

## **Appendix 4**

### Hastings Water Development Servicing Plan (DSP) 2006



Engineering the Future



PORT MACQUARIE  
HASTINGS

# Port Macquarie-Hastings Council

2006

## Development Servicing Plans for the Hastings District, Comboyne, Telegraph Point & Long Flat Water Supply Schemes

Cardno (Qld) Pty Ltd  
ABN 57 051 074 992

Level 1, 5 Gardner Close, Milton QLD 4064  
PO Box 388, Toowong QLD 4066 Australia

Telephone: 07 3369 9822  
Facsimile: 07 3369 9722  
International: +61 73369 9822

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## EXECUTIVE SUMMARY

These Development Servicing Plans (DSP) detail the water supply developer charges for the following development areas served by Port Macquarie-Hastings Council.

<b>Service Area</b>	<b>Area Included</b>
<i>Hastings</i>	The integrated water supply and distribution network servicing the areas of Port Macquarie (including Area 13), Wauchope and Camden Haven (including Area 14).
<i>Telegraph Point</i>	The water supply and distribution network to the village of Telegraph Point.
<i>Comboyne</i>	The water supply and distribution network to the village of Comboyne.
<i>Long Flat</i>	The water supply and distribution network to the village of Long Flat.

This document has been prepared in accordance with the Developer Charges Guidelines for Water Supply, Sewerage and Stormwater (2002) issued by the Department of Energy, Utilities and Sustainability (DUES) (former Department of Land and Water Conservation (DLWC)), pursuant to section 306 (3) of the Water Management Act 2000. This document is to be registered with the Department of Energy, Utilities and Sustainability (DEUS).

A detailed listing of the scope, timing and expenditures for works serving the areas covered by this document are provided in Appendix B.

Levels of service to be provided to the service areas are summarised in Table 5.1 in Section 5.0.

After agglomeration, three Development Servicing Plans have been developed. The developer charges for the DSP's covered by this document have been calculated as shown in Table 1.

**TABLE 1 – Water Supply Developer Charges**

<b>DSP No</b>	<b>Catchment</b>	<b>Developer Charge per Equivalent Tenement</b>	
		<b>Calculated</b>	<b>Adopted</b>
1	Hastings (incl Port Macquarie, Wauchope & Camden Haven)	\$8,035	\$8,035
2	Comboyne & Telegraph Point	\$25,004	\$8,035
3	Long Flat	\$42,157	\$8,035

Developer charges relating to this DSP will be reviewed after a period of 5 years. A shorter review period is permitted if a major change in circumstances occurs.

In the period between any review, developer charges will be adjusted on a quarterly basis in accordance with the Consumer Price Index (CPI) as published by the ABS.

The developer shall be responsible for the full cost of the design and construction of water supply and sewerage reticulation works within subdivisions.

Further details relating to these plans can be found in the Background document developed by Cardno (February 2005).

## 1.0 INTRODUCTION

Section 64 of the *Local Government Act 1993* enables local government to levy developer charges for water supply infrastructure. This power is derived from a cross-reference in that Act to section 306 of the *Water Management Act 2000*.

A Development Servicing Plan (DSP) is a document, which details the water supply developer charges to be levied on development areas utilising a Council's water supply infrastructure.

This document contains three DSP's that together cover water supply developer charges for all areas served by Port Macquarie-Hastings Council.

This DSP has been prepared in accordance with the *Developer Charges Guidelines for Water Supply, Sewerage and Stormwater (2002)* issued by the Minister for Land and Water Conservation (now Minister for Energy, Utilities and Sustainability), pursuant to section 306 (3) of the *Water Management Act 2000*.

These DSP's supersede any other requirements related to water supply developer charges for the areas covered by these DSP's. These DSP's take precedence over any of Council's codes or policies where there are any inconsistencies relating to water supply developer charges.

## 2.0 ADMINISTRATION

### 2.1 Development Servicing Plans

The document contains three Development Servicing Plans as defined below.

**DSP No 1**

**DSP Name Hastings**

**DSP Area** The area covered by this DSP includes the water supply and distribution zones of Port Macquarie, Wauchope and Camden Haven as shown in the plans located in Section 9.0.

**DSP Boundaries** The basis for defining the DSP area boundary is the limits of the integrated water supply and distribution areas served by Cowarra, Port Macquarie Dams and the associated Headworks distribution systems.

**Payment of Developer Charges** Refer to Section 2.2.

**DSP No 2**

**DSP Name Comboyne and Telegraph Point**

**DSP Area** The areas covered by this DSP include the integrated water supply and distribution zones of the villages of Comboyne and Telegraph Point as shown in the plans located in Section 9.0.

**DSP Boundaries** The basis for defining the DSP area boundary is the water supply and distribution areas served by the existing water supply network and new (independent) water treatment facilities.

**Payment of Developer Charges** Refer to Section 2.2.

**DSP No 3**

**DSP Name Long Flat**

**DSP Area** The area covered by this DSP include the independent water supply zone of the village of Long Flat as shown in the plans located in Section 9.0.

**DSP Boundaries** The basis for defining the DSP boundary is the water supply and distribution area served by the existing water supply network and new water treatment facility.

**Payment of Developer Charges** Refer to Section 2.2.

Town water supply is not guaranteed to land falling outside the various DSP areas within the next 5 years.



## 2.2 Payment of Developer Charges

### 2.2.1 General

The contribution payment is interrelated with the Compliance Certificate as a Compliance Certificate must be submitted to complete a development. When a Compliance Certificate is required, depends on the type of development but in each case, a Compliance Certificate will not be issued until the contribution payment has been receipted.

A Compliance Certificate is only issued after it has been applied for, Council has stated the contribution component payable in a Notice of Payment – Developer Charges and the requirements of the Compliance Certificate have been met. The Compliance Certificate's submission timeframe for the three main categories of development are:

<b>A Development Consent</b> is issued (general case)	- Prior to the release of the construction certificate, or, as specified in the development consent
<b>Subdivision</b>	- Prior to the subdivision certificate being issued, or, as specified in the development consent
<b>Other developments</b> not necessarily requiring a Development Consent (eg new business in existing premises with higher water demands)	- The sooner of: Within three (3) months of granting the development consent OR Prior to occupation

The extent of the Developer Contribution will be determined in accordance with Council's Contribution Payment System Policy, Development Contribution Assessment Policy and Assessment of Load on Water and Sewer Headworks Policy for non Residential Development.

### 2.2.2 Alternate Payment Options

**Contribution Offsets** – construction/supply/dedication of water supply assets in lieu of monetary contributions.

Contribution Offsets are governed by the requirements of Council Works In Kind Policy. Generally, Contribution Offsets allow flexibility in the way developers pay their contributions but tend to be more applicable to large scale developments. In this DSP Council may consider receipt of contributions in the following forms:

- i. as a direct cash contribution (as 2.2.1 above);
- ii. dedication of land for the purposes of water supply related functions, to the value of, or part thereof, the cash contribution; or
- iii. construction and/or supply of water supply-related infrastructure to the value of, or part thereof, the cash contribution.

