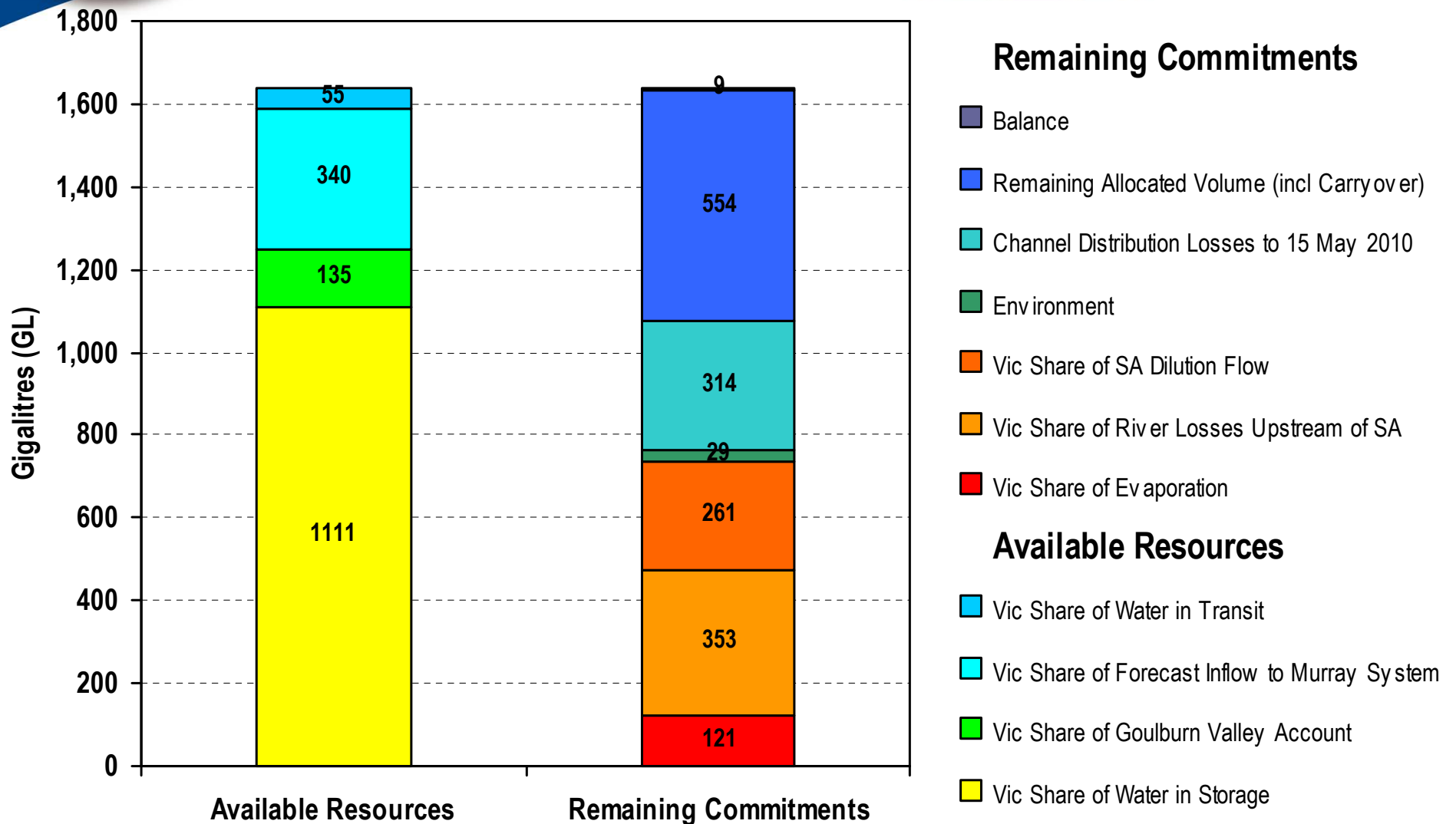




# Murray System

## Breakdown of Water in Store and Commitments

1 October 2009





# Murray System

## Water Balance Terms and Definitions

**Vic Share of Water in Storage:** The share of water in the Murray system storages – Dartmouth Dam, Lake Hume and Lake Victoria – that is owned by Victoria, excluding water that is not available to Victoria under interim water sharing arrangements.

