



Section 6

Further information

6.1 Acronyms

CEWH – Commonwealth Environmental Water Holder

CMA – Catchment management authority

MDBA – Murray-Darling Basin Authority

NVIRP – Northern Victoria Irrigation Renewal Project

VEWH – Victorian Environmental Water Holder



Drying field of nardoo, Gunbower, by Kathryn Stanislawski

6.2 Glossary

Acid sulphate soils – Naturally occurring soils containing high quantities of iron sulphates. When these soils remain underwater they are stable, but if they are exposed to air sulphuric acid is generated and can result in severe environmental impacts.

Adaptive management – An iterative decision-making process based on continuous learning, with the aim of reducing uncertainty over time.

Administrative water transfers – The most common trades the VEWH undertakes, they occur between VEWH entitlements to move water to where it is most needed. They include transfers by other environmental water holders of their water to the VEWH for delivery in Victoria.

AHD – see Australian Height Datum.

Allocation (of water) – The specific volume of water allocated to water entitlements in a given water year or allocated as specified within a water resource plan.

Australian Height Datum (AHD) – Height above sea level.

Azolla – A native aquatic fern which grows in waterways in dense patches; its presence usually indicates high levels of nutrients.

Bank erosion – Bank erosion is the wearing away of the banks of a stream or river (as distinct from erosion of the bed) and can occur in extensively dry conditions.

Bank slumping – A form of mass wasting in a river or stream that occurs when a coherent mass of loosely consolidated materials or rock layers moves a short distance down a slope.

Bankfull flows – Flows of sufficient size to reach the top of the river bank with little flow spilling onto the floodplain.

Baseflows – A relatively stable, sustained and low flow in a river, generally being its minimum natural level.

Biodiversity – The variety or abundance of plant and animal species in a particular habitat or environment.

Biofilms – Slimy films of bacteria, other microbes and organic materials that cover underwater surfaces including rocks and snags.

Biota – The animal or plant life of a particular region, habitat or geological period.

Blackwater – Blackwater is a natural occurrence and is caused by the breakdown of plant matter causing the water to discolour. The water turns black and can have very low dissolved oxygen levels which can cause stress to fish and other animals that breathe underwater.

Brackish water – Water that is moderately salty but not as salty as sea water. It may result from the mixing of seawater with fresh water, as in estuaries.

Carryover – Allows entitlement holders to retain ownership of unused water into the following season, according to specified rules.

Catchment management authority – A statutory authority established to manage river health, regional and catchment planning, and to manage waterways, floodplains, salinity and water quality.

Cease-to-flow – The period in which there is no discernible flow in a river and partial or total drying of the river channel.

Channel outfall – The spillage of water from irrigation channels to rivers or wetlands as part of system operations.

Climatic conditions – The long-term prevalent weather conditions of an area.

Cold water pollution – Is caused by cold water being released into rivers, primarily from large dams, during warmer months.

Commonwealth Environmental Water Office – Manages the water entitlements recovered by the Australian Government through a combination of investments in water-saving infrastructure, water purchases and other water recovery programs; the entitlements are held by the Commonwealth Environmental Water Holder (CEWH).

Confluence – The point where a tributary joins a larger river, called the main stem, or where two streams meet to become the source of a river of a new name.

Consumptive water – Water owned by water corporations or private entitlement holders, held in storages and actively released to meet domestic, stock, town and irrigation needs.

Shared benefits – The many recreational, Indigenous cultural, social and economic benefits of environmental watering.

Drawdown – Water released from a body of water (such as a reservoir) at the end of the irrigation season for dam operation and maintenance purposes.

Ecological vegetation communities – Components of a vegetation classification system, these are groups of vegetation communities based on floristic, structural and ecological features.

Environmental watering regime – The timing, frequency, duration and magnitude of flows for the environment.

Environmental flow study – A scientific study of the flow requirements of a particular basin's river and wetland systems used to inform decisions about the management and allocation of water resources.

Environmental water - Water available for environmental purposes including Water Holdings (held by the Victorian Environmental Water Holder), passing flows and unregulated flows.

Environmental water entitlement – An entitlement to water to achieve environmental objectives in waterways. It covers an environmental entitlement, environmental bulk entitlement, water share, section 51 licence or supply agreement.

Environmental water management plan – A plan developed by a waterway manager outlining long-term environmental objectives based on consultation with key stakeholders, local community and advisory groups to inform the seasonal watering proposal for the particular system.

Estuary – A partially enclosed body of water along the coast where freshwater from rivers and streams meets and mixes with salt water from the sea.

Fishway – A series of pools built like steps to enable fish to travel through a particular waterway, dam or waterfall.

Fledging – The care of a young bird until it can fly.

Flow components – Components of a river system's flow regime that can be described by magnitude, timing, frequency and duration (for example, cease-to-flow and overbank flows).

Freshes – Small or short-duration peak flow events which exceed the baseflow and last for a small number of days.

Geomorphology – The scientific study of landforms and the processes that shape them.

Gigalitre (GL) – One billion (1,000,000,000) litres.

Groundwater – Water held underground in the soil or in pores and crevices in rock.