A direct cash contribution is a straightforward monetary payment to Council. Dedication of land for the purposes of water supply – related functions and/or the construction – supply of Council's Works In Kind Policy.

Council may not necessarily accept offers of Contribution Offsets, and where this is the case, the monetary contribution remains applicable.

### **Deferment**

Council will accept deferred payment of Development Contributions involving the construction of a building only, subject to the following conditions:

- i. Lodgement of an irrevocable guarantee for the amount of the contributions plus an additional 12-month interest amount calculated at the average rate of Council's investments performance over the past 12 months plus 1%.
- ii. The maximum period for which the guarantee will be accepted is the sooner of 12 months or the issue of an occupation certificate for the development.
- iii. Guarantees will only be accepted from an institution approved by the Manager Corporate and Financial Planning.
- iv. If at the end of the period for the lodgement of the guarantee, the outstanding contributions plus the additional amount referred to in 'i' have not been paid, Council will call in the guarantee without further reference to the applicant.
- v. A pro-rata reduction in the amount referred to in 'i' will be allowed for payment of the outstanding contributions within 12 months or the calling in of the guarantee within 12 months.
- vi. The guarantee is to provide for Council to unconditionally call in the guarantee for the full amount at any time.

### **Exemptions**

The types of development exempted from the application of this plan include:

- Existing vacant residential lots currently rated for water and sewer (except where subdivision or an increase in population density is involved);
- A change of land use not involving the creation of additional lots, dwellings or increased population;
- Development exempted by Council's Development Contribution Assessment Policy.

Where the Crown acts as a private developer, it will be expected to pay a level of contribution equal to the private sector.

## **2.3 Review and Indexing of this Plan**

To ensure that the value of the contributions is not eroded by inflation, Council will increase the Developer Charge on a quarterly basis in accordance with the Consumer Price Index All Group Index Number for Sydney (CPI), as published by the ABS.

Where contributions have been levied under an existing consent, granted in accordance with this Plan, but not yet paid, the contribution will continue to be indexed on a quarterly basis in accordance with the above until such time as they are paid.

Council will undertake a review of this plan in 5 years unless there is a major change to the Capital Works Program that warrants an earlier review.

## **2.4 Relationship with other Plans, Council Policies and Planning Instruments**

This plan relates to the following relevant Council plans and policies:

- ☐ Hastings LEP (2001)
- ☐ Hastings Urban Growth Strategy 'HUGS' (2001)
- ☐ Port Macquarie-Hastings Contribution Payment System Policy
- ☐ Port Macquarie-Hastings Development Contributions Assessment Policy
- ☐ Assessment of Load on Water and Sewer Headworks for non Residential Development.
- ☐ Port Macquarie-Hastings Works in Kind Policy

This plan repeals and amends Previous Development Servicing Plans as detailed in the following table:

**TABLE 2 – Repeal and Amendment of Development Servicing Plans**

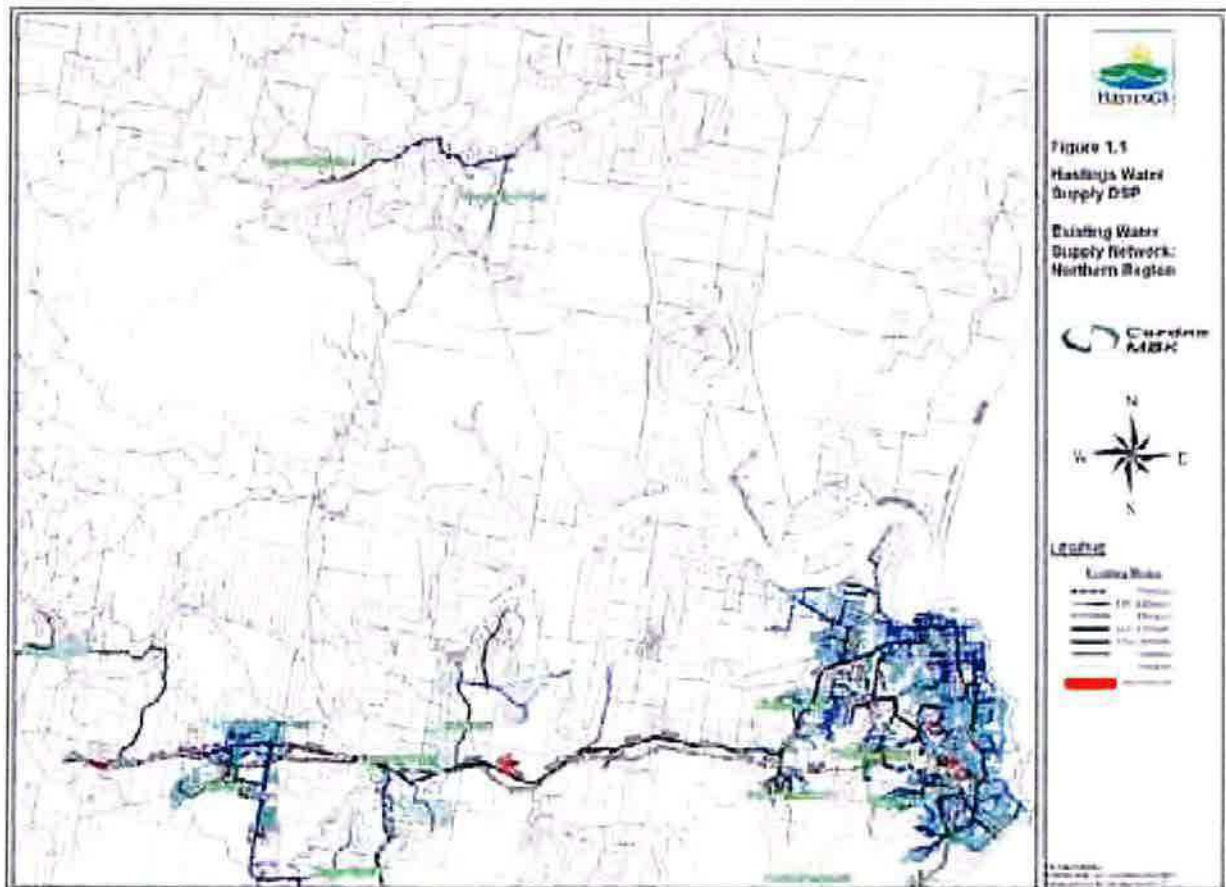
Development Servicing Plan	Details of amendment or repeal
Port Macquarie-Hastings Development Servicing Plan for Hastings District, Comboyne, Telegraph Point and Long Flat Water Supply Schemes 2001	Repealed
Innes Peninsula Water Supply – Development Servicing Plan	Repealed
Kings Creek Contribution Plan Version 2.4	Section "D" Deleted
All other Water Supply Development Servicing Plans and Local Contribution Charges made prior to this Development Servicing Plan except those detailed above and Port Macquarie-Hastings Administration Levy Development Servicing Plan.	Repealed

