

### **SQID Asset Management Square 1**

Lessons learned from working at 3 Councils



### Asset managers role

WHAT DO YOU HAVE?

WHERE DO YOU HAVE IT?

WHAT CONDITION IS IT IN?

WHAT ARE YOU GOING TO DO ABOUT IT?



### What do you have? Reference slide

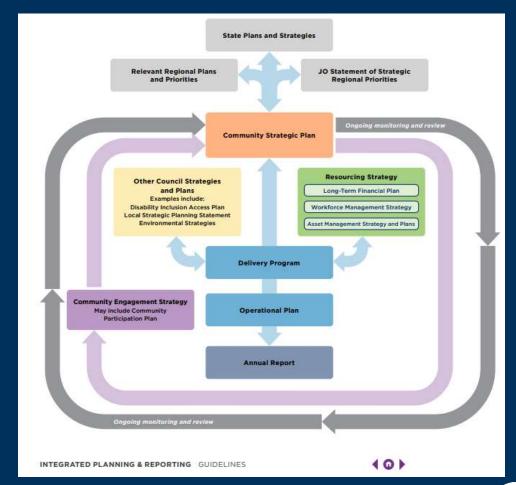
- Digging for documents:
  - Design report
  - Detailed design
  - Bill of Quantities
  - Works as executed
  - Cleaning specification/Data sheet
  - Photo points (2-3)





### How do you store the information?

- Asset management systems such as Tech1 or MyData
- Provides one source of truth
- Hugely important for funding





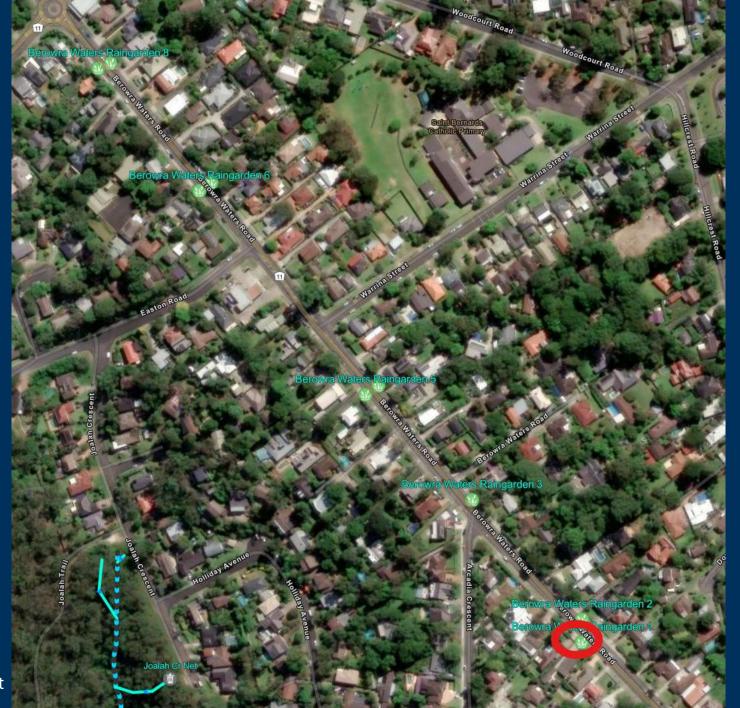
#### Parameters to store

- Reference slide
  Asset sub-class (eg bio-filter, Water harvesting, GPT)
- Asset Category (eg rack, sed basin, bio-retention, vault)
- Asset Name (develop a 30 character naming convention eg [Road name/reserve name], asset category)
- Model (if proprietary)
- Date Constructed
- Cost
- Geometry (area or length) (if bespoke)
- Structural score (IPWEA)
- Capacity Score
- Location information
- Source of the project (developer, Council, TfNSW etc)

