in the Fairbanks area, we are reducing costs to acquire and rectify satellite imagery. However, it would take us many years to partially update the forest inventory vegetation type maps solely as a by-product of this effort. Development of a common base map that can be used for both fire and resource management projects is a high priority and will be continued, but a focused inventory effort is needed to complete the project in a timely manner.

The scope of this project is very large, and current staffing and funding levels in the resource management program can only address a small portion of the work suggested by this CIP request. Staff members with the required expertise are fully committed to core Division functions. It may be possible to contract for this work with the private sector, but having staff knowledgeable and trained in this discipline is desirable.

This is not a life, health, or safety issue nor is there any direct linkage to the operating budget. Several non-permanent positions may be created to complete aspects of the project, such as some of the data collection, mapping, and geographic information system (GIS) work.

Why is this Project Needed Now: Interest in new timber processing facilities is growing. Our ability to respond to prospective investors is hampered by inaccurate information. The extensive fires in 2004-5, changes in land status, and changes in inventory technology render the current data out-of-date. Without accurate inventory data, DNR must use very conservative estimates of available volume to avoid harvesting beyond sustained yield levels.

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Specific Spending Detail:

	Personal Services 100	Travel 200	Services 300	Comm. 400	Capital 500	Total
Forest Inventory Project						
Forester I, R-14, 6 months	30,000					\$30,000
Field Crew, Forest Techs II-IV, 8 months	130,000					\$130,000
Travel, per diem and field work		10,000				\$10,000
Aerial Photography/Satellite Imagery			40,000			\$40,000
Field supplies, flagging, maps				2,000		\$2,000
Helicopter time, agency		25,000				\$25,000
Hardware, computer workstation, software					13,000	\$13,000
Total	\$160,000	\$35,000	\$40,000	\$2,000	\$13,000	\$250,000

Project Support:

Local timber industry
 Fairbanks North Star Borough
 Fairbanks Economic Development Corporation
 Environmental Community
 Tanana Chiefs Conference, Inc.
 Doyon, Ltd. (Regional Native Corporation)
 Various Village Corporations in the Tanana Basin
 Chamber of Commerce