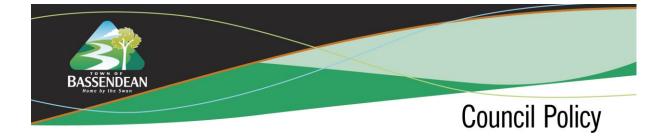


# TOWN OF BASSENDEAN POLICY MANUAL

Section 2: Environmental Sustainability and Adaptation to Climate Change

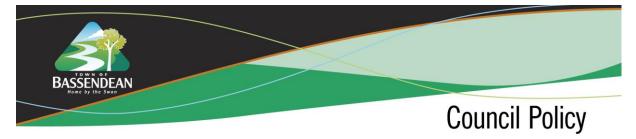


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#### **Amendment Status**

Date	Amendment Details	Authorised
OCM-22 April 2014	Policies revised to bring into line with Council's Strategic Community Plan 2013-2023	CEO



### 2.1 Sustainable Bassendean Policy

### Objective

The Town recognises that all life has intrinsic value, is interconnected and that biodiversity and ecological integrity are part of the irreplaceable life support systems upon which the earth depends. Council is committed to using its best endeavours to meet the needs of current and future generations through an integration of environmental protection, social advancement and economic prosperity.

Our four key objectives are:

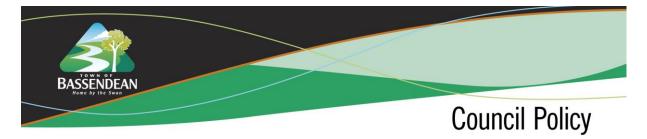
- 1. To ensure an integrated approach to protecting the natural environment and enhancing the built environment that provides a sustainable environment for future generations.
- 2. To enhance the quality of community life in the Town characterised by vibrant participation, cohesiveness, increased social capital and recognition of the need for social justice and community safety.
- 3. To foster economic prosperity in the Town and Region.
- 4. To strengthen the Town's position as an innovative, independent local government achieving business excellence.

### Strategy

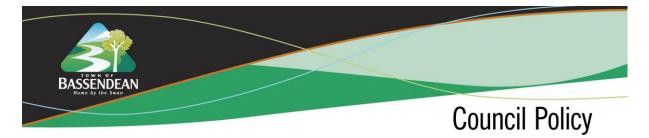
(Reference "Sustainability Framework for the State Sustainability Strategy")

The Town of Bassendean strives to achieve these objectives by:

- 1. Ensuring that the way we govern as a Council is driving the transition to a sustainable future by:
  - Providing stable, ethical and sound government for the Town's residents and ratepayers;
  - Using sustainability assessment to aid decision making;
  - Planning for sustainable long term outcomes for the community;
  - Forming partnerships and strategic alliances to foster sustainability;



- Managing financial resources in a prudent manner to safeguard a sustainable future;
- Raising awareness and building capacity in both Councillors, staff and the community in achieving sustainable outcomes;
- Measuring and reporting on sustainability.
- 2. Leading by example and playing our part in solving the global challenges of sustainability by:
  - Accepting our fair share of increased population density
  - Supporting the development and implementation of environmental technology
  - Maintaining and increasing the Town's biodiversity
  - Responding to green house and climate change and setting an example in reducing greenhouse emissions
  - Raising awareness of oil vulnerability, the gas transition and the use of cleaner fuels
- 3. Valuing and protecting our environment and ensuring the sustainable management and use of natural resources and in particular our number one asset the Swan River by:
  - Ensuring products and services used by the Town support sustainable agriculture, fisheries and aquaculture, forestry and plantations and sustainable mining and petroleum production;
  - Encouraging sustainable tourism in the Region;
  - Protecting the Swan River and the Town's water and aquatic systems; and
  - Employing sustainable land use management for parks, reserves and the urban form.
- 4. Planning and encouraging our community to reduce its ecological footprint and enhance its quality of life at the same time by:
  - Participating in initiatives to manage the wider urban and regional growth;
  - Revitalising our Town centres and suburbs;
  - Implementing sustainable urban design;
  - Integrating land use with transport modes;
  - Encouraging the sound management of freight and regional transport in the Town;
  - Preserving air quality;
  - Reducing waste and managing it as a resource;

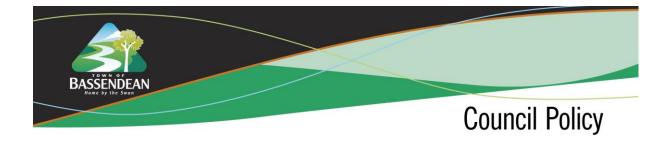


- Reducing water consumption and improving water quality;
- Using sustainable energy sources; and
- Conserving cultural heritage and landscapes and creating a strong 'sense of place'.
- 5. Supporting our community to fully participate in achieving a sustainable future by:
  - Providing community services, community development and capacity building;
  - Encouraging sustainable housing;
  - Fostering a healthy, fair and safe community;
  - Providing community education and raising community awareness for sustainability;
  - Fostering sustainability through culture and the arts;
  - Fostering sustainability through multiculturalism;
  - Fostering a socially inclusive society;
  - Fostering participatory democracy and community participation in decision making.
- 6. Assisting business to benefit from and contribute to sustainability by:
  - Facilitating networking activities for business sustainability;
  - Creating a business friendly Council and developing economic policy for sustainability;
  - Fostering cleaner production in the Town and Region; and
  - Encouraging corporate social responsibility and industry sustainability

### Application

Responsibility for the implementation of this policy rests with the Mayor, Councillors and Chief Executive Officer. The Policy is to be reviewed every three years.

Policy Type: Strategic Policy	Responsible Officer: Director Community Development
<b>Link to Strategic Community Plan:</b> Environmental Sustainability and Adaptation to Climate Change	Last Review Date: 7 July 2009 Version 2
	Next Review due by: December 2016



### 2.2 Treatment of Weeds and Noxious Plants Policy

### Objective

To remove weeds and noxious plants from Council controlled land in order to:

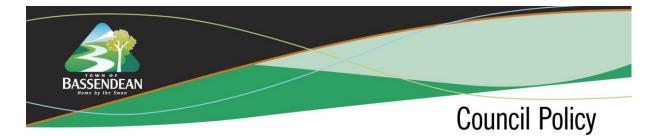
- a) protect and promote the regeneration of locally native vegetation and fauna; and
- b) protect people's health by eliminating poisonous plants.