Headwater – A tributary stream of a river close to or forming part of its source.

Headworks system – A system including various storage infrastructure (such as reservoirs and diversion weirs) to enable connection of multiple waterways.

Heritage rivers – Rivers listed under the *Heritage Rivers Act 1992*, and are particular parts of rivers and river catchment areas in Victoria which have significant nature conservation, recreation, scenic or cultural heritage attributes.

High-reliability entitlement – Legally recognised, secure entitlement to a defined share of water (full allocations are expected in most years).

Hydrology – The study concerned with the properties of the water and its movement in relation to land.

Intervalley transfers – The transfer of water between river systems to meet demands as a result of water trade between river systems.

Irrigation releases – Release of water for irrigation purposes.

Juvenile – Animals and plants not yet fully mature.

Land manager – Agency or authority responsible for the conservation of natural and cultural heritage on public land, including parks and reserves (includes Parks Victoria and Department of Environment, Land, Water and Planning).

Low-reliability entitlement – Legally recognised, secure entitlement to a defined share of water (full allocations are expected only in some years).

Macroinvertebrates – Animals without a backbone and which can be seen with the naked eye including worms, snails, mites, bugs, beetles, dragonflies and freshwater crayfish.

Macrophytes – Aquatic plants that are either emergent (growing out of the water; for example, phragmites), submergent (growing under water; for example, ribbonweed), or floating (for example, floating pond weed).

Managed releases – Release of water from the Water Holdings which is stored in major reservoirs; used for priority watering actions to achieve environmental outcomes.

Megalitre (ML) – One million (1,000,000) litres.

Midden – A site of cultural significance where Indigenous people left the remains of their meals and other domestic waste.

Millennium Drought – One of the worst droughts recorded since settlement, it went from about 1995 to 2012.

Operational releases – Releases made from major storages to enable the water distribution system to operate or make water available to consumptive users.

Overbank flows – The portion of a flood flow that flows outside the main river channel at relatively small depths over part of or the full width of the waterway and in a direction essentially parallel with the direction of the main channel.

Passing flow – Water released from storages to operate river and distribution systems (often to assist delivery of water for environmental or consumptive uses), and maintain environmental values and other community benefits. The volume of passing flows is generally determined by inflows to those storages.

Permanent trade – Transfer of ownership of a water share or licence.

Potential environmental watering – Environmental flow components that have been identified for a particular system in a particular year.

Pulse – A gradual build in the flow of water, typically to replicate optimal conditions for water species such as fish to travel and spawn.

Ramsar-listed wetland – A wetland listed as internationally significant under the Convention on Wetlands signed in Ramsar, Iran in 1971.

Reach – A stretch or section of a river, generally defined in an environmental flows study.

Recruitment – When plants or animals survive to settlement or maturity stage.

Regional waterway strategy – an eight-year action plan prepared by a catchment management authority for the rivers, wetlands and estuaries in its area. It provides a single, regional planning document for waterways in the area.

Remnant vegetation – Patches of native trees, shrubs and grasses still remaining following disturbance.

Return flows – Any flows that are delivered for environmental purposes and then returned to the downstream system to be reused for other purposes. Returned flows may be captured and stored downstream for later reuse, although most commonly remain within the waterway for in-stream reuse.

Riffle – Relatively shallow section of stream where water flows at a higher velocity with increased turbulence, causing many ripples to be formed in the water surface.

Riparian vegetation – Vegetation located in the area of land that adjoins, regularly influences or is influenced by a river.

Salt wedge – The transition zone of salt water and freshwater environments which occurs when a freshwater river flows directly into salt water.

Seasonal watering plan – The Victorian Environmental Water Holder's annual operational document which outlines potential environmental watering across the state in the forthcoming water year.

Seasonal watering proposal – An annual proposal outlining the regional priorities for environmental water use in each water year and submitted by waterway managers to the Victorian Environmental Water Holder for consideration in its seasonal watering plan.

Seasonal watering statement – A statement by the Victorian Environmental Water Holder authorising a catchment management authority to apply or use water from the Water Holdings consistent with the seasonal watering plan.

Slackwater habitat – Habitat in a body of water that has little or no flow, typically formed in areas where the current is restricted by obstructions.

Spawning – The process of species releasing eggs and sperm to reproduce.

Storage manager – Appointed by the Minister for Environment, Climate Change and Water to operate major water storages in a particular river basin to deliver to entitlement holders.

System operating water – Water managed by storage managers and held in storages that is actively released to ensure the system can deliver consumptive water and water to meet other needs.

Temporary trade – Transfer of a seasonal allocation.

Terrestrial vegetation – Land-based plants.

The Living Murray program – An intergovernmental program which holds an average of 500,000 ML of environmental water per year, for use at six iconic sites along the River Murray.

Trade – Water shares, allocations and take-and-use licences can be traded in Victoria under rules set by the Minister for Environment, Climate Change and Water.

Translocation – The movement of living organisms from one area to another area where they are given free release.

Tributary – Smaller river or creek that flows into a larger river.

Unregulated (entitlement) – An entitlement to water declared during periods of unregulated flow in a river system: that is, flows that are unable to be captured in storages.

