



Photo by Paulo Alcazaren

Country /City Philippines
University / School University of the Philippines Diliman / College of Architecture
Academic year 2017-2018
Title of the project Achieving Garden City Status for Quezon City: A Proposed Ecological Masterplan for the 'Green Lungs' of Metro Manila
Authors Michael Abuan, Aicel Mae Alvarez, Jereca Mae Amata, Benedict Martin Caliwara, Franklin Fontanoza Jr., Cindy Pornelos, Maria Monica Pujalte

TECHNICAL DOSSIER

Title of the project	Achieving Garden City Status for Quezon City: A Proposed Ecological Masterplan for the 'Green Lungs' of Metro Manila
Authors	Michael Abuan, Aicel Mae Alvarez, Jereca Mae Amata, Benedict Martin Caliwara, Franklin Fontanoza Jr., Cindy Pornelos, Maria Monica Pujalte
Title of the course	L Arch 250: Landscape Design, Construction, and Management
Academic year	2017-2018
Teaching Staff	Nappy L. Navarra, D.Eng.
Department / Section / Program of belonging	Environmental Landscapes Studio Laboratory / Master of Tropical Landscape Architecture Program
University / School	University of the Philippines Diliman / College of Architecture



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

The *garden city* concept was created to improve the quality of life in growing urban centers. Several cities in the world (i.e. Singapore) reached its garden city status through a strong political will and participative approach in its conceptualization. The project explores the possibility of achieving a garden city status for Quezon City through a proposed ecological masterplan. The study uses garden city indicators (from Singapore) and landscape metrics as basis for the ecological masterplan in order to formulate solutions that will enhance the existing baseline of Quezon City's indicators. Using geographic information system mapping, landscape metrics were used to determine the different ecological patches of the city. Through a response framework and design interventions, a conceptual master development plan was developed that features connection of the city's ecological cores through several ecological design strategies.

This design endeavor serves as a guide and calls for an integration of multiple disciplines and inter-coordination among government offices, national agencies, private developments, and local government units in prioritizing areas of for conservation and in refocusing community efforts for future development.

For further information

Máster d'Arquitectura del Paisatge - UPC

Contact via email at:
master.paisatge.comunicacio@gmail.com

biennal.paisatge@upc.edu

Máster d'Arquitectura del Paisatge - UPC

Sede ETSAB - Universitat Politècnica de Catalunya

Calle Jordi Girona, 15. Edificio Omega 1-3
08034 Barcelona - Spain

COAC - Colegi oficial d'Arquitectes de Catalunya

Carrer Arcs, 1-3
08002 Barcelona - Spain

12th International Biennial Landscape Barcelona

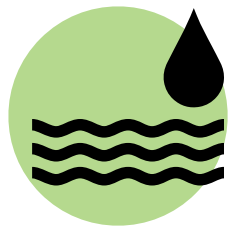
Barcelona October 2023

SCHOOL PRIZE

why become a garden city?



gives equal opportunity to people from all walks of life to enjoy the surrounding



water quality protection



improved air quality



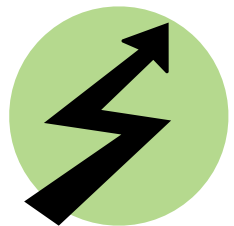
natural resource for conservation



reduce urban heat build up



higher revenue for the city as landscape renew business centers as "green economy"



higher productivity rate when exposed to improved landscape

why Quezon City?

