Parkes Shire Council Parkes Town Water Security Program

Program Execution Roadmap July 2021

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Summary

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Parkes Water Security Program

+The Parkes Water Security Program (PSWP) is a collection of strategic infrastructure packages aimed to 'future proof' Council's water supply network.

+These packages comprise of a variety of different aspects including:

- Infrastructure scopes.
- Government and non-Government funding sources and funding requirements.
- Funding deadlines/ Milestones.



Roadmap Purpose

- +Discuss the PSWP packages, including the scopes of infrastructure within the package.
- +Note the current status and intent of infrastructure projects within each package.
- +Identify funding streams and stakeholders for each package.
- +Articulate the funding agreement core obligations for each package.
- +Discuss Procurement matters to progress the infrastructure construction.
- +Discuss Property, Property Acquisition, and Approvals matters.
- +Discuss Community & Stakeholder Engagement requirements.
- +Discuss Project Delivery support.



Business Case Scenarios

For funding applications two businesses cases have been developed (BBRF, S&S).

Other business case scenarios have been developed based on various infrastructure components inclusions.

All business cases (except BBRF) deliver additional 200L/s (40L/s NPM, 50L/s SAP with remainder for town/water security).

* Modelled business cases

#	Component	Cos	st	st Scenario	
1	Lachlan River Pump Station Augmentation	\$904,811			Components
2	Eugowra Road Lachlan River Pump Station PTP	\$5,572,040		Parkes Water Security Project*	Parkes Water Security Project* None
3	Additional Bore Lachlan Aquafer	\$3,350,687		Building Better Regions Fund	S S None
4	Eugowra Road Solar System	\$1,843,366		(Package 1)	(Package 1)
5	Parkes WTP Raw Water Dam	\$2,731,584		Safe & Secure (Original)	Safe & Secure (Original)1, 2, 4
6	New Eugowra Road Pump Station	\$2,501,334		Safe & Secure (Package 2)	Safe & Secure (Package 2) 1-8
7	Akuna Road Pump Station	\$2,469,087			
8	New Eugowra Road Pump Station Solar System	\$4,092,592		Safe & Secure (Package 1 & 2)*	Safe & Secure (Package 1 & 2)* 6-8
9	Lachlan Duplication Pipeline	\$35,510,550		Priority 1*	Priority 1* None
10	Akuna Road Pump Station Solar System	\$2,759,429		Priority 2*	Priority 2* None
	Total	\$61,735,480			

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Business Case Scenarios & Ideal Funding

					Business Ca	se Scenario			
Fund	Infrastructure Component	PWSP	BBRF P1	RRP	S&S P2	S&S P1&2	S&S Orig	Priority1	Priority2
BBRF	Lachlan River Pump Station Augmentation	\checkmark	\checkmark			\checkmark		\checkmark	\checkmark
BBRF	Eugowra Road Lachlan River Pump Station PTP	\checkmark	\checkmark			\checkmark		\checkmark	\checkmark
BBRF	Additional Bore Lachlan Aquafer	\checkmark	\checkmark			\checkmark	\checkmark		
BBRF	Eugowra Road Solar System	\checkmark	\checkmark			\checkmark			
BBRF	Parkes WTP Raw Water Dam	\checkmark	\checkmark			\checkmark	\checkmark		\checkmark
RRP	New Eugowra Road Pump Station	\checkmark		\checkmark			\checkmark	\checkmark	\checkmark
RRP	Akuna Road Pump Station	\checkmark		\checkmark			\checkmark	\checkmark	\checkmark
RRP	New Eugowra Road Pump Station Solar System	\checkmark		\checkmark			\checkmark		
S&S	Lachlan Duplication Pipeline	\checkmark			\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
S&S	Akuna Road Pump Station Solar System	\checkmark			\checkmark	\checkmark	\checkmark		
	Capital Cost (\$M)	\$61.7	\$14.4	\$9.1	\$38.3	\$52.7	\$54.7	\$47.0	\$49.7
	Ideal Funding (\$M)								
	Commonwealth	\$16.0	\$6.0	\$5.0	\$5.0	\$11.0		\$10.0	\$10.0
	NSW Government	\$12.0			\$12.0	\$12.0	\$25.1	\$12.0	\$12.0
	PSC	\$13.7	\$4.4	\$2.1	\$7.3	\$11.7	\$11.5	\$5.0	\$7.7
	NPM	\$20.0	\$4.0	\$2.0	\$14.0	\$18.0	\$18.1	\$20.0	\$20.0

