

# Responses to Questions on Notice

Received at the  
21 June 2018 Ordinary Meeting of Council

A handwritten signature in black ink, appearing to read 'Mark Arnold'.

**Mark Arnold**  
General Manager

**1. QUESTIONS WITH NOTICE**

	1.1	Byron Bay Bypass - Butler Street Residents .....	2
	1.2	Flood Levels - Vallances Road Plan of Management .....	6
	1.3	Operational Costs of Low Pressure System at New Brighton .....	60
5	1.4	Brunswick Valley Sewerage Treatment Plant .....	61
	1.5	Wet Weather Capacity of Pump Stations to Brunswick Valley STP .....	66
	1.6	Reuse of Treated Effluent .....	67

**QUESTIONS WITH NOTICE**

**Question with Notice No. 1.1**      **Byron Bay Bypass - Butler Street Residents**  
**File No:**                                      I2018/1288

5

At Council's Ordinary Meeting held on 21 June 2018, John Anderson asked the following question which was taken on notice:

*Late last year Council's lawyers demanded the personal financial details of many members of the Butler Street residents group opposed to the bypass, leading to complaints to Council about intimidation. You Mr Mayor, were quoted in the press as saying you would "look into it" or something to that effect. What were the results of your enquiries as to who authorised that legal action and why?*

**Response Legal Counsel:**

Personal financial details of many members of the Butler St. residents group

Council did not seek any information concerning the personal financial details of any person. The information which Council sought in a Notice to Produce was as follows:

1. Any register of committee members pursuant to section 29(1) of the *Associations Incorporation Act 2009* or other document recording any persons that have held office as committee members of the applicant at any time on or after 22 June 2016. The information sought from any such document is limited to:
  - (a) The name of committee members.
  - (b) The address of committee members.
  - (c) The date in which committee members took and vacated office.

The name of each member of the committee of the Applicant who holds the position (if any) of president, vice-president, secretary or treasurer of the Applicant, the date on which the member was elected or appointed to the position, and the date on which the member ceased to hold the position.

Council indicated that it did not object to the redaction of any other information contained on those documents.

2. Any register of members pursuant to section 7 of the *Associations Incorporation Act 2009* or other document recording persons that have been members of the Applicant at any time on or after 22 June 2016. The information which is sought from any such document is limited to:
  - (a) The name of any members.
  - (b) The date on which any members became a member.
  - (c) The address of any members.
  - (d) The date of resignation of any member if that resignation occurred on or after 22 June 2016.

Council indicated that it did not object to the redaction of any other information contained on those documents.

3. Any document (including receipts and bank records) recording the name and address of

any person that has:

- (a) contributed funds to the Applicant since 22 June 2016; or
- (b) contributed funds in satisfaction of invoices billed to the Applicant since 22 June 2016;
- (c) contributed funds to service providers (including lawyers and experts) who have carried out services in respect of these proceedings, irrespective of the recipient of those fees;

whether those funds are derived from entrance fees, annual subscriptions of members, donations or any other sources as contemplated by clause 39 of the Applicant's Constitution.

The scope of this paragraph of this Notice to Produce was stated to be limited to the name and address of any contributing person.

Council indicated that it did not object to the redaction of any other information contained on those documents.

- 4. Any invoice or other document recording fees that have been billed by service providers (including lawyers and experts) who have carried out services in these proceedings, irrespective of the recipient of those fees.

Rule 4.2(1) of the Land and Environment Court Rules 2007 (NSW) provides that the Court may decide not to make an order for the payment of costs against an unsuccessful applicant in any proceedings if it is satisfied that the proceedings have been brought in the public interest.

The Notice to Produce was issued as Council was of the view that the proceedings launched by the applicant were not brought in the public interest but rather in the interest of a limited number of people in the vicinity of the proposed development.

#### Actions taken by the Mayor

The Mayor made numerous enquiries through the General Manager as to the application and was provided with relevant responses.

The Mayor and Councillors received three, monthly updates, during the currency of the proceedings via the Legal Services Status Report.

The Mayor and Councillors received a memorandum on 31 October 2017, briefing them on the outcome of the proceedings.

#### Who authorised the legal action and why

##### Who

The decision to take action to seek to recover costs of the applicant's failed Notice of Motion was authorised by the General Manager after having considered both internal and external legal advice. Specific instructions were provided by the Coordinator Legal Services pursuant to authority delegated by the General Manager.

##### Why

The power of the Court to order costs is contained in s 98 of the *Civil Procedure Act 2005* (NSW), which provides:

#### **98 Courts powers as to costs**

- (1) Subject to rules of court and to this or any other Act:

- (a) costs are in the discretion of the court, and
- (b) the court has full power to determine by whom, to whom and to what extent costs are to be paid, and
- (c) the court may order that costs are to be awarded on the ordinary basis or on an indemnity basis.

Relevantly, r 3.7 of the Land and Environment Court Rules 2007, provides:

**3.7 Costs in certain proceedings**

- (1) This rule applies to the following proceedings (except for appeals under section 56A of the Act):
  - (a) all proceedings in Class 1 of the Court’s jurisdiction,...
- (2) The Court is not to make an order for the payment of costs unless the Court considers that the making of an order as to the whole or any part of the costs is fair and reasonable in the circumstances.
- (3) Circumstances in which the Court might consider the making of a costs order to be fair and reasonable include (without limitation) the following:
  - (a) that the proceedings involve, as a central issue, a question of law, a question of fact or a question of mixed fact and law, and the determination of such question:
    - (i) in one way was, or was potentially, determinative of the proceedings, and
    - (ii) was preliminary to, or otherwise has not involved, an evaluation of the merits of any application the subject of the proceedings,
  - ...
  - (d) that a party has acted unreasonably in the conduct of the proceedings;

The proceedings were within Class 1 of the Court’s jurisdiction and accordingly the starting point is the presumptive rule, enshrined in r 3.7(3) of the Court’s Rules, that there be no order for costs. Despite the presumptive rule, r 3.7(3) of the Court’s Rules sets out certain circumstances in which the Court may find that it is “fair and reasonable” to award costs in Class 1 proceedings.

Council’s position was that it was fair and reasonable for it to be awarded its costs of the applicant’s unsuccessful notice of motion.

The costs sought were in relation to the failed Notice of Motion and were not in respect of the entirety of the proceedings.

**Question with Notice No. 1.2**  
**File No:**

**Flood Levels - Vallances Road Plan of Management**  
**I2018/1289**

---

At Council's Ordinary Meeting held on 21 June 2018, Patricia Warren tabled the following question which was taken on notice:

*What are the implications of the flood levels up to and inclusive of the 2050 flood as shown in Council's Climate Change Strategy, on the proposed Vallances Road Plan of Management on Lots 1 DP 952598 (125 Vallances Road) and Lot 1 DP 129374 as given in the Water, Waste and Sewerage Advisory Committee 10 October 2017?*

**Response Director Infrastructure Services:**

Please note, Council Resolution **17-459** renamed the plan to the Brunswick Valley Sustainability Centre Management Plan.

The Climate Change Strategic Planning Policy provides climate change flood planning scenarios for the years 2050 and 2100. The 2050 flood planning scenario is to be used for any Council strategic, infrastructure and operational planning document or designs that may be affected by climate change. The 2050 flood planning scenario will apply to most development for land use planning

The Vallances Road site is affected by flooding and consistent with this policy land uses decisions are informed by flooding and ecosystem buffering. The Conceptual land use plan identifies an environmental zone which seeks to protect/restore the riparian zone of the Brunswick River.

This area also incorporates land which is flood affected. The passive land use area also contains land which is flood affected but removed from desired ecological corridor.

Changes to land form may extend the range of uses permitted.

Management Plan attached for information.

5

**Attachments:**

- 1 E2018 20915 Brunswick Valley Sustainability Centre Management Plan Final Report - 21FEB2018, E2018/20915 , page 7 [↓](#)

10



**BRUNSWICK VALLEY  
SUSTAINABILITY CENTRE  
MANAGEMENT PLAN**

VALLANCES ROAD. MULLUMBIMBY





Brunswick Valley Sustainability Centre Management Plan  
Vallances Road, Mullumbimby  
Byron Shire Council  
December 2017

This page has been intentionally left blank





Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

**Document Information**

Prepared by Planit Consulting Pty Ltd  
 December 2017

ABN 20 099 261 711

Level 2, 11-13 Pearl Street  
 Kingscliff, NSW  
 PO Box 1623  
 Kingscliff, NSW 2487

Telephone: (02) 6674 5001  
 Facsimile: (02) 6674 5003

Email: [admin@planitconsulting.com.au](mailto:admin@planitconsulting.com.au)  
 Web: [www.planitconsulting.com.au](http://www.planitconsulting.com.au)



Document Title	Brunswick Valley Sustainability Management Plan		
Date Commenced			
Responsible Directorate			
Date Adopted		Resolution No	
Review Timeframe			
Last Review Date		Next Review Date	

Document Reference No.	Date Amended	Details/Comments



Brunswick Valley Sustainability Centre Management Plan  
Vallances Road, Mullumbimby  
Byron Shire Council  
December 2017

## EXECUTIVE SUMMARY

The purpose of this Management Plan (MP) is to provide a framework for the management, development and future use of the Brunswick Valley Sustainability Centre.

The land included in this Management Plan is a large parcel of land formed by several lots (cumulatively 112.77 ha) owned by Byron Shire Council (BSC).

The sites are located in Mullumbimby, to north-east of the township and bordered by the Brunswick River to the south. The land is locally known as the Vallances Road site and currently includes the Brunswick Valley Sewage Treatment Plant (BVSTP).

The Project Areas, outcomes and actions intended from this Management Plan include the following:

- **Environmental Land Use Project Areas**
  - Native trees and plants revegetation and rehabilitation.
  - Brunswick River bank stabilisation.
  - Boardwalks & walkways.
  - Irrigation with recycled BVSTP effluent.
  - Fertilising and soil amendment with BVSTP biosolids.
- **Affordable Housing & Community Initiatives Project Areas**
  - Affordable / community housing (subject to rezoning).
  - Use of existing corridors and rights-of-way.
  - Education & interpretation centre.
  - Community gardens.
  - Camping and tourist/visitor accommodation.
- **Brunswick Valley Sewage Treatment Plant (BVSTP) Project Areas**
  - Upgrades to BVSTP in order to accept the flow from the Ocean Shores STP.
  - Effluent storage ponds to buffer flows in order to facilitate effluent reuse and further polishing.
  - Constructed wetlands for effluent polishing.
  - Recycled water generation for irrigation and other valuable reuse.
  - Bioenergy from biomass, e.g., gasification and/or anaerobic digestion, to reduce waste, and generate electricity and other beneficial by-products.
  - STP biosolids dewatering for reuse as fertilizer and soil amendment.
- **Biomass Project Areas**
  - Biomass coppice crops cultivated for bioenergy and other valuable uses, e.g., woody crops or oil crops such as hemp.



Brunswick Valley Sustainability Centre Management Plan  
Vallances Road, Mullumbimby  
Byron Shire Council  
December 2017

- Use of recycled water for crop irrigation.
- Land application of dewatered biosolids and/or other biomass for reuse as fertilizer and soil amendment.
- **Solar Farm Project Areas**
  - Solar photovoltaic arrays for electricity generation.
  - Community-funded and/or privately operated solar farm.

Please refer to **Map 1 – Project Areas** for the project areas.

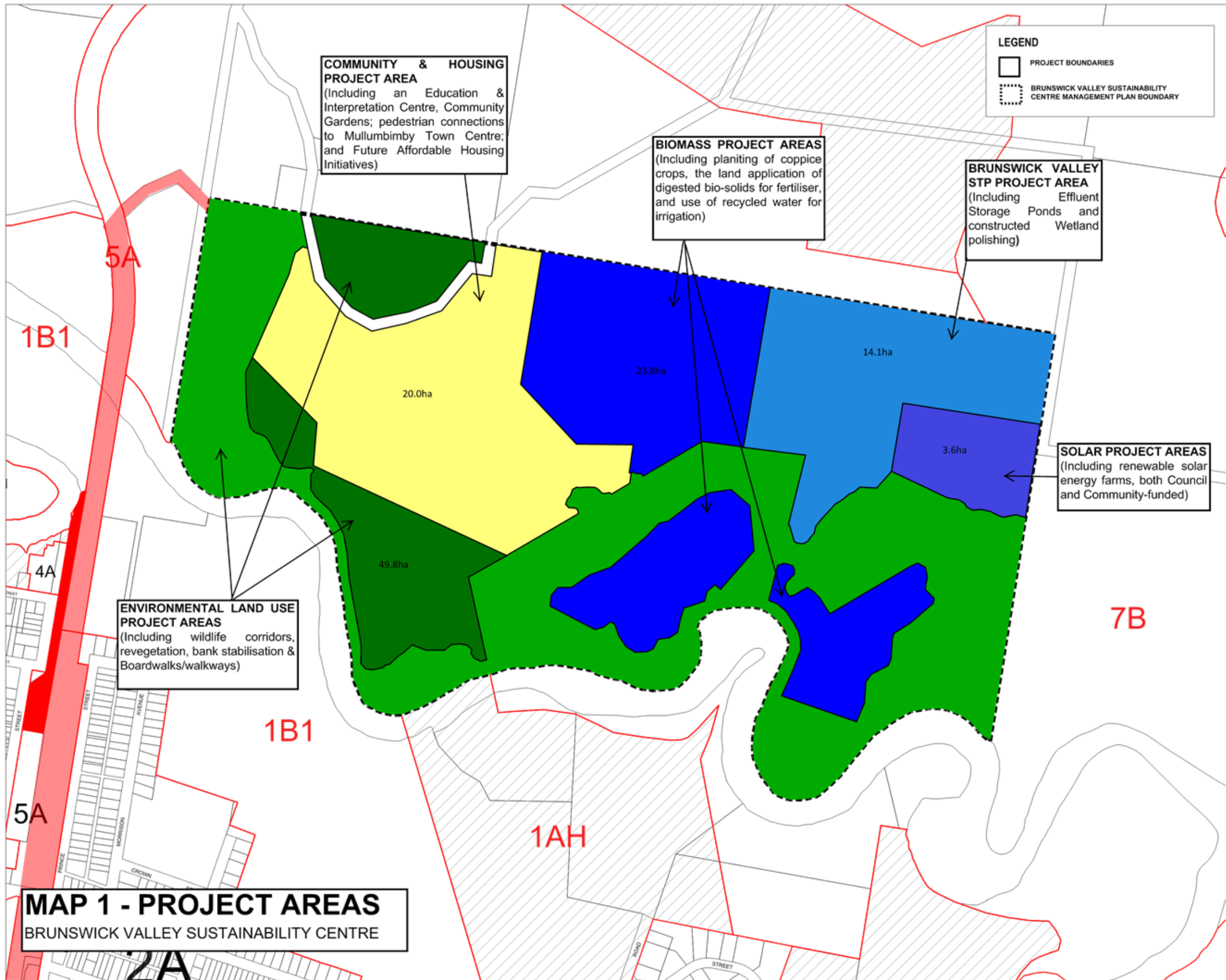
The table overleaf summarises the intended actions for the Brunswick Valley Sustainability Centre in greater detail, and implementation processes for these actions. In doing so, Council may wish to consider the following issues in greater detail:

1. Prepare a detailed Project Execution Plan (PEP) for implementing the Actions contemplated within this Management Plan. The PEP will prioritise Actions and identify specific works.
2. Conduct a Request for Expressions of Interest for the “**Solar Farm Project Areas.**”
3. Conduct a public review and consultation process for the Management Plan “**Affordable Housing & Community Initiatives Project Areas.**” As part of this public consultation, review the rezoning and planning processes required to facilitate specific works in these areas.
4. Identify and consider the statutory instruments, reviews, and approvals that may be required for the broad Management Plan Actions and resulting specific works.
5. Conduct Ecological Assessments, as required, to confirm extent of threatened Species areas within the site.
6. Estimate the costs – and the funding sources and methods – for the Actions and specific works.
7. Estimate the timelines for implementation of the Management Plan Actions and specific works.

