

WATERSHED MANAGEMENT

Investments and Financing Mechanisms in
Forest Environmental Services

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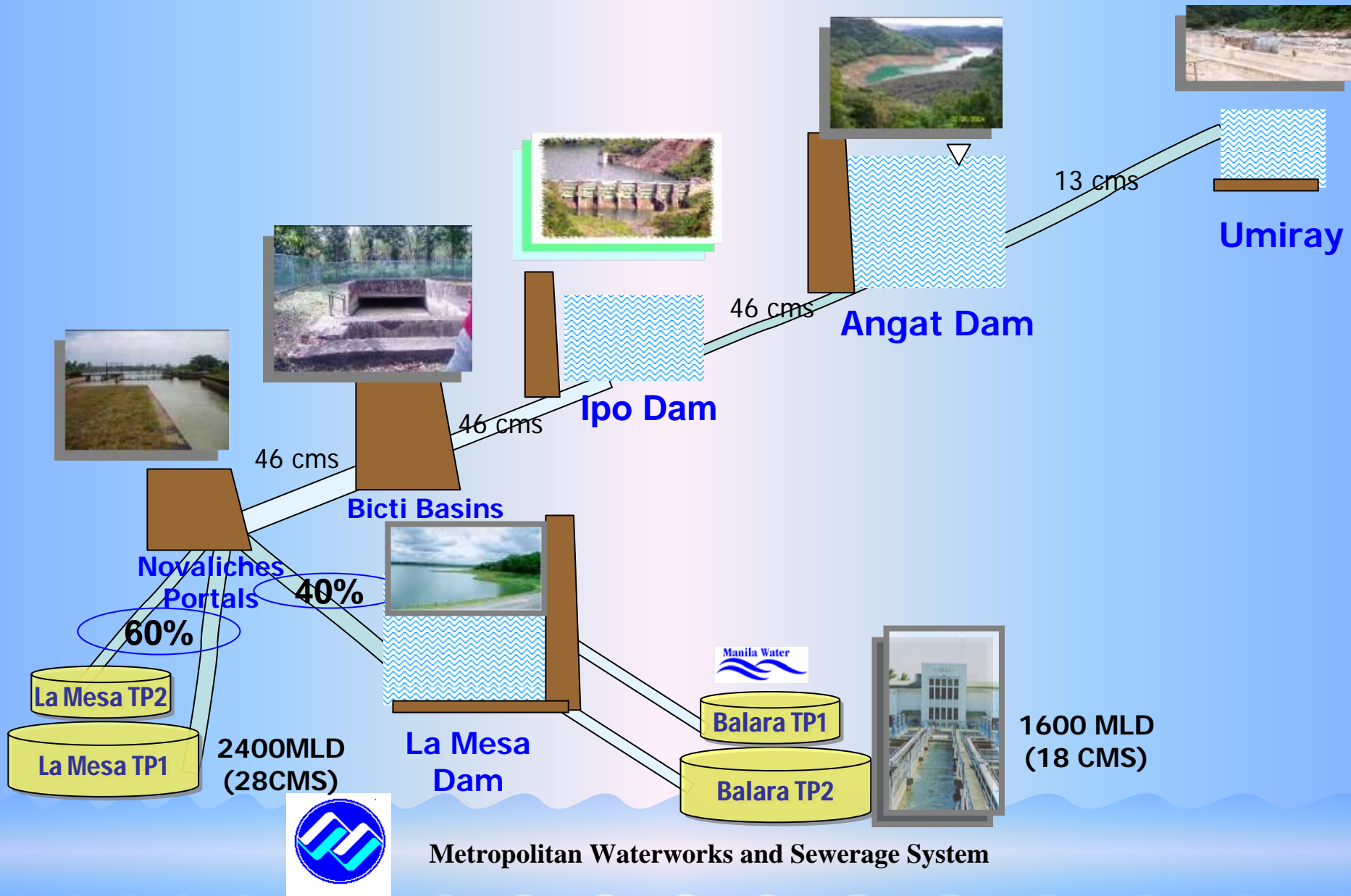
Metropolitan Waterworks and Sewerage System