### Strategy

The Town of Bassendean will achieve these objectives by:

- Developing Weed Management Plans which will manage the identified target environmental weeds, in accordance with legislative requirements and industrywide best management techniques in order to control weeds in public places and natural areas;
- Developing Bushland Weed Management Plans that identify weeds that can be removed by non-chemical methods, without damaging the bush area;
- Developing baseline Bushland weed maps that will indicate the target weed species and allow for strategic planning for the priority timing for weed control and management;
- Prevent introduction of additional weed species and prevent further encroachment of weeds;

Council recognises where herbicides are used that the Australian Pesticides and Veterinary Medicines Authority is responsible for assessment, product registration, quality assurance and compliance of agricultural chemicals and that the Town applies these registered herbicides in accordance with manufacturer's guidelines, the Material Safety Data Sheet requirements and the Town's Pesticide Operational Policy & Guidelines.

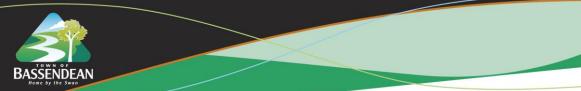


Where any of the following species are growing on Council controlled land, the plants are to be removed and the seed stock progressively controlled:

	Where to be removed from	
Plant	All Locations	Bushland
Acacia rostellifera	✓	✓
Annual Barbgrass		$\checkmark$
African lovegrass	✓	$\checkmark$
Arum lily		$\checkmark$
Bamboo	✓	$\checkmark$
Blackberry	✓	$\checkmark$
Barley Grass		$\checkmark$
Beach Evening Primrose		$\checkmark$
Bedstraw		$\checkmark$
Brome Grass		$\checkmark$
Bougainvillea		$\checkmark$
Blowfly Grass		$\checkmark$
Black Nightshade		$\checkmark$
Bridal creeper	✓	$\checkmark$
Birdsfoot		$\checkmark$
Burr Medic		$\checkmark$
Buffalo grass		$\checkmark$
Bullrush		$\checkmark$
Caltrop	✓	$\checkmark$
Cape lilac		$\checkmark$
Cape tulip	✓	$\checkmark$
Capeweed		$\checkmark$
Castor oil bush	$\checkmark$	$\checkmark$
Chilian willow		$\checkmark$
Clover	$\checkmark$	$\checkmark$
Couch		$\checkmark$
Crab Grass		$\checkmark$
Curled Dock		$\checkmark$
Cyperus		$\checkmark$

Where to be removed fr		moved from
Plant	All Locations	Bushland
Doublegee	✓	$\checkmark$
Flatweed		$\checkmark$
Fleabane	✓	$\checkmark$
Giant reed	✓	$\checkmark$
Goldenrod		$\checkmark$
Hares Tail Grass		$\checkmark$
Japanese pepper	$\checkmark$	$\checkmark$
Kikuyu		$\checkmark$
Mile-a-Minute		$\checkmark$
Marsh Club-rush		$\checkmark$
Morning glory	$\checkmark$	$\checkmark$
Nasturtium		$\checkmark$

Town of Bassendean Council Policy Section2: Environmental Sustainability & Adaptation to Climate Change



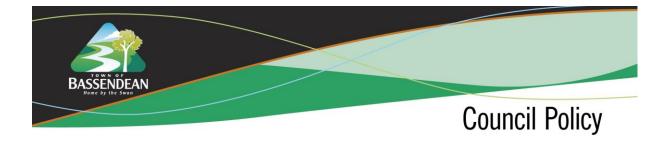
# Council Policy

Oleander     ✓       Pampas grass     ✓       Paspalum     ✓       Pigeon Grass     ✓       Poplars     ✓       Prickly Lettuce     ✓	
Paspalum     ✓       Pigeon Grass        Poplars        Prickly Lettuce	
Paspalum     ✓       Pigeon Grass        Poplars        Prickly Lettuce	✓ ✓ ✓ ✓
Poplars Prickly Lettuce	
Prickly Lettuce	✓ ✓
	1
	•
Prickly Sowthistle	$\checkmark$
Pimpernel	$\checkmark$
Ribwort Plantain	$\checkmark$
Ryegrass	$\checkmark$
Shiver Grass	$\checkmark$
South African gladiolus	$\checkmark$
Soursob	$\checkmark$
Small Flowered Mallow	$\checkmark$
Tree lucerne	$\checkmark$
Trumpet Vine	$\checkmark$
Veldt Grass ✓	$\checkmark$
Vetch	$\checkmark$
Watercress	$\checkmark$
Watsonia 🗸	$\checkmark$
Wild lantana 🗸	✓
Wild Oat	$\checkmark$
Wild Radish	$\checkmark$
Whiteflower Fumitory	

### Application

Responsibility for the implementation of this policy rests with the Mayor, Councillors, Council delegates and Chief Executive Officer. The Policy is to be reviewed every three years.

Policy Type: Strategic Policy	Responsible Officer: Director Operational Services First Adopted: OCM - 11/6/99
<b>Link to Strategic Community Plan:</b> Environmental sustainability and adaption to climate change	Last Reviewed: March 2014 Version
	Next Review due by: December 2016



### 2.3 Natural Areas Management Policy

The biodiversity found in the south west of WA, including Bassendean, makes it one of the 25 global biodiversity hot spots. However, climate change, development pressures, clearing, weed invasion, over-extraction of ground water and erosion of soils threaten this natural heritage.

The Town of Bassendean currently has 2.39% of its original pre-European settlement vegetation remaining; this equates to about 21 hectares. The Town is committed to conserving biodiversity and to revegetating areas that are degraded. A detailed Five Year Operational Plan for Natural Areas has been developed to provide staff with best practice management tools for actions that need to be implemented in bushland reserves.

### **Objectives**

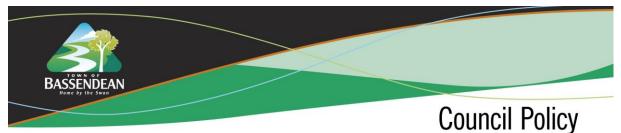
The Town of Bassendean's objectives for its Natural Areas Management Policy are:

- To ensure that bushland reserves are maintained and restored to protect and enhance their conservational, ecological and community values;
- To provide appropriate frameworks, timelines and processes for the management of the reserves vested in the care of the Town of Bassendean;
- To develop a long term strategy for bushland restoration works and ongoing maintenance of the reserves vested in the care of the Town of Bassendean, including involvement of volunteers;
- To have best practice guidelines in place for staff involved in the management of the reserves.

