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*Mt Madden Community Dam - Lake Grace Shire*
Although there have been noticeable improvements in farmland water supply across the State in recent years, there are still serious water deficiencies in some areas.

Climate change and predicted trends for drier and warmer conditions highlight the urgent need to plan for increasingly difficult farming conditions.

Water planners will need to address lower rainfall, higher evaporation, reduced surface water run-off and greater demand for water. Sustained periods of low run-off will inevitably create big challenges for landholders - even those considered good water managers.

The key to successfully tackling the two problems in dryland areas - lack of water and poor quality water - is a coordinated approach that draws together a set of integrated actions with clear outcomes.

The primary goal of this Rural Water Plan is "to promote strategic development of reliable and sustainable water supplies that will provide long-term solutions to overcome water deficiencies".

Developing alternative water sources will become increasingly important as the population of the State increases and the rural sector battles to sustain itself in the face of growing land degradation problems, climate change and demands for protection of the environment.

Fully utilising existing water resources, such as lower quality groundwater reserves, Agricultural Area (AA) dams and delivering more water to rural communities, needs high priority.

Drawing water supply programs together under one banner - this plan - will help to keep the water needs of rural Western Australia clearly to the fore. More importantly, it will promote regional development and on-the-ground water supply improvements.

The changing face of agriculture and rural communities requires innovative approaches that maximise the benefits of water resources while overcoming water shortages and land degradation.

Rural water supply planning has tended to respond to problems as they arise. While this approach may produce short-term results, it lacks long-term vision. A more proactive and strategic approach to water supply development, as set out in this plan, will produce sustainable long-term results.
Under this plan, water supply planning will be improved, with greater accessibility to more detailed zone/regional information, such as:

- projected land use;
- projected long-term rainfall;
- available water resources; and
- the suitability of different types of water resource improvements with landform and soil type.

The key factors in future decision-making will be examining all options to maximise social, economic and environmental outcomes. Those making decisions on rural water planning need the information and resources to:

- determine whether water supplies can be developed on-farm;
- predict the likely demand for emergency water supplies; and
- decide whether to encourage community water projects, such as scheme water pipeline extensions and community dams.

This Rural Water Plan will encourage and promote research and development - finding alternative ways of dealing with present and emerging challenges for the rural sector and looking for opportunities to use water resources for more than a single use.

In the face of declining income in many rural areas and increased production costs, a number of primary producers are reducing enterprise risk by diversifying into other industries. However, part of the farming community continues to be very successful and profitable - ensuring ongoing investment in sustainable communities and farming systems.

A Rural Water Plan must accommodate these trends, support a broader range of industries and ensure the water supplies needed to support the long-term objectives of rural communities.

Integrating rural water initiatives with broader-based State water planning and conservation strategies will help ensure maximum advantage is taken of opportunities to access and develop new sources of water while reducing wastage.

Critical to success is ensuring that all programs meet the interests of the rural community and reflect government water management policies.

Strong representation of rural water needs and influencing policy will be important in meeting the challenges ahead. It will ensure that the unique demands of rural dryland communities are not overlooked in the debate on the State-wide water management issues that are often focused on large urban centres and heavy water users.
Recurrent farm water supply problems throughout the agricultural region during the late 1960s, 70s, 80s and early 90s highlighted the need for an integrated plan to tackle farm water supply shortages in dryland farming districts.

During this period, farm water shortages continued despite free technical advice from the Department of Agriculture and financial assistance from the Rural Adjustment and Finance Corporation.

In 1992, the State Government established a Farm Water Strategy Group to develop long-term solutions to the ongoing water supply problems in the dryland agricultural region. The group included farmer and government representatives and concluded that:

- The most acceptable, practical and economic solution to water supply problems was one that encouraged optimum development and use of on-farm water supplies;
- Emergency farm water supply arrangements should be provided by government;
- Low cost and good quality off-farm water encouraged farmers to cart water;
- Farmers were reluctant to invest in more reliable on-farm supplies; and
- Farmers developing their own on-farm supplies faced far greater risks than those connected to piped supplies.

A Farm Water Plan was completed by late 1994 and has been largely adopted since then.