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PWSP CBA Outcomes

- The CBA modelling for the project at a 7% discount rate indicates it is economically desirable, with the following results:
 - A Net Present Value (NPV) of \$215 million with aggregated present value (PV) benefits of approximately \$287 million compared to an aggregated PV costs of approximately \$72 million.
 - A BCR of 4.0, highlighting that the project is economically desirable under the CBA modelling assumptions, returning \$4 for every dollar cost.
- The most significant benefits are from the NPM mining royalties (57.5%) followed by SAP producer surplus (18.2%).

	PV (\$M) 7% DR	Share
Costs		
Capital Cost	\$59.018	81.9%
Ongoing Operating Cost	\$13.081	18.1%
Total Costs	\$72.100	100.0%
Benefits		
Town residential access revenue	\$0.046	0.0%
Town residential usage revenue	\$1.258	0.4%
Town commercial access revenue	\$0.004	0.0%
Town commercial usage revenue	\$0.212	0.1%
Town commercial producer surplus	\$0.000	0.0%
Town option value of water dam	\$0.304	0.1%
Town water quality improvements	\$14.728	5.1%
Town drought security benefit	\$1.269	0.4%
NPM usage revenue	\$20.471	7.1%
NPM mining royalties	\$165.086	57.5%
SAP access charge revenue	\$2.385	0.8%
SAP usage charge revenue	\$23.958	8.3%
SAP producer surplus	\$52.228	18.2%
GHG emission reductions	\$0.726	0.3%
Residual value	\$4.321	1.5%
Total Benefits	\$286.996	100.0%
Summary		
Net Present Value (NPV)	\$214.896	
Benefit Cost Ratio (BCR)	4.0	





All CBA Outcomes (7% discount rate)

	Total	Town	NPM	SAP	Total	Town	NPM	SAP		
		PWSP So	cenario		S&S P1 & P	2 Scenario				
PV Costs	\$72.100	\$39.655	\$14.420	\$18.025	\$55.579	\$30.568	\$11.116	\$13.895		
PV Benefits	\$286.996	\$20.597	\$186.566	\$79.833	\$286.273	\$20.199	\$186.421	\$79.653		
NPV	\$214.896	-\$19.058	\$172.146	\$61.809	\$230.694	-\$10.369	\$175.305	\$65.758		
BCR	4.0	0.5	12.9	4.4	5.2	0.7	16.8	5.7		
		Priority 1	Scenario		Priority 2 Scenario					
PV Costs	\$62.160	\$11.302	\$22.604	\$28.254	\$65.291	\$11.871	\$23.742	\$29.678		
PV Benefits	\$285.478	\$18.462	\$186.840	\$80.176	\$285.623	\$18.489	\$186.892	\$80.242		
NPV	\$223.318	\$7.161	\$164.236	\$51.922	\$220.332	\$6.618	\$163.150	\$50.564		
BCR	4.6	1.6	8.3	2.8	4.4	1.6	7.9	2.7		

+All business cases deliver a positive NPV and high BCR.

When disaggregated by end user the town has a negative NPV for the PWSP and S&S Remainder P1&2 scenarios due it being allocated all remaining water (after NPM & SAP) and therefore capital cost. This result indicates the need for funding for water security objectives.

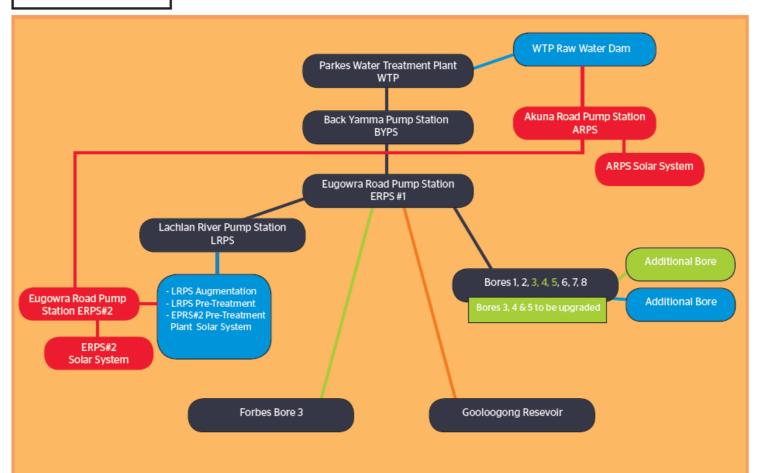
In the Priority 1 & 2 scenarios the additional Lachlan qauifier bore is not included which contributes 90L/s to water security. Therefore with the town not being allocated this amount the capital allocation for this user is less.





