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**Document Status:** Draft

Date Issued: 01-02-2018

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Approved by: Danvm DC Finance & Policy Committee

**Date for Review: 29-03-2019** 

### **Record of Policy Review:**

Date Policy was Issued	Date of Review	Reason for Review	Lead Reviewer	Additional Comments
01-02- 2019	29-03-2019	Committee approval	Finance & Policy Committee	Next review when changes in legislation



### 1. Introduction

The **Danvm Drainage Commissioners** (the Board) was formed in April 2012 by a Constitution Order under the Land Drainage Act 1991 (as amended) following amalgamation of the Dearne & Dove IDB, Dun Drainage Commissioners, Knottingley to Gowdall IDB and Went IDB. The Board's purpose is to protect people and their property against river and surface water flooding through water level management within low lying areas predominately from the north of Doncaster up to the River Aire.

Up to 40% of the Drainage District relies upon mechanical means of lifting water from the low-lying areas into the River Aire, River Went, River Don, Ea Beck, River Dearne, River Dove and Aire & Calder Navigation with gravity discharge dependant on Main River catchment rainfall, topographic levels, and/or tidal influences.

Within the District there are several pumping stations lifting water from subsided ground, inherited from the National Coal Board coal mining operations and those of private mining companies, whose impact on drainage is now managed by the Coal Authority. Coal mining and land drainage have a long-standing tradition and relationship dating back to early 20<sup>th</sup> century.

#### Moving toward Asset Management

"Line of sight" is a phrase which describes the requirement that there is a clear connection between all activities within the Board which effectively drive forward the achievement of the Boards overall objectives. Activities must align with the priorities outlined in the Boards vision, mission, strategy and objectives.

To be an effective Asset Manager it is critical that the Board considers the following:

- Production of an Asset Management Policy (a high-level statement of intent which provides guidance for lower level plans, policies, procedures and actions)
- Define and document Asset Management Objectives (key performance measures or outcomes for Assets and the Asset Management system which must be achieved if the organisation is going to achieve its overall objectives)
- Develop and document a Strategic Asset Management Plan (a document which
  outlines the strategic initiatives and actions for the Asset Management System and
  for Critical Assets which are required in order to bridge the gap between desired
  Asset Management outcomes and objectives and what the results would be in those
  areas in the event of a "do nothing, business as usual" situation.
- Develop, review and record, Asset Management Plans (whole-of-life or longer term plans for the management of critical assets i.e. Pumping Stations which outline what must be done to those assets in order to ensure that those assets continue to meet their required performance targets in terms of cost, performance and risks and therefore contribute to achievement of the specified Asset Management Objectives and through those, achievement of the organisation's overall objectives.



### 2. Foreword and Vision

The successful management of assets requires a robust understanding of their requirement, condition and the management plans required to ensure they operate effectively within clearly defined parameters which can be quantified against risk of failure. Therefore, this understanding must be supported by factual information that is both reliable, and realistic in its content, delivered through documented approved processes by competent professionals.

Our aim is to meet our wider obligations in a manner which demonstrates world class thinking and delivery of function, by matching capabilities and requirements for the needs of ourselves and our partners, clients and the wider stakeholder groups affected by our activities. We fully acknowledge that the principles and discipline of asset management will guide the coordination of our activities, and to realise the full value of our physical assets ensuring that they operate efficiently over their whole life therefore offering 'true value for money'.



We will put safety and the environment at the forefront of our asset policies and decisions, thus ensuring investments can justified when afforded any scrutiny. We will commit to the principles of sustainable development in all areas of our water level management activities by; 'Seeking to deliver, a coordinated natural approach to water level management, acknowledging the synergy between land, water, vegetation, wildlife and natural resources for this and future generations'

Delivering our function through the principles of asset management will ensure that planning and programming is efficient. By reviewing cost and benefit to confirm this is aligned with the Boards Strategic Plan, will help programme and guide delivery by identifying future risk and potential failure therefore defining the most suitable cost-effective mitigation measures required to manage this.