Outline

- Critical Watersheds
- Common Problems
- Impacts
- Strategy
- Framework
- La Mesa Watershed
- Ipo Watershed
- Moving Forward



MWSS Raw Water Flow Diagram



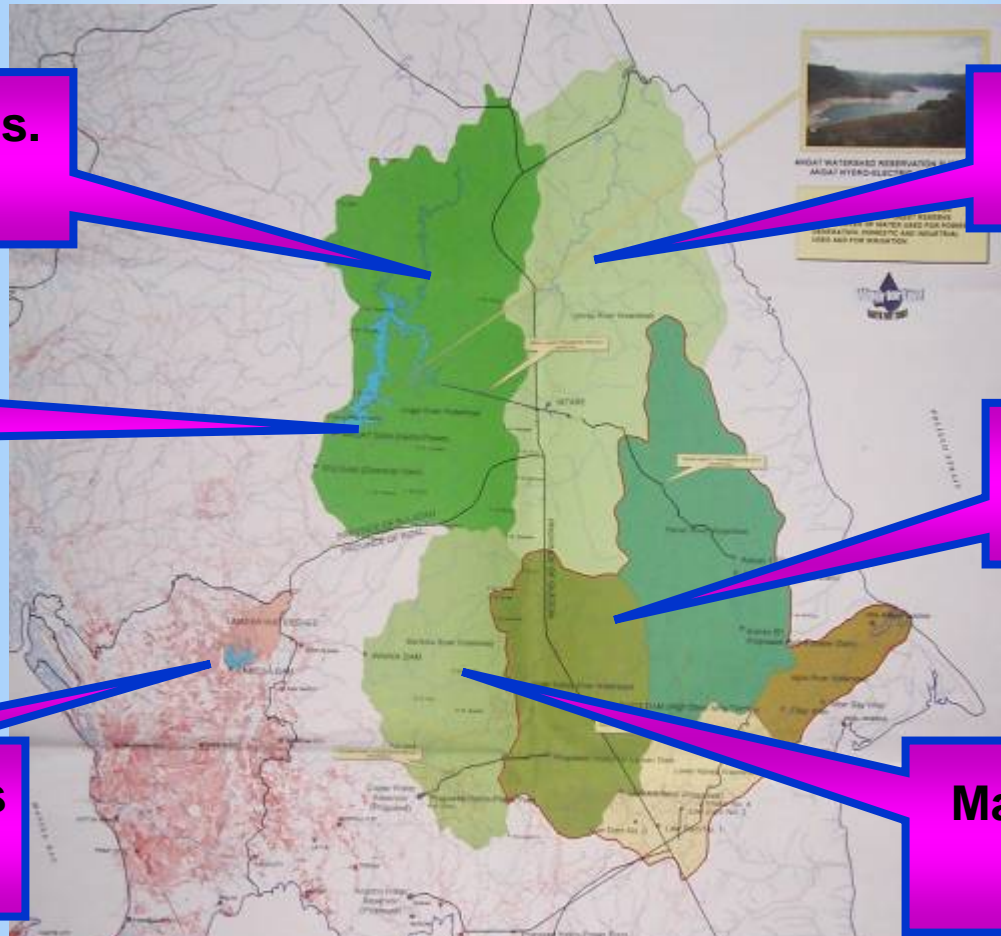
CRITICAL WATERSHEDS

Watershed	Area (Has)	Est. Area of Deforestation
Umiray	80,400	16,080
Angat	56,400	11,280
Ipo	6,600	4,620
La Mesa	2,600	130
Marikina	19,000	15,200
Laguna		



Based from unconfirmed reports
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CRITICAL WATERSHEDS



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ISSUES & CONCERNS

- Kaingin (Slash and Burn)
- Illegal Poaching
- Influx of settlers
- Encroachment of Communities
- Illegal harvesting of forest products
- Overlapping policies and guide
- Funding