**Vic Share of Goulburn Valley Account:** Total amount of Goulburn system water bought by Victorian Murray system users that is yet to be delivered.

**Vic Share of Forecast Inflow to Murray System:** The Victorian share of forecast inflows in the River Murray and tributaries above the storages that are yet to flow into the storages. This estimate of inflows assumes there are no further rain events for the year.

**Vic Share of Water in Transit:** The share of the water flowing in the River Murray that is assigned to Victoria, but has not reached a Murray system storage.

**Vic Share of Evaporation:** The Victorian share of the water needed to account for evaporation from storages.

**Vic Share of River Losses upstream of SA:** The Victorian share of the water needed to account for losses from the River Murray upstream of the South Australian border.

**Vic Share of SA Dilution Flow:** The Victorian share of the water needed to account for the supply of dilution water to South Australia, as required under the Murray-Darling Basin Agreement.

**Environment:** Entitlements held for the environment, including the Barmah-Millewa Forest and lower Broken Creek operation.

**Channel Distribution Losses to 15 May 2010:** Estimate of the amount of water required to operate Victorian Murray system rural water corporations' channel and pipeline delivery systems to deliver allocation to customers and urban water corporations.

**Remaining Allocated Volume (including Carryover):** The volume assigned to entitlement holders under a 29% allocation of high-reliability water shares plus the carried over resources that were allocated to entitlement holders in 2008/09, but are yet to be delivered. Carryover includes resources held by rural water customers and urban water corporations.

**Balance:** The balance that will be available when sufficient water is available to make a full 1% of high-reliability water shares to all Murray customers.

Please note that the category of **Essential Human Needs** (the volume set aside to meet essential domestic and stock needs in the urban and rural systems) has been removed because the announcement of a seasonal allocation greater than 20% of high-reliability water shares means that the supply of water for essential needs under the Murray Qualification of Rights has expired.

