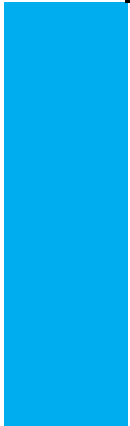


# Graduation Plan

**Master of Science in Architecture, Urbanism & Building Sciences**

MSc Landscape Architecture 2023 - 2024

[your name]



## Graduation Plan

Submit your Graduation Plan to the Board of Examiners ([Examencommissie-BK@tudelft.nl](mailto:Examencommissie-BK@tudelft.nl)), your mentors and delegate of the Board of Examiners one week before the P2 date at the latest.

### I Personal information

Full name	<b>Stelina Tsalapati</b>
Student number	5855314

### II Studio / Lab information

Name / Theme	FLOWSCAPES	
Main mentor	Inge Bobbink	Landscape Architecture
Second mentor	Nikos Katsikis	Urbanism
Argumentation of choice of the LA graduation lab	<p>I chose the Circular Water Stories (CWS) lab for my landscape graduation due to its perfect alignment with my research interest in water as a fundamental element in landscapes. This lab provides a unique opportunity to comprehensively understand how hydrological conditions, water dynamics, climate, geology, culture, and human activities contribute to landscape transformations over time.</p> <p>My interest in the CWS lab began during my second quarter in BK, where I studied the Dutch landscape and its water management. This experience served as a catalyst for the direction of my graduation thesis. It made me realize my deep interest in similar studies within my home country, particularly focusing on the island of Naxos. Understanding landscapes shaped entirely by water is crucial, as it equips me with the knowledge to propose sustainable solutions for areas transformed by water, now facing challenges such as water scarcity, as observed in the Aegean islands.</p>	

### III Graduation project

Title of the project	<b>A dialog between people and landscape:</b> the Alikí Wetland Ecosystem as a starting point to explore Naxos Island, Greece	
<b>Context and aim of the project</b>		
Location (region / area / site)	South Aegean Sea, Naxos Island, Alyki Wetland	
Problem statement	The environmental challenges facing Naxos, akin to other Cyclades Islands,	

	<p>are closely tied to shifts in land use and spatial management. A particularly pressing issue is the ongoing degradation of Aliko Lagoon, the largest natural coastal wetland in the Cyclades and a vital habitat for avifauna in the South Aegean Region. This wetland, covering approximately 924 hectares, faces the imminent threat of extinction, escalated by State projects and insufficient recognition of its ecological significance by the local community. Despite its potential for environmental education, nature tourism, and recreation, Aliko has suffered from misguided attempts to drain it in the 60s and subsequent degradation due to the construction of Naxos Airport and unregulated logging in the 1980s. The urgent problem statement revolves around the need to address and reverse the continuing deterioration of Aliko Lagoon, emphasizing the crucial role of informed local engagement and sustainable practices in preserving this essential natural ecosystem.</p>
<p>Research question(s)</p>	<p><b>Main Research Question</b></p> <p>How can landscape architectonic principles be employed to create a more resilient synergy and spatial integration between modern developments and nature preservation in the Aliko Wetland in Naxos?</p> <p><b>Sub-questions:</b></p> <ul style="list-style-type: none"> <li>-What is the current wetland system of the island?</li> <li>- How can an alternative tourism approach revive the island's wetland ecosystem?</li> </ul>

	<p>-How can people re-evaluate their relationship with the environment and co-exist with nature without ruining it?</p> <p>- How could spatial developments affect the social and traditional relationship between the inhabitants and the wetlands?</p>
<p>Design assignment</p>	<p>The design assignment is formulated in 2 different scales:</p> <p>The goal of the assignment is to enhance Naxos Island's existing wetland ecosystem, dealing with the threats of uncontrolled tourism and fostering a profound connection between individuals and the landscape. The objective is to design connectivity within the wetland ecosystem, ensuring biodiversity, and propose an alternative tourism model aligned with the island's socio-economic challenges. The aim of this proposal is not solely to enhance the already high tourism during the summer months but to spread tourist activity throughout the year by promoting alternative activities. Drawing inspiration from the region's history, the assignment explores visionary interpretations at both regional and local scales. To grasp the area's importance and values, an investigation into wider scales, including the Archipelago and island scales, was essential.</p> <p><b>Regional scale</b></p> <p>On a regional scale, my goal is to highlight the importance of connectivity among the wetland natural paradises, promoting a networked system that enhances interaction between humans and nature. Seasonality will play a vital role in designing these connections, incorporating various types of mobility</p>

