

Watershed Management in NPC: An Overview on Managing the Caliraya-Lumot Watershed

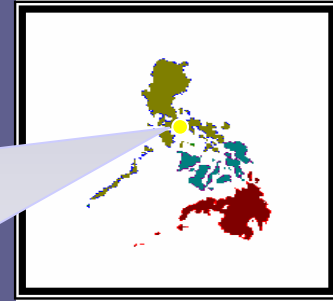
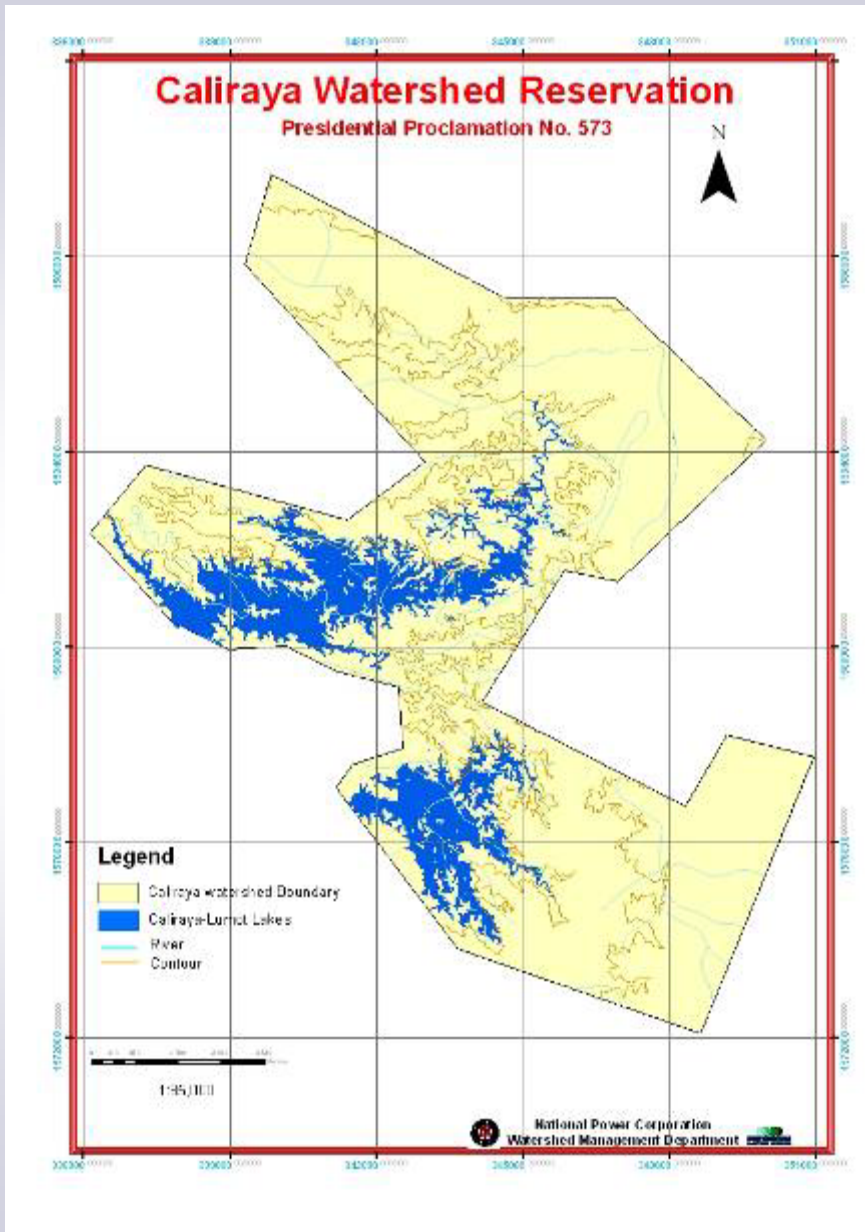
A presentation to the participants of the "Second Thematic Workshop on
Water Rights and Allocation"