In addition to the table below, **Section 5** and **Appendix 1** summarise in detail the strategic actions of these projects, and the strategic objectives of the projects.

**Section 6** recommends actions to be implemented in order to achieve the outcomes intended by this Management Plan.

v



**PROJECT TITLE**  
 VALLANCES ROAD, MULLUMBIMBY

**DRAWING TITLE**  
 PROJECT AREAS

**BASE ISSUED BY**  
 GOV/MAPS

**SCALE**  
 NTS

**DESIGN**  
 ZP

**DRAWN**  
 ZACP

**DATE**  
 26/07/2017

**CHECKED**  
 CT

**DRAW NO**  
 A102

**SHEET NO**  
 02

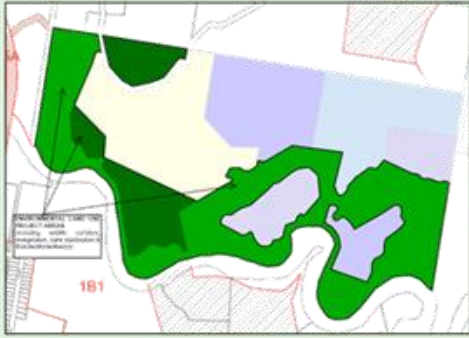

NO	DATE	REVISION	BY



Level 1 2247 Gold Coast Hwy  
 Nobby Beach  
 PO Box 206 QLD 4218  
 Telephone: 07 5526 1500  
 Fax: 07 5526 1502  
 Email: admin@planetconsulting.com.au





TABLE 1 MANAGEMENT PLAN - SUMMARY				
ENVIRONMENTAL LAND PROJECT AREAS				
ACTION	KEY PROPOSALS	AREA (APPROX.)	ZONING	SUMMARY OF PERMISSIBLE USES
	<ul style="list-style-type: none"> <li>o Native trees and plants revegetation and rehabilitation.</li> <li>o Brunswick River bank stabilisation.</li> <li>o Boardwalks &amp; walkways.</li> <li>o Irrigation with recycled BVSTP effluent.</li> <li>o Fertilising and soil amendment with BVSTP biosolids.</li> </ul>	49.8 ha	Rural 2 – Rural Landscape Deferred Matter (LEP 2014) Coastal Habitat (LEP 88)	<ul style="list-style-type: none"> <li>• Environmental Facility</li> <li>• Environmental protection works</li> <li>• Information and Education Facility</li> <li>• Recreation Area</li> <li>• Flood Mitigation Works</li> </ul>
AFFORDABLE HOUSING & COMMUNITY INITIATIVES PROJECT AREA				
ACTION	KEY PROPOSALS	AREA (APPROX.)	ZONING	SUMMARY OF PERMISSIBLE USES
	<ul style="list-style-type: none"> <li>o Sustainable community housing (subject to rezoning).</li> <li>o Use of existing rail corridor, bridge and Council road right-of-way to access the site</li> <li>o Promote low-footprint development via foot traffic, bicycle, and/or e-vehicles</li> <li>o Leading-edge, multi-purpose educational facility to highlight innovations in sustainable land management.</li> <li>o Provision of community gardens</li> <li>o Potential for camping and tourist/visitor accommodation.</li> </ul>	20.0 ha	RU1 – Primary Production RU2 – Rural Landscape	<ul style="list-style-type: none"> <li>• Affordable Housing (*Subject to re-zoning of the land)</li> <li>• Community Facility</li> <li>• Restaurant or Cafe</li> <li>• Environmental Facility</li> <li>• Information &amp; Education Facility</li> <li>• Recreation Area</li> <li>• Camping Ground</li> <li>• Eco Tourist Facilities</li> <li>• Tourist and Visitor Accommodation (ONLY Bed &amp; Breakfast and Farm-Stay Accommodation)</li> </ul>



Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

BIOMASS PROJECT AREAS				
ACTION	KEY PROPOSALS	AREA (APPROX.)	ZONING	SUMMARY OF PERMISSIBLE USES
	<ul style="list-style-type: none"> <li>Planting of biomass coppice crops for harvesting and use in generation of bioenergy and other valuable use, e.g., woody crops or oil crops such as hemp.</li> <li>Use of recycled BVSTP effluent for irrigation.</li> <li>Land application of dewatered BVSTP biosolids for fertiliser and soil amendment.</li> </ul>	23.8 ha	RU1 – Primary Production RU2 – Rural Landscape	<ul style="list-style-type: none"> <li>Agriculture</li> <li>Extensive Agriculture</li> <li>Intensive Plant Agriculture</li> <li>Horticulture</li> <li>Intensive Livestock Agriculture</li> <li>Farm Building</li> <li>Rural Industry</li> </ul>
BVSTP PROJECT AREA				
ACTION	KEY PROPOSALS	AREA (APPROX.)	ZONING	SUMMARY OF PERMISSIBLE USES
	<ul style="list-style-type: none"> <li>Upgrades to BVSTP to accept Ocean Shores STP flows</li> <li>Effluent storage ponds to buffer flows in order to facilitate effluent reuse and further polishing.</li> <li>Constructed wetlands for effluent polishing.</li> <li>Recycled water generation for irrigation and other valuable uses.</li> <li>Bioenergy from biomass to generate electricity.</li> <li>Biosolids reuse as fertilizer and soil amendment.</li> </ul>	14.1 ha	RU1 – Primary Production RU2 – Rural Landscape	<ul style="list-style-type: none"> <li>Sewerage System</li> <li>Extensive Agriculture</li> <li>Rural Industry</li> <li>Intensive Plant Agriculture</li> <li>Horticulture</li> <li>Intensive Livestock Agriculture</li> <li>Farm Building</li> <li>Rural Industry</li> </ul>
SOLAR FARM PROJECT AREAS				
ACTION	KEY PROPOSALS	AREA (APPROX.)	ZONING	SUMMARY OF PERMISSIBLE USES
	<ul style="list-style-type: none"> <li>Installation of solar photovoltaic arrays for:                             <ul style="list-style-type: none"> <li>Byron Shire Council for use in the operation of the BVSTP</li> <li>Opportunity for community-owned electricity retailer</li> </ul> </li> <li>Excess electricity to be net-metered and sold to generate a sustainable source of revenue.</li> </ul>	3.6 ha	RU1 – Primary Production RU2 – Rural Landscape	<ul style="list-style-type: none"> <li>Electricity Engineering</li> <li>Solar Energy System</li> <li>Rural Industry</li> </ul>



Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

## Table of Contents

<b>EXECUTIVE SUMMARY .....</b>	<b>iv</b>
<b>Table of Contents.....</b>	<b>ix</b>
<b>1. INTRODUCTION .....</b>	<b>1</b>
1.1. Structure of this Management Plan .....	1
1.2. Land covered by this Plan.....	2
<b>2. SITE DETAILS.....</b>	<b>7</b>
2.1. Condition of the Land.....	7
2.2. Existing Zoning of the Land.....	8
2.3. Zone Objectives .....	13
2.4. Existing Uses and Facilities .....	15
2.5. Existing Vegetation .....	19
2.6. Existing Fauna .....	23
<b>3. LEGISLATIVE FRAMEWORK.....</b>	<b>25</b>
<b>4. STRATEGIC FRAMEWORK .....</b>	<b>26</b>
4.1. Strategic Objectives .....	26
4.2. Biodiversity Conservation Strategy .....	26
4.3. Sustainable Agriculture Strategy .....	26
4.4. Low Carbon Strategy 2014 .....	27
4.5. Climate Change Strategic Planning Policy .....	28
4.6. Community Gardens Policy.....	28
4.7. Corporate Sustainability Policy .....	29
<b>5. FUTURE USE AND DEVELOPMENT OF THE LAND .....</b>	<b>30</b>
<b>6. RECOMMENDATIONS.....</b>	<b>38</b>
<b>APPENDIX 1. SUMMARY &amp; STRATEGIC GUIDANCE.....</b>	<b>39</b>



Brunswick Valley Sustainability Centre Management Plan  
Vallances Road, Mullumbimby  
Byron Shire Council  
December 2017

This page has been intentionally left blank

x





Brunswick Valley Sustainability Centre Management Plan  
Vallances Road, Mullumbimby  
Byron Shire Council  
December 2017

## 1. INTRODUCTION

The purpose of this Management Plan is to provide a framework for the management, development and future use of the Brunswick Valley Sustainability Centre.

The Plan is community driven and provides for the community's vision for the land, including permitted uses and establishes strategies and an action plan for the implementation of the desired outcomes.

The land included in this Management Plan is Operational Land owned by Byron Shire Council (BSC) identified as:

- Lot 1 on DP 952598 (125 Vallances Road, Mullumbimby);
- Lot 1 on DP 129374 (Vallances Road, Mullumbimby);
- Lots 14-15, 17-19 on DP 251938 (Vallances Road, Mullumbimby).

The sites are located in Mullumbimby, to north-east of the township and bordered by the Brunswick River to the south.

The land is collectively known as the Brunswick Valley Sustainability Centre, and includes the Brunswick Valley Sewage Treatment Plan (STP). It is intended to develop the site as a whole for sustainable eco-pursuits, renewable energy technologies and innovative environmental processes.

### 1.1. Structure of this Management Plan

This Management Plan is divided into the following sections:

1. **Introduction** – provides the purpose of the Plan and the details of the land applicable under this Management Plan.
2. **Site Details** – Provides a description of the land, current uses and purposes, zoning, vegetation and locational context.
3. **Strategic Framework** – this section outlines the core objectives, strategic actions and policies shaping this Management Plan.
4. **Future Use and Development of the Land** – provides the authorised (proposed and potential) developments on the land.
5. **Recommendations** – provides recommendations in order to facilitate future use and development of the land
6. **Summary** – provides a synopsis of the Management Plan and intended outcomes.
7. **Appendices** – provide information applicable to this Management Plan.





Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

**1.2. Land covered by this Plan**

The land covered by the Brunswick Valley Sustainability Centre Management Plan is shown on **Map 2 – Project Boundary** overleaf.



This Management Plan applies to the following individual land parcels shown in **Table 2**:

Table 2: Land Parcel details

No.	Lot / DP	Physical Address	Area
1	Lot 1 DP952598	125 Vallances Road, Mullumbimby	25.4 ha (254,189.32m <sup>2</sup> )
			
2	Lot 1 DP129374	Sewerage Woks – Vallances Road	85.9ha (859,015.52m <sup>2</sup> )
			





Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

No.	Lot / DP	Physical Address	Area
3	Lot 14 DP 251938	Vallances Road, Mullumbimby	5,452m <sup>2</sup>
			
4	Lot 15 DP 251938	Vallances Road, Mullumbimby	445m <sup>2</sup>
			




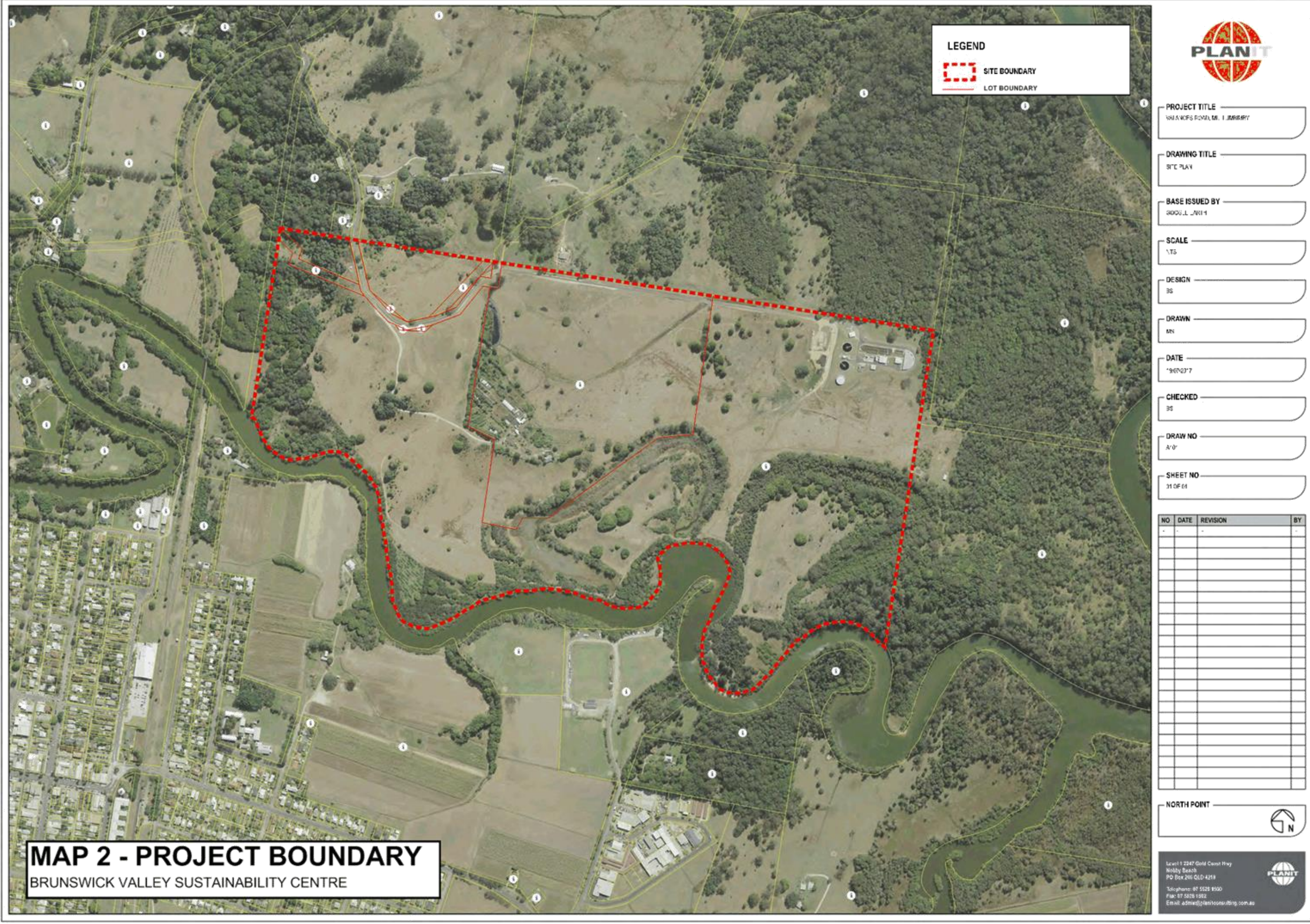
Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

No.	Lot / DP	Physical Address	Area
5	Lot 17 DP 251938	Vallances Road, Mullumbimby	3,273m <sup>2</sup>
			
6	Lot 18 DP 251938	Vallances Road, Mullumbimby	375m <sup>2</sup>
			



Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

No.	Lot / DP	Physical Address	Area
7	Lot 19 DP 251938	Vallances Road, Mullumbimby	25m <sup>2</sup>
			
<b>TOTAL</b>			<b>112.27 ha (1,122,774 m<sup>2</sup>)</b>





Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

## 2. SITE DETAILS

### 2.1. Condition of the Land

The subject site is a large parcel of land formed by a total of 7 lots (cumulatively 112.27ha) owned by Byron Shire Council (BSC), as shown in **Map 2 – Project Boundary**. The site is located within a rural area to the north of the Brunswick River, approximately 1km to the north-east of the Mullumbimby CBD.