such as walking paths, cycling paths, and boats. Along these connections, visitors can experience different conditions of the coastal landscape, enjoy panoramic views, explore cultural and natural sites, and even stay overnight in designated camping areas. While the focus is on the Aliko wetland as the starting point of the narrative, the overall experience centers around the interconnected hydro-paradises.

Products:

1. Masterplan of the whole region (mobility, stops and interventions, spatial characteristics of the route, photos)
2. diagrams showing the seasonality of the activities along the route
3. Map with photos of specific stops
4. Visual sequence of the route

#### **- Local scale**

For the local scale, I am looking into the largest wetland of the island and the Cyclades known as Aliko, covering an area of 170 hectares. Chosen for its historical and contemporary importance, Aliko plays a vital role in supporting diverse flora and fauna.

My vision for this area is to establish a new center for people approaching Naxos Island. The airplain, a different but still a 'bird' of the area, rises above the lake, attracting tourists. The view from above will be the first challenge to achieve, capturing people's interest to explore more of the site. The airport, an existing 'threat' to the site in terms of environmental impact, will be the key point of the story and the starting point of the experience.

So, by incorporating both man-made and natural elements, my goal is to integrate an alternative tourist model focused on the relationship between humans and nature. I aim to highlight the island's natural beauty, which attracts people for

firsthand experiences. Creating paths, bird observatories - crucial for the wetland area -, camping areas for overnight stays, integrating sports in the surrounding areas, and educating people through experiential and educational methods are essential parts of my design. This not only strengthens the bond between humans and nature but also involves the creation of eco-friendly infrastructures, ensuring safe mobility within the area while preserving the environment.

Products:

1. Map of the site
2. Sections showing the relation of the lake with its surroundings (Airport, Agricultural land, Sea, Urban environment, Roads)
3. Visualizations (By the plane, Seasonal differences )
4. Route sequence around the lake
5. Diagrams for program design

## IV Graduation process

### Method description

- A **literature review** extensively covered various aspects of
  - the Aegean archipelago and Cyclades complex, with a particular focus on Naxos, encompassing both cultural and natural dimensions.
  - Wetland types prevalent in these islands were explored for their ecological significance.
  - Ongoing urbanization trends, contemporary tourist approaches, and alternative tourism form as potential solutions to emerging challenges.
  - Ornithological studies and ecological studies provided insights into bird migratory patterns, contributing to a broader understanding of biodiversity.
  - A critical investigation into coastal transformations due to climate change in the Aegean archipelago and a study on water management in the Cyclades islands were undertaken.

In addition to this, the study involved an examination of research and proposals from places facing similar challenges. This broader comparative approach, spanning both wider and smaller scales, provided significant insights, facilitating a deeper understanding of the area.

- **Fieldwork:** exploring the **Aliki wetland**, its **surrounding landscape features**, and **other wetlands on the west side** of the island in different seasons.

- **Visiting the site in different seasons: (Summer visits)** involved thorough **exploration**, collecting **aerial photographs** and photographs highlighting diverse vegetation. **Winter revisit** captured a distinctive period with off-season tourism, showcasing the site's transformation into a crucial migratory bird stopover. Seeing how dramatically the site changed in different seasons was interesting and helped shape my proposal.
- Conducted interviews across age groups to gather insights into past experiences, interactions, and current perspectives on the Aliki lagoon.
- Meet with individuals managing non-profit organizations and with the municipality to understand their perspectives on the site through discussions.