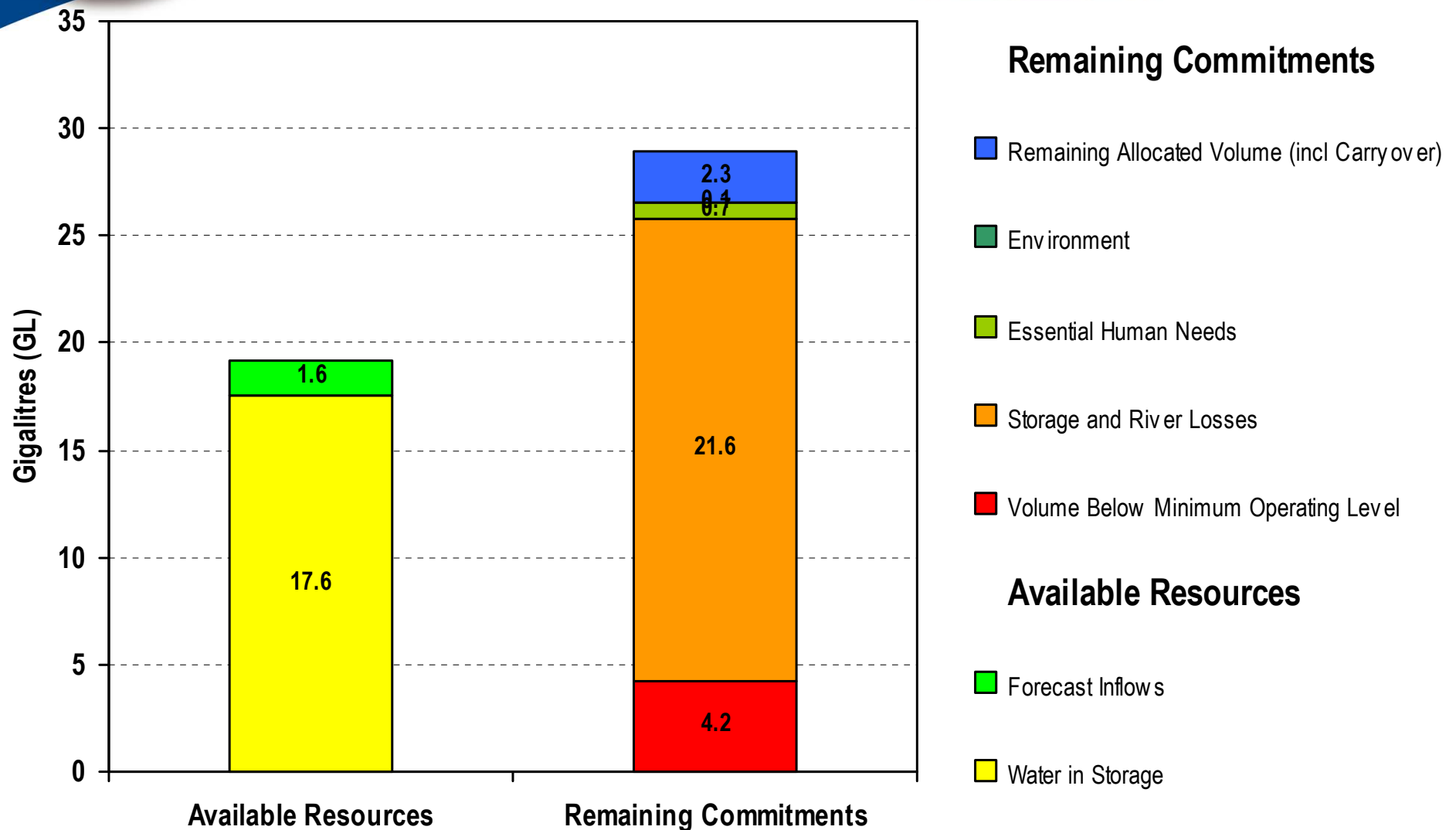
*Source: Goulburn-Murray Water*



# Broken System

Breakdown of Water in Store and Commitments

1 October 2009





# Broken System

## Water Balance Terms and Definitions

**Water in Storage:** The combined volume of water held in Lake Nillahcootie and Lake Mokoan. The level at Lake Mokoan is now at a measurable level and has now been included in the resource assessment.

**Forecast Inflows:** The volume of forecast inflows in tributaries above Lake Nillahcootie that are yet to flow into the storage, plus the volume of forecast diversions to Lake Mokoan. This estimate of inflows assumes there are no further rain events for the year.

**Volume Below Minimum Operating Level:** The volume of water that cannot be released through existing infrastructure under gravity.

**Storage and River Losses:** The volume of evaporation and other water losses from the storages and from the natural rivers, lakes and waterways that are part of the irrigation network. Also called headworks losses.

**Essential Human Needs:** The volume set aside to meet essential domestic and stock needs in the rural distribution system.

**Environment:** Entitlements held for the environment, including commitments to the Murray system obtained from water savings projects.

**Remaining Allocated Volume (including Carryover):** The volume assigned to water share holders under a 0% allocation of high-reliability water shares plus the carried over resources that were allocated to water share holders in previous seasons, but not delivered.