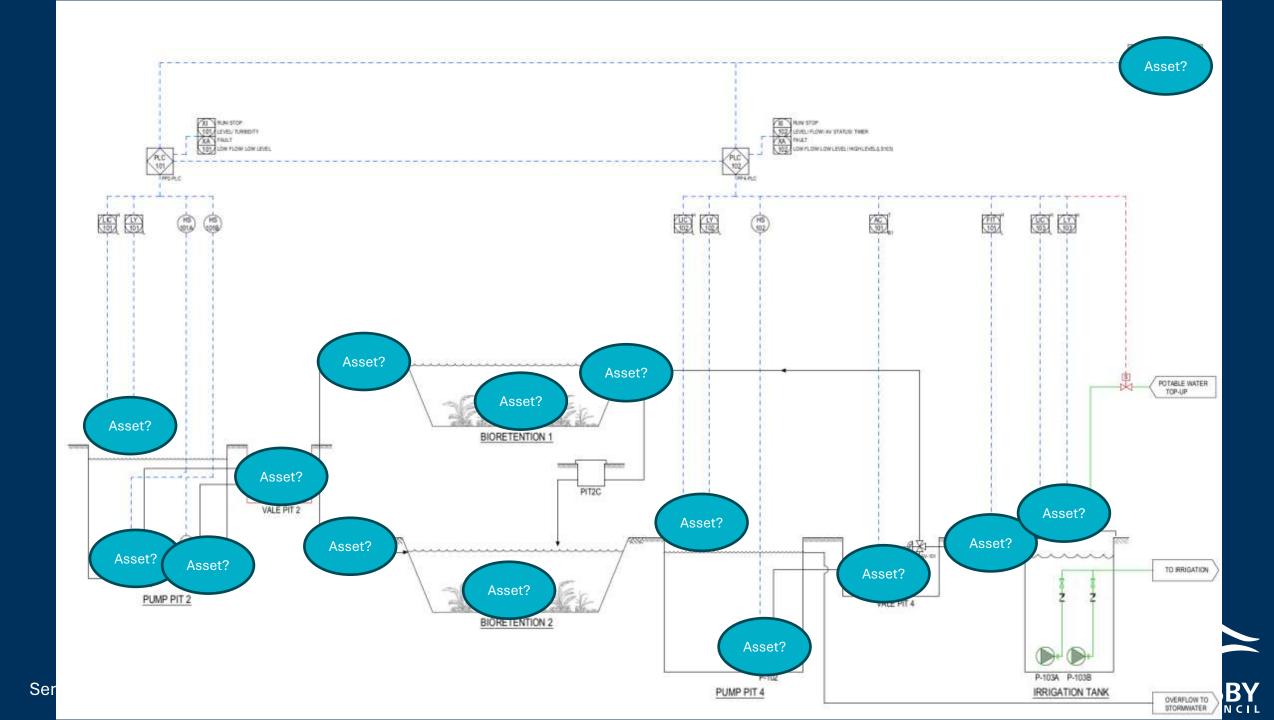


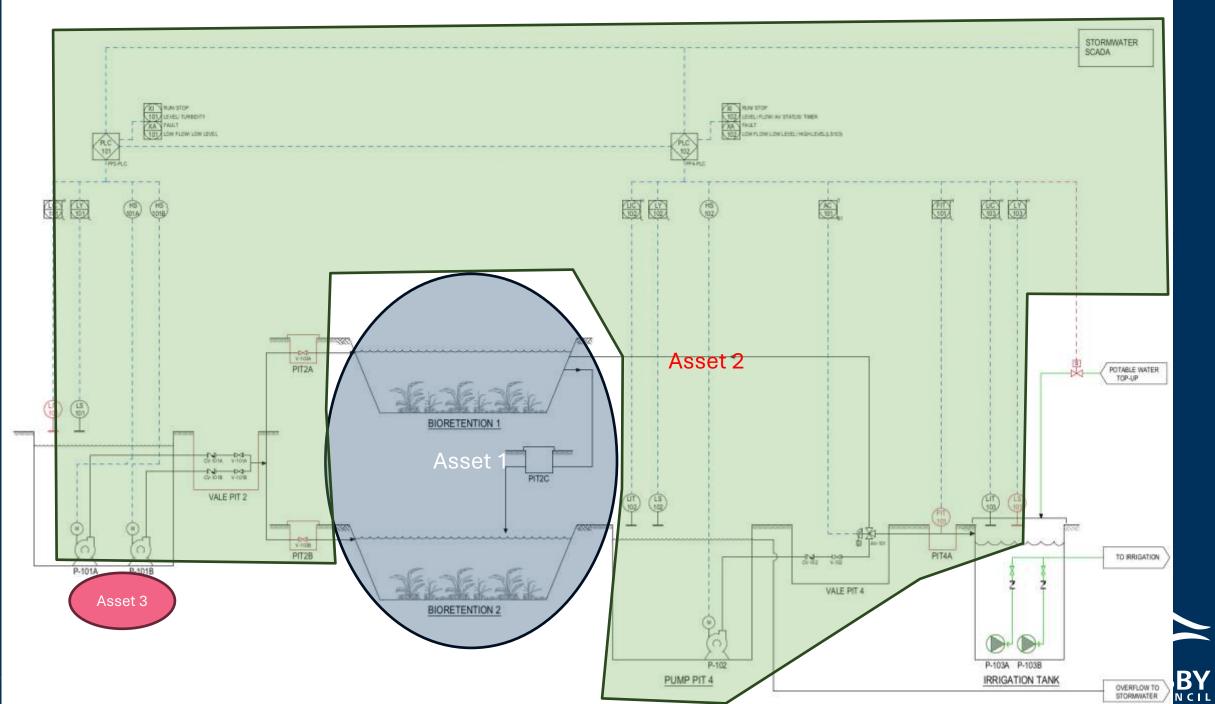
# What is a capitalised asset? (or) How do you cut a cake?