### Strategy

The Town of Bassendean will achieve these objectives by:

- 1. Ensuring our own operations encompass best practice standards and practices by:
  - Seeking to preserve and increase local endemic native vegetation in all bushland areas, in partnership with volunteer groups, for which the Town has a management responsibility;
  - Implementing the Five Year Operational Plan for Natural Areas;



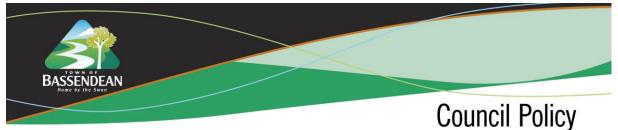
- Managing exotic weed species, in partnership with volunteer groups; and
- Developing and implementing procedures for best practice management procedures in bushland areas for Council operations;
- 2. Ensuring land use planning decisions and processes take bushland management into account by:
  - Providing guidance on statutory and non-statutory bushland planning mechanisms to promote or secure the protection and enhancement of bushland not owned or managed by the Town;
  - Such guidance to include provision of adequate vegetative buffers, Dieback control, acid sulphate soils, weed control and restrictions on clearing of native vegetation and rehabilitation of native vegetation.
- 3. The use of chemicals for weed control to be used strictly in accordance with Council procedure and to be used only when necessary.

- This policy applies to all planning projects including Council projects, subdivisions, land development and redevelopment proposals;
- This policy provides direction to Council in respect of any application for rezoning, subdivision and planning approval. The Council will have due regard to the objectives of the policy before making its determination;
- Providing training to all relevant employees to ensure that they are aware of this Policy and are involved in assisting Council to implement this policy. Training will be provided to volunteer groups involved in bushland management activities on Council managed reserves, as per the Friends Group Manual;
- Openly communicating the Policy to the community.

### Application

Responsibility for the implementation of this policy rests with the Mayor, Councillors, Council delegates and Chief Executive Officer. The Policy is to be reviewed every three years.

Policy Type: Strategic Policy	Responsible Officer: Director Operational Services
	First Adopted: June 2011
Link to Strategic Community Plan:	Last Reviewed: March 2014
Environmental sustainability and adaption	Version
to climate change	Next Review due by: December 2016



## 2.4 Local Biodiversity Policy

The Town of Bassendean values biodiversity and recognises the importance of protecting natural areas. There are significant threats to biodiversity from development pressures, inappropriate management and from climate change.

The purpose of this policy is to ensure the variety of all life forms of endemic plants, native insects, native animals, micro-organisms, their genes and the ecosystem processes of which they are a part, are protected.

### Objectives

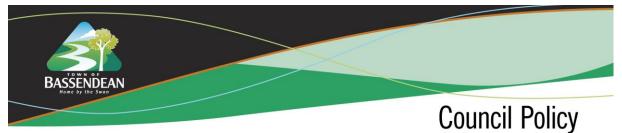
The Town of Bassendean's Local Biodiversity Policy objectives are:

- To secure the protection and conservation of bushland areas, in particular biodiversity corridors (or ecological linkages);
- To promote the retention, conservation, protection, effective management and restoration of all remnant vegetation;
- To ensure that biodiversity conservation and management issues are appropriately addressed and integrated in all Council's activities including strategic land use planning and decision making;
- To ensure that development and land use are compatible with biodiversity protection and/or provide for an improved environmental outcome and incorporate best practice planning, design and management outcomes.

### Strategy

The Town of Bassendean strives to achieve these objectives by:

- Developing a partnership with adjacent Councils to develop and implement a local biodiversity strategy for the Town;
- Protecting and regenerating bushland remnants, restoring local reserves, and either creating or consolidating ecological linkages and buffer zones;
- Ensuring that a comprehensive ecological assessment is undertaken in development proposals and activities;
- Applying an equivalent or higher standard of environmental assessment to planning and carrying out its own works;
- Exploring options for incentives to property owners and developers to conserve biodiversity on private land;



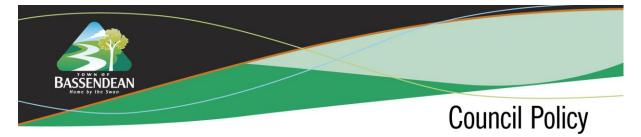
- Only approving development proposals or other activities within its control with likely impacts to biodiversity if the Town is satisfied there are measures in place to avoid or mitigate adverse impacts.
- Reporting implementation of these measures for the life of the development;
- Improving and enhancing management of natural areas existing reserves ensuring local and regional linkages;
- Landscaping to increase and enhance local biodiversity;
- Monitoring and evaluation of natural areas.

- Council adopted Local Planning Policy No. 18 Landscaping with Local Plants applies to all subdivisions, land development and redevelopments proposals
- This policy applies to all bushland and foreshore areas within the Town of Bassendean;

### Application

Responsibility for the implementation of this policy rests with all Councillors, staff, volunteers and contractors of the Town of Bassendean. This policy is to be measured and reported upon in the quarterly and annual report. This policy is to be reviewed every three years.

Policy Type: Strategic PolicyLink to Strategic Community Plan:Environmental sustainability and adaptionto climate change	Responsible Officer: Director Operational Services First Adopted: June 2011 Last Reviewed: March 2014 Version
	Next Review due by: December 2016



### 2.5 Landscaping with Local Plants Policy

The existing remnant native vegetation is a primary environmental feature contributing to amenity, biodiversity and natural heritage value. The loss of local native vegetation, replacement with exotic landscaping and increased water and fertiliser use is increasingly recognised as an issue impacting on water quality and the health of the Swan-Canning catchment. There is an expectation that Local Governments will make informed decisions and act in a sustainable way to preserve and enhance the natural amenity of their areas.