most competitive city in the Philippines

"The Green Lungs of Metro Manila" because of the number of parks and green space

home to the country's **largest natural reservoir** located in an urban setting

takes lead in **green governance** through environment management goals

goals + objectives

design an **ecological masterplan** for Quezon City

1 operationalize the **Garden City indicators**

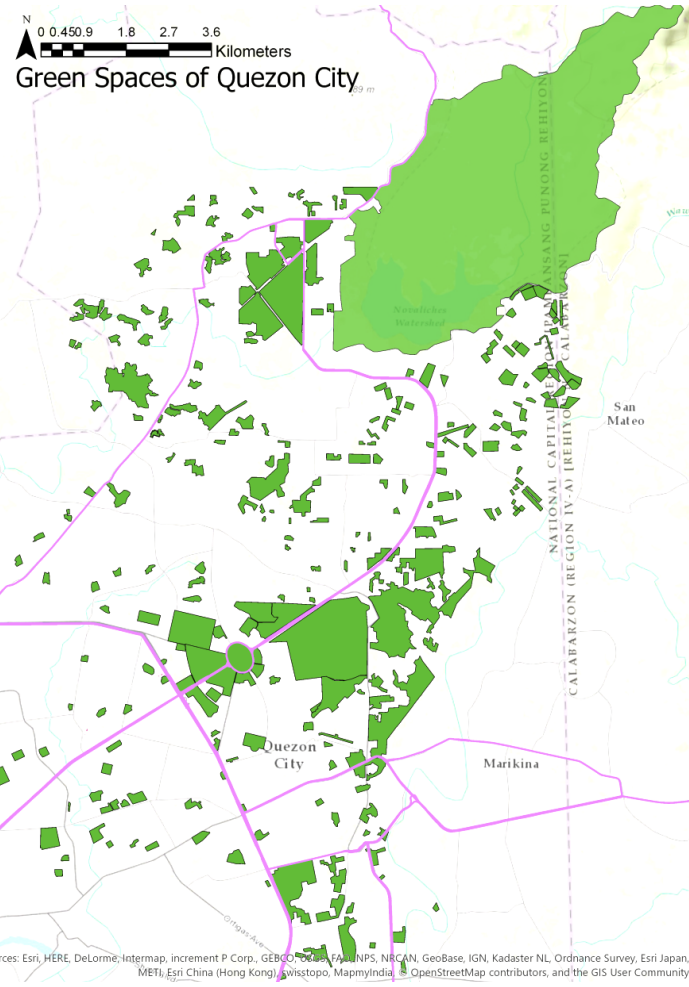
2 **measure landscape metrics** of the city's green spaces

3 Integrate indicators and metrics into a **conceptual plan + responsive framework**

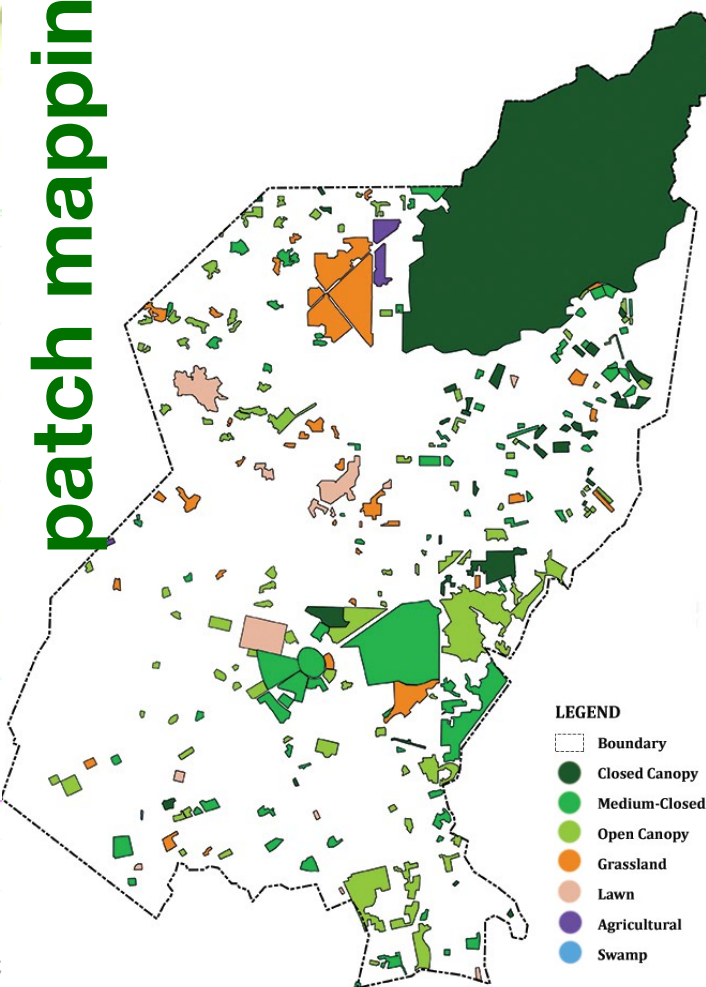
garden city indicators

indicators	drivers	operators
affordable housing	livable and sustainable housing developments	No. of units shared by persons
land use	valuation effect of green spaces	no. of green patches within 1km radius from a commercial area
strong local jobs	tax collection for green infrastructure	no. of employed individuals
walkable neighborhood	decrease energy consumption	% of residential area within 1km radius of a transport hub
food security	safe and ample food source	no. of urban farms
community engagement	community buy-in	no. of NGO's and volunteer groups for the environment
tree-lined streets	more shaded areas and improve air quality	% of tree cover along streets
integrated transport	accessibility + circulation; less carbon footprint	no. of modes of transportation
stewardship of assets	environmental management	no. of environmentally focused gov't agencies
greenbelts	mitigate urban sprawl	length of longest greenbelt
high-quality gardens	green economics	no. of tourist visitors
generous green space	improved quality of life	green space per capita
connected biodiversity	increase biodiversity	no. of recorded flora and fauna
designed homes	residential land use to add more green spaces	% of open space in residential zones