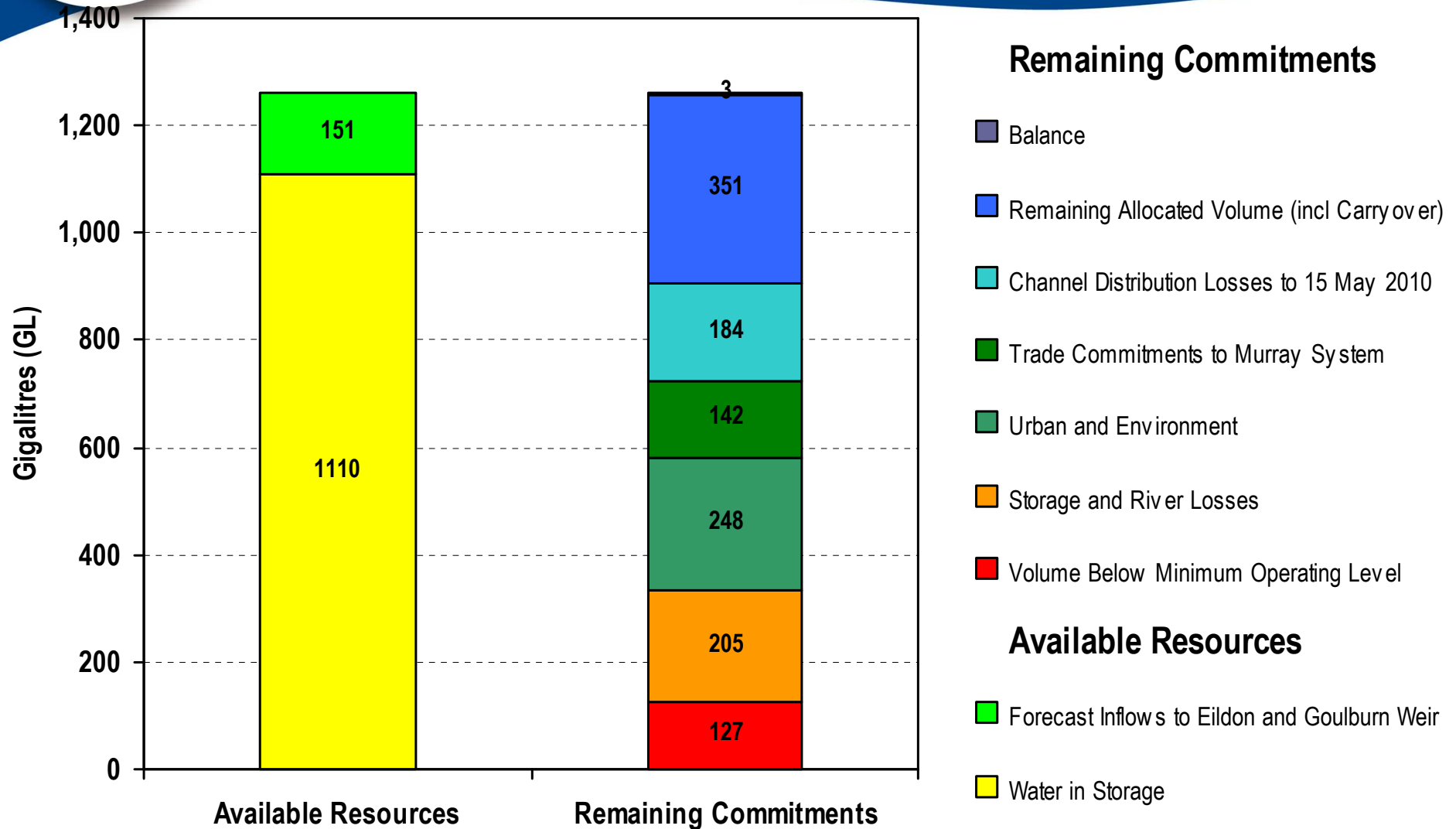
*Source: Goulburn-Murray Water*



# Goulburn System

## Breakdown of Water in Store and Commitments

1 October 2009





# Goulburn System

## Water Balance Terms and Definitions

**Water in Storage:** The volume of water held in Lake Eildon, Waranga Basin and Greens Lake.

**Forecast Inflows to Eildon and Goulburn Weir:** The volume of forecast inflows in tributaries above Lake Eildon and Goulburn Weir that are yet to flow into storage. This estimate of inflows assumes there are no further rain events for the year.

**Volume Below Minimum Operating Level:** The volume of water that cannot be released through existing infrastructure under gravity. The water remaining after pumping from Waranga Basin is included in this assessment.

**Storage and River Losses:** The volume of evaporation and other water losses from the storages and from the natural rivers, lakes and waterways that are part of the irrigation network. Also called headworks losses.

**Urban and Environment:** Entitlements held by urban water corporations including Melbourne, irrigators on the lower Broken Creek and the environment (including the water quality reserve).

**Trade Commitments to Murray System:** Total amount of Goulburn system water bought by Murray system users that is yet to be delivered and the carried over volume of Goulburn system water obtained from water savings projects that is to be delivered to the Murray instead of diverted from the Snowy hydroelectric scheme.

**Channel Distribution Losses to 15 May 2010:** Estimate of the amount of water required to operate the G-MW channel and pipeline delivery systems to deliver qualified essential human needs allocation to customers and urban water corporations.

