



Clarence Valley Council

West Yamba Development Servicing Plans Water Supply Services

October 2020

Executive Summary

This Development Servicing Plan (DSP) covers water supply developer charges in regard to the West Yamba Urban Release Area (WYURA) served by Clarence Valley Council (CVC).

This DSP document has been prepared in accordance with the *2016 Developer Charges Guidelines for Water Supply, Sewerage and Stormwater* (2016) issued by the NSW Department of Primary Industries Office of Water (NSW DPI Office of Water), pursuant to section 306 (3) of the *Water Management Act, 2000*.

The area covered by this DSP and the existing and proposed works serving the area are shown in Section 12.

The timing and expenditure for works servicing the areas covered in this DSP are discussed in Section 4.

Levels of service to be provided in the DSP area are shown summarised in Section 5.

The water supply developer charge for the area covered by this DSP have been determined as summarised in Table E-1 below:

Table E-1 Water Supply Developer Charges

DSP Name	Calculated Developer Charge (\$/ET)	Adopted Developer Charge (\$/ET)	Cross-subsidy	Resulting Increase in the Typical Residential Bill (\$)
West Yamba Water Supply Scheme	\$5,679	\$5,679	\$0	\$0

Developer charges relating to this DSP will be reviewed after a period of 4 to 8 years, concurrently with the review of the Clarence Valley Council Development Servicing Plan – Water Supply Services, GHD, 2016.

In the period between any review developer charges will be indexed annually on the basis of movements on the Consumer Price Index (CPI) for Sydney, excluding the impact of Goods and Services Tax (GST).

The Developer shall be responsible for the full cost of the design and construction of reticulation works within subdivisions. The design and construction of the works shall be in accordance with Council's development specifications for water supply services.

Background information containing all the critical data including calculation models behind this DSP is available from Council's offices by appointment. To review these documents, please contact Council on (02) 6643 0200.

This DSP should be read in conjunction with the adopted WYURA Water Supply and Sewer Servicing Strategy, by HunterH2O, July 2019.

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1. Introduction

Section 64 of the *Local Government Act, 1993* enables a local government Council to levy developer charges for water supply, sewerage and stormwater. This derives from a cross-reference in that Act to Section 306 of the *Water Management Act 2000*.

A Development Servicing Plan (DSP) details the water supply developer charges to be levied on development areas using a local utility's water supply infrastructure.

This DSP covers water supply developer charges for the development of the West Yamba Urban Release Area (WYURA)

This DSP has been prepared in accordance with the *2016 Developer Charges Guidelines for Water Supply, Sewerage and Stormwater* (2016) issued by the Minister for Lands and Water, pursuant to section 306 (3) of the *Water Management Act, 2000*.

This DSP document supersedes previous water supply DSPs and requirements related to water supply developer charges for the areas covered by this DSP adopted by the Council prior to the adoption of this DSP. This DSP document takes precedence over any of Council's codes or policies where there are any inconsistencies relating to the water supply developer charges.

1.1 Purpose of the Plan

The purpose of this DSP is to set out the contributions payable by developments to the authority responsible for providing infrastructure and other facilities.

In the development of this DSP and calculation of the contributions payable, the following aims and objectives are taken into consideration:

- Ensure that adequate water supply infrastructure, and in specific areas recycled water infrastructure, is provided for as part of new developments
- Provide a comprehensive strategy for the assessment, collection, expenditure accounting and review of contributions on an equitable basis
- Ensure that the existing community is not burdened by the provision of water supply infrastructure as a result of future development
- Enable Council to be both publicly and financially accountable in its assessment and administration of the DSP.

1.2 Disclaimer

This report has been prepared by GHD for Clarence Valley Council ("the Council") and may only be used and relied on by Clarence Valley Council for the purpose agreed between GHD and the Clarence Valley Council as set out in Section 1.1 of this report.

GHD otherwise disclaims responsibility to any person other than Clarence Valley Council arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no

responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

2. Administration

2.1 DSP Name and Area Covered

This DSP is known as *West Yamba Development Servicing Plan – Water Supply Services*.

It is noted that previously West Yamba was included in the CVC Development Servicing Plan – Water Supply Services (2017), however the 2017 DSP did not make revision for the specific infrastructure requirements in West Yamba. West Yamba therefore requires its own DSP. The area to which This DSP Applies is shown in Figure 12-1.

DSP Name	West Yamba Water Supply Scheme
DSP Area	The area covered by this DSP and a schematic of the water supply system is shown in Figure 12-1.
DSP Boundaries	The DSP area boundary is defined as the area included in the The West Yamba Urban Release Area (WYURA).

2.2 Date of DSP Commencement

Council approved this DSP on [28th July 2020] for public exhibition. The DSP will come into effect following adoption by Council after the public exhibition period. Once adopted, the DSP will be forwarded to the NSW Office of Water (NOW) for registration.

The charges in this Plan will apply to all Development Applications determined on or after the date Council resolves the Plan to commence.