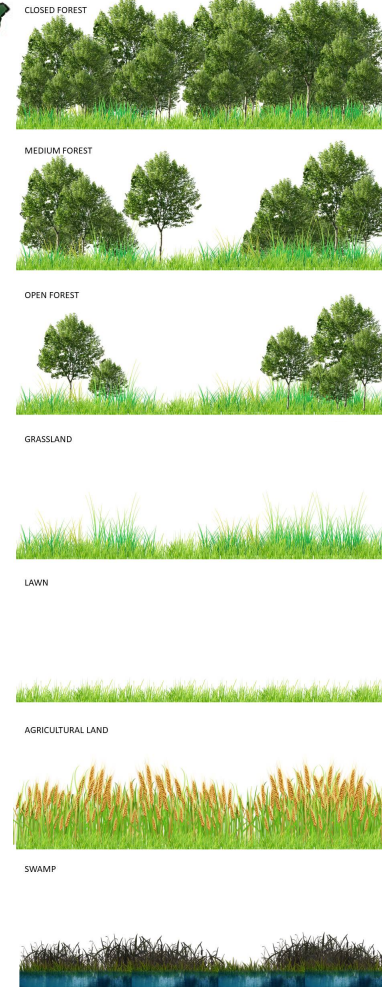
landscape metrics



patch mapping



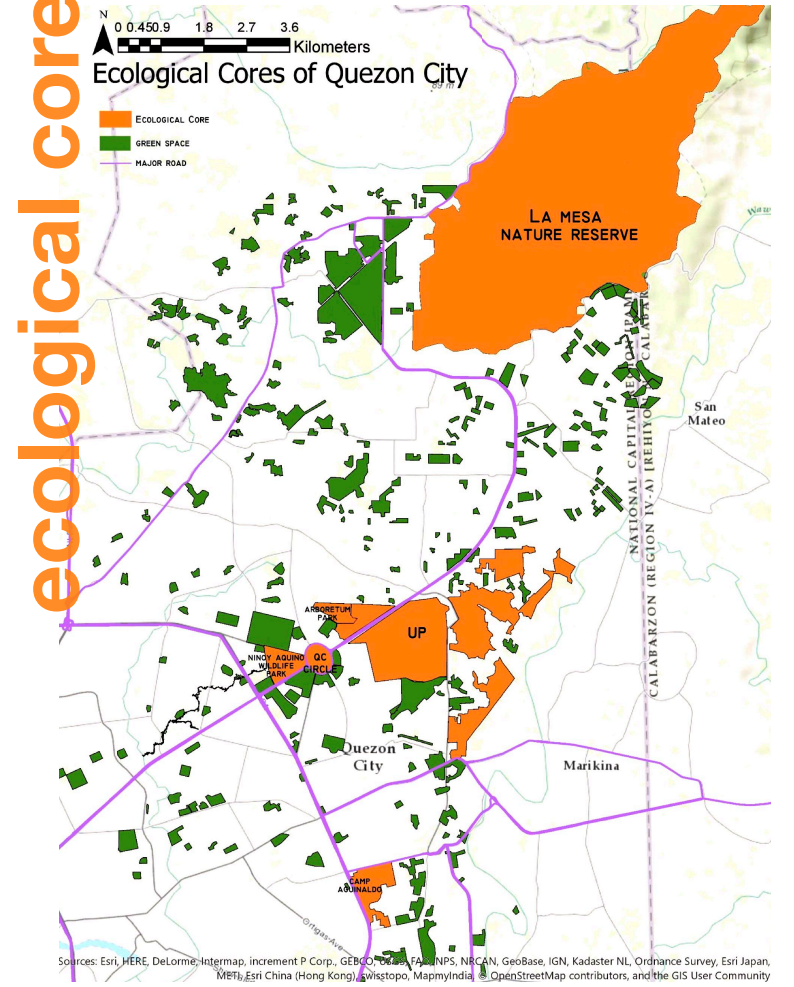
biotope profiles



sites



