







### **COEGA SPECIAL ECONOMIC ZONE**

Water for Industrial Development



right PLACE • right TIME • right CHOICE

06 October 2017

15489 20001 27001 31000 0HSAS 18001

#### Index

- The Coega SEZ Overview
- The Package of Plans Approach
- 3 Water Demand Planning
- 4 Conclusion



# Coega Overview: Ownership & Control





Government of THE REPUBLIC OF SOUTH AFRICA







Minister Dr Rob Davies







the **dti** Department: Trade and Industry REPUBLIC OF SOUTH AFRICA



Mr Sakhumzi Somyo





Premier of Eastern Cape

Mr Phumulo Masualle

Executive Mayor Mr Athol Trollip





• right PLACE • right TIME • right CHOICE

B-BBEE LEVEL 3 CONTRIBUTOR ISO 9001 14001 15489 20001 27001 31000 OHSAS 18001

# Coega Overview: current status

43 Operational investors IDZ & NMBLP	17 International companies 26 Home-grown companies
R6.682 bn private sector investment	R2.646 bn top-structures for investors
16 686 Jobs have been created in the SEZ	7 575 Operational jobs 9 107 Construction jobs
Over <b>85 886</b> people trained since inception	4 x Customs Controlled Areas (CCA) to reduce costs for exporters (Zone 1 & 2)



### **Current Investors**





















































































° Other \* Projects Being Implemented

### Coega Overview: Internal Capacity to Deliver

Vision 2030 (infrastructure award)	2017
Top Performing Public Service	2016
Job Creation	2016
2030 Vision	2016
Legends of Empowerment & Transformation	2016
Top Empowered: Public Service	2015
Top company in Infrastructure Development	2014
Top Performing Public Service	2014
Top Employer in SA: Public Sector	2014-16
Best Provider of Services to Exporters	2014
Most Empowered Enterprise	2014
Best company with most jobs created	2014
Top Green Organisation	2014



### Coega Highlights

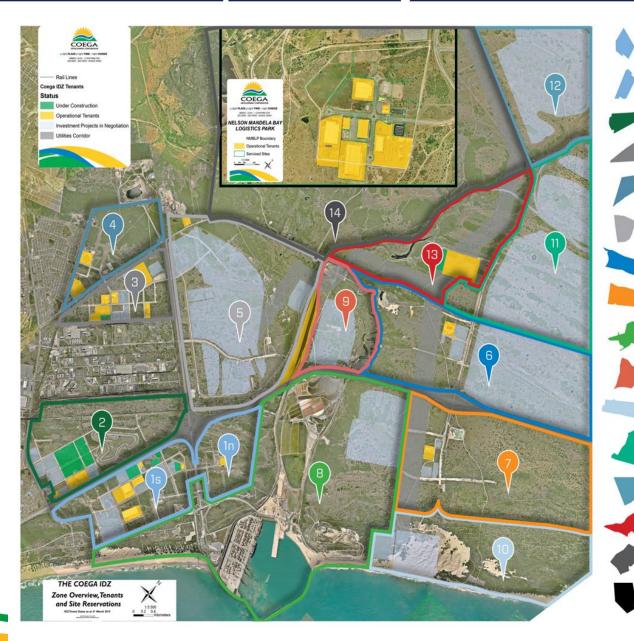


Coega Wins Top Performance Award. (left to right) Coega CEO - Pepi Silinga; MEC for EC Economic Development - Sakhumzi Somyo, Environmental Affairs & Tourism; Premier of the Eastern Cape - Phumulo Masualle; and Vice President of the People's Republic of China - Dr LI Yuanchao.

"In the last 5 years, the CDC has signed new investment deals with 61 private sector investors, with a combined investment value of R35.8 billion, making Coega IDZ the No 1 IDZ in Africa" - Dr Ayanda Vilakazi, Coega's Head of Marketing

"I've been to many developing countries and industrial development zones, the Coega IDZ is by far the best of them all"
- Dr LI Yuanchao, Vice President of the People's Republic of China.

