

- ▶ SALVAGING UNDERWATER
TIMBER IN THE PANAMA CANAL 1
- ▶ CAN THIS FINANCIAL
ASSISTANCE PROGRAM HELP
YOUR COMPANY? 2
- ▶ BIOMASS ENERGY UPDATE 3
- ▶ BECK LOG PROCUREMENT
SYSTEM UPDATE 4

Forest Products News from . . . **The Beck Group**

"If all economists were laid end to end, they would not reach a conclusion"

George Bernard Shaw

SALVAGING UNDERWATER TIMBER IN THE PANAMA CANAL

Timber isn't the first thing that comes to mind when one thinks of the "Panama Canal", but this fall Beck staff learned there is a direct connection. BECK has been involved with Ardan International Group (AG), a Panamanian company that has been extracting and processing hardwood timber that was submerged nearly one hundred years ago during the construction of the Panama Canal.

As part of the construction of the Panama Canal, a dam was built on the Chagres River to create a new lake that would serve as a portion of the shipping channel. In order to create the lake, vast areas of tropical forest were flooded during the early 1900s. Outside of the main channel, the hardwood timber in the forests was not cut before being flooded. As a result, most of Lake Gatun still contains thousands of hectares of standing, submerged, old growth tropical timber, most of it not visible, unlike the two lone trees shown in the photo to the right.

While the canal was under U.S. control, the trees were left standing because they were viewed as a natural navigational defense mechanism for the canal. Since control over the canal was transferred to Panama in 1999, the government has become very interested in taking advantage of the submerged timber resource for economic development. The timber removal will also decrease the lake's navigation hazards and increase potential real estate development on the vast shoreline.



AG acquired the timber concessions to most of the lake, and in 2007, completed a pilot study that helped to determine the volume, species composition, cutting process, transporting methods, milling and quality of timber in the lake. (If you think timber cruising on land is challenging, you should try it under water). The method for cutting the timber is to use a commercial diver and a hydraulic power chainsaw. The hydraulic fluid used for the chainsaw is essentially vegetable oil, a precaution so as not to harm the lake or fish. A pontoon boat is used to aid the divers as they cut the trees (as shown in the photograph to the left).

The Beck Group performed due diligence on the conclusions of the pilot study. One of our main concerns going into the project was the quality of lumber that could be sawn from timber that has been submerged for over 100 years. Based on our own inspection and feedback from customers during the year long pilot study, AG has shown that the hardwood lumber produced from the submerged timber is of exceptional quality. (See the photograph on page 2)

(Continued on page 2)

Can This Financial Assistance Program Help Your Company?

The U.S. Department of Commerce offers the Trade Adjustment Assistance program. It is a program designed to provide financial assistance to U.S. manufacturing firms that have been harmed by imported products. The program is run through eleven regional centers located throughout the continental U.S. The goal is to help “import-impacted” manufacturers change their businesses “to better compete” by using consultants to identify and implement specific tasks to achieve improved performance.

Substantial financial assistance (up to 50% of the budgeted project cost) is offered for outside consultants or industry-specific experts who can help a firm and ultimately an industry “strengthen operations and sharpen competitiveness”. The type of assistance provided can be customized on a case-by-case basis and can apply to a variety of projects, including marketing, information technology, manufacturing, engineering, and quality assurance.

The actual level and type of assistance provided depends on a variety of factors, including:

- The size of the firm
- The nature of the proposed project(s)
- Availability of program funds.

Several of our recent clients have used this program, so if you think your company might be eligible, we would be happy to work with you in contacting the center and assisting in the application process. Please contact us for more information.

THE BECK GROUP

Ph: 503 684-3406 Fax: 503 639-0784

www.beckgroupconsulting.com

Staff

Tom Beck — President

tomb@beckgroupconsulting.com

Bill Mitchell — Vice President

billm@beckgroupconsulting.com

Bryan Beck — Senior Consultant

bryanb@beckgroupconsulting.com

Roy Anderson — Senior Consultant

roya@beckgroupconsulting.com

Mario Angel — Consultant

marioa@beckgroupconsulting.com

Jon Thomas — Consultant

jont@beckgroupconsulting.com

Dan Mak — Consultant

danm@beckgroupconsulting.com

Lindy Alexander — Office Manager

info@beckgroupconsulting.com

Associate

Darrell Wheelock —

Project Manager/Designer

info@beckgroupconsulting.com

Happy Holidays

SALVAGING UNDERWATER TIMBER IN THE PANAMA CANAL

(Continued from page 1)



AG's parent company, Gunderboom of Anchorage, Alaska, has been involved with underwater salvage operations for years and helped establish safe procedures for harvesting the submerged logs. Divers descend to the lake bottom, locate a tree, and attach an air bag to the stem so that after it is severed, it floats to the surface. The floating logs are then towed to the shore where they are skidded from the lake for bucking and milling. For more information about the project and to view a video of the timber extraction process, visit www.ardaninternational.com.

Over 30 different wood species have been extracted, processed and sold worldwide, including a number of high value species such as cocobolo, ipe, mahogany and teak. In addition, a significant volume of softer, lower value hardwoods (espave) have been processed and sold locally. Given the success of the pilot project, Ardan International Group is seeking funding to ramp up production. If you would like more information about this unique project, please contact The Beck Group. If you would like to learn how BECK can complete due diligence work for your situation, please give us a call.