The north-east portion of the site is the Brunswick Valley sewage treatment plant (BVSTP), operated by BSC. The remainder of the site is largely vacant and used for agistment and livestock grazing. The site accommodates two dwellings (one circa 1980's, the other circa 1920's) with other structures and features associated with an old plant nursery, all towards the south eastern corner.

The site's natural features include about 2.4km of river frontage along the Brunswick River, two large oxbow lagoons (or billabongs) about 1 km in length each, and a small stream close to the south-western property boundary. The landscape is made up of gently undulating slopes and estuarine flood plains. The vegetation is largely disturbed as a result of the historical use of the site for agistment.



Figure 2 – Portion of Site as viewed from Vallances Road



Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

**2.2. Existing Zoning of the Land**

The land is currently zoned RU1 (Primary Production), RU2 (Rural Landscape) and DM (Deferred Matter) under the Byron Local Environmental Plan 2014 (BLEP 2014).

DM (Deferred Matter) designated land is land that is zoned for environmental protection purposes under (the largely superseded) Byron Local Environmental Plan 1988 (BLEP 88). Where such an environmental protection zone applies, BLEP 88 provisions continue to apply. On the subject site, the DM designation primarily relates to environmental protection zone - 7(b) Coastal Habitat Zone.

It is noted that there are a number of zoning inconsistencies on the site, with several parts of the DM-designed land under BLEP 2014 being zoned 1(a) General Rural zone, 1(a)(h) – General Rural (Hatched) and 1(b)(1) – Agricultural Protection under BLEP 88, rather than for environmental protection purposes. These areas of inconsistencies are also subject to the provisions of BLEP 88.

The details of the existing zoning of the sites is shown below in **Table 3**, and identified in the maps overleaf (refer **Map 3 – Zoning Plan (BLEP 88)** and **Map 4 – Zoning Plan (BLEP 2014)**).

**Table 3 – Land Zoning**

Lot / DP	Physical Address	Zoning (BLEP 88)	Zoning (BLEP 2014)
<b>Lot 1 DP 952598</b>	125 Vallances Road, Mullumbimby	<b>1(a)</b> – General Rural <b>7(b)</b> – Coastal Habitat Zone	<b>RU1</b> – Primary Production <b>RU2</b> – Rural Landscape <b>DM</b> – Deferred Matter
<b>Lot 1 DP 129374</b>	Sewerage Works – Vallances Road, Mullumbimby	<b>1(a)</b> – General Rural <b>1(a)(h)</b> – General Rural (Hatched) – subject to Clause 38A <b>1(b)(1)</b> – Agricultural Protection <b>7(b)</b> – Coastal Habitat Zone (Part Lot)	<b>RU1</b> – Primary Production <b>RU2</b> – Rural Landscape <b>DM</b> – Deferred Matter
<b>Lot 14 DP 251938</b>	Vallances Road, Mullumbimby	<b>1(a)</b> – General Rural	<b>RU1</b> – Primary Production <b>RU2</b> – Rural Landscape



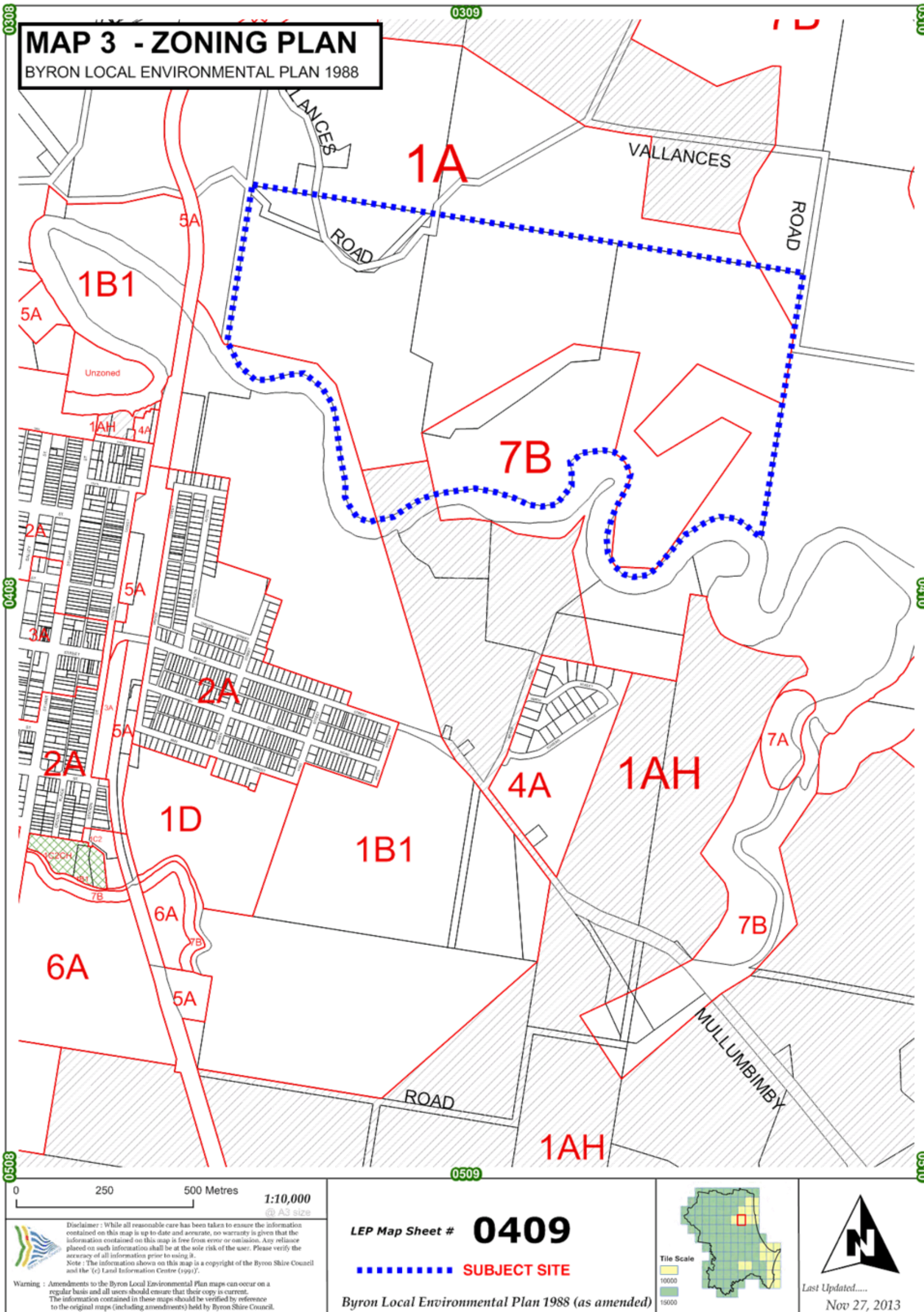


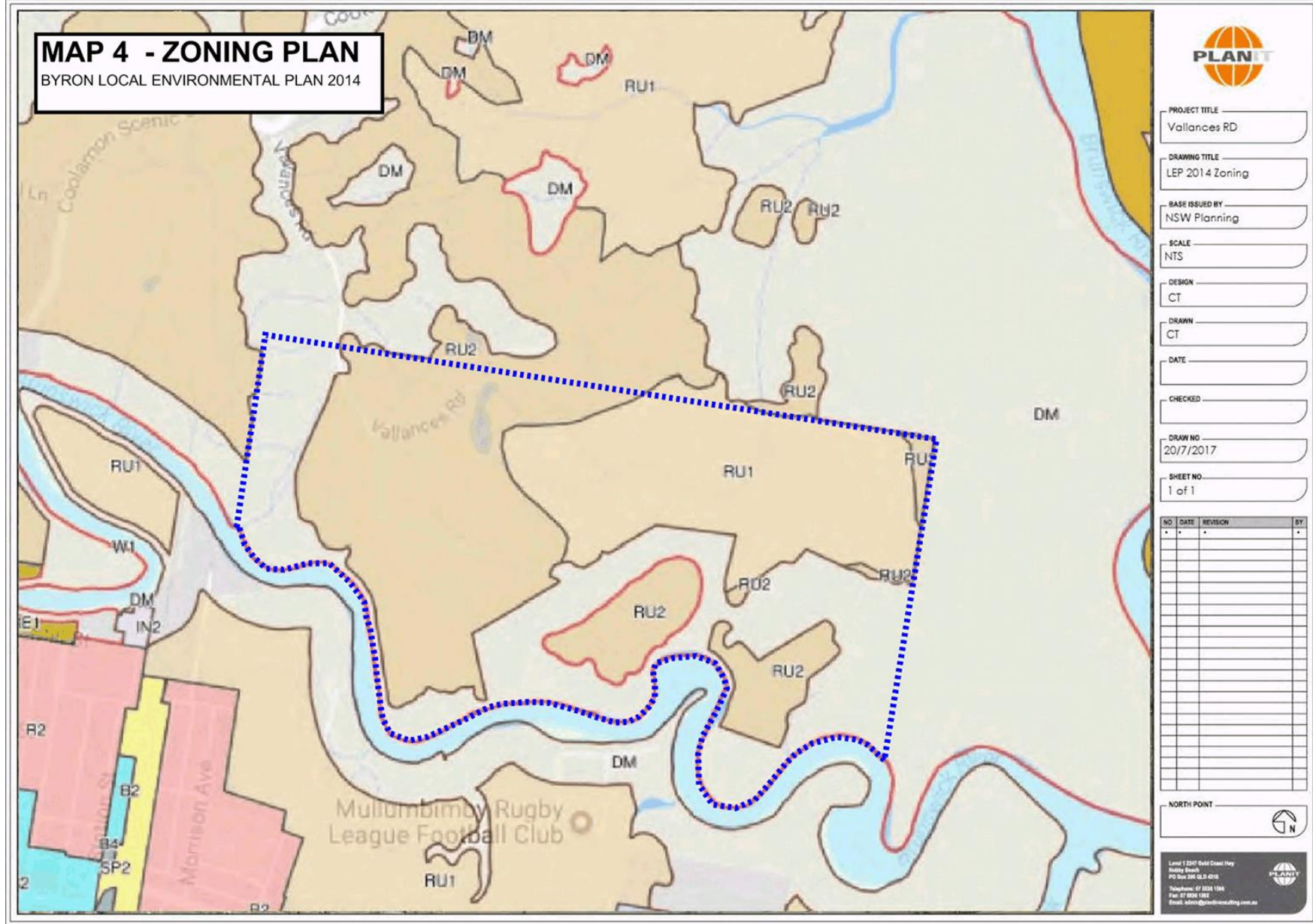
Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

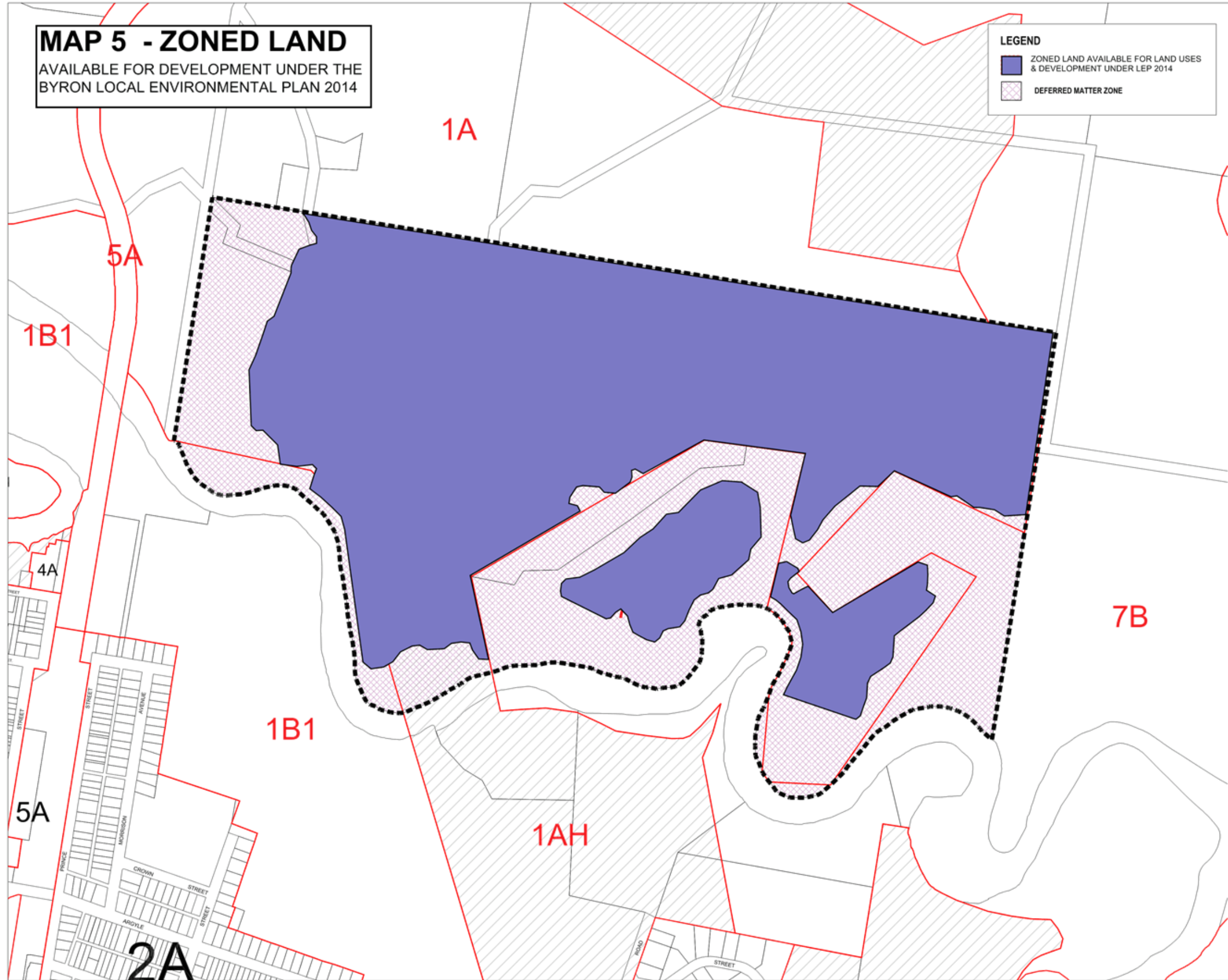
<b>Lot 15 DP 251938</b>	Vallances Road, Mullumbimby	<b>1(a)</b> – General Rural	<b>RU2</b> – Rural Landscape
<b>Lot 17 DP 251938</b>	Vallances Road, Mullumbimby	<b>1(a)</b> – General Rural	<b>RU2</b> – Rural Landscape
<b>Lot 18 DP 251938</b>	Vallances Road, Mullumbimby	<b>1(a)</b> – General Rural	<b>RU2</b> – Rural Landscape
<b>Lot 19 DP 251938</b>	Vallances Road, Mullumbimby	<b>1(a)</b> – General Rural	<b>RU2</b> – Rural Landscape

The primary development opportunities of the Brunswick Valley Sustainability Centre eco-pursuits are focused within those areas of land Zoned RU1 (Primary Production) or RU2 (Rural Landscape) under LEP 2014 (refer **Map 5 – Zoned Land**).

