



CRYSTALLINE LAGOONS OF UNLIMITED SIZE

Crystal Lagoons

WORLD'S TOP AMENITY

BURSWOOD PARK LAGOON

PERTH, WESTERN AUSTRALIA

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Burswood Park Crystal Lagoon Project

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PUBLIC ACCESS LAGOONS™

PAL Corporate Video Link
<https://youtu.be/XAlvkWBL1z0>

Enjoy Beach Life Anywhere in the World

STADIUMS

WATER PARKS

CASINOS

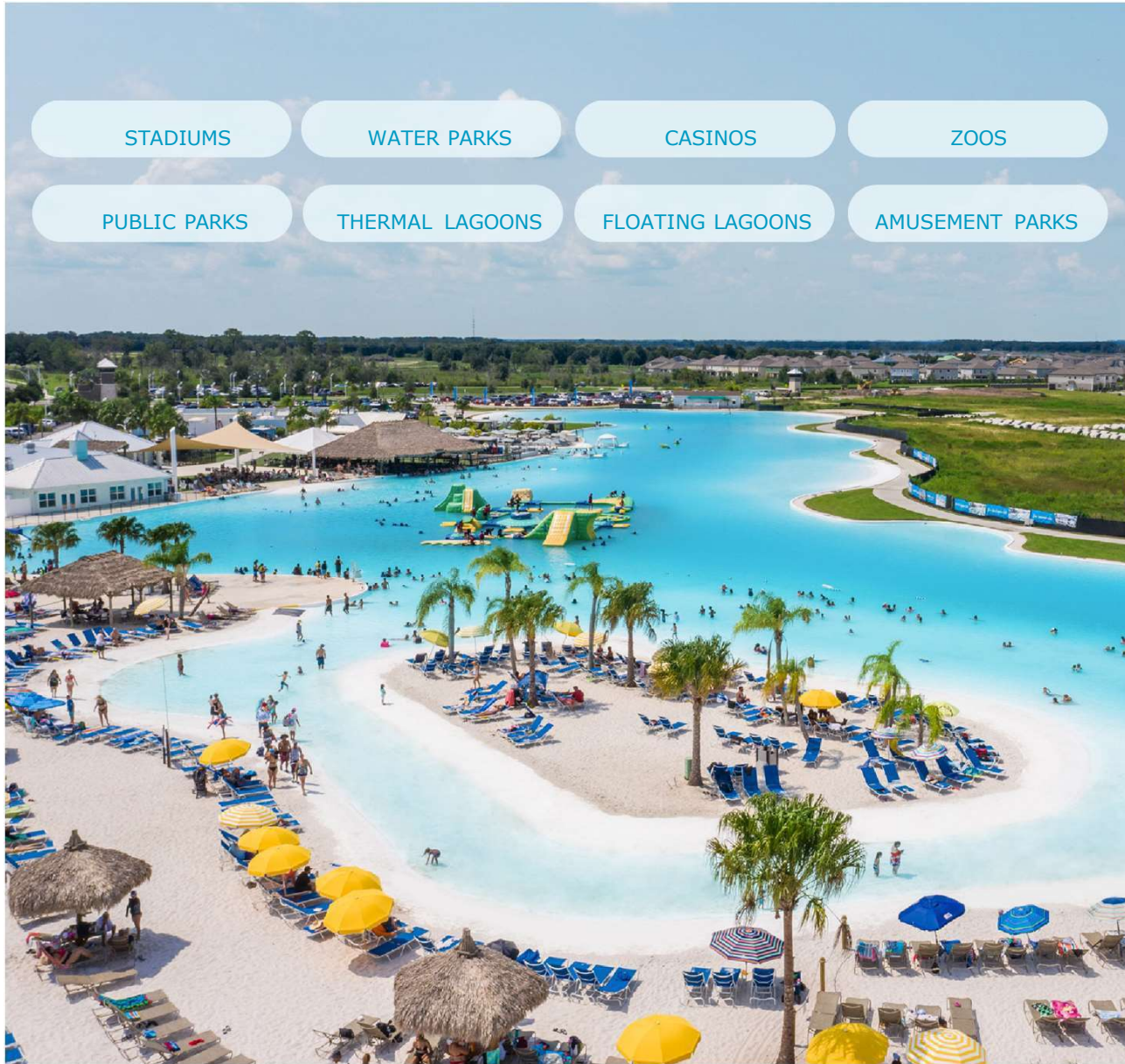
ZOOS

PUBLIC PARKS

THERMAL LAGOONS

FLOATING LAGOONS

AMUSEMENT PARKS



Upgrade any project into a recreational family meeting point and generate new streams of revenue.

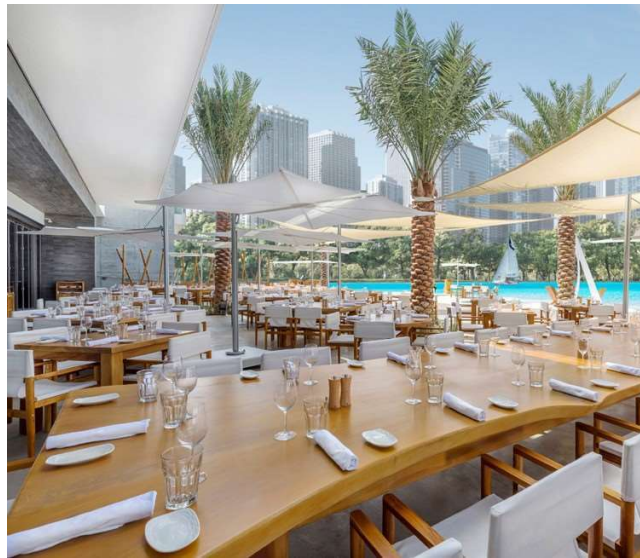
Public Access Lagoons™ by Crystal Lagoons is a leading-edge entertainment concept that turns any venue anywhere in the world into an idyllic beach life lagoon for its visitors based on an admission revenue model.

Take part in water and beach sports; enjoy the best bars and restaurants; watch impressive concerts and shows from a natural amphitheater with a stunning view of a lagoon stage or giant movie screen, or enjoy a beach setting with the most stunning crystalline lagoon.

Creating a new destination

Most, if not all, sites in the world can be transformed into a destination with Public Access Lagoons™. We are able to enhance, create, or revitalize all types of spaces where land is available.