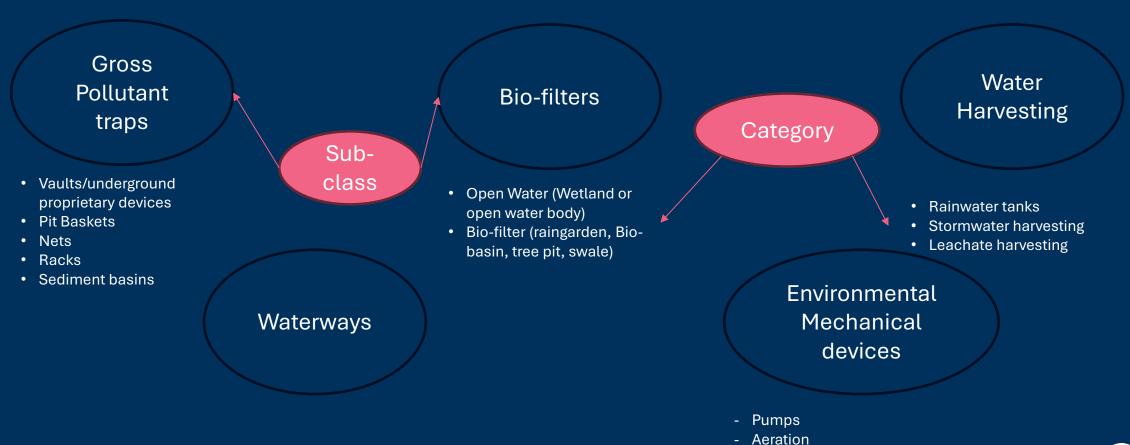
## What is a capitalised asset? (or) How do you cut a cake?

 Group what you can, but identify physically separate assets as individual assets

A single asset is a maintainable unit



### Asset Tree Organisation Reference Slide



- Sensors/ data loggers

- Water height control structures

### Detailed database Reference slide

- Further information to store
  - Photos of the device (during construction and throughout its life)
  - Historic Cleaning information
  - Spreadsheet of devices (basis for an AMP)
    - Store many different parameters for analysis eg
      - What catchment its in?
      - What's the contributing catchment?
      - Impervious fraction of the contributing catchment
      - Life cycle information (costs for various things)
      - Origination of the project (council, developer, TfNSW etc)
      - Related assets (treatment train)
      - Breakdown of relevant sub-assets
      - Audit information
      - Cleaning frequencies



### Where do you have it? The role of GIS

Asset management

Strategic planning

Maintenance



### What condition is it in?

- Structural rating (IPWEA Practice notes)
  - A measure of how long the asset has left before you need to re-build it (remaining useful life)
  - Renewals



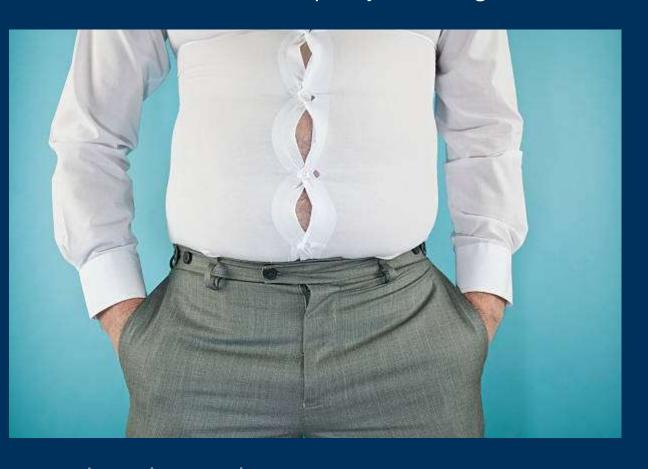






### **Capacity rating**

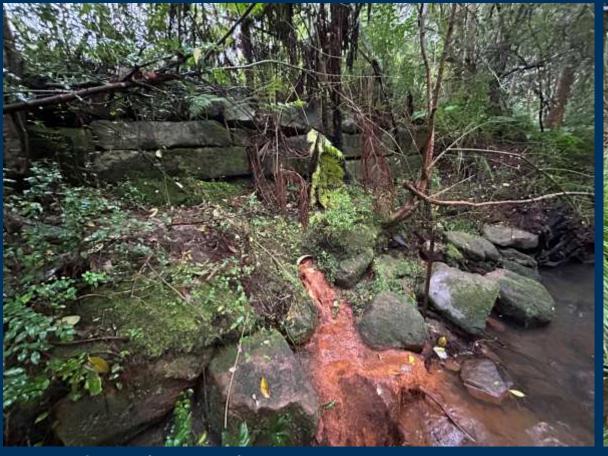
- Can the device meet the services expectations of the catchment?
- Can the device meet the service expectations of the inflows?
  - Low capacity sites are good candidates for upgrades