### Objectives

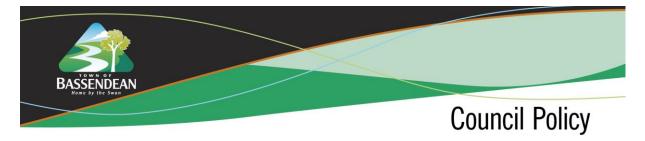
The Town of Bassendean's Landscaping with Local Plants Policy objectives are:

- To increase the use of species from local plant communities and those of the South Western Province in landscaping across the public and private land;
- Ensure that landscaping is more sustainable by:
  - Reducing the amount of irrigation water required;
  - Reducing the amount of fertiliser required, minimise nutrient export to groundwater, wetlands and the Swan-Canning river system;
  - Reducing threats to biodiversity by avoiding plant selection that may lead to future environmental weed problems;
  - Preserving and enhancing, the identity and 'sense of place' for the local community through appropriate landscaping, with consideration for historical relationships of other tree types for specific town features.
- Enhance local biodiversity by conserving existing native vegetation areas and by restoring and creating new native vegetation areas with a mix of species that would occur naturally in any one location, to create habitat for indigenous fauna;
- Build pride in the Town of Bassendean's natural environment and 'sense of place' for the local community through appropriate landscaping.

### Strategy

The Town of Bassendean strives to achieve these objectives by:

- Promoting the use of local native plants in sustainable landscaping across the public and private land;
- Ensuring that Council, developers and private property owners are aware that landscaping with local native species is more sustainable;



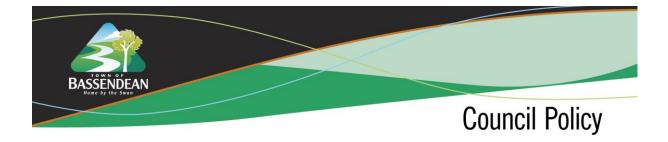
- Encouraging reduction of water use by planting local native species which can survive successfully without excessive watering;
- Reducing the amount of fertiliser required for landscaping purposes, which will minimise nutrient export to groundwater, wetlands and the Swan-Canning river system;
- Raising awareness of non-local plant species that have the potential to become environmental weeds;
- Using local native species to enhance local biodiversity by conserving existing native vegetation areas and by restoring and creating new native vegetation areas that aim to replicate the mix of species that would occur naturally in a location to create habitat for indigenous fauna.

- Council adopted Local Planning Policy NO.18 Landscaping with Local Plants and Local Planning Policy NO 13 – Trees on Development Sites applies to all subdivisions, land development and redevelopments proposals;
- This policy applies to all Council landscape and streetscape projects

#### Application

Responsibility for the implementation of this policy rests with the Mayor, Councillors, Council delegates and the Chief Executive Officer. The Chief Executive Officer (ECO) has the authority to administer the requirements of this policy. This policy is to be reviewed every three years.

Policy Type: Strategic Policy	<b>Responsible Officer:</b> Director Operational Services
	First Adopted: June 2011
Link to Strategic Community Plan:	Last Reviewed: March 2014
Environmental sustainability and adaption	Version
to climate change	
	Next Review due by: December 2016



### 2.6 Foreshore Restoration Policy

Council recognises that the riparian vegetation that adjoins drainage gullies, creeks, wetlands, floodplains and the Swan River play a very important role in maintaining foreshore stability and the ecological health of the area by filtering nutrients and sediments, and providing habitat for endemic flora and native fauna.

*Note: 'Riparian' describes the area of land bordering a waterway, where the structure, function and composition of the landscape are influenced by the waterway. The riparian zone includes the entire floodplain.* 

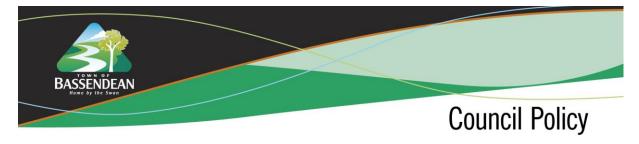
Council also recognises that it has an important role in balancing community expectations and environmental needs in relation to foreshore management.

The Town, in partnership with other agencies responsible for the management of foreshore reserves, has a responsibility to ensure its own actions meet best practice standards.

# Objectives

The Town of Bassendean's objectives for the Foreshore Restoration Policy are:

- To protect, rehabilitate and enhance the natural functions and biodiversity of the foreshore including the riparian zone through:
  - The employment of best management practices, strategies and other mechanisms to guide management actions in a consistent and co-ordinated manner;
  - To incorporate consideration of these issues into Council's land use planning and development processes and decision-making;
  - To ensure compliance with Western Australian environmental policies, legislation and strategic initiatives relevant to foreshore management;
- To achieve urban design and architectural outcomes which enhance and protect the character and landscape setting of the foreshore;
- To advocate to other agencies with responsibilities for management of foreshore reserves for the protection, enhancement and rehabilitation of the natural functions and biodiversity of the foreshores in line with this policy;
- To take a strong advocacy role in promoting foreshore protection.



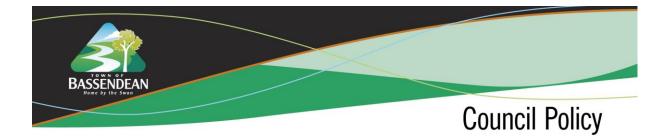
# Strategy

The Town of Bassendean strives to achieve these objectives by:

- 1. Ensuring our own operations encompass best practice standards and practices by:
  - Developing foreshore management plans for all areas for which the Town has a management responsibility;
  - Developing and implementing procedures to minimise and control erosion and sedimentation from Council operations;
  - Managing exotic weed species\*;
  - Ensuring community consultation is undertaken;
  - Ensuring Aboriginal Consultation is undertaken when required;
  - Working closely with the community and volunteer groups in the undertaking of foreshore restoration works;
  - Seeking cost effective standards that can be maintained;
  - Seeking to preserve native vegetation within the riparian zone; and
  - Delivering projects in a timely manner.

\* Note: In order to minimise risk of erosion of the foreshore soils following weed removal, it is important that temporary and/or permanent foreshore restoration activities are established prior to undertaking such removal.

- 2. Ensuring land use planning decisions and processes take foreshore protection and management into account by:
  - Providing guidance on statutory and non-statutory foreshore planning mechanisms to promote or secure the protection and enhancement of foreshores not owned or managed by the Town; and
  - Such guidance to include provision of adequate vegetative buffers, erosion and weed control and restrictions on clearing of native vegetation and rehabilitation of native vegetation.
- 3. Providing leadership identifying and addressing the probable impacts of climate change on the Town's foreshores by:
  - Working at a regional level and with relevant State agencies to identify the likely range of impacts;
  - Seeking partnerships to develop responses to the predicted impacts; and
  - Education and engagement programs to the local community.