The 1994 plan was framed to:

- Provide a planned approach to water supply developments to ensure projects were the best long-term solutions and fit together as an integrated strategy;
- Adopt technology to improve reliability of water supply infrastructure;
- Focus on integrating farm water supply and landcare; and
- Establish a more equitable link between the real cost of on-farm supplies, piped supplies and the actual prices charged for water from Water Corporation schemes.
These outcomes are reflected in the initiatives that evolved out of the plan’s recommendations.

During 2000, an extensive review of the Farm Water Plan was undertaken under the guidance of the Office of Water Regulation and the Rural Water Supply Coordinating Committee (now the Rural Water Advisory Committee).

Important contributions to the review were made by stakeholder groups including landholders, the WA Farmers Federation, the Pastoralists and Graziers Association, Water Corporation, the Department of Agriculture, Landcare technicians, Rural Water Advisory Committee members and the former Office of Water Regulation.

The review led to a commitment by the State Government to maintain the operation of the original Farm Water Plan, re-badged as the State Rural Water Plan.

A 2004 review also reinforced the key role played by the plan in improving rural water supplies, better managing existing water resources and securing dryland communities against serious water deficiency.

Trends in primary production and changes to management of land and natural resources require on-going improvement and review of the Rural Water Plan.

The Department of Water, as custodian of the plan, and the Rural Water Advisory Committee is committed to ensuring the plan remains responsive to the needs of the rural sector.
Scope of the plan

This plan applies principally to the provision of sustainable water supplies for livestock and general farm use for farmland and pastoral stations in dryland areas of the State.

The plan does not cover the provision of treated drinking water suitable for human consumption to rural towns. This is the province of licensed water service providers.

The Rural Water Plan programs embrace all dryland farming areas of the agricultural region of south-western Australia that receive less than 600 mm annual average rainfall, plus all areas of the rangelands.

In respect to farmland water, the south-west of the State has been divided into seven zones in which water supply problems differ in respect to:

- sources of supply;
- frequency and size of water deficiency; and
- timeframes and costs required to address problems.

Specific features and characteristics of each zone are described in more detail in the Western Australian Farm Water Plan Interim Report - March 1994.

The seven zones are shown in Figure 1.

Figure 1

[Map of Western Australia with zones numbered 1 to 7 and cities such as Dalwallinu, Northam, Corrigin, Kondinin, Lake Grace, Katanning, Albany, Esperance, and Darling Fault Line marked.]

LEGEND

Zone 1. Northern Sandplain/Northern Wheatbelt
Zone 2. Reticulated Scheme Area
Zone 3. Midlands and Upper Great Southern
Zone 4. Great Southern
Zone 5. North-eastern & Eastern Wheatbelt
Zone 6. South-eastern Wheatbelt & Salmon Gums
Zone 7. South Coast Sandplains
The Government’s water planning framework affords a high priority to the protection and effective management of the State’s water resources.

The State Water Plan (2007) is the centrepiece of the Government’s commitment to this goal. It will ensure the State is positioned to take up the challenges ahead and secure water supplies for future generations.

Strategic water issues plans such as the Rural Water Plan are an integral part of the water planning framework underpinning the State Water Plan.

The well planned, consistent and structured approach to water use and water supply issues embodied in the Rural Water Plan provides a platform from which to address the ongoing water needs of the dryland agricultural and pastoral areas of Western Australia.

Notably, the plan will help to guide the future development of Regional Water Plans, which will be important tools in implementing the policy objectives of the State Water Plan.
Water demand in dryland areas – influences and future challenges

The reviews of 2000 and 2004 highlighted the changing demand for water services as evidenced in a noticeable shift in the demographic characteristics and economics of the rural sector.

Some of the more significant trends identified that will potentially affect future rural water demands are discussed below.

In setting goals, it is important to appreciate the underlying factors considered by industry to be the drivers for change. A fuller understanding and appreciation of these considerations will help drive new approaches to water supply development and management and deliver optimal benefits to the community.

Adapting to climatic change

There is clear scientific evidence showing that rainfall and run-off in the south-west have fallen since the mid-70s. Research suggests a further decline in rainfall, requiring industries to adapt to a climate that will be drier and hotter.