2.3 Payment of Developer Charges

Developer charges will be determined and levied in accordance with the provisions of the current DSP at the time of considering an application for a compliance certificate under section 305 of the *Water Management Act 2000*, a construction certificate under section 109 of the *Environmental Planning and Assessment Act 1979* or at the time of issuing a notice or other form of written advice, e.g. Section 5.3, 5.5 or 5A.2 of the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*.

A time limit for payment of developer charges must be included in any developer charge determination or advice provided to developers.

Council may elect to determine developer charges at the time of considering a development application. Such a determination would accompany the development consent, and must specify a time limit, subject to the development consent remaining valid, no further adjustment to the developer charges may be made at the time of considering an application for a Compliance Certificate. If the developer charges have not been paid in full within the specified time limit, the developer charges will be determined by the Local Water Utility (LWU) at the time of considering an application for a Compliance Certificate, using the LWU's then current DSP document.

It is noted that section 64 developer charges do not apply for developments serviced by a licenced operator under the *Water Industry Competition Act 2006* (WICA) or *Water Industry Competition Amendment (Review) Act 2014*. The capital cost of the infrastructure serving such developments would be recovered through annual access and usage charges.

2.4 Developer Charges for Crown Developments

Under section 306 (4) and (5), of the *Water Management Act 2000*, the Minister for Planning and Infrastructure may make a determination in respect of developer charges levied on Crown developments.

Crown developments for essential community services (education, health, community services, and law and order) are exempt from general developer charges. Council can only charge crown developments for the portion of cost associated with direct connection costs relating to the development.

2.5 Refunds

If this DSP is revised to correct a major error in the calculation, Council will provide a refund to developers for any resulting over-payments.

2.6 Developments outside the DSP Area

When considering development outside the boundaries of this DSP, Council may either:

- Apply the developer charges adopted for the DSP to the new development; or
- Prepare a new DSP for the new development.

Such a development is likely to require the construction of specific assets. Refer to Section 2.7 for discussion on funding of out-of-sequence development.

2.7 Out-of-Sequence Development

Council has assumed infrastructure development will occur in accordance with the sequence of development defined in the WYURA Water Supply and Sewer Servicing Strategy, prepared by HunterH2O, July 2019. If a Developer wishes to proceed with a development not in the same sequence, i.e. before essential assets are in place, the Council may require and/or approve construction of shared assets ahead of time provided that there are no other constraints to the development.

In such cases the assets will be designed and constructed by the Developer in accordance with the requirements of this DSP and the HunterH2O Servicing Strategy, and the full capital cost would initially be met by this Developer. If the asset funded by this Developer will serve other future development, the Developer shall receive a discount on their developer charges. The Council and the Developer must enter into an agreement stating how the Developer will be reimbursed for shared infrastructure.

2.8 Consultation and Dispute Resolution

A Developer who is dissatisfied with how the Council has calculated a developer charge has a right of appeal pursuant to the *2016 Developer Charges Guidelines for Water Supply, Sewerage and Stormwater* (NSW DPI Office of Water, 2016). The following process must be followed:

1. A Developer who is dissatisfied with how Council has calculated the developer charge for a particular development may lodge a formal complaint to the Council.
2. The CVC General Manager is to review the complaint or cause it to be reviewed.
3. CVC is not a member of the Energy and Water Ombudsman (EWON). If the developer is not satisfied with the General Manager's response, the matter may be referred to the Ombudsman.

4. If the complaint is on technical matters or issues of interpretation of *2016 Developer Charges Guidelines for Water Supply, Sewerage and Stormwater* (NSW DPI Office of Water, 2016), the Developer may refer the complaint to NOW. NOW will respond to the complaint. Where warranted, NOW may refer the matter to the expert technical panel, which includes representatives from NOW, Independent Pricing and Regulatory Tribunal (IPART), the NSW Water Directorate, local water utilities and the development industry.
5. The Developer, if still dissatisfied, may request that the matter be reviewed by way of arbitration by an arbitrator, who is to be appointed by agreement between the Developer and the Council (The *Commercial Arbitration Act 1984* applies to any such arbitration).
6. The decision of the arbitrator is binding on both the Developer and Council.
7. Costs of the arbitration are to be borne equally by the Developer and Council.

3. Demographic and Land Use Planning Information

3.1 Growth Projections

Growth projections for population and number of water Equivalent Tenements (ETs) are shown in Table 3-1 below. These projections are from the present year (2021) to 2050 (30 years).

ET calculations are included in Section 13.

Table 3-1 Growth Projections

Time Period	Cumulative Equivalent Tenements (ETs)	Number of New ETs/year
2020/21	0	0
2021/22	53	53
2022/23	106	53
2023/24	159	53
2024/25	212	53
2025/26	265	53
2026/27	318	53
2027/28	371	53
2028/29	424	53
2029/30	477	53
2030/31	530	53
2031/32	583	53
2032/33	637	54
2033/34	691	54
2034/35	745	54
2035/36	799	54
2036/37	853	54
2037/38	907	54
2038/39	961	54
2039/40	1,015	54
2040/41	1,069	54
2041/42	1,123	54
2042/43	1,177	54
2043/44	1,231	54
2044/45	1,285	54
2045/46	1,339	54
2046/47	1,339	0
2047/48	1,339	0
2048/49	1,339	0
2049/50	1,339	0
2050/51	1,339	0

3.2 Land Use Information

This DSP should be read in conjunction with the *CVC Strategic Business Plan for Sewerage Services* (GHD, 2019), the *Clarence Valley Local Environmental Plan* (CVC, 2011) and the *WYURA Water Supply and Sewer Servicing Strategy* (HunterH2O, July 2019).