# SEZ Zones per Priority Investment Sector



#### ZONE 1

Commercial Cluster - Coega Business Centre

#### **ZONE 19**

Logistics Cluster – Digistics, Famous Brands, APM Terminals, PE Cold Storage, General Motors South Africa, Vector Logistics

#### ZONE 2

Automotive Cluster - FAW, UTi

#### ZONE 3

General Industries Cluster – Afrox, Powerway, Air Products, Dynamic Commodities, Coega Dairy, Coega Cheese, DCD Wind Tower

#### ZONE 4

Training & Academic Cluster - Human Capital Solutions, BPO Park: Discovery

#### ZONE 5

Metallurgical Cluster - Bosun Brick

#### ZONE 6

Ferrous Metals Cluster - Agni Steels SA, Electrawinds

#### ZONE 7

Chemicals Cluster - Cerebos

#### ZONE 8

Port Area

#### ZONE 9

Materials Handling Cluster

#### **ZONE 10**

Mariculture & Aquaculture Cluster

#### ZONE 11

Petrochemical Cluster

#### ZONE 12

Advanced Manufacturing Cluster

#### ZONE 13

Energy Cluster - Dedisa

#### ZONE 14

Advanced Manufacturing: Aeronautical & Aerospace Cluster

#### NMBL

Nelson Mandela Bay Logistics Park – MSC, Grupo Antolin, Benteler, Inergy, Rehau, Faurecia, Hella

### Project implemented- Dedisa Peaking Power Plant



# Project implemented- Vector Logistics



# Project implemented- ID Logistics



## Project implemented- Coega Cheese Expansion



## Project implemented- Coega Dairy



### Projects implemented: Discovery Phase 2 & WNS

#### **Discovery Phase 2 - R10 million**



Jobs: 300 Operational

Start of operations: Q4 2015

#### **WNS R33 million**



Jobs: 950 Operational

Start of operations: Q4 2015

### Project implemented- REHAU Phase 2



#### BAIC

- About BAIC International
  - SOE with global footprint
    - 20 countries
  - 207 on the Global Fortune 500
  - Top 4 largest Chinese Automaker
    - 2<sup>nd</sup> in Heavy Commercial Vehicles
    - 4<sup>th</sup> in Passenger & Light Commercial
       Vehicles
  - Annual production of 2.5 million vehicles (3.6 times as SA)
  - Targeting 5 million units by 2020
    - (> UK + Italy + Turkey + Africa)
  - 2015 Revenue approx. Half a Trillion
     Rand







### BAIC Project Specifics

- Phased approach in NMB:
- Initial Phase: 30,000 units
- Full capacity: 100,000 units (over 5 years)
- Expected 800 1,500 operational jobs
- 10,500 indirect jobs at entry
- New supplier base to be developed
- 4,000 direct jobs at peak
- **50%** Exports
- \$770 million investment (Exch. 04/05/2016)
- Breaking ground: 30 November 2016
- Start of Production: Mid 2018

# BAIC's Artistic Impression



# What Sets Coega Apart

- Only Metro in SA served by two ports:
   [93% of EC container handling capacity]
- 2.6 million TEU capacity
- Served by major shipping lines & car carriers
   [90% of EC capacity]
- CCA: 70% saving on surety bond
- CDC institutional capacity:
  - Labour & SHEQ Services
  - Project development
  - Regulatory approval
- Services
  - Roads, Electricity, Waste, Waste Water
  - Water



