



CLIENTS | PEOPLE | PERFORMANCE

SUSTAINABLE FOREST MANAGEMENT



GHD IS AN INTERNATIONAL PROFESSIONAL SERVICES COMPANY. OUR PEOPLE DELIVER INNOVATIVE SOLUTIONS BY COMBINING TECHNICAL SKILL AND EXPERIENCE WITH AN UNDERSTANDING OF OUR CLIENTS' OBJECTIVES AND ASPIRATIONS.

GHD has extensive experience in the planning and management of both plantation estates and native forests. This includes permit applications, budgeting, establishment plans, establishment management, forest maintenance, fire control, timber inventory, harvesting and roads supervision.

OUR CAPABILITY

GHD provides consultancy services for large industrial plantation growers, international pulp and paper corporations, managed investment schemes, government authorities, NGO's and private forest owners.

FOREST PLANNING

Project reviews, industry assessments, due diligence research, independent forestry services, property management plans, operational planning, development and permit applications, and budgeting.

FOREST ESTABLISHMENT

Property Establishment Plans, planting design, mapping and GIS, project management of establishments contracts, quality assurance and auditing.

FOREST MANAGEMENT

Forest health monitoring and the implementation of biological control programmes, fauna and flora surveys, pest assessment and control, weed assessments and control, water quality and water and nutrient balance assessments, and forest access management.

FOREST INVENTORY

Establishment survival and quality assurance audits, growth assessments, permanent sample plot establishment and monitoring, MARVL inventories and data processing, native forest inventories, harvest yield planning, yield predictions, estate evaluation and wood flow analysis.

FOREST HARVEST MANAGEMENT

The preparation of harvest plans, coupe design and control, timber marketing, harvest system reviews, harvest management and supervision and harvest auditing.

Harvest road planning, harvest road construction management and ongoing maintenance supervision.

BUSH FIRE MANAGEMENT

Bush Fire management planning, landscape zonation for bush fire planning, fire trail location and standards, fuel hazard assessments, fire prevention program management, and spatially based risk assessment processes.



Fire salvage



Environmental protection



Remote forest inspection



SUSTAINABLE CARBON BIO-SEQUESTRATION

Land suitability assessments, project reviews, species suitability and capability assessments, establishment audits, maintenance audits, and carbon monitoring.

OUR EXPERIENCE

GHD services a range of clients in Australia and overseas. Our experience includes:

INDEPENDENT FORESTER

GHD acts as the Independent Forester for Great Southern for their Sustainable Pulpwood Project and the High Value Timber Project. In this role GHD undertakes due diligence research, prepares Independent Forester statements, reviews properties acquired for the projects, conducts annual inspections of plantations and prepares annual reports for investors.

PROJECT REVIEW

This project involved a review of a proposal to re-vegetate a number of properties in the Hunter Valley of NSW with native eucalypt plantations and biodiversity plantings. The study required the provision of establishment budgets, assessing species suitability, carbon bio-sequestration rates and project risks.

PLANTATION MANAGEMENT AND ADVICE

PROJECT MANAGEMENT PLANTATION ESTABLISHMENT

In this project GHD undertook the project management on behalf of Hume Forests Ltd for the establishment of 600 hectares of both second and first rotation softwood establishment in the Tumut and Oberon regions of NSW. This work involved the preparation of establishment plans, mapping and GIS, management of works such as debris removal, cultivation, weed control, planting and quality assurance.

ESTATE MANAGEMENT

GHD provided estate management services for the Southern Cross Forests Corporation Pty Ltd estate at Tumut and Oberon NSW until the estate was dispersed in 2005. GHD have an ongoing role as estate manager for the Templegate Forestry Trust located at Oberon and Yass, NSW. In these roles GHD has undertaken sustainable forest management of plantation health, infrastructure, and fire control planning and works management. GHD also provides harvesting management services for these forest trusts, including fire salvage harvesting facilitating insurance settlement.

SILVICULTURAL ADVICE

GHD provides silvicultural advice for Environinvest Ltd in the fields of plantation design, plantation establishment, insect monitoring, plantation management and nutrition, growth monitoring and the establishment of permanent sample plots.



Forest assesment



Establishment management



Indonesian plantation

PLANTATION INVENTORY

GHD was engaged by the Plantation Timbers Group of Mt Gambier to undertake softwood inventory of a slash pine estate located in northern NSW. The study involved volume assessment, stocking assessment, growth predictions mapping and GIS analysis.

NATIVE FOREST MANAGEMENT PLANNING

GHD has prepared a Native Forest Management Plan for Australian Hardboards Ltd's Ravensbourne property located in southeast Queensland and for the Cockatoo forest, located near Bawley Point on the southern NSW Coast. These studies involved native forest timber inventory and yield estimates and recommendations for ongoing property management of roading and snig tracks, harvest coupes and harvest loading areas, weed control and fire control.

FOREST HARVEST AUDITING

GHD has undertaken a number of auditing roles of native forest harvesting in both government and private forest estates. These studies have involved assessments of retained vegetation and compliance with harvest planning, environmental set backs, coupe boundaries and codes of practice. GHD has testified in legal proceedings involving contract breaches.

CARBON BIO-SEQUESTRATION

GHD provides an independent forestry service to Eraring Energy to review third party land acquisitions for the purpose of carbon bio-sequestration plantings. The role also includes annual assessments of planting performance.

GHD carried out an industry review of the native vegetation establishment industry in southern Western Australia and the capacity of the industry to scale up for expanded plantings for the purposes of carbon bio-sequestration.

VISITING AGENT SERVICES

GHD Forestry provides Visiting Agent services to the APRIL Group of companies throughout Indonesia, in the fields of tropical forestry plantation planning, establishment, and management as well as harvesting and transport. The role of the Visiting Agent is to periodically review management performance against budgets and plans and report to the President of the Company with recommendations that will improve the performance of the Company. The Visiting Agent also advises and mentors Estate and Department Managers within the Company.

BUSH FIRE MANAGEMENT

GHD has developed fire management plans for a number of Department of Defence properties.

GHD is currently assisting with the development of peat land fire management standards in Indonesia to assist with the reduction of carbon omissions.



ABOUT GHD

GHD is an international professional services company. Our people deliver innovative solutions by combining technical skill and experience with an understanding of our clients' objectives and aspirations.

With more than 6000 people in a network of 100-plus offices throughout Australia, New Zealand, Asia, the Middle East, the Americas and Europe, we serve clients in the global market sectors of infrastructure, mining and industry, defence, property and buildings and the environment.

Central to our clients' prosperity and GHD's success are forward-thinking engineers, architects, planners, scientists, drafters, project managers, economists and supporting staff. Our people embrace the core values that have sustained the company since inception – **Teamwork, Respect and Integrity.**

Established in 1928, GHD is ranked as one of the world's leading engineering, architecture and consultancy firms. We are dedicated to our clients and their stakeholders, to being a responsible corporate citizen and to improving the quality of life around the world.

We contribute to the goals of sustainable development and are committed to managing the social, economic and environmental impacts of our operations and assisting our clients to manage theirs in the provision of our technical consulting services. We recognise innovation as the key to realising this objective.

As a member of the World Business Council for Sustainable Development (WBCSD), GHD actively participates in the public debate on the role business has to play in managing climate change, energy, development and ecosystems.

GHD operates under a Practice Quality Management System that is certified to AS/NZS ISO 9001:2000 and our Environmental Management System (EMS) is accredited to international standard ISO 14001 by NATA Certification Services International (NCSI).

For more information, visit www.ghd.com.au



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