- **Visual documentation**

- Sketching transformations in the area based on old photographs deepens understanding of geological and geographical features.
- Mapping of the Natural and Cultural environment in the island's scale
- Mapping of different types of connections (Migratory birds' corridors, Geological settings etc.) in Cyclades scale
- Drawing the different types of the wetlands in island scale
- Illustrations of the existing situation around Aliki Wetland (spatial analysis)
- Illustrations of the Aliki's wetland area future with and without implemented actions,

## **Design Process**

The design I envision for the site is the result of extensive research on the area. It draws significant inspiration from the broader concept of an archipelago and similar proposals that originated from a wetland natural preserved site. Unfortunately, these sites are often not recognized by municipalities and are consistently degraded by indifferent individuals. Therefore, for my design at both regional and local scales, I will consider the following:

- Analyzing the existing terrain of the region to establish experiential connections.
- Examine the existing tourism model, characterized by a super high season in July and August and significantly lower activity during other

seasons. Propose activities that will captivate people's interest throughout the year to mitigate the stark contrast between peak and off-peak periods. This approach aims to alleviate the impact of extreme tourism conditions on the island without diminishing overall tourist activity.

- Understanding the hydrology of the wetlands to create suitable conditions for water restoration.
- Considering the seasonality of flora and fauna, as well as the migratory periods of birds, to incorporate bird-watching activities.
- Examining the spatial characteristics of the route to design areas for overnight stays (camping) or gathering places that do not disrupt wildlife.
- Implementing a conscientious approach to address threats from the airport, such as noise, in a manner that minimizes interruption to the area's wildlife.

## Literature and more applied references

### Papers:

1. Corner, James. "The Agency of Mapping: Speculation, Critique and Invention' In Mappings, edited by Denis Cosgrove, 231–52. London: Reaktion, 1999.
2. Dimaki, M. (2014). Ornithological observations from some Cyclades islands (Aegean Sea, Greece). Maria Dimaki - Academia.edu.
3. Eleftheriou, A. (2012). Environmental Study of the Beaches of Naxos Island.
4. Evelpidou, N. (2020). WETLANDS – The example of Samos Island. Uoa.
5. Evelpidou, N., Karkani, A., & Giannikopoulou, K. (Eds.). (2017). Fieldtrip Guide: Land Rehabilitation in Mediterranean Environments. Athens. International Course on Naxos Island, Cyclades, Greece, 20-31 March 2017.
6. Evelpidou, N., Karkani, A., Komi, A., Giannikopoulou, A., Tzouxanioti, M., Saitis, G., Spyrou, E., & Gatou, M.-A. (2021). Interactive Virtual Fieldtrip as a Tool for Remote Education.
7. Evelpidou, N., Petropoulos, A., Karkani, A., & Saitis, G. (2021). Evidence of Coastal Changes in the West Coast of Naxos Island, Cyclades, Greece.
8. Gaki-Papanastassiou, K., Vassilopoulos, A., Evelpidou, N., & Maroukian, H. (Year of Publication). Quaternary Morphological Evolution of the Cyclades Islands (Greece).
9. ΓΥΣ | Αρχική. (n.d.). <https://www.gys.gr/>.
10. Lucas, Raymond. Research Methods for Architecture. London: Laurence King Publishing Ltd, 2016.
11. Moore, D. R. J., Keddy, P. A., Gaudet, C. L., & Wisheu, I. C. (1989). Conservation of Wetlands: Do Infertile Wetlands Deserve a Higher Priority?
12. ΟΡΕΙΝΟΣ ΑΞΩΤΗΣ σταγόνες της ιστορίας της Νάξου. (n.d.-c). <https://orinosaxotis.blogspot.com/>.



13. Roussos, K. (1984). Reconstructing the Settled Landscape of the Cyclades: The islands of Paros and Naxos during the Late Antique and Early Byzantine centuries.
14. Vakalopoulou, M. (n.d.-c). ΑΛΥΚΗ ΝΑΕΟΥ | ΟΜΑΔΑ ΒΙ.Δ.Α. [https://vidarchives.gr/reports/2020\\_04\\_746](https://vidarchives.gr/reports/2020_04_746).
15. The importance of wetlands. (n.d.). The Convention on Wetlands, the Convention on Wetlands.
16. Wilson, B. (2014). Francesco Lupazzolo's Isolario of 1638: The Aegean Archipelago and Early modern historical anthropology.
17. World Wildlife Fund. (2024). Conservation of the Island Wetlands of Greece: Discovering the True Value of Greek Island Wetlands. WWF.
18. Zogaris, S., Vlami, V., & Probonas, N. (1996). Preliminary Study of Environmental Assessment and Management. Greek Poultry Society.