Water planners will need to develop strategies to address lower rainfall, higher evaporation, reduced surface water run-off and greater demand for water. It will be vital to develop water supply projects that improve the reliability and security of water supplies.

Land degradation

Managing water in the landscape to prevent degradation, while adding value to rural landscapes, is consistent with rural water planning objectives. Most farmers have seen some land degradation from salinisation and wind and water erosion. Increasingly, farmers have to face and deal with these issues to protect their future.

Governments at all levels have made substantial commitments to landcare programs in an endeavour to slow, or reverse, the land degradation process.

More efficient water use is seen as a priority in improved land management practices. This includes programs to manage saline water as well as structures to capture and transfer water supplies.

The Rural Water Plan will benefit from a catchment focus that gets the best results for sustainable land management.

Intensive land use

To maintain profitability in the face of variable broadacre farming returns, some farmers are exploring more intensive land uses.

Where water supplies are available, they are turning to new enterprises such as horticulture, viticulture, floriculture and aquaculture.

In some cases, the soils being used for intensive agriculture are of marginal quality and would have been overlooked in the past. Now, availability of a water source has become more important than soil suitability.

A strong argument persists that a Rural Water Plan should accommodate and support a broader range of industries and the water supplies needed to support long-term objectives of communities.

Any proposed water supply investment must be compatible with sustainable use of the land.
Farm sizes

Two trends are becoming increasingly noticeable.

1. In broadacre farming areas, amalgamation of businesses to improve income in the face of declining terms of trade continues.

2. The number of broadacre farms is falling, leading to reductions in the number of farming families.

Population decline in traditional farming areas has the potential to reduce demand for household water supplies, but will have little impact on demand for water supplies for livestock and cropping purposes.

On the other hand, in areas close to major population centres, subdivision of broadacre properties to create lifestyle or hobby blocks is increasing population and placing pressure on State and local government to provide services. Landholders on small lifestyle blocks and small industry groups are demanding improved access to assured sources of high quality water.

Farming Practices

Changes in farming practices, such as an increased reliance on agronomic chemicals, is increasing demand for larger quantities and better quality water.

In some areas, minimum tillage practices have resulted in less run-off from farmland, reducing the quantity of water harvested by many landholders.

These changes need to be taken into account when implementing initiatives under the Rural Water Plan.

Diversification of farm enterprises

Farm enterprise diversification is driven by commodity prices, market identification and factors such as concerns with weed control in monoculture cereal enterprises.

A more diverse farming system with integrated cropping and livestock components can spread enterprise risk; however, this often involves more intensive management of land and water resources.

Recent trends and forecasts indicate livestock numbers are likely to increase. This will increase demand for water supplies.

Maintaining reliable water supplies to meet the demands of the changing enterprise mix will stimulate development of farm infrastructure.
Farming income

Surveys over recent years by groups such as the Australian Bureau of Agricultural Economics show that incomes in many broadacre farming areas are declining. Some farmers now say that water supply improvements are beyond their means.

It is important to recognise this in considering future directions for government support for rural water supply development.

At the same time, it must be recognised that the primary responsibility for commercial performance rests with the owner of an enterprise. While government intervention in the form of subsidies and grants is often warranted, this assistance should not diminish self-responsibility.

Management of water supplies

The sustainability of water supplies will depend largely on achieving linked land and water management practices, with water conservation measures designed to protect existing and potential water sources.

Managing to protect water quality is essential, particularly where high water quality is in demand. The requirements for each project, landholder or business will be unique.

Resource efficiency

To secure the best results and outcomes that account for economic, social and environmental values we must work smarter and more cooperatively at a government level and within the community.

Community expectations

Community expectations are essentially threefold:

First, value for money. There is a need for resource efficiency and measurable results from the resources committed to areas targeted as a priority by government. Water projects must demonstrate effectiveness and cost competitiveness with other options.

Second, the environment. The community has expressed its desire to protect the environment for future generations. Water supply planning must recognise this and consider potential impacts of water supply development on the environment, while looking for ways to protect and sustain our natural resources.

Third, lifestyle expectations. Rural people are increasingly reluctant to accept second best. Water supply programs can significantly improve rural lifestyles and demand for a reasonable level of access to services and utilities are being strongly expressed in many rural communities.
Objectives and role of the Rural Water Plan

The 1992 to 1994 Government study into recurrent water supply problems in dryland areas of the agricultural region concluded that a planned, well organised and integrated approach to water supply development was required.

