21.03 ENVIRONMENT

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21.03-1 Key Issues and Challenges

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The key planning issues and challenges facing the Moira Shire relating to the environment include:

- Ensuring the Council's decision making has regard to and implements endorsed State and Regional Environmental Planning Policies and Strategies;
- Protection of the Shires natural features and bioregions;
- Management and control of water table and salinity;
- Management of and control of issues relating to flooding;
- Co-ordinated management of available land and water resources;
- Effective management of effluent disposal; and
- Protection of historic sites.

An overview of these issues and challenges are described below.

State Planning Policy

The State Planning Policy Framework (at Clause 15) identifies a variety of detailed environmental considerations, and local and regional environmental strategies, which Council must have regard to in ensuring that environmental protection is achieved. Council embraces these State Policies and will utilise them as the fundamental starting point in considering future land use and development proposals. It is stressed that Council is committed to working in partnership and shares the responsibility for integrated management of catchment issues with all natural management authorities including the Department of Sustainability and Environment, Catchment Management Authorities, Goulburn-Murray Water, North-East Water, Goulburn Valley Water, Murray Darling Basin Commission and adjoining local municipalities and land owners across the region. A key plank of this is to support the implementation of the Goulburn Broken and North East Regional Catchment Strategies and their sub-strategies.

Natural Features and Native Vegetation

The Shire's abundant natural features and bioregions play an important role in supporting native flora and fauna, and providing wetland habitat for migratory birds, breeding habitat for Murray Cod, providing aesthetic values and supporting recreational activities. The key biodiversity assets of the Shire include: Barmah (RAMSAR wetland); Broken Boosey State Park; Nationally listed fauna (Superb Parrot) and State listed species (Grey Crowned Babbler, Bush Stone Curlew, Yarran Wattle). Many of the sites and the native species that they support are significant and require management to conserve their values. These sites are sensitive to modifications in land use, waterway management actions, flooding, drainage and catchment management. The quality and extent of native vegetation is an indicator of Catchment health. The major vegetation types in the Shire are severely depleted. Most of what remains is along roadside reserves, along the rivers and streams, on public land and as small patches on private land. This vegetation provides key habitats for threatened species and also provides important ecosystem services. Much of this native vegetation is protected within a number of existing legislative Acts and State policies. Weeds and pest animals pose a threat to natural assets and agricultural production. It is also noted that the Lower Ovens River, downstream of Wangaratta, is a declared Heritage River under the Heritage Rivers Act, 1992.

Salinity

A proportion of the Moira Shire suffers from the effects of high water tables and salinity, most visibly in the irrigation areas. In dryland areas, deforestation and changed land uses have also exposed areas to the threat of dryland salinity. Salinity and the high water table are already having and will continue to have a significant impact on agricultural productivity and community assets within the Moira Shire. Salinity is also causing deterioration in natural vegetation and water quality. Major initiatives are already under way to address the problems caused by salinity and the high water table in the region.

Flooding

Areas of the Shire are subject to periodic flooding due to the number of rivers and waterways, the topography and the use of irrigation channels for drainage throughout the Shire. Management of flooding issues is one of the largest challenges facing the Shire. Council is critically aware that inappropriate development within designated floodplains can significantly exacerbate flood impacts along the floodplain. Many detailed flood mitigation and management studies are currently being undertaken throughout the Shire. The results of these investigations will be incorporated into the Planning Scheme via separate Planning Scheme Amendments once complete.

Water Management

While Moira is heavily dependent on the irrigated agriculture industry, Council recognises that the supply of water for irrigation is finite. Efficient irrigation management is needed to minimise water use, reduce infiltration to the water table and potential downstream impacts from drainage (eg. nutrients, water quality and increased flows, loss of flood storage, loss of wetlands and biodiversity). More efficient water use has the potential to make additional water available for expansion of irrigation enterprises on suitable land and to also provide additional flows for the environment. Coordinated management of the available land and water resource represents one of the major land use challenges facing Council and the region. Council acknowledges that changes in land form and farm drainage schemes in the irrigated and dryland area of the Shire have the potential to cause adverse impacts downstream. The impact that Council is keen to minimise relates to declining water quality and the increased risk of flooding. Elevated water tables and clearance of vegetation limit the capacity of dryland catchments to reduce rainfall runoff and extend the duration of runoff events. This is contributing to soil erosion, siltation, turbidity and nutrient pollution. Past dryland enterprise management practices have lead to a rising water table and enhanced risks of salination. There is a need to encourage on-farm practices that seek to exploit rainfall more effectively while ensuring that this action does not result in adverse impacts on river health.

