## Performance against WAMC Output Measures for 2020-21

This report details performance against the WAMC Output Measures for the 2020-21 period.

- 1. The relevant agency (The Department of Planning & Environment, the Natural Resources Access Regulator and WaterNSW (ie, the agencies that deliver water management services on behalf of WAMC) must report against these output measures for the 2020-21 period.
- 2. Provide a self-assessment of whether the agency has met the targets in the Agency column. The following table provides some guidance on how to complete this column.

Agency comment	Explanation
Targets have been met.	All targets detailed in the column 'Measures and Indicators' for the WAMC activity have been met.
Targets have been partially met.	One or more of the targets detailed in the column 'Measures and Indicators' for the WAMC activity have been met. Provide an explanation if the output measures and/or performance indicators have not met the target
Targets have not yet been met.	None of the targets detailed in the column 'Measures and Indicators' for the WAMC activity have yet been met. Provide an explanation if the output measures and/or performance indicators have not met the target.
2020-21 data is yet to be reported by WaterNSW.	Provide an explanation/ expected date when the data will be reported.
This WAMC activity does not have a target.	No target was specified for the WAMC activity.

Activity	Outputs	Measures and Indicators <sup>1</sup>	2020-21 Reported	d Data			
W01-01 Surface water	A maintained monitoring network	Output measure (OM1)	Reported by Wate	erNSW			
quantity monitoring	of hydrometric stations providing	Number of stations for water				Average	
The provision of a surface	the necessary data for surface	management charges:		Total		Visits per	
water quantity monitoring	water management.	▼ Target:		Visits	Site Count	Site	
system; including design,	-	<ul> <li>Dol Water: 430</li> </ul>	WAMC	1686	433	3.9	
	Provision of validated water data	– BRC: 29					
	from the network of surface		BRC	194	30	6.5	
	water hydrometric stations.		MDBA	484	75	6.5	
and archiving from the		Performance indicator					
networks of water monitoring		<ul> <li>Number of visits per</li> </ul>					
stations; the delivery of near		year per station:					
real time height and/or flow		<ul> <li>Target: average 5</li> </ul>					
data from all telemetered sites							
to the corporate database; and the maintenance and operation							
of surface water monitoring							
stations.							
Stations.							
W01-02 Surface water data	Surface water quantity and	Output measure (OM2)	Reported by Wate	erNSW			
		Number of surface water sites					
		subject to data management					
	published to stakeholders and	meeting specific criteria:					
1 5	the public.	▼ Target: 1,245	▼ 992				
information; including	•	5	V 002				
compilation, secure storage,							
management and publishing of							
data to customers,							
stakeholders and the general							
public.							
		Performance indicators					
		Percentage telemetered sites					
		with data available on internet					
		9am each day:					
		▼ Target: 95%	<b>▼</b> 91%				
		-					
		Percentage of Dol Water <sup>2</sup>					
		funded sites telemetered					
		▼ Target: 90%	▼ 100% (so	me sites do	not have teleme	try as it is not specified as required)	

Where timeframes for achievement of output measures or targets (formerly 'forecasts') have not been listed, the targets relate to the last year of the 2016 Determination, 2020-21 (refer IPART, *Review of prices for the Water Administration Ministerial Corporation – Final Report,* June 2016, p 194). 1

Agency Comment
Agency Comment Targets have been met.
Targets have been partially met.
WaterNSW comment:
The target of 1245 sites has not been supported by a confirmed 'Roles and Responsibilities Agreement' (RRA) schedule with DPE. A final list is expected to be confirmed with the signing of the RRA schedules in 2022.
WaterNSW comment:
The W01-02 response is calculated to best represent the data available at 9am i.e. what % of sites had current data available on the RTD at 9am.
We note that the measure is poorly defined as it fails to properly consider the multiple steps in the telemetry and water data systems process.
Common issues associated with delayed data include environmental conditions, instrument failures, communications and system level issues it is also worth noting that the % of available data fluctuates throughout the day.
We note that the 9am W01-02 & W02-03 output measure has been

<sup>2</sup> Department of Industry (DoI) – Water is now the Department of Planning, Industry and Environment (DPE)

Activity	Outputs	Measures and Indicators <sup>1</sup>	2020-21 Reported Data	Agency Comment
				revoked by IPART in its latest 2021 WAMC Determination.
V01-03 Surface water quality nonitoring	Provision of validated water quality test information.	<i>Output measure (OM3)</i> Number of tests per year:	Reported by WaterNSW	Targets have been partially met.
ne provision of a surface		▼ Target:		WaterNSW comment:
ater quality monitoring rogram; including design, ample collection, laboratory esting and analysis, test result uality assurance to accepted		<ul> <li>Dol Water: 30,120 per year</li> <li>Murray Darling Basin Authority (MDBA):</li> </ul>	<ul> <li>▼ DPE: 25,335</li> <li>▼ MDBA: 6,409</li> </ul>	Monitoring frequency reduced due flood events and COVID restriction limiting access to sites.
andards, and test result ancoding to make it available r data management and		5,144 per year - Border Rivers Commission (BRC):	▼ BRC: 4,651	
porting.		4,800 per year	▼ BRC. 4,031	
		Performance indicators Tests meeting quality standards (percentage acceptable tests/total tests): ▼ Target: 90%	▼ 100%	
		Speed of reporting of results (percentage of tests taken, processed, quality assurance approved and coded for	• 10070	
		publication within 90 days): ▼ Target: 90%	▼ 100%	
V01-04 Surface water algal nonitoring he provision of a surface vater algal monitoring rogram; including design,	Provision of algal data on the presence and extent of potentially toxic algal blooms.	Output measure (OM4) Number of sites monitored and tested for blue green algae: ▼ Target: average 73	Reported by WaterNSW ▼ Average per month: 83 sites	Targets have been met.
ample collection, laboratory nalysis, algal identification nd enumeration to accepted andards, and result encoding r provision to regional pordinating committees.		sites per month (Dol Water and MDBA). Increased frequency when conditions require.		
		Performance indicator Percentage of samples collected and analysed according to current standards and within agreed timeframe: ▼ Target: 95%	▼ 100%	
V01-05 Surface water cological condition nonitoring The provision of a surface	Provision of the information for the six components of the River Condition Index:	Output measure (OM5) River condition index updated: ▼ Target: an updated report completed	Reported by DPE <u>Output measure</u> There are 6 components of the RCI. ▼ Hydrology is a component of the HEVAE and is 80% complete.	Targets have been met. Target has been met. ▼ RCI was 100% updated in 2016 and is available on the
ater ecological condition nonitoring system to assess ne health of water sources; ncluding design and	<ul> <li>✓ Geomorphology</li> <li>✓ Riparian</li> <li>✓ Biota</li> <li>✓ Disturbance</li> </ul>	each year, outlining the attributes updated and the proportion of the state/water	<ul> <li>Geomorphology is a component of River Styles and is complete although in continual improvement cycle.</li> <li>Riparian vegetation spatial layers are being converted into the RCI format currently.</li> <li>Biota layer is being developed.</li> </ul>	DPE website. It is currently undergoing revision and improvement for a update scheduled for completion in
oplication based on the River ondition Index for rivers, flood ains and wetlands.	▼ Water quality.	sources covered.	<ul> <li>Disturbance index is complete as is a component of River Styles.</li> <li>Water Quality is a new layer and requires development of a method for generalising site-specific data to river reach regions. This method is in development and refinement. Expected completion March 2022.</li> </ul>	<ul> <li>2022.</li> <li>▼ Annual reports specific to RCI have not been produced. HEVAE and Riv Styles are frequently updated and reported on ti</li> </ul>

Activity	Outputs	Measures and Indicators <sup>1</sup>	2020-21 Reported Data	Agency
			Two catchment areas are being fast tracked to test methods and provide case examples. These are expected to be complete April 2022. 100% completion of the RCI update in programmed for December 2022.	•
		<ul> <li>Performance indicator</li> <li>Percentage of the state for</li> <li>which the River Condition</li> <li>Index (RCI) is completed in</li> <li>current year:</li> <li>Target:</li> <li>10% completed each</li> <li>year.</li> <li>100% of all RCI</li> <li>completed for the state</li> <li>by the end of 10 years.</li> </ul>	Performance indicator HEVAE is updated and complete for 80% of the NSW WSP regions.	Target ▼
W02-01 Groundwater	A maintained network of	Output measure (OM6)	Reported by WaterNSW	Target
quantity monitoring	monitoring bores providing the	The number of pipes from		-
level, pressure and flow	data necessary for groundwater management.	which data are collected (in the last 2 years):	SITE COUNT 4790 BASS 3775 79%	WaterN
monitoring system; including	-	▼ Target: 4,800	PASS 3775 79% FAIL 1015 21%	• The
	Provision of validated quantity and other physical resource data			been su 'Roles a
assurance, archiving, and information provision; and the	from groundwater monitoring bores.			Agreem DPE. A
maintenance and operation of	50103.			confirm
groundwater monitoring bores.				schedu
				• Mor
				to flood restricti
		Performance indicator Percentage of pipes monitored according to their scheduled frequency: 90%	▼ 79%	
W02-02 Groundwater quality monitoring The provision of validated groundwater quality monitoring	The provision of validated groundwater quality information.	<i>Output measure (OM7)</i> The number of pipes from which water quality data are collected (in the last 2 years):	Reported by WaterNSW	Targets