Targets: By 2019

To have in place an asset management system that fully complies with the requirements of BS EN ISO 55000



### 3. Purpose

This document forms the basis for the Asset Management Policy of the Board. It defines the key principles and requirements which the Board will apply to its infrastructure to achieve its business objectives and Strategic Asset Management Plan (SAMP).



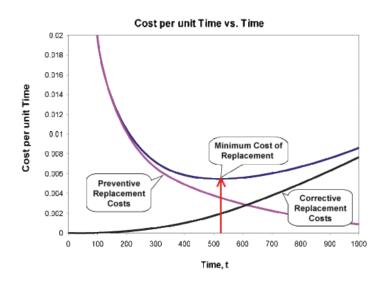
For the sake of clarity, an asset is regarded as tangible item of economic value. For this policy, it refers primarily to physical items such as the Board's Pumping Station Infrastructure and includes the Board's Operational Equipment such as Tractors, Flail Mowers, Excavators and Powered Hand Tools such a Strimmer's and Lance Type Sprayers and Drills etc<sup>1</sup>.

### 4. Scope

This document has been developed to comply with the relevant clauses of BS EN ISO 55001.

### 4.1 Corporate Alignment

This document has also been developed to align to the Board's Corporate Plan and forms the framework for the implementation of asset management within the Board's Internal Drainage District (IDD) regarding its associated activities and decisions and is intended to define the approach to asset management activity undertaken by the Board.



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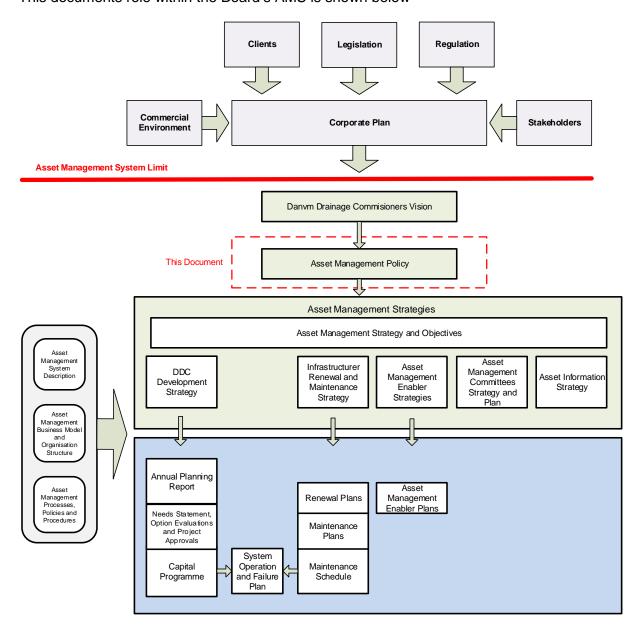
<sup>&</sup>lt;sup>1</sup> See table 1



#### 4.2 Asset Management Alignment

This policy forms the basis for the Board's Asset Management System (AMS) ensuring a clear 'direction of travel' on the Board's asset management journey and implementation of the Boards corporate plan. It seeks to support the Board in disseminating its Corporate plan into an effective delivery vehicle for the asset management plan.

