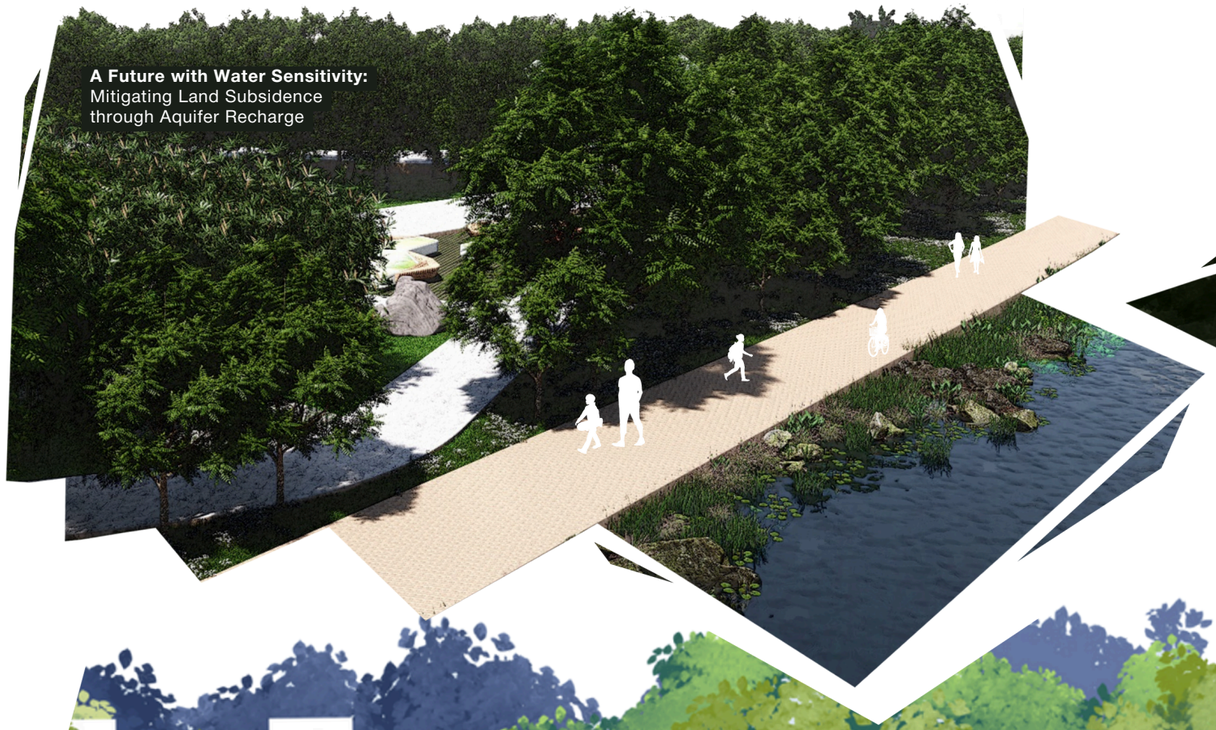








Please provide a 250-word text explaining the selection criteria used to choose the five projects representing the school in the Ribas Piera Prize. Detail the aspects evaluated, such as conceptual quality, innovation, thematic relevance, technical resolution, or any other criteria considered in the selection process with a single image, characteristic of the academic process, to accompany the text.

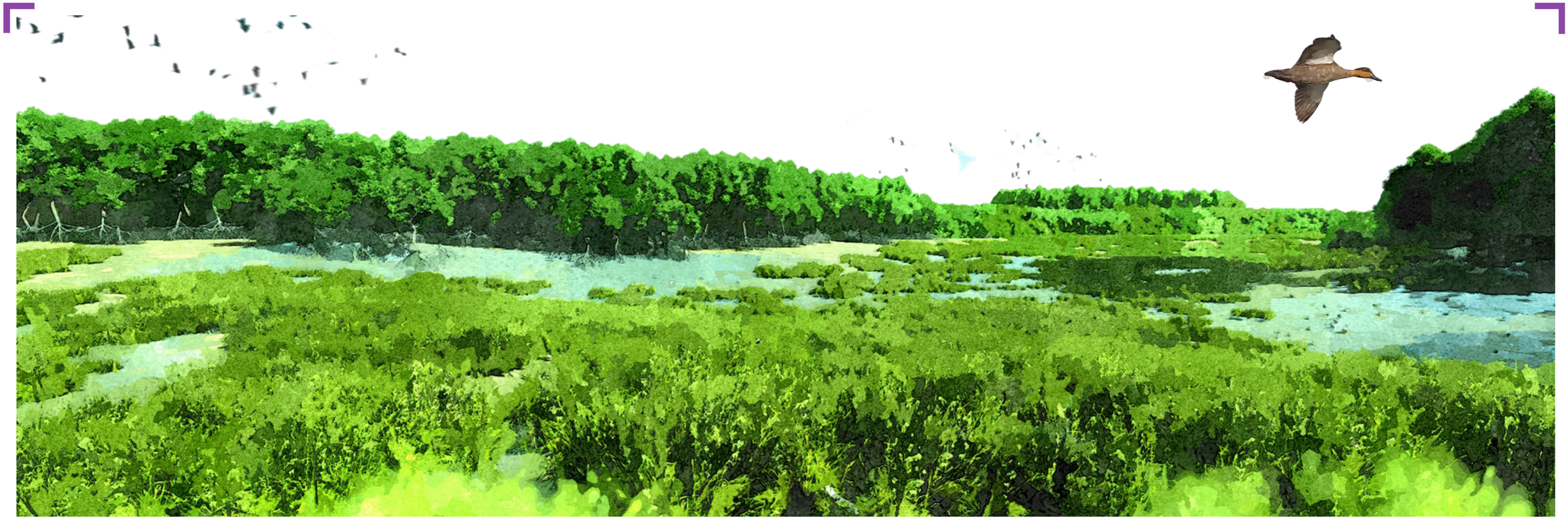
The Landscape Architecture program at the University of the Philippines College of Architecture nurtures students to become culturally aware, ethically grounded, and environmentally responsible professionals. With a growing global population facing complex local and regional challenges, the program equips future landscape architects to design meaningful and transformative solutions. Having access to evolving technologies and a wealth of academic resources, students develop proposals that reimagine the landscape and, by extension, the world.