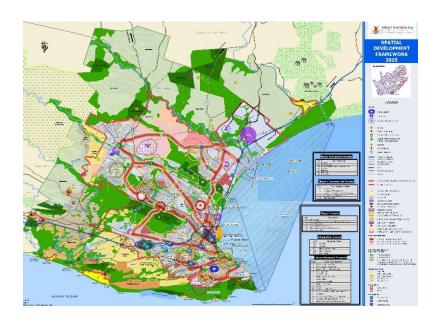
# The Package of Plans Approach

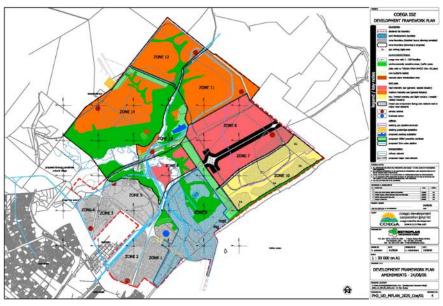


right PLACE - right TIME - right CHOICE

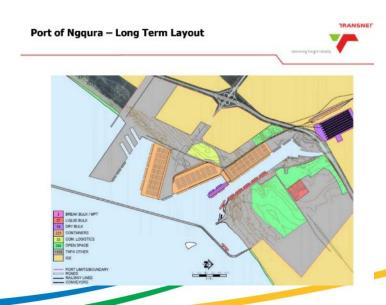
B-BBEE LEVEL 3 CONTRIBUTOR ISO 9001 14001 20001 27001 31000 OHSAS 18001

### PACKAGE OF PLANS APPROACH



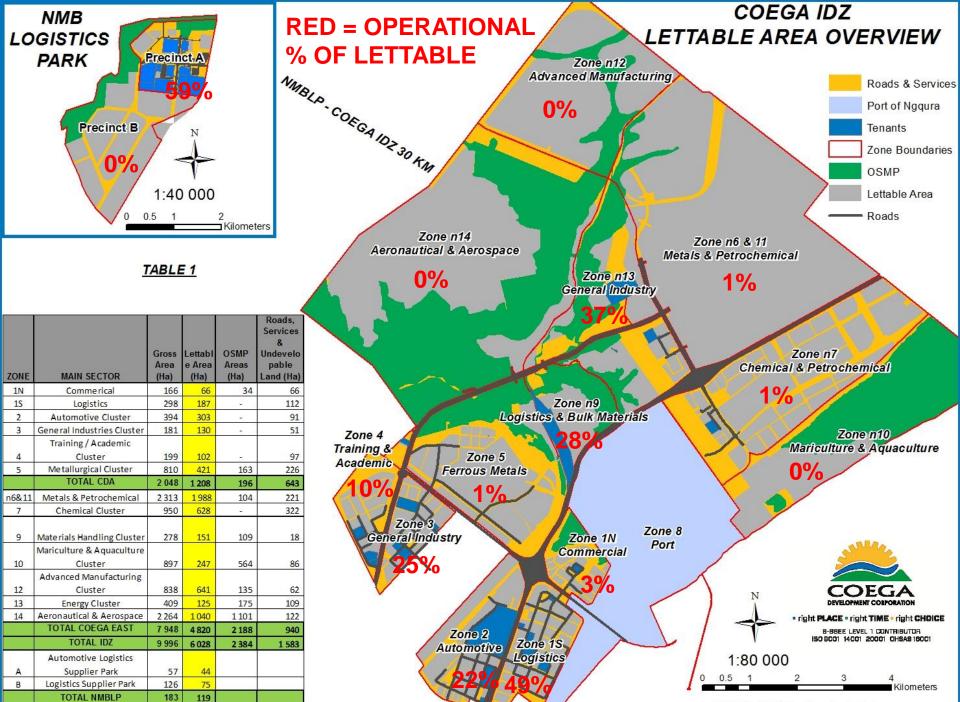






#### PACKAGE OF PLANS APPROACH





TOTAL IDZ & NMBLP

10 179

GT:\150911\_IDZ\_SDF.mxd by graham.taylor@coega.co.za

# **Water Demand Planning**



• right PLACE • right TIME • right CHOICE

B-BBEE LEVEL 3 CONTRIBUTOR ISO 9001 14001 20001 27001 31000 OHSAS 18001

### **Water Demand Planning**

Spatial Planning to support water demand for long term growth and short term demand