### **Functional rating**

- A measure of how well are the parts working
  - Poorly functioning devices often need a more maintenance.
  - It may also be related to how much inflow is coming in



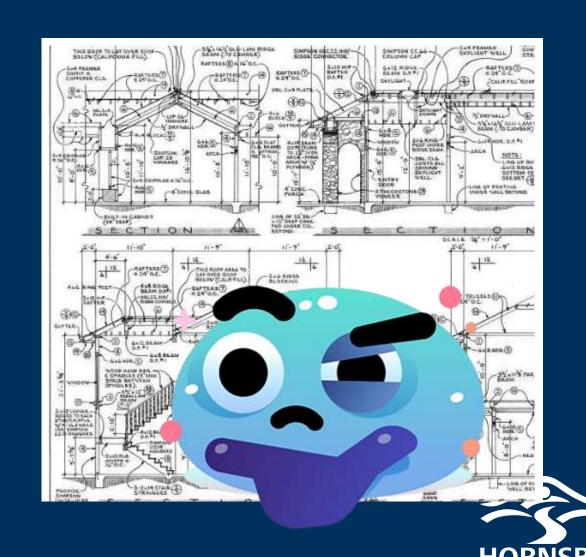


### Auditing

- Don't audit your bio-filters, stormwater harvesting devices or sediment basins until you've gotten familiar with them – at least a year.
- You want to know where everything is before getting an auditor out

• Go with them to all devices. Things get missed easily. The device itself or parts of the device.

GPT's are easier to see and understand



### What are you going to do about it?

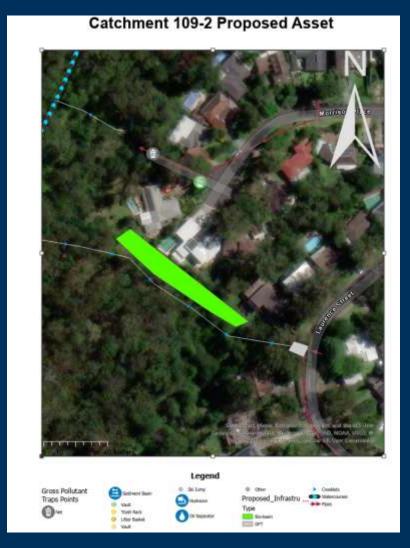
- Prioritised rectifications from auditing
  - Will highlight maintenance and renewals required and good upgrade options.
  - Low hanging fruit





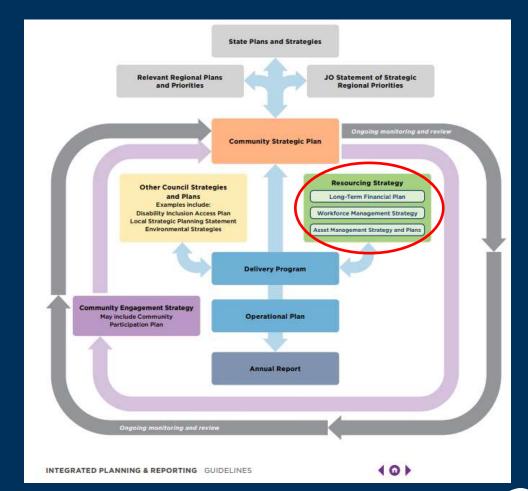
### What are you going to do about it?

- Sub-catchment planning (for initiatives and upgrades)
- Put all options on the table and prioritise them
- Developer contribution schemes/ developer built assets
- Identification of Council led initiatives
- Get these adopted or noted in your plans of management



### **Asset Management plans**

- Asset management plans Integrated planning and reporting
- Maintenance staff know nothing (of AMPs)
- AMPs are your sword for getting what you want





### **Funding**

- Stormwater management service charge
  - Use to fund upgrades and initiatives
  - 70/30 split with General reserves
- Special rate variations SRV's
  - Depends
- General reserves
  - Use it to fund renewals and maintenance through Asset Management Plans
- Grants
  - Use these to fund initiatives and upgrades
  - But be ready! Have a design shelf.
- Developer contributions
  - Most likely will fund initiatives and Upgrades in response to increased population