This curated selection of student works showcases not only the potential of landscape architecture, but more significantly, the bold imagination and essential engagement of the next generation. Each project has undergone a rigorous, holistic evaluation process reflecting the program's commitment to academic excellence, creativity and contemporary relevance.

Projects were selected based on several key criteria: strength in conceptual vision, innovation, and responsiveness to cultural, social, and ecological contexts. These present imaginative design solutions that fit specific site conditions and address community needs, while also pushing the boundaries of the discipline though the use of emerging tools and climate-resilient strategies.

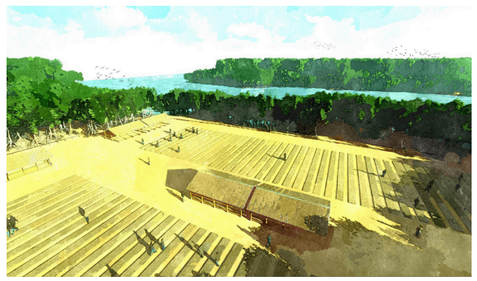
The success of any design is reliant on a strong theme. Projects must communicate a cohesive and well-developed idea evident in spatial organization, material articulation and overall user experience. Strong graphic communication, clarity of presentation style, and the ability to elicit meaningful conversation about pressing environmental issues further elevate the importance of these projects.

Together, these projects exemplify the highest standards of landscape architectural education, serving as models of forward thinking, responsible and impactful design.

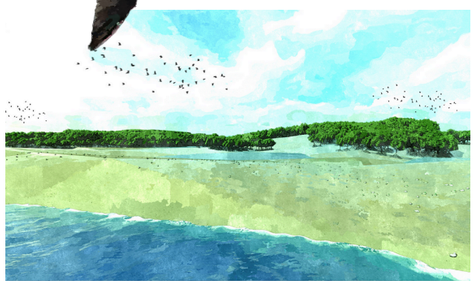


















Winged Frontiers:

Biodiversity Prioritization in a Rising Coastal Aerotropolis

Country/City	Quezon City, Philippines
University / School	University of the Philippines Diliman
Academic Year	A.Y. 2024-2025
Title of the project	Winged Frontiers: Biodiversity Prioritization in a Rising Coastal Aerotropolis
Authors	Rayco, Gilbert Matthew D.; Prof. Villa Juan, Jose Dan V.; Prof. Santos, Selena Balbino U.

TECHNICAL DOSSIER

Title of the project	Winged Frontiers: Biodiversity Prioritization in a Rising Coastal Aerotropolis
Authors	Rayco, Gilbert Matthew D.; Prof. Villa Juan, Jose Dan V.; Prof. Santos, Selena Balbino U.
Title of the course	L Arch 200: Undergraduate Thesis
Academic year	A.Y. 2024-2025
Teaching Staff	Prof. Villa Juan, Jose Dan V.; Prof. Santos, Selena Balbino U.
Department / Section / Program of belonging	Bachelor of Landscape Architecture (BLA) / Environmental Landscapes Studio Laboratory (ELSL)
University / School	University of the Philippines Diliman

13

Written statement, short description of the project in English, no more than 250 words

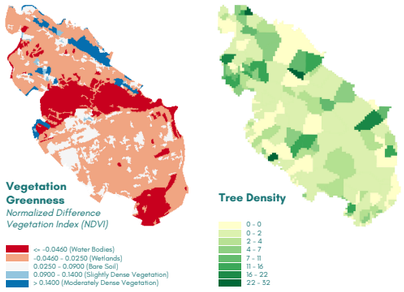
The development of the New Manila International Airport (NMIA), in the Municipality of Bulakan, Bulacan, Philippines, distended into complex dialogues of livelihood displacement, worsened pollution, and increased population among others. While these circumstances are highly significant to the elaborate lives of coastal community locals, it is equally important to consider the adverse effects of large-scale development places on the existing biodiversity, particularly the notable ecological indicators: waterbirds and mangroves. Environmental impact assessments have been undertaken for the airport project, yet their results still show substantial disturbances in the coastal area. With this matter in hand, this study aimed to assess the implications of the development of NMIA to the ecological indicators and implemented a comprehensive coastal aerotropolis planning approach. Ecological baseline, coastal landscape management, and risks and constraints analyses were implemented, feeding to planning scenarios. Ultimately, the most optimal scenario translated into management measures, interventions, and zoning schemes crucial to a mangrove-sensitive and waterbird-centric coastal aerotropolis. The proposed solutions favored comprehensive and multilayered coastal aerotropolis management through thorough analyses of both waterbird profile, vegetation health, habitat dynamics, concerning threats, and airport reconfiguration. This study suggests further investigation of waterbird populations, aerodrome capacity studies, and spatial adjustments for impact assessment.

Barcelona International Landscape Biennial

Contact via email:
biennaladm@coac.net

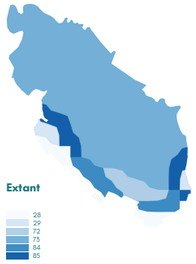
Venue:
COAC - Col·legi Oficial d'Arquitectes de Catalunya
Carrer Arcs 1-3, 08002 Barcelona - Spain

VEGETATION HEALTH (VH)



WATERBIRD PROFILE

PRESENCE

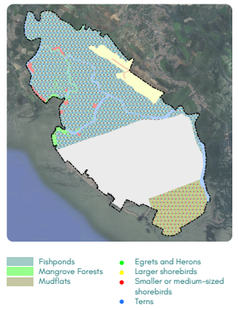




ORIGIN

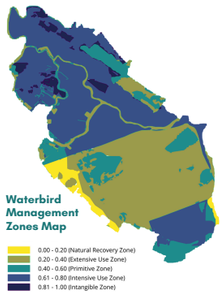


HABITAT PREFERENCE

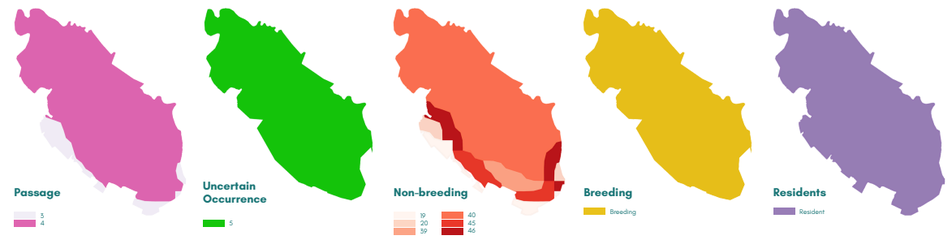


COASTAL BIODIVERSITY DATA ANALYSIS

Ecological analysis produced several layers: vegetation health (VH), waterbird presence (WP), waterbird origin (WO), waterbird habitat preference (WHP), and waterbird seasonality (WS). Through a formulated **Comprehensive Waterbird Viability Index (CWVI)**, waterbird management zones emerged to guide planning and implementations of coastal landscape strategies.