The Meeting Place of the 21st Century





Guest Journey: Seasonal Activities



 Volleyball
Weddings
Wellness
Summer Camps

 Conferences
Ice-Skating

 Windsurf
Rowing
Sailing
Scuba Diving

 Swimming
Sun-bathing
Water Games

Guest Journey: Round the Clock Activities



Morning Yoga

Jogging

Brunch

Co-Working

Paddle-Boarding

Kid's Swim Class



Lunch

Sun-Bathing

Swimming

Volleyball League

Happy Hour



Outdoor Cinema

Concerts

Weddings

Special Events

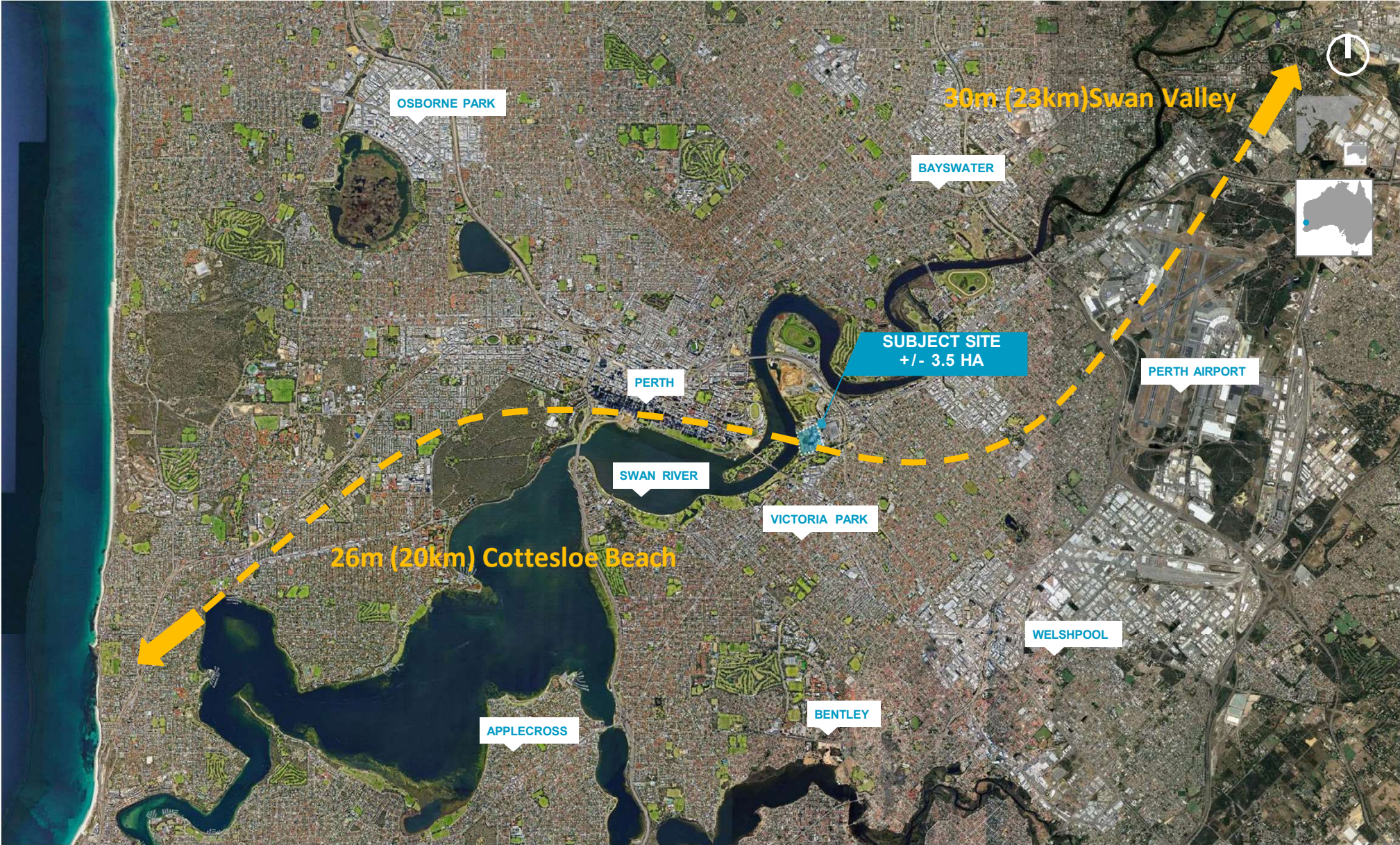


Beach Parties



BURSWOOD PARK CRYSTAL LAGOON

Burswood Lagoon Location Plan



Existing Burswood Lake and Event Car Park Sites






Burswood Lagoon and Development Sites



Burswood Lagoon Master Plan



Lagoon Features

1. Crystalline Lagoon (1.64 ha)
 2. Beach Areas (5,850m²)
 - A. PAL™ Beach 4,450m²&
 - B. Hotel Beach 1,400m²
 3. Wedding Pavilion
 4. Boat House & Water Sports Rental
 5. Water Slide
 6. Beach Volleyball Court
 7. Amphitheatre
 8. Iconic Island & Performance Stage
 9. Kids Splash Pad/Water Park
 10. Lighthouse/Viewing Platform
 11. "Wanju" Water Course (Wibit)
 12. Waterfront Restaurants
 13. Pedestrian Access Bridge
 14. 360° F&B and Immersive Dome
 15. Riverside Pedestrian Crossing
 16. Promenade/Running Track
 17. Boardwalk Retail & Entry Gate
 18. Parking and redevelopment site
 19. Illuminated(LED) Canopy
 20. Bush Tucker Gardens
-  PAL™ Project Access Point
 -  Social Media Viewing Spot
 -  Illuminated (LED) Feature Canopy
 -  Immersive WA Tourism Dome

Lagoon Design Objectives & DNA



Design Objectives

1. Promotes WA's Tourist Attractions
2. Promotes Indigenous Culture, Design, Arts and Education
3. Promotes Local Businesses and Enterprises
4. Promotes Local Employment and Training Schemes
5. Promotes WA's History, Culture and Arts
6. Promotes WA's Unique Landscaping and Environment
7. Promotes Perth as the "City of Lights"

Design DNA

1. Native Landscape Design
2. Indigenous Inspired Design
3. Climate Responsive Design
4. Immersive/Interactive Design
5. Adaptive/Multifunctional Design
6. Healthy Living Space Design
7. Environmental Sensitive Design
8. Programmable Entertainment Spaces
9. Net Positive Development Outcomes
10. Inclusive Accessibility Design
11. Water Sensitive Design
12. Ecological Positive Design
13. Community Responsive Design
14. One Plant Design Principles
15. Intuitive Design Principles
16. Sensory Design Principles
17. Noongar Six Seasons Design Principles