Effluent

The Shire is committed to effectively managing effluent disposal to protect public health, minimise environmental impacts, minimise the demand for water as a resource and maximise reuse opportunities in an economically viable manner. The Shire has an important role in ensuring that developments either discharge effluent to a suitable treatment facility or have appropriate onsite methods for the treatment and disposal of effluent. The Shire also has a role in encouraging waste minimisation and reuse, including the use of new and viable technologies. It is important that the location of sewerage treatment facilities or disposal sites (septic or land applied) avoid sensitive environmental areas including drainage lines and floodways.

Historic Sites

Moira Shire has an abundance of natural, cultural and historically significant sites. Many of these have been recognised by local historic societies, interest groups and the Yorta Yorta community.

The *Moira Shire Heritage Study Stage One (2004),Moira Shire Heritage Study Stage Two (2007) and the Moira Shire Heritage Study (2007) Addendum 24 March 2015 ('The Moira Shire Heritage Study')* has been prepared by Lorraine Huddle Pty. Ltd. for the whole municipality. The study identified post-contact places and precincts of cultural significance and includes a thematic environmental history of post-colonial European occupation. The study identified 126 individual sites (in addition to the existing 35 sites), 15 heritage precincts and a number of groups of significant paces such as schools, halls, churches and cemeteries. The Study includes 'Statements of Significance' for each individual heritage place, precinct or group of buildings. The Study also identifies those places within each precinct that are considered to be 'contributory' to that precinct.

Murray River Corridor

The SPPF seeks to protect and conserve environmentally sensitive areas and to protect landscapes that contribute to character, identity and sustainable environments. and the NSW *Regional Environment Plan No. 2 – Riverine Land 1994* and *the Murray Shire Local Environment Plan 1989* identify the Murray River as an asset of National and State significance. The Murray River and its environs serves a variety of environmental, economic, social, and recreational and tourist functions. It is a common strategy, at all levels of government, that the Murray River and its environs be maintained and enhanced. All waterways in the municipality form a vital part of the Murray Darling Basin.

A co-ordinated and co-operative approach to planning and management of the River corridor is required to protect its significant values; and to prevent conflict arising from agricultural development, urban development, tourism and recreation development along the waterway and on adjoining land.

21.03-2 Environmental Goal

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Council's Environment Goal is to protect and enhance the environmental attributes of the Shire including natural systems (soil, water and air) which in turn support agriculture and tourism and influence the local character of towns and settlements, and to ensure that any development has regard to these environmental features.

21.03-3 Environmental Objectives

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To maintain and enhance the biodiversity of native flora and fauna communities.

To maintain and enhance river health within the Shire.

To minimise the risk to life and safety of the population from the effects of flood waters.

To preserve the natural function of floodplains, including their inherent wetland values.

To minimise environmental impacts resulting from land management, use and development.

To minimise the long-term impacts of salinity in irrigation and dryland areas.

To encourage productive and sustainable farming enterprises which have minimal off-farm environmental impact;

- To promote the use of stormwater and effluent as valuable resources and not as waste, and to prevent or minimise peak flows and pollutants affecting the ecological health, recreational values and amenity of rivers, creeks, water bodies and water storages; and

- To protect public amenity and Council assets through the provision of appropriate buffers between effluent disposal / storage sites, water utility assets and other land uses.

To conserve and protect sites of historic, cultural and natural significance.

To protect the environs of the Murray River recognising its importance for nature conservation, flooding, economic development, recreation and tourism.

To support the conservation of those places threatened by development or neglect.