WATERBIRD SEASONALITY (WS)





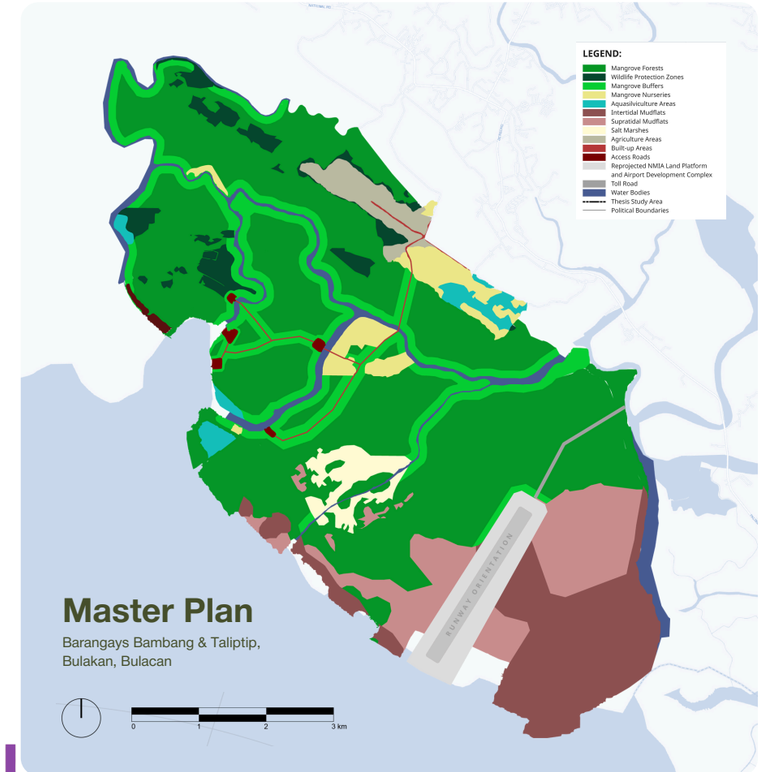
SCENARIO 1:
Status Quo (Airport-First)

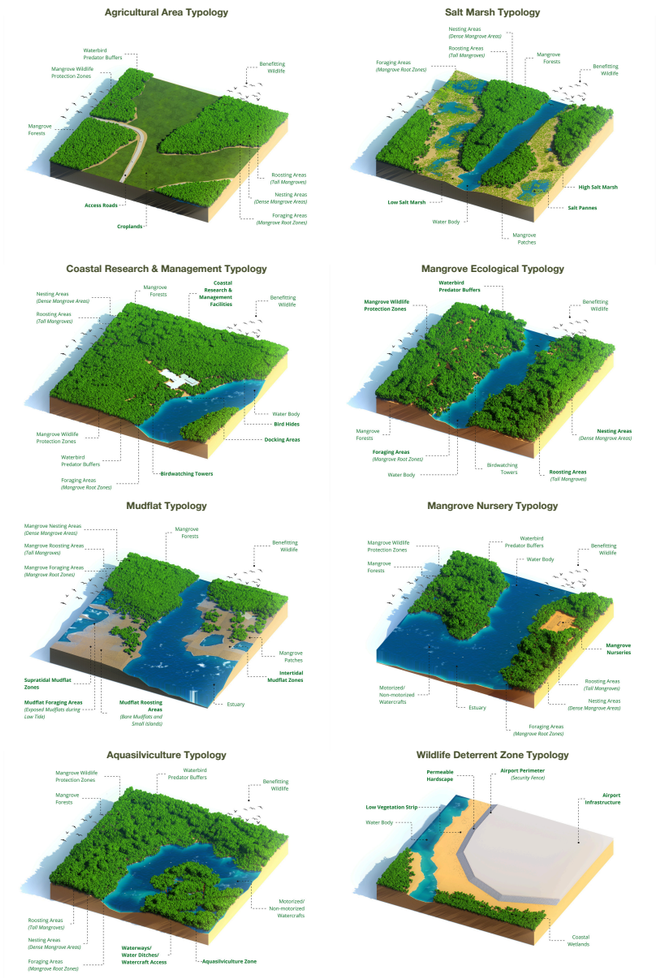
SCENARIO 2:
Balanced (Compromise)

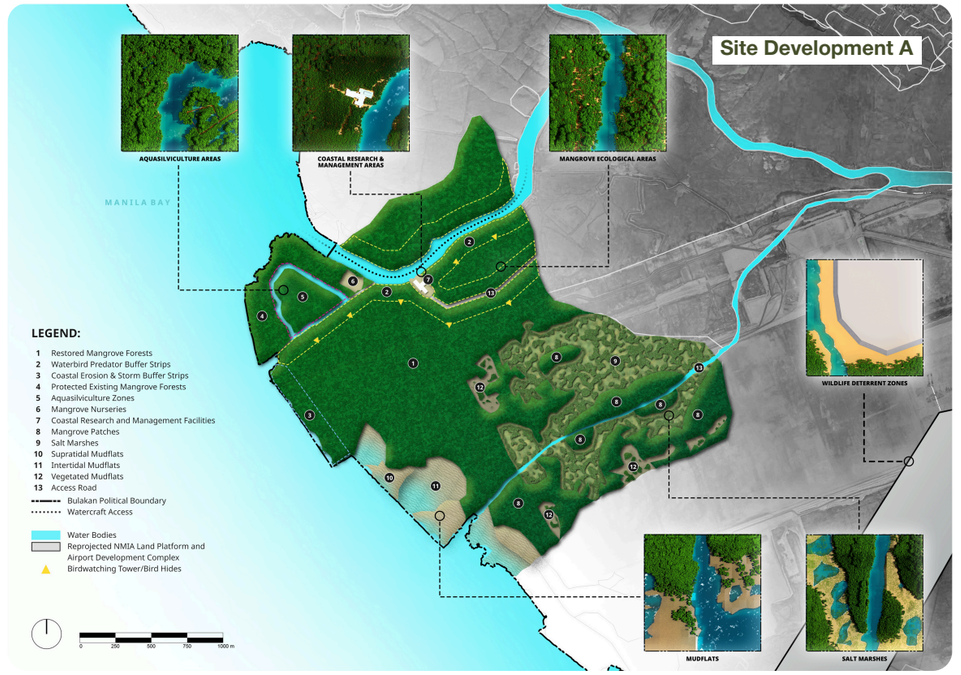
SCENARIO 3:
Rehabilitation (Nature-First)