Agency Comment         vide case examples. These are late in programmed for       DPE website. In addition, Water Quality annual reports (SWAMP reports) are produced at the end of the water year.         ▼ Progress on the 2022 RCI update is behind schedule due to the urgency of completion of coastal Risk Assessments to complete WSP revisions, particularly the changing time frames required for Sydney Metro Plans. These timeframes are outside the control of Water Science.         Target has been met.       ▼ Three areas on the coast remain to be completed in line with the project deadlines for Risk Assessments required for WSP remakes. These are Clarence, Nambucca and Macleay. These will be completed by March 2022.         ▼ The updated HEVAE layers are being uploaded to the DPE website and are expected to be available from February 2022. The three areas not yet complete will have the previous macro style risk analysis reported for the interim on the DPE website.         Targets have not been met.       WaterNSW Comment:         • The target of 4800 pipes has not been supported by a confirmed 'Roles and Responsibilities Agreement' (RRA) schedule with DPE. A final list is expected to be confirmed with the signing of the RRA schedules in 2022.         • Monitoring frequency reduced due to flood events and COVID restrictions limiting access to sites.	
<ul> <li>date in programmed for</li> <li>Water Quality annual reports (SWAMP reports) are produced at the end of the water year.</li> <li>Progress on the 2022 RCI update is behind schedule due to the urgency of completion of coastal Risk Assessments to complete WSP revisions, particularly the changing time frames required for Sydney Metro Plans. These timeframes are outside the control of Water Science.</li> <li>Target has been met.</li> <li>Three areas on the coast remain to be completed in line with the project deadlines for Risk Assessments required for WSP remakes. These are Clarence, Nambucca and Macleay. These will be completed by March 2022.</li> <li>The updated HEVAE layers are being uploaded to the DPE website and are expected to be available from February 2022. The three areas not yet complete will have the previous macro style risk analysis reported for the interim on the DPE website.</li> <li>Targets have not been met.</li> <li>WaterNSW Comment:</li> <li>The target of 4800 pipes has not been supported by a confirmed 'Roles and Responsibilities Agreement' (RRA) schedule with DPE. A final list is expected to be confirmed with the signing of the RRA schedules in 2022.</li> <li>Monitoring frequency reduced due to flood events and COVID restrictions limiting access to sites.</li> </ul>	Agency Comment
<ul> <li>DPE website and are expected to be available from February 2022. The three areas not yet complete will have the previous macro style risk analysis reported for the interim on the DPE website.</li> <li>Targets have not been met.</li> <li>WaterNSW Comment:         <ul> <li>The target of 4800 pipes has not been supported by a confirmed 'Roles and Responsibilities Agreement' (RRA) schedule with DPE. A final list is expected to be confirmed with the signing of the RRA schedules in 2022.</li> <li>Monitoring frequency reduced due to flood events and COVID restrictions limiting access to sites.</li> </ul> </li> </ul>	<ul> <li>DPE website. In addition, Water Quality annual reports (SWAMP reports) are produced at the end of the water year.</li> <li>Progress on the 2022 RCI update is behind schedule due to the urgency of completion of coastal Risk Assessments to complete WSP revisions, particularly the changing time frames required for Sydney Metro Plans. These timeframes are outside the control of Water Science.</li> <li>Target has been met.</li> <li>Three areas on the coast remain to be completed in line with the project deadlines for Risk Assessments required for WSP remakes. These are Clarence, Nambucca and Macleay. These will be completed by March 2022.</li> <li>The updated HEVAE layers</li> </ul>
<ul> <li>Targets have not been met.</li> <li>WaterNSW Comment: <ul> <li>The target of 4800 pipes has not been supported by a confirmed 'Roles and Responsibilities Agreement' (RRA) schedule with DPE. A final list is expected to be confirmed with the signing of the RRA schedules in 2022.</li> <li>Monitoring frequency reduced due to flood events and COVID restrictions limiting access to sites.</li> </ul> </li> </ul>	are being uploaded to the DPE website and are expected to be available from February 2022. The three areas not yet complete will have the previous macro style risk analysis reported for the interim on the DPE
<ul> <li>WaterNSW Comment:</li> <li>The target of 4800 pipes has not been supported by a confirmed 'Roles and Responsibilities Agreement' (RRA) schedule with DPE. A final list is expected to be confirmed with the signing of the RRA schedules in 2022.</li> <li>Monitoring frequency reduced due to flood events and COVID restrictions limiting access to sites.</li> </ul>	
Targets have been met.	<ul> <li>WaterNSW Comment:</li> <li>The target of 4800 pipes has not been supported by a confirmed 'Roles and Responsibilities Agreement' (RRA) schedule with DPE. A final list is expected to be confirmed with the signing of the RRA schedules in 2022.</li> <li>Monitoring frequency reduced due to flood events and COVID</li> </ul>
	Targets have been met.

Activity	Outputs	Measures and Indicators <sup>1</sup>	2020-21 Reported Data
program including design, sample collection, laboratory testing and analysis, test result quality assurance to accepted standards, and test result encoding to make it available for data management and reporting.		<ul> <li>▼ Target: 495</li> <li>Performance indicator</li> <li>Percentage of pipes</li> <li>monitored according to their</li> <li>scheduled frequency:</li> <li>▼ Target: 90%</li> </ul>	<ul><li>▼ 870</li><li>▼ 98%</li></ul>
W02-03 Groundwater data management and reporting The data management and reporting of groundwater quantity and quality information; including compilation, secure storage, management and publishing of data to customers, stakeholders and the general public.	Groundwater quantity and quality information compiled, securely stored, managed and published to stakeholders and general public.	Output measure (OM8) Number of active pipes subject to data management: ▼ Target: 5,000	Reported by WaterNSW ▼ 4594
		Performance indicator Percentage of active sites subject to data management: ▼ Target: 98%	▼ 95.9%
W03-01 Water take data collection The electronic and manual collection, transmission and initial recording of water take data from licence holders for unregulated and groundwater sources; and the operation and maintenance of government owned meter and telemetry facilities.	Government owned meters operated and maintained. Volume of water take is collected.	Output measure (OM9) Number of government owned andmaintained meters: Target: 1,200 – Unregulated river: 600 – Groundwater: 600 Number of sites with agency water take reading/ assessments charged: Target: 3,300 – Unregulated river: 200 – Groundwater: 3,100 Performance indicator Percentage government owned meters operational: ▼ Target: 95%	Reported by WaterNSW         Number of government owned and maintained meters:         ✓       Unregulated river: actual 930         ✓       Groundwater: actual 930         ✓       Groundwater: actual 585         Number of sites with agency water take reading/ assessments charged:       ✓         ✓       Unregulated river: actual 37         ✓       Groundwater: actual 218         NOTE: This is much lower than 19-20 due to COVID restrictions on travel, etc.         Noting this target and the metering fleet were transferred from DPI to WaterNSW in 2016, no addit assets have been added since that date.         There are 930 meters on unregulated streams. 98 are part of the Southern Catchment and 832 are Hawkesbury/Nepean system (H/N System). The H/N System incorporates Bega and Bemboka vall         The 98 unregulated meters in the Southern catchment are essentially operational. 550 of the 832 r form part of the H/N system have been conditioned assessed. 369/550 have been identified as nee replacing, requiring some type of maintenance or their condition is unknown. The remaining 282 m scheduled to have their conditions assessed by 2023. A further inspection of all meters is planned the work required to ensure all meters are deemed compliant by the agreed compliance dates und water market reforms.         There are 585 groundwater meters which are predominantly located in the Southern Catchment (i. Darling, Murray and Murrumbidgee Rivers). These meters are managed by Comdain under a mai agreement. Accordingly, all of these meters would be operational (noting that some would be unde rectification and or correction as per the m

Comment
have not been met.
SW Comment:
es has not been supported firmed 'Roles and ibilities Agreement' (RRA) with DPE. A final list is to be confirmed with the f the RRA schedules in
W comment:
ng frequency reduced due to ents and COVID restrictions ccess to sites.
have been partially met.
W comment:
that the W03-01 and W03- t measure has been led by IPART (2021 WAMC ation) and is no longer in the context of the ntation of the Government's n metering reforms.