Lagoon Programmatic Access Areas



OPEN ACCESS

WATERFRONT RESTAURANTS & RETAIL

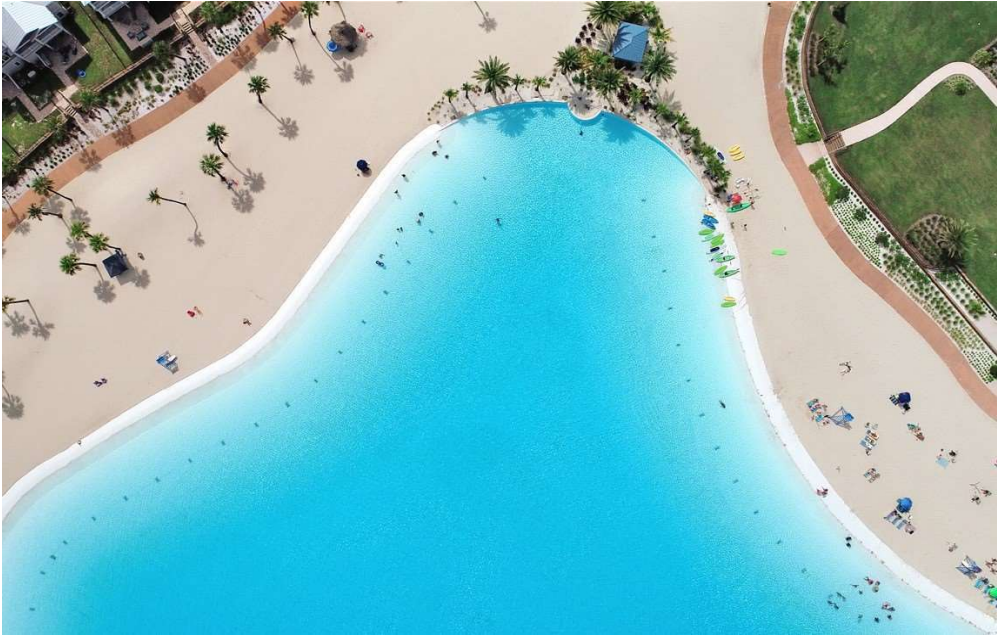
TICKETED ACCESS

PAL™ BEACH AREA

HOTEL BEACH AREA



Lagoon Beach Life



Lagoon Water Sports



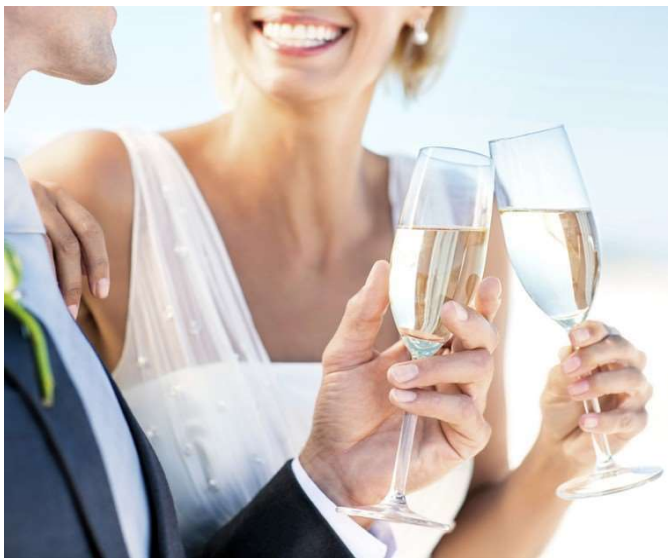
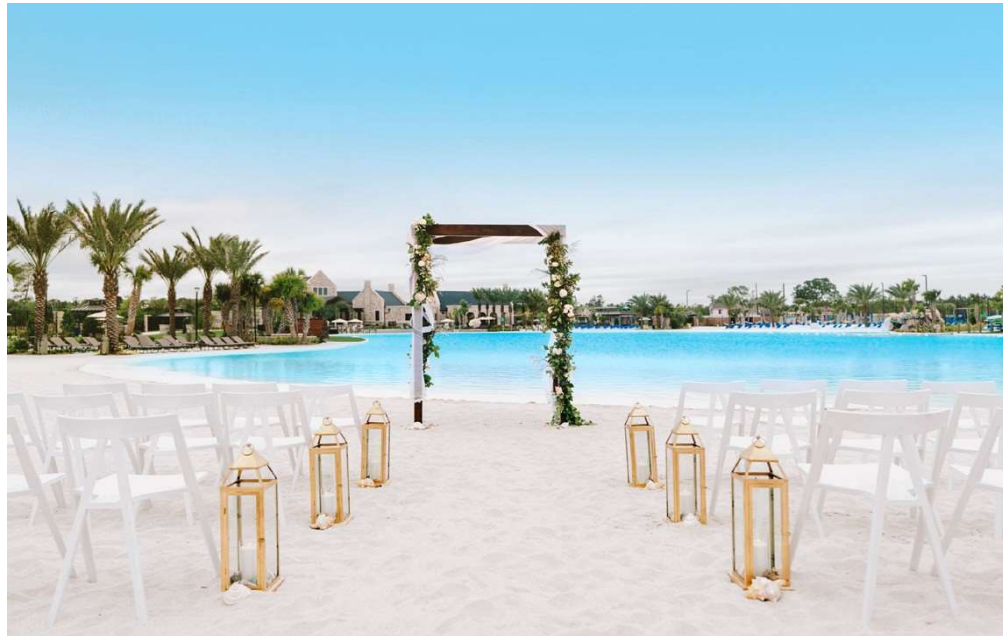
Lagoon Beach Club & Restaurants



Lagoon Event Esplanade



Lagoon Wedding Peninsula



Lagoon Entertainment Amphitheatre



Reference Visualisation (Lagoon Beachfront)



Reference Visualisation (**Entertainment Amphitheatre**)



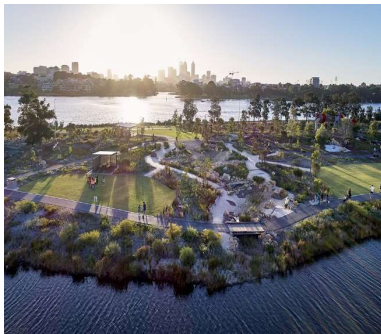


SHOWCASING WA's UNIQUE IDENTITY

Celebrating WA's Identity & Character



WA's Landscape & Wildflowers



WA's Beach Lifestyle & Character



WA's Indigenous Arts & Culture



WA's Indigenous Inspired Design



WA's Nature Inspired Design



A photograph of four Indigenous Australians in traditional attire, including body paint and headbands, performing a ceremony in a field at sunset. They are holding and manipulating yellow and red ropes. The background is a warm, golden landscape with trees and a bright sun.