All areas of the site designated as Deferred Matter (for environmental protection purposes or otherwise) are subject to BLEP 88 provisions. These areas are not suitable for development and have been retained as a wildlife corridor for environmental and conservation purposes. This is discussed further in the subsequent sections.







**PROJECT TITLE**  
VALLANCES ROAD, MULLUMBIMBY

**DRAWING TITLE**  
LEP 88 - LEP 2014 DEFERRED MATTER ZONE

**BASE ISSUED BY**  
GOV MAPS

**SCALE**  
NTS

**DESIGN**  
ZP

**DRAWN**  
ZACP

**DATE**  
26/07/2017

**CHECKED**  
CT

**DRAW NO**  
A102

**SHEET NO**  
02

NO	DATE	REVISION	BY



Level 1 2247 Gold Coast Hwy  
 Hobby Beach  
 PO Box 206 QLD 4218  
 Telephone: 07 5526 1500  
 Fax: 07 5526 1502  
 Email: admin@planetconsulting.com.au



Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

### 2.3. Zone Objectives

Below is a summary of the zone objectives and the permissible uses (with /without consent) in each zone. The land uses relevant to the ecological and sustainable development intent of the site have been highlighted in bold where relevant. These uses are discussed further in **Section 5**.

#### **RU1 – Primary Production**

The relevant LEP 2014 objectives for the RU1 – Primary Production zone are:

- *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.*
- *To encourage diversity in primary industry enterprises and systems appropriate for the area.*
- *To minimise the fragmentation and alienation of resource lands.*
- *To minimise conflict between land uses within this zone and land uses within adjoining zones.*
- *To encourage consolidation of lots for the purposes of primary industry production.*
- *To enable the provision of tourist accommodation, facilities and other small-scale rural tourism uses associated with primary production and environmental conservation consistent with the rural character of the locality.*
- *To protect significant scenic landscapes and to minimise impacts on the scenic quality of the locality.*

Works on this portion of land which would be permissible without development consent include:

- **Environmental protection works; Extensive agriculture; Home-based child care; Home occupations**

The following land uses, activities and development on this portion of land would be permissible, subject to development consent:

- *Airstrips; Animal boarding or training establishments; Business identification signs; **Camping grounds; Community facilities; Dual occupancies; Dwelling houses; Environmental facilities; Extractive industries; Farm buildings; Flood mitigation works; Forestry; Helipads; Home businesses; Home industries; Industrial retail outlets; Industrial training facilities; Intensive livestock agriculture; Intensive plant agriculture; Landscaping material supplies; Open cut mining; Places of public worship; Plant nurseries; Recreation areas; Restaurants or cafes; Roads; Roadside***



Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

*stalls; **Rural industries**; Rural supplies; Rural workers' dwellings; Secondary dwellings; **Tourist and visitor accommodation**; Veterinary hospitals*

**RU2 – Rural Landscape**

The relevant LEP 2014 objectives for the RU2 – Rural Landscape zone are:

- *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.*
- *To maintain the rural landscape character of the land.*
- *To provide for a range of compatible land uses, including extensive agriculture.*
- *To enable the provision of tourist accommodation, facilities and other small-scale rural tourism uses associated with primary production and environmental conservation consistent with the rural character of the locality.*
- *To protect significant scenic landscapes and to minimise impacts on the scenic quality of the locality*

Works on this portion of land which would be permissible without development consent include:

- ***Environmental protection works; Extensive agriculture; Home-based child care; Home occupations***

The following land uses, activities and development on this portion of land would be permissible, subject to development consent:

- **Agricultural produce industries; Agriculture;** Airstrips; Animal boarding or training establishments; Business identification signs; **Camping grounds;** Cemeteries; Child care centres; **Community facilities;** Crematoria; Depots; Dual occupancies; Dwelling houses; **Eco-tourist facilities; Environmental facilities;** Extractive industries; **Farm buildings; Flood mitigation works;** Forestry; Funeral homes; Garden centres; Health consulting rooms; Helipads; Home businesses; Home industries; Hostels; Industrial retail outlets; Industrial training facilities; **Information and education facilities;** Landscaping material supplies; Livestock processing industries; Neighbourhood shops; Places of public worship; Plant nurseries; **Recreation areas;** Recreation facilities (indoor); Recreation facilities (outdoor); Respite day care centres; **Restaurants or cafes;** Roads; Roadside stalls; Rural supplies; Rural workers' dwellings; Secondary dwellings; Stock and sale yards; Storage premises; **Tourist and visitor accommodation;** Transport depots; Truck depots; Veterinary hospitals; Warehouse or distribution centres.



Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

### **DM - Deferred Matter**

The DM - Deferred Matter designation under LEP 2014 consists of the following zonings under LEP 88:

- 1(a) – General Rural;
- 1(a)(h) – General Rural (Hatched);
- 1(b)(1) – Agricultural Protection; and
- 7(b) – Coastal Habitat Zone.

Although each of these areas has specific objectives and land use permissibility under LEP 88 these are not addressed in this Management Plan as all works proposed are to take place outside of the DM area.

Any future works on this land will be required to be in accordance with the relevant provisions of LEP 88.

## **2.4. Existing Uses and Facilities**

The majority of the site is largely vacant and used for agistment and livestock grazing. The site accommodates two dwellings (one circa 1980's, the other circa 1920's) with other structures and features associated with an old plant nursery, all towards the south eastern corner.

The primary use of the north-eastern corner of the site is the Brunswick Valley Sewage Treatment Plant (BVSTP), constructed and operated under the Brunswick Valley Sewage Augmentation scheme. The STP requires a 500m radius buffer around the sewerage infrastructure, which extends outside the subject sites' boundaries (refer **Map 6 - Constraints**).

The BVSTP has been operating since 2010. The BVSTP was constructed to facilitate better wastewater management practices in the Mullumbimby and Brunswick Heads areas, and improved water quality in the Brunswick River estuary.

The BVSTP facilities include the operation of a physical, chemical and biological treatment plant and off-site recycled water irrigation storage. Treated effluent is available to the Main Arm Irrigation Scheme which currently irrigates treated effluent onto dairy pasture. Biosolids recycling is also available to local farms for use as a soil conditioner.



Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

A table of existing uses is provided below:

Lot / DP	Physical Address	Existing Uses
Lot 1 DP 952598	125 Vallances Road, Mullumbimby	<ul style="list-style-type: none"> <li>• Extensive Agriculture (Agistment/Grazing)</li> <li>• Dwelling (x 2)</li> <li>• Farm Building</li> </ul>
Lot 1 DP 129374	Sewerage Woks – Vallances Road, Mullumbimby	<ul style="list-style-type: none"> <li>• Sewerage System</li> <li>• Extensive Agriculture (Agistment/Grazing)</li> <li>• Environmental protection Works</li> </ul>
Lot 14 DP 251938	Vallances Road, Mullumbimby	<ul style="list-style-type: none"> <li>• Vacant – Closed Road Reserve</li> <li>• Extensive Agriculture (Agistment/Grazing)</li> </ul>
Lot 15 DP 251938	Vallances Road, Mullumbimby	<ul style="list-style-type: none"> <li>• Vacant – Closed Road Reserve</li> <li>• Extensive Agriculture (Agistment/Grazing)</li> </ul>
Lot 17 DP 251938	Vallances Road, Mullumbimby	<ul style="list-style-type: none"> <li>• Vacant – Closed Road Reserve</li> <li>• Extensive Agriculture (Agistment/Grazing)</li> </ul>
Lot 18 DP 251938	Vallances Road, Mullumbimby	<ul style="list-style-type: none"> <li>• Vacant – Closed Road Reserve</li> <li>• Extensive Agriculture (Agistment/Grazing)</li> </ul>
Lot 19 DP 251938	Vallances Road, Mullumbimby	<ul style="list-style-type: none"> <li>• Vacant – Closed Road Reserve</li> <li>• Extensive Agriculture (Agistment/Grazing)</li> </ul>

The extent of the Extensive Agriculture (Agistment/Grazing) is shown in **Figure 5** below, while the BVSTP area is shown in **Figure 6** below.





Brunswick Valley Sustainability Centre Management Plan  
Vallances Road, Mullumbimby  
Byron Shire Council  
December 2017



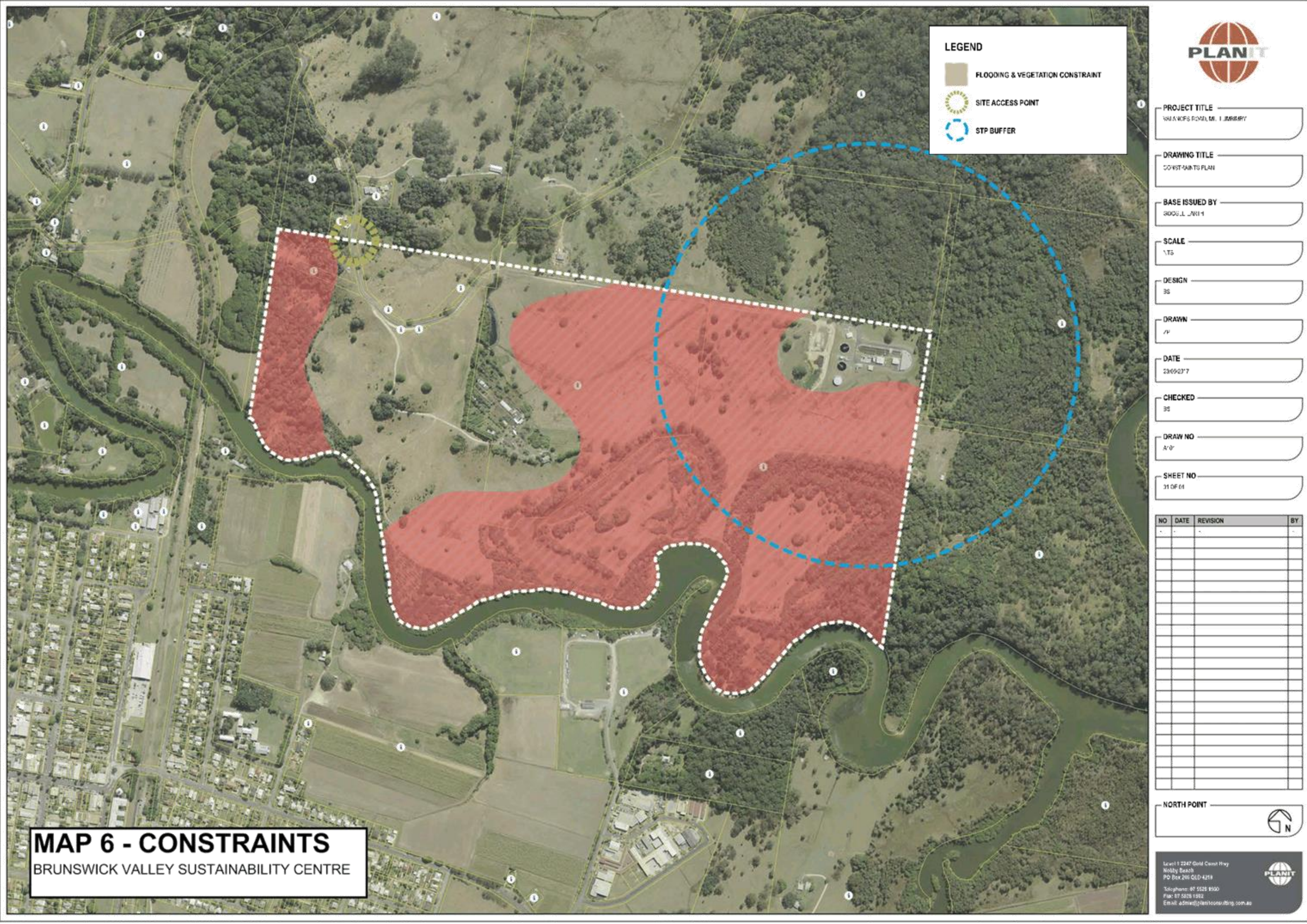
Figure 5 - Historical Grazing Lease Areas

Source: Byron Shire Council



Figure 6 – Existing Sewage Treatment Plant area

Source: SIXmaps, 2017



**MAP 6 - CONSTRAINTS**  
BRUNSWICK VALLEY SUSTAINABILITY CENTRE



Brunswick Valley Sustainability Centre Management Plan  
Vallances Road, Mullumbimby  
Byron Shire Council  
December 2017

## 2.5. Existing Vegetation

With approximately 2.5 km of frontage to the Brunswick River and associated riparian riverbank vegetation, the site is a significant ecological zone and provides an important fish habitat leading into the Cape Byron Marine Reserve.

About 80% of the site consists of cleared land that supports exotic pasture and has been used for cattle grazing since the 1940s. The remaining 20% consists of heavily vegetated areas of mangrove forest and woodland, saltmarsh, swamp sclerophyll forest and woodland, wet sclerophyll forest, rainforest (some dominated by Camphor Laurel), and Brushbox forest (refer **Map 7 – Vegetation Mapping**).