## 3.0 THE HASTINGS DISTRICT WATER SUPPLY SCHEME

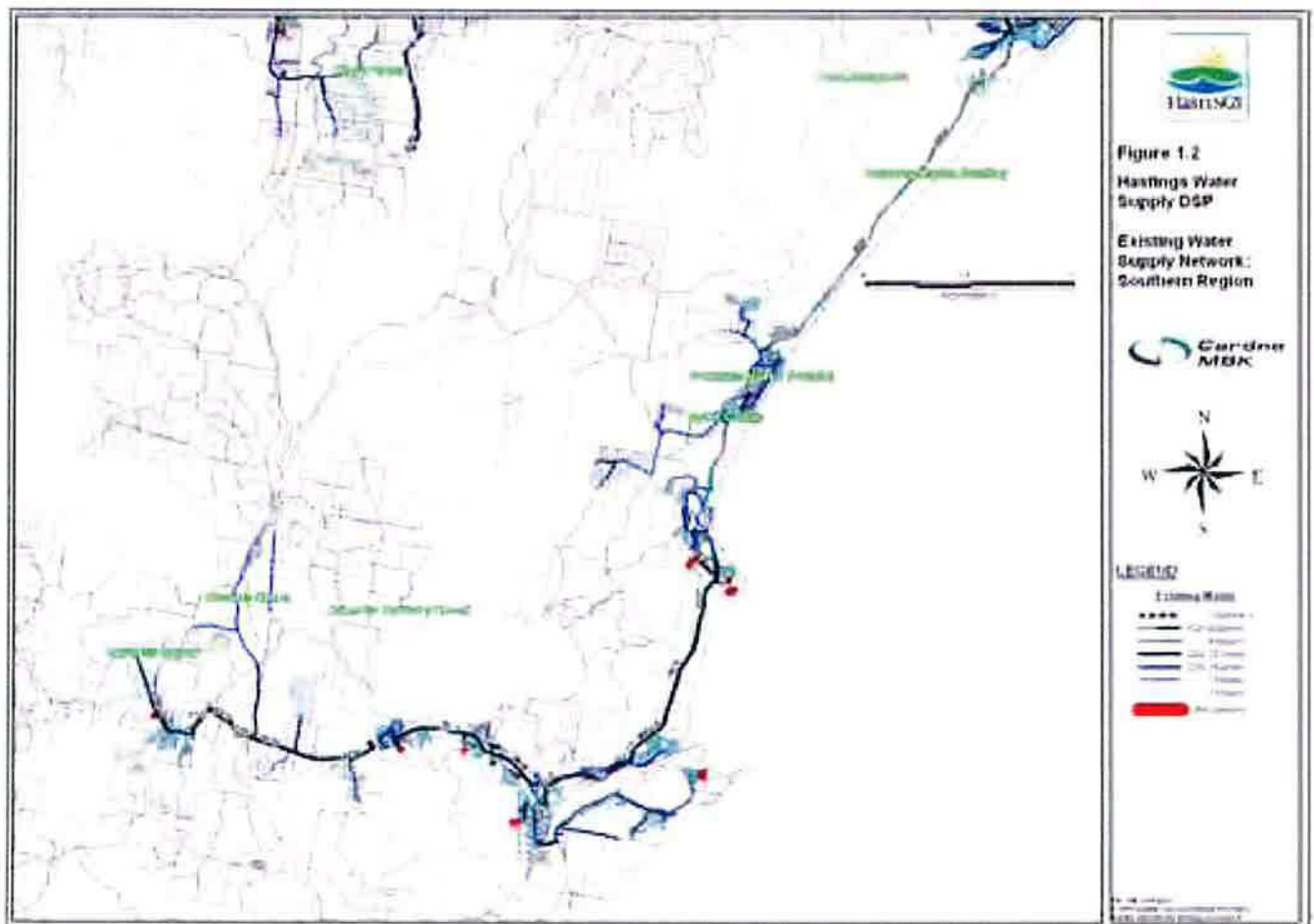
### 3.1 The Water Supply Service Area

The scope of the Hastings District Water Supply Scheme illustrated schematically in Figures 3.1 and 3.2.

**FIGURE 3.1 – Hastings District Water Supply Scheme**



**FIGURE 3.2 – Hastings District Water Supply Scheme**



### 3.2 Existing Water Services

The Hastings Scheme includes the integrated bulk water supply and distribution network to the townships of Port Macquarie, Wauchope and Camden Haven.

The scheme can be divided into:

- **Major Headworks** items (ie the raw water sourcing and distribution infrastructure); and
- **Distribution Headworks** (ie water service assets which fall within or specifically service each of the three distribution areas of Port Macquarie, Wauchope and Camden Haven). The distribution headworks are those items of infrastructure which provide a shared water service to residents in these areas.

Major Water Supply Headworks include the raw water sourcing and distribution network which connects the three major settlements. The network includes:

- Cowarra Reservoir;
- Port Macquarie Reservoir;
- Koree Pump Station;
- Rosewood Reservoir;
- Cowarra Balance Tank;
- Proposed New Bonny Hills Reservoir; and
- Associated Trunk Mains (450 to 900 diameters).

The contribution for these major water supply assets has been calculated separately and presented as the Hastings Major Headworks Scheme.

In addition to the Hastings Major Headworks Scheme items, the network items on which the charges have been determined includes the distribution headworks for the three catchments of Wauchope, Port Macquarie and Camden Haven areas. They incorporate assets previously identified as key Local Area Schemes.

**The final charge for each of these areas is the sum of the Major Headworks cost and cost of Distribution Headworks for each individual catchment.** The calculation of the charge and a detailed outline of the scope, cost and timing of the existing and proposed water supply and distribution headworks serving the area covering by this DSP is provided in Appendix A and B.

### 3.3 Future Water Supply Services

Port Macquarie-Hastings Council has recently undertaken a comprehensive review of the bulk water supply system (Hastings Major Headworks) and distribution networks for each of the three (3) catchment areas. These studies have identified the need for augmentation of the existing schemes to accommodate future growth. The scope and scale of the augmentation to the catchment area networks is summarised in the background document developed by Cardno (November 2004). The scale of augmentation required for the Hastings bulk water supply system is summarised in the report by the Department of Energy, Utilities and Sustainability (May 2004).

### 3.4 Growth Projections for the Hastings Catchment

Table 3.1 provides a breakdown of the estimated number of Equivalent Tenements (ET's) and growth projections to 2033 (Council's current planning horizon).