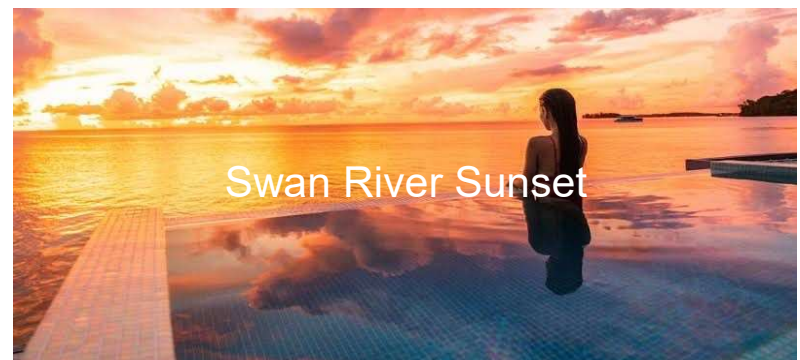
IMMERSIVE WA TOURISM EXPERIENCES

WESTERN AUSTRALIA
IT'S LIKE NO OTHER.

Immersive Indigenous Experiences (Food & Spirit)



Immersive Indigenous Experience (Water)



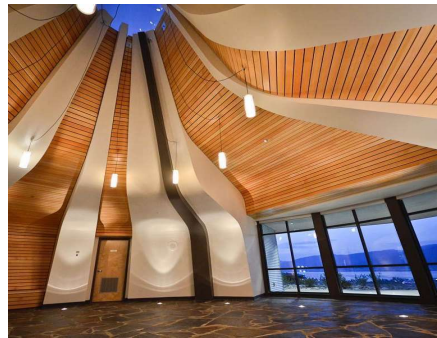
Immersive Indigenous Experience (Arts & Culture)



Immersive Indigenous Experience (Lighting Shows)



Indigenous Inspired Lagoon Hotel (Development Site 1)



Illuminated Feature Canopy (Perth 'City of Lights')



Immersive WA Tourism Dome (360° Riverfront F&B)

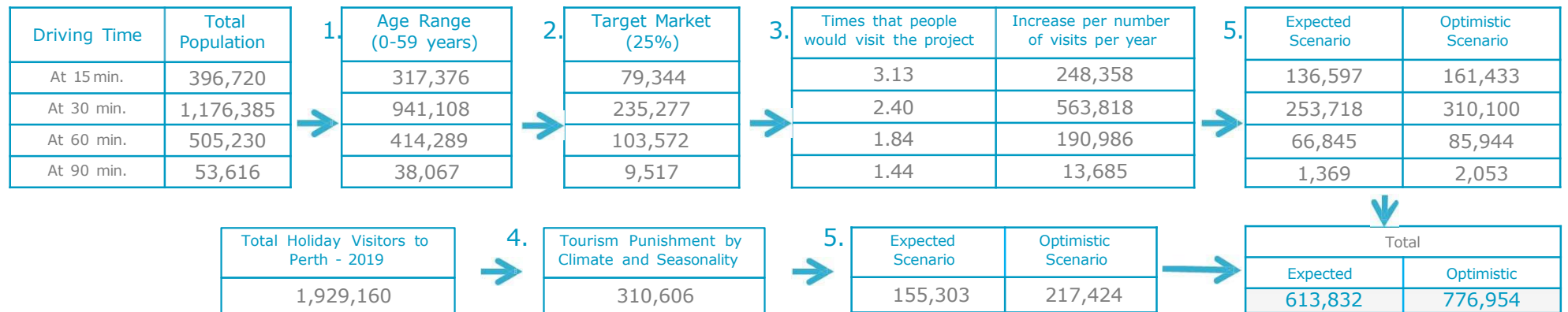




VISITOR ESTIMATIONS

Summary

1. In summary, a **first filter** given by **age range** is made to the total population analyzed by the driving bands, which considers capturing only the **population between 0-59**.
2. Then, a **second filter** is carried out by the **project's target market**, which considers only **25% of the population between 0 - 59 years** obtained, given the socio-economic distribution of the population and being **conservative** in the analysis.
3. In **third place**, the number of times that the population can pay a **US\$ 20 entry** to the project using its entire annual recreation and culture budget is analyzed, and then adjusting the number of visits to **1 - 3 times a year**, justified by **IAAPA studies for similar regions**. In this way, the **potential annual market of visits** to the project is obtained.
4. In parallel, the influence of **tourism** to the area covered by the project is analyzed, which is filtered by the **location of the project**, the **climatic factor** and **seasonality of tourism** in the sector, without considering the tourist attraction that the lagoon would produce.
5. Finally, the **annual visitor estimation** of the project is calculated for an **expected scenario** and an **optimistic scenario**, taking into account different weightings.



Demographic Data

Given the **radius of analysis**, **demographic data** is obtained for each influence sector. This determines the capacity of **spending on recreation and culture services** within the population and defines the scope of the **target market (0-59 years)**.

Key Data	Driving Time [Min] (in bands)			
	At 15 min.	At 30 min.	At 60 min.	At 90 min.
Population	396,720	1,176,385	505,230	53,616
Households	192,343	477,027	207,465	27,038
Average households size	2.1	2.5	2.4	2.0
Recreational & cultural service expenditures: Per Capita [AUD]	\$1,429	\$1,313	\$1,263	\$1,313
Purchase power: Per Capita [annual] [AUD]	\$56,800	\$51,033	\$46,558	\$46,085
Population by age	At 15 min.	At 30 min.	At 60 min.	At 90 min.
0-14	15%	20%	22%	18%
15-29	23%	19%	20%	15%
30-44	25%	22%	21%	17%
45-59	17%	19%	19%	21%
60+	20%	20%	18%	29%
Population between 0-59 years	317,376	941,108	414,289	38,067

Payment Capacity(USD)

	Payment capacity and potential market			
	At 15 min.	At 30 min.	At 60 min.	At 90 min.
Population between 0-59 years	317,376	941,108	414,289	38,067
Recreation & Culture expenditure [USD]*	\$1,043	\$959	\$922	\$959
PAL ticket price [USD]**	\$20	\$20	\$20	\$20
Can the visitor pay at least one visit per year?	Yes	Yes	Yes	Yes
How many visits can the visitor afford per year?	52	48	46	48
Percentage of people who would go to the project	25%	25%	25%	25%
Percentage of times that people would go to the project	6%	5%	4%	3%
Potential market	248,358	563,818	190,986	13,685

* 1AUD = 0.73008658 USD

Considering the **per capita spending on recreation and culture** and also bearing in mind the **cost of entry to a PAL in Australia (US\$ 20)** are initially thought), we proceed to determine how many times a person could visit the project per year.

Of that number of times a year, **6%** of the times the person could afford to go in the **first band** is considered (3 .13times), **5%** in the **second band** (2 .40 times), **4%** in the **third band** (1 .84 times), and finally **3%** in the **last band** (1 .44 times), given the limited recreation & leisure expenditure of the population.