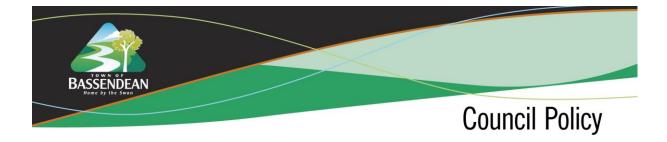


- Council adopted Local Planning Policy No. 3 Water Sensitive Design, Local Planning Policy No. 4 – Flood Plain Management & Development and Local Planning Policy No. 14 – On-Site Stormwater Policy shall apply to all I subdivisions, land development and redevelopment proposals;
- This policy applies to all Council foreshore restoration and rehabilitation works;
- Providing training to all relevant employees to ensure that they are aware of this Policy and are involved in assisting Council to implement this policy
- Openly communicating the Policy to the community.

### **Application**

Responsibility for the implementation of this policy rests with the Mayor, Councillors, Council delegates and the Chief Executive Officer. The Chief Executive Officer (ECO) has the authority to administer the requirements of this policy. This policy is to be reviewed every three years

Policy Type: Strategic Policy	Responsible Officer: Director Operational Services
Link to Strategic Community Plan: Environmental sustainability and adaption to climate change	First Adopted: June 2011 Last Reviewed: March 2014 Version
	Next Review due by: December 2016



# 2.7 Acid Sulfate Soils Policy

Acid Sulfate Soils (ASS) occur naturally in Western Australia and are harmless when left in a waterlogged, undisturbed environment. However, when exposed to air through drainage or excavation, the iron sulfides in the soils react with oxygen and water to produce iron compounds and sulfuric acid. This acid can release other substances, including heavy metals, from the soil and into the surrounding environment and waterways.

### Objectives

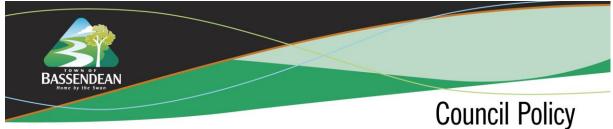
The Town of Bassendean's objectives for the Acid Sulfate Soils policy are:

- That all activities with the potential to disturb ASS must be managed in accordance to the State Government's guidelines to avoid potential adverse effects on the natural and built environment (including infrastructure);
- To avoid, where possible, or to minimise the disturbance of ASS;
- To ensure any disturbance of ASS in subdivision and developments is planned and managed using best practice standards to mitigate potential adverse outcomes;
- To require the rehabilitation of disturbed ASS and acid drainage;

### Strategy

In order to protect the Town of Bassendean from the adverse effects of Acid Sulfate Soils and to achieve the objectives the following will be undertaken:

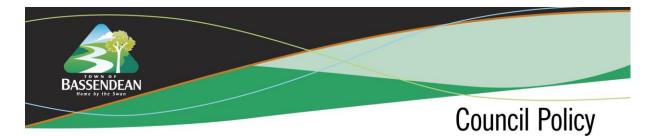
- Any significant risk of disturbing ASS should be accompanied by a Preliminary Site Assessment prepared in accordance with State guidelines where developments are located on Class One, Two or/and Three ASS or moderate to high PASS. An ASS risk map for the Town of Bassendean can be found in the Appendix;
- Where a Preliminary Site Assessment has identified PASS or ASS risks, the application should also be accompanied by a detailed site assessment and an Acid Sulfate Soil Management Plan prepared in accordance with State guidelines. The feasibility of remediation options/ priorities should be identified;
- Any application for development on land where disturbance of ASS is proposed or likely to occur should be referred to the relevant State government authorities, for advice prior to a decision being made;



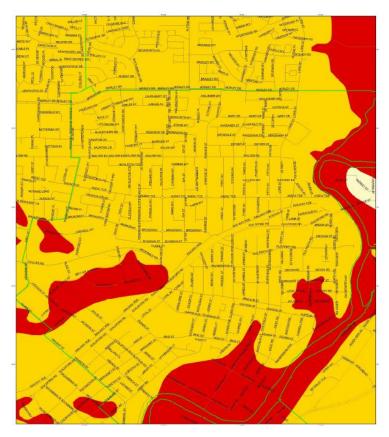
• Ensure all of the Town's operations likely to affect or be affected by ASS or PASS be planned and carried out to best management standards.

### Application

- This policy applies to all planning projects including Council projects, subdivisions (administered by the WA Planning Commission), land development and redevelopments and is to be carried out in accordance with State policies and guidelines;
- This policy provides direction to Council in respect of any application for rezoning, subdivision and planning approval. The Council will have due regard to the objectives of the policy before making its determination;
- Provide training to all relevant employees to ensure that they are aware of this Policy;
- Openly communicate the Policy to the community.



# Appendix



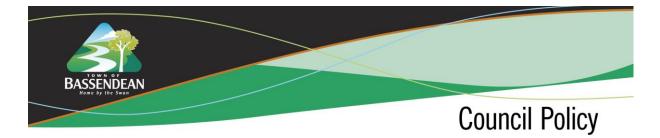
Indicates Class 2 Acid Sulfate Disturbance Risk

Indicates Class 1 Acid Sulfate Disturbance Risk

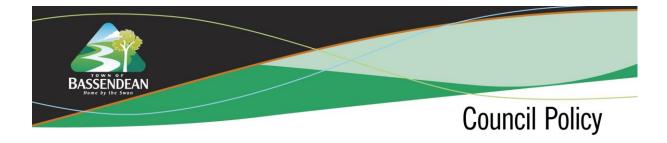
### Application

Responsibility for the implementation of this policy rests with the Mayor, Councillors, Council delegates and the Chief Executive Officer. The Chief Executive Officer (CEO) has the authority to administer the requirements of this policy. This policy is to be reviewed every three years.

Fig 1: Acid Sulfate Soil Risk Map for the Area within the Town of Bassendean (Source: Land and Water Quality Branch, Department of Environment and Conservation)



Policy Type: Strategic Policy         Link to Strategic Community Plan:         Environmental sustainability and adaption	Responsible Officer: Director Operational Services First Adopted: Last Reviewed: March 2014 Version
to climate change	Next Review due by: December 2016



### 2.8 Energy Use Policy

Policy and programs in areas such as urban development, transport planning, local economic development, and community development and education have an impact on greenhouse gas emissions. Local Government is also a user of energy itself through its own operations and facilities. The Town of Bassendean is a leader in energy management and is working to ensure that its energy consumption is as efficient and effective as possible. This policy is designed to assist in strategic energy management in the Town.