right PLACE - right TIME - right CHOICE

B-BBEE LEVEL 3 CONTRIBUTOR ISO 9001 14001 20001 27001 31000 OHSAS 18001

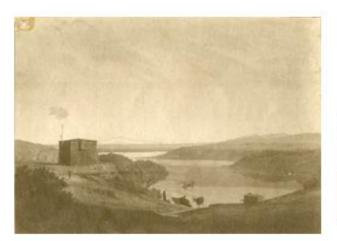
# NELSON MANDELA BAY – EARLY IMAGES

















# NELSON MANDELA BAY – EARLY IMAGES









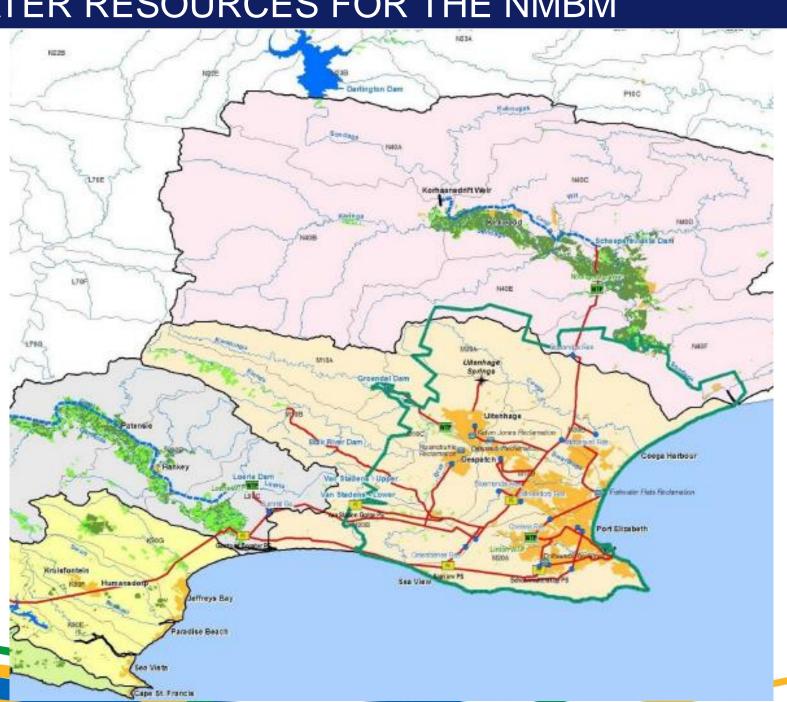




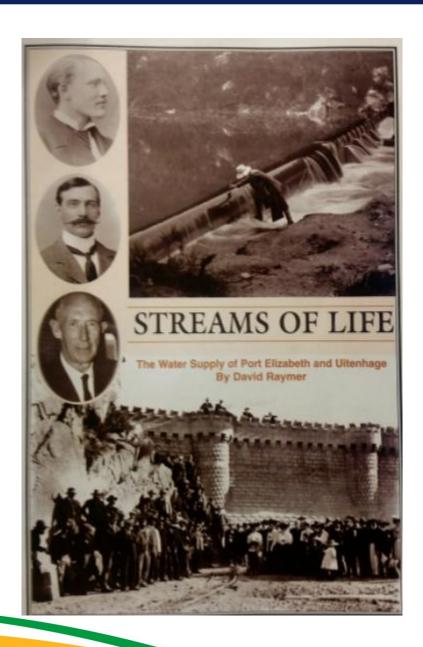
### WATER RESOURCES FOR THE NMBM



### WATER RESOURCES FOR THE NMBM



### STRONG PRECEDENTS TO WATER PLANNING



Well documented by David Raymer, 2008

#### ALGOA RECONCILIATION STRATEGY

Algoa Reconciliation Strategy (2010) Updated for emergency interventions (April 2011)



Status Report 1 (Sep 2011) Status Report 2 (Sep 2012) Status Report 3 (Sep 2013) Purpose is to determine the current water balance situation and to develop various possible future water balance scenarios for at least a 25-year planning horizon.