W03-02 Water take data		Measures and Indicators <sup>1</sup>	2020-21 Repo					
	Water take measurement	Output measure (OM10)	Reported by WaterNSW					
management and reporting	information quality assured,	Issued entitlement metered:			nent based on th	ne 2020-21 wate	er years billing reco	nciliatio
The data management and	compiled, managed and made	▼ Target: 3,495,000						
reporting of water take for	available to stakeholders.	- Unregulated river:	Unregulated: 2	2,248,724 MLs	6			
unregulated and groundwater sources including compilation,		2,017,000 shares						
secure storage, management		<ul> <li>Groundwater: 1,478,000 shares</li> </ul>	Groundwater:	1 341 170 MI	\$			
and publishing of data to		The number of licence holders	Croanawator.	1,011,170 ML	0			
authorised parties.		switching from a 1-part to a 2-						
		part tariff each year (and the						
		number of licence holder in						
		total, subject to each tariff						
		type), by water source.						
		Performance indicator	Percentage of	issued entitle	ment metered:			
		Percentage of issued						
		entitlement metered:						
		▼ Target: 70%		68.6%	000/			
		- Unregulated river: 65%		nregulated rive roundwater: 6				
		<ul> <li>Groundwater: 78%</li> </ul>	o G	roundwater. o	070			
			The above is b	based on the M	Aeter billing repo	ort out of Water	Accounting System	with a
							overnment owned n	
			l ables below	left are the to	tal number of li	censes that rec	eived the 2-part ta ey and based on	roporte
			performance i	ndicator is bas	sed on the total	entitlement that	was billed under the	he two
							number of custome	
			WaterNSW.		· · · ·	-		
			Unregulated	river	1			
			Valley	2020-21	2019-20	2018-19	2017-18	
			Border	39	47	55	88	
			Gwydir	20	16	25	59	
			Namoi	66	45	52	91	
			Peel	20	15	21	58	
			Lachlan	39	37	45	120	
			Macquarie	143	120	164	337	
			Far West	100	93	69	110	
			Murray	164	70	79	110	
				92	99	140	279	
			Murrumbidgee					
			North Coast	353	353	372	622	
			Hunter	129	111	158	488	
				771	790	805	1065	
			South Coast		100	000	1000	

	Agency Comment
	Targets have been partially met.
	<b>o</b> 1 <i>y</i>
	WaterNSW comment:
	We note that the W03-01 and W03-
	02 output measure has been
	superseded by IPART (2021 WAMC
	Determination) and is no longer
	relevant in the context of the
	implementation of the Government's
	non-urban metering reforms.
	non-uban metering reforms.
meters and	
1 water year	
n WAS. The	
This is a little	
usage data to	
U	

Activity	Outputs	Measures and Indicators <sup>1</sup>	2020-21 Repo				
			Groundwater				
			Valley	2020-21	2019-20	2018-19	2017-18
			Border/Gwydir /Namoi/Peel	796	922	918	977
			Lachlan	365	380	373	353
			Macquarie	345	347	365	343
			Far West	7	11	15	9
			Murray	423	497	495	463
			Murrumbidgee	559	548	502	485
			North Coast	122	35	53	148
			Hunter	7	125	167	237
			South Coast	215	43	96	166
			Total	2906	2908	2984	3181
The development, upgrade and application of surface water esource management models, or use in water planning and to issess performance in terms of tatutory requirements, neterstate agreements, regional vater supply optimisation and hird party impacts on NSW takeholders.	conceptualisation and structure, processes, calibration, data sources for stakeholder information. Long-term extraction limits. Reliability and sequencing of water take. Reliability and sequencing of water availability for entitlement types. Time series and statistical analysis of river flows and floodplain/wetland watering. On-farm water management. Daily stream salinity. Modelling to support water planning at a regional scale, including hydrologic/economic optimisation models for regional water strategies and metro water planning.	annually: ▼ Target: 26 / 2,800 Performance indicators The percentage of surface water share component in NSW covered by models subject to annual assessments: ▼ Target: 95% - Regulated river: 100% - Unregulated river: 50%	programs, and Performance The percentage assessments Current: ▼ Regu ▼ unreg	I stochastic cli Indicators ge of surface v lated River: 10 ulated river :8	mate analysis, r vater share com 00%	nore than 10,00	lel software. With 0 model runs will / covered by mod
W04-02 Groundwater modelling The development and upgrade and use of groundwater resource water sharing and management applications, and for resource impact and balance assessments.	Regional groundwater models for groundwater sources covered by water management plans that are capable of providing: Long-term sustainable extraction limits. Details of aquifer interference. Local water table details. Water balance details. Technical assessment of development proposals.		<ul> <li>DPE</li> <li>Number of the constraints</li> <li>Performance</li> <li>Percentage of the constraints</li> </ul>	ure dels/major aq Water has a lib per of runs tha thousands of indicator	t produce usable runs done to pre oundwater share	ndwater models e results for plar epare the model	. Of these 13 are nning purposes is for the final anal pject to modelling

	Agency Comment
	Agency comment
various en.	Targets have been met. Target has been met. New models have been built in Source. Additional models built in coastal catchments.
l	Target has been met.
	Targets have been met
aintained. However,	Targets have been met. Target has been met. 8 Models were updated, and additional work has been performed to improve models.
y:	<b>Target has been met.</b> Achieved 50% and updated 8 models with an additional year of climate and hydrologic data. 4 models were subjected to performance review and passed as they remain calibrated.

Activity	Outputs	Measures and Indicators <sup>1</sup>	2020-21 Reported Data	Agency Comment
<b>V04-03 Water resource</b> <b>ccounting</b> The development and update f water resource accounts and iformation on NSW water ources, for use by external takeholders, and for internal vater planning, management nd evaluation processes.	Miscellaneous analysis and reporting. → Target: - 17 valleys - 17 analysis reports - 20 miscellaneous studies <i>Performance indicators</i> Percentage of entitlement by		Reported by DPE         Output measure         The following were produced in 2020-21:         ▼       9 General Purpose Water Accounting Reports covering 11 regulated water sources.         ▼       Maintenance of environmental water register         ▼       Maintenance of online water information dashboards (including water trading, usage, allocations, GW compliance)         ▼       20 miscellaneous analysis reports/accounting project support         ▼       API support for water insights information platform         Performance indicator         Percentage of entitlement by water type for which detailed water accounting information/reports is provided	Targets have been partially met. Target has been partially met. Target has changed. Measures amended for 2021/22 reporting period.
		water type covered by the water accounting reports: ▼ Target: - Regulated river: 100% - Unregulated river: 60% - Groundwater: 95%	<ul> <li>▼ Regulated river: 100%</li> <li>▼ Unregulated river: 100%</li> <li>▼ Groundwater: 100%</li> </ul>	<b>T</b> error to be a second to the second
V05-01 Systems operation nd water availability	Implementation procedures and systems.	Output measure (OM14)	Reported by DPE Output measure	Targets have been partially met.
nanagement The preparation and mplementation of the procedures and systems equired to deliver the provisions of water	Water availability determinations. WaterNSW operations compliance monitoring and annual reporting. Audit of Water Sharing Plan	Annual compliance review on WaterNSW work approval conditions.	<ul> <li>Annual compliance review on WaterNSW work approval conditions:</li> <li>✓ Annual compliance review underway</li> <li>✓ Each year, as a condition of their work approvals, WaterNSW submit Annual Compliance Reports for review to NRAR.</li> <li>✓ DPE Water provides advice to NRAR regarding the compliance reports and whether the conditions of the work approvals are being met.</li> </ul>	Target has been met.
nanagement plans; and operational oversight to ensure blan compliance, the available vater determinations and the assessment of compliance with ong term extraction limits.	operations.	<ul> <li>Available Water</li> <li>Determinations (AWD) issued:</li> <li>▼ Target:</li> <li>Regulated river: at least monthly AWD for all licence categories for all water sources</li> <li>Unregulated river and groundwater: annual AWD for each water source</li> </ul>	<ul> <li>Available Water Determinations (AWD) issued:</li> <li>DPE Water issued water allocations to all regulated river, groundwater and unregulated river licence categories on 1 July 2020.</li> <li>DPE Water provided a spreadsheet to WaterNSW of allocation determinations to allow automated upload of 1 July allocations to its accounting system.</li> <li>Where a full allocation was not possible, conditions were monitored, and allocations incremented by DPE Water as soon as water became available during the year.</li> <li>Over 1,600 allocations were determined in 2020-21 (most on 1 July).</li> <li>Water availability outlooks were provided in the NSW Murray and Murrumbidgee valleys to assist water users to plan their seasons.</li> <li>All water allocations were determined in accordance with the rules in respective water sharing plans.</li> </ul>	Target has been met.
		Performance indicator Annual compliance review on WaterNSW submitted within 3 months of receiving input data from Dol Water.	Performance indicator ▼ The annual compliance data and reviews are received by NRAR in two parts: WaterNSW Metro and WaterNSW Rural. Both the 2020-21 WaterNSW Metro data and the WaterNSW Rural have been received by NRAR and are currently being reviewed.	Target has not been met.
		Timeliness of AWDs: ▼ Target: 100%	<ul> <li>Timeliness of AWDs:</li> <li>▼ 266 out of 272 AWDs issue within time (97%) in 2020/21.</li> <li>▼ Balance issued within 2 days.</li> <li>95% of AWD were issued within the timeframe.</li> </ul>	Target has not been met
			For Regulated AWDs on some occasions (such as delayed access to data) AWDs are issued 1-2 days later than committed. In all but extreme seasons Unregulated and GW will only get a single allocation on 1 July. DPE consider this target met.	
			Additional information	