### Objectives

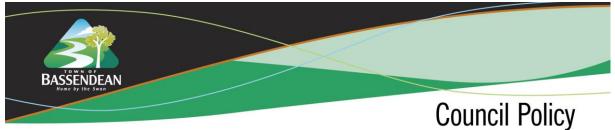
The Town of Bassendean policy objectives for Energy Use are:

- To progressively reduce greenhouse gas emissions and energy consumption beyond the Town of Bassendean's Greenhouse target of 20% of 1998 levels by 2010 to meet international best practice targets;
- To ensure that energy efficiency is a key criteria for consideration in the Town's purchasing decisions, planning and operations, to improve clean energy use.

### Strategy

In order for the Town of Bassendean to minimise energy use and to achieve the objectives the following will be undertaken:

- Improve Bassendean's greenhouse gas management and performance through the CCP Plus Program by setting achievable targets;
  - Ensure that all future Council buildings utilise energy efficient hot water systems, solar hot water systems to be considered where practical;
  - Insulate exposed pipes from water heaters, to prevent heat loss;
  - Progressively replace electric water heaters energy efficient systems e.g. solar, heat pump or gas water heaters;
  - Insulate all Council buildings and use tinting and window treatments to reduce energy use for heating and cooling;
  - Ensure that the Council vehicle fleet and travel requirements consider the associated greenhouse gas emissions;
  - Manage the Council fleet to reduce vehicle emissions, including passenger vehicles having a minimal green star rating of 3 and alternative fuels where practical;
  - Develop a data management system to record energy consumption and changes;



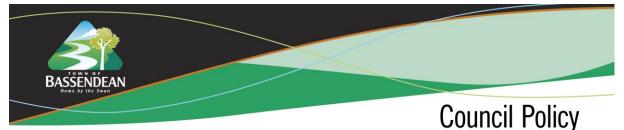
- Ensure that new and existing Council infrastructure minimises energy/water/waste usage;
- Investigate and, where feasible, utilise alternate renewable energy sources (e.g. wind, geo-thermal);
- Annual inventories of Council buildings shall be undertaken to monitor and to minimise energy/water/waste usage;
- Maintain a commitment to the Green Bassendean program to offset carbon emissions; and
- Support research to quantify the carbon sequestration potential of native vegetation plantings.

- Council adopted Local Planning Policy NO. 2 Energy Efficiency Design and Building Code of Australia (BCA) 2010 "6 Star" minimum energy efficiency standards applies to Council building applications, subdivisions, land development and redevelopments and proposals;
- This policy applies to all upgrades to Council Buildings, upgrades to infrastructure and Town of Bassendean activity.
- Provide training to all relevant employees to ensure that they are aware of this Policy and are involved in assisting Council to reduce energy use;
- Openly communicate the Policy to the community and formulate local partnerships to reduce community energy use.

### Application

Responsibility for the implementation of this policy rests with the Mayor, Councillors, Council delegates and the Chief Executive Officer. The Chief Executive Officer (CEO) has the authority to administer the requirements of this policy. This policy is to be reviewed every three years.

Policy Type: Strategic Policy	Responsible Officer: Director Operational Services
<b>Link to Strategic Community Plan:</b> Environmental sustainability and adaption to climate change	First Adopted: June 2011 Last Reviewed: March 2014 Version Next Review due by: December 2016



### 2.9 Water Sensitive Urban Design and Water Conservation Policy

Australia is the driest inhabited continent in the world and Australian Local Governments have a significant role to play in minimising the impact on our limited water resources.

Our changing climate has become more noticeable in the past 10 years with altered rainfall intensity, reduced rainfall occurrences and changes in rainfall timing.

To manage the stormwater received the Town will apply Water Sensitive Urban Design (WSUD) principles.

#### Objective

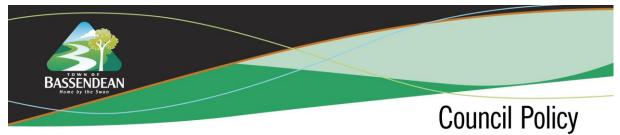
The Town of Bassendean's objectives for Water Sensitive Urban Design and Water Conservation Policy are:

- Ensure that water sensitive urban design and water conservation best management practices are implemented in all new development and redevelopment proposals;
- Raise awareness about the environmental impacts of water waste;
- Assist in protecting the values of the Swan and Canning River and watercourses, consistent with the requirements of the Environmental Protection (Swan and Canning Rivers) Policy 1998;
- Protect and where possible restore and enhance the environmental, economic and social (i.e. recreation and scenic) values of waterways and wetlands; and
- Retain or enhance open drains where possible by converting them to "living streams" in multiple use corridors that provide habitat for wildlife and passive recreation opportunities wherever possible.

### Strategies

The Town of Bassendean strives to achieve these objectives by:

- Assessing the Town's entire stormwater drainage network to identify water quality improvement opportunities;
- Incorporating the Building Code of Australia (BCA) 2010 "6 Star" minimum energy efficiency standards early on in the land use planning;

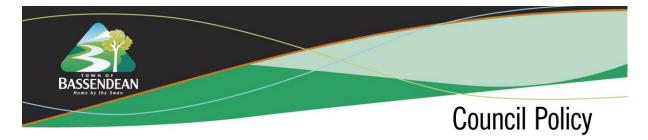


- Addressing water resource management at the catchment and sub-catchment level;
- Storing and reusing stormwater and stormwater treatment in the drainage catchment prior to water discharging into water bodies such as the Swan and Canning Rivers; Ensuring stormwater system design incorporates features of waterways that improve water quality;
- Establishing vegetation (particularly native riparian vegetation) in stormwater management to promote filtering and slowing of runoff to maximise settling of particulate-bound pollutants;
- Ensuring structural best management practices which encompass the above principles;
- To protect property from flooding or damage by surface water or groundwater; and
- To ensure post-urban development conditions in watercourses approximate pre urban conditions (i.e. water level and flow regimes are maintained).

A comprehensive approach to stormwater management also involves the promotion of non-structural best management practices. These include source controls such as:

- Education to residents on water conservation, appropriate plant species, fertiliser and water use, street sweeping regimes; and
- Improved waste and stormwater management for industrial premises.