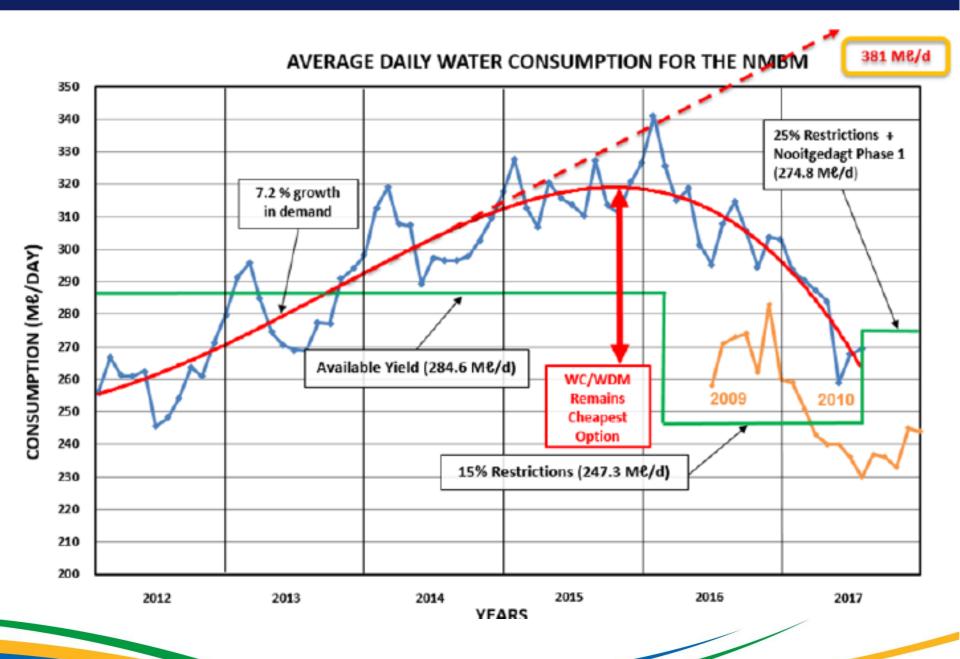
Status Report 4 (Sep 2016)

Status Report 5 (Sep 2017)

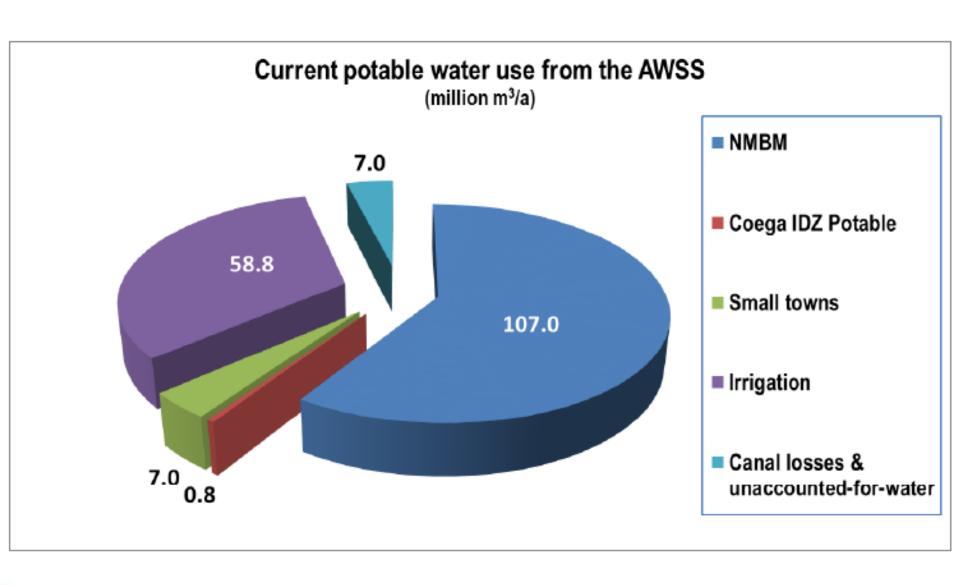
Status Report 6 (Sep 2018)