The proposed water supply ring main serving the area covered by this DSP is shown in Section 12.

4. Water Supply Infrastructure

This DSP levies developer charges towards the cost of providing water supply infrastructure to service new development. This infrastructure includes the value of future water supply assets serving the new development area.

Assets covered by this DSP include, but are not limited to:

As the West Yamba Water Supply Scheme will connect into the Nymboida River Water Supply Scheme, the developer charges associated with existing and proposed water supply assets in the Nymboida River Water System (detailed in the CVC Development Servicing Plan – Water Supply Services, GHD 2017) are applicable to this DSP.

Assets covered by the previous DSP include, but are not limited to:

- Distribution and Trunk Mains.
- Water Pumping Stations.
- Water Treatment Works.
- Water Reservoirs.
- Shannon Creek Dam (off creek storage).

4.1 Existing and Future Water Supply Services

The water supply infrastructure required to serve the area covered by this DSP is detailed in the WYURA Water Supply and Sewer Servicing Strategy (HunterH2O, July 2019) including proposed connection to the existing Nymboida River Water Supply Scheme. In summary, the proposed water supply services include:

- A ring-main (closed-loop pipe network) as shown in Figure 12-1.
- Construction is proposed to occur in stages (“initial” and “future” stages).
- Initial stages include:
 - 704 metres of DN150 watermain in Carrs Drive, to the extent shown in Figure 12-1 allowing for connection of initial lots south of Miles Street.
 - Connection to the existing DN375 watermain in Harold Tory Drive.
 - Connection to the existing DN150 watermain in Carrs Drive.
- Future stages include:
 - 1,360 metres of DN250 watermain that completes the DN250 ring main (closed-loop) system for WYURA.
 - Connection to the existing DN375 in Yamba Road as shown in Figure 12-1.

Capital works specific to this DSP (including a description and MEERA costs) are summarised in Section 15.

A schematic of the proposed West Yamba Water Scheme is presented in Figure 12-1.

4.2 Existing Capital Cost

The estimated Modern Engineering Equivalent Replacement Asset (MEERA) capital cost of the existing assets in the Nymboida River Water System is detailed in the CVC Development Servicing Plan – Water Supply Services, GHD 2017.

Table 4-1 Summary of the Existing Capital Charge (from the 2017 CVC Development Servicing Plan - Water Services)

DSP Name	Existing (2017) Capital Charge (\$ / ET)	Existing (2017) Reduction Amount (\$ / ET)	Existing (2017) Calculated Maximum Developer Charge (\$ / ET)	Existing (2017) Developer Charge Adopted for Exhibition Purposes (\$ / ET)	Existing 2020 ¹ Developer Charge (\$/ET)
Nymboida River Water System	\$4,856	\$137	\$4,719	\$4,719	\$4,979

¹ This value has been taken from the CVC Adopted 2020/21 Fees and Charges, Section 7.11 (previously Section 94 contributions) Current Plans and Section 64 Contributions.

4.3 Future Capital Works Program

The timing and expenditure for future water supply capital works serving the area covered by this DSP and which contributed to the capital charge are provided in Section 15.

The timing and expenditure for future water supply capital works (including backlog works) in the Nymboida River Water System is detailed in the CVC Development Servicing Plan – Water Supply Services, GHD 2017.

Capital costs were estimated using the *NSW Office of Water (formerly Ministry of Energy and Utilities) NSW Reference Rates Manual Valuation of Water Supply, Sewerage and Stormwater Assets (2014)* in accordance with the requirements of the *2016 Developer Charges Guidelines for Water Supply, Sewerage and Stormwater* (NSW DPI Office of Water, 2016).

4.3.1 Backlog Works

There are no Backlog works to be considered for the WYURA. Only new developments are required to pay developer charges in accordance with this DSP.

4.3.2 Reticulation Works within a Development

The Developer shall be responsible for the full cost of the design and construction of water supply works within subdivisions that service only that development. The design and construction of the works shall be in accordance with Council's development specifications for water supply services.

5. Levels of Service

System design and operation are based on providing Council's current levels of service (LOS) as outlined below.

The water supply network is required to meet CVC's current LOS outlined in the Table 5-1. CVC are currently reviewing their LOS to ensure compliance with minimum legislative requirements outlined in the *NSW Water and Sewerage Strategic Business Planning Guidelines* (NSW Office of Water, 2011). This is discussed in detail in *CVC Strategic Business Plan – Water Supply Services* (GHD, 2017).

