

## DRIVERS, ACTIONS & PRESSURES CAUSING CHANGE

### Climate Change

- Sea level rise (SLR)
- Rainfall decrease
- Temperature increase

### Estuary Use Intensification

- Boat traffic
- Recreational fish extraction
- Recreational crab catch
- Commercial crab catch
- Aquaculture

### Urban Population Growth

- Urban area expansion
- Urban densification
- Lifestyle block expansion
- Non-scheme water consumption

### Agricultural Intensification

- Agric sector area expansion
- Animal stocking density
- Fertiliser use (& nutrient runoff)
- Intensive horticulture
- Non-scheme water consumption

## RESPONSES ENABLING ADAPTATION

### Climate adaptation

- Flow targets
- Coastal retreat
- Revegetation

### Coastal infrastructure

- Boat ramps
- Coastal protection
- Dredging

### Fishery management

- MSC certification
- Gear and take limits

### Liveable cities initiatives

- WSUD
- High PRI fill
- Urban greening
- Urban infill
- Land release

### Farm technology adoption

- Carbon farming
- Intensive horticulture
- etc

### Pollution control

- Effluent discharges
- Septic tanks
- Nutrient targets

### Regional Planning

- SAPP, etc

### Community engagement & stewardship

- Communication
- Education

## LOCAL INITIATIVES

CoM/SoM  
foreshore/coastal  
management  
plans  
Ramsar Site  
management plan

WQIP  
Strategic  
Community Plan

M&M  
Economic  
Development  
Strategy

Peel Regional  
Investment  
Blueprint

## OPPORTUNITY / VULNERABILITY

### ENVIRONMENTAL QUALITY

- Clean water
- Diverse fish stocks
- Sustainable crab fishery
- Ramsar obligations
- Flood mitigation

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### ECONOMIC GROWTH

- Quality of life
- Standard of living
- Economic performance

## MONITORING & COORDINATION

DWER  
monitoring,  
review &  
assessment

WSC  
Benchmarking

Coordination &  
engagement

PDCB Blueprint  
evaluation &  
monitoring

## ADAPTIVE MEASURES & RISK MITIGATION

### Water management

- e-water
- MAR
- Irrigation control

### Mosquito spraying

### Fishery management

- Bag limits & season
- Restocking

### In situ remediation

- Oyster reef filtration
- Oxygenation

### Shoreline management

- Wrack harvesting
- Beach closures
- Maintenance

### Waterway management

- Drain intervention and stripping ponds
- River shading

### Land management

- Riparian revegetation
- Soil amendment
- Fertiliser reduction
- Slow release fertilisers
- Perennial pastures

### Local investment

- Financial incentives
- Partnerships

### Communities

- Arts, culture & sports
- Education & support
- Citizen science

### Strategic initiatives

- Peel Food Zone
- Peel Business Park
- Eco-tourism

## MODEL TOOLS

## BENEFITS & INDICATORS

### Water quality

- NEA: Nutrient export & assimilation
- WQI: Water quality

### Tourism & livability

- TUR: Waterfront amenity
- MQR: Mosquito risk
- CRB: Crab habitat

### Environmental health

- FCI: Fish diversity
- GHG: Greenhouse gas emission
- HAB: Harmful algal blooms
- HYP: Hypoxia

### Comparative advantage

- S&D: Specialisation & diversity
- IIL: Inter-industry linkages
- EXO: Export orientation

### Competitive advantage

- GUD: Growth potential
- LIC: Local job creation