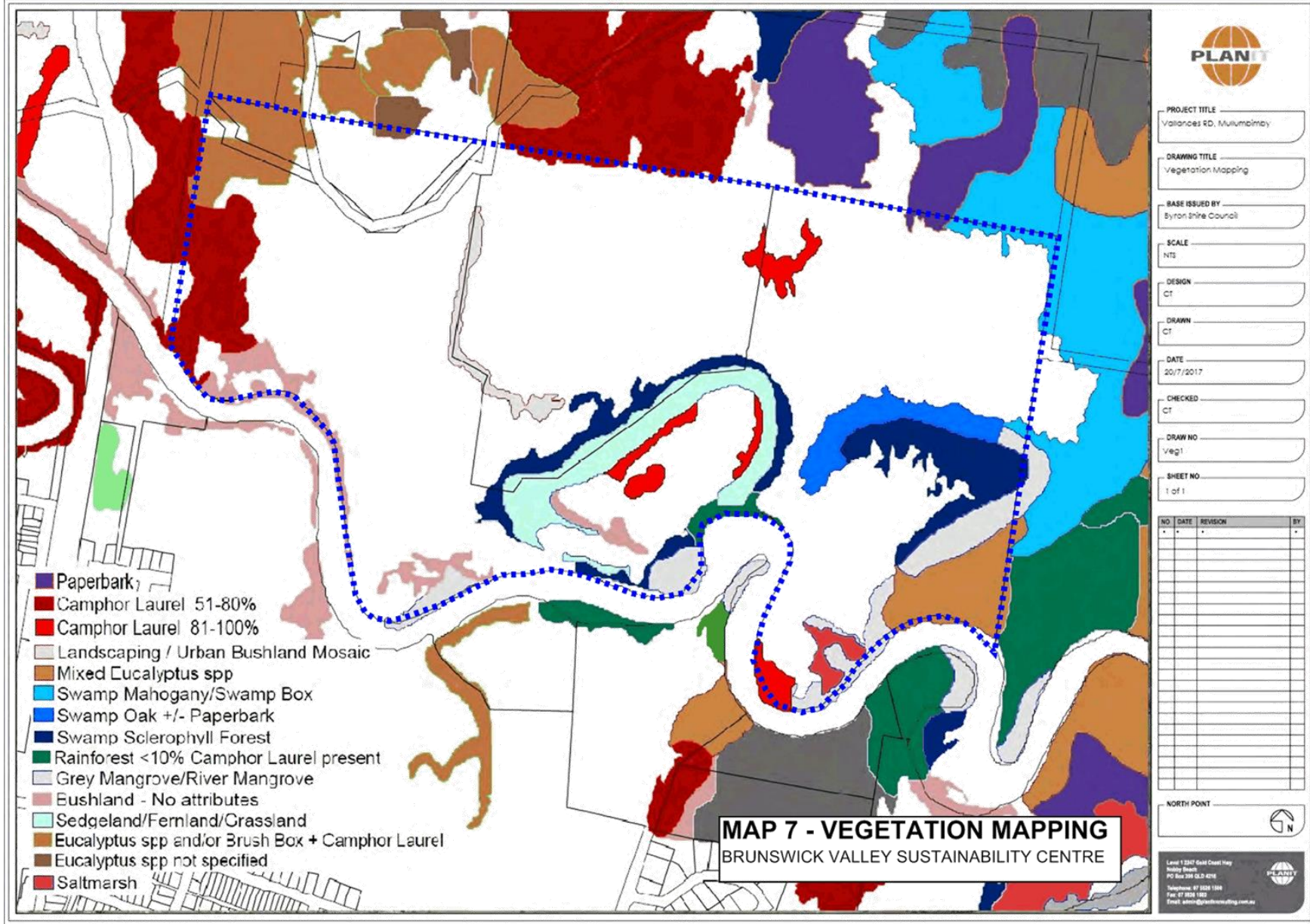
Endangered Ecological Communities represented on the site include Coastal Saltmarsh, Swamp Oak Floodplain Forest, Swamp Sclerophyll Forest on Coastal Floodplains, Subtropical Coastal Floodplain Forest, Lowland Rainforest on Floodplain and Freshwater Wetlands. These areas are designated as High Value Conservation Vegetation and form part of the wildlife corridor through the site (refer **Map 8 – Vegetation Mapping – High Conservation & Wildlife Corridors**).

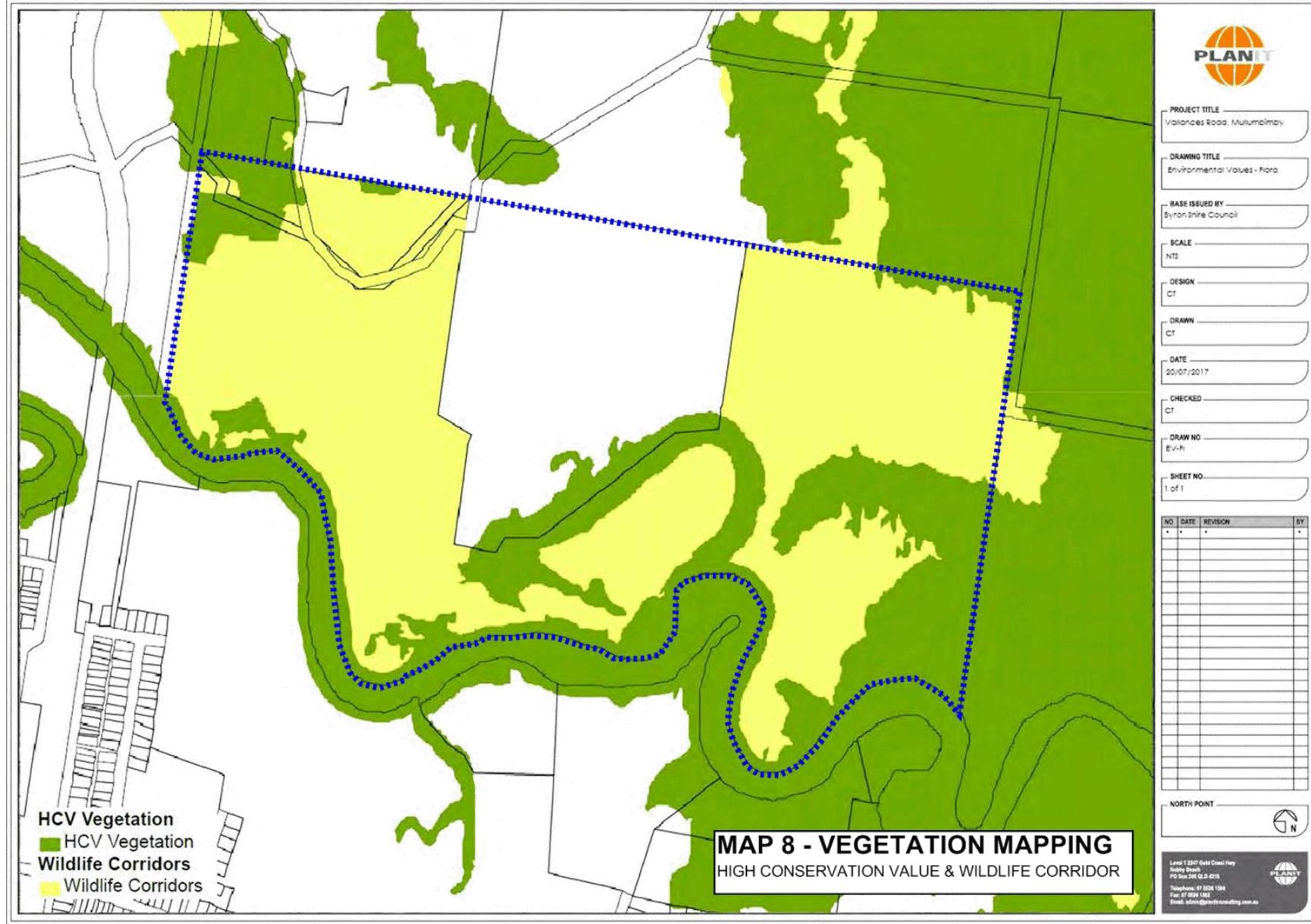
Eight threatened flora species have been recorded: Hairy Joint Grass (*Arthraxon hispidus* – V), Marblewood (*Acacia bakeri*-V), White Lace Flower (*Archidendron hendersonii* – V), Giant Ironwood (*Choicarpa subargentea* – E), Davidson's Plum (*Davidsonia jersyana* - E), Rough Shelled Queensland Nut (*Macadamia tetraphylla* – V) and Spiny Gardenia (*Randia moorei* – E).

Three threatened fauna species have been recorded in native vegetation at the site. The Koala (*Phascolarctos cinereus* - V), the Bush Hen (*Amaurornis olivaceus* - V), and the Rose-Crowned Fruit Dove (*Ptilinopus regina* –V).

Native vegetation on the site is severely fragmented and occurs in narrow corridors along riparian zones. The site has historically suffered from edge effects and was moderately to severely infested with over 40 species of environmental weeds. However; the subject site has undergone extensive regeneration and revegetation projects between 2006 and 2009 (*Bush Generation Outcomes for Vallances Road 2007-2009*, Byron Shire Council 2009).

Revegetated areas focused on the Camphor Laurel Forest; Swamp Sclerophyll Forest and Woodland; Swamp Sclerophyll Forest; Grey Mangrove/River Mangrove Forest and Woodland; Salt marsh, with the removal of Weeds including Camphor Laurel, Groundsel, Grasses, Coastal Morning Glory, Winter Senna, and Lantana.







Brunswick Valley Sustainability Centre Management Plan  
Vallances Road, Mullumbimby  
Byron Shire Council  
December 2017



Figure 10 – River Mangroves/ Brunswick River



Figure 11- Heavily Modified Agistment Areas



Figure 12 –Swamp Mahogany/Swamp Box



Figure 13 – Camphor Laurel



Brunswick Valley Sustainability Centre Management Plan  
Vallances Road, Mullumbimby  
Byron Shire Council  
December 2017

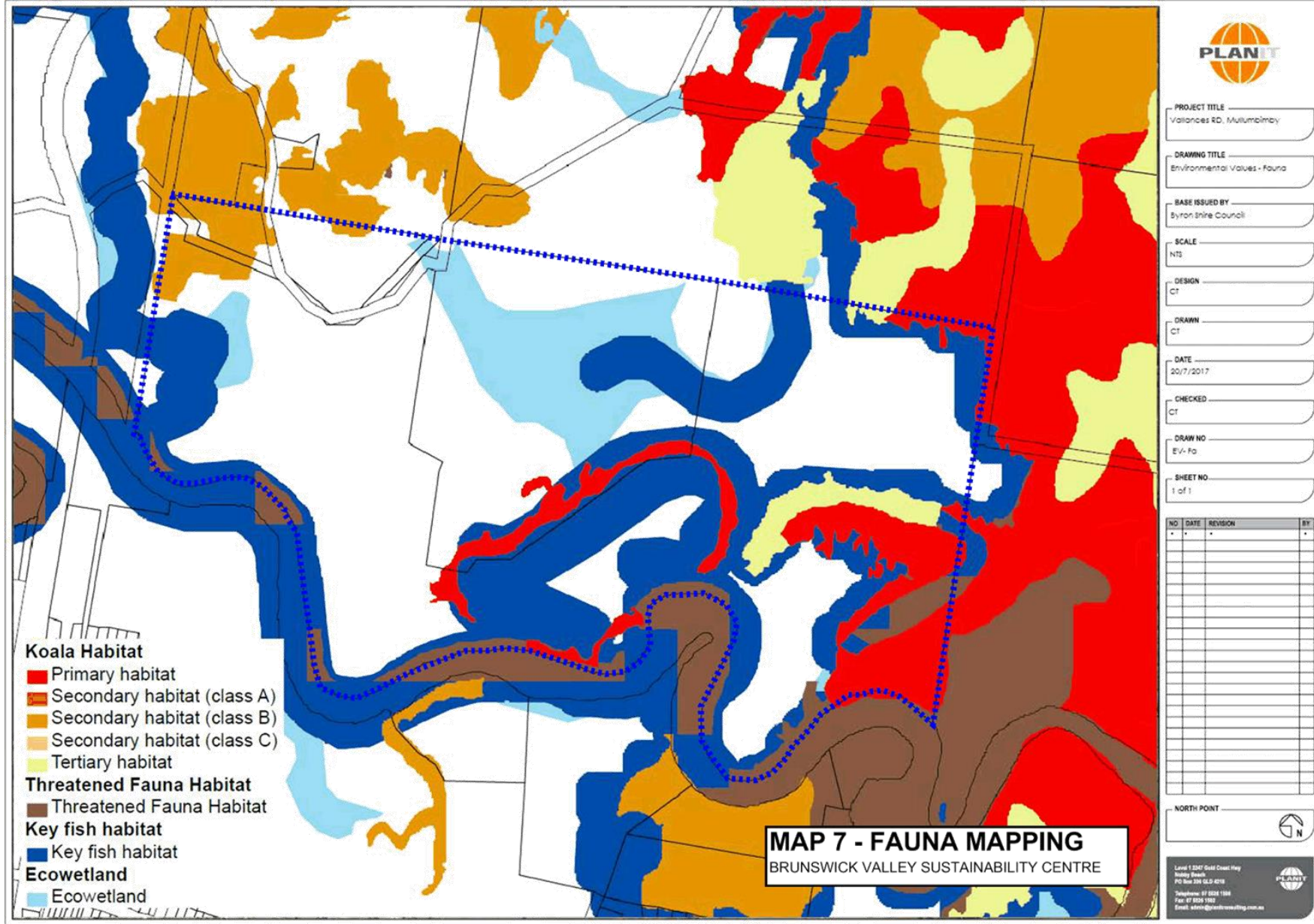
## 2.6. Existing Fauna

The subject site plays an important ecological role in the Brunswick Valley, forming part of an important wildlife corridor that connected the coastal floodplains with the sub-coastal hinterland.

Fauna Surveys conducted in 2009 revealed the site had at least 133 terrestrial invertebrate species inhabiting the site. This included 104 bird species (two threatened), 13 mammal species (three threatened), nine frog species and seven reptile species (refer **Map 9 – Fauna Mapping**).

There is evidence that the rehabilitation of native vegetation has improved the habitat for threatened fauna species previously recorded at Vallances Road. While bush regeneration works were underway at the site, Bush Hens and Rose-Crowned Fruit Doves have been heard calling in the surrounding vegetation.

Prior to bush regeneration activities commencing, repeated and targeted searches failed to locate any Koalas in the vegetation of the eastern oxbow. In 2009, Koalas have been sighted on two separate occasions feeding and resting in Tallowwoods in the eastern oxbow. The removal of Lantana from the understory may have facilitated the return of koalas to this forested area (*Bush Regeneration Outcomes for Vallances Road 2007-2009, Byron Shire Council*).







Brunswick Valley Sustainability Centre Management Plan  
Vallances Road, Mullumbimby  
Byron Shire Council  
December 2017

### 3. LEGISLATIVE FRAMEWORK

Under the legislative requirements of the *Local Government Act 1993*, Council is required to classify all public land. Public Land is defined as:

**Public Land** means any land (including a public reserve) vested in or under the control of the council, but does not include:

- (a) a public road, or
- (b) land to which the *Crown Lands Act 1989* applies, or
- (c) a common, or
- (d) land subject to the *Trustees of Schools of Arts Enabling Act 1902*, or
- (e) a regional park under the *National Parks and Wildlife Act 1974*.

Public land is to either be classified as 'Community Land' or 'Operational Land'. The purpose of classification is to identify clearly that land which should be kept for use by the general public (community) and that land which need not (operational). The major consequence of classification is that it determines the ease or difficulty with which land may be alienated by sale, leasing or some other means.

Community land is relatively restricted in that it must not be sold, or be leased or licensed for more than 21 years and may only be leased or licensed for more than 5 years if public notice of the proposed lease or licence is given and, in the event that an objection is made to the proposed lease or licence, the Minister's consent is obtained. No such restrictions apply to operational land. Classification or reclassification of land does not affect any estate or interest a council has in the land.

Community land would ordinarily comprise land such as a public park. Operational land would ordinarily comprise land held as a temporary asset or as an investment, land which facilitates the carrying out by a council of its functions or land which may not be open to the general public, such as a works depot or a council garage or, in this instance, the varied uses that incorporate the Brunswick Valley Sustainability Centre.

Byron Shire Council confirmed the classification of all the subject land as Operational Land.



Brunswick Valley Sustainability Centre Management Plan  
Vallances Road, Mullumbimby  
Byron Shire Council  
December 2017

## 4. STRATEGIC FRAMEWORK

### 4.1. Strategic Objectives

The objective of this Management Plan is to provide for a range of sustainable land use initiatives that meet Council's sustainability strategies and environmental intents in the following general areas:

- Environmental Initiatives
- Community & Housing Initiatives
- Sewerage Treatment Plant Initiatives
- Biomass Initiatives
- Solar Initiatives

Byron Shire Council's applicable sustainability and environmental policies are summarized below.