IMPACTS

- Global warming
- Water quality problems
- Decreased inflow
- Soil erosion
- Sedimentation
- Flooding
- Damaged to lives and properties



MAJOR CHALLENGES

- Relationship building with stakeholders
- Watershed importance awareness
- Commitment by stakeholders to effectively implement comprehensive watershed management programs



FRAMEWORK

V I S I O N

To be able to manage our watersheds involving all stakeholders in a manner that is beneficial to all, contributes to global biodiversity and ensure sustainability of raw water supply

NGO

PARTNERSHIP

G
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- Water

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- Forest

- Forest Security

- Forest Structures

- Mapping/Data Base build up

Reforestation

- Structural Intervention

- Ripraping

Community Organizing

- Awareness Campaign

- Capacity Building

- Livelihood

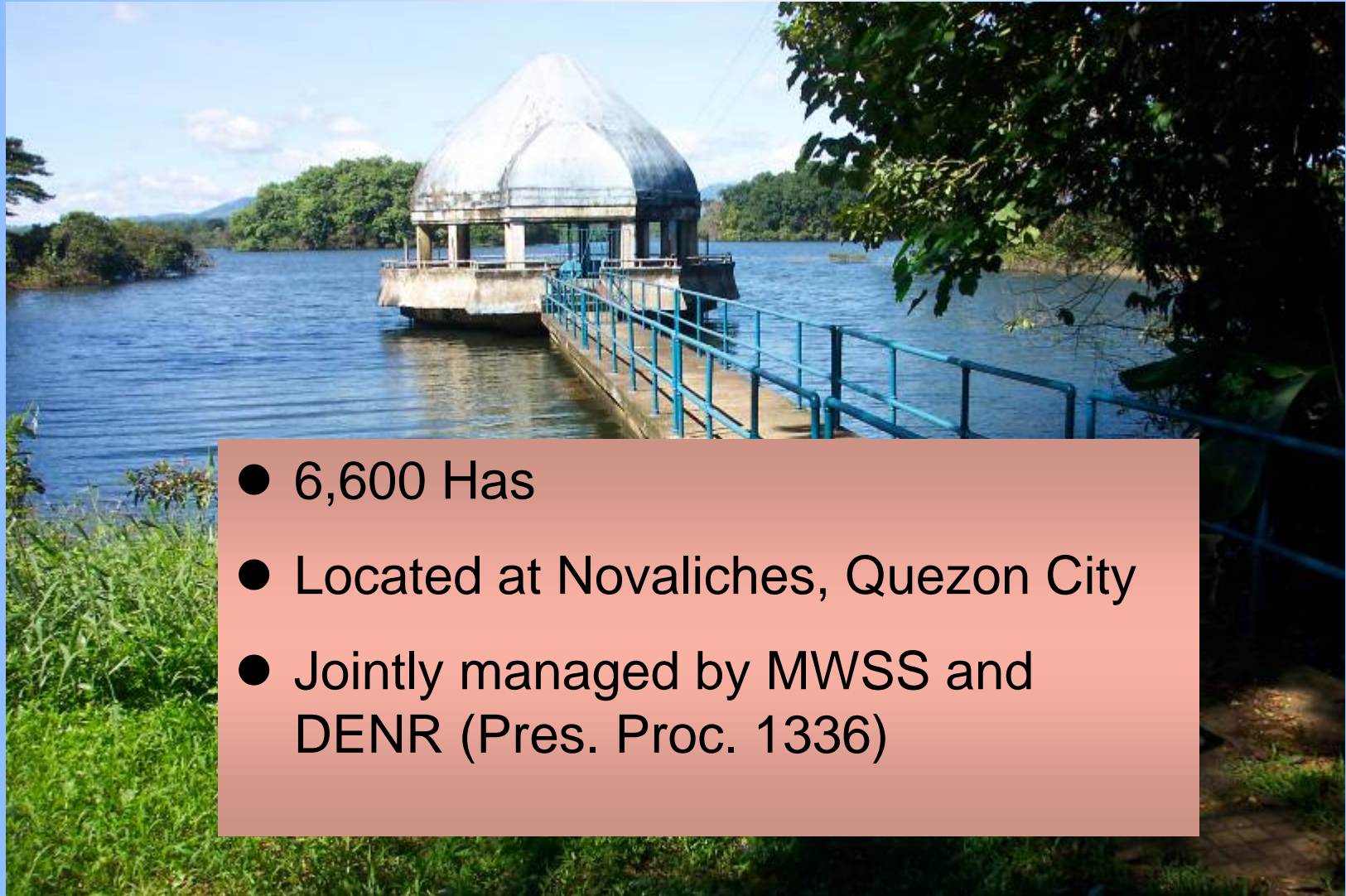