SCENARIO ASSESSMENT

A total of three (3) coastal aerotropolis planning scenarios were formulated and proposed for the coastal landscape of Bulakan, Bulacan. Through these scenarios, a deeper understanding of the dynamics between airports and the complex structure of coastal landscapes was explored. Each scenario corresponds to varying sets of goals and challenges relevant to the study and offers different levels of strategies in addressing them.









For Foraging

- *Sonneratia alba* **Pagatpat**
- *Sonneratia caseolaris* **Pedada**
- *Avicennia spp.*
- *Nypa fruticans* **Nipa**
- *Acanthus ilicifolius* **Jeruju**
- *Rhizophora spp.*

For Nesting

- *Rhizophora apiculate* **Bakawan/Bakhaw Lalake**
- *Rhizophora mucronate* **Bakawan Babae**
- *Rhizophora stylosa* **Bakawan/Bakhaw Bato**
- *Bruguiera gymnorrhiza* **Busain/Pototan**
- *Bruguiera sexangular* **Pototan**
- *Bruguiera parviflora* **Langarai**
- *Sonneratia caseolaris* **Pedada**

For Roosting

- *Avicennia marina* **Bungalon**
- *Avicennia alba* **Bungalon Puti**
- *Ceriops tagal* **Tangal**
- *Bruguiera spp.*

GENERAL PLANTING CONCEPT: AVIAN COASTAL SANCTUARIES

The planting concept of Avian Coastal Sanctuaries focuses on creating spaces that function as safe environments for waterbirds through optimal use of local and native species. The layered and strategic zonings of planting materials employed were dependent on soil types, tidal regime, coastal configurations, waterbird preferences, and compatible species.





A Future with Water Sensitivity

Mitigating Land Subsidence through Aquifer Recharge



Country/City	Quezon City, Philippines
University / School	University of the Philippines Diliman
Academic Year	A.Y. 2024-2025
Title of the project	A Future with Water Sensitivity: Mitigating Land Subsidence through Aquifer Recharge
Authors	Obaña, Jeanne Clarisse C.; Prof. Villa Juan, Jose Dan V.; and Prof. Dul-loog, Vic L.

TECHNICAL DOSSIER

Title of the project	A Future with Water Sensitivity: Mitigating Land Subsidence through Aquifer Recharge
Authors	Obaña, Jeanne Clarisse C.; Prof. Villa Juan, Jose Dan V.; and Prof. Dul-loog, Vic L.
Title of the course	L Arch 200: Undergraduate Thesis
Academic year	A.Y. 2024-2025
Teaching Staff	Prof. Villa Juan, Jose Dan V.; Prof. Dul-loog, Vic L.
Department / Section / Program of belonging	Bachelor of Landscape Architecture (BLA) / Environmental Landscapes Studio Laboratory (ELSL)
University / School	University of the Philippines Diliman