Activity	Outputs	Measures and Indicators <sup>1</sup>	2020-21 Reported Data
			In 2020/21 DPE Water established a new Evaluation and Reporting team and began development improved Theme based Implementation Program for NSW water sharing plans. DPE Water will tran new Systems into Business as usual in 2021/22.
W05-02 Blue-green algae management The provision of an algal risk management system; including oversight, coordination and training, the issue of algal alerts and the development of algal risk management plans.	Algal risk management framework for fresh and marine waters managed appropriately. Issue of algal alerts as required, provision of regular updates to stakeholders and maintenance of the algal website and information line.		<b>Reported by WaterNSW</b> A review of current risk management plans is currently underway for all regions. In 2021 stakeholder meetings, stakeholders were given the opportunity for input into the documents. Algal management remain in line with the NHMRC 2008 Guidelines.
		Performance indicator Percentage of reports meeting weekly timeframe to regional algal coordinating committees and state algal coordinator of alert levels based on algal data: ▼ Target: 100%	100% of routine updates were provided to stakeholders for each region. Weekly reporting was carri
		Actions implemented in accordance with algal risk management plan and guidelines: ▼ Target: 100%	All actions were completed in accordance with algal risk management plans. Of these 99.1% were within set timeframes from results received. For 2020-21 there were 77 red alerts.
W05-03 Environmental water management The development and collaborative governance of environmental flow strategies and assessments; and the use of environmental water to achieve environmental outcomes.	<ul> <li>Collaborative management of planned environmental water in regulated and unregulated rivers.</li> <li>Collaborative management of adaptive and held environmental water in regulated rivers.</li> <li>Measurement of the outcomes of environmental water delivery (in selected valley(s).</li> <li>Snowy River and Murray River increased flaver</li> </ul>	<ul> <li>Output measure (OM16)</li> <li>▼ Delivery of Snowy and Snowy Mountain River increased flows.</li> <li>▼ Conditions on major dam work approvals to implement environmental watering plans and to mitigate cold water pollution impacts on receiving waters.</li> <li>▼ Monitor and evaluate water resource plans to determine environmental outcomes.</li> </ul>	Reported by DPE         Output measure         ▼       Input provided to 5 Environmental Water Advisory Groups (EWAG) per year.         ▼       Report on Snowy Licence Review implementation published on DPE website.         ▼       Annual report on Prerequisite Policy Measures (PPM) implementation published on DPE website.         ▼       Annual report on Prerequisite Policy Measures (PPM) implementation published on DPE website.         ▼       Annual progress report published on the Environmental Water Hub.
	flows. ▼ Cold Water Pollution (CWP) management and science development.	<ul> <li>Performance indicator</li> <li>▼ Percentage of occasions that Snowy and Snowy Mountain River daily flow target achieved: 98% of occasions.</li> </ul>	<ul> <li>Performance Indicator</li> <li>✓ Snowy River flow from 2019-20 is reported by DPE Environment Energy and Science (EES Water Operations Report. Data on Snowy River daily release targets for 2020-21 is available Snowy Hydro website under the 'Reports' heading.</li> <li>✓ Snowy River and Snowy Mountain River Increased Flows (SRIF, SMRIF) successfully delive flow targets met above 98% of the time. There were three consecutive days were the where release targets were outside the daily target by more than the 20% tolerance.</li> </ul>
W05-04 Water plan performance assessment and evaluation	<ul> <li>Performance and assessment strategy document.</li> </ul>	<i>Output measure (OM17)</i> Number of valleys being assessed under the	Reported by DPE <u>Output measure</u> Number of valleys being assessed under the performance and assessment strategy:

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	Targets have been partially met.
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Activity	Outputs	Measures and Indicators <sup>1</sup>	2020-21 Reported Data
The assessment, audit and	<ul> <li>Identification of key</li> </ul>	performance and assessment	
evaluation of the water		strategy:	
management plans'	to assessment of plan	▼ Target: 24	12 of the 16 WSP Valleys (75%) had MER activities conducted within them in this water year
appropriateness, efficiency and			
effectiveness in achieving	followed by an		
economic, social and	integrated research		
environmental objectives.	program to resolve the		
	knowledge gap.	Number of plan audits	▼ The Natural Resources Commission finalised 22 S44 audits (5 yearly) in 2020/21.
	<ul> <li>Publication of ecosystem response</li> </ul>	completed (5 yearly): ▼ Target: 32	
	conceptual models and	♦ Target. 52	
	preliminary reports that		
	describe ecology/flow		
	management outcomes		
	and provide adequate		
	advice.		
	<ul> <li>Assessment of water</li> </ul>		
	plan amendment	Number of plan evaluations	
	provisions.	completed:	
	<ul> <li>Outputs – evaluation.</li> </ul>	▼ Target: 17	▼ The Natural Resources Commission finalised three S43A water sharing plan reviews (end of
	<ul> <li>Assessment of level of</li> </ul>		DPE Water finalised 11 S43 floodplain management plan reviews
	plan achievement of:		
	<ul> <li>Economic objectives</li> </ul>		
	<ul> <li>Environmental objectives</li> </ul>	Performance indicators	Performance indicators
	<ul> <li>Social/cultural objectives</li> </ul>	Percentage of plans	Percentage of plans incorporated into ecological performance and assessment programs:
	<ul> <li>Audit and assessment</li> </ul>	incorporated into ecological	
	of the level of	performance and assessment	
	implementation of	programs:	• Current for 20/21, 71% of MCD areas had MCD activities conducted within the area in the r
	provisions in plans. ▼ Each WSP audited	▼ Target: 100%	Current for 20/21: 71% of WSP areas had MER activities conducted within the area in the p months
	every 5 years to		months.
	determine if its	Percentage of plans audited	
	provisions are being	within statutory requirement:	Percentage of plans audited within statutory requirement:
	actioned.	▼ Target: 100%	▼ Current for 2020-21: - n/a
	<ul> <li>Completion of</li> </ul>	3	
	evaluation reports for		
	the WSPs as they		
	expire.		
		Percentage plans evaluated	Percentage plans evaluated that have come to term:
		that have come to term:	▼ Current for 2020-21: - n/a
		Target: 100%	

	Agency Comment
/ear.	<ul> <li>Number of valleys being assessed under the performance and assessment strategy:</li> <li>▼ Target has been met Target was met in 2019-20. Target is no longer applicable (see additional information below)</li> <li>Number of plan audits completed (5 yearly):</li> <li>▼ Target has been met Target was met in 2019-20. This output measure no longer applies as DPE Water no longer has responsibility for S44 audits of water management plans.</li> </ul>
d of term),	Number of plan audits completed (5 yearly): Target has been met Target was met in 2019-20.
	Percentage of plans incorporated into ecological performance and assessment programs:
e past 12	▼ Target has not been met: the target no longer applicable.
	<ul> <li>Percentage of plans audited within statutory requirement:</li> <li>▼ Target has not been met: the target is no longer applicable as the Natural Resources Commission (NRC) is now responsible for Audits of Floodplain Management and Water Sharing Plans.</li> <li>▼ DPE Water coordinated and provided information relevant for S44 Audit requirements to the NRC within requested timeframes.</li> </ul>
	Percentage plans evaluated that have come to term: ▼ Target has not been met: the target is no longer applicable as NRC is now responsible for S43A reviews of Water Sharing Plans.

Activity	Outputs	Measures and Indicators <sup>1</sup>	2020-21 Reported Data	Α
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W06-01 Water plan development (coastal) The development, review, amendment, and extension or replacement of water management plans, and the consultation activities associated with developing these plans for the coastal water sources.	<ul> <li>WSPs completed for all non-MDB water sources.</li> <li>Implementation of the WSP ecosystem performance and assessment strategy.</li> <li>Review and remake or extension of each WSP as it expires.</li> </ul>	<ul> <li>Output measure (OM18)</li> <li>▼ 5 WSPs will be reviewed and replaced/extended.</li> <li>▼ 7 WSPs will be reviewed.</li> <li>▼ 1 WSP will be reviewed and merged into an existing WSP.</li> </ul>		T Vre Vre

	Agency Comment
	<ul> <li>DPE Water coordinated and provided information relevant for S43A Audit requirements to the NRC within requested timeframes.</li> <li>DPE Water retained responsibility for S43 reviews of Floodplain Management plans to be carried out within the fifth year after the plan was made. 10 southern and one northern Floodplain management plans were reviewed in 2020-21</li> </ul>
	Additional information In 2020/21 DPE Water established a new Evaluation and Reporting team and began development of an improved Monitoring Evaluation Reporting (MER) and Improvement System for NSW water sharing plans. DPE Water will transition the new Systems into Business as usual in 2021/22.
	DPE no longer has ecological performance and assessment programs. Data provided is relevant to MER activities within WSP areas. Inland WSP areas have extensive MER programs related to MDB reporting requirements. Activities in coastal WSP need further development and resourcing. <b>Targets have been partially met.</b>
er to undertake plan MR GW, Bega) in 2020-21,	WSPs reviewed and replaced/extended: ▼ Target has been met. All plans extended for replacement in required timeframes for 2020-21. Cumulative target of 5 exceeded.
7 plans above, 14 plans	WSPs reviewed: In 2020-21 there were 6 WSPs in progressive levels of development. DPE consider plans submitted to Minister for approval satisfies this target. ▼ Target has not been met. 2 WSP submitted to Minister in 2019-20 and 3 submitted cumulatively.
	WSPs reviewed and merged into an existing WSP:

Activity	Outputs	Measures and Indicators <sup>1</sup>	2020-21 Reported Data
		Performance indicator Cumulative percentage of forecast WSPs reviewed, replaced/extended or merged: ▼ Target: 100%	Performance indicators         Final NRC review report and approval by Minister for extension of plan to undertake plan replacement: $V = 100\%$ DPE Internal rule development: $V = 100\%$ Public exhibition: $V = 30\%$ Submission to Minister for approval to commence 2 plans: $V = \%$ Commencement of plans: $V = 100\%$
W06-02 Water plan development (inland) The development, review, amendment, and extension or replacement of water management plans; the development of additional planning instruments to comply with the Commonwealth Water Act; and the consultation activities associated with developing these plans for the inland water sources.	<ul> <li>Water Resource Plans development for MDB water sources.</li> <li>Implementation of the WSP Ecosystem Performance and Assessment Strategy.</li> <li>Each WSP audited every 5 years to determine its provisions are being actioned.</li> <li>Completion of evaluation reports for</li> </ul>	<ul> <li>Output measure (OM19)</li> <li>▼ 8 WSPs will be reviewed and replaced/extended.</li> <li>▼ 2 WSPs will be reviewed.</li> <li>▼ 3 WSPs will be reviewed and merged into an existing WSP.</li> <li>▼ 22 WRPs will be completed.</li> </ul>	<ul> <li>Reported by DPE Output measure WSPs reviewed and replaced/extended: Final NRC review report and approval by Minister for extension of plan in order to undertake plan replacement:</li> <li>▼ 0 plans in 2020-21, 3 plans have been reviewed cumulatively (Border Rivers, Peel and B Darling), with 2 plans having been reviewed and extended.</li> <li>WSPs reviewed: DPE Internal rule development:</li> <li>▼ 0 plans in 2020-21 (not yet commences rule development stage), 32 plans cumulatively.</li> <li>Public exhibition:</li> <li>▼ 0 plans in 2020-21, 32 plans cumulatively (20 surface water, 12 groundwater) Submission to Minister for approval to commence:</li> </ul>

	Agency Comment
	▼ N/A
	A decision was made not to merge any coastal WSP.
	<ul> <li>Additional information</li> <li>Final NRC review report and approval by Minister for extension of plan to undertake plan replacement:         <ul> <li>All plans extended for replacement in required timeframes.</li> </ul> </li> <li>DPE Internal rule development:         <ul> <li>Work commenced in initial rule development for all plans.</li> </ul> </li> <li>Public exhibition:         <ul> <li>Only 1 out of 3 plans (CC) was placed on public exhibition during this period due to longer timeframe for initial rule development for</li> </ul> </li> </ul>
	some plans. Submission to Minister for approval to commence: ▼ Delay in progression to public exhibition meant progression to this step did not occur in timeframes anticipated. Commencement of plan: ▼ The Bellinger water sharing plan commenced on 1 July 2020.
	Cumulative percentage of forecast WSPs reviewed, replaced/extended or merged: Target has not been met
	Targets have been partially met. WSPs reviewed and replaced/extended:
e plan and Barwon	<ul> <li>Target has not been met.</li> <li>2 WSPs have been reviewed and replaced/extended cumulatively in 2020-21.</li> </ul>
у.	WSPs reviewed: ▼ Target has been met. 24 WSPs submitted to Minister cumulatively.
	WSPs reviewed and merged:

Activity	Outputs	Measures and Indicators <sup>1</sup>	2020-21 Reported Data
Activity	Outputs         the WSPs as they expire.         Remake or extension or each WSP as it expires         WRP assessment tasks	f	O plans in 2020-21, 24 plans cumulatively Commencement of plans:     O plans in 2020-21 (Border Rivers was gazetted on 3 July 2021), 24 plans cumulatively WSPs reviewed and merged:     O plans in 2020-21, 19 plans were merged into 7 consolidated plans in 2019-20. WRPs completed: Submission to the Minister for provision to MDBA for accreditation assessment:     O plans in 2020-21, 20 plans cumulatively. <i>Note: the number of WRPs has reduced to 20 total.</i>
		Performance indicators         Cumulative percentage of         forecast WSPs reviewed,         replaced/extended or merged:         ▼ Target: 100%         Cumulative percentage of         forecast WRPs completed:         ▼ Target: 100%	Performance indicatorsFinal NRC review report and approval by Minister for extensionof plan to undertake plan replacement:

Agency Comment
Target has been met.
Additional information:
Final NRC review report and approval
by Minister for extension of plan to
undertake plan replacement:
All plans extended for replacement in
required timeframes.
DPE Internal rule development:
Initial rule development commenced
for 6 unregulated plans; work
progressed on review of accreditation
assessment advice on some WRPs.
Public exhibition:
n/a Cubraissian ta Ministan (an annaus) ta
Submission to Minister for approval to
<u>commence:</u> Only 1 plan proceeded (BR Reg) due
to Independent Inquiry into Floodplain
Harvesting (delay FHP inclusions)
and MO focus on Border Regulated
Rivers meaning other Reg Plan
packages did not proceed for
approval.
Commencement of plans:
23 inland (unreg/gw) plans
commenced
WRPs completed
▼ Target has been met
All 20 WRPs submitted to Minister for provision to
MDBA accreditation
assessment (Apr/June 20).
See note below against
WRP performance indicator.
·····
Cumulative percentage of forecast
Cumulative percentage of forecast
WSPs reviewed, replaced/extended or merged:
▼ Target has been partially
met.
While only 25% of WSPs
were replaced or extended,
the remaining plans were
reviewed and submitted to
the Minister for approval.
Cumulative percentage of forecast
WRPs completed:
▼ Target has been met.
The number of Water
Resource Plans (WRPs) ha
All plans were submitted on
30 June 2020 to the Murray
Darling Basin Authority (MDBA) for assessment for
(MDBA) for assessment for accreditation.
MDBA provided subsequent
recommendations and the 20

Activity	Outputs	Measures and Indicators <sup>1</sup>	2020-21 Reported Data							Agency Comment
			·							WRPs have been updated accordingly and are expected to be resubmitted for accreditation assessment of 30 June 2022.
W06-03 Floodplain management plan development The development, review, amendment and extension or replacement of Floodplain Management Plans in collaboration with OEH.	<ul> <li>Floodplain Management Plan (FMP) development.</li> <li>Remake of each FPH as it expires.</li> </ul>	<ul> <li>Output measure (OM20) Number of FMP completed or remade:         <ul> <li>▼ 5 new FMPs will be developed</li> </ul> </li> <li>Progress in implementing floodplain harvesting licensing.</li> </ul>	<ul> <li>Reported by DPE         <ul> <li>Output measure</li> <li>The number of FMP's has increased to 6, higher than forecast number of 5 in output measure. As at 30 June 2021, 5 (of 6) FMP's complete with the final plan largely complete (it commenced 24 September 2021).</li> <li>Good progress made on licensing, but no licensing issued in 20-21 due to disallowance of amendments to the Water Management (General) Regulation 2018, on 6 May 2021.</li> </ul> </li> <li>Floodplain harvesting – progress update (percentage (%) completed)</li> </ul>							Targets have been met.Target has been met.FMP for the:▼Lower Namoi Valley Floodplain: commenced on 11 September 2020.▼Border Rivers Valley Floodplain: commenced on 11 September 2020.
			Actions	Gwydir	Border Rivers	Macquarie	Barwon- Darling	Namoi		As of 30 June 2021, the one remaining FMP (Macquarie Valley Floodplain), largely complete (it
			1. ROI's invited and assessment of eligibility completed	100%	100%	100%	100%	100%		commenced, 24 September 21). S43 review of Gwydir FMP undertaken in
			2. IBQ's completed	100%	100%	100%	100%	97%		20/21. Response to review is being undertaken including update of
			3. Modelling completed	100%	100%	100%	90%	85%		floodplain model to underpin plan amendment.
			4. Draft FPH entitlements Process completed	80%	100%	100%	80%	40%		Review of new FMP areas in
		5. Draft WIP process completed	100%	100%	100%	100%	100%		southern Basin undertaken for Murray, Murrumbidgee and Lachlan	
			6. WSWAs issued*	80%	80%	80%	80%	70%		<ul> <li>Valleys:</li> <li>▼ Scope of activities and staffing has been reviewed and NPP for additional funding has been sought to complete new FMPs</li> <li>▼ Recruitment of planning</li> </ul>
			7. Revision of floodplain harvesting policy completed	100%	100%	100%	100%	100%		
			8. Revised floodplain harvesting entitlements released	0%	0%	0%	0%	0%		
			9. Floodplain harvesting entitlements finalised	98%	0%	0%	0%	0%		team has commenced
			10. Floodplain harvesting access licences issued	0%	0%	0%	0%	0%		
			Percentage (%) completed	76%	68%	68%	65%	59%		
			*DPE did not issue any WSWA's within this WSWAs	period, the p	ercentages i	represent prog	press toward	s issuing		