21.03-4 Environmental Strategies

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- Require developments that may have an impact on the natural environment to be considered in relation to any management plan or public policy including those identified in the SPPF.
- Council, private landowners and local land care groups to liaise with the managers of parks and conservation reserves to minimise the off-site effects of those reserves on adjoining land uses.
- Encourage on-site treatment and disposal facilities which demonstrate adequate structural integrity, capacity and capability to handle, treat and dispose of wastewater without adverse impacts on land, surface water and groundwater systems.
- Encourage an integrated approach to flood management.
- Ensure that the identification, control and management of development in areas prone to flooding is based on an assessment of the depth and activity of potential flood and the impact of the proposed development on land outside the identified area of potential flooding, acknowledging the importance of continued agricultural activity within some areas defined as liable to flooding or rural floodway.
- Ensure that the impacts of salinity and high nutrient levels in water are managed in accordance with the CMA salinity and water quality programs, guidelines and requirements.
- Encourage native vegetation plantings to assist in the stabilisation or reduction of groundwater levels, greenhouse gas abatement and enhancement of biodiversity.
- Apply the “net gain” principle to the assessment of applications involving the loss of native vegetation.
- Encourage landowners to avoid the need to clear native vegetation. If clearance is unavoidable then landowners should seek to minimise clearance.
- Encourage wastewater management practices in both urban and rural areas that reduce the impacts of effluent and stormwater on the environment.
- Minimise the impact on downstream properties from development in terms of either flooding or water quality resulting from stormwater run-off.
- Require package treatment plants be subject to three-month inspections for unsewered development around Lake Mulwala.
- Maintain appropriate buffer distances between sewerage/wastewater treatment and disposal facilities and other land uses in accordance with EPA guidelines.
- Identify sites as having significance for their scientific, aesthetic, architectural, historical, social importance or other special cultural value.
- Ensure applications within heritage areas are supported by reference to the relevant Statement of Significance as contained in the Moira Shire Heritage Study.
- Discourage intensive animal activities within and in proximity to the Shire's townships; and

- Minimise visually intrusive development around Lake Mulwala and discourage development in the lake environs that reduces the quality of irrigation water, landscape character, recreation use, visitor amenity and public access to the lake.
- Protect and enhance the biodiversity, ecological, and cultural values of the waterway.
- Prevent use and development of land adjoining the river from degrading water quality.
- Promote consistent planning and management along the River corridor.
- Prevent the loss of riparian flora and fauna, biodiversity, habitat and wetland environments.
- Protect the values and role of the Murray River reserves and other public land as floodplains and as buffer areas for nutrients and other pollutants.
- Restrict inappropriate use and development on land adjoining and near the Murray River.
- Ensure that buildings are sited a sufficient distance from the Murray River.

21.03-5 Environmental Implementation

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Zones and Overlays

- Apply the Farming Zone, Schedule 1 to the 'growth' and 'consolidation' areas with a minimum lot size of 60ha.
- Apply the Rural Activity Zone Schedule to areas along the Murray River Corridor that support rural based tourism.
- Apply the *Public Park and Recreation Zone* and *Public Conservation and Resource Zone* to the natural assets and areas of natural significance within the Shire.
- Apply the *Significant Landscape Overlay* to areas around Lake Mulwala to protect the landscape value of the area.
- Apply the *Floodway Overlay* to areas at significant risk of flooding.
- Apply the *Land Subject to Inundation Overlay* to areas subject to the 1 in 100 year flood event.
- Apply the *Heritage Overlay* to sites of identified significance.
- Apply the Environmental Significance Overlay to the Murray River Corridor to protect and enhance the biodiversity, ecological and cultural values of the waterway.

Policy and Exercise of Discretion

- Use Local Policy to assist in the protection of interfaces with public parks and reserves for Land Adjoining Parks or Conservation Reserves, or Land Known to Have Aboriginal Heritage Values or Land Within 100 Metres of Water Authority Assets – (Application Notification Policy - Clause 22.03).
- Apply the Lake Mulwala Management Plan (and the principles of the NSW REP No.2) for developments that impact on the Murray River and Lake Mulwala environs.
- Apply the "Earthworks Controls in the Shire of Campaspe, City of Greater Shepparton and Moira Shire – August 2010" for development in the Farming Zone.
- Ensure that the Interim Floodplain Management Plans Moira Shire Planning Scheme (1997) are taken into account in the consideration of all use and development proposals within flood affected areas (land subject to inundation or floodway).