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Water Security Projects



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		PA	ARKES WATER SECU	JRITY PROGRAM				
Detail		FUNDED PROJECTS			SEEKING	FUNDING		
Grant	Critical Drought Infrastructure (NSW Govt) - Restart \$4m	Safe and Secure Business Case (NSW Govt) Restart \$1,016,037	IWCM Update (Safe and Secure - NSW)	Building Better Regions Fund (Feds) Stage 3 of Water Security Project Package 1 - AEC Group Business Case	(Fe Package 2 - BOE	/ Partnerships Fund eds) E Business Case	Safe and Secure Package 2 - BOE Business Case	
Grant notes	\$600k DPIE \$3.4m RNSW2688 \$0.7k PSC TOTAL: \$4.07m	\$1.016m PSC \$1.016m RNSW1865 (50% funded business case) TOTAL: \$2.03M	\$235k DPIE NPM \$100k (TBC) PSC \$100K TOTAL: \$435k	\$6m BBRF \$4m Northparkes Mine \$4.403m Parkes Shire Council TOTAL: \$14.403M			Safe and Secure Fund \$12m SAP \$5M NPM \$14M PSC \$7.27M	
Scope	intrastructure development *Additional bore (new bore 9) (Ulmarra property)	2 packages of works to be delivered - one for Water Security project for Parkes and the second is the CENTROC water grid pipeline study * Package 1: to include Business Case including preliminary design for water supply from Lachlan River to Parkes (Lachlan Pipeline Duplication); Prelim EIS plus sustainabilty for the water supply from Lachlan to Parkes; Business Case including prelim. designs for Lachlan Borefields Expansion plus prelim EIS plus sustainability for Lachlan Borefields Expansion. * Package 2: Business Case plus prelim design for Parkes - Gooloogong CENTROC water grid pipeline and an economic appraisal.	Funding will be provided over three stages to fund an updated IWCM for Parkes Shire	 * Eugowra Road Lachlan River Pump Station and Pretreament Plant (sediment ponds) \$5.6m * Lachlan River Pump Station Augumentation \$0.9m * Additional Bore Lachlan Aquafer \$3.4m (new bore 10) on new property * Eugowra Road Solar \$1.8m * Parkes WTP Raw Water Dam \$2.7m TOTAL PROJECT COST \$14.4m 	Akuna Road New F New Eugowra Road System TOTAL INFRASTRUC Contingen	I Pump Station Solar \$3.8m CTURE COST \$8.3m ICURE COST \$8.3m ICU - \$373k ts \$376k	Remaining scope: 35km of pipeline to pump stations including all works to take pipeline under creeks, railway lines Plus final design, contingency, PM *Pipeline from ERPS to ARPS \$29.2m *Pipeline from ARPS to WTP Raw Water Dam \$6.3m *ARPS Solar \$2.8m TOTAL PROJECT COST \$38.27m	
Notes	Delivery expected Jan 2022	Package of works 1: due 30 April 2021 Package of works 2: due 25 June 2021	Milestone 1 Submit IWCM Issues Paper Aug21 Milestone 2 Submit IWCM strategy report Sep21 Milestone 3 Completion of Stage 3 Nov21	BC + Grant Application submitted in March, expected announcements September 2021.	expected July 2021	mitted in March, Deed for an August 2021 ncement.	BC + Grant Application submitted in May, Deed expected in August for a September commencement.	
				BOE BASE CASE			BOE BUSINESS CASE	
NO Critical Drought forms part of BASE CASI				Eugowra Road Lachlan River Pump Station a \$5.6m Lachlan River Pump Station Augumer Eugowra Road Solar \$1.8	entation \$0.9m	Additional Bore Lachlan Aquafer \$3.4m Parkes WTP Raw Water Dam \$2.7m Lachlan Duplication Pipeline \$35.5m New Eugowra Road Pump Station \$2.5m (=\$2.3m+Contingency+I Akuna Road Pump Station \$2.5m (=\$2.3m+Contingency+I New Eugowra Road Pump Station Solar System \$4.1m (=\$3.8+Contingency+PM) Akuna Road Pump Station Solar System \$2.8m		
				TOTAL \$8.3m			TOTAL \$53.4	
4								