### 4.2. Biodiversity Conservation Strategy

The Byron Biodiversity Conservation Strategy (BCS) is a long term, on-going project that is intended to provide a range of biodiversity conservation directions, on-ground actions and funding options that will work toward improving biodiversity management and practices across the Shire.

The Byron Biodiversity Conservation Strategy aims to:

- Protect, restore and maintain ecosystems and ecological processes through the delivery of on-ground works and planning controls;

The Vallances Road site can deliver on the aims and objectives of the Strategy through:

- Improvement of the condition of ecosystems and increase the extent of native vegetation cover through targeted ecological restoration works;
- Rehabilitate riparian zone along the Brunswick River;
- Establish environmental corridor through the site; and
- Community education and engagement opportunities.

Refer to the Key Project Areas in **Section 5** and **Appendix 1** for further details.

### 4.3. Sustainable Agriculture Strategy

- A range of agricultural opportunities are able to be conducted.
- The intensity, scale and mix of these land uses will be driven by the community and provides the opportunity to deliver a Food Empowerment Project (FEP).
- By integrating and valuing by-products from the STP such as heat and biosolids, a closed loop system can be developed.



Brunswick Valley Sustainability Centre Management Plan  
Vallances Road, Mullumbimby  
Byron Shire Council  
December 2017

- Through this closed loop system recovery, re-use or recycling, this project can reduce emissions, waste and raw materials requirements.

Refer to the Key Project Areas in **Section 5** and **Appendix 1** for further details.

#### 4.4. Low Carbon Strategy 2014

Council's Low Carbon Strategy 2014 targeted a minimum 30% reduction in greenhouse gas emissions below 2003/04 levels by 2020. In March 2017, BSC issued a report (Report No. 13.7) on Council's Low Carbon Target. It was resolved [emphasis added below]:

1. That Council note the 2014/15 and 2015/16 greenhouse gas emission status;
2. That Council note the progress of completed actions from the Low Carbon Strategy.
3. **That Council commits to achieving a 100% net Zero Emissions Target by 2025 in collaboration with Zero Emissions Byron (ZEB).**
4. That, as such, Council congratulates the community for its efforts thus far to realise the employment, national leadership and sustainability benefits that come from the commitment to a zero emissions future
5. **That Council commit itself to source 100% of its energy through renewable energy within 10 years.**
6. **That Council supports the goals of Zero Emission Byron for a net zero emissions Shire in the areas of building, energy, land use, transport and waste.**
7. That, to support the Sustainability Team, a two day a week Emissions Reduction role be established to lead the project and liaise with ZEB.
8. That to support the realisation of this goal in these sectors, Council provide for both Council and the community:
  - i. Within Council's upcoming Waste Strategy, a waste emissions reduction plan provided
  - ii. Within Council's upcoming Transport Strategy, a transport emission reduction modelling report be provided
  - iii. Within Council's upcoming Rural Land Use Strategy, a land use emission reduction modelling report be provided
  - iv. a more detailed 100% Renewable Energy Plan be commissioned and provided
  - v. a Building Emissions Reduction Plan be commissioned and provided.

The projects contained within the Brunswick Valley Sustainability Centre and the actions and uses detailed by this Management Plan are a strong step towards meeting the Zero Emissions Target intentions of Byron Shire Council.

As part of achieving this target Council is investigating all potentials to utilise sources of organic waste materials, termed "biomass", produced in the Shire. Biomass is organic matter, typically from commercial or farming activities, which could be put to its highest available reuse value as feedstock to a bioenergy plant. Municipal STPs produce biosolids as a waste, which is a source of biomass that can be anaerobically digested to produce biogas that, in turn, has



Brunswick Valley Sustainability Centre Management Plan  
Vallances Road, Mullumbimby  
Byron Shire Council  
December 2017

high energy value. A review of the relevant scheme and legislative controls does enable the use of the site for a bioenergy facility.

Obviously, solar projects also form a part of the means to achieve Council's Low Carbon objectives, and these will be investigated for implementation on the subject properties.

Refer to the Key Project Areas in **Section 5** and **Appendix 1** for further details.

#### 4.5. Climate Change Strategic Planning Policy

The Climate Change Strategic Planning Policy provides climate change flood planning scenarios for the years 2050 and 2100. The 2050 flood planning scenario is to be used for any Council strategic, infrastructure and operational planning document or designs that may be affected by climate change. The 2050 flood planning scenario will apply to most development for land use planning

The Vallances Road site is affected by flooding and consistent with this policy land uses decisions are informed by flooding and ecosystem buffering. The Conceptual land use plan identifies an environmental zone which seeks to protect/restore the riparian zone of the Brunswick River.

This area also incorporates land which is flood affected. The passive land use area also contains land which is flood affected but removed from desired ecological corridor.

Changes to landform may extend the range of uses permitted.

Refer to the Key Project Areas in **Section 5** and **Appendix 1** for further details.

#### 4.6. Community Gardens Policy

Council recognises community gardens as social assets that enhance local food security and provide opportunities for recreational, cultural, economic, health and educational pursuits.

The Vallances Road site is able to fulfil a number of the objectives of this policy through:

- Provision of new community gardens on Council owned and managed land.
- Promote knowledge and access in relation to nutritious, organic and locally produced foods to enhance regional food security within the context of climate change and peak oil
- Provide opportunities for outdoor learning that support Council's sustainability education Initiatives
- Position Byron Shire Council as a leader in advancing sustainability within the community
- Community gardens may be able to be established in the passive or active land use area of the site.



Brunswick Valley Sustainability Centre Management Plan  
Vallances Road, Mullumbimby  
Byron Shire Council  
December 2017

Refer to the Key Project Areas in **Section 5** and **Appendix 1** for further details.

#### **4.7. Corporate Sustainability Policy**

The policy objectives include:

- Continually improve the sustainability performance of Council.
- Support the efforts of the wider Byron Shire community in the transition to a low carbon community
- Acknowledge the inter-relationships between social, economic and environmental considerations in all decision-making.
- Support efforts to reduce Council's ecological footprint, including corporate energy consumption, potable water consumption, greenhouse emissions and waste generation across all programs, assets and services.

Vallances Road provides the opportunity to integrate a range of complementary and interrelated land uses and management actions that can achieve the sustainability objectives.

Refer to the Key Project Areas in **Section 5** and **Appendix 1** for further details.



Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

## 5. FUTURE USE AND DEVELOPMENT OF THE LAND

The following table details the developments that this Management Plan expressly authorises for the Brunswick Valley Sustainability Centre at Vallances Road, Mullumbimby. The definitions of these uses are as per the Byron Local Environmental Plan 2014, except where otherwise noted.

**Note:**

LEGEND	
O	<b>Permitted Without Consent</b> [Assessment under Part 5 of the EP&A Act (Review of Environmental Factors) still required]
C	<b>Permitted With Consent</b> [Assessment under Part 4 of the EP&A Act (Development Consent) required]
X	<b>Prohibited</b>

### 1. ENVIRONMENTAL LAND USE PROJECT AREA

Action	Environmental Land Use & Wildlife Corridor
<b>Area</b>	49.8 ha total
<b>Detailed Description</b>	<ul style="list-style-type: none"> <li>• <b>Revegetation / Rehabilitation:</b> Revegetation of wetland areas disturbed by historical grazing; removal of weed species; replanting of wildlife corridors with native species. This will include ongoing follow-up maintenance of already worked areas and expansion into new areas as time and resources permit.</li> <li>• <b>Bank Stabilisation:</b> Brunswick River bank stabilisation works to occur in specific locations, and sediment and erosion control measures implemented. Use of log treatment method, whereby large logs are driven vertically into the river bed at approximately 2-4 metre spacing at various angles to the river bank. By angling the poles, the waters energy is dissipated, slowing the flow thereby reducing the impact on the river bank. In addition, debris is slowed and settles behind the logs providing valuable real estate for trees and mangroves to gain a foothold and stabilise the river bank.</li> <li>• <b>Boardwalks &amp; Walkways:</b> A series of connected walkways winding around the wetlands and raised boardwalks through the billabongs as not to impact on the billabong sensitive habitat, is envisaged for this site. These walkways and raised boardwalks</li> </ul>



Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

	would ultimately enhance the access and enjoyment for people with disabilities, the elderly, their families and carers.					
<b>Zoning (LEP 2014)</b>	<ul style="list-style-type: none"> <li>• RU2</li> <li>• DM - Deferred Matter*</li> </ul> <p>*Deferred Matter under LEP 2014 relates to land zoned 1(a) General Rural; 1(a)(h) General Rural (Hatched); 1(b)(1) Agricultural; and 7(b) Coastal Habitat under LEP 88.</p>					
<b>Authorised Scale of Development</b>	Development and/or works permitted on the land include, but are not limited to: <ul style="list-style-type: none"> <li>• <b>Environmental Facility (1)</b></li> <li>• <b>Environmental Protection Works (2)</b></li> <li>• <b>Information and Education Facility (3)</b></li> <li>• <b>Recreation Area (4)</b></li> <li>• <b>Flood Mitigation Works (5)</b></li> </ul>					
<b>Existing Permissibility</b>		(1)	(2)	(3)	(4)	(5)
	RU2	C	O	C	C	C
	DM	Subject to provisions of LEP 88				
<b>Possible exemptions under SEPP Infrastructure?</b>	Possible SEPP exemptions for <b>Environmental Protection Works (2)</b> and <b>Flood Mitigation Works (5)</b> . Further planning investigations to be undertaken					



Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

3. AFFORDABLE HOUSING & COMMUNITY INITIATIVES PROJECT AREA

Action	Affordable Housing, Community Gardens, and Education & Interpretive Centre
Area	20.0 ha total
Detailed Description	<ul style="list-style-type: none"> <li>• <b>Affordable / Community Housing:</b> It is intended to work towards innovative sustainable community housing provision, there may be the potential, subject to re-zoning, to create affordable housing on the land.</li> <li>• <b>Use of Existing Rail Corridor:</b> It is intended to utilise the existing rail corridor, bridge and Council road right-of-way to allow for pedestrian access to the site. The innovative use of these existing corridors will allow ease of access to the community land from Mullumbimby Town Centre. This will result in a low-footprint development, with an emphasis on foot traffic, bicycle, and/or e-vehicles.</li> <li>• <b>Education and Interpretation Centre:</b> There is the potential to create a leading-edge educational facility to highlights innovations found in the nexus between sewage treatment innovations, bioenergy and biomass management, native plant replanting, and many other aspects of sustainable land management.</li> <li>• <b>Community Gardens:</b> Provision of community gardens that serve the local community. The gardens could be used as educational and information centres promoting sustainable living initiatives, job-creation, and to increase the provision of fresh and affordable produce to the local community. This facility could host school groups, drop-ins from the general public, residential caretakers, and on-site experts-in-residence programmes.</li> </ul>
Zoning (LEP 2014)	<ul style="list-style-type: none"> <li>• RU1</li> <li>• RU2</li> </ul>
Authorised Scale of Development	Development and/or works permitted on the land include, but are not limited to: <ul style="list-style-type: none"> <li>• <b>Community Facility (1)</b></li> <li>• <b>Community Garden (2)</b> (defined under Community Gardens Policy)</li> <li>• <b>Restaurant or Café (3)</b></li> <li>• <b>Environmental Facility (4)</b></li> <li>• <b>Information and Education Facility (5)</b></li> <li>• <b>Recreation Area (6)</b></li> <li>• <b>Camping Ground (7)</b></li> <li>• <b>Eco Tourist Facilities (8)</b></li> </ul>





Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

	<ul style="list-style-type: none"> <li>• <b>Tourist and Visitor Accommodation</b> (ONLY Bed &amp; Breakfast and Farm Stay Accommodation) (9)</li> <li>• <b>Affordable / Community Housing</b> (10)</li> </ul>										
Existing Permissibility		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	RU1	C	N/A	C	C	X	C	C	X	C	X
	RU2	C	N/A	C	C	C	C	C	C	C	X
Possible exemptions under SEPP Infrastructure?	No exemptions permissible.										

4. BVSTP PROJECTS AREA

Action	Brunswick Valley Sewage Treatment Plant and associated by product technologies
Area	14.1 ha total
Detailed Description	<ul style="list-style-type: none"> <li>• <b>Upgrades to BVSTP:</b> Upgrades to the BVSTP to include capacity from the Ocean Shores STP.</li> <li>• <b>Effluent storage ponds &amp; Wetlands Effluent polishing:</b> wetlands and an effluent storage pond will create a community resource that not only further “polishes” already high quality treated effluent but also achieves an innovative and integrated range of environmental and social objectives. These objectives included:                         <ul style="list-style-type: none"> <li>• Maximise the resource value of recycled water.</li> <li>• Further polish and limit the nutrient input to the sensitive waters of the Brunswick River.</li> <li>• Create a natural and effective assimilation pathway to return surplus flows to the water cycle.</li> <li>• Restore an area of pre-disturbance vegetation and habitat.</li> <li>• Integrate operational objectives with broad regional environmental objectives including the creation of an extended and extensive wildlife corridor.</li> <li>• Preserve, protect and encourage threatened species and associated habitat areas.</li> <li>• Buffer and protect billabong and wetland areas.</li> </ul> </li> </ul>



Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

	<ul style="list-style-type: none"> <li>• Achieve sustainable constructed wetlands that are reliable and flexible.</li> <li>• Incorporate innovative water management approaches and technology.</li> <li>• Deliver an asset that the Byron Shire community is proud of and recognised as a model for environmental protection and sustainable water management.</li> <li>• <b>Recycled water:</b> Innovative recycling of tertiary-treated STP effluent as irrigation water for use on coppice crops on the site, as well as for re-establishment and expansion of native plants. This recycled water also has nutrient value to the crops, providing nitrogen and phosphorous required for plant growth.</li> <li>• <b>Bioenergy from Biomass:</b> Advanced sustainable bioenergy technologies exist which can produce from biomass electricity, heating, cooling, biofuels and other valuable by-products for reclamation and reuse. These technologies divert wastes from landfill and displace the use of fossil fuels. It is intended to consider the use of technologies for the generation of bioenergy from biomass, such as gasification and/or anaerobic digestion.</li> <li>• <b>Dewatered biosolids:</b> Biosolids represent a sustainable biomass supply to bioenergy facilities, and are also a high-value soil amendment and fertilizer for coppice crops and native plants. Utilising this STP by-product results in the diversion of what may otherwise be a waste stream, with potential savings of the disposals costs.</li> </ul>						
<b>Zoning (LEP 2014)</b>	<ul style="list-style-type: none"> <li>• RU1</li> <li>• RU2</li> </ul>						
<b>Authorised Scale of Development</b>	Development and/or works permitted on the land include, but are not limited to: <ul style="list-style-type: none"> <li>• <b>Sewerage System (1)</b></li> <li>• <b>Extensive Agriculture (2)</b></li> <li>• <b>Rural Industry (3)</b></li> <li>• <b>Environmental Protection Works (4)</b></li> <li>• <b>Intensive Plant Agriculture (5)</b></li> <li>• <b>Horticulture (6)</b></li> </ul>						
<b>Existing Permissibility</b>		(1)	(2)	(3)	(4)	(5)	(6)
RU1	See below	O	C	O	C	C	C
RU2	See below	O	X	O	C	C	C



Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

<b>Possible exemptions under SEPP Infrastructure?</b>	SEPP exemptions for <b>Sewerage System (1)</b> .
-------------------------------------------------------	--------------------------------------------------