Unregulated flows – Natural stream flows that cannot be captured in major reservoirs or storages.

Victorian Environmental Water Holder (VEWH) – An independent statutory body responsible for holding and managing Victorian environmental water entitlements and allocations (Victorian Water Holdings).

Victorian environmental watering program – The overarching program by which all environmental watering actions are planned for and delivered and in which all key environmental watering partners are involved.

Water Act – The *Water Act 1989* is the legislation that governs water entitlements and establishes the mechanisms for managing Victoria's water resources.

Water entitlement – The right to a volume of water that can (usually) be stored in reservoirs and taken and used under specific conditions.

Water Holdings – Environmental water entitlements held by the Victorian Environmental Water Holder.

Water trade – The process of buying or selling or exchanging water allocation or entitlements.

Water allocation – see Allocation (of water)

Water year – the same as a financial year, from 1 July to 30 June the next year.

Waterway manager – Agency or authority responsible for the environmental management of catchments and waterways (includes catchment management authorities and Melbourne Water).

Waterways – Includes rivers, wetlands, creeks, floodplains and estuaries.

6.3 Contact details

For further information about the *Seasonal Watering Plan 2015–16*, please contact the Victorian Environmental Water Holder.

Victorian Environmental Water Holder

Visit: Ground floor, 8 Nicholson St,
East Melbourne, Victoria 3002
Mail: PO Box 500, East Melbourne, Victoria 3002
Call: (03) 9637 8951
Email: general.enquiries@vewh.vic.gov.au
Website: www.vewh.vic.gov.au

For specific information about each system, and details about specific seasonal watering proposals, please contact the relevant waterway manager.

Corangamite Catchment Management Authority

Visit: 64 Dennis Street, Colac, Victoria 3250
Mail: PO Box 159, Colac, Victoria 3250
Call: (03) 5232 9100
Email: info@ccma.vic.gov.au
Website: www.ccma.vic.gov.au

East Gippsland Catchment Management Authority

Visit: 574 Main Street, Bairnsdale, Victoria 3875
Mail: PO Box 1012, Bairnsdale, Victoria 3875
Call: (03) 5152 0600
Email: egcma@egcma.com.au
Website: www.egcma.com.au

Glenelg Hopkins Catchment Management Authority

Visit: 79 French Street, Hamilton, Victoria 3300
Mail: PO Box 502, Hamilton, Victoria 3300
Call: (03) 5571 2526
Email: ghcma@ghcma.vic.gov.au
Website: www.ghcma.vic.gov.au

Goulburn Broken Catchment Management Authority

Visit: 168 Welsford Street, Shepparton, Victoria 3630
Mail: PO Box 1752, Shepparton, Victoria 3630
Call: (03) 5822 7700
Email: reception@gbcma.vic.gov.au
Website: www.gbcma.vic.gov.au

Mallee Catchment Management Authority

Visit: DPI Complex, Corner Koorlong Avenue and
Eleventh Street, Irymple, Victoria 3498
Mail: PO Box 5017, Mildura, Victoria 3502
Call: (03) 5051 4377
Email: reception@malleecma.com.au
Website: www.malleecma.vic.gov.au

Melbourne Water

Visit: 990 La Trobe Street, Docklands, Victoria 3008
Mail: PO Box 4342, Melbourne, Victoria 3001
Call: 131 722
Email: enquiry@melbournewater.com.au
Website: www.melbournewater.com.au

North Central CMA

Visit: 628-634 Midland Highway, Huntly 3551
Mail: PO Box 18, Huntly 3551
Call: (03) 5448 7124
Email: info@nccma.vic.gov.au
Website: www.nccma.vic.gov.au

North East CMA

Visit: Level 1, 104 Hovell Street, Wodonga VIC 3690
Mail: PO Box 18, Huntly 3551
Call: (02) 6043 7600
Email: necma@necma.vic.gov.au
Website: www.necma.vic.gov.au

West Gippsland CMA

Visit: 16 Hotham Street, Traralgon, Victoria 3844
Mail: PO Box 1374, Traralgon, Victoria 3844
Call: 1300 094 262
Email: westgippy@wgcm.vic.gov.au
Website: www.wgcm.vic.gov.au

Wimmera CMA

Visit: 24 Darlot Street, Horsham, Victoria 3400
Mail: PO Box 479, Horsham, Victoria 3402
Call: (03) 5382 1544
Email: wcma@wcma.vic.gov.au
Website: www.wcma.vic.gov.au

For specific information about the other environmental water holders in Victoria, please contact one of the following organisations.

Murray-Darling Basin Authority

Visit: Level 4, 51 Allara Street, Canberra City, ACT 2601
Mail: GPO Box 1801, Canberra City 2061
Call: (02) 6279 0100
Email: inquiries@mdba.gov.au
Website: www.mdba.gov.au

Commonwealth Environmental Water Office

Visit: John Gorton Building,
King Edward Terrace, Parkes, ACT 2600
Mail: GPO Box 787, Canberra, ACT 2061
Call: 1800 218 478
Email: ewater@environment.gov.au
Website: www.environment.gov.au/aggregation/commonwealthenvironmental-water-office