This documents role within the Board's AMS is shown below

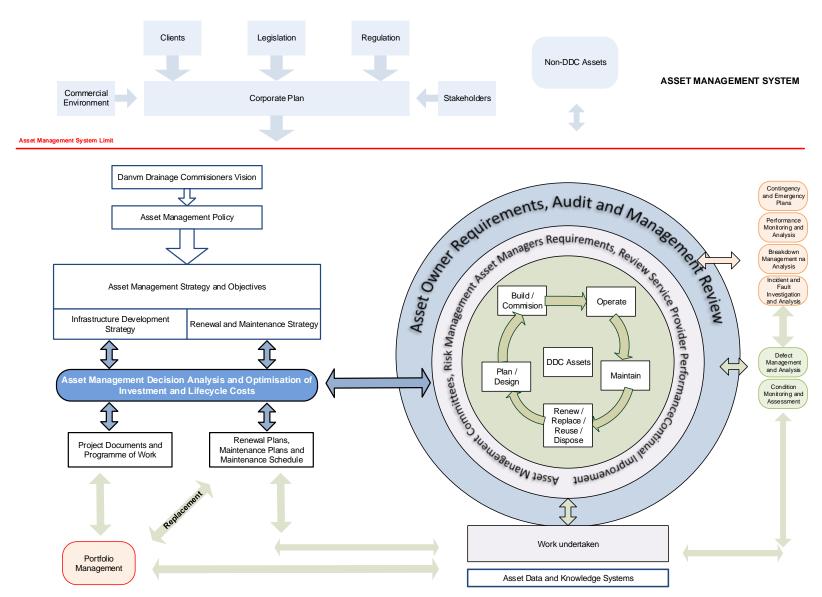


#### 4.3 Asset Management Activities

In accordance with the guidance as set out by the Institute of Asset Management (IAM) the range and scope of asset management activities is shown below;

#### Scope of the Asset Management System Activities









### 4.4 Asset Management Definitions

#### **Asset Management**

Systematic and coordinated activities through which the Board manages its assets and their associated performance, risks and expenditures over their lifecycle for the purpose of achieving its corporate plan

#### **Asset Management System**

The Board's Asset Management Policy, Asset Management Strategy, Asset Management objects and Asset Management plans and the activities, processes and organisational structure necessary for the development, implementation and delivery of said requirements seeking to review and continually improve performance in all areas

#### **Asset Manager**

The person(s) responsible for the strategic delivery and monitoring of the plan

#### **Asset Management Policy**

Principles and mandated requirements derived from and consistent with the Board's Corporate Plan, providing a framework for the development and implementation of the asset management strategy and the setting of the asset management principles

#### **Asset Management Strategy**

Long term optimised approach to management of Board assets derived from and consistent with the Board's Corporate Plan and the Asset Management Policy

#### **Asset Management Objectives**

The Asset Management Objectives are:

- Specific and measurable outcomes or achievement required of the asset systems in order to implement the asset management policy and the asset management strategy and/or
- A detailed and measurable level of performance or condition required of Board assets and/or
- Specific and measurable outcomes or achievement required of the asset management system

#### **Asset Management Plans**

Documents specifying activities, resources, responsibilities and times scales for implementing the asset management strategy and delivering the asset management objectives



#### 4.5 Physical Assets

The assets that are included within the scope of the asset management system are those physical assets comprising or relating to the provision of water level management within the Board's IDD. The classes of assets that are included in the AMS are described in the table below and have been ranked in Order of Priority/Importance.





Table 1

	PHYSICAL ASSET TYPE & RANKING	DESCRIPTION
1.	Water Level Management Pumping	- Groundworks and sub-structures
	Stations, Structures and Board Owned Systems	- Building(s)
		- Pumps
		- Electrical Panels
		- Weedscreen Cleaners
		- Weirs, Penstocks and Syphons
		- Culverts and Pipelines
2.	Control System	- Telemetry - Pressure Sensors, Ultrasonics, Radar
3.	Operational Equipment	- Tractors
		- Flail Mowers
		- Excavators
		- Vehicles
4.	Operational Equipment – Hand Held	- Strimmers

#### 4.6 Management of Assets outside of the Asset Management System

Whilst this policy has a direct focus on the physical network of the Boards pumping station infrastructure, the principles and policy within this document are considered to be best practice for all the Boards assets outside of the defined asset management system. The asset management policy will define the approach taken in the production and development

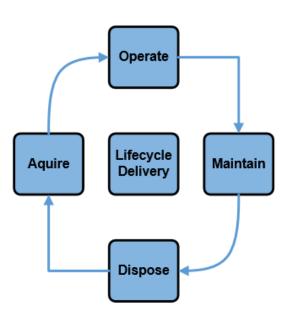


of suitable strategies and plans for these assets moving forward to ensure consistency of management and delivery.