Infrastructure		Total	Priority 1		Priority 2		Future	Func	ling
Eugowra Road Lachlan River Pump Station Pre-treatment Plant	\$	5,572,040.39						NPM	\$ 20,000,000.00
Lachlan River Pump Station Augmentation	\$	904,810.97						S&S	\$ 12,000,000.00
Lachlan Duplication Pipeline	\$	35,510,550.38	\$ 46,957,822.21	¢ 10 690 105 05	10 690 105 05			RRP	\$ 5,000,000.00
New Eugowra Road Pump Station		2,501,333.62		φ	\$ 49,689,405.95			BBRF	\$ 6,000,000.00
Akuna Road Pump Station	\$	2,469,086.85						PSC	\$ 3,957,822.21
Parkes WTP Raw Water Dam	\$	2,731,583.73						PSC	\$ 2,731,583.73
Additional Bore Lachlan Aquafer	\$	3,350,686.94				\$	3,350,686.94		
Eugowra Road Solar System	\$	1,843,365.85				\$	1,843,365.85		
New Eugowra Road Pump Station Solar System	\$	4,092,592.02				\$	4,092,592.02		
Akuna Road Pump Station Solar System	\$	2,759,429.46				\$	2,759,429.46		
	\$	61,735,480.21	\$ 46,957,822.21	\$	49,689,405.95				\$ 49,689,405.95





+Bis Oxford Economics (BOE) developed Business Case:

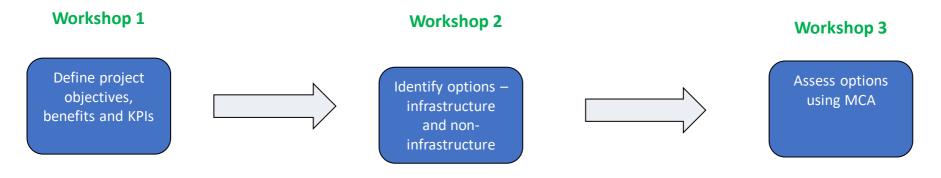
- Lachlan Pipeline Duplication.
- CENTROC watergrid.

+Funding being provided from:

- RNSW \$1.016M.
- PSC \$1.016M.



+BOE Options Assessment workshops:



While a strategic business case was not prepared for Stage 2 Safe and Secure funding, PSC has already undertaken a significant amount of work in considering the logic for investment through their IWCM strategy. This includes identification of a 'do minimum' base case as well as project options. Caras Consulting produced a preferred option for Parkes bulk water supply system in 2018. This forms the basis of the current optioneering work, assessed against PSC's latest demand projections. Additional options for the bulk water supply (including the role of major users) will also be considered, along with the CENTROC pipeline and other drought security options. Using the objectives from Workshop 1 and the options shortlist from Workshop 2, we will then perform an MCA to identify the options to take forward for the CBA. Note: Council has an MCA used for the IWCM and the engineering teams have been using pairwise comparison to consider constructability criteria which can be adapted for this purpose.

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+BOE Economic and Financial workshops:



The IWCM will provide 30-year population and demographic projections and 30-year water cycle analysis and projections which will underpin the economic and financial appraisals. The workshop will ensure that the work being undertaken aligns with the requirements for the appraisals. It will also include an assessment of the approach to water pricing for both components of the project.

PSC has a BBRA process and risk management plan which will be used as a basis for this component of work. A key focus will be the approach to assessing risks for incorporation into the probabilistic costings. Workshop 6

Cost workshop

The purpose of this workshop is to ensure that all costs for the base case and selected