WATER RESOURCE AVAILABILITY — SOUTH WEST REGION

622. Dr D.J. Honey to the Minister for Water:

I refer to the water resources available and water drawdown in the south west region, covering the three years 2019–20 to 2021–22, and ask:

(a) What was the sustainable ground water yield for the superficial aquifers in the Perth regional area;

(b) What was the sustainable ground water yield for the superficial aquifers in the south west region outside Perth;

(c) What was the sustainable ground water yield for the deep aquifers in the Perth regional area;

(d) What was the sustainable ground water yield for the deep aquifers in the south west region outside Perth;

(e) What was the sustainable surface water yield for the south west region including Perth;

(f) What volume of water was drawn from Perth's superficial aquifer for each of those years;

(g) What volume of water was drawn from Perth's deep aquifer for each of those years;

(h) What volume of water was drawn from superficial aquifers in the south west region outside Perth for each of those years;

(i) What volume of water was drawn or flowed into dams from surface water sources in the south west region including Perth;

(j) Does the Department of Water compile, or receive from any other organisation, annual estimates on total water flows for each region, sustainable yields and usage from different sources, and if not, why not; and

(k) If the Department does have such reports, will the Minister table the last 5 annual reports on water availability, and if not, why not?

Ms S.F. McGurk replied:

Answer

(a)–(i) Sustainable yields are determined in water allocation plans prepared by the Department of Water and Environmental Regulation, which establish an annual resource allocation limit. The tables below provide the allocation limits, volume of water licensed and estimated abstraction (volume of water drawn) from the Perth and South West region superficial and deep aquifers (groundwater) and surface water for the three years 2019–20, 2020–21 and 2021–22 respectively.

2019–20

Region[i]	**Resource Type**[ii]	**Sum of allocation limits**[iii] **(GL) @ 30 June 2020**	**Volume of water licensed (GL) @ 30 June 2020**	**Estimated abstraction**[iv] **(GL)**
Perth	Superficial aquifers	335	270	288
Perth	Deep aquifers	150	149	119
Perth	Surface water	226	226	21
South West	Superficial aquifers	57	42	29
South West	Deep aquifers	151	160[v]	96
South West	Surface water	447	358	164

2020–21

Region	**Resource Type**	**Sum of allocation limits (GL) @ 30 June 2021**	**Volume of water licensed (GL) @ 30 June 2021**	**Estimated abstraction (GL)**
Perth	Superficial aquifers	334	266	311
Perth	Deep aquifers	163	163	134
Perth	Surface water	226	225	30
South West	Superficial aquifers	57	42	36

South West	Deep aquifers	151	160	94
South West	Surface water	448	361	160

2021–22

Region	**Resource Type**	**Sum of allocation limits (GL) @ 30 June 2022**	**Volume of water licensed (GL) @ 30 June 2022**	**Estimated abstraction[vi] (GL)**
Perth	Superficial aquifers	312	277	Not yet available
Perth	Deep aquifers	162	162	Not yet available
Perth	Surface water	226	226	Not yet available
South West	Superficial aquifers	57	43	Not yet available
South West	Deep aquifers	151	161	Not yet available
South West	Surface water	445	358	Not yet available

[i] Perth comprises the following water resource management areas: Canning River, Cockburn, Cockburn/Kwinana Coastal, Dandalup River System, Gnangara, Gwelup, Helena River, Jandakot, Kwinana Peel Coastal, Mirrabooka, Murray, Murray River and Tributaries, Perth, Rockingham, Serpentine, Serpentine River Catchment, South West Coastal (Coastal, Colburra Downs, Falcon, Island Point, Mandurah, Whitehills, Lake Clifton), Stakehill, Swan, Swan Coastal, Swan River and Tributaries, Wanneroo, and Yanchep management areas. South West region comprises the following water resource management areas: Blackwood, Bunbury, Busselton Coast, Busselton–Capel, Capel River, Collie, Donnelly River and Tributaries, Dwellingup, Harvey, Lower Blackwood, Middle Blackwood, Muir–Unicup, Nornalup, Preston Area, Shannon–Gardner, South West Coastal (Myalup, Wellesley, Harvey, Lake Preston, Kemerton), Upper Blackwood, Warren River and Tributaries.

[ii] 'Deep aquifers' includes the following resources: Cattamarra Coal Measures, Leederville, Lesueur Sandstone, Sue Coal Measures Yaragadee, Mullalo, Lower Collie Group, Muja, Stockton. 'Superficial aquifers' includes all Superficial, Surficial and Mirrabooka resources. Fractured Rock and saline resources are excluded.

[iii] The annual allocation limit defines how much water can be abstracted for consumptive use from a proclaimed water resource. It includes all water that can be taken under licence and estimates of water uses that are exempt from water licensing.

[iv] Estimated abstraction includes metered data and estimated abstraction for uses that are unmetered, including uses that do not require a licence such as garden bores.

[v] The Deep aquifers of the South West are shown as over-allocated with respect to the allocation limit. This is primarily due to licenced entitlements for safe dewatering of coal mining operations in the Collie Basin.

[vi] Data collection and quality assurance for Estimated abstraction in 2021–22 is not yet completed.

(j) The Department of Water and Environmental Regulation undertakes its own data collection from more than 300 streamflow gauging stations and 3000 groundwater monitoring bores throughout the state. The information collected is available online via the Department's Water Information Reporting tool.

In Western Australia, annual streamflow information is not used to determine a different sustainable yield from year to year. Instead, sustainable yields are determined in water allocation plans, which establish an annual resource allocation limit.

(k) The Department of Water and Environmental Regulation's annual reports include a summary of the total annual licensed water entitlement for Western Australia's groundwater and surface water resources. The Department's last five annual reports have previously been tabled as follows:

Reporting year	**Tabling date**	**Tabled paper number**
2017–18	9 October 2018	1890
2018–19	25 September 2019	2805
2019–20	23 September 2020	3716
2020–21	13 October 2021	704
2021–22	26 October 2022	1617