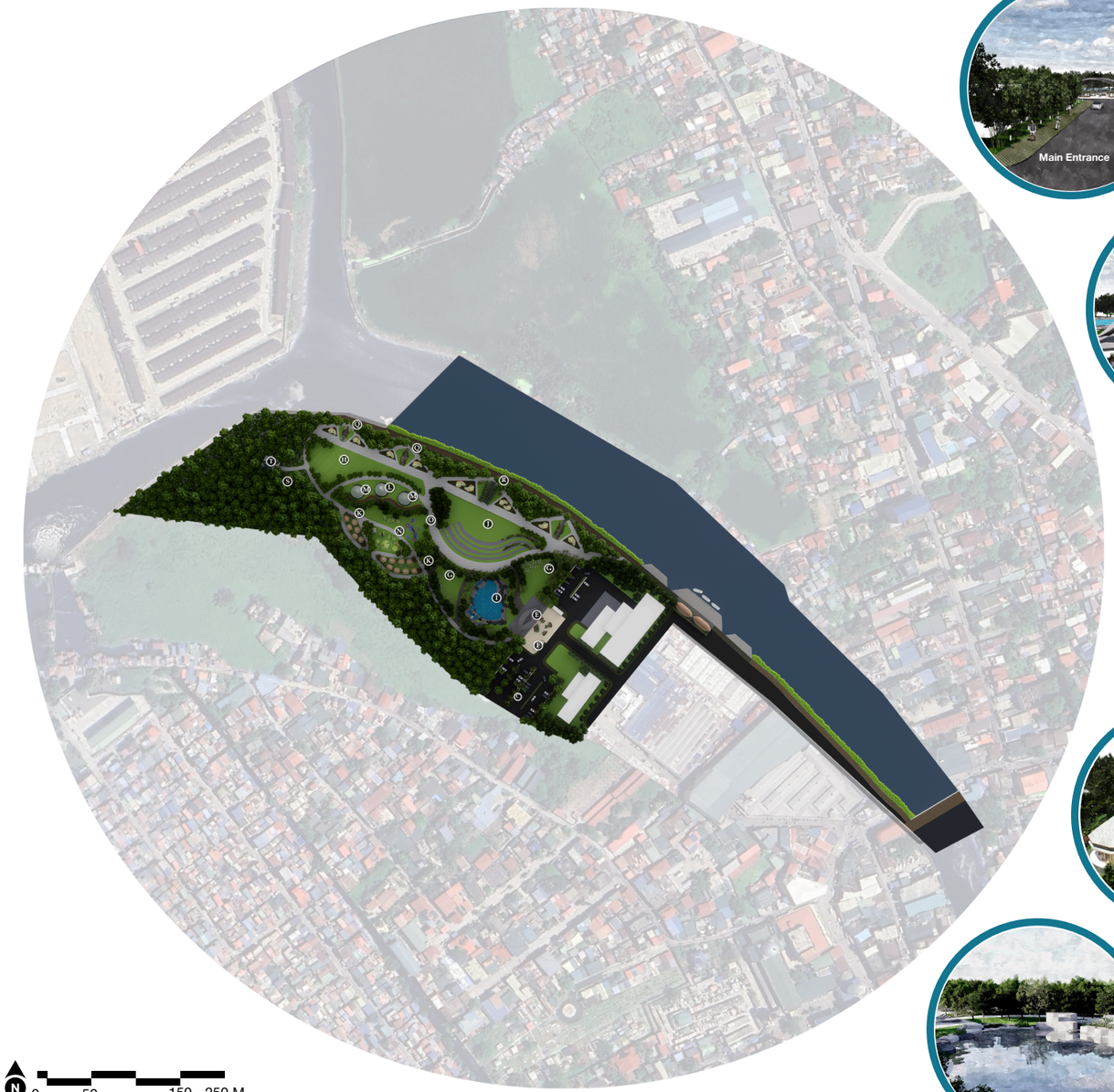
13

Written statement, short description of the project in English, no more than 250 words

In the City of Meycauayan, Bulacan, Philippines, urbanization has resulted in the expansion of built infrastructure at the expense of open green spaces. This increase in impervious surfaces threatens the natural recharge of aquifers– an essential source of groundwater. With the increasing population, the demand for water continues to rise, placing increasing pressure on the water table. Excessive and unregulated groundwater extraction endangers this critical resource, exacerbating the occurrence of land subsidence. To address these challenges, the project proposes the integration of Water-sensitive Urban Design (WSUD) strategies aimed at recharging the aquifers. By designating open spaces as strategic groundwater recharging points, the proposal seeks to recharge the groundwater table, reduce surface runoff, improve water infiltration, and ultimately mitigate land subsidence.

The primary goal of this multifunctional development is to maximize the potential of a barren land by transforming it into a dynamic public space that enhances river accessibility and a landscape demonstration of water management. This multifunctional approach aligns with Water-sensitive Urban Design (WSUD) principles by integrating a range of strategies aimed to support ecological functions while providing recreational benefits for the community. These elements, combined together, promote a balance between the functionality and social impact of the site.

MULTIFUNCTIONAL RIPARIAN ZONE SITE DEVELOPMENT PLAN





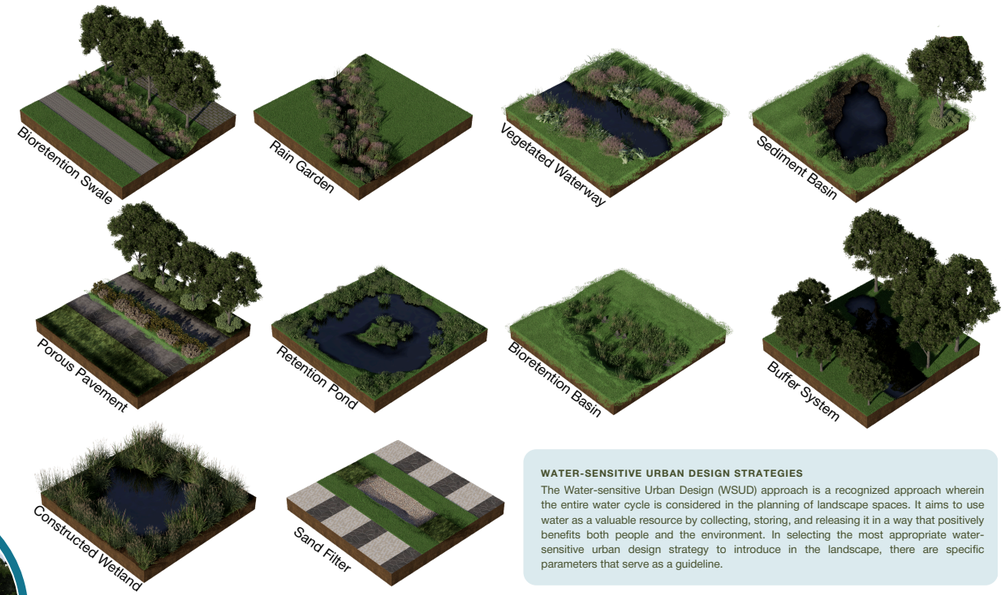




N 0 50 150 250 M

- A Main Entrance
- B Existing Market Facility
- C Parking
- D Plaza
- E Welcome Pavilion
- F Drop off / Waiting Shed
- G Sitting Area
- H Open Lawn
- I Retention Pond
- J Amphitheater
- K Gazebos
- L Water Monitoring Stations
- M Workshop Facility
- N Children's Playground
- O Adult's Playground
- P Pocket Garden
- Q Flower Garden
- R Kawayan Garden
- S Nature Trail
- T Forest Treehouse
- U Boat Dock
- V River Esplanade
- W Floating Garden
- X Meycauayan River

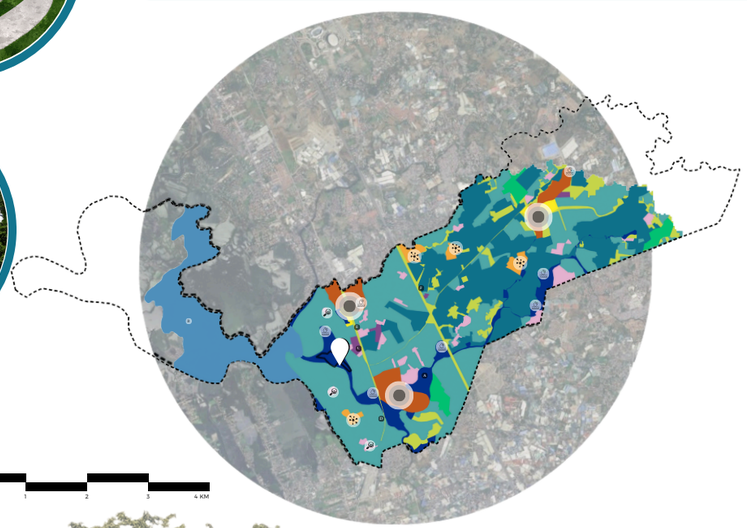
WSUD STRATEGIES



WATER-SENSITIVE URBAN DESIGN STRATEGIES

The Water-sensitive Urban Design (WSUD) approach is a recognized approach wherein the entire water cycle is considered in the planning of landscape spaces. It aims to use water as a valuable resource by collecting, storing, and releasing it in a way that positively benefits both people and the environment. In selecting the most appropriate water-sensitive urban design strategy to introduce in the landscape, there are specific parameters that serve as a guideline.