Table 5-1 Current Levels of Service – Water Supply¹

Service Criteria	Service Target	Compliance Measure
Availability of supply - Connection	Provide point of connection for all allotments within defined service areas	Availability of point of connection for all allotments.
Availability of supply - Pressure	20 metres minimum	95% compliance
Availability of supply - Flow	48 litres/min 24 litres/min	85% compliance 95% compliance.
Response times to supply failures		
During Work Hours	2 hours from notification	95% compliance
Out of Work Hours	3 hours from notification	95% compliance
Minor Problems/General Enquires		
Oral	5 working days	95% compliance
Written	10 working days	95% compliance
Water Quality	NHRMC Australian Drinking Water Guidelines 2011.	95% compliance generally but 80% compliance for turbidity.
Water Restrictions	Restrictions that reduce demand by 20% being applied no more than once every 10 years for no more than 5% of the time.	Restriction history over a 10-year period.

CVC has different LOS for their raw water customers due to lack of water quality measures. These LOS are not currently being reviewed by CVC. CVC's current LOS for raw water consumers is detailed in Table 5-2.

¹ Hunter Water Australia, Clarence Valley Council Strategic Business Plan for Water Supply Services, 2006, page 12

Table 5-2 Current Levels of Service – Raw Water Consumers²

Service Criteria	Service Target Raw Water Supply
Availability of service	No new connections permitted. There are approximately 400 existing raw water consumers for which the grandfather clause applies.
Pressure	Pressure will fluctuate depending on consumption; hence a break pressure tank will be required to ensure consistent pressure.
Flow	Due to varying pressure the flow at the meter will also vary, however a minimum of 10 litres per minute will be provided wherever possible.
Response times to supply failures	Whenever a consumer is without water or damage is being caused by a leak the problem will be rectified as soon as possible, otherwise the repair will be programmed and affected customers notified prior to turning off the water.
Water Quality	NHRMC Australian Drinking Water Guidelines 2011 are not complied with.
Water Restrictions	Restrictions are applied whenever necessary

5.1 Further Information

Further information on standards of service is available from:

- *Clarence Valley Council Strategic Business Plan – Water Supply Services* (GHD, 2017), which is available on Council's website.
- *NSW Water and Sewerage Strategic Business Planning Guidelines* (NSW Office of Water, 2001) (available at www.water.nsw.gov.au).

² Hunter Water Australia, Clarence Valley Council Strategic Business Plan for Water Supply Services, 2006, page 13

6. Design Parameters

CVC's peak planning documents include the following:

- Draft Water Supply Asset Management Plan, CVC, 2015
- Integrated Water Cycle Management Simplified Strategy, CVC, 2009
- Clarence Valley Council Water Supply Strategic Business Plan, CVC September 2017.

These documents determine the LOS for designing and delivering CVC's water supply systems.

Investigation and design of water supply system components is based on the AUSPEC *Northern Rivers Local Government Development Design and Construction Manual, Development Design Specification D11 Water Supply* (CVC et al., 2009). This refers to the following for water supply design:

- Water Supply Code of Australia, Water Services Association of Australia (WSAA) 2002.

6.1 Planning and Design Parameters

The major components of the water supply network were planned according to the following:

- Regional Water Supply Strategy, Lower Clarence Country Council, 1997.
- WYURA Water Supply and Sewer Servicing Strategy, HunterH2O, July 2019.

7. Calculated Developer Charges

Developer charges are up-front charges used to recover infrastructure costs incurred through the provision of services to new developments and service changes to existing developed areas. Developer charges are comprised of the following components:

- Capital charge – the cost of providing the asset, and;
- Reduction amount – the cost recovered through annual charges.

The relationship between these components is as follows:

$$\text{Developer Charge} = \text{Capital Charge} - \text{Reduction Amount}$$

7.1 Summary

As the proposed ring main services all developments in the WYURA, development charges are to be paid as a proportion of ETs serviced by the new pipework, i.e. if a developer contributes 10% of the total ET load, they will contribute the equivalent of 10% of the costs associated with construction costs of the new pipes servicing the WYURA.

The developer charges for the area covered by this DSP are as follows:

Table 7-1 Summary of Developer Charges

DSP Name / Area	Capital Charge (\$ / ET)	Reduction Amount (\$ / ET)	Calculated Maximum Developer Charge (\$ / ET)	Developer Charge Adopted for Exhibition Purposes (\$ / ET)
West Yamba Water Supply Scheme	\$5,697	\$0 ¹	\$5,697	\$5,697

¹ The reduction amount for this DSP was excluded from this developer charge. This is because the existing developer charge from the 2017 CVC DSP Water Services report included a reduction amount for Yamba (inclusive of West Yamba).

These amounts have been calculated on the basis of Section 7.2 to Section 7.6 below.

Background information containing all the critical data including calculation models behind this DSP is available from Council's offices by appointment. To review these documents, please contact Council on (02) 6643 0200.

7.2 Equivalent Tenements (ETs)

The basis of future development in WYURA has been adopted from the WYURAWater Supply and Sewer Servicing Strategy, HunterH2O, July 2019.

Actual populations will be subject to the ultimate Council Development Approval.

ET projections are shown in Section 3.1. ET calculation details are shown in Section 13.

7.3 Capital Charge

The capital charge for the service area covered by this DSP has been calculated using the net present value (NPV) spreadsheet method.