# 5. Asset Management Principles

The key asset management principles to be applied thus enabling the creation and implementation of the asset management strategy, objectives and plans are;

- Ensuring alignment with the Corporate Plan
- Considering all stages in the asset life cycle i.e. planning, design, construction, operation, maintenance, renewal and disposal
- Optimising the performance, cost and risks of the assets
- Focused on service outcomes as seen by all stakeholders
- Maintaining compliance with relevant regulatory requirements
- Provide a framework for the continual improvement of the asset management system





### 6. Policy

The Board's Asset Management Policy is to ensure that its physical assets (as defined in section 4.5) are managed effectively across the complete asset lifecycle in a safe, efficient coordinated and environmentally sensitive way that sustainably serves the needs of stakeholders and optimises the long-term return on investment. In doing this the Board will comply with all legal, regulatory safety and environmental requirements and will not compromise the safety of its employees, stakeholders or members of the public.

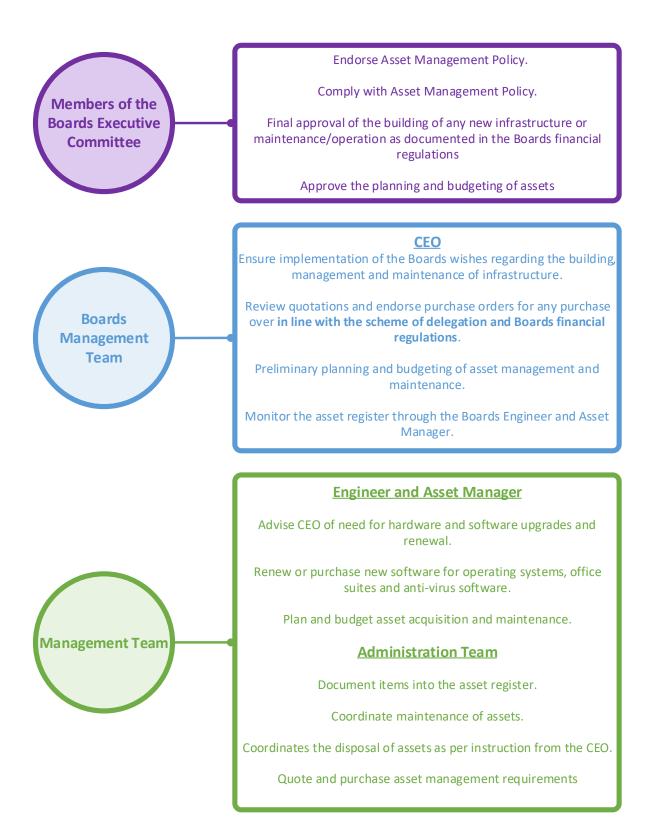
In order to achieve this policy, the Board will;

- Develop and maintain a coordinated asset management system that;
  - Applies a lifecycle approach to asset management
- Establish asset management strategies, objectives and plans;
  - To support the achievement of the corporate plan
  - That are sustainable, efficient and based on an optimised consideration of economic, technical, risk and performance of assets
  - Use risk management principles to systematically identify hazards and to assess and therefore control risks associated with identified hazards

- Integrates with the Boards other management systems
- Are continually reviewed for improvement opportunities
- Ensures employees have appropriate asset management competencies
- Facilitates regular audit and management reviews of the asset management system
- Undertakes regular reviews and benchmarks the economic and technical performance of assets, service providers and contractors



# 7. Functions and Delegations





# 8. Risk Management

The Board has systems in place to protect and account for assets, to include:

- Incident Response Plans
- Business continuity Plans
- Operational Flood Management Plans

The Board provides members and staff with development information in respect to asset management, including acquisition, use, maintenance, repair and disposal. There are regular reviews of asset management systems with staff in particular



All staff, and Board Members are responsible for understanding and adhering to this policy.

Asset management is an integral part of the organisation's operation and its application is reviewed and minuted during Board meetings.



# 10. Policy Detail

The Boards Management Team will direct Board employees (and Contractors where required) to maintain and replace assets to assist the Board to meet its objectives.

All assets are appropriately insured and recorded on the asset register.



#### 10.1 Asset Acquisition

The Boards Management Team has authority to approve asset purchases in line with the Boards financial regulations and approved budgets. Assets above this value will be submitted for approval to the Boards Finance/Executive Committee.