Activity	Outputs	Measures and Indicators <sup>1</sup>	2020-21 Reported Data						
		Performance indicator ▼ Cumulative percentage of forecast FMPs	Performance Indicator ▼ Almost 100% of Target has been met as of 30 June 2021.						
		completed: – Target: 100%	Cumulative percentage of plans of Actions	Gwydir	Barwon Darling	7 % IN 201 Upper Namoi	9-20) Lower Namoi	Border Rivers	Macquai
			1. Has been to Targeted Consultation						
			2. Has IRP approval to go to Public Exhibition						
			3. Has been to Public Exhibition						
			4. Has Interagency Regional Panel approval to commence						
			5. Commenced	100%	6 100%	5 100%	100%	b 100%	
W06-04 Drainage plan development The development, review, amendment, and extension or replacement of Drainage Management Plans, to address water quality problems associated with drainage systems.	Drainage Management Plan (DMP) development. Remake of each DMP as it expires.	Output measure (OM21)Number of DMPs completedor remade:▼ 0 new DMPs will be developed.Performance indicator▼ N/A	<ul> <li>Reported by DPE <u>Output measure</u></li> <li>✓ During the 2016 regulatory p framework that will meet the Stage 1 of DPI's Marine Esta</li> <li>✓ From 2020-21 to 2024-25 w plans for priority areas that w Seven plans will be develop plans under the WMA consider rules that apply across all set developed, or another more</li> <li>✓ The framework is being developed DPI Fisheries. State agencies catchments for action under</li> </ul>	objectives ate Manage e propose t will improve ed if catchr dered the b even catchr appropriate eloped in co es and will o	outlined al ement Stra o finalise t the manage nent-level p est tool to nents – and tool or se onjunction cover each	bove. This tegy (MEM hat framew gement of o blanning is deliver those d possibly t of tools u with the ot	work has I S). ork and po coastal floo necessary se improve other coas sed to ach ner key DF	argely bee ossibly deli odplain dra and drain ements; if n tal catchma ieve the ou PE divisions	n funded ver up to inage imp age mana ot, one p ents – wil utcomes. s listed at

	Agency Comment
arie 95%	<b>Target has been met.</b> 5 (of 6) FMPs complete and final plan (Macquarie) almost complete as of 30 June 2021.
ment ed through mpacts. inagement plan with vill be s. above and priority	No target for this measure or indicator.

Activity	Outputs	Measures and Indicators <sup>1</sup>	2020-21 Reported Data
Activity W06-05 Regional planning and management strategies The development, evaluation and review of regional water strategies, metropolitan water plans and other planning instruments, including the associated stakeholder engagement.	<ul> <li>✓ Development of regional water strategies, which integrate and set priorities for related special-purpose plans (for example water sharing plans).</li> <li>✓ Evaluation and ongoing adaptive management of the metropolitan water plans for greater Sydney and the lower Hunter.</li> <li>✓ Development, assessment and review of planning instruments.</li> </ul>	<ul> <li>Measures and Indicators<sup>1</sup></li> <li>Output measure (OM22)</li> <li>✓ 2 regional water strategies (metropolitan water plans) will be reviewed.</li> <li>✓ 6 new regional water strategies will be completed.</li> </ul>	<ul> <li>Reported by DPE <u>Output measure</u> Metropolitan Water</li> <li>▼ Draft Lower Hunter Water Security Plan (LHWSP) was developed in the FY 2020-21.</li> <li>▼ Greater Sydney Water Strategy (GSWS) was developed and first submission was conside Cabinet in December 2020, This will be followed by second submission which will consider independent supply augmentations to address drought resilience and the supply/demand g other key infrastructure, policy decisions and actions required to enhance the resilience of t water system, and move towards meeting the vision and objectives for a sustainable, produ- liveable Greater Sydney.</li> <li>Regional Water</li> <li>▼ 1 Regional Water Strategy (Greater Hunter RWS) complete and in implementation phase.</li> <li>▼ Expanded Regional Water Strategies Program established.</li> <li>▼ 3 Draft strategies (Lachlan, Macquarie, Gwydir RWS) complete and awaiting public consult Following exhibition, finalisation will involve using economic decision framework to develop option portfolios and recommendations.</li> <li>▼ Draft of Far North Coast and South Coast significantly advanced and being reviewed by ag ▼ Planning, research, inter-agency and council engagement commenced for remaining 6 strategies</li> </ul>
		Performance indicator Cumulative percentage of forecast metropolitan water plans being reviewed: ▼ Target: 100% Cumulative percentage of forecast regional water strategies completed: ▼ Target: 100%	<ul> <li>Performance indicators Metropolitan Water <ul> <li>✓ Draft LHWSP was developed in FY 2019-20.</li> <li>✓ First draft of GSWS was developed and considered by the cabinet in December 2020. <li>✓ Community consultations and finalization of both the strategies will take place in 2021-22.</li> </li></ul></li></ul>
W06-06 Development of water planning and regulatory framework The development of the operational and regulatory requirements and rules for water access.	<ul> <li>Developed, amended and refined regulatory instruments and policies putting in place an improved regulatory framework for water management planning.</li> <li>Requirements for issuing new water licences clearly defined and understood by users.</li> <li>Requirements for equitable water take defined and improved.</li> </ul>	Output measure (OM23) Number of regulatory instruments and policies developed or amended according to an annual forecast: ▼ Target: forecast on an annual basis	<ul> <li>Reported by DPE Output measure Delivered:</li> <li>▼ work to progress regulatory instruments, plans or policies.</li> <li>Progress to date outlined below.</li> <li>▼ Ran controlled allocation tender process in July 2021, including responding to stakeholder in and matters arising through the implementation of the controlled allocation process.</li> <li>▼ Assessed and responded to requests from the Clean Energy Regulator for comment/endors plantation forestry projects submitted under the Commonwealth's Emissions Reduction Fur</li> <li>▼ Assumed responsibility for the regulation of metering associated with the NSW Non-Urban Policy (as the Water Renewal Taskforce wound up).</li> <li>▼ Amendments to the Water Management (General) Regulation 2018 made and published or Legislation website relating to:</li> <li>emergency works dewatering exemptions</li> <li>strategic planning requirements for Water Supply Authorities</li> </ul>

	Agency Comment
dered by ler rainfall gap, and of the whole oductive and	<ul> <li>Target has been partially met.</li> <li>Target has been met.</li> <li>Metropolitan Water</li> <li>✓ 2 regional water strategies (GSWS &amp; LHWSP) drafts were complete for cabinet consideration and community consultation.</li> </ul>
e. ultation. op preferred agencies. trategies.	<ul> <li>Target has not yet been met. Regional Water</li> <li>✓ One regional strategy complete and in implementation phase</li> <li>The Regional Water Strategies program has been expanded from 6 plans to 12. The scope of the strategies has also expanded to include best practice climate modelling and Aboriginal water outcomes. As outlined in the DPE/NRAR 2020 WAMC price submission, the expanded scope has changed the timeline that was established in the 2016 price review. All 12 regional water strategies are expected to be finalised by end of 2022.</li> </ul>
2.	Cumulative percentage of forecast metropolitan water plans being reviewed: ▼ Target has been met Cumulative percentage of forecast regional water strategies completed: ▼ Target has not been met
	Targets have not yet been met. Target has not been met. No annual forecasts made.
er inquiries	
lorsement of Fund. an Metering on NSW	

Activity	Outputs	Measures and Indicators <sup>1</sup>	2020-21 Reported Data	Agency Comment
Activity W06-07 Cross border and	Outputs         ■         Development and	Measures and Indicators1         Performance indicator         Percentage of annual forecast         frameworks and regulatory         instruments delivered         according to schedule:         ▼       Target: 100%         Output measure (OM24)	<ul> <li>2020-21 Reported Data <ul> <li>the temporary excavation dewatering exemption (Botany Sands)</li> <li>Schedule 3 Water Supply Critical Needs Act</li> <li>various metering regulations.</li> </ul> </li> <li>Torafted and finalised remakes of relevant water sharing plans to <ul> <li>support the development of NSW's 20 water resource plans within the Murray-Darling Basin, and the coastal Water Sharing Plan for the Bellinger River Area Unregulated and Alluvial Water Sources 2020.</li> <li>Progressed policy work relating to regulating areas that are experiencing intensive new irrigation development (particularly the Murray Lower Darling) to help satisfy NSW's obligations under the Basin Salinity Management Strategy 2030.</li> <li>Managed the procurement, guidance and delivery of consultants' reports relating to managed aquifer recharge, access to deep groundwater storage and managing uncontrolled flows in the Great Artesian Basin.</li> <li>Published a coastal harvestable rights review discussion paper and supporting materials and completed a comprehensive community consultation phase.</li> <li>Significant input into the implementation of the Water Supply (Critical Needs) Act 2019, including preparing strategic advice on development applications (to inform statutory decisions for developments authorisations) and advice on future operation of water interception by forestry plantations.</li> <li>Finalised review of the WaterNSW operating licence.</li> <li>Progressed policy research and options analysis for the regulation of water planning and policy matters, via the Regional Water Senior Officers Group.</li> </ul> </li> <li>Parformance Indicator</li> <li>No schedule was in place in 2020-21.</li> </ul>	Agency Comment         Target has not been met         No schedule set due to continued         development of prioritisation         framework and a move to new         reporting performance reporting         system for W06-06 as negotiated         during recent IPART determination         process.         Targets have been met.
W06-07 Cross border and national commitments The development of interstate water sharing arrangements and the implementation of operational programs to meet national and interstate commitments.	implementation of	Full participation in interstate processes to manage water.	Output measure         NSW actively and fully participates in the relevant interstate processes to manage water according to the key interstate agreements. This includes participation in inter-jurisdictional committees to progress interstate water sharing arrangements and water reform initiatives, which includes:         ▼       Murray-Darling Basin Ministerial Council         ▼       Basin Officials Committee         ▼       National Water Reform Committee         ▼       Border Rivers Commission         ▼       Environmental Watering Committee         ▼       Southern Connected Basin Environmental Watering Committee         ▼       River Murray Operations Committee         ▼       Great Artesian Basin (GAB) Senior Officials Committee.	Target has been met. Target has been met.
W07-01 Water management	Water management works to	Output measure (OM25)	Reported by DPE	Targets have been met.
works The undertaking of water management works to reduce	mitigate resource impacts: ▼ Riverbank protection	High priority areas of erosion identified and remediated: ▼ Target: 90%	<u>Output measure</u> This is a cumulative target (target to be achieved by 2020/21)	Target has been met.