This Rural Water Plan has therefore been developed as a strategic tool to:

- **Provide coordination and leadership**
  
  To build on the water supply improvements achieved to date, effective coordination and integration of water supply activities between the primary stakeholders is critical. This will ensure consistent and resource-efficient delivery of actions to improve water supplies and better manage existing resources.

  Coordination across government with improved integration between water supply and land management initiatives will be needed to improve the delivery of water programs.

- **Encourage community participation and ownership**
  
  While the Rural Water Plan provides an organised and structured approach to improving farmland water supplies, successful implementation of programs requires active community participation and support.

  The plan therefore has an important role to play in encouraging the community to:
  - be involved in water supply projects;
  - accept an element of responsibility;
  - take ownership of local water supply assets; and
  - engage in an ongoing planning and improvement process.

- **Facilitate and encourage farm water supply planning**
  
  Water supply planning within a farming operation should be part of an overall water management strategy linked into a broader business plan.

  Emerging climate change and predicted trends for drying and warming may reduce the reliability of farm water supplies. Coping with these changes will require a much more consistent and strategic approach to providing on-farm water supplies.

  With this as a backdrop, farm water supply planning must be seen a part of a broader business planning activity focusing on future business activities.

- **Enable access to technical support**
  
  Reliability of water supply can be influenced through the availability of sound technical services and advice for landholders in the dryland areas.

  It has long been recognised that landholders who must satisfy their on-farm water requirements without intervention from outside the farm gate are at greater risk than those who are able to draw water from scheme water systems offered by Water Corporation.

  Those landholders who invest in the planning and development of new water supplies have to deal with risk factors on several fronts.

  Designing and constructing water supply infrastructure, such as dams and catchments, can be complex and involves certain risks. Consideration must be given to climatic and site conditions, infrastructure suitability and water demands in order to provide a reliable water supply particularly when facing a drying climate. To
achieve the best design features with the least likelihood of failure requires a high level of technical expertise and experience.

There is an additional risk that reliability of supply may be reduced if capital assets function below expectation, are damaged or are poorly maintained. For example, a dam may have inadequate catchment or be poorly maintained so that inflows are unreliable, or a bore may go dry due to overuse or poor management.

If farmers have access to technically competent personnel, the risk of failure of water supply structures can be minimised by ensuring accepted and proven technical standards are applied throughout the planning, development and installation.

- **Improve on-farm water supplies**

The Rural Water Plan is based on the principles of self-reliance and water self-sufficiency.

Therefore, the primary focus of the plan is on improving on-farm water supplies to improve preparedness for periods of low rainfall and drought and less reliance on off-farm and public water supplies.

- **Establish sources of emergency community water supply**

Reliable community water supplies represent an important way to secure farming operations against serious on-farm water shortages that may lead to a landholder sourcing alternative supplies outside the farm gate.

While the improvement of on-farm water supplies is at the forefront of the program initiatives in this plan, the inevitability of future water shortages is recognised, as is the possibility of limited capacity for further on-farm water supply improvements.

- **Promote emergency water response planning**

While self-sufficiency is the centrepiece of the Rural Water Plan, preparing for extended periods of low rainfall and limited run-off into farm dams and tanks storage also features prominently.

Predicted climate change makes it urgent to plan for increasingly difficult farming conditions. Sustained periods of low run-off will inevitably create big challenges for landholders - even those considered good water managers.

Emergency water response planning is one of the key roles of the Rural
Water Plan. It aims to ensure that the commercial and lifestyle interests of farming families in dryland agriculture areas are safeguarded against serious water shortages, particularly in respect to livestock needs.

The plan provides for an organised and structured approach to on-going improvement and maintenance of sustainable farmland water supplies.

While landholder self-sufficiency remains the primary objective, preparing for those times when on-farm supplies fail is an essential function of rural water planners.

A responsibility rests on all stakeholders, including farmland communities, local government and State Government agencies to participate and cooperate in an integrated approach to water supply planning.