Under the NPV spreadsheet method, the capital cost of relevant assets and projected ET's served in the service area are identified. These capital costs represent only the share of the asset capacity used by the service area. The present value (PV) of capital cost and the PV of

new ETs are calculated. The capital charge per ET is the PV of the capital cost divided by the PV of new ETs.

The calculation of the capital charge is summarised in tables presented in Section 13. A summary of the capital charge calculations prior to any agglomeration or cross-subsidy is shown in Table 7-2 below.

Table 7-2 Capital Charge Calculation

DSP Name / Area	PV of New ETs for pre-1996 assets @ 3%	PV of New ETs for post-1996 assets @ 5%	PV of capital cost from pre-1996 assets @ 3%	PV of capital cost from post-1996 assets @ 5%	Capital charge for pre-1996 assets (\$ / ET)	Capital charge for post-1996 assets (\$ / ET)	Capital charge per ET (\$ / ET)
West Yamba Water Supply Scheme	N/A	791	N/A	\$567,624	N/A	\$718	\$718
Nymboida River Water System ¹	N/A	N/A	N/A	N/A	N/A	N/A	\$4,979 ²
Total:							\$5,697

¹ As noted in Section 4, key works included in the capital charge calculated for the Nymboida River Water System in the CVC Water Services DSP will support developments in the West Yamba Urban Release area, therefore this component of the capital charge has not been recalculated for this DSP.

² This value has been taken from the CVC Adopted 2020/21 Fees and Charges, Section 7.11 (previously Section 94 contributions) Current Plans and Section 64 Contributions.

7.4 DSP Areas

The 2016 Developer Charges Guidelines for Water Supply, Sewerage and Stormwater (NSW DPI Office of Water 2016) permit the agglomeration of service areas into DSP areas which have capital charges that are within 30% of each other. Agglomeration is intended to minimise the number of different developer charges within the LGA.

As there is only one service area being considered no agglomeration was undertaken.

7.5 Reduction Amount

The reduction amount is defined as the NPV of the future net income expected from providing water-related services to the new residents in the DSP area.

The previous CVC Water Services DSP (GHD, 2017) included the WYURA, and the key works used in the existing developer charge for the Nymboida River Water System which will support future development within the WYURA. The existing developer charge has therefore been added to the new capital charge calculated in this DSP (which is for works specific to the WYURA only). As the existing developer charge already incorporates a reduction amount into its final developer charge calculation, no further reduction amount is applicable for the works in this DSP.

7.6 Cross-subsidy

In accordance with *2016 Developer Charges Guidelines for Water Supply, Sewerage and Stormwater* (NSW DPI Office of Water 2016), a utility may elect to levy less than the calculated developer charge.

The cross-subsidy is the percentage difference between the annual bill with the calculated maximum developer charge and the proposed lower developer charge.

No cross-subsidy has been applied as part of the considerations for the development areas in this DSP.

8. Reviewing / Updating of Calculated Developer Charges

In line with the *2016 Developer Charges Guidelines for Water Supply, Sewerage and Stormwater* (NSW DPI Office of Water 2016) the developer charges relating to this DSP will be reviewed after a period of 4 to 8 years from the implementation of this plan, concurrently with the review of the CVC Development Servicing Plan – Water Supply Services, GHD, 2017. If the review indicates that the developer charges in this DSP are still applicable this DSP will apply for a further five years once the Council releases a public notice to this effect. However, if the developer charges in this DSP are found to no longer apply and it is believed that a new DSP is warranted, a new DSP shall be prepared, audited, exhibited and registered.

If a major change occurs, such as a requirement for significant capital works, which was not considered in the DSP, Council may carry out a review in less than 4 years, subject to NOW approval. If the review identifies that a new DSP is required, the new DSP must to be prepared, audited, exhibited and registered.

In the period between any review, developer charges will be adjusted annually on 1 July on the basis of movements in the Consumer Price Index (CPI) for Sydney, in the preceding 12 months to December, excluding the impact of Goods and Services Tax (GST).

9. Background Information

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

1. West Yamba Urban Release Area Water Supply and Sewer Servicing Strategy, HunterH2O, July 2019.
2. 2011 Australian Census, Australian Bureau of Statistics, 2011
3. Clarence Valley Local Environmental Plan, CVC, 2011
4. Northern Rivers Local Government Development Design and Construction Manual, Development Design Specification D11 Water Supply, CVC, et. al, 2009
5. Clarence Valley Council Sewerage Water Supply Business Plan, GHD, 2016
6. Clarence Valley Council Development Servicing Plans for Water Supply Services, Hunter Water Australia, 2005
7. Clarence Valley Council Water Supply Strategic Business Plan, GHD, September 2017.
8. 2016 Developer Charges Guidelines for Water Supply, Sewerage and Stormwater, NSW Department of Primary Industries Office of Water, 2016
9. NSW Reference Rates Manual – Valuation of Water Supply, Sewerage and Stormwater Assets, NSW Government Office of Water, Ministry of Energy and Utilities, 2003 with amendments in 2010
10. NSW Water and Sewerage Strategic Business Planning Guidelines. NSW Office of Water, 2011
11. Section 64 Determinations of Equivalent Tenements Guidelines, Water Directorate, May 2009 Addendum
12. Water Supply Code of Australia, Water Services Association of Australia, 2002
13. Regional Water Supply Strategy, Lower Clarence Country Council, 1997
14. Excel spreadsheets used in calculating developer charges

All other documents can be reviewed in Council's offices by appointment. To review the documents, please contact Council on (02) 6643 0200.