In addition, **25% of the target public (0 -59 years)** is considered to determine the **potential market**, given the socio-economic distribution of the population and being **conservative** in the analysis.

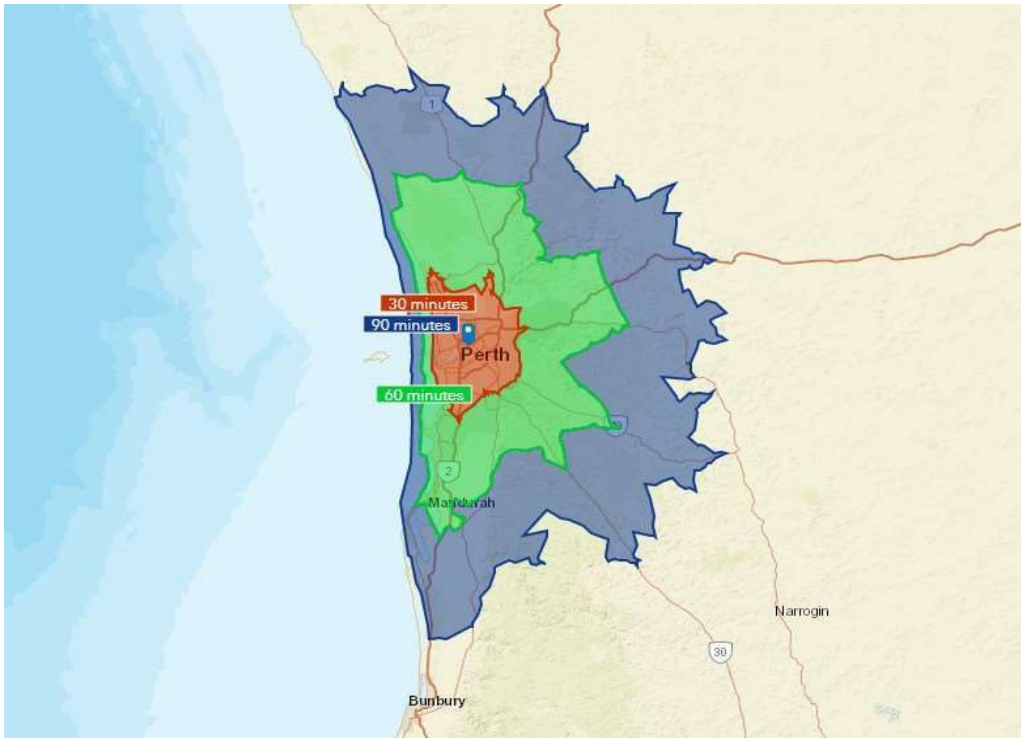
Recreational Market Study

Recreational centers in **Australia** charge an **average price** between **US\$ 16.69** and **US\$ 22.93**, differentiating the rates for Low season vs.High season, and in several cases divided between children and adults .

Establishment	Activity	City / Zone	Annual Attendance	High Fare [USD]	Low Fare [USD]
Adventure World	Theme and Water Park	Perth	500,000	\$ 48.15	\$ 40.12
Perth's Outback Splash	Water Park	Perth	90,000	\$ 29.93	\$ 24.82
Bayswater Waves	Water Park	Perth	604,948	\$ 4.56	\$ 3.43
Kalamunda Water Park	Water Park	Perth	50,000	\$ 13.51	\$ 11.32
Splash City	Water Park	Perth	-	\$ 20.44	\$ 20.44
Perth Aqua Park	Floating Inflatable Water Park	Perth	-	\$ 21.90	\$ 18.25
Island Aqua Park Hillarys	Floating Inflatable Water Park	Perth	-	\$ 18.25	\$ 14.60
Just 4 Fun Aqua Park	Floating Inflatable Water Park	Perth	-	\$ 32.85	\$ 18.25
The Big Wedgie	Inflatable Water Park	Perth	-	\$ 34.31	\$ 11.68
Cockburn ARC	Aquatic and Recreation Centre	Perth	1,400,000	\$ 5.40	\$ 3.94
Whiteman Park Pool Playground	Wildlife Public Park	Perth	1,000,000	Free	Free
Average			607,491	\$ 22.93	\$ 16.69

This evidences the demand for recreational centers in the analyzed sector and the **opportunity to develop a PAL™ project** in the studied site. In addition, it is corroborated that the **US\$ 20 ticket** considered is **adequate** compared to recreational centers of the same quality.

Summary Analysis



The demographic data collected comes from ESRI's demographic database and statistics, tourism data from The Australian Trade and Investment Commission (Austrade) and the Tourism Australia database, and climatic data from climate-data.org. It is proposed to validate the numbers through a local market study.

Through the **demographic analysis** carried out, the attractiveness of a **PAL™ project** as an **entertainment center** for the **affected population** and all of **Australia** is determined, satisfying the need for **recreation** of the population and **improving their quality of life**.

Visitor Estimation

- Expected: 613,832
- Optimistic: 776,954

Potential revenue with a ticket price of USD \$ 20:

- Expected: US\$ 12,276,640
- Optimistic: US\$ 15,539,080

The results obtained in this study consider that the project is the **only PAL™ project in the affected region** . If another PAL™ project is developed in the influenced region, the estimated number of visitors could be affected .



LAGOON CONSTRUCTION

CAPEX/TEX Estimate (USD)

Design Considerations	
Area	1.64 ha
Shape Class	D
Maximum Lagoon Depth	2.40 mts
Total Lagoon Perimeter	813 mts
Lagoon Edge	646 mts
Beach Entrance	167 mts
Machine Room	Underground

CAPEX	
Based on our experience from work on previous lagoons of similar size and shape, the estimated construction cost of a lagoon with these characteristics and the design considerations are:	
Civil Works *	1,191,000
Hydraulic Systems *	260,000
Liner / Waterproof System *	568,000
Electrical System *	639,000
Module**	875,000
Bottom Cleaning Cart	155,000
Estimated Average Total Cost	US\$ 3,688,000
Estimated Average Cost per hectare	US\$/ha 2,248,780

* These costs are only for referential purpose and therefore should be validated by a third party cost estimator. General Expenses, profits, and taxes are not included in the cost.

** CIF cost of Crystal Lagoons® Modular Treatment System (MTS)

Construction Costs Exclusions and Assumptions

These figures are not binding and may vary based on the design considerations and location of the project.

The estimate is considered a Class 4 Estimate based on AACE international recommended.

The lagoon edge considers vertical wall with height=1.05m
Beach sand is not included. For referential purpose the price of the sand in Chile for this project is US\$986,013.