- Benchmarking

Data Base updating

R&D

Acquisition of Tools and Eqpmnt.

LA MESA WATERSHED



- 6,600 Has
- Located at Novaliches, Quezon City
- Jointly managed by MWSS and DENR (Pres. Proc. 1336)



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SAVE THE LA MESA WATERSHED

- Partnership with Bantay Kalikasan, Concessionaires (MWCI& MWSI)
- Funding from donation coming from environmental and cause oriented groups
- Reforestation
- Protection
- Biodiversity (indigenous species)
- Maintenance and protection
- Education-research
- Recreation



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LA MESA WATERSHED PROJECTS

- Competent management
- Seedling production
- Nursery propagation
- Infrastructure
- 81 kinds of indigenous trees planted
- 95% survival



LA MESA WATERSHED



Model Watershed Area of the Philippines



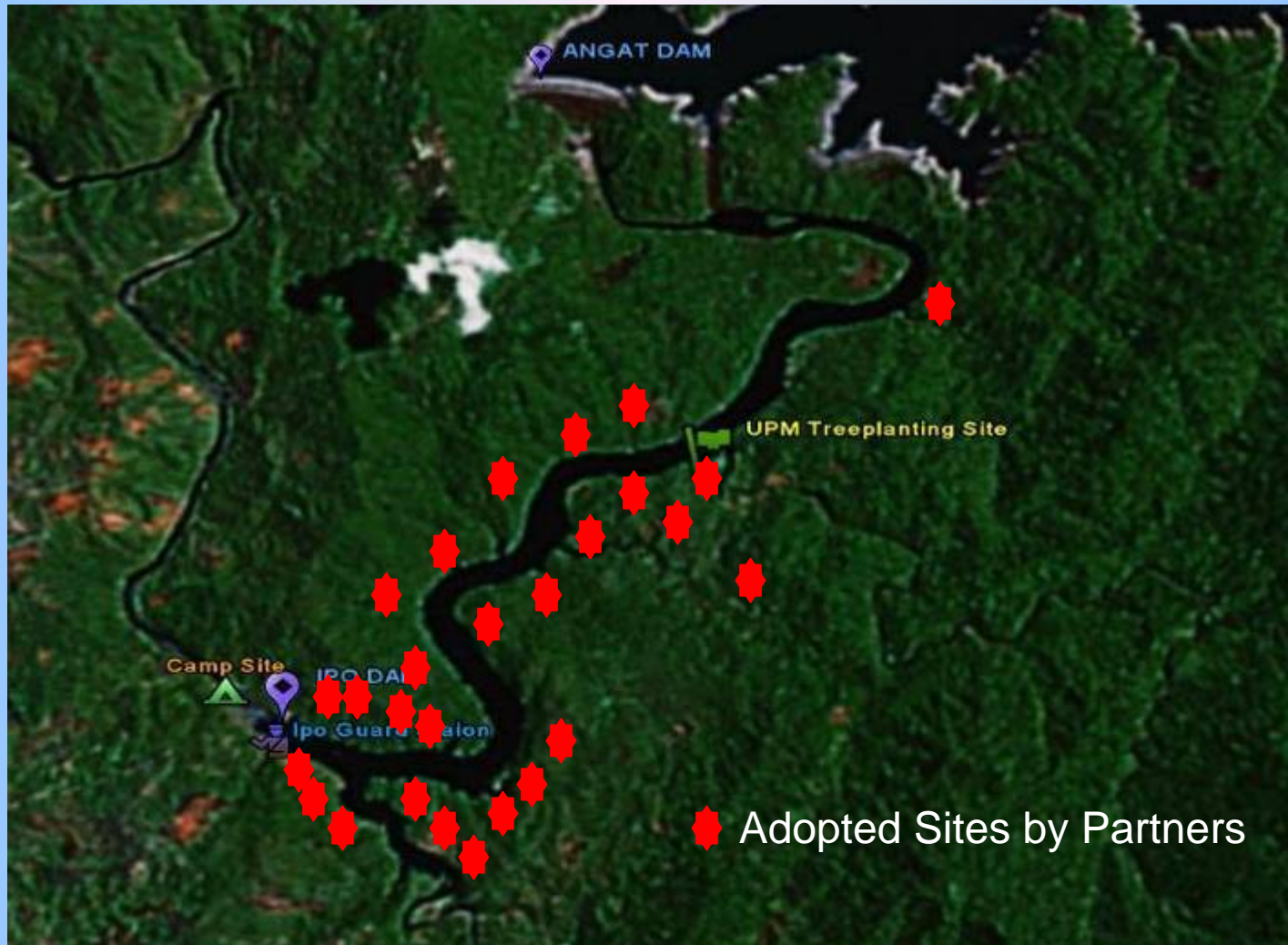
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IPO WATERSHED