- Utilise the "Selected Biodiversity Components – LGA Moira Map" for the identification of Ecological Vegetation Classes and Conservation Status inline with State Policy and GB Native Vegetation Management Strategy that may be affected by proposed development.
- Apply Clause 22.01 Agricultural Policy in considering an application for a dwelling and subdivision in rural areas to ensure that farming is not jeopardised.
- Apply Clause 22.02 Rural Activity Zone Policy in considering an application for the use of land, a dwelling and subdivision in the Murray River Corridor in order to support rural-based tourism and take advantage of the natural attributes of the region.
- Apply Clause 22.06 to Clause 22.22 (inclusive) to all applications within a Heritage Overlay to provide a clear and consistent basis for decision making.
- Discourage intensive animal activities within and in proximity to the Shire's townships (Residential Amenity Policy - Clause 22.06).
- Require all relevant applications to demonstrate capacity to maintain grey water and effluent on-site and to provide information relevant to an assessment of this capacity; e.g. soil conditions, topography, flooding, drainage lines, natural or constructed water features on and near site, the location and type of proposed holding and treatment facilities.
- Require all relevant applications to provide stormwater management information indicating the location and type of proposed treatment/disposal facilities and their effectiveness in minimising impacts to land, surface water and groundwater systems.
- Consider the effects of grey water, effluent and stormwater on the environment and potential for best practice treatment and reuse of these when undertaking planning studies and making land use and development decisions.

21.03-6 Further Strategic Work

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A range of studies/investigations are recognised by Council as being required to assist in the development of appropriate planning scheme responses to a number of environmental issues and challenges facing the Shire. The following list of further strategic work reflects those tasks that have been identified as being required as matters of high and longer-term priority. Council is committed to completing those tasks listed as being high priorities by mid 2006, pending the ability to secure funding support from other agencies as necessary. Other tasks identified will be undertaken as funding opportunities become available.

High Priorities

- Goulburn Broken Catchment Management Authority to complete current flood studies and flood investigations as identified in the Goulburn Broken Floodplain Management Strategy (Prime Responsibility – GBCMA);
- Prepare separate Planning Scheme Amendment(s) to take account of updated flood information (Prime Responsibility – GBCMA);
- If adopted by Council utilise the findings and recommendations of the Lake Mulwala Land and On Water Use Management Plan to develop planning control responses to guide future use and development of land from Yarrawonga to Bundalong and along the lower reaches of the Ovens River (Prime Responsibility - Goulburn Murray Water);
- Develop a realistic program for effectively integrating biodiversity objectives into the Planning Scheme (Prime Responsibility – GBCMA);
- Consider how best environmental practice can be used to inform further strategic work of Council (Prime Responsibility – Council); and

- In partnership with Heritage Victoria develop a Heritage Conservation Study which identifies those Aboriginal and post-contact sites known as having scientific, architectural, historical, cultural or social importance and include these sites within the Planning Scheme (Prime Responsibility – Council).

Longer Term Priorities

- Investigate the need for "buffer" mechanisms surrounding wastewater treatment plants in the Shire (Prime Responsibility – Goulburn Valley Water);
- Investigate the protection of areas of the Shire that are identified by the Department of Sustainability and Environment as having ground water levels within 2 metres of the natural surface level (Prime Responsibility – Goulburn Broken CMA);
- Investigate the implementation of salinity control initiatives including retention and propagation of tree stands of species native to the areas that are proven to assist in the stabilisation or reduction of ground water levels (Prime Responsibility – Goulburn Broken CMA);
- Liase with Country Fire Authority to finalise extent and detail of mapping and schedules for inclusion of a Wildfire Management Overlay in the scheme (Prime Responsibility – CFA); and
- Identify and record those areas that are unsuitable for on-site treatment and disposal of effluent including septic systems and land applications. These areas would be closely linked with land capability mapping, groundwater and surface water quality assessments, floodways and drainage easements.