KPSPP, Kalayaan, Laguna
June 7, 2006



Harnessing Power from the Watersheds

Caliraya-Lumot Watershed Reservation



- Pres. Proc. No. 573
- Covers parcels of land in the Municipalities of **Lumban**, **Kalayaan** and **Cavinti** in Laguna comprising of **10** brgys
- Total area of **10,770** has.
- Supports **KPSPP** and **CHEP (700 MW)**
- **Ecotourism** destination
- Source of **livelihood**

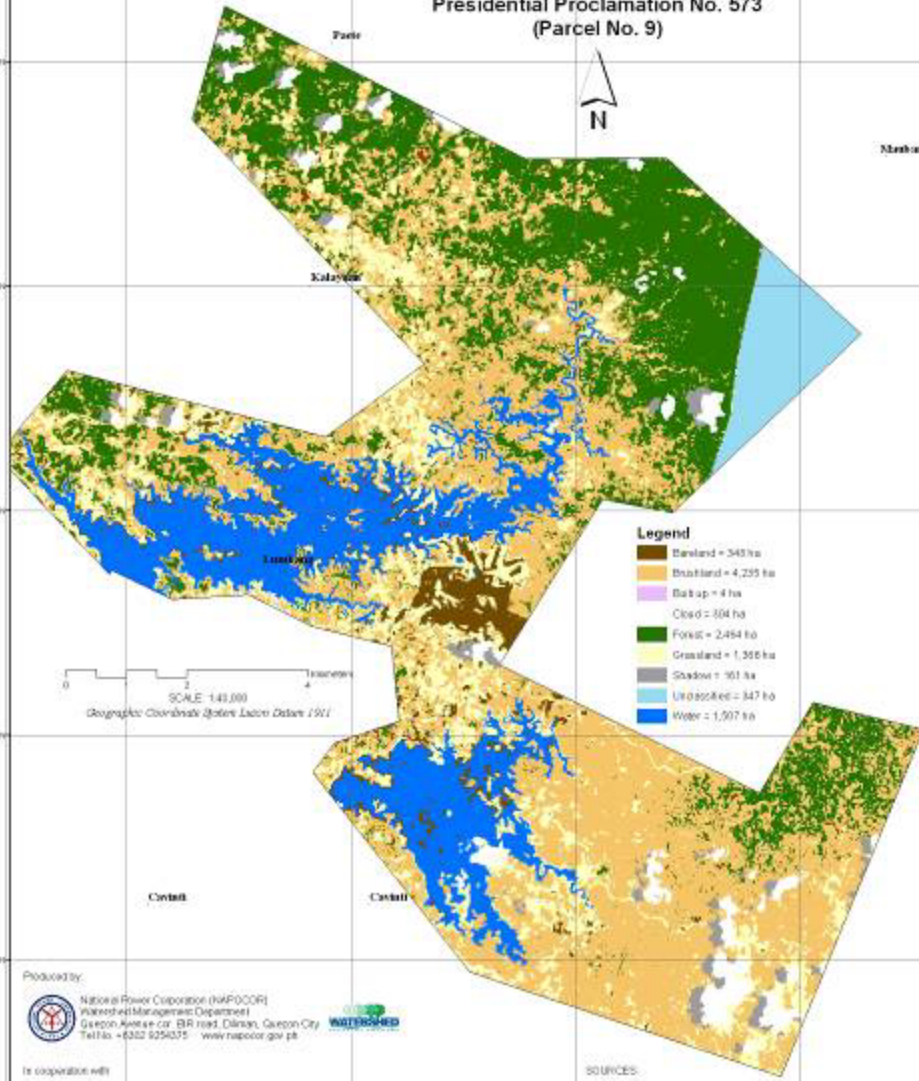
Premises and Legal Basis

- **Pres. Proc. No. 573 (1969)**: Established the Caliraya-Lumot River Forest Reserve and withdrew the same from sale and settlement and set aside as permanent forest reserve.
- **Republic Act No. 6395 Sec. 2n (1971)**: Authorizes NPC to exercise complete jurisdiction and control over watersheds surrounding the reservoirs of power plants and power projects.
- **Pres. Proc. No. 1579 (1976)**: Excluded from the operation of Proc. No 573 an aggregate area of 1,351 hectares within Caliraya-Lumot Forest Reserve and declaring the same open for disposition for agricultural purposes under the Public Land Act and subject to R.A. 1273 and P.D. 705.
- **Executive Order No. 224 (1987)**: Vested NPC the complete jurisdiction, control and regulation over watershed areas and reservations supporting power generating plants and properties.



LAND COVER MAP OF CALIRAYA-LUMOT WATERSHED

LAGUNA, PHILIPPINES
Presidential Proclamation No. 573
(Parcel No. 9)



- Completely **devoid** of old-growth forest
- Caters to the **only pumped-storage** power plants in the country
- **Most pressure-laden** watershed in terms of land-use conversion and development

Produced by:



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ASTER images, April 25, 2001, September 8, 2002 and August 21, 2003

Technical Documentation of National Power Corporation,
Watershed Reservation

Note:
Areas not based on available data.
Discrepancies are subject to future computerized data and processing software.

Concerns in CLWR

- Patches of open and eroded areas
- Illegal activities
 - Charcoal-making
 - Kaingin
 - Carabao Logging
- Illegal occupancy and development activities