Activity	Outputs	Measures and Indicators <sup>1</sup>	2020-21 Reported Data	Agency Comment
the impacts arising from water use or remediate water courses.	Salt interception schemes.	Maintain salinity (EC) credits for NSW.	<ul> <li>114% of initially identified high priority areas of erosion identified as per the Management Plan have been remediated. Additional areas were subsequently identified as high priority and remediated</li> <li>This included:</li> <li>Tumut Riverbank rock work – 615 metres</li> <li>Tumut Riverbank re: vegetation – 1,990 metres</li> <li>Willow Management</li> <li>Weed Spraying</li> <li>Snag management</li> <li>Fencing</li> <li>To date, 9.6km of the estimated 8.4km of high priority erosion works (as identified in the Management Plan - developed in 2010) have been completed. As part natural river avulsion processes, additional high priority erosion sites were identified via annual bank condition monitoring and assessment, hence why the target was overachieved.</li> <li>NSW maintained a credit balance on the Salinity Register in 2020-21 (-32.7EC). The operation and maintenance of the three Salt Interception Schemes in NSW generates 19.4EC in salinity credits that are shared between the Basin States and the Commonwealth, contributing to meeting the Basin Salinity Target (&lt;800 EC at Morgan, 95% of the time) as prescribed in Schedule B of the Murray-Darling Basin Agreement.</li> </ul>	
		<i>Performance indicator</i> Channel output capacity at Tumut maintained at 9,200ML/day.	Performance indicator Channel output capacity at Tumut was maintained at 9,200 ML/day.	Target has been met.
W08-01 Regulation systems management The management, operation, development and maintenance of the register for access licences, approvals, trading and environmental water.	<ul> <li>Management and operation of public register for access licence approvals, trading and environmental water.</li> <li>Systems development:</li> <li>▼ Online tools</li> <li>▼ Online applications</li> <li>▼ Online payments</li> <li>▼ Smart phone tracking of applications.</li> </ul>	Output measure (OM26) Number of applications received online: ▼ Target: 2,500 Performance indicator Percentage of all applications received online: ▼ Target: 42%	Product         Total         # received online         % online           BLR bores         1,279         704         55%           Extensions         1,842         1,021         55%           WAL         1,022         232         23%           Total         4,143         1,957         47.24%	Targets have been partially met.
W08-02 Consents management and licence conversion The transcribing of water sharing provisions into licence conditions and the conversion of licences to the Water Management Act.	<ul> <li>Licences cleansed for conversion to WMA.</li> <li>Volumetric licence conversions.</li> <li>Water sharing provisions transcribed into licence conditions.</li> <li>Development of discretionary conditions.</li> </ul>		Reported by DPE and Water NSW Output measure (DPE)         It is not possible to determine the number of access licences and approvals recorded on the public register at a historic point in time. The register only displays the access licences and approvals currently recorded. In the reporting period: <ul> <li>✓ 2 existing water sharing plans had outstanding conditions to be updated.</li> <li>✓ 18 water sharing plans were remade or amended in the reporting period, which required conditions to be notified. This was completed for 13 plans during the reporting period.</li> </ul> <li>Output measure (WaterNSW)         <ul> <li>As at 8/12/2021 (cannot be reported on as at 30 June 2021 as system does not store a daily snapshot) total approvals and licences (Including WaterAct) is 179,534.</li> </ul> </li>	<ul> <li>Targets have been partially met. <u>DPE:</u></li> <li>Target has not been met</li> <li>✓ Updating conditions for the existing Water Sharing Plan for the Lower North Coast Porous and Fractured Rock Groundwater Sources was on hold due to conversion issues.</li> <li>✓ Updating conditions for the existing Water Sharing Plan for the Paterson Regulated River Water Source did not occur. This was due to the workload of eighteen water sharing plans being remade or amended in the reporting period.</li> <li>✓ Updating conditions for 5 of the 18 water sharing plans which were remade or amended in the reporting period did not occur. This was due to the workload of</li> </ul>

Activity	Outputs	Measures and Indicators <sup>1</sup>	2020-21 Reported Data	A
			Total Number of Current Licences	
			Access Licences 38,632	
			Work Approvals         104,659           Use Approvals         2,249	
			Flood Work Approvals 1,612	
			Combined Approvals 23,701	
			Total Approvals 132,221	
			Total WMA 170,853	
			1912 - part 2 (Surface Water) 39	
			1912 - part 5 (Ground Water) 8,642 1912 - part 8 (Controlled Work) 0	
			Total 1912 8,681	
			Total Licences Administered 179,534	
		Performance indicator Percentage of access licences and changes to licence details		D T
		recorded on the public register		т
		within two months of implementation or update of	Performance indicator (WaterNSW) 55 WSP's amended in 21/21 financial year – 100% of changes reflected in register within 2 months once	m
		sharing plan:	changes and mandatory conditions loaded by DPE in WLS.	w re
		▼ Target: 90%		е
				re a
				p
				p
				s 2
				<u> </u>
				Т
	Compliance education,	Output measure (OM28)	Reported by NRAR	т
W08-03 Compliance management	monitoring and breach management/ enforcement/	Number of breach reports received:	Output measure Breach reports received:	т
The on-ground and remote	investigation.	▼ Target: 600	▼ 1,649	
monitoring activities (including investigations and taking				
statutory actions) to ensure		Performance indicators	Performance indicator	Р
compliance with legislation,		<ul> <li>Percentage of non-</li> </ul>	6.7% of approvals (including floodworks, use approval, works approval) audited by NRAR	ri
including licence and approval conditions.		basic landholder rights approvals		
		audited each year:		
		2%		Ρ
		<ul> <li>Percentage of properties audited</li> </ul>	▼ 79% properties audited in compliance	a
		that are in compliance		a a
		with licence and		а
		approval conditions (excluding those		
		audited as part of		
		investigating an		
		alleged breach): 90% ▼ Percentage of breach	▼ 91% public reports triaged within 14 days	Р
		reports risk assessed		г a
		within 14 days of		
		receipt: 90%		

	A manager Command
	Agency Comment
	18 water sharing plans being remade or amended on the same date.
h were remade or amended	<u>DPE:</u> Target has not been met.
er within 2 months once	The performance indicator was not met for 14 water sharing plans which were remade or amended in the reporting period. This is because eighteen water sharing plans were remade or amended on 1 July 2020, and it was not possible to meet the performance indicator for all of the plans given the number of plans subject to the same date of 1 July 2020. <u>WaterNSW:</u> Target has been met.
	Targets have been partially met.
	Target has been met.
audited by NRAR	Percentage of non-basic landholder rights approvals audited each year: ▼ Target has been met.
	<ul> <li>Percentage of properties audited that are in compliance with licence and approval conditions (excluding those audited as part of investigating an alleged breach):</li> <li>▼ Target has not been met - this target is reflective of on-ground water user behaviour and not within direct control of NRAR.</li> <li>Percentage of breach reports risk assessed within 14 days of receipt</li> <li>▼ Target has been met.</li> </ul>