- Located at Norzagaray & San Jose del Monte, Bulacan and Montalban, Rizal
- Co-Managed by MWSS & DENR (Pres. Proc. 391)
- With Amendments
 - * Proclamation 1636 (2,923 Has)
 - * CADT Awarded to Dumagats (1,817 Has)
 - * CADT Area covered by Angat Pilot WFR (592 Has)
- Aprox. Area 6,600 Has.(Excl. amendment (3,677 Has)
- Forest cover-30-40%
- Estimated Inhabitants- 2,000



ADOPT-A-WATERSHED PROJECT



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ADOPT-A-WATERSHED PROJECT

1. AON (1 hectare)
2. Envirokonsult (5 hectares)
3. Waterkonsult (5 hecaters)
4. Couples for Christ , Rotary Club of New Manila (2 hectares)
5. Claret Shool (10 hectares)
6. UP Mountaineers, Rotary Club Manila South, Royal ABC, Wyatt Watson, Penshoppe, Pisay 96 (10 hectares) & affiliated groups
7. Ayala Business Club (5 hectares)
8. Green Dream Philippines, Oakwood Boys Airsoft Team (5 hectares)
9. 503rd Batallion, ARG (12 hectares)
10. Technological Institute of the Philippines
11. Tau Gamma Phi (10 hectares)
12. Green Army/Tzu Chi Foundation (10 hectares)
13. San Agustin Center for Studies (2 hectares)
14. World Bank (2 hectares)
15. Hands On Manila (5 hectares)
16. PWU (1 hectare)
17. Learning Tree Growth Center (1 hectare)
18. PWWA (5 hectares)
19. Ms. Earth Foundation (3 hectares)
20. Ms. Cathy Untalan (2 hectares)
21. SMART/PLDT (30 hectares)



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HIGHLIGHTS

- Partnership with MWSS, Concessionaires (MWCI & MWSI), NGOs, academe
- Community based
- IPs (Dumagats) as forest tenders
- Livelihood Training
- Education campaign
- 80 hectares reforested
- 80% survival



MOVING FORWARD

- Comprehensive watershed management program
- Funding and implementation by the Concessionaires
- Commissioning of SCAA for forest protection
- Prevent entry/relocate settlers
- Fence watershed areas
- Install security monitoring devices



Thank You



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