

Managing The State's Storages

*Drought Management Workshop
September 2003*

*Abel Immaraj
State Water*

Recent History:

- 1896-1986: Water commissions /Departments
(WC&IC, WRC, DWR)**
- 1995: NSW Bulk Water Delivery Business Arm
of Dept Land Water Conservation**
- 1997: State Water formed in response to
COAG, NCC, NSW Water Reforms**
- 1998: Commercial Business within DLWC**
- 2003: Commercial Business within Ministry of
Energy & Utilities**
- 2004: ??**

Separation of roles:

Natural Resource Regulator

**Dept Infrastructure Planning Natural
Resources (DIPNR)**

Resource Operator - State Water

Resource Regulation - DIPNR

- **Water Sharing Planning**
- **Environmental Management**
- **Landscape Management**
- **Community Support**

Resource Operations - State Water

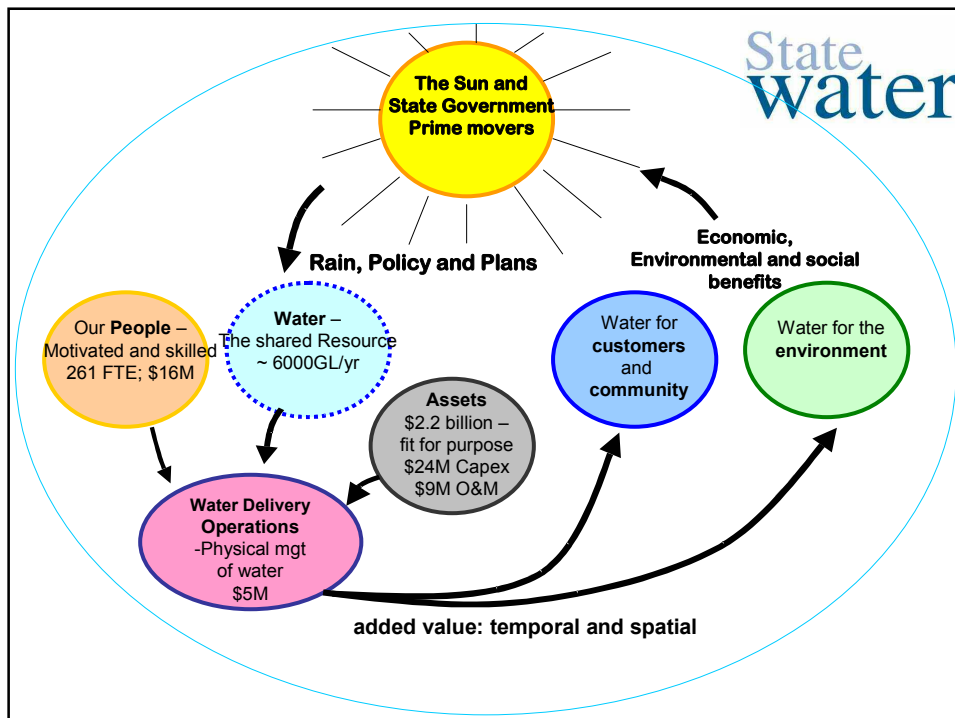
- **Water Delivery**
- **Asset Management**
- **Commercial Services**
- **Customer Service**

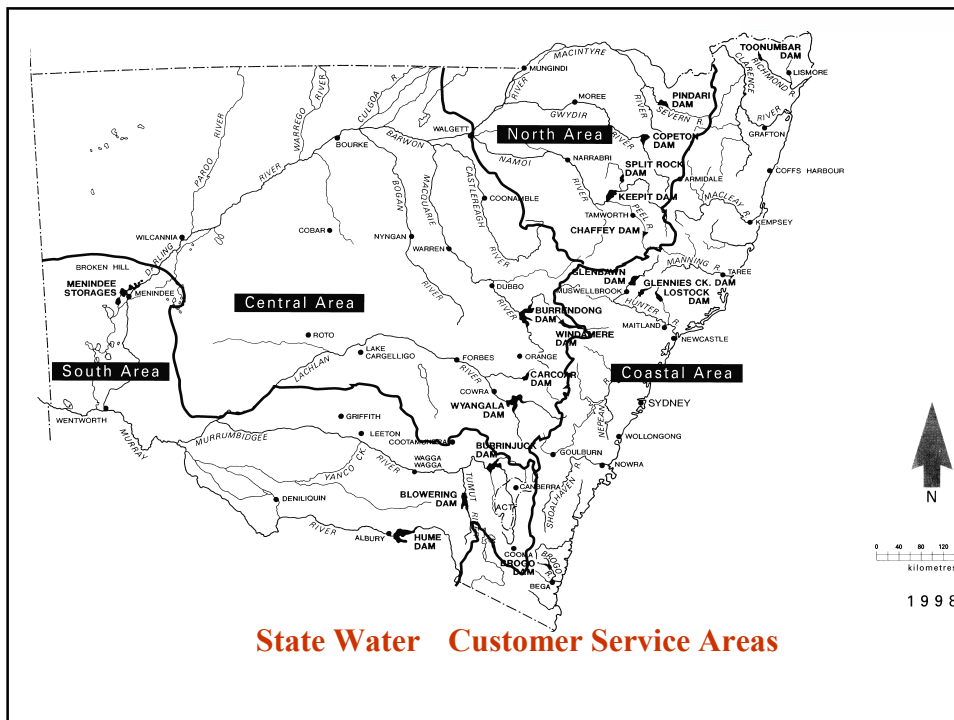
5 Key Result Areas:

- **Water Delivery** measuring, planning, making decisions, operating structures
- **Asset Management** planning, maintaining structures, lifecycle management
- **Customer Service** managing customer accounts, advice, demand management
- **Business Development** business sustainability, cost effective delivery and full cost recovery
- **Our People** informed decision making, operation, review and development

Operating Environment:

- **Operating authority**
- **Dam safety standards**
- **Statement of financial performance**
- **Water pricing regulation**
- **Customer service charter**





State
water

The Resource:

- Surface Water
- Groundwater

...Highly Variable

- availability in time and space
- supply and demand

The Resource:

- **10 “regulated” river systems**
- **Numerous unregulated streams**
- **Groundwater systems**

...Highly Variable

- **availability in time and space**
- **supply and demand**

WATER...

Who needs it? Who wants it?

Every one...

6 million Megalitres/year...

1 million hectares of wetlands...

95% of power generation...

towns, riparian, recreation...

...increasing demand and competition.

Water Delivery Operations:

To maximise the delivery of the allocated water to customers - manage storage, supply, demand and usage.

- **Efficient operations**
- **Environmental compliance**
- **Cost effectiveness**

Water Delivery Operations:

- **Assessment of resources**
storage, minimum inflows
- **Essential requirements**
basic rights, town water supplies, environmental water, transmission requirements, carry overs
- **Allocation of available water**
annual available volume as a % of entitlement
- **Annual operating plan**
Storages, supply and demand management, implementation of rules and targets

Water Delivery Operations:

- **Water orders**
CSO, telephone, IVR, Fax, email
- **Determination of flow regime**
CAIRO, Flow rules, targets
- **Dam and weir operations**
Realtime water releases and re-regulation
- **Water usage monitoring and control**
Metering, assessment, advice and notification
- **Water account management**
Forecast and manage availability and consumption

Contingency Planning:

- **Demand Management**
- **Supply Management**
- **Water Delivery Operations**
- **Communication**
- **Compliance**

Customer Service:

8 Customer Service Committees:

- Levels of service
- Water pricing negotiations
- Investment decisions

State Water Organisation:

- 4 Customer Service Managers
- 33 Customer Service Officers
- Customer Enquiry Facility

The Assets:

- **18 Large Dams**
- **12 Small Dams**
- **264 Weirs and Regulators**
- **140 Associated structures**
- **548 Buildings**
- **Land**
- **SCADA System Infrastructure**
- **Plant & Equipment**

Asset Management Strategy:

To maintain an asset portfolio which delivers optimal performance:

- **Operational**
- **Environmental**
- **Financial**

Sustainable Infrastructure

Structures and systems must meet targets/standards:

- **Safety**
- **Service Level**
- **Environmental**
- **Economic**

Total Asset Management Plan

Effective **Planning** of
asset management **actions** and
funding to
implement the principles of
sustainability.

TAMP Outputs:

- Knowledge of assets
- Levels of service
- Portfolio risk assessment
- Life cycle management plans
- Integrated operation & maintenance
- Budgets, pricing and funding plans
- Assets “fit for purpose”

Commercial Operations:

**To delivery services to customers -
water users and government**

- **Cost effective delivery of services**
- **Full cost recovery of efficient costs**
- **Regulatory compliance**