Identifies responsibilities and timing of actions that needed to reconcile available resources and requirements,

### NMBM WATER USE



## ANNUAL USE (ALGOA WATER SUPPLY SYSTEM)



### AWSS AUGMENTATION FOCUS AREAS

- Water Conservation and Demand Management
- Nooitgedacht Low Level Scheme
  - Phase 1: 90 MI / day
  - Phase 2: 125 MI / day (Completed August 2017)
  - Phase 3: 160 MI / day
  - Desalination
    - Schoenmakerskop
    - Coega Marine Servitude
    - Zwartkops River & Sea Salt options
  - Groundwater
    - Coega Groundwater (30 Ml / day)



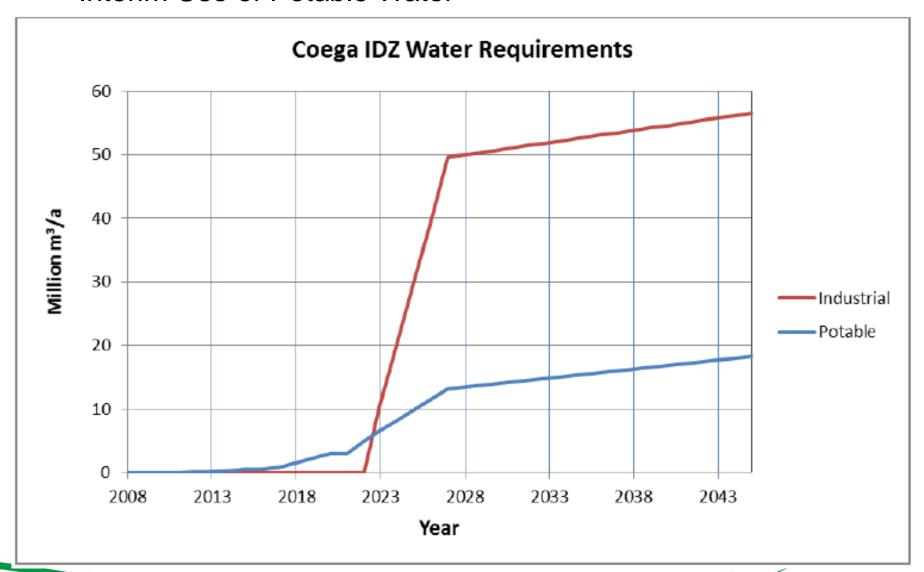
#### AWSS AUGMENTATION FOCUS AREAS

- Industrial Process Water
- Fish Water Flats Waste Water Treatment Works
  - First phase 30 MI / day
  - Second Phase 60 MI / day
  - Membrane Biological Reactors (MBR)
- Coega Waste Water Treatment Works
  - First phase 20 MI / day

Phase Da	Dete	Volume per	Phase (Mℓ/d)	Cumulative volume (Mℓ/d)	
	Date	Domestic	Industrial	Domestic	Industrial
1	2019	20		20	
2	2024	20	10	40	10
3	2029	20	10	60	20
4	2034		20		40
5	2038		30		70