Activity	Outputs	Measures and Indicators <sup>1</sup>	2020-21 Reported Data		Agency Comment
		Percentage of all cases finalised within 6 months: 70%	▼ 58% of all cases were closed within 6 months. (High priority case	es = 54%)	Percentage of all cases finalised within 6 months: ▼ Target has not been met. This measure was impacted by intermittent COVID-19 restrictions on field activities preventing timely case closure in some circumstances. It is expected to improve once restrictions on movement are lifted.
W08-99 Water consents overhead The administrative overhead costs associated with water consent transactions, which are passed on to customers in the water management tariff.	Overhead support and facilities for consent transactions.	(OM29) – Overhead charge associated with consent transactions.	Reported by Water NSW WaterNSW has applied its own methodology of apportioning corporate with the WAMC cost codes, which does not require the creation of a specific co- overhead		No target for this measure or indicator.
<ul> <li>W09-01 Water consents ransactions</li> <li>Transactions undertaken on a ee for service basis; including dealings, assessments, changes to conditions and new</li> <li>Water consents transactions processed</li> <li>Water consents transactions processed</li> <li>Licences in compliance with regulatory requirements.</li> </ul>		Output measure (OM30) Number of applications processed: ▼ Target: Process all applications received	Reported by NRAR and Water NSW         Output measure (NRAR)         Number of applications processed:         ▼ 397 Work Approvals & Licences received         ▼ 510 Work Approvals & Licences issued		Targets have been partially met. <u>NRAR:</u> Target has been met.
applications for water licences and approvals.		Output measure (WaterNSW)         ▼       5,131 applications received         ▼       4,708 applications were processed (determined)		WaterNSW: Target has not been met.	
		Performance indicators ▼ Percentage of applications for licence dealings assignment of shares (71Q) processed within 20 days: 90%	Performance Indicators (NRAR) Percentage of applications for licence dealings assignment of shares (710 ▼ NA for NRAR	Q) processed within 20 days:	NRAR: Percentage of applications for licence dealings assignment of shares (71Q) processed within 20 days: ▼ NA.
		<ul> <li>Percentage of applications for new access licences processed within 40 days: 80%</li> </ul>	Percentage of applications for new access licences processed within 40 d ▼ 19%	lays:	Percentage of applications for new access licences processed within 40 days:      Target has not been met
		<ul> <li>Percentage of applications for water management work and use approvals processed within 60</li> </ul>	Percentage of applications for water management work and use approvals ▼ 26%	s processed within 60 days:	Percentage of applications for water management work and use approvals processed within 60 days: ▼ Target has not been met
	days: ▼ Perce applic a wate		Percentage of applications to extend a water management work approval ▼ 23% Note NRAR is not responsible for reporting against the fifth and sixth performance.		Percentage of applications to extend a water management work approval processed within 20 days: ▼ Target has not been met.
		work approval Note NRAR is not responsible for reporting against the fifth and sixth performance ir processed within 20 days: 90% <ul> <li>▼ Percentage of Performance Indicators (WaterNSW)</li> </ul>			Process and system improvements have been made in response to this performance that will see improved
		applications for an approval for a bore		Performance Actual Indicator	results in 2021-22.
		for domestic and stock rights	Percentage of applications for licence dealings assignment of shares (71Q) processed within 20 days	90% 98%	<u>WaterNSW:</u> Targets have been met,
		processed within 10 days: 90%	Percentage of applications for new access licences processed within 40 days	80% 96%	

Activity	Outputs	Measures and Indicators <sup>1</sup>	2020-21 Reported Data			Agency Comment
		<ul> <li>Percentage of legal searches completed</li> </ul>	Percentage of applications for water management work and use approvals processed in 60 days	80%	87%	
		within the preferred processing time	Percentage of applications to extend a water management work approval processed within 20 days	90%	95%	
		frame: 95%	Percentage of applications for an approval for a bore for domestic and stock rights processed within 10 days	90%	92%	
			Percentage of legal searches completed within the preferred processing time frame	95%	100%	
W10-01 Customer management All customer liaison activities; including responding to calls to licensing and compliance information lines; and producing communication and education materials such as website content and participation in customer forums.	Timely responses to customer enquiries.	Output measure (OM31) Number of enquiries: ▼ Target: 10,000	<ul> <li>Reported by NRAR and Water NSW Output measure (NRAR)         <ul> <li>▼ 4,721 enquiries through call centre</li> </ul> </li> <li>Output measure (WaterNSW)         <ul> <li>Total WAMC-related Customer Contacts in 2020-21:</li> <li>▼ 14,151 by phone</li> <li>▼ 4,278 via email/fax.</li> <li>▼ 111 separate pieces of outgoing communication material sent to un customers, including 79 email and 32 letter campaigns. E.g., annu (22,500), monthly e-newsletters (20,000+), weekly water availability licencing mailouts for water sharing plans (approx. 30,000), Murrur (10,000+) and other various education items regarding metering resolution items regarding metering resolution items regarding metering resolution</li> </ul> </li> </ul>	al newsletters wi y reports (5,000- nbidgee IVT noti	th customer bills + per month),	Targets have been met.
		Performance indicator Percentage of enquiries directly responded to at the time of the call/email: ▼ Target: Maintain or improve on 90%	<ul> <li>Performance Indicators (NRAR)</li> <li>▼ 100% of enquiries are responded to at time of contact providing the number and acknowledgement letter and refer to the appropriate to</li> <li>Performance Indicators (WaterNSW)</li> <li>▼ Based on Calls only: 91%</li> </ul>		a reference	
			Our call centre received 36,859 calls in 2020-21. 14,151 of these were via to queue. We have noted that many customers select this licencing queue regardless implemented changes to the contact centre staffing to balance this. Our "Lic merged with the general contact centre staff, we introduced team leader po- skilled in WAMC related enquiries as part of our continuous improvement p Even though part of our WAMC activity was passed to NRAR in recent yea Reform Implementation Plan (WRIP) has generated a lot of additional comp 2021 progresses.	of their enquiry cence Advisory ( sitions, and extra rogram. rs, the implement	so in 20-21 we Centre" staff a staff were cross- tation of the Water	
			An additional 4,278 electronic requests (emails, fax, webforms) were receive request type receives either an answer to their query, or their query is forwar colleague. Over 90% of emails are responded to in one of these two ways The complex matters are usually referred to local water regulation officers w is required to assist the customer. Depending on the complexity of the matt to resolve. Customers are made aware of this at the time they are referred	arded to a more within two days o whose specialise er, these enquiri	qualified of being received. ed local knowledge es can take longer	
			We are constantly measuring our performance against these metrics to imp	prove the custom	er experience.	
			Our performance indicator for WAMC related calls was 91% over the year, 94% for the 1st half of the year, and 89% for the second 6 months as the W required follow-up contacts and the training of additional staff to respond to	/RIP enquiries in	creased. These	

Activity	Outputs	Measures and Indicators <sup>1</sup>	2020-21 Reported Data	Agency Comment
W10-02 Business governance and support The business systems and processes that support organisation-wide activities; including asset management, annual reporting and pricing submissions to IPART.	Business systems, processes and administration for commercial operation of government monopoly water services.	Output measure (OM32) ▼ Annual reporting to IPART and ACCC. ▼ Annual performance reporting to customers.	Reported by DPE and WaterNSW         Output measure (DPE)         ▼       financial reporting submitted to ACCC         ▼       financial reporting to IPART at WAMC activity code level deferred to 2022         ▼       performance reporting to customers deferred due to WAMC price review         Output measure (WaterNSW)	Targets have been met.
		<ul> <li>Performance indicators</li> <li>Annual reporting within agreed timeline from end of financial year:</li> <li>▼ Reporting to IPART and ACCC: 4 months.</li> <li>▼ Reporting to customers: 6 months.</li> </ul>	<ul> <li>IPART deferred AIR financial reporting due to the 2021 WAMC price review. IPART will issue the request for 2020-21 AIR in July 2022, at the same time as the AIR request for 2021-22</li> <li>Reporting to customers: 2020-21 OMR deferred due to price review. Will be reported to customers in early 2022 to meet the revised submission date agreed with IPART.</li> </ul>	DPE: Target has been met. DPE Water reporting to IPART and ACCC was completed within the agreed timeframes, some of which are outside of the timeframes define- in the performance indicators. As the agreed timeframes have been determined in consultation with the ACCC and IPART, DPE Water considers this performance indicator has been met
			Performance indicator (WaterNSW)         For IPART reporting:         ▼ WaterNSW-GS AIR – Response provided by Due Date         ▼ WaterNSW-Rural AIR – Response not required by IPART.         ▼ WAMC AIR – response not required by IPART         For ACCC reporting:         ▼ ACCC Water Monitoring Report Bulk RFI FY20 - WaterNSW submitted a response to the ACCC on the 22 December 2021         ▼ ACCC WPM Information Request – WaterNSW has requested an extension to the submission date	<u>WaterNSW:</u> Target has been met.
W10-03 Billing management The management of billing requirements and subcontracted billing, revenue collection and debtor	Water billing and payment processing.	Output measure (OM33) Number of bills issued: ▼ Target: 65,000	for the WPM information return to 31 January 2022. <b>Reported by WaterNSW</b> Number of bills issued WaterNSW issued a total of 72,829 water licences invoices. This is for Regulated (Q1-4) + Unregulated/Groundwater for the 2020/21 water year. Approximately 3,600 (900 per qtr) of the Regulated invoices had NO WAMC charges, as they were meter service charges on Work Approvals only.	Targets have been met.
management service delivery, and responding to queries on billing activities.		Performance indicators Percentage of billing revenue collected within 3 months of the bills being issued: ▼ Target: 95%	Performance indicator Percentage of billing revenue collected within 3 months of the bills being issued: The total percentage of revenue collected within three months was 99% based on 12 months' worth of revenue and collections data	