Warehouse for lagoon equipment and supplies is not included.
Other costs such as overheads, utilities and contingency are not included.
Bottom Cleaning Cart is considered CIF and includes spare cart

The equipment considered in this estimate are for fresh water use that considers TDS<5,000 ppm and temperature<25°C.

Module prices are related to lagoon shape and design considerations, any changes in the following stages may affect module price.

Landscaping is not included.
Any stormwater solution is not included.
Electric power supply is not included.
The price of the module is considered CIF.
Bottom drainage solution is not included.
Earthworks are not included.
Water pretreatment is not included.
Internet connection is not included.
This estimation is valid until 2-3-2022.
PAL Success items are not included.



TECHNOLOGY OPERATION COST

Based on our experience from work on previous lagoons of similar size and shape, the **Technology cost** of a lagoon with these characteristics and the design considerations should vary depending of the season as it's shown in the following:

Estimated Monthly Technology Cost	Low Season	High Season
	[US\$]	[US\$]
Additives	5,300	7,000
Energy	2,100	3,200
Total Monthly Technology Cost	7,400	10,200
Total Monthly Technology Cost per hectare	3,176	4,378

Monthly Staff Requirements	Low Season	High Season
	[Man hours/Month]	[Man Hours/Month]
Lagoon Supervisor	68	120
Cleaning Cart Operator	130	190
Manual Cleaning Operator	1,020	1,820

Technology Costs Exclusions and Assumptions

The figures set forth in this document only consist of operational costs and are only for referential purpose and therefore should be validated by a third party cost estimator. These figures are not binding and may vary based on the design considerations and location of the project.

Maintenance, staffing and the cost of water for filling and/or refilling the lagoon are not included.

The costs considered are based on international prices.

These operational costs are calculated under normal operation.

The energy consumption has been estimated using a base referential cost of 0.12 US\$/kWh.

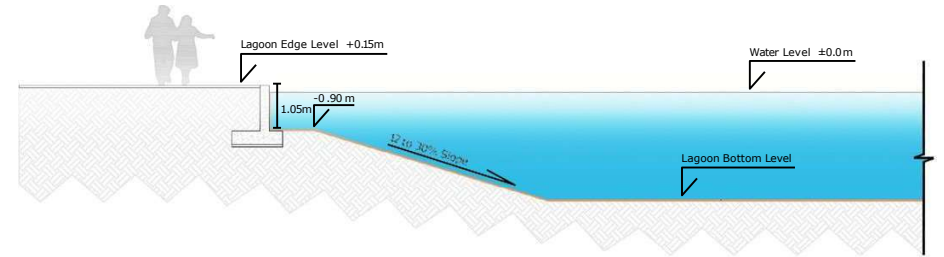
This document does not includes CL System Fee.

December 17 2021

Lagoon Edges

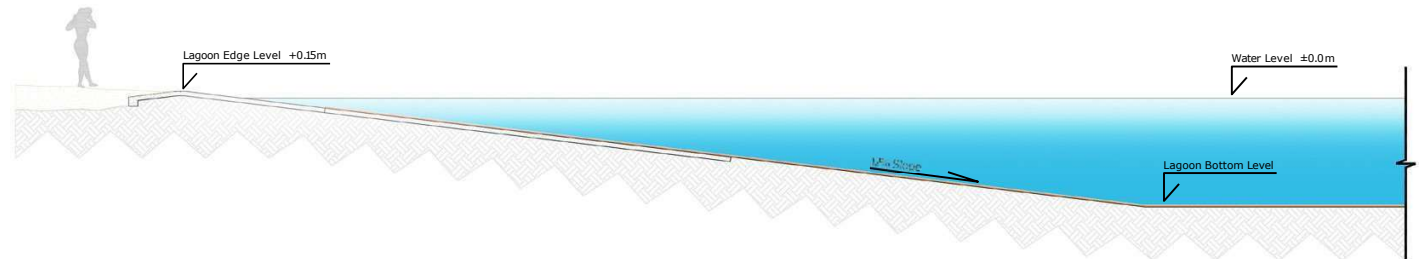
Vertical Edges Small Wall

- Concrete wall of 1.05m height
- 12to 30% slope

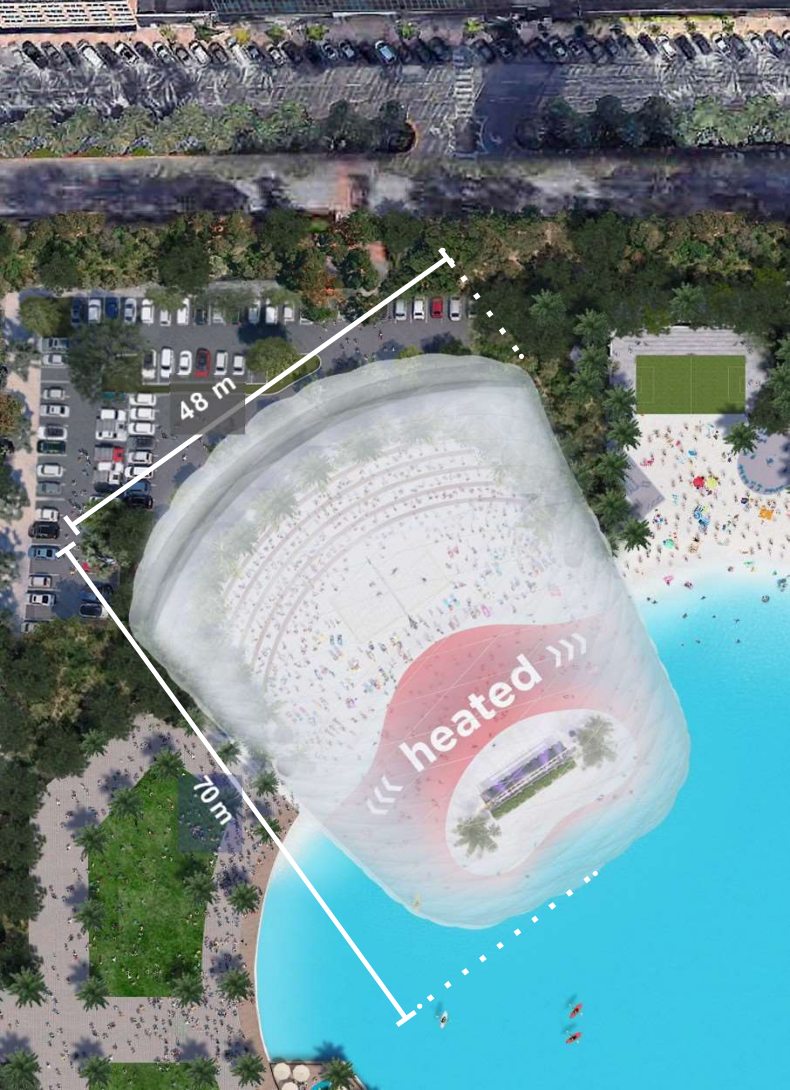


Beach Access

- Pedestrian access to the lagoon
- 12% slope



PAL™ Year-Round Use - Translucent Airdome & Hot Reef™



DISCLAIMER: The suitability and application of certain components of the Crystal Lagoons® System in relation to the Project, such as but not limited to, the use of domes and/or structures to partially or completely cover the lagoon and its surroundings and the Hot-Reef™ water heating system, techniques and methods, will depend, among other factors, on local site conditions, local permitting and regulations and any governmental authorizations needed to use such components. The Client shall be the solely responsible for procuring and obtaining all necessary local permits, licenses and authorizations, and complying with local regulations in connection with the inclusion of the applicable components in the Project.