BECK Projects Update

BECK staffers have been busy completing a variety of industry projects, several of which are highlighted here. A few more are under development

Recently Completed

Panama Submerged Timber Extraction Due Diligence – Beck recently completed an in-depth analysis of the operating and business plan of Ardan International Group as part of an international development bank's due diligence process (see lead article on Page 1 for details). We have completed several studies this year relating to due diligence for potential acquisitions.

Strategic Planning in SE Alaska – Beck has completed a report assisting wood products manufacturers in SE Alaska with planning how to best utilize expected increased harvests of second growth timber. The research included assessments of the requirements at sawmills to efficiently process smaller logs, necessary changes in logging operations, and potential new products and bio-energy businesses that can utilize second growth timber. Special thanks to The Nature Conservancy for funding this project.

Sawmill Operational Assessments – In recent months, BECK staff have completed two operational assessment/mill audits at large Southern Pine sawmills. Even though both mills were highly optimized, well-run operations, BECK was able to identify a few **no cost/low cost opportunities**. These were primarily refinements in operating practices, but the financial impact of minor changes can be very significant. During a mill audit, we examine all profit-sensitive variables, including log quality, bucking, sawing, drying, planing and grading, operator and machine performance, product mix, etc. A minor investment in BECK services can lead to major savings.

Western Stud Benchmarking Study – Earlier this year, BECK completed the Western Stud Competitive Assessment/Benchmarking study. This study provided participants with an accurate and ethical way of assessing the competitive position of their own operations, as well as with a window showing how other companies have reacted to the challenges facing the industry.

Plywood Plant Business Plan Assessments – BECK staff completed assessments of the business plans for two softwood plywood plants that were considering transitioning from primarily sheathing producers to specialty products. One of the plants was also considering adding a power plant that would supply the plant and also supply electricity to the grid. The studies included independent assessments of the raw material supply and markets, as well as detailed analyses of financial projections and capital improvements.

Under Development

Southern Pine Sawmill Benchmarking Study – Based on preliminary discussions with the industry, BECK is hopeful that we will have sufficient participants to support a good study of this region. We will begin recruiting sometime after the first of the year. If you would like more information or have suggestions as to how we could make the comparison even more useful to you, please let us know.

Biomass Energy Update

Beck continues to be active in the biomass energy arena. We are involved in two cogeneration studies – one being a biomass fuel study in the Northwest in which we are not only identifying the volume of mill residues, urban wood waste, and logging residues, but also identifying the volume consumed by other existing biomass facilities in the region. The second study involves a Southern Pine sawmill that is in the process of negotiating a power purchase agreement with the local electric utility as part of developing cogeneration on their site.

Sawmills have been able to get tax benefits by producing and *selling* electrical power for several years. It may not have been obvious to many of you that if power was generated and *used internally*, these tax benefits did not apply. Currently proposed Federal legislation would change that policy so that companies producing biomass energy could use the electricity in-house and also receive the tax benefit. In addition, the new administration is working on legislation that would benefit alternative energy producers, including those who utilize woody biomass. If you have considered cogeneration and want to know if it is a feasible option, please give us a call.



13500 S.W. 72nd Avenue
Suite 250
Portland, OR 97223-8013

PRESORTED STANDARD
U.S. POSTAGE
PAID
PORTLAND, OR
PERMIT NO. 4308

If you would like to receive our newsletter by e-mail, please contact us at info@beckgroupconsulting.com with your name, company and e-mail address. We will be happy to send you our newsletters in Acrobat Reader (.pdf) format.

BECK Log Procurement System Update

As many of you may know, The Beck Group develops customized log procurement systems. For each system, we build a computer-based model that allows log buyers to calculate how much they can afford to pay for a timber sale, deck of logs, or gatewood. This determination is based on the mill's actual recovery and manufacturing cost, as well as market prices. A number of our clients have found the models useful for determining key log specifications, identifying the most profitable log type/size for the mill, and establishing log purchase prices.

The data in our model comes from actual log tests – batches of logs are processed through the mill and the volume and value of the lumber and by-products produced is measured, in addition to the manufacturing time (and therefore cost) to produce the lumber. Historically, we have supplied our model with data solely from log tests rather than simulations because, in our experience, log tests are more accurate. The downside of using log test data is that we must assume in our model that the product mix from a given log type will not change. In reality, sawing solutions and, therefore, the product mix may vary over time with changes in lumber markets. Thus, if the product mix is changed materially, the data in the model can become obsolete and require new log tests.

In order to address this issue (and in recognition of improvements in technology), we have been working with key equipment manufacturers to utilize their optimized log scanning and simulation data. In other words, we now use both simulation data and log test data in our models. By integrating actual log tests and optimized solutions, our models can now be easily updated to reflect changes in lumber prices affecting product mix, sawmill productivity, and recovery. Using this approach, our clients can have the best of both worlds – accurate lumber grade and volume estimates and the flexibility to easily model varying sawing solutions.

Give us a call to learn more about our procurement systems and the advances we are making.