Asset acquisition is based on consideration of whether the asset:

- Has come to the end of its initial design life or through robust inspection has shown that refurbishment cost will not be economically viable compared to investment in a replacement
- will provide significant, direct and tangible benefit to the Board
- is compatible with existing equipment and will not lead to unwarranted additional expenditure
- can be accommodated (wherever reasonably practicable) in existing space and facilities
- is the most suitable, appropriate and fit
- does not exist or could not be upgraded or adapted to meet the same purpose
- is appropriate and cost effective over its life

Multiple quotes will be sought for assets as specified in specific project funding agreements and for any purchases in line with the Boards financial regulations.



#### 10.2 Asset Register

An asset register of all physical assets is maintained by the Board's Management Team. Assets are depreciated by at a rate determined by the initial design asset life cycle. Depreciation is posted to the identified management cost of individual sub catchments.

Depreciation of operational equipment used to support and develop the entire infrastructure is recorded and reported on annually.

#### 10.3 Asset Utilisation

Under-utilised and under-performing assets will be identified, reasons critically examined, and appropriate action taken. In the worst-case scenario this may include; cessation of use, decommissioning or disposal. Replacement of any asset will only occur after clear prior justification or following catastrophic failure where repair cannot be justified due to the age of the asset or its intrinsic value not improving or increasing to improve its second-hand value.

#### 10.4 Asset Maintenance

All assets will be maintained through actions recommended in manufacturer's manuals. For each asset, efficient maintenance strategies will be implemented.

An operation and maintenance plan establishing responsibility and standards for the level of use, condition, servicing and performance of each asset will be developed.

### 10.5 Asset Security

All assets will be safeguarded against theft, damage and tampering by others as far as reasonably practicable using various initiatives i.e. use of Smart Water, CCTV, Intruder Alarms and Telemetry monitoring.

#### 10.6 Asset Disposal

Asset disposal may occur through dismantling and disposal, auction, tender, private sale, destruction, donation and transfers to other organisations.

The method of asset disposal will be based on consideration of what offers the best return and best furthers the Boards objectives, and considers all environmental, health, safety and welfare responsibilities, legislation and regulation.

Asset life accounts for the design life, economical operational life or Board approved replacement in accordance with its Asset Management Principles.



#### 10.7 Asset Review Process

Collation of asset data is pivotal to the successful implementation of this policy. The process map highlights the direction of travel required to achieve this.

To support this process the Board will employ the principles of 'Investing to Save' by carrying out intrusive inspections to guide its decision-making regarding refurbishment and replacement.

#### 10.8 Asset Transfer

The Board may be approached to consider asset transfer opportunities as part of the rationalisation of its IDD. Rationalisation of assets will always be approached positively.

Any rationalisation review will follow the guidelines as defined/documented in process flow chart; **AM5: EA System Rationalisation** 

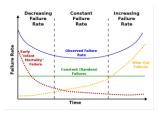
It will also consider the wider issues relating to the environment, health safety and well being and current legislation and regulation.



#### **Asset Management Programme** 11.

Define and prioritise problems and opportunities

- Decision criticality
- Decision urgency



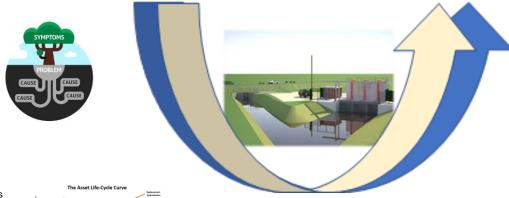
Total portfolio and programme assembly

- Capital investment plans
- Resourcing needs
- Risk and forecast



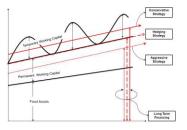
Root cause analysis Underlying causes

- Similar cases for improvement



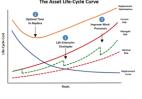
Evaluate and optimise combinations of interventions

- Optimal blending
- Optimal bundling



Identify potential solutions

- Inspection
- . Maintenance
- Modification
- Renewal
- mitigation



Evaluate and optimise timing of discrete options