**Remaining Allocated Volume (including Carryover):** The volume assigned to entitlement holders under a 30% allocation of high-reliability water shares plus the carried over resources that were allocated to entitlement holders in 2008/09, but are yet to be delivered. Carryover includes resources held by rural water customers.

**Balance:** The balance that will be available when sufficient water is available to make a full 1% of high-reliability water shares to all Goulburn customers.

Please note that the category of **Essential Human Needs** (the volume set aside to meet essential domestic and stock needs in the rural system) has been removed because the announcement of a seasonal allocation greater than 20% of high-reliability water shares means that the supply of water for essential needs under the Goulburn Qualification of Rights has expired.

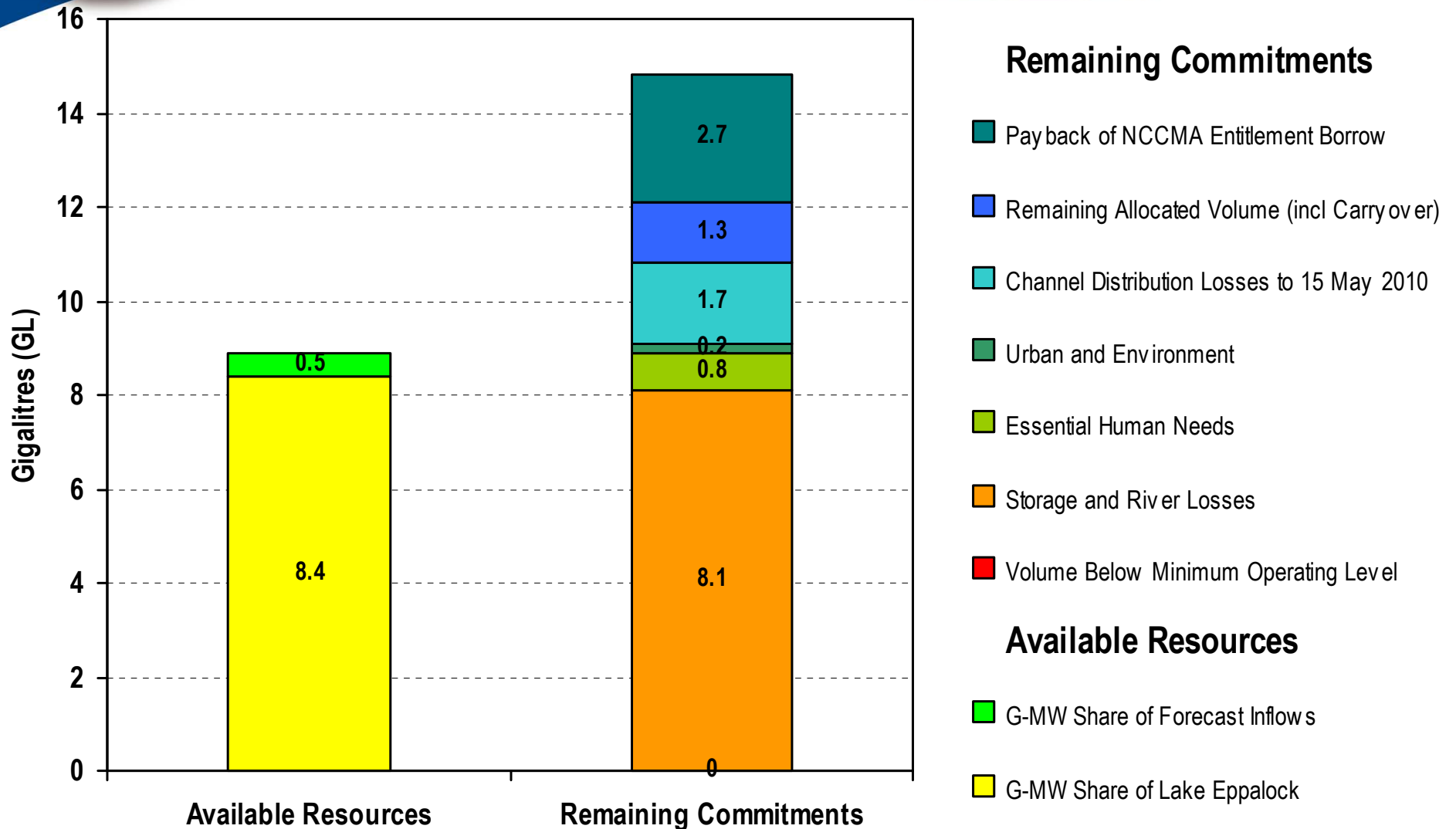
*Source: Goulburn-Murray Water*



# Campaspe System

Breakdown of Water in Store and Commitments

1 October 2009



## Remaining Commitments

- Pay back of NCCMA Entitlement Borrow
- Remaining Allocated Volume (incl Carry over)
- Channel Distribution Losses to 15 May 2010
- Urban and Environment
- Essential Human Needs
- Storage and River Losses
- Volume Below Minimum Operating Level

## Available Resources

- G-MW Share of Forecast Inflows
- G-MW Share of Lake Eppalock