Websites:

1. 2006 Venice Biennale of Architecture Greek participation. (n.d.) ArtBOX. <https://www.artbox.gr/2006-venice-biennale-of-architecture-greek-participation.html>
2. Island Wetlands. (n.d.). WWF. [https://www.wwf.gr/en/our\\_work/nature/terrestrial/protected\\_areas/island\\_wetlands/](https://www.wwf.gr/en/our_work/nature/terrestrial/protected_areas/island_wetlands/)
3. Laguna Coast Foundation. (2023, April 10). Home - Laguna Coast Foundation. <https://lagunacoast.org/>
4. Lagoon, the wildlife "Refuge." (2022e, September 15). Naxos Wildlife Protection. <https://naxoswildlifeprotection.com/lagoon-the-wildlife-refuge/>
5. The importance of wetlands. (n.d.). The Convention on Wetlands, the Convention on Wetlands <https://www.ramsar.org/about/our-mission/importance-wetlands>
6. The park. (n.d.). Nationaal Park Nieuw Land. <https://www.nationaalparknieuwland.nl/en/the-park>
7. Wetlands / Kalloni-Salt pans, NaturaGraeca. (n.d.). <https://www.naturagraeca.com/ws/218,282,149,2,1,Kalloni-salt pans>
8. World Park Project. (n.d.). <https://theworldpark.com/>

## V Reflection on the project proposal

1. What is the relation between your graduation topic, the lab topic, and your master track?

My graduation topic, which centres on the restoration of the damaged wetland landscape of the island of Naxos in the Aegean Sea, and aims to foster stronger connections between humans and nature through an alternative touristic approach, is closely aligned with the master track of Landscape and my lab focus of CWS as well.

My CWS lab research delves into the pivotal role of water in landscapes, exploring the mechanisms and reasons behind their transformations over time and their profound connection to human stories. My lab research has significantly deepened my comprehension of landscape transformations on islands. Beyond hydrology, the broader scale analysis includes the evolution of terrain, the integral role of people in these changes, and the lasting impact of water on shaping the landscape over the years. Through my landscape studies, I have delved deeply into how landscape principles can shape proposed design interventions. This includes

considerations such as the connectivity of places, the mobility of individuals along both designed and non-designed paths, sustainable development in vulnerable landscapes, the influence of seasonality and time processes in design, and the spatial experience of people within it. This comprehensive understanding is pivotal for my research and will enable me to propose a design firmly anchored in the principles imparted by the discipline of landscape, thereby ensuring a comprehensive approach.

2. What is the relevance of your graduation work in the larger social, professional and scientific context?

The project is designed to elevate public awareness regarding the natural habitat and water, prompting a re-evaluation of the human-environment relationship. By proposing the creation of high-quality spaces for people to interact with nature and water throughout the seasons, the work addresses a crucial aspect of social consciousness. Furthermore, the project acknowledges the socio-economic challenges of the island, particularly the predominant focus on tourism for development. By spreading tourism more evenly throughout the year, preventing the insane peak of summer months, a balance can be achieved between modern needs, development, and the flourishing of nature. This, in my view, could be a key solution not only for the sustainability of the entire island but also for many other similar cases suffering from over-touristic activity.

From a scientific perspective, the landscape architecture principles embedded in the project offer a valuable framework for understanding and addressing the complexities involved. These principles enable the seamless integration of modern interventions into the environment without compromising its integrity. By emphasizing the relationship between people and their surroundings, the project aligns with the scientific goal of finding sustainable solutions for vulnerable areas.

In conclusion, graduation work contributes to the larger social context by fostering awareness, addresses professional challenges through a balanced tourism approach, and aligns with scientific principles for sustainable environmental solutions. It stands as a potential model not only for the island in focus but also for similar cases grappling with the impacts of over-touristic activities and water scarcity in a broader context.