10. Other DSPs and Related Contribution Plans

Other DSP's and related plans include:

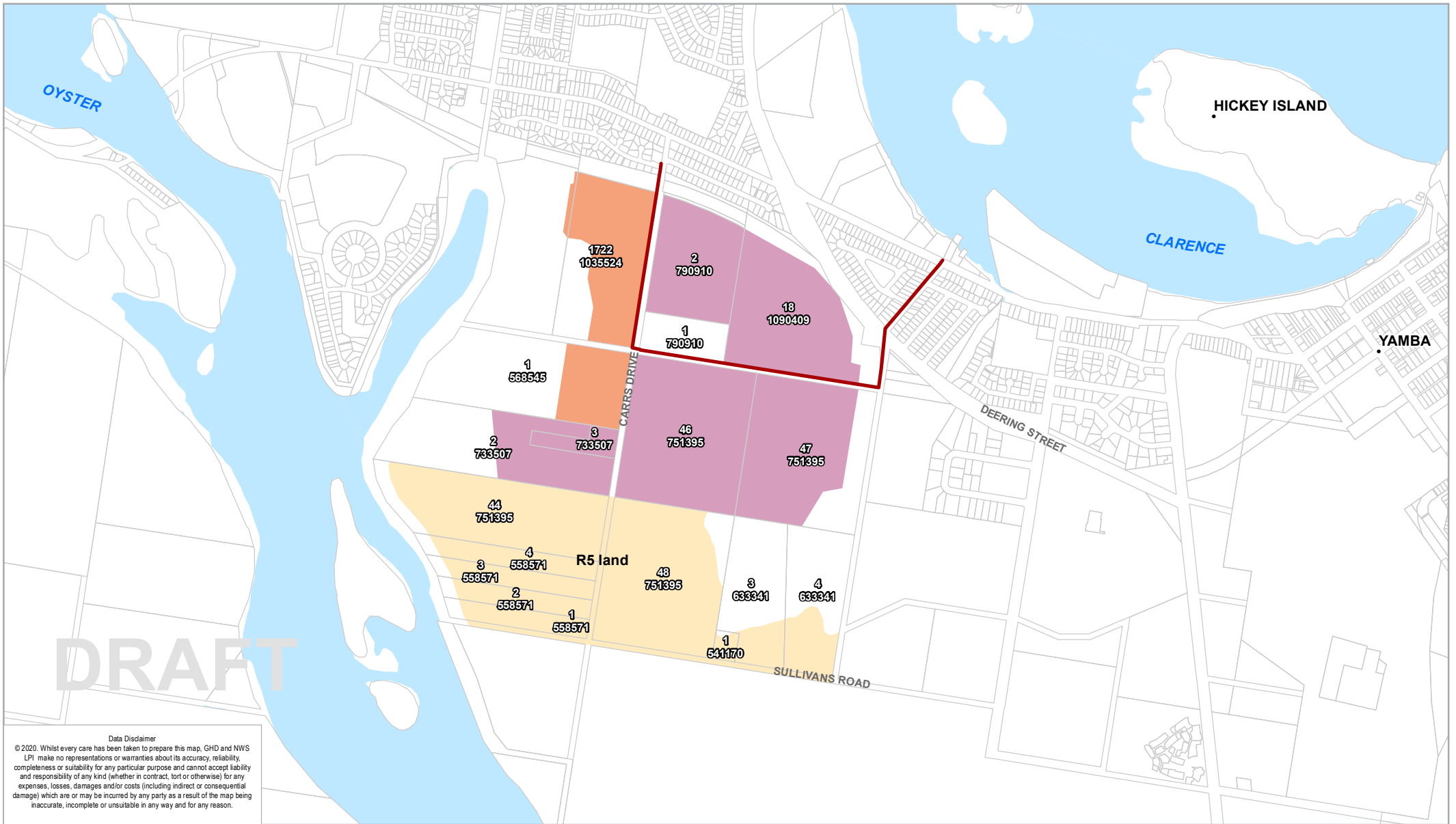
- Clarence Valley Council West Yamba Development Servicing Plan – Sewerage Services, GHD, 2020.
- Clarence Valley Council Development Servicing Plan – Water Supply Services, GHD, 2017.
- Clarence Valley Council Development Servicing Plan – Sewerage Services, GHD, 2016.

CVC also levies developer contributions for various public amenities under Section 94 of the *Environmental Planning and Assessment Act, 1979*.