5. BIOMASS PROJECTS AREA

Action	Biomass Coppice Crops and associated bio-projects								
<b>Area</b>	23.8 ha total								
<b>Detailed Description</b>	<ul style="list-style-type: none"> <li><b>Biomass Coppice Crops:</b> Planting of coppice crops for harvesting and use in generation of bioenergy and other sustainable uses/products to occur across the project area. This may include other valuable uses, such as the growth of oil crops like hemp. This will be the primary source of bioenergy across the site, and will utilize recycled water for irrigation. Byron Council is currently conducting a Bioenergy feasibility study that will determine what coppice crops and biomass will be most suitable for a bioenergy facility. Biosolids application for beneficial agricultural use will continue on site for the time being.</li> <li><b>Recycled Water:</b> Innovative recycling of tertiary-treated STP effluent as irrigation water for use on coppice crops on the site, as well as for re-establishment and expansion of native plants. This recycled water also has nutrient value to the crops, providing nitrogen and phosphorous, which are required for plant growth.</li> <li><b>Land Application of Biomass:</b> Biosolids represent a sustainable supply of high-value soil amendment and fertilizer for coppice crops and native plants.</li> </ul>								
<b>Zoning (LEP 2014)</b>	<ul style="list-style-type: none"> <li>RU1</li> <li>RU2</li> </ul>								
<b>Authorised Scale of Development</b>	Development and/or works permitted on the land include, but are not limited to: <ul style="list-style-type: none"> <li><b>Agriculture (1)</b></li> <li><b>Extensive Agriculture (2)</b></li> <li><b>Intensive Plant Agriculture (3)</b></li> <li><b>Horticulture (4)</b></li> <li><b>Intensive Livestock Agriculture (5)</b></li> <li><b>Farm Building (6)</b></li> <li><b>Rural Industry(7)</b></li> </ul>								
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td style="width: 10%; text-align: center;">(1)</td> <td style="width: 10%; text-align: center;">(2)</td> <td style="width: 10%; text-align: center;">(3)</td> <td style="width: 10%; text-align: center;">(4)</td> <td style="width: 10%; text-align: center;">(5)</td> <td style="width: 10%; text-align: center;">(6)</td> <td style="width: 10%; text-align: center;">(7)</td> </tr> </table>		(1)	(2)	(3)	(4)	(5)	(6)	(7)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)		



Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

Existing Permissibility	RU1	X	O	C	C	C	C	C
	RU2	C	O	C	C	C	C	X
Possible exemptions under SEPP Infrastructure?	No exemptions permissible.							

6. SOLAR PROJECTS AREA

Action	Renewable Solar PV Energy farms			
Area	3.6 ha total			
Detailed Description	<ul style="list-style-type: none"> <li>• <b>Solar photovoltaic arrays:</b> Solar photovoltaic arrays are intended to be installed in proximity to the STP and the electricity produced can be used in many fashions, including: to power the many electric motors in the STP treatment process; heating and cooling of STP or other nearby buildings; drying biomass crops, if necessary; and export to the grid.</li> <li>• Subject to market sounding, these projects may be installed by the single or combined efforts of Council, community groups and/or other proponents with beneficial community-oriented attributes embedded in their execution plans in the pursuit and promotion of a 100% renewable energy future for the region.</li> <li>• <b>Electricity Generation:</b> Excess electricity to be net metered and sold to generate a sustainable source of revenue.</li> </ul>			
Zoning (LEP 2014)	<ul style="list-style-type: none"> <li>• RU1</li> <li>• RU2</li> </ul>			
Authorised Scale of Development	Development and/or works permitted on the land include, but are not limited to: <ul style="list-style-type: none"> <li>• <b>Electricity Generating Works (1)</b></li> <li>• <b>Solar Energy System (2)</b></li> <li>• <b>Rural Industry (3)</b></li> </ul>			
Existing Permissibility		(1)	(2)	(3)
	RU1	See below	See below	C
	RU2	See Below	See Below	X



Brunswick Valley Sustainability Centre Management Plan  
Vallances Road, Mullumbimby  
Byron Shire Council  
December 2017

<b>Possible exemptions under SEPP Infrastructure?</b>	SEPP exemptions for <b>Electricity Generating Works (1)</b> and <b>Solar Energy System (2)</b> , subject to conditions. Further planning investigations to be undertaken
-------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------



Brunswick Valley Sustainability Centre Management Plan  
Vallances Road, Mullumbimby  
Byron Shire Council  
December 2017

## 6. RECOMMENDATIONS


In the next phases of follow-on work regarding implementing the Actions from this Management Plan, Council may wish to consider the following tasks:

1. Prepare a detailed Project Execution Plan (PEP) for implementing the Actions contemplated within this Management Plan. The PEP will prioritise Actions and identify specific works.
2. Conduct a Request for Expressions of Interest for the "**Solar Farm Project Areas.**"
3. Conduct a public review and consultation process for the Management Plan "**Affordable Housing & Community Initiatives Project Areas.**" As part of this public consultation, review the rezoning and planning processes required to facilitate specific works in these areas.
4. Identify and consider the statutory instruments, reviews, and approvals that may be required for the broad Management Plan Actions and resulting specific works.
5. Conduct Ecological Assessments, as required, to confirm extent of threatened Species areas within the site.
6. Estimate the costs – and the funding sources and methods – for the Actions and specific works.
7. Estimate the timelines for implementation of the Management Plan Actions and specific works.



Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

APPENDIX 1. SUMMARY & STRATEGIC GUIDANCE

PROJECT AREA	PROJECT DESCRIPTION/ACTIONS	POTENTIAL PARTNERS	POTENTIAL FUNDING SOURCES	TIMELINE (data from Council)	ESTIMATED COSTS (data from Council)
Environmental Land Project Area					
	<ul style="list-style-type: none"> <li>• <b>Revegetation / Rehabilitation:</b> Revegetation of wetland areas disturbed by historical grazing; removal of weed species; replanting of wildlife corridors with native species. This will include ongoing follow-up maintenance of already worked areas and expansion into new areas as time and resources permit.</li> <li>• <b>Bank Stabilisation:</b> Brunswick River bank stabilisation works to occur in specific locations, and sediment and erosion control measures implemented. Use of log treatment method, whereby large logs are driven vertically into the river bed at approximately 2-4 metre spacing at various angles to the river bank. By angling the poles, the waters energy is dissipated, slowing the flow thereby reducing the impact on the river bank. In addition, debris is slowed and settles behind the logs providing valuable real estate for trees and mangroves to gain a foothold and stabilise the river bank.</li> <li>• <b>Boardwalks &amp; Walkways:</b> A series of connected walkways winding around the wetlands and raised boardwalks through the billabongs as not to impact on the billabong sensitive habitat, is envisaged for this site. These walkways and raised boardwalks would ultimately enhance the access and enjoyment for people with disabilities, older people, their families and carers.</li> <li>• <b>Constructed Wetlands:</b> The construction of wetlands will create a community resource that not only further "polishes" already high quality treated effluent but also achieves an innovative and integrated range of environmental and social objectives, including restoration of areas of pre-disturbed vegetation; creation of an extended and extensive wildlife corridor; and preserve, protect and encourage threatened species and associated habitat areas.</li> </ul>	<ul style="list-style-type: none"> <li>• Brunswick Valley Land Care</li> <li>• Mudgha Magogen</li> <li>• Community NGOs</li> <li>• Other departments in Byron Shire Council (Biodiversity Regeneration Crew)</li> </ul>	<ul style="list-style-type: none"> <li>• Sewer fund</li> <li>• Grant Funding</li> </ul>	<ul style="list-style-type: none"> <li>• Can commence immediately</li> </ul>	<ul style="list-style-type: none"> <li>• TBA</li> </ul>




Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

PROJECT AREA	PROJECT DESCRIPTION/ACTIONS	POTENTIAL PARTNERS	POTENTIAL FUNDING SOURCES	TIMELINE (data from Council)	ESTIMATED COSTS (data from Council)
<b>Community &amp; Housing Project Area</b>					
	<ul style="list-style-type: none"> <li>• <b>Affordable / Community Housing:</b> It is intended to work towards innovative sustainable community housing provision, there may be the potential, subject to re-zoning, to create affordable housing on the land.</li> <li>• <b>Use of Existing Rail Corridor:</b> It is intended to utilise the existing rail corridor, bridge and Council road right-of-way to allow for pedestrian access to the site. The innovative use of these existing corridors will allow ease of access to the community land from Mullumbimby Town Centre. This will result in a low development footprint, with an emphasis on foot traffic, bicycle, and/or e-vehicles.</li> <li>• <b>Education and Interpretation Centre:</b> There is the potential to create a leading-edge educational facility to highlights innovations found in the nexus between sewage treatment innovations, bioenergy and biomass management, native plant replanting, and many other aspects of sustainable land management. There is also the potential to add tourist / visitor accommodation to this centre.</li> <li>• <b>Community Gardens:</b> Provision of community gardens that serve the local community. The gardens could be used as educational and information centres promoting sustainable living initiatives, job-creation, and to increase the provision of fresh and affordable produce to the local community. This facility could host school groups, drop-ins from the general public, residential caretakers, and on-site experts-in-residence programmes.</li> </ul>	<p>Affordable Housing</p> <ul style="list-style-type: none"> <li>• Third Party Developers</li> <li>• Community Development &amp; Housing Agencies</li> <li>• Community NGO's</li> </ul> <p>Education Centre</p> <ul style="list-style-type: none"> <li>• Primary &amp; Secondary Schools</li> <li>• Tertiary Education Users</li> <li>• Community Groups</li> </ul>	<p>Affordable Housing</p> <ul style="list-style-type: none"> <li>• Third Party Developers</li> <li>• Grant Funding</li> </ul> <p>Education Centre</p> <ul style="list-style-type: none"> <li>• BSC Sewer Funds</li> <li>• Grant Funding</li> </ul>	<p>Community Consultation to be undertaken first</p>	<ul style="list-style-type: none"> <li>• TBA</li> </ul>



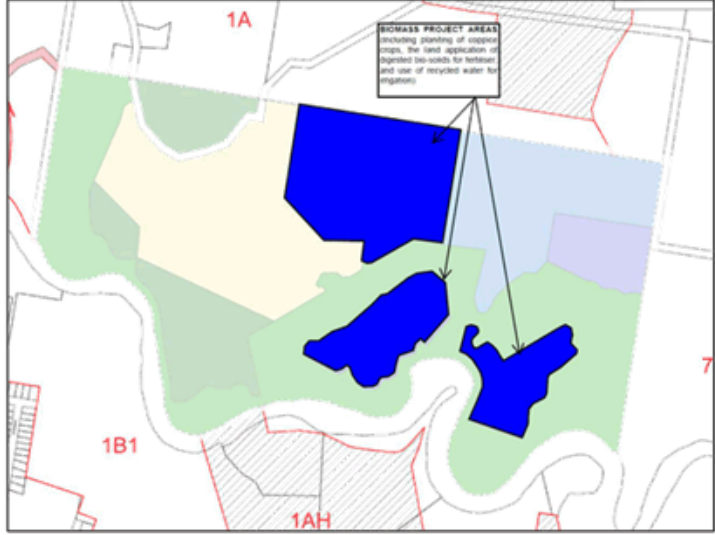


Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

PROJECT AREA	PROJECT DESCRIPTION/ACTIONS	POTENTIAL PARTNERS	POTENTIAL FUNDING SOURCES	TIMELINE (data from Council)	ESTIMATED COSTS (data from Council)
<b>Brunswick Valley Sewage Treatment Plant Project Area</b>					
	<ul style="list-style-type: none"> <li>• <b>Upgrades to BVSTP:</b> Upgrades to the BVSTP to include capacity for flows from the Ocean Shores STP.</li> <li>• <b>Effluent Storage Ponds &amp; Wetlands Effluent Polishing:</b> wetlands and an effluent storage pond will create a community resource that not only further "polishes" already high quality treated effluent but also achieves an innovative and integrated range of environmental and social objectives. These objectives included:                         <ul style="list-style-type: none"> <li>• Buffering to maximise the resource value of recycled water.</li> <li>• Further polish and limit the nutrient input to the sensitive waters of the Brunswick River.</li> <li>• Create a natural and effective assimilation pathway to return surplus flows to the water cycle.</li> <li>• Integrate operational objectives with broad regional environmental objectives including the creation of an extended and extensive wildlife corridor.</li> <li>• Preserve, protect and encourage threatened species and associated habitat areas.</li> <li>• Restore areas of pre-disturbance vegetation and habitat; protect billabong and wetland areas.</li> <li>• Achieve sustainable constructed wetlands that are reliable and flexible.</li> <li>• Incorporate innovative water management approaches and technology.</li> <li>• Deliver an asset that the Byron Shire community is proud of and recognised as a model for environmental protection and sustainable water management.</li> </ul> </li> <li>• <b>Recycled Water:</b> Innovative recycling of tertiary-treated STP effluent as irrigation water for use on biomass coppice crops on the site, as well as for re-establishment and expansion of native plants. This recycled water also has nutrient value to the crops, providing nitrogen and phosphorous, which are required for plant growth.</li> <li>• <b>Biomass Anaerobic Digestion:</b> Advanced sustainable bioenergy technologies exist which can produce electricity, heating, cooling, biofuels, and other valuable by-products for reclamation and reuse. These technologies divert wastes from landfill, displace the use of fossil fuels. It is intended to use Biomass Anaerobic Digestion for biogas generation.</li> <li>• <b>Dewatering Biomass:</b> Biosolids represent a sustainable supply of high-value soil amendment and fertilizer for coppice crops and native plants. Utilising this STP by-product results in the diversion of what would otherwise be a waste stream, and savings of the disposals costs.</li> </ul>	<ul style="list-style-type: none"> <li>• Other Council department</li> <li>• Wildlife groups</li> <li>• Farmers for agistment and irrigation</li> <li>• Technology companies for R&amp;D purposes</li> </ul>	<ul style="list-style-type: none"> <li>• BSC Sewer Fund</li> <li>• Grant funding</li> </ul>	<ul style="list-style-type: none"> <li>• 2020 Subject to Council Approval</li> <li>• Can commence immediately</li> </ul>	<ul style="list-style-type: none"> <li>• \$10,000K</li> <li>• \$3,000K</li> </ul>



Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

PROJECT AREA	PROJECT DESCRIPTION/ACTIONS	POTENTIAL PARTNERS	POTENTIAL FUNDING SOURCES	TIMELINE (data from Council)	ESTIMATED COSTS (data from Council)
<b>Biomass Project Areas</b>					
	<ul style="list-style-type: none"> <li>• <b>Biomass Coppice Crops:</b> Planting of coppice crops for harvesting and use in generation of bioenergy and other sustainable uses/products to occur across the project area. This may include other valuable uses of oil crops such as hemp. This will be the primary source of bioenergy across the site and will utilize recycled water for irrigation. Byron Council is currently conducting a Bioenergy feasibility study that will determine what coppice crops and biomass will be most suitable for a bioenergy facility. Biosolids application for beneficial agricultural use will continue on site for the time being.</li> <li>• <b>Recycled Water:</b> Innovative recycling of tertiary-treated STP effluent as irrigation water for use on coppice crops on the site, as well as for re-establishment and expansion of native plants. This recycled water also has nutrient value to the crops, providing nitrogen and phosphorous, which are required for plant growth.</li> <li>• <b>Application of Dewatered Biomass:</b> Dewatered biosolids represent a sustainable supply of soil amendments and fertilizer for coppice crops and native plants. Utilising this STP by-product results in the diversion of what would otherwise be a waste stream, and savings of the disposals costs.</li> </ul>	<ul style="list-style-type: none"> <li>• Universities</li> <li>• Private third parties for R&amp;D</li> </ul>	<ul style="list-style-type: none"> <li>• BSC Sewer Fund</li> <li>• grant funding</li> <li>• Third party R&amp;D programmes</li> </ul>	<ul style="list-style-type: none"> <li>• Dependent on Biomass Pre-Feasibility Project – possible start 2020</li> </ul>	<ul style="list-style-type: none"> <li>• \$3,000K</li> </ul>