Selection of best management practices should follow Town of Bassendean, Local Planning Policy No. 3 – Water Sensitive Design, Local Planning Policy No. 4 – Flood Plain Management & Development, Local Planning Policy No. 14 – On-Storm Water, Local Planning Policy No. 18 - Landscaping with Local Plants, the Department of Water Stormwater Management Manual for Western Australia, the Building Code of Australia (BCA) 2010 "6" star requirements and the Natural Resource Management (NRM) Policy Manual .

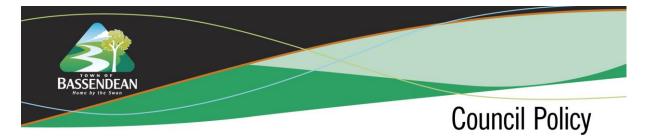


- Council has adopted Local Planning Policy No. 3 Water Sensitive Design and Local Planning Policy No. 14 - On-Site Stormwater Policy;
- Providing training to all relevant employees to ensure that they are aware and are involved in assisting Council to implement this policy;
- Educating and promoting the Building Code of Australia (BCA) 2010 "6 Star" requirements.

### Application

Responsibility for the implementation of this policy rests with the Mayor, Councillors, Council delegates and the Chief Executive Officer. The Chief Executive Officer (ECO) has the authority to administer the requirements of this policy. This policy is to be reviewed every three years

Policy Type: Strategic PolicyLink to Strategic Community Plan:Environmental sustainability and adaptionto climate change	Responsible Officer: Director Operational Services First Adopted: June 2011 Last Reviewed: March 2014 Version
	Next Review due by: December 2016



### 2.10 Nutrient and Irrigation Management Policy

The Town of Bassendean is committed to protecting the natural environment and water quality. Good planning and operational practice is vital to ensure that water is used efficiently and effectively.

The Town recognises that the application of artificial fertilisers and irrigated water supply can have unwanted impacts on the natural environment, especially water bodies, if not carefully managed.

#### **Objectives**

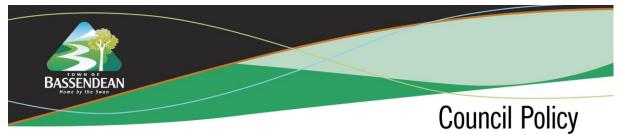
The Town of Bassendean's objectives of the Nutrient and Irrigation Management Policy are:

- To protect water quality in the Town's water courses and drainage systems;
- To contribute to reducing nutrient inputs to water courses and drainage systems to levels that have minimal impact on human health, the environment and associated values;
- To reduce the frequency and intensity of toxic or nuisance algal blooms caused by nutrient pollution.

### Strategy

The Town of Bassendean strives to achieve these objectives by:

- Setting appropriate guidelines for irrigation development;
- Strengthening land use controls and planning mechanisms to identify and phase out high nutrient exporting land uses that are unable to meet nutrient reduction targets;
- Reviewing Town Planning Schemes to ensure they minimise nutrient export from various land uses;
- Planting and retaining local native vegetation etc. This will reduce the risks of nutrients and pesticides entering water bodies;
- Using guidelines to determine fertilisation requirements;
- Ensuring irrigations systems are water efficient;
- Investigate, and where practicable apply, the use of subsurface irrigation systems to minimise runoff;



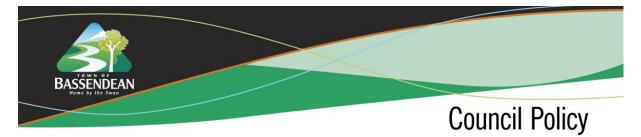
- Where nutrient rich wastewater is used for irrigation, control application rates and establish a comprehensive monitoring and evaluation program to ensure surface runoff and shallow groundwater contamination does not occur;
- Monitor and evaluate the nutrient and irrigation management practices to gauge overall effectiveness.

- Council adopted Local Planning Policy NO. 3 Water Sensitive Design, Local Planning Policy NO. 4 – Flood Plain Management & Development and Local Planning Policy NO. 14 – On-Site Stormwater Policy shall apply to all subdivisions, land development and redevelopment proposals;
- This policy applies to all Council parks, reserves and stormwater drainage networks;

### Application

Responsibility for the implementation of this policy rests with the Mayor, Councillors, Council delegates and the Chief Executive Officer. The Chief Executive Officer (ECO) has the authority to administer the requirements of this policy. This policy is to be reviewed every three years

Policy Type: Strategic Policy Link to Strategic Community Plan: Environmental sustainability and adaption to climate change	Responsible Officer: Director Operational Services First Adopted: June 2011 Last Reviewed: March 2014 Version
	Next Review due by: December 2016



### 2.11 WETLANDS POLICY

The Town of Bassendean is committed to protecting the natural environment and recognises that wetlands are a vital part of a complex link between the landscape, soil, groundwater, rivers, plants and animals and that Wetlands provide a habitat, refuge, breeding ground and food source for fauna.

### Objectives

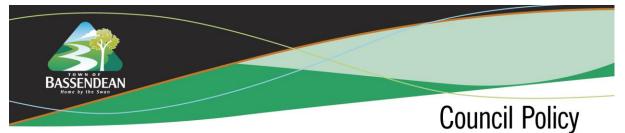
The Town of Bassendean's objectives of the Wetlands Policy are:

- To conserve and manage wetlands in an ecologically sustainable way and within a framework of integrated catchment management, and integration as part of ecological linkage development (in accordance with the Town's Collective Biodiversity Strategy);
- To prevent the further loss or degradation of valuable wetlands and wetland types, and promote wetland conservation, restoration and, in some instances, creation;
- To greatly increase community awareness and appreciation of the many values of wetlands and the importance of sound management of wetlands;
- To increase community involvement in the management of wetlands.