WATER-SENSITIVE MASTERPLAN OF MEYCAUAYAN, BULACAN



LEGEND

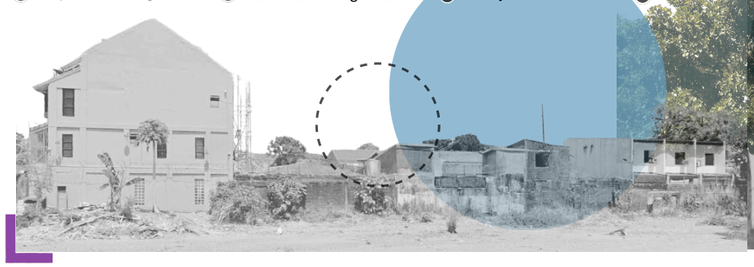
- Agro-Industrial Zone
- Fishpond Zone
- Green Corridor Zone
- Multifunctional Riparian Zone
- Recreational Zone
- Water-sensitive Commercial Zone
- Water-sensitive Institutional Zone
- Water-sensitive Industrial Zone
- Water-sensitive Residential Zone
- Major Recharge Zone
- Minor Recharge Zone
- Waterway

- WSUD Hub
- Water Monitoring Station
- Land Subsidence Monitoring Station
- Water-sensitive Park
- A Meycauayan River
- B Fishpond
- C New Meycauayan City Hall
- D Meycauayan Evacuation Center
- E North-South Commuter Railway
- F McArthur Highway

N 0 1 2 3 4 KM

WATER-SENSITIVE MASTERPLAN

The water-sensitive masterplan illustrates the proposed zoning and key markers of the proposed plan. The central aspect to this is the establishment of a water-sensitive park system, which the masterplan emphasizes by highlighting water-sensitive parks designated as critical recharge areas. These are strategically connected through green corridors and minor recharge zones, strengthening ecological and community access.



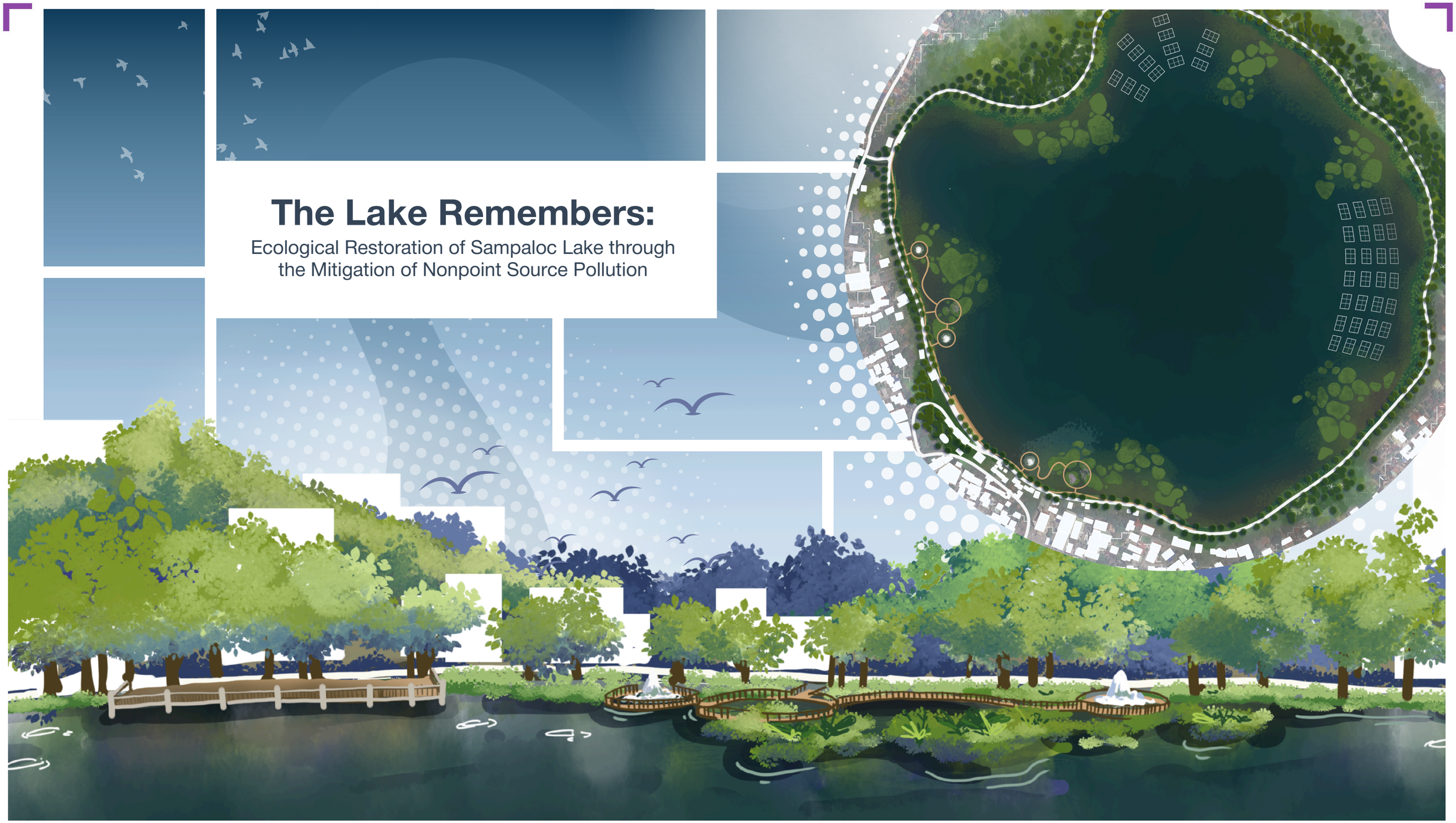






The Lake Remembers:

Ecological Restoration of Sampaloc Lake through the Mitigation of Nonpoint Source Pollution



Country/City	Quezon City, Philippines
University / School	University of the Philippines Diliman
Academic Year	A.Y. 2024-2025
Title of the project	The Lake Remembers: Ecological Restoration of Sampaloc Lake through the Mitigation of Nonpoint Source Pollution
Authors	Selma, Adrielle L.; Prof. Navarra, Nappy L. D.Eng.