# Campaspe System

## Water Balance Terms and Definitions

**G-MW Share of Lake Eppalock:** The volume of water by G-MW held in Lake Eppalock.

**G-MW Share of Forecast Inflows:** The G-MW share of the volume of forecast inflows in tributaries above Lake Eppalock that are yet to flow into storage. This estimate of inflows assumes there are no further rain events for the year.

**Volume Below Minimum Operating Level:** The volume of water that cannot be released through existing infrastructure under gravity.

**Storage and River Losses:** The volume of evaporation and other water losses from the storages and from the natural rivers, lakes and waterways that are part of the irrigation network. Also called headworks losses.

**Essential Human Needs:** The volume set aside to meet essential domestic and stock needs in the rural distribution system.

**Urban and Environment:** Entitlements held by urban water corporations and the environment.

**Channel Distribution Losses to 15 May 2010:** Estimate of the amount of water required to operate the Campaspe Irrigation District channel and pipeline delivery systems to deliver qualified essential human needs and allocation to customers.

**Remaining Allocated Volume (including Carryover):** The volume assigned to water share holders under a 0% allocation of high-reliability water shares plus the carried over resources that were allocated to water share holders in previous seasons, but not delivered.

**Payback of NCCMA Entitlement Borrow:** The volume borrowed from the environment's share of Lake Eppalock (managed by North Central Catchment Management Authority or NCCMA) by G-MW for river operations during 2008/09. The volume borrowed must be repaid before an allocation can be made.