### Strategy

The Town of Bassendean strives to achieve these objectives by:

- Identifying all wetlands and prioritising in order of significance. This will allow decision making to be accountable in consideration of the wetland, and for appropriate objectives and management strategies to be determined;
- Ensuring adequate and appropriate buffering and/or setbacks of wetlands to maintain or enhance the environmental attributes, functions and values of the water resource and minimise the adverse impact of nearby land uses both existing and future;
- Implementing measures to manage vegetation cover and dependant ecosystems;
- Introducing measures that ensure implementation of best planning practice and best management;
- Assessing potential impacts the wetland may have on land use i.e. flooding;

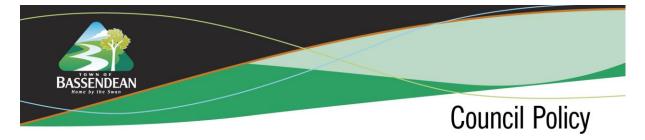


- Protecting, managing, conserving and enhancing the environmental attributes, functions and values of wetlands;
- Preparing management plans for wetlands of significance;
- Rehabilitating damaged wetlands.
- Council adopted Local Planning Policy No. 3 Water Sensitive Design, Local Planning Policy No. 4 – Flood Plain Management & Development and Local Planning Policy No. 14 – On-Site Stormwater Policy shall apply to all subdivisions, land development and redevelopment proposals;
- This policy applies to all Council parks, reserves and stormwater drainage networks;
- There are several wetlands within the Town of Bassendean, including:
  - Ashfield Flats Reserve (vested predominately with the Western Australian Planning Commission (WAPC). Department of Planning currently manage the vested land and the Department of Water manage the stormwater drains);
  - Bindaring Park/ Pickering Park;
  - Success Hill Reserve natural springs;
  - Mary Crescent Reserve; and
  - Broadway Reserve.

### Application

Responsibility for the implementation of this policy rests with all Councillors, staff, volunteers and contractors of the Town of Bassendean. This policy is to be measured and reported upon in the quarterly and annual report. This policy is to be reviewed every three years.

Policy Type: Strategic PolicyLink to Strategic Community Plan:Environmental sustainability and adaptionto climate change	Responsible Officer: Director Operational Services First Adopted: June 2011 Last Reviewed: March 2014 Version
	Next Review due by: December 2016



### 2.12 Bulk Rubbish, Greenwaste Pick Up Collections Publicity Policy

### Objective

To ensure that residents have advance notice of this service and a clear indication of materials suitable for collection.

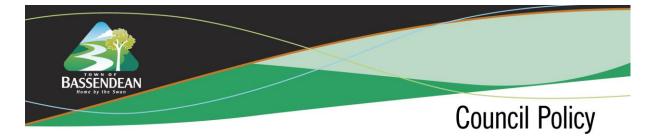
### Policy

Council will keep its residents fully informed of the bulk rubbish, green waste pruning collection days by advising them of the dates and times of the collection, by means of a pamphlet printed on a distinctive coloured paper, showing a clear map with the area indicated where collections will be made. Pending budget provision, the Town will deliver pamphlets each year.

### Application

Responsibility for the implementation of this policy rests with the Mayor, Councillors, Council delegates and Chief Executive Officer. The Policy is to be reviewed every three years.

Policy Type: Strategic Policy	Policy Owner: Director Operational Services
Link to Strategic Community Plan:	First Adopted: OCM – 18/4/99 Last Review Date: March 2014
Environmental Sustainability & Adaptation to Climate Change	Version: 2 Next Review due by: December 2016



### 2.13 Bulk Rubbish And Greenwaste Pruning PickUp Service Policy

### Objective

To provide a service to residents who are unable to dispose of bulk items or greenwaste pruning by other methods.

### Policy

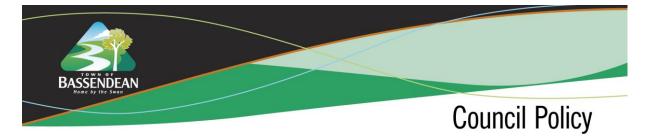
Council will provide bulk rubbish and greenwaste pruning pick-ups, within separately specific timeframes each financial year, dependent on Council budget allocations.

Removal of recyclable goods from materials placed on verges is permissible, providing the material is stored on the verge in accordance to the set out requirements and within the specified time frames and the site is left tidy.

### Application

Responsibility for the implementation of this policy rests with the Mayor, Councillors, Council delegates and Chief Executive Officer. The Policy is to be reviewed every three years.

Policy Type: Strategic Policy		Policy Owner: Director Operational Services
Link to Strategic Community Plan: Environmental Sustainability Adaptation to Climate Change	&	First Adopted:OCM – 19/4/99 Last Review Date: March 2014 Version: 2 Next Review due by: December 2016



# 2.14 Placement Of Roadside Litter Bins Policy

### **Objectives**

To provide a framework for the placement of high quality, urban designed, roadside litter bins which are conveniently and safely located for the disposal of litter, that will not detract from adjacent properties and will improve the streetscape appearance for the benefit of the whole community.

Anti-litter educational strategies shall accompany the provision of litter bins along with sound maintenance regimes.

### Policy

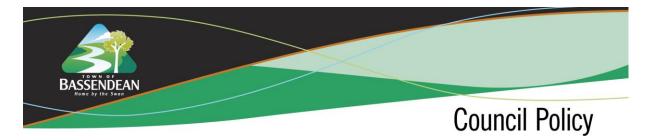
#### Location & Placement of Units

In assessing the appropriate location for the provision of Litter Bins, regard should be taken of the following:

- High quality, urban designed, litter bins;
- Locations that are convenient/accessible to the general public for the safe and effective means of disposing of litter;
- Where possible be located near pedestrian crossings, high public use areas such as shopping precincts and bus shelters;
- A minimum of one metre back from the face of the kerb to ensure that pedestrians are not obscured from oncoming traffic and ensure compliance with Road Safety requirements, unless otherwise approved;
- Be accessible for safe emptying and cleaning activities;
- No political, commercial advertising or promotional material shall be permitted;
- Under no circumstances are the litter bin units to obstruct pedestrian access along the footpath or cycle path; and
- Main Roads WA and other statutory approval requirements.

Installation of the litter bin units is on the basis of precincts litter waste disposal requirements, not in response to one-off requests which may be received.

All roadside litter bins vandalised shall be assessed to determine the precincts litter disposal requirements before immediately replacing the bin.



#### **Maintenance of Bins**

Cleaning of the bin receptacles, litter bins and surrounds shall be regularly cleaned inside and out, free of stains and physically and mechanically intact.

### Application

Responsibility for the implementation of this policy rests with the Mayor, Councillors, Council delegates and Chief Executive Officer. The Policy is to be reviewed every three years.

Policy Type: Strategic Policy	Policy Owner: Director Operational Services
Link to Strategic Community Plan: Environmental Sustainability and Adaption to Climate Change	First Adopted: OCM – 4/8/01
	Last Reviewed: March 2014
	Version: 2
	Next Review due by: December 2016