TECHNICAL DOSSIER

Title of the project	The Lake Remembers: Ecological Restoration of Sampaloc Lake through the Mitigation of Nonpoint Source Pollution
Authors	Selma, Adrielle L., Prof. Navarra, Nappy L. D.Eng.
Title of the course	L Arch 200: Undergraduate Thesis
Academic year	A.Y. 2024-2025
Teaching Staff	Prof. Navarra, Nappy L. D.Eng.
Department / Section / Program of belonging	Bachelor of Landscape Architecture (BLA) / Environmental Landscapes Studio Laboratory (ELSL)
University / School	University of the Philippines Diliman

13

Written statement, short description of the project in English, no more than 250 words

Sampaloc Lake in San Pablo City, Laguna faces challenges of Nonpoint Source Pollution brought by surrounding land uses and aquaculture practices. The lake experiences phosphorus levels 30 times higher than the class use dedicated by the Department of Environment and Natural Resources and is continuing to be more polluted every year contributing to fish kills and ecological degradation.

This project aimed to calculate and locate nonpoint sources of pollution to develop spatially targeted landscape interventions to mitigate nutrient loading and restore the ecological balance efficiently. Through the utilization of simulation methods, the project determined that aquaculture contributes a significant portion of pollution to the lake and thus requires the increase of nutrient outflow to address the nutrient levels in the lake. These findings are then used as a basis to develop planning scenarios for the mitigation of cultural eutrophication and its impacts in the lake catchment area.



OBJECTIVES OF THE PROJECT



Identify sources and pathways of phosphorus



Characterize phosphorus sink landscapes



Quantify Rate of Input and Spatial Distribution of Nonpoint Source Pollution

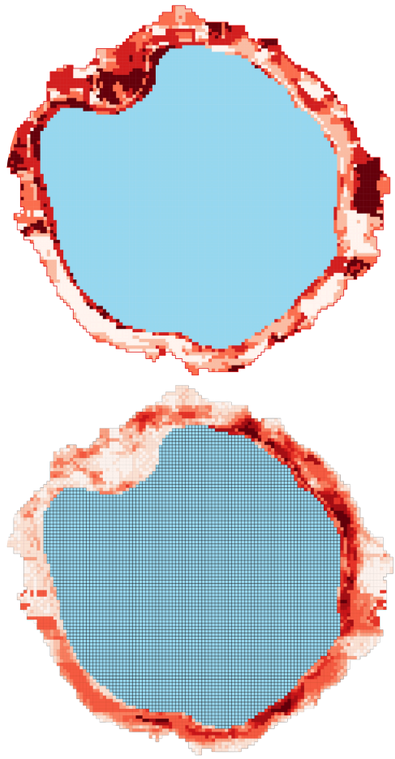


Propose interventions and management strategies that target phosphorus sources



Evaluate the effectiveness of planning scenarios in reducing phosphorus loading

MEAN ANNUAL PHOSPHORUS OUTPUT



NPS Pollution Analysis through SWAT+

Nonpoint source (NPS) pollution is difficult to track and monitor because of its diffuse nature. Because of this, a simulation is done in SWAT+ to approximate the amount of phosphorus contribution of the catchment area of the lake. This is done as a function of land use, soil type, slope, and amount of precipitation.

Annual SRP Yield (in kg/ha)
- 0.42 - 1.09
- 1.09 - 3.66
- 3.66 - 6.14
- 6.14 - 9.63
- 9.63 - 13.99

It is determined that the major contributor of phosphorus to the lake is the aquaculture practice. This necessitates active removal of phosphorus from the water body.

Mean Annual Organic Phosphorus transported in Runoff in kgha
- 0 - 0.47
- 0.47 - 0.93
- 0.93 - 1.4
- 1.4 - 1.87
- 1.87 - 2.33
- 2.33 - 2.8
- 2.8 - 3.27
- 3.27 - 3.73
- 3.73 - 4.2
- 4.2 - 4.67

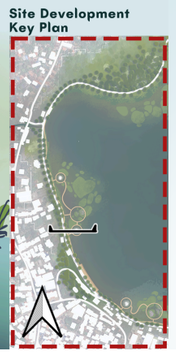
MASTERPLAN



1 Site Entrance and Admin/Tourism Center
2 Buffer Area
3 Conserved Forest
4 Floating Wetlands
5 Water Quality Monitoring Facility
6 Aquaculture Areas

FLOATING WETLANDS











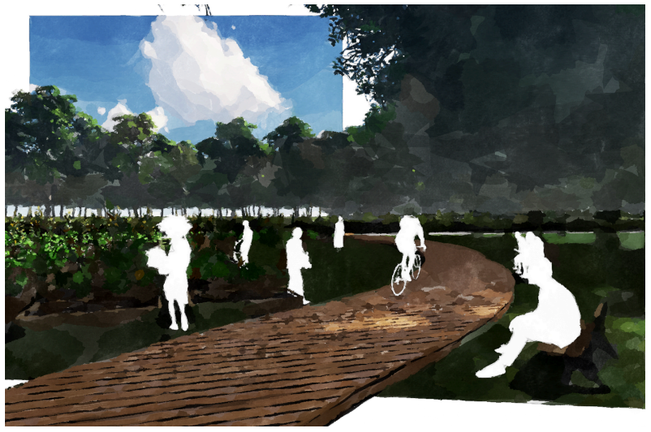
DEPENSAKA:

Conservation of Prime Agricultural Lands using Future Land Use Simulation









Country/City	Quezon City, Philippines
University / School	University of the Philippines Diliman
Academic Year	A.Y 2024-2025
Title of the project	DEPENSAKA: Conservation of Prime Agricultural Lands using Future Land Use Simulation
Authors	Espina, Lance Ciple T.; Prof. Villa Juan, Jose Dan V.; Prof. Santos, Selena Balbino U.