11. Glossary

Capital Cost	The Present Value (MEERA basis) of assessment used to service the development.
Capital Charge	The capital cost per ET.
CPI	Consumer Price Index
CVC	Clarence Valley Council
Developer Charge	A charge levied on Developers to recover part of the capital cost incurred in providing infrastructure to a new development.
Discount Rate	The rate used to calculate the present value of money arising in the future.
DSP	Developer Servicing Plan
DCP	Development Control Plan
ET	Equivalent Tenement
et al.	et alia
EWON	Energy and Water Ombudsman
FU	Fixture Unit
GST	Goods and Services Tax
i.e.	id est
IPART	Independent Pricing and Regulatory Tribunal
LEP	Local Environmental Plan
LGA	Local Government Area
LOS	Level of Service
MEERA	Modern Equivalent Engineering Replacement Asset
ML	Megalitre
ML/day	Megalitre per day
NHRMC	National Health and Medical Research Council
NPV	Net Present Value
NSW	New South Wales
NSW DPI	NSE Department of Primary Industries
OMA	Operation, maintenance and administration (cost)
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.
Reduction Amount	The amount by which the capital charge is reduced to arrive at the developer charge. The amount reflects the present value of the capital contributions that will be paid by the occupier of a development as part of future annual charges.
RWSS	Regional Water Supply Scheme

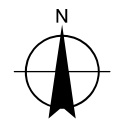
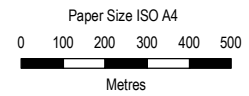
Service Area	An area served by a separate water supply system, an area served by a separate sewerage treatment works, a separate small town or village, or a new development of over 500 lots.
WICA	Water Industry Competition Act
WSAA	Water Services Association of Australia



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Legend

- Place names
- Proposed watermain
- Initial stages
- Future stages
- R5 land
- Waterways
- Cadastre



Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 56

Clarence Valley Council
 Sewer and Water Development
 Servicing Plan Update (DSP)

Project No. **12528667**
 Revision No. **B**
 Date **8/07/2020**

**West Yamba Development Servicing
 Plan Areas – Water Overview**

FIGURE 1

13. ET Projections

13.1 ET Projection Calculations

The basis of future development in WYURA has been adopted from the WYURA Water Supply and Sewer Servicing Strategy, by HunterH2O, July 2019. As such, the projected number of ETs is in accordance with the servicing strategy.

Table 13-1 ET Projections

DSP Name / Area	Stage / Development Area	Proposed number of Lots	Calculated ETs ¹
West Yamba Water Supply Scheme	Carrs Drive Stage 1	57	57
	Carrs Drive Stage 2	54	54
	Carrs Drive Stage 3	50	50
	Land south of Miles Street ²	200	120
	All initial stages	361	281
	NE1 subsystem	170	170
	NE2 subsystem	256	256
	SE subsystem	480	480
	SW subsystem	110	110
	All future stages	1,016	1,016
	R5 land ³	42 ⁴	42 ⁴
	Total	1,419	1,339

¹ For the development areas north of Miles Street (Carrs Drive stage 1, 2, and 3), 1 ET per lot is assumed for water planning purposes. This is based on 3-4 bedroom dwelling per lot (which is considered appropriate for the 450 to 560 sqm lot sizes).

² Council advised HunterH2O in February 2018 that the land south of Miles Street could adopt a 0.6 ET per lot rate for water planning purposes. This rate is based on 2-bedroom dwellings per lot.

³ It is noted that the contribution from the R5 land area development has been considered for the water DSP only, as per CVC advice.

⁴ The proposed number of lots in the R5 area has been revised down from the 104 lots listed in the WYURA Water Supply and Sewer Servicing Strategy (HunterH2O, 2019) to 62 lots, as per CVC advice. In addition, 20 lots have already paid contributions and/or been developed. As such, 42 lots remain for incorporation into this DSP.

13.1.1 Background

Background information provided to inform the population projection calculations included the following:

- West Yamba Urban Release Area Water Supply and Sewer Servicing Strategy (HunterH2O, 2019).

13.1.2 Assumptions

The following assumptions were made to produce the growth projections:

- Complete development within 25 years (2021 to 2046).
- A linear growth rate over the period.

A summary of the growth projections is provided in Table 13-2.

Table 13-2 Growth Projections

Time Period	Equivalent Tenements (ETs)	Number of New ETs/year
2020/21	0	0
2021/22	53	53
2022/23	106	53
2023/24	159	53
2024/25	212	53
2025/26	265	53
2026/27	318	53
2027/28	371	53
2028/29	424	53
2029/30	477	53
2030/31	530	53
2031/32	583	53
2032/33	637	54
2033/34	691	54
2034/35	745	54
2035/36	799	54
2036/37	853	54
2037/38	907	54
2038/39	961	54
2039/40	1,015	54
2040/41	1,069	54
2041/42	1,123	54
2042/43	1,177	54
2043/44	1,231	54
2044/45	1,285	54
2045/46	1,339	54
2046/47	1,339	0
2047/48	1,339	0
2048/49	1,339	0
2049/50	1,339	0
2050/51	1,339	0

14. Existing Capital Costs

A summary of assets and MEERA values is included in the CVC Development Servicing Plan – Water Supply Services, GHD, 2017. Below is a summary of the existing water costs for the Nymboida River Water System.