BURSWOOD PARK CRYSTAL LAGOON

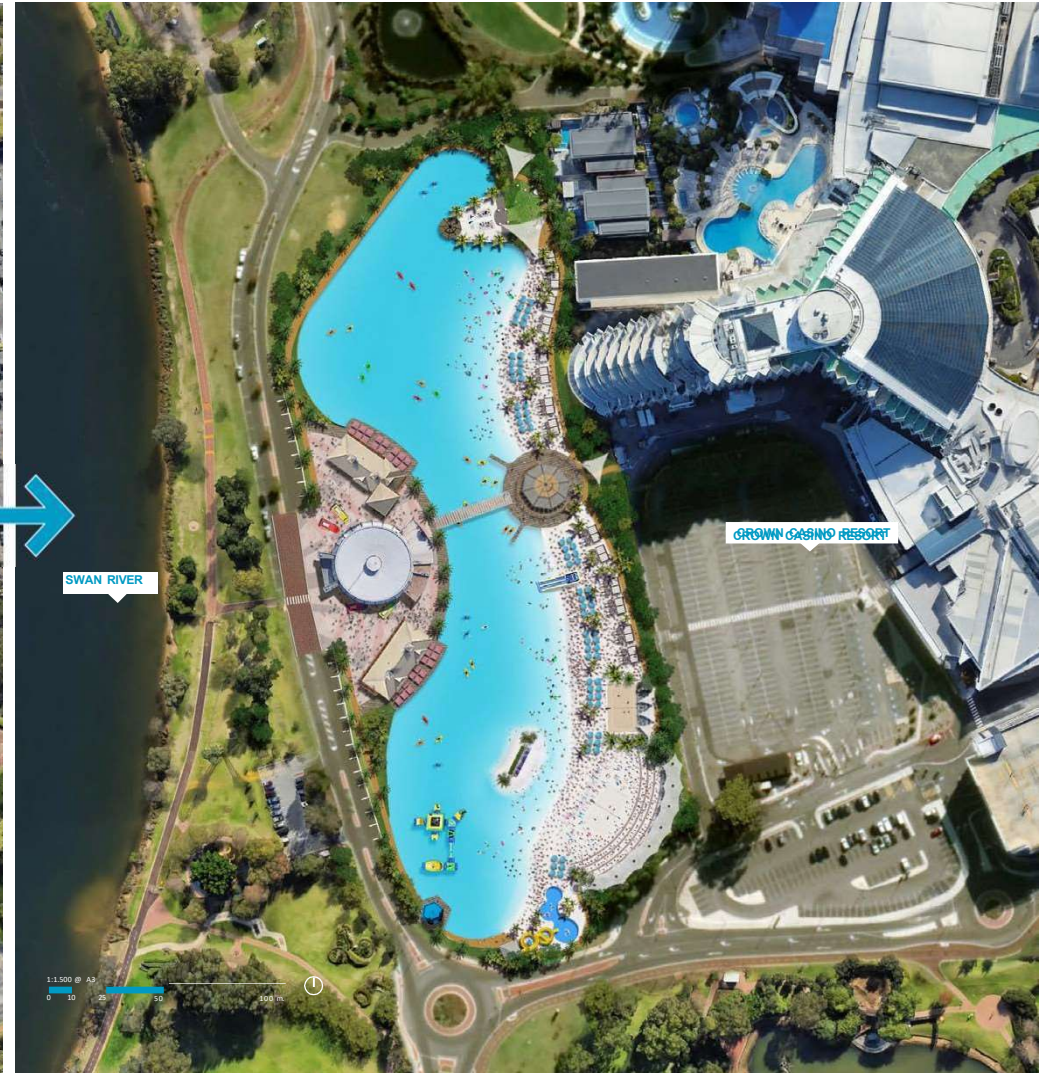
Burswood Park's Transformation

Existing Lake and Event Car Park



FROM THIS

New Burswood Park Crystal Lagoon



TO THIS

Burswood Peninsula's Development Vision



Burswood Lagoon's Redevelopment Vision



1) BURSWOOD "CITY OF LIGHTS"