ecological cores



green space summary

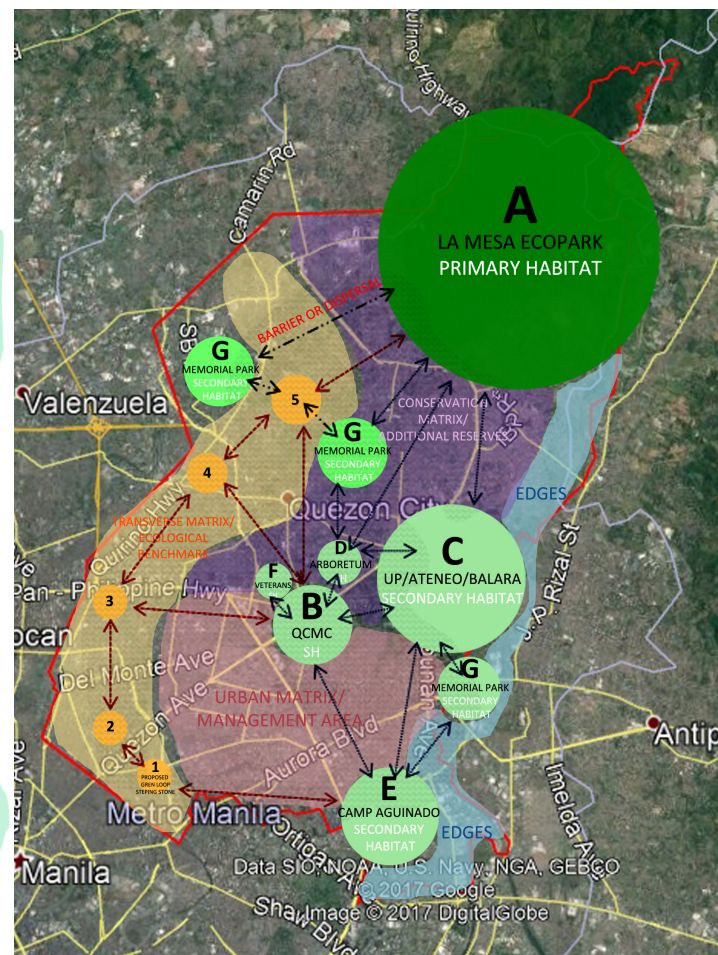
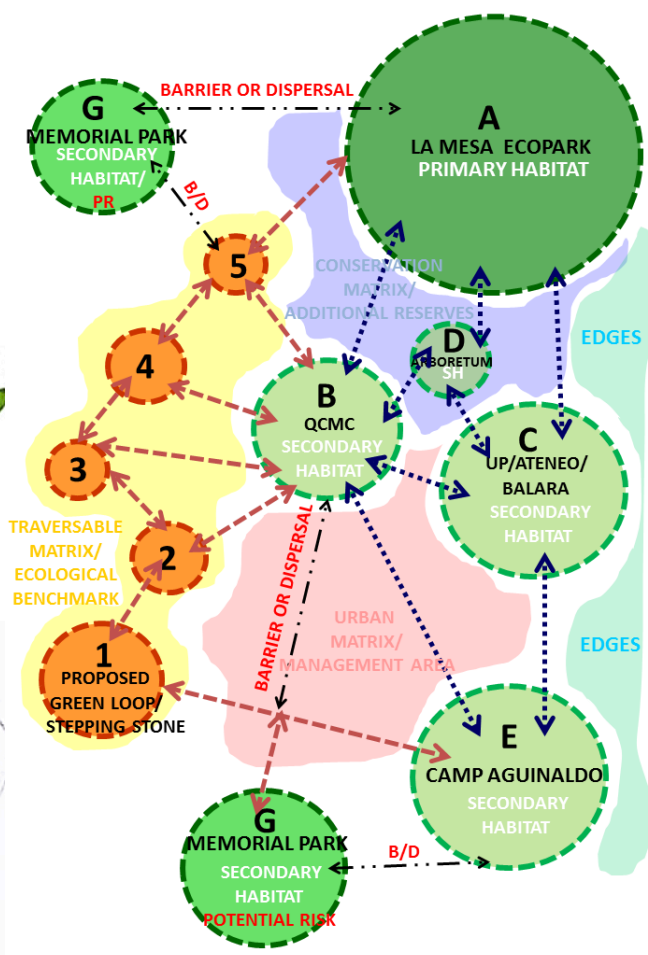
total number of green spaces **273**