Table 14-1 Summary of the Existing Capital Charge (from the CVC Development Servicing Plan - Water Servicest, GHD 2017)

DSP Name	Existing (2017) Capital Charge (\$ / ET)	Existing (2017) Reduction Amount (\$ / ET)	Existing (2017) Calculated Maximum Developer Charge (\$ / ET)	Existing (2017) Developer Charge Adopted for Exhibition Purposes (\$ / ET)	Existing 2020 ¹ Developer Charge (\$/ET)
Nymboida River Water System	\$4,856	\$137	\$4,719	\$4,719	\$4,979

¹ This value has been taken from the CVC Adopted 2020/21 Fees and Charges, Section 7.11 (previously Section 94 contributions) Current Plans and Section 64 Contributions.

15. Future Capital Works Program

Future capital works including a description, construction year and MEERA costs are included in the CVC Development Servicing Plan – Water Supply Services, GHD, 2017 and Table 15-1 below.

Table 15-1 Future Water Supply Scheme Capital Expenditure (contributing to Capital Charge)

Amenity	Asset Name	DSP Name / Area	Stage / Development Area	Construction Year	Gross (2020/21\$)	Capital Charge (2021\$)
New System Asset	704 metres of DN150 ring main (initial stages)	West Yamba Water Supply Scheme	Initial stages / All	2021 - 2023	\$230,610	\$230,610
New System Asset	1,360 metres of DN250 ring main (future stages)	West Yamba Water Supply Scheme	Future stages / All	2026 - 2028	\$451,309	\$451,309
Total:					\$681,919	\$681,919

16. Calculation of Capital Charge

A summary of the calculated capital charge per ET for DSP Area: West Yamba Water Supply Scheme is provided in

Table 16-2.

Table 16-1 Capital Charge Net Present Value, Summary of Calculations

Year Number	Year	Estimated Expenditure	PV factor (@5%)	PV of Capital Expenditure (@5%)	New ETs per year	PV of New ETs (@5%)	Capital Charge
1	2021/2022	\$65,860	1	\$65,860	53	53	
2	2022/2023	\$164,750	0.95	\$156,512	53	50	
3	2023/2024		0.91	\$-	53	48	
4	2024/2025		0.86	\$-	53	46	
5	2025/2026		0.82	\$-	53	43	
6	2026/2027	\$225,654	0.78	\$176,010	53	41	
7	2027/2028	\$225,654	0.75	\$169,241	53	40	
8	2028/2029		0.71	\$-	53	38	
9	2029/2030		0.68	\$-	53	36	
10	2030/2031		0.64	\$-	53	34	
11	2031/2032		0.61	\$-	53	32	
12	2032/2033		0.58	\$-	54	31	
13	2033/2034		0.56	\$-	54	30	
14	2034/2035		0.53	\$-	54	29	
15	2035/2036		0.51	\$-	54	28	
16	2036/2037		0.48	\$-	54	26	
17	2037/2038		0.46	\$-	54	25	
18	2038/2039		0.44	\$-	54	24	
19	2039/2040		0.42	\$-	54	23	
20	2040/2041		0.4	\$-	54	22	
21	2041/2042		0.38	\$-	54	21	
22	2042/2043		0.36	\$-	54	19	
23	2043/2044		0.34	\$-	54	18	
24	2044/2045		0.33	\$-	54	18	
25	2045/2046		0.31	\$-	54	17	
26	2046/2047	\$-	0.3	\$-	0	0	
27	2047/2048	\$-	0.28	\$-	0	0	
28	2048/2049	\$-	0.27	\$-	0	0	
29	2049/2050	\$-	0.26	\$-	0	0	
30	2050/2051	\$-	0.24	\$-	0	0	
End		\$681,919		\$567,624	1,339	791	\$718

Table 16-2 Capital Charge per ET, Summary of Calculations

DSP Area	Future Works (\$/ET)	Existing Works (\$/ET)		Total Capital Cost per ET (\$/ET)
		Pre-1996	Post-1996	
West Yamba Water Supply Scheme	\$718	-	-	\$718
Nymboida River Water System ¹				4,979 ²
Total:				\$5,697

¹ As noted in Section 4, key works contributing to the capital charge calculated for the Nymboida River Water System in the CVC Water Services DSP will support developments in the West Yamba Urban Release area, therefore this component of the capital charge has not been recalculated for this DSP

² This value has been taken from the CVC Adopted 2020/21 Fees and Charges, Section 7.11 (previously Section 94 contributions) Current Plans and Section 64 Contributions.

17. Calculation of the Reduction Amount

As discussed in section 7.5 no reduction amount was calculated for this DSP.

18. Cross-subsidy Calculations

No cross-subsidy has been applied to the DSP areas in this DSP.

19. Calculation of Developer Charge

The calculation of developer charges per ET is summarised in Table 19-1.

Table 19-1 Developer Charge per ET, Summary of Calculations

DSP Name / Area	Capital Charge for DSP Area (\$/ET)	Reduction Amount (\$/ET)	Calculated Developer Charge (\$/ET)
West Yamba Water Supply Scheme	\$5,697	\$0	\$5,697

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Revision	Author	Reviewer		Approved for Issue		
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