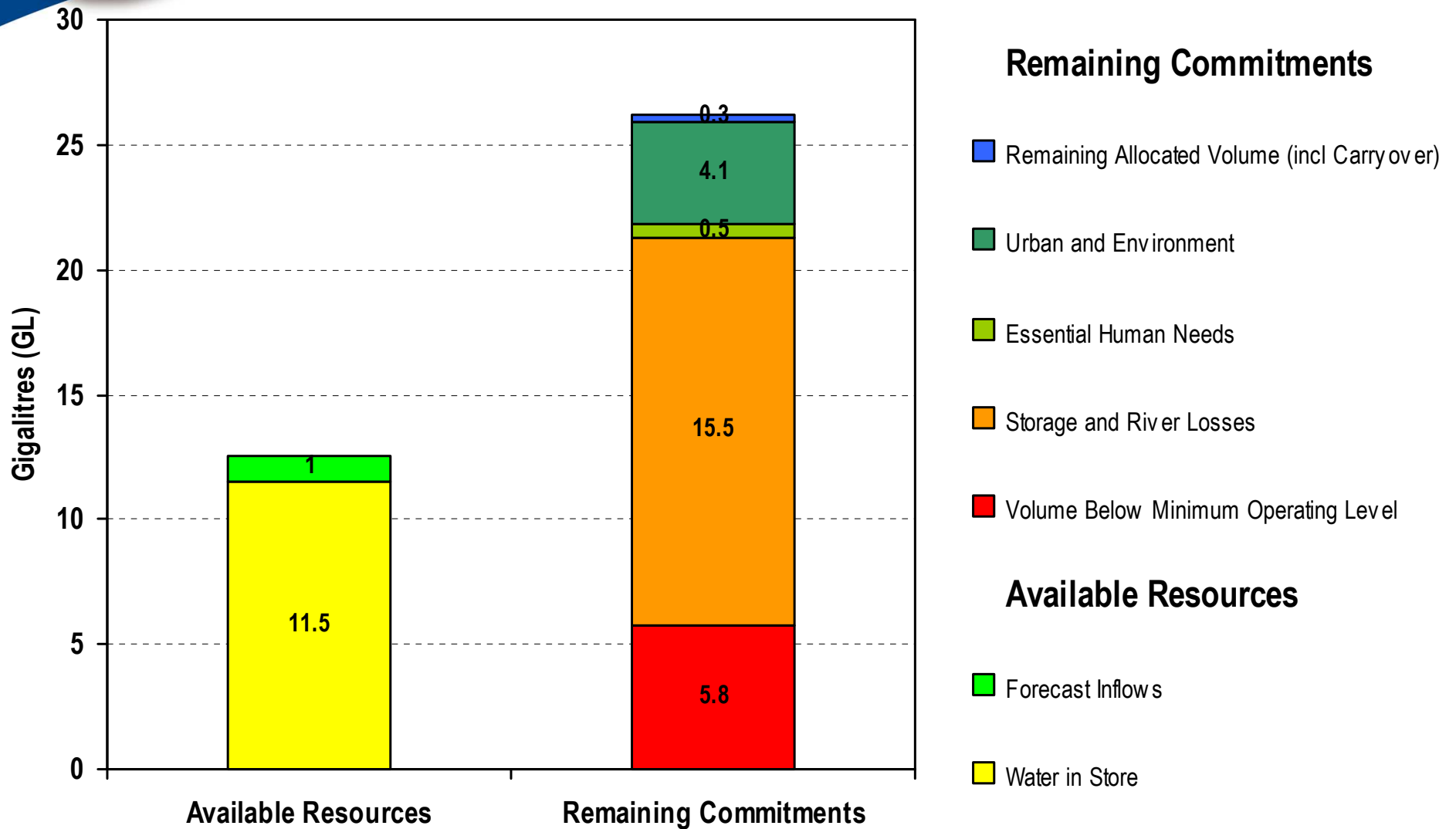
*Source: Goulburn-Murray Water*



# Loddon System

Breakdown of Water in Store and Commitments

1 October 2009





# Loddon System

## Water Balance Terms and Definitions

**Water in Storage:** The volume of water held in Cairn Curran, Tullaroop and Laanecoorie reservoirs.

**Forecast Inflows :** The volume of forecast inflows in tributaries above the three Loddon storages that are yet to flow into storage. This estimate of inflows assumes there are no further rain events for the year.

**Volume Below Minimum Operating Level:** The volume of water that cannot be released through existing infrastructure under gravity.

**Storage and River Losses:** The volume of evaporation and other water losses from the storages and from the natural rivers, lakes and waterways that are part of the irrigation network. Also called headworks losses.

**Essential Human Needs:** The volume set aside to meet essential domestic and stock needs in the rural distribution system.

**Urban and Environment:** Entitlements held by urban water corporations and the environment.

**Remaining Allocated Volume (including Carryover):** The volume assigned to water share holders under a 0% allocation of high-reliability water shares plus the carried over resources that were allocated to water share holders in previous seasons, but not delivered.