• Protect the commercial interests of broadacre farmers

A feature of the Rural Water Plan is the role it plays in securing rural communities at times of water shortage by coordinating emergency arrangements and providing alternative water supplies.

While it is recognised that primary responsibility for commercial performance rests with the owners of a business or enterprise, there are times when intervention by government is warranted to protect commercial performance, for the wider public good.

There will be times when on-farm and community water supplies fail, forcing landholders to go outside the farm gate for emergency water supplies. On occasions, this may necessitate an unreasonable amount of travel.

Under these circumstances, free supplies of water of livestock quality will be transported to central points where landholders can collect it.
- **Promote improved utilisation of water resources**

Untapped water resources

Developing alternative sources of water will become increasingly important as the population of the State increases and the rural sector battles to sustain itself in the face of growing land degradation problems, climatic change and demands for environmental protection.

The development of on-farm and community water supplies in situ must be given renewed emphasis by providing financial incentives under the grants schemes offered under the Rural Water Plan.

In order to deliver more water to rural communities, future planning will aim to optimise existing resources (such as AA dams) and maximise the potential of the natural environment to harness water that is largely lost in the landscape, such as runoff from large rock catchments.

Efficient use of existing water resources

Until now, the primary focus of the plan has been developing new water supplies to overcome water shortages and increase the reliability of supplies.

Integrating rural water initiatives with broader-based State water planning and conservation strategies will help ensure maximum advantage is taken of opportunities to access and develop new sources of water, while reducing wastage.

The plan offers an important vehicle for promoting the development and implementation of water conservation measures in the rural sector.

**Promote innovative water supply development**

The changing face of agriculture and rural communities requires innovative approaches that maximise benefits of water resources while overcoming water shortages and land degradation.

The Rural Water Plan must be used to encourage and promote research and development - finding alternative ways of dealing with present and emerging challenges for the rural sector and looking for opportunities to use water resources for more than a single use.
To address serious water supply deficiency in dryland areas of the State, the plan will:

- Identify and target those farming areas most susceptible to serious water deficiency.
- Provide the means for landholders to gauge their on-farm water supply situation and choose appropriate actions to combat deficiency.
- Offer financial incentives for landholders to plan and invest in on-farm and community level water supply improvements.
- Facilitate emergency farmland water arrangements.
- Provide a network of strategic emergency water supplies.
- Facilitate a structured emergency farmland water response planning process.
- Foster innovation in water management and use.
- Offer rural communities the opportunity to provide direct advice to government on water supply issues in dryland areas.

These goals will be achieved through the availability and delivery of the following initiatives.

**Rural Water Advisory Committee**

A Farm Water Coordinating Committee (FWCC) was formed in 1994 to provide advice on rural water supply matters to the Minister for Water Resources.

The name of the FWCC has since been changed to the Rural Water Advisory Committee to reflect more accurately the State-wide role of the committee and its advisory function. The Department of Water provides executive support.

The committee, which generally meets at least four times a year, consists of seven farming representatives (one from each farm water zone), a representative of the pastoral regions, and representatives from relevant government agencies.

The committee provides valuable direct contact with rural communities and advises the Minister for Water Resources and the Department of Water on water supply issues in dryland areas.

**Farm Water Supply Planning Program**

Typically, a significant proportion of the farms operating in the dryland areas rely partially on water carted from public supplies off-farm.

The program aims to address this situation by offering subsidies to encourage landholders to invest in water supply planning and to integrate this planning into an overall water management strategy for the property and neighbourhood water supply initiatives.

Recipients of planning subsidies will engage technically competent farm water planners who can provide a comprehensive plan to achieve improved water supply reliability, guidance on the best technical solutions to address current and future water supply needs and recommend appropriate steps towards targeted and thorough farm water management.

The program targets commercial broadacre farmers whose properties are in the local government areas that fall within the dryland areas covered by the State’s Rural Water Plan. Unlike the Farm Water Grants Scheme and the Community Water Supply Program, this includes landholders whose properties are connected to a piped water supply.
Farm Water Grants Scheme

The Farm Water Grants Scheme provides grants to broadacre farmers impacted by serious on-farm water deficiency so they can plan and invest in improvements to on-farm water supplies.

The scheme provides financial incentives to landholders to address on-farm water deficiency by developing additional sources of water to meet domestic, crop spray and livestock requirements.