Brunswick Valley Sustainability Centre Management Plan  
 Vallances Road, Mullumbimby  
 Byron Shire Council  
 December 2017

PROJECT AREA	PROJECT DESCRIPTION/ACTIONS	POTENTIAL PARTNERS	POTENTIAL FUNDING SOURCES	TIMELINE (data from Council)	ESTIMATED COSTS (data from Council)
<b>Solar Farm Project Areas</b>					
	<ul style="list-style-type: none"> <li><b>Solar Photovoltaic Arrays:</b> Solar photovoltaic arrays are intended to be installed in proximity to the STP and the electricity produced can be used in many fashions, including: to power the many electric motors in the STP treatment process; heating and cooling of STP or other nearby buildings; and drying biomass crops, if necessary</li> <li><b>BVSTP Solar Farm:</b> 1.6 ha of land adjacent to the BVSTP to be used by Byron Shire Council for solar electricity generation and use in the operation of the BVSTP</li> <li><b>Community Solar Farm:</b> 2.0 ha of land adjacent to the BVSTP to be used by a not-for-profit community group.</li> <li><b>Electricity Generation:</b> Excess electricity to be net metered and sold to generate a sustainable source of revenue.</li> </ul>	<p>Community</p> <ul style="list-style-type: none"> <li>Community Not-for-profit entity</li> </ul> <p>Council</p> <ul style="list-style-type: none"> <li>Other departments in Byron Shire Council</li> </ul>	<p>Community</p> <ul style="list-style-type: none"> <li>Community Not-for-profit entity</li> <li>Byron Shire Council (in-kind funding)</li> </ul> <p>Council</p> <ul style="list-style-type: none"> <li>BSC Sewer Fund</li> <li>Other departments in Byron Shire Council</li> </ul>	<p>Immediately</p>           <p>Immediately</p>	<p>\$200K</p>           <p>In kind funds (land, rental income)</p>

**Question with Notice No. 1.3      Operational Costs of Low Pressure System at New Brighton**  
**File No:                                    I2018/1291**

5

At Council’s Ordinary Meeting held on 21 June 2018, Susan Skyvington asked the following question which was taken on notice:

*What have been the Council’s operational costs since installation to date for the low pressure system at New Brighton? Tabulated to show:*

- (a) the number of pumps that have been replaced*
- (b) other maintenance costs*
- (c) overtime costs incurred in out of hours call outs*
- AND*
- (d) the electricity charges incurred by property owners*

**Response Director Infrastructure Services:**

Council does not keep records of any electricity costs of private property owners.

The New Brighton LPPS commenced in 2004, staff were not able to collate the requested information dating back to 2004.

Should this detail be required by the applicant it would be appropriate that the applicant seek this information through an access application under the *Government Information (Public Access) Act 2009*.

This system is now 15 years old which is the normal life expectancy of an electrical switchboard and mechanical pump. Since 2002 there have been 228 pumps repaired or replaced in the LPPS averaging out at 14 pumps per year over the 240 sites.

The information below outlines the costs over the last 4 years:-

			2015	2016	2017	2018
<b>Ocean Shores</b>	Pressure Sewer Network	Planned Maintenance	\$24,851.79	\$21,700.05	\$23,088.69	\$27,592.76
		Reactive Maintenance	\$52,497.31	\$89,094.53	\$130,154.28	\$132,862.55
		<b>TOTAL</b>	<b>\$79,364.10</b>	<b>\$112,810.58</b>	<b>\$155,259.97</b>	<b>\$162,473.31</b>
<b>Byron Bay</b>	Vacuum Sewer System	Planned Maintenance	\$50,688.96	\$28,027.09	\$51,798.07	\$79,656.17
		Reactive Maintenance	\$67,026.54	\$85,651.91	\$97,970.62	\$52,023.71
		<b>TOTAL</b>	<b>\$117,715.50</b>	<b>\$113,679.00</b>	<b>\$149,768.69</b>	<b>\$131,679.88</b>

A majority of these costs can be attributed to the end of pump life costs as most of the original E-Ones have been replaced and also costs from the flood in March 2017 which required new panels on every pump including a lot of pump replacements and repairs.

The average the costs for LPPS is half the cost of the vacuum units i.e.:-

- E-One Pumps is \$162,473.31 (238 E-one pumps is \$682 per unit) compared to
- Vacuum Pumps of \$131,679.88 (90 vac pods at \$1,463 per unit).

**Question with Notice No. 1.4**  
**File No:**

**Brunswick Valley Sewerage Treatment Plant**  
**I2018/1292**

---

At Council's Ordinary Meeting held on 21 June 2018, Sonia Laverty tabled the following question which was taken on notice:

*What are the inflow figures at Monitoring Point 5 at Brunswick Valley Sewerage Treatment Plant 31.1. 18 to date?*

**Response Director Infrastructure Services:**

See Attachment 1 (E2018/59385), this data is now available to the public and can be viewed at <http://www.byrondata.sgautomation.com.au/>

5

**Attachments:**

1 Brunswick Valley STP Flows at EPA 5 - 01/01/2018 to 12/07/2018, E2018/59385 , page 62 [↓](#)

10

# BYRON SHIRE COUNCIL

<b>Utility Description Date</b>	<b>Brunswick Valley STP EPA Point 5 Value (Kilolitres)</b>
01/01/2018	1880.57
02/01/2018	1959.89
03/01/2018	4041.47
04/01/2018	3851.96
05/01/2018	2696.42
06/01/2018	2147.93
07/01/2018	1935.40
08/01/2018	1810.07
09/01/2018	1718.13
10/01/2018	1606.04
11/01/2018	1569.55
12/01/2018	1527.25
13/01/2018	1517.41
14/01/2018	1507.25
15/01/2018	1430.54
16/01/2018	1410.48
17/01/2018	1364.65
18/01/2018	1353.69
19/01/2018	1324.88
20/01/2018	1306.58
21/01/2018	1312.32
22/01/2018	1254.02
23/01/2018	1221.26
24/01/2018	1201.34
25/01/2018	1165.43
26/01/2018	1205.35
27/01/2018	1219.62
28/01/2018	1359.50
29/01/2018	1424.53
30/01/2018	1629.54
31/01/2018	1440.05
01/02/2018	1518.03
02/02/2018	1767.32
03/02/2018	2673.10
04/02/2018	2917.65
05/02/2018	2651.31
06/02/2018	2035.26
07/02/2018	1714.05
08/02/2018	1577.85
09/02/2018	1516.33
10/02/2018	1425.24
11/02/2018	1378.67
12/02/2018	1391.22
13/02/2018	1357.87
14/02/2018	1277.92
15/02/2018	1258.35
16/02/2018	1262.63
17/02/2018	1330.95
18/02/2018	1338.05
19/02/2018	1274.18
20/02/2018	1249.70
21/02/2018	1222.44
22/02/2018	1182.81
23/02/2018	1697.00

Data Powered by:



Report Generated:  
7/12/2018 10:23:29 AM  
Page 1 of 4

# BYRON SHIRE COUNCIL

Utility Description Date	Brunswick Valley STP EPA Point 5 Value (Kilolitres)
24/02/2018	2515.25
25/02/2018	10939.55
26/02/2018	7802.30
27/02/2018	8458.37
28/02/2018	6748.56
01/03/2018	4004.30
02/03/2018	2878.29
03/03/2018	2356.01
04/03/2018	2423.69
05/03/2018	2413.73
06/03/2018	6541.98
07/03/2018	11824.82
08/03/2018	9906.12
09/03/2018	6196.43
10/03/2018	4626.21
11/03/2018	6117.63
12/03/2018	8711.62
13/03/2018	6251.07
14/03/2018	4143.08
15/03/2018	3367.04
16/03/2018	2812.00
17/03/2018	2468.49
18/03/2018	2221.92
19/03/2018	2074.80
20/03/2018	1944.64
21/03/2018	1833.47
22/03/2018	1815.07
23/03/2018	2770.92
24/03/2018	7329.07
25/03/2018	9817.70
26/03/2018	6330.59
27/03/2018	3802.61
28/03/2018	3861.01
29/03/2018	3950.11
30/03/2018	5906.57
31/03/2018	5214.83
01/04/2018	3845.86
02/04/2018	3209.40
03/04/2018	3512.55
04/04/2018	3544.49
05/04/2018	3095.30
06/04/2018	2746.17
07/04/2018	2499.98
08/04/2018	2305.48
09/04/2018	2135.50
10/04/2018	1985.27
11/04/2018	1892.36
12/04/2018	1815.34
13/04/2018	1746.97
14/04/2018	1692.53
15/04/2018	1615.25
16/04/2018	1582.13
17/04/2018	1566.63
18/04/2018	2925.88

Data Powered by:



Report Generated:  
7/12/2018 10:23:29 AM  
Page 2 of 4

# BYRON SHIRE COUNCIL

QUESTIONS WITH NOTICE

13.4 - ATTACHMENT 1

Utility Description Date	Brunswick Valley STP EPA Point 5 Value (Kilolitres)
19/04/2018	5771.34
20/04/2018	4207.27
21/04/2018	3154.33
22/04/2018	3127.69
23/04/2018	3364.70
24/04/2018	2880.01
25/04/2018	2382.66
26/04/2018	2369.47
27/04/2018	2233.75
28/04/2018	2039.16
29/04/2018	2804.42
30/04/2018	2948.87
01/05/2018	2721.39
02/05/2018	2421.42
03/05/2018	2149.14
04/05/2018	1995.19
05/05/2018	1892.95
06/05/2018	1804.80
07/05/2018	1782.79
08/05/2018	3869.35
09/05/2018	4406.52
10/05/2018	3479.50
11/05/2018	2619.78
12/05/2018	2267.05
13/05/2018	2059.24
14/05/2018	1893.38
15/05/2018	1787.04
16/05/2018	1717.63
17/05/2018	1692.25
18/05/2018	1625.14
19/05/2018	1603.05
20/05/2018	1580.93
21/05/2018	1576.34
22/05/2018	1492.86
23/05/2018	1453.56
24/05/2018	1426.68
25/05/2018	1413.18
26/05/2018	1415.37
27/05/2018	1426.15
28/05/2018	1452.10
29/05/2018	1421.39
30/05/2018	1362.50
31/05/2018	1333.88
01/06/2018	1314.64
02/06/2018	1313.20
03/06/2018	1322.32
04/06/2018	1281.81
05/06/2018	1263.19
06/06/2018	1340.89
07/06/2018	1679.21
08/06/2018	2331.30
09/06/2018	2299.42
10/06/2018	1885.65
11/06/2018	1664.18

Data Powered by:



Report Generated:  
7/12/2018 10:23:29 AM  
Page 3 of 4



Utility Description Date	Brunswick Valley STP EPA Point 5 Value (Kilolitres)
12/06/2018	1578.20
13/06/2018	1484.37
14/06/2018	1433.26
15/06/2018	1426.64
16/06/2018	1378.24
17/06/2018	1371.95
18/06/2018	1338.25
19/06/2018	1339.28
20/06/2018	1299.65
21/06/2018	1271.19
22/06/2018	1261.24
23/06/2018	1288.66
24/06/2018	1272.24
25/06/2018	1250.34
26/06/2018	1248.04
27/06/2018	1280.60
28/06/2018	1346.19
29/06/2018	1305.68
30/06/2018	1312.75
01/07/2018	1306.01
02/07/2018	1270.22
03/07/2018	1245.16
04/07/2018	1254.45
05/07/2018	1329.31
06/07/2018	1669.33
07/07/2018	1736.15
08/07/2018	1584.51
09/07/2018	1460.82
10/07/2018	1342.41
11/07/2018	1763.09
12/07/2018	1816.38

Data Powered by:



Report Generated:  
7/12/2018 10:23:29 AM  
Page 4 of 4

**Question with Notice No. 1.5      Wet Weather Capacity of Pump Stations to Brunswick Valley STP**

5

**File No:** I2018/1293

At Council’s Ordinary Meeting held on 21 June 2018, Angela Dunlop tabled the following question which was taken on notice:

*What is the wet weather capacity of the last two pump stations (from the Main Arm side and the CBD side of Mullumbimby) when both pumps are in full operation at each station to deliver to the Brunswick Valley STP (in ML/day and litres/sec) and what are the implications on the bioreactor and the nitrification process during said wet weather conditions?*

*A response in terms of the effect and its implications on the nitrification process from 6/03/18 to 13/03/2018 would be appropriate.*

**Response Director Infrastructure Services:**

There is only one pump station from Mullumbimby that pumps directly to Brunswick Valley STP. This pump station, SPS4000 at the intersection of Train and Station Streets, has a wet weather capacity to pump at a rate of 156L/s (13.48ML/day). The other pump station is located in Brunswick Heads, SPS2000, it has a wet weather capacity of 158L/s (13.65ML/day). The Brunswick Valley STP has the capacity to receive peak flow at 314L/s, matching the capacity of the pump stations.

In the context of the period in the question, these pumps delivered the following to BVSTP:

Date	ML/day
06/03/2018	6.54
07/03/2018	11.82
08/03/2018	9.91
09/03/2018	6.20
10/03/2018	4.63
11/03/2018	6.12
12/03/2018	8.71
13/03/2018	6.25

The biological treatment stage (bioreactor and clarifiers) is designed for 7.1 x ADWF hydraulic instantaneous peak flow, or 5.8 x ADWF sustained peak flow, is designed for reduction of nitrogen and phosphorus. The designed ADWF (Average Dry Weather Flow) is 314L/s = 27.13ML/day, therefore the peak capacity of the bioreactor [where nitrification/denitrification occurs] is 7.1 x 27.13ML/day = 192.62ML/day

There is no by-pass facility around the bioreactor to the clarifiers (i.e. if peak flows into the plant exceed 5.8 x ADWF on a sustained basis, these flows will continue to flow via the bioreactor to the clarifiers and will potentially cause solids loading ‘stress’ on the clarifiers (beyond their design sustained solids loading rate). Similarly, short-term instantaneous peak flows (>5.8 x ADWF) will increase short-term solids loading rates on the clarifiers beyond the design sustained solids loading rate.

*What was the effect during the period between 6/03/18 and 13/03/2018? As per the daily flow shown above - Negligible.*

**Question with Notice No. 1.6**  
**File No:**

**Reuse of Treated Effluent**  
I2018/1294

---

At Council's Ordinary Meeting held on 21 June 2018, Sean O'Meara tabled the following question which was taken on notice:

*When did the Main Arm farmers, Leeson and Johnson respectively stop taking treated effluent?*

**Response Director Infrastructure Services:**

No farmer has formally notified Council that they will not be taking any more treated effluent.

One farmer has not used water since March 2018, the other continues to utilise the system.