total area of green spaces **4,791.67 hectares**

Quezon City's total land area **16,533 hectares**

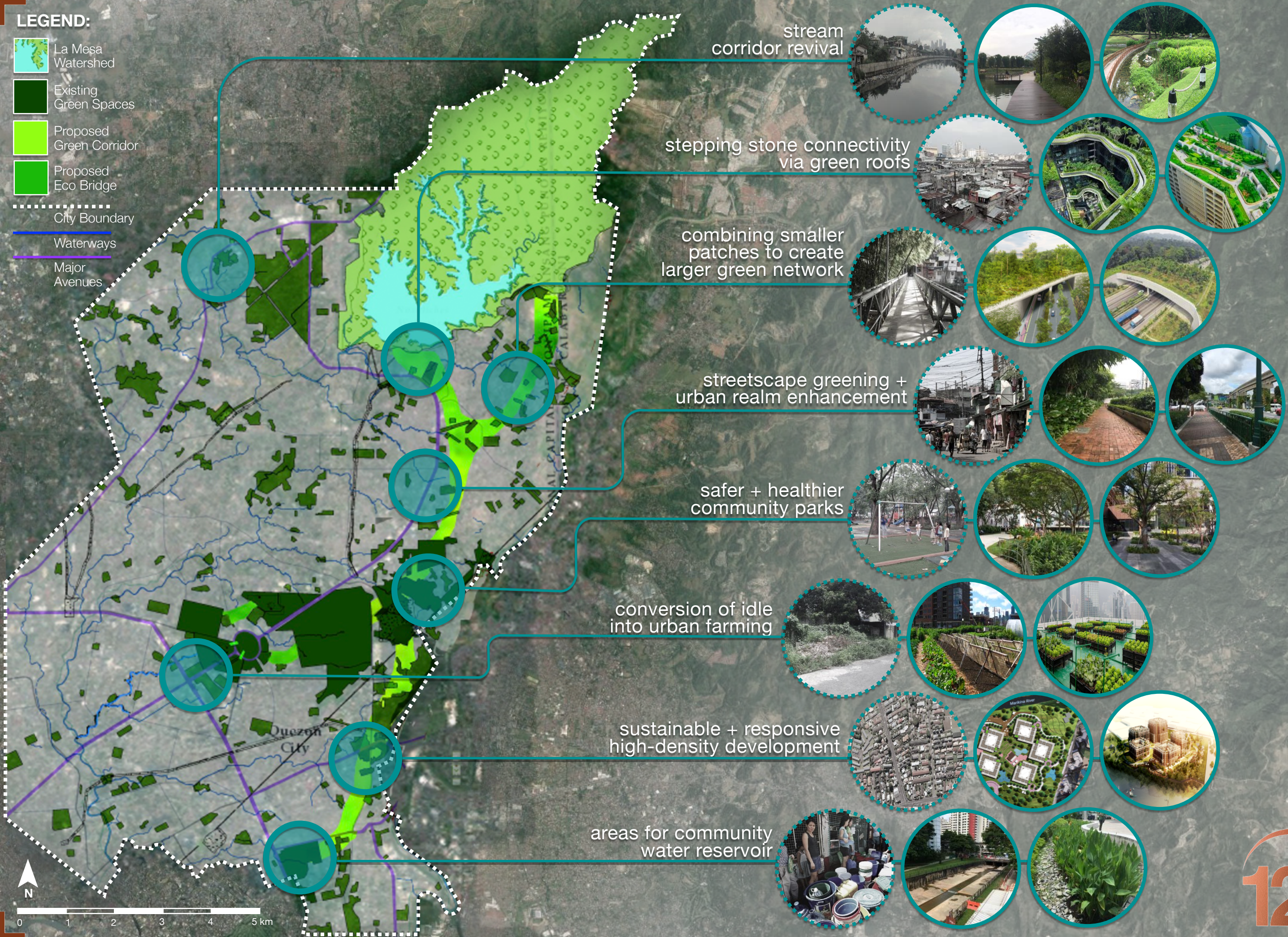
green space density **28.98%**

space programming



LEGEND:

- La Mesa Watershed
- Existing Green Spaces
- Proposed Green Corridor
- Proposed Eco Bridge
- City Boundary
- Waterways
- Major Avenues



proposed ecological masterplan