2) BURSWOOD CRYSTAL LAGOON



3) LAGOON WATERSIDE F & B



4) IMMERSIVE WA TOURISM DOME



5) BURSWOOD MASTER PLAN



6) INDIGENOUS INSPIRED HOTEL

Best of WA's Waterfronts on Perth's Doorstep



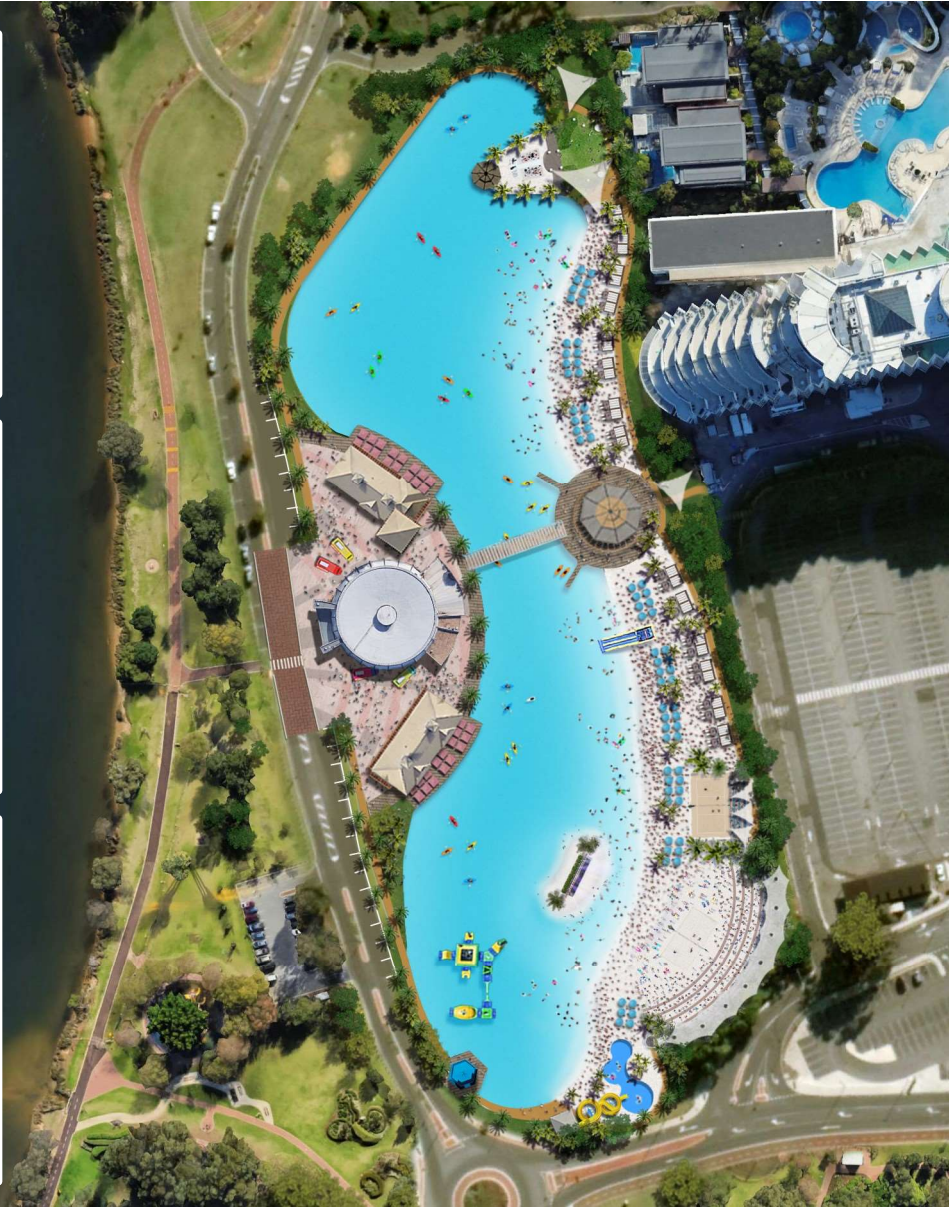
BROOME



HILLARYS



PORT BEACH



COTTESLOE



SCARBOROUGH



FREMANTLE

Perth's Future Water Park Precinct Vision

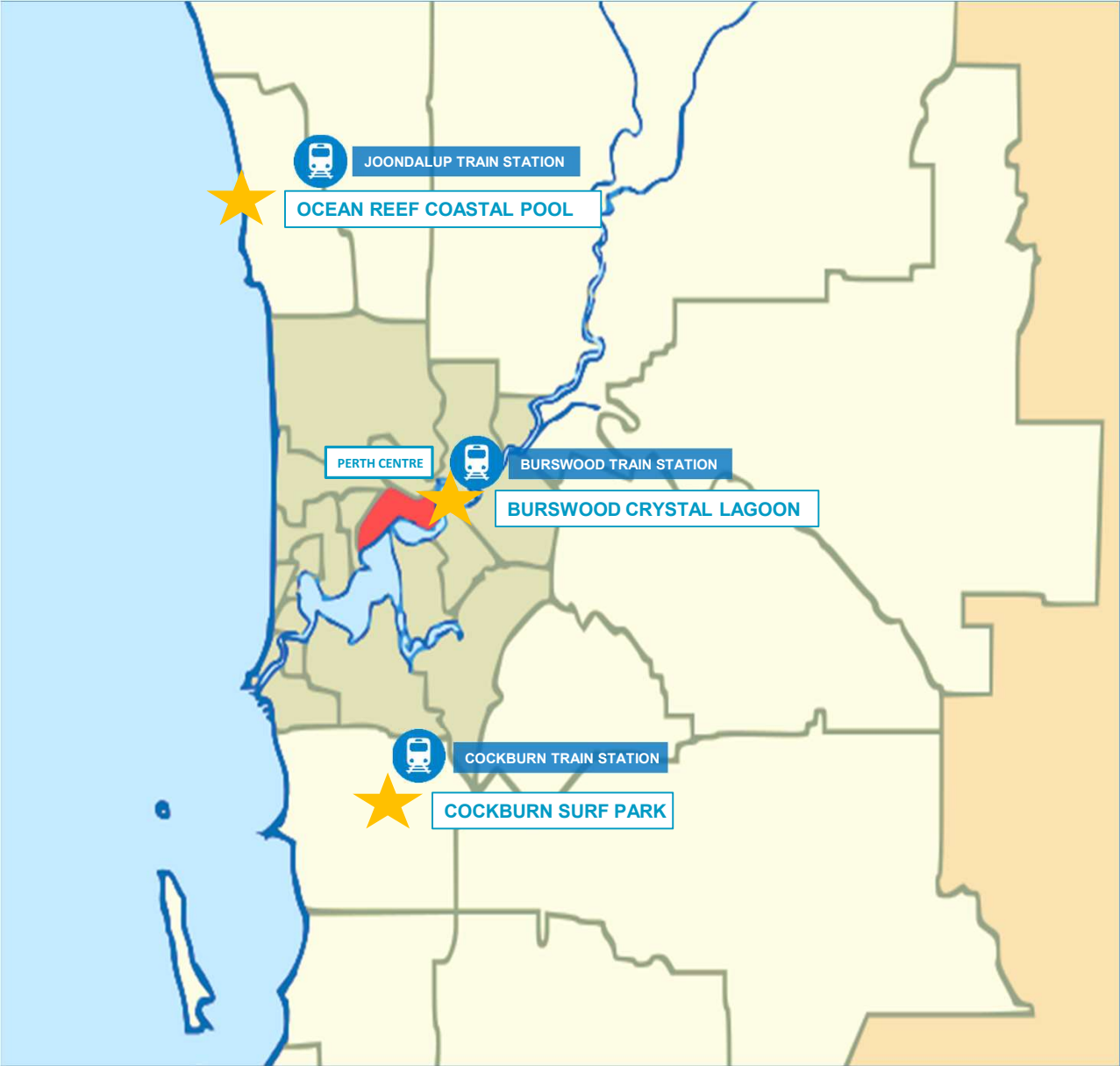
OCEAN REEF COASTAL POOL



BURSWOOD CRYSTAL LAGOON



COCKBURN CENTRAL SURF PARK



CRYSTALLINE LAGOON OF UNLIMITED SIZE

Crystal Lagoons
WORLD'S TOP AMENITY

Burswood Crystal Lagoon

“Perth’s Most Exciting Waterfront Destination”

MIAMI • SANTIAGO • AMSTERDAM • DUBAI • CAIRO

www.crystal-lagoons.com