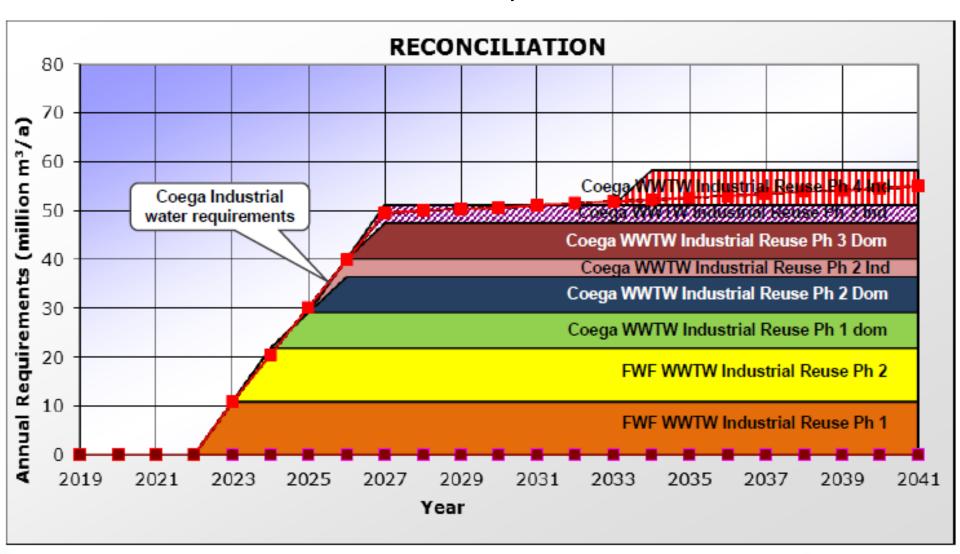
### COEGA SEZ WATER REQUIREMENTS

Interim Use of Potable Water

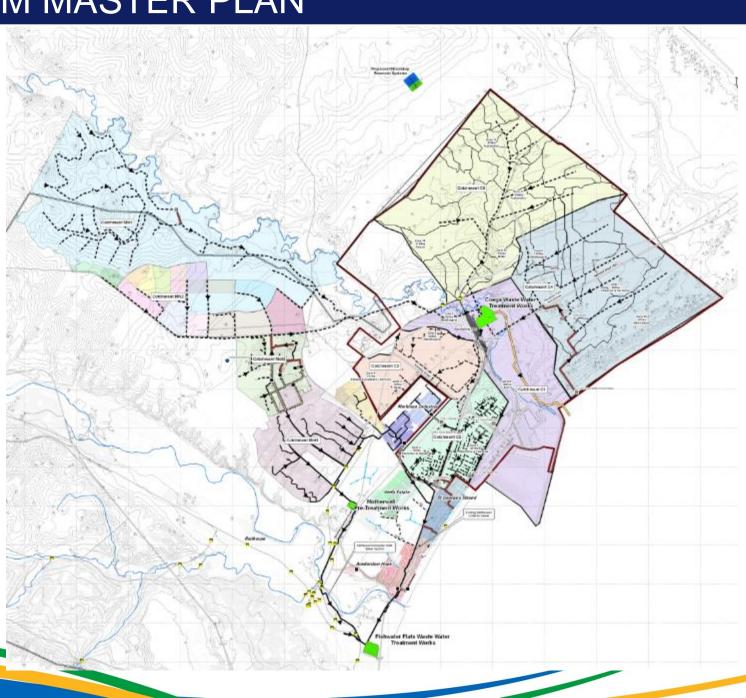


#### COEGA SEZ WATER REQUIREMENTS

Seven Growth Scenarios Developed



# NMBM MASTER PLAN



# COEGA SEZ WATER MASTER PLAN



# COEGA SEZ BULK WATER, SEWAGE & RE



#### CONCLUSION

- Master Planning in Place to accommodate various growth scenarios
- Scale and Uncertainty are key issues
- Institutional issues are still a key focus area
- Funding is a key issue
- Environmental studies completed and / or in progress for various components
- Collaboration is an imperative
- Options for Industrial ecology / Industrial Symbiosis

# THANK YOU



right PLACE • right TIME • right CHOICE

B-BBEE LEVEL 3 CONTRIBUTOR ISO 9001 14001 20001 27001 31000 OHSAS 18001