WMD Interventions

- **Watershed Rehabilitation Program**
 - Reforestation projects
 - Regular tree planting activities with various groups
 - Arrangement with private sectors (MOA with Couples for Christ)
- **Watershed Protection and Conservation Program**
 - Regular patrolling and enforcement of forestry laws
 - Community-Based Forest Protection (Bantay Watershed Task Force)
 - Active participation in MMT
- **Various Institutional Arrangement**
 - Agreement with DENR (Issuance of NPC clearance)
 - MOA with LGU's and other Government Agencies
 - Covenant with CLWR stakeholders (CLWEC)
- **Awareness and Livelihood Program**

Watershed Management Programs

COMPONENT	STRATEGIES	PARTNERS OF NPC
Watershed Rehabilitation	<ul style="list-style-type: none"> ■ Reforestation ■ Agroforestry ■ Greenbelt establishment 	DENR, LGUs, Resort Owners, NGOs
Watershed Protection	<ul style="list-style-type: none"> ■ Enforcement of Forest Laws ■ Multi-sectoral Protection Council ■ Occupancy Mgt ■ Information, Education, Communication 	Military, LGUs, Resort Owners, DENR
Lake Use and Safety (Transport, Recreation, Economic opportunities)	<ul style="list-style-type: none"> ■ Regulation of lake use ■ Creation of Lake Patrol Group ■ Formation of sectoral organizations 	Resort Owners, DENR, Military, LGUs, Resource users

Watershed Management Programs

COMPONENT	STRATEGIES	PARTNERS OF NPC
Environmental Enhancement	<ul style="list-style-type: none"> ■ Water yield quality monitoring ■ Compliance to environmental guidelines on waste mgt 	Resort Owners, LGUs, CBKPCL
Water Management	<ul style="list-style-type: none"> ■ Hydromet station establishment ■ Ground water use analysis ■ Water use regulation 	CBKPCL, NWRB
Land Use Management	<ul style="list-style-type: none"> ■ Updating and implementation of Master Plan and Land Use Zones ■ Conduct watershed capability assessment and researches 	Resort Owners, LGUs, Academe, Research institutions, NGOs
Community Development	<ul style="list-style-type: none"> ■ Creation of livelihood opportunities ■ Capacity building and skills enhancement 	LGUs, LGAs, Resort owners, CBKPCL