- The scheme targets commercial broadacre farmers whose properties are in the local government areas that fall within the dryland areas covered by the Rural Water Plan and suffer from the most serious on-farm water deficiency.

One of the fundamental features of the scheme is the recognition it gives to the underlying principle of self-reliance and self-sufficiency.

The key thrust is a shift away from an over-reliance on water from off-farm sources by developing on-farm supplies to a level where a farm is substantially self-sufficient and better able to cope with water shortages in years of low rainfall and drought.

Rather than removing any responsibility from the farmer, the scheme provides an incentive to shift to long-term sustainability through investment in on-the-ground water supply improvements, application of contemporary construction standards coupled with up-to-date technology, and improved water management practices.

The grants scheme is not intended as a substitute for development incentives, nor does it seek to replace effective farm management practices such as a recurrent program of farm maintenance.

Importantly, apart from encouraging the development of additional water supplies, the scheme promotes an increased awareness of proper planning, improved technology and land management issues.

It also provides opportunity to invest in water supply options that complement actions designed to avoid or lessen the impact of groundwater salinity and address land degradation.

The scheme specifically excludes assistance for intensive farming industries including horticulture, aquaculture and viticulture and intensive animal enterprises such as dairies, piggeries and feedlots.
Community Water Supply Program

The Community Water Supply Program provides grants to encourage rural local governments and farmland community groups to plan and construct improved community water supplies.

The key thrust of the program is to assist farming communities who have limited options for improving their on-farm supplies and whose livelihood depends on the availability of water from off-farm. It focuses on developing off-farm supplies in contrast to on-farm improvements (promoted under the Farm and Pastoral Water Grants Schemes).

The program helps needy communities provide new water supplies for a wide range of uses, from emergency drinking water for livestock to supplementary water supplies for rural towns.

The program recognises that there are times when extended periods of low rainfall may cause on-farm supplies to fail, forcing landholders to cart water from off-farm. It offers grants to develop additional sources of water to satisfy domestic, crop spray and livestock requirements where benefits are available to the broader community, which greatly assists emergency responses.

Active participation by the community and local government in the projects approved under this program is essential. In addition, it is desirable that management of the new water supplies and maintenance of associated infrastructure be the responsibility of the local community.

For projects resulting in significant direct benefit to individuals, a minimum community contribution of one-third of the construction cost is required.

Those projects that are revenue earning can be funded by Water Corporation.

On the other hand, stand-alone community water supplies, such as strategic supplies from which farmers can cart water when on-farm supplies fail, are not revenue earning and are funded by the Department of Water from Rural Water Planning Program funding.

The program specifically excludes assistance for intensive farming industries including horticulture, aquaculture and viticulture, and intensive animal enterprises such as dairies, piggeries and feedlots. Water requirements for these industries are predictable, more consistent and are more easily planned for in the business development stage.

It is not intended that this program be a substitute for development incentives or replace effective farm management practices, such as a recurrent program of farm water supply maintenance. Nor is it meant to act as a disincentive to improve on-farm supplies where the potential exists to do so. In fact,
utilisation of on-farm supplies is strongly encouraged and community projects should be seen as a supplement to these water sources that contribute to the overall reliability of supply.

However, as well as encouraging development of additional water supplies, the program also promotes an increased awareness of proper water supply planning, use of improved technology, innovative use of natural and built assets and attention to environmental and land management issues. Moreover, the program provides an opportunity to invest in projects that have complementary benefits, such as broadening salinity management options.

Pastoral Water Grants Scheme

The principle aim of the Pastoral Water Grants Scheme is to encourage pastoralists to develop alternative watering points to reduce grazing pressure around existing water supplies and encourage improved livestock management and distribution.

The scheme is also designed to secure pastoral properties against water shortages in most years and to enhance homestead water supplies.

Water supplies can be difficult to locate on pastoral leases. As a result, the range resources adjacent to existing watering points may be subject to high grazing pressure threatening the fragile rangeland environments.

Overgrazing in fragile areas of the rangeland has led to land degradation, including soil erosion, loss of biodiversity and other environmental problems.

The scheme has a clear role in raising the awareness of proper planning and land management practices.