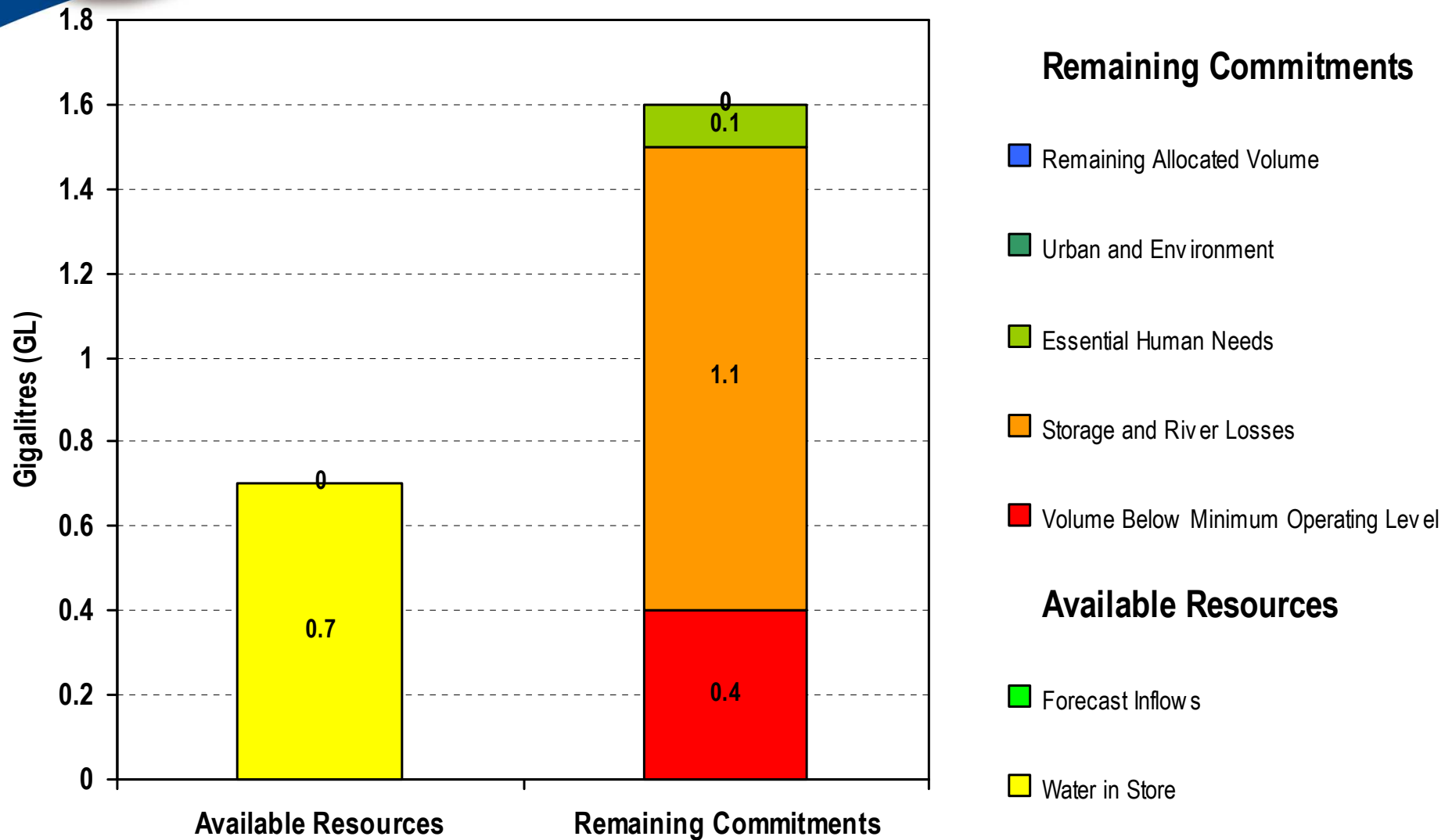
*Source: Goulburn-Murray Water*



# Bullarook System

Breakdown of Water in Store and Commitments

1 October 2009



The logo for Goulburn-Murray Water, featuring the text "GOULBURN-MURRAY WATER" in a serif font above a stylized blue wave graphic.

GOULBURN-MURRAY  
WATER



# Bullarook System

## Water Balance Terms and Definitions

**Water in Storage:** The volume of water held in Newlyn Reservoir and Hepburns Lagoon.

**Forecast Inflows :** The volume of forecast inflows in tributaries above the Bullarook storages that are yet to flow into storage. This estimate of inflows assumes there are no further rain events for the year.

**Volume Below Minimum Operating Level:** The volume of water that cannot be released through existing infrastructure under gravity.

**Storage and River Losses:** The volume of evaporation and other water losses from the storages and from the natural rivers, lakes and waterways that are part of the irrigation network. Also called headworks losses.

**Essential Human Needs:** The volume set aside to meet essential domestic and stock needs in the rural distribution system.

**Urban and Environment:** Entitlements held by urban water corporations and the environment.

**Remaining Allocated Volume:** The volume assigned to water share holders under a 0% allocation of high-reliability water shares.

*Source: Goulburn-Murray Water*