TECHNICAL DOSSIER

Title of the project	DEPENSAKA: Conservation of Prime Agricultural Lands using Future Land Use Simulation
Authors	Espina, Lance Ciple T., Prof. Villa Juan, Jose Dan V., Prof. Santos, Selena Balbino U.
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Teaching Staff	Prof. Villa Juan, Jose Dan V.; Prof. Santos, Selena Balbino U.
Department / Section / Program of belonging	Bachelor of Landscape Architecture (BLA) / Environmental Landscapes Studio Laboratory (ELSL)
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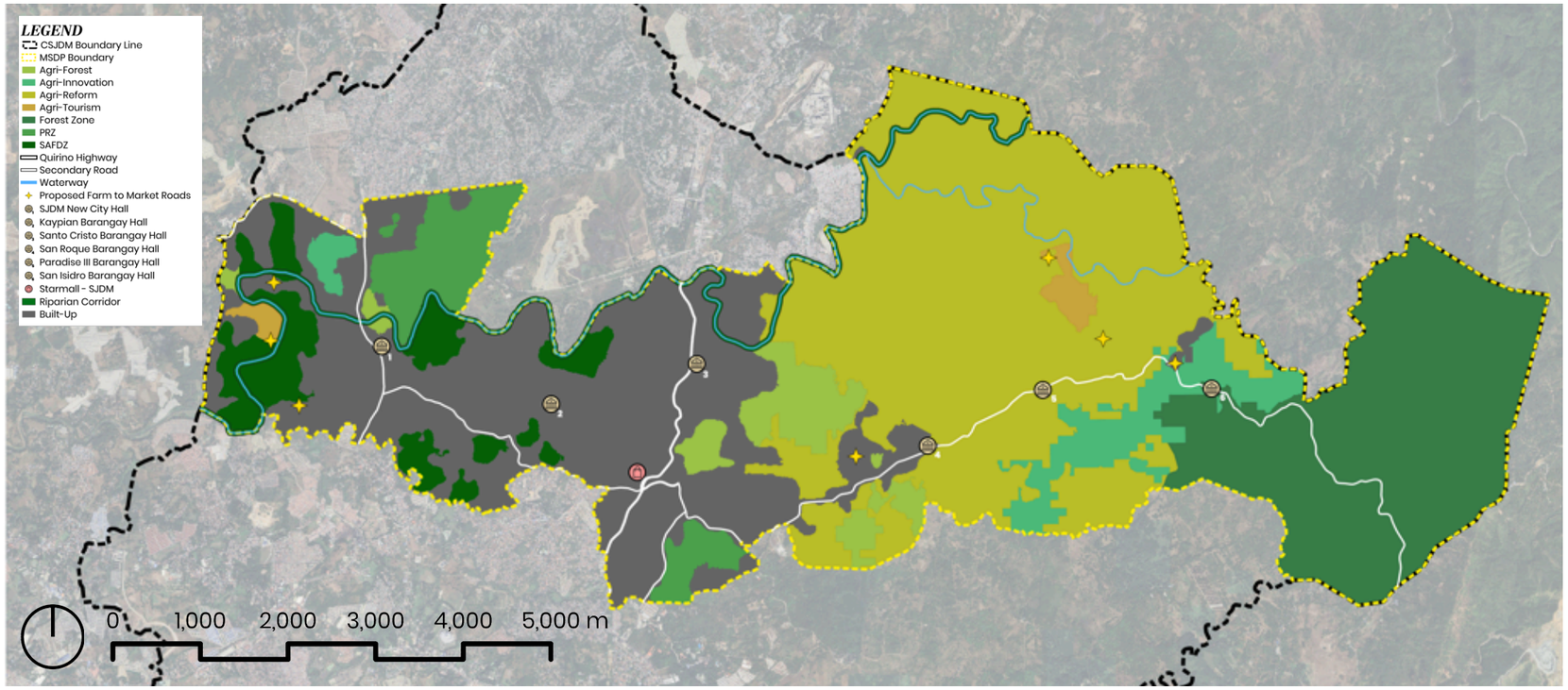
13

Written statement, short description of the project in English, no more than 250 words

Faced with urban sprawl and its associated challenges, such as the loss of agricultural lands, massive land conversions, and diverting from proper urban planning, how can the City of San Jose Del Monte, Bulacan, conserve its prime agricultural lands from the effects of urban sprawl such as urban encroachment and land conversion using future land use planning and simulation? The study uses the PLUS Model which is designed as a transdisciplinary model that combines knowledge discovery, policy-making, and simulation to address the land use changes through various stages employing different methods. The model generates three future land use scenarios – Defensive, Protective, and Opportunistic. Using a modified AHP ranking, the scenario chosen is the opportunistic scenario, becoming the basis to generate the landscape plan which is aided by community preferences and researcher input. While it is inevitable that there will be loss of prime agricultural lands in future land use scenarios, choosing the opportunistic scenario to be applied for the future provides the least amount of change in terms of cropland, rangeland, and tree land cover loss while still achieving the goals of the CLUP, and providing for more socioeconomic opportunities for the city, hence protecting and enhancing the agricultural lands.

AGRICULTURAL CONSERVATION MASTER PLAN





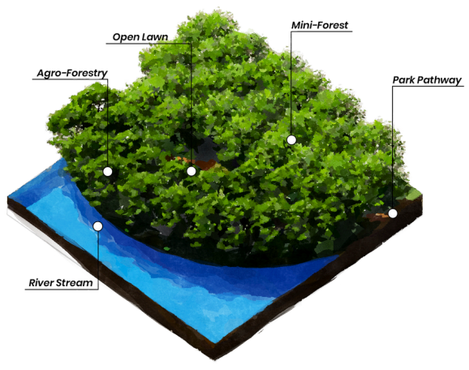




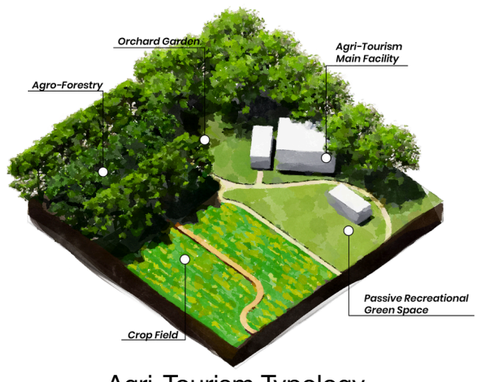
LANDSCAPE PLAN TYPOLOGIES



Agri-Innovation Hub Typology



Agri-Forest Park Typology



Agri-Tourism Typology

AGROFORESTRY PRACTICES



Polyculture Systems



Alley Cropping