Underpinning the operation of the scheme is the desire to assist in environmental protection of the rangelands with the potential for economic benefits that will flow from a more sustainable pastoral industry.

The benefits will extend to the wider community through the maintenance of biodiversity, a reduction of erosion and discharge of silt into waterways, and improved water quality.

The availability of grants for the development of better homestead supplies provides a social dividend in terms of lifestyle improvements and by encouraging maintenance of a strong pastoral sector.

The scheme specifically excludes grants for intensive industries such as aquaculture and horticulture, and intensive animal enterprises such as feedlots. Farm stay businesses are also excluded.

The scheme is not intended to substitute for development incentives, nor does it seek to replace effective pastoral management practices such as a recurrent station maintenance program.
Agricultural Area (AA) dams

Over 600 AA dams were constructed during the development of the agricultural region and have contributed to emergency water supply during periods of water deficiency.

While many of these facilities continue to play a key role in maintaining regional water security, there are now a large number that have been superseded by other water resources and are no longer in frequent use by the farming community or government agencies.

A network of strategic AA dams is presently being secured throughout many parts of the dryland agricultural area and these supply points will be maintained to provide sources of emergency water, which can be accessed by farmers in times of serious on-farm water deficiency.

These facilities will complement community water supplies established through the Community Water Supply Program.

In addition to the strategic public water sources, there are many more non-strategic agricultural area (AA) dams and tanks, which are now surplus to requirements. A process is underway to arrange for disposal of these.

Development of emergency farmland water response plans

Emergency water response planning is an essential part of ensuring an orderly response to a critical deficiency in water supplies, particularly for livestock requirements.

The plans will document an emergency water response process and identify the key strategic water sources.
**Water deficiency declaration process**

A declaration of ‘water deficiency’ is a government response to safeguard the commercial interests of farmers at times of very dry seasonal conditions, which cause five or more farmers within a 20 km radius to cart water from an off-farm source.

Such a declaration requires the State Government to haul livestock quality water supplies to local communities, so that no farmer has to travel more than 40 km in one direction from the farm gate to collect water.

Under the water deficiency declaration policy, ‘reasonable access’ to water is defined as being within a 40 km radius of a suitable water source.

The application process for a ‘water deficiency declaration’ requires a local government to make a formal request to the Department of Water and for the Department to make a recommendation to the Minister for Water Resources after consulting with the Department of Agriculture and the Rural Water Advisory Committee.

**Technical support for landholders**

Provision of technical support to all aspects of the Rural Water Plan from within the Department of Water and through closely related industry consultants (farm water planners and assessors), will lead to improved outcomes across the board.

Planned outputs to support the grant schemes and planning subsidy include: accrual and effective communication of good technical standards, relevant and targeted information products and accessibility to individual support. Water supply works should be planned carefully to match purpose, site, climate and demand. These measures will allow suitability and quality in the works implemented and the infrastructure installed.

**Research and development projects**

New ideas and technology, or the application of existing technology to new uses, will require staged development and trials where appropriate use can be demonstrated.

Technologies for lower cost saline water disposal and desalination offer opportunities for improved water use in dry areas.

Greater interest in research and development opportunities is seen as desirable and is encouraged through the operation of the Rural Water Plan.
Supports to the Rural Water Plan

Implementation of the programs under the Rural Water Plan is supported by the following publications.

**Rural Water Planning Operations Manual**

**Farm Water Supply Planning Program**
- Policy Statement
- Operating Guidelines

**Farm Water Grants Scheme**
- Policy Statement
- Operating Guidelines

**Pastoral Water Grants Scheme**
- Policy Statement
- Operating Guidelines

**Community Water Supply Program**
- Policy Statement
- Operating Guidelines

**Water Deficiency Declarations**
- Policy Statement

These program supports are available from the Department of Water’s web site [www.water.wa.gov.au](http://www.water.wa.gov.au)

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**References**

*Western Australian Farm Water Plan - Interim Report March 1994.*

*Outcome of Farm Water Planning Workshop - February 2000* - Office of Water Regulation.

*State Water Strategy for Western Australia - February 2003.*

*Rural Water Plan - Proposed Directions for the Future - August 2004, Department of Environment.*

*State Water Plan 2007.*