**TABLE 3.1 – Population Projections**

Area	Cumulative Number of ET's						
	2003	2008	2013	2018	2023	2028	2033
Wauchope	3,707	4,622	5,838	8,675	11,344	14,013	17,825
Camden Haven	6,754	7,834	8,910	10,410	11,460	12,510	14,010
Port Macquarie	16,757	18,857	20,869	22,932	23,719	24,507	25,632
<b>Total ET</b>	<b>27,218</b>	<b>31,313</b>	<b>35,618</b>	<b>42,018</b>	<b>46,524</b>	<b>51,030</b>	<b>57,468</b>
<b>Average Growth (% pa)</b>		3.0%	2.7%	3.6%	2.1%	1.9%	2.5%
<b>Total New Assessments</b>		4,095	4,305	6,400	4,506	4,506	6,437

### 3.5 Land Use Information

This DSP should be read in conjunction with Council's Hastings Local Environmental Plan (LEP) 2001 which was published in the NSW Government Gazette on 8 June 2001.

### 3.6 Design Parameters

The following documents have been used to determine the design parameters for the Major and Distribution Headworks required to service 16 above growth projects.

- Hunter Water Australia "Hastings District Water Supply Investigations – Initial Design Criteria", June 2003
- Hunter Water Australia "Hastings District Water Supply System Investigation Report and System Amplification requirements", 2003.
- NSW Department of Commerce, "Stage 1 Review of Water Demand and Secure Yield Analysis", March 2004 (Draft Report no 04015).

## **4.0 THE COMBOYNE, LONG FLAT & TELEGRAPH POINT WATER SUPPLY SCHEMES**

### **4.1 The Water Supply Service Area**

The scope of the Comboyne, Long Flat and Telegraph Point Water Service areas are illustrated schematically as Figure 4.1, 4.2 and 4.3 respectively.



FIGURE 4.1 – Comboyne Water Supply Scheme

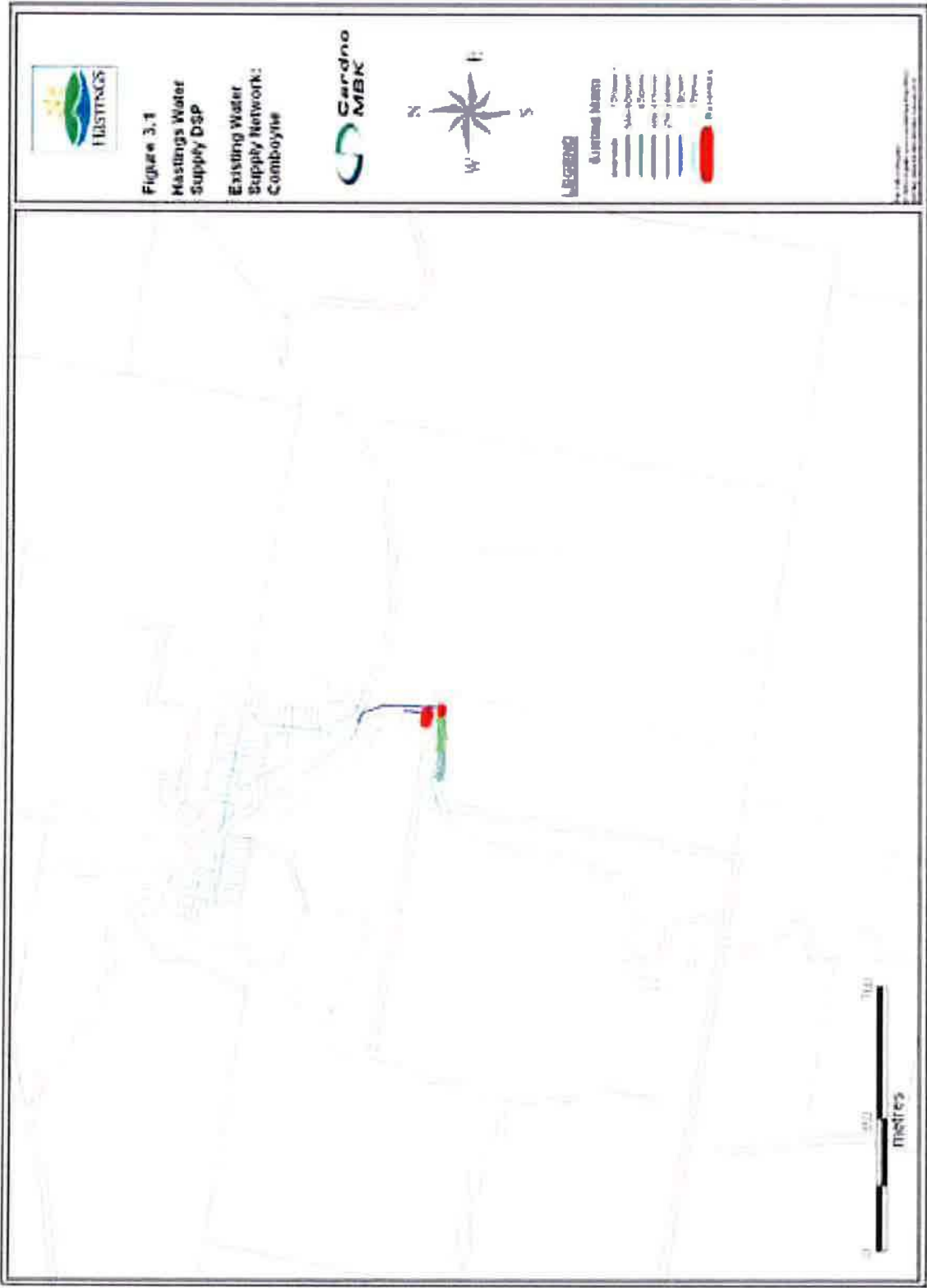


FIGURE 4.2 – Long Flat Water Supply Scheme

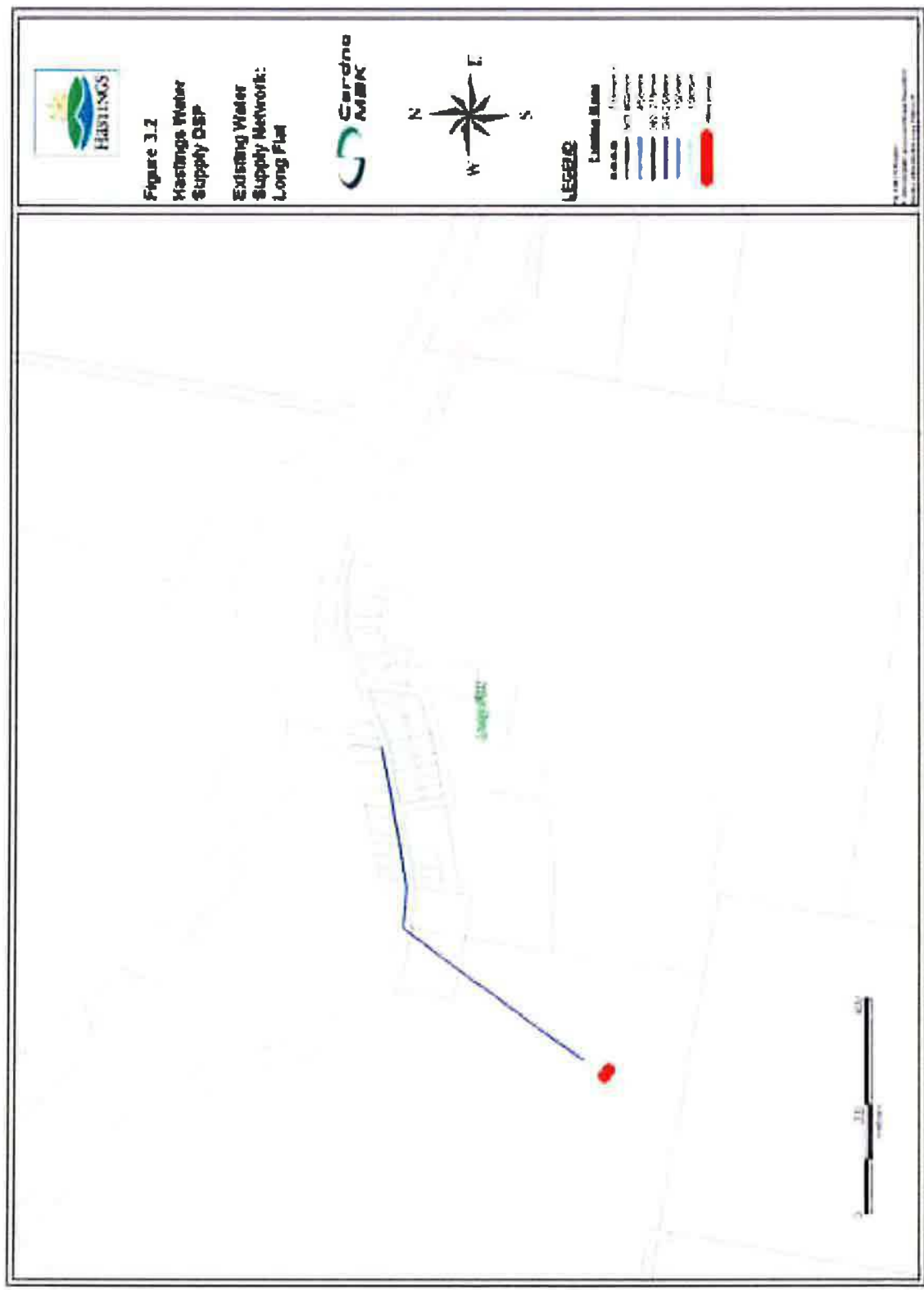
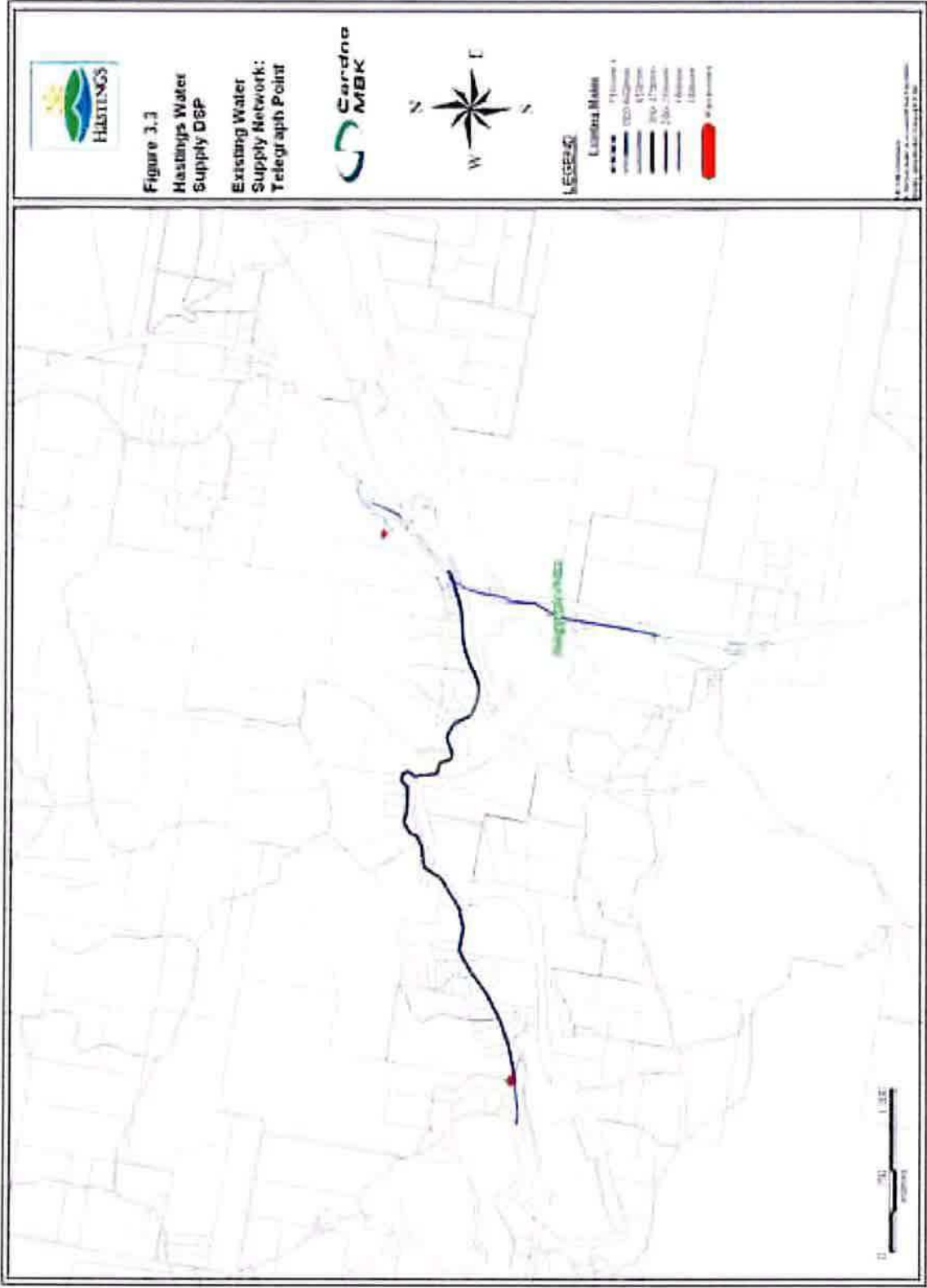


FIGURE 4.3 – Telegraph Point Water Supply Scheme



## 4.2 Existing Water Services

Port Macquarie-Hastings Council operates each of the above three (3) separate village schemes.

The Comboyne Scheme provides a raw water supply to approximately 136 tenements. The Long Flat scheme provides a raw water supply to approximately 68 tenements whilst the Telegraph Point scheme serves a further 242 tenements.

Each system has its own independent raw water sources and is operated by Council as a independent scheme.

## 4.3 Future Works

Port Macquarie-Hastings Council is currently in the process of upgrading the water quality to these 3 villages through the provision of separate site based water treatment facilities at each village. These WTP's are the only significant capital works planned for the villages over the next 5 years.

## 4.4 Growth Projections for the Village Catchments

Table 3.1 provides a breakdown of the estimated number of Equivalent Tenements (ET's) and growth projections to 2033 (Council's current planning horizon).

**TABLE 4.1 – Population Projections**

Area	Cumulative Number of ET's						
	2003	2008	2013	2018	2023	2028	2033
Comboyne	136	138	141	143	145	148	150
Long Flat	68	70	71	73	74	76	77
Telegraph Point	242	250	257	265	272	280	287
<b>Total ET</b>	<b>446</b>	<b>457</b>	<b>469</b>	<b>480</b>	<b>491</b>	<b>503</b>	<b>514</b>
<b>Average Growth (% pa)</b>		0.5%	0.5%	0.5%	0.4%	0.5%	0.4%
<b>Total New Assessments</b>		11	11	11	11	11	11

## 4.5 Land Use Information

This DSP should be reading conjunction with Council's Local Environmental Plans (LEP) 2001 which was published in the NSW Government Gazette on 8 June 2001.

## 4.6 Design Parameters

The following documents have been used to determine the design parameters for the Major and Distribution Headworks required to service the above growth projections:

- Hunter Water Australia "Hastings District Water Supply Investigations – Initial Design Criteria", June 2003
- Hunter Water Australia (Hastings District Water Supply System Investigation Report and System Amplification requirements", 2003

## 5.0 STANDARDS OF SERVICE

Port Macquarie-Hastings Council's levels of service apply to each of its water supply schemes and are targets which council aims to meet. The targets are not intended as a formal customer contact and the target levels of service are detailed in Table 5.1.

### 5.1 Water Supply

**TABLE 5.1 – Levels of Service**

Description	Unit	Level of Service
<b>Availability of Supply</b>		
<u>Normal Quantity Available:</u>		
Domestic peak day	Litres/tenement/day	2,100
Domestic annual	kL/tenement/year	310
<u>Fire Fighting</u>		
Compliance with Building Codes and Fire Brigade requirements	% of service area	100%
<u>Pressure<sup>1</sup></u>		
Minimum pressure (at low flow rate of 0.15 L/s per tenement in Council's main adjacent to property boundary)	Metres head	20
Maximum static pressure	Metres head	90
<b>Restrictions<sup>2</sup></b>	No longer than 5% of the time, not more often than once in 10 years, at least 80% of the normal quantity is available	
<b>Water Quality<sup>3</sup></b>		
Compliance with NH&MRC/ AWRC Guidelines (1996 edition)	Percentage of samples	100%

Notes:

<sup>1</sup> The following areas are designated as low-pressure areas:

Clearwater Crescent, Port Macquarie, Panorama Drive and John Phillip Drive, Bonny Hills, Skyline Place, Flinders Drive, Laurieton, Waterview Heights, West Haven, Fairwinds Avenue, Lakewood, Bernanoon Drive, Kendall, Bushlands Drive, Sancrox.

Consumers in these locations are encouraged to install a booster pump to ensure adequate internal water supply pressure is available. Generally a requirement to install an internal booster pump has been included in the 88B Instrument for the subdivision constructed in these areas. It is not a result of any deficiency in the water main reticulation networks associated with the water supply in these areas.

<sup>2</sup> Council has adopted three levels of water restrictions have been placed upon based on storage levels in the Port Macquarie dam. A permanent ban has been placed upon the use of fixed sprinklers between 6 am and 4 pm.

<sup>3</sup> Water quality provided to consumers at Council's rural water supply schemes located at Telegraph Point, Long Flat and Comboyne may not always be in accordance with adopted water quality guidelines. This situation is due to the need for river abstraction during periods of high turbidity. Council has adopted an ongoing strategy to reduce the incidence and severity of these problems. Investigators are presently underway to determine appropriate water treatment processes at these three rural water supply schemes.

## 6.0 CALCULATION OF DEVELOPER CHARGES

### 6.1 Capital Charge

The capital charge was calculated separately for the Hastings Major Headworks, each of the major communities (ie Port Macquarie, Wauchope and Camden Haven) and the three villages (Long Flat, Comboyne and Telegraph Point).

In the case of the Hastings catchments (i.e. Port Macquarie, Wauchope & Camden Haven), the charges calculated have been developed on a layered format which mimics the infrastructure layout of the District Scheme. The charge is broken into Major Headworks (Bulk Water Assets which connect the communities) and Distribution Headworks Infrastructure. The contribution calculated for a particular development area is then the summation of the contributions for the Major Headworks layer and relevant Distribution Headworks layer.

The charges have been based on the existing and future assets providing the services in those areas. The initial developer charges for each area is summarised in Table 6.1.

**TABLE 6.1 – Initial Developer Charges**

<b>Catchment</b>	<b>Major Headworks (\$/ET)</b>	<b>Distribution Headworks Capital (\$/ET)</b>	<b>Total Capital Charge (\$/ET)</b>
Port Macquarie	\$5,946	\$3,009	\$8,955
Wauchope	\$5,946	\$4,060	\$10,006
Camden Haven	\$5,946	\$4,664	\$10,611
Telegraph Point	Nil	\$25,713	\$25,713
Comboyne	Nil	\$25,170	\$25,170
Long Flat	Nil	\$43,013	\$43,013

The detail of calculation of the capital charges for the area served by the DSP's are provided in Appendix A.

### 6.2 Agglomeration of DSP Areas

The capital charges have been grouped into DSP areas of within 30% of the highest capital charge. The process of the agglomeration is shown in Table 6.2.

**TABLE 6.2 – Agglomeration of Capital Charges**

<b>DSP</b>	<b>Capital Charge (2003 \$/ET)</b>	<b>DSP Area 1 (% of highest)</b>	<b>DSP Area 2 (% of highest)</b>	<b>DSP Area 3 (% of highest)</b>
Long Flat	\$43,013	100%		
Telegraph Point	\$25,713	60%	100%	
Comboyne	\$25,170	59%	98%	
Camden Haven	\$10,611	25%	41%	100%
Wauchope	\$10,006	23%	39%	95%
Port Macquarie	\$8,955	21%	35%	84%

The outcomes of the agglomeration process are:

- The capital charges of Wauchope, Camden Haven and Port Macquarie are within 30% and they have been grouped into DSP Area 1.
- The capital charges of Telegraph Point and Comboyne are within 30% and have been grouped into DSP Area 2.
- Long Flat has a capital charge significantly higher than the others, and was grouped in its own DSP Area 3.

### 6.3 Reduction Amount

Council has adopted the NPV of Annual Charges method to calculate the Reduction Amount. This amount is defined as the Net present value (NPV) of the difference between the operating revenue and operating costs for new development within each individual scheme.

The reduction amounts have been calculated using the 20 year operational financial model specifically developed for each DSP Area. The detailed calculations are provided in Appendix A.

### 6.4 Developer Charges

The calculated developer charges for the DSP areas are shown in Table 6.3. These developer charges reflect the cost of assets for serving new development, and are the maximum amounts, which may be charged by Council.

**TABLE 6.3 – Maximum Developer Charges**

DSP No.	DSP Name	Wt Ave Capital Charge (\$/ET)	Reduction Amount (\$/ET)	Calculated Developer Charge (\$/ET)
1	Wauchope, Port Macquarie and Camden Haven	\$9,509	\$1,474	\$8,035
2	Comboyne and Telegraph Point	\$25,518	\$514	\$25,004
3	Long Flat	\$43,013	\$856	\$42,157

Council has recognised that application of the maximum charge amount could have a detrimental impact on development in the village areas. Subsequently, Council has adopted a uniform weighted annual developer charge for all DSP areas. The adopted developer charge is provided in Table 6.4.

**TABLE 6.4 – Adopted Developer Charges**

DSP No.	DSP Name	Calculated Developer Charge (\$/ET)	Adopted Charge (\$/ET)
1	Wauchope, Port Macquarie and Camden Haven	\$8,035	\$8,035
2	Comboyne and Telegraph Point	\$25,004	\$8,035
3	Long Flat	\$42,157	\$8,035



## 6.5 Reviewing/Updating of Calculated Developer Charges

As required under the guidelines (Section 2.5), the developer charges relating to these DSPs will be reviewed by Port Macquarie-Hastings Council after a period of 5 years.

In the period between any review, developer charges will be adjusted on a quarterly basis in accordance with the Consumer Price Index (CPI) as published by the ABS.

## 6.6 Reticulation Works

The developer shall be responsible for the full cost of the design and construction of water supply reticulation works within developments including subdivisions. The design and construction of these works shall be in accordance with Council's development specifications for water supply infrastructure.

## 6.7 Cross-Subsidy

As shown in Table 6.4, Council intends to levy developer charges in some areas that are lower than the maximum amounts, which may be applied by the Council. In order for Council to levy charges lower than the calculated amount, the Guidelines require the disclosure of cross subsidy by existing customers.

The impact of implementing the lower charges compared with implementing the calculated charge is displayed in Table 6.5, 6.6 and Figure 3. Table 6.5 shows the average cross subsidy in terms of developer charges. Table 6.6 shows the cross subsidy in terms of annual bills. Figure 3 is a pictorial representation of Table 6.6

**TABLE 6.5 – Cross-Subsidy on Developer Charges**

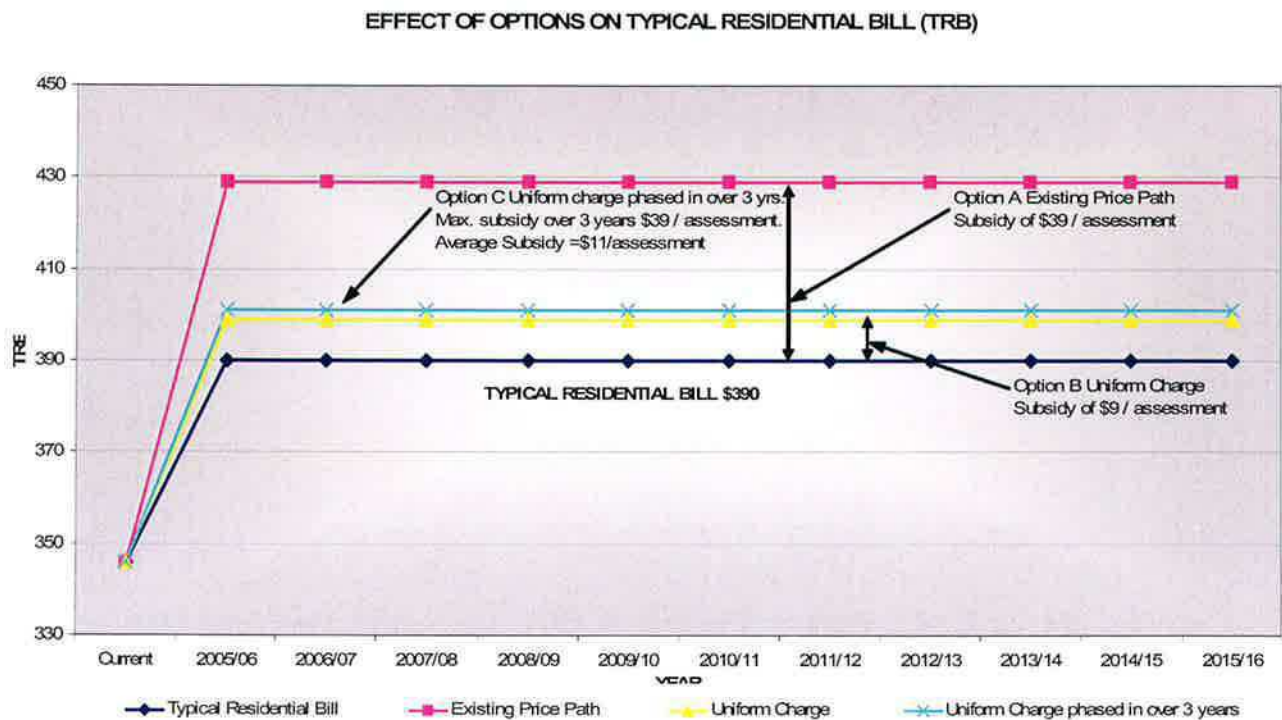
Catchment	Calculated Developer Charge (\$/ET)	Adopted Developer Charge (\$/ET)	Subsidy (\$/ET)
Hastings	\$8,035	\$8,035	Nil
Comboyne	\$24,656	\$8,035	- \$16,621
Telegraph Point	\$25,199	\$8,035	- \$17,164
Long Flat	\$42,157	\$8,035	- \$34,122

**TABLE 6.6 – Cross-Subsidy of Typical Residential Bills**

Option	Calculated Developer Charge			Adopted Developer Charge	Required Annual TRB	Increase in TRB	Total Cross Subsidy over 30 yrs
	Hastings	Comb & Tele Pt	Long Flat				
Option A	\$8,035	\$25,004	\$42,157	\$5,895 to \$6,895	\$385	\$39 pa	\$31.8M
Option B	\$8,035	\$25,004	\$42,157	\$8,035	\$355	\$9 pa	\$7M
Option C	\$8,035	\$25,004	\$42,157	\$8,035 phased in over 3 yrs	\$385 to \$355	\$39 to \$9(\$11 ave)	\$8.6M



**FIGURE 6 – Comparison of the impact of Developer Charges Options on Residential Bills**



## **7.0 REFERENCE DOCUMENTS**

Background information and calculations relating to this DSP are contained in the following documents:

- Cardno, "Developer Servicing Plan for Water – Background document", July 2004
- Hunter Water Australia "Hastings District Water Supply Investigations – Initial Design Criteria", June 2003.
- Hunter Water Australia "Hastings District Water System Investigation Report and System Augmentation Requirements", 2003.
- Department of Commerce, Stage 1 Review of Water Demand and Secure Yield Analysis", March 2004, Draft Report No 04015
- Department of Land and Water Conservation "Guidelines for Developer Charges for Water Supply, Sewerage and Stormwater".
- IPART Determination No 9, Dec 1995, "Prices of Developer Charges for Water, Sewerage and Drainage Services".

These documents contain detailed calculations for the capital charge and reduction amount, including asset commissioning dates, size/length of assets, MEERA valuation of assets, and financial modelling for calculation of reduction amounts. These documents can be reviewed in Council's offices by appointment.

## 8.0 GLOSSARY

Annual Demand	Total annual water consumption
Capital Cost	The Present Value (MEERA basis) of assets used to service the development.
Capital Charge	Capital cost of assets per ET x Return On Investment (ROI) Factor.
CPI	Consumer Price Index.
Developer Charge (DC)	A charge levied on developers to recover part of the capital cost incurred in providing infrastructure to new development.
Discount Rate	The rate used to calculate the present value of money arising in the future.
DSP	Development Servicing Plan
DCP	Development Control Plan
DUES	Department of Energy, Utilities and Sustainability (previously the Department of Land and Water Conservation)
ET	Equivalent Tenement
IPART	Independent Pricing and Regulatory Tribunal
kL/d	Kilolitres per day
LEP	Local Environmental Plan
MEERA	Modern Equivalent Engineering Replacement Asset
ML/d	Megalitres per day
NHMRC	National Health and Medical Research Council
NPV	Net Present Value
OMA	Operation, maintenance and administration (costs)
Peak Day Demand	Highest water consumption on one day in a year.
Post 1996 Asset	An asset that was commissioned by a water utility on or after 1 January 1996 or that is yet to be commissioned.
Pre-1996 Asset	An asset that was commissioned by a water utility before 1 January 1996.
PV	Present value. The value now of money, or ETs, in the future.
Real Terms	The value of a variable adjusted for inflation by a CPI adjustment.
Reduction Amount	The amount by which the capital charge is reduced to arrive at the developer charge. This amount reflects the present value of the capital contribution that will be paid by the occupier of a development as part of future annual charges.
ROI	Return on investment. Represents their income that is, or could be, generated by investing money.
Service Area	An area served by a separate water supply system, an area served by a separate sewage treatment works, a separate small town or village, or a new development of over 500 lots.
SR	Service Reservoir
TRB	Typical residential bill
WTW	Water Treatment Works

## **9.0 PLANS**

The scope of the Hastings District Water Supply Network is illustrated in Figures 9.1 to 9.5.

FIGURE 9.1 – Granite Water Supply Network

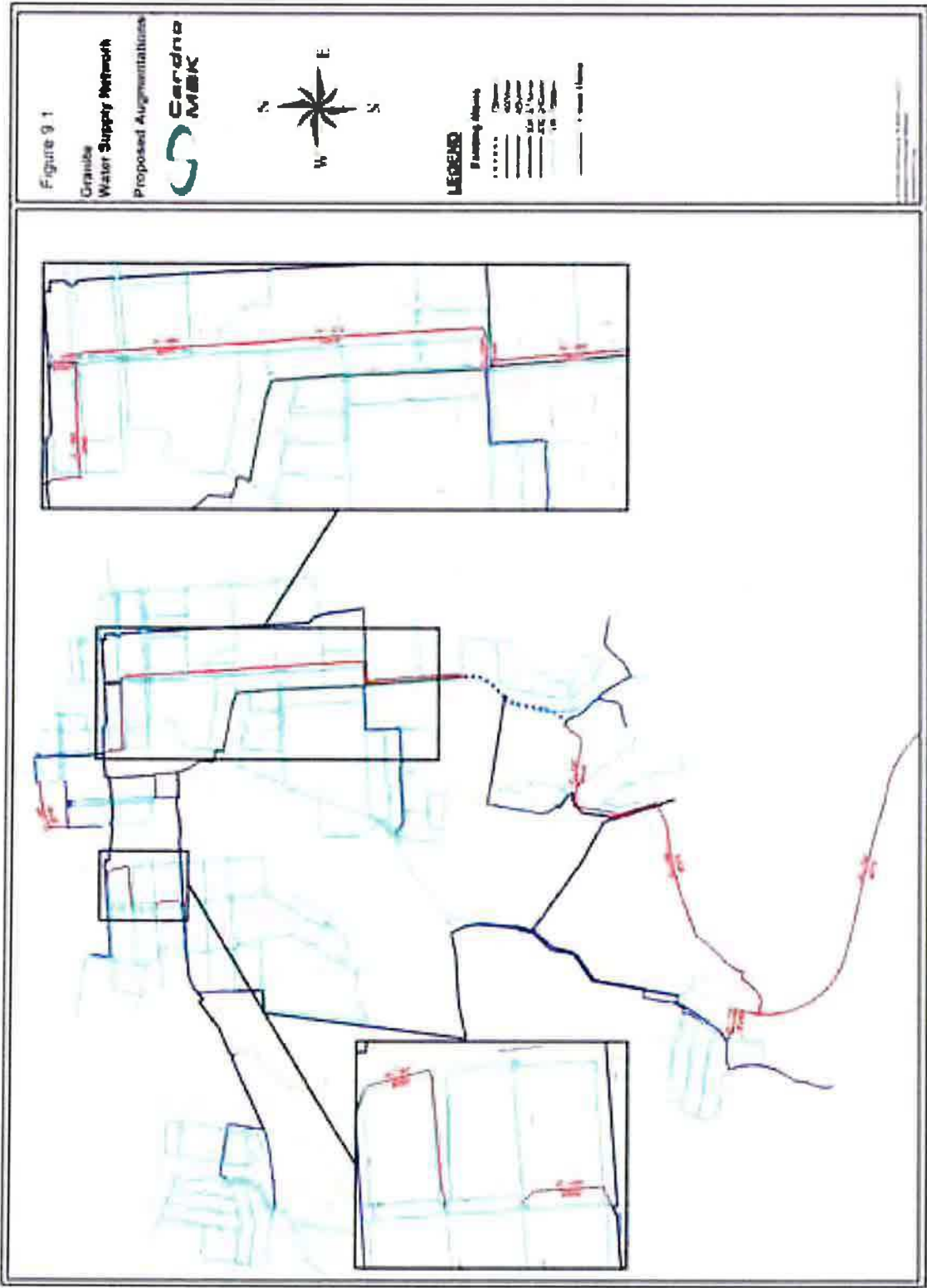


FIGURE 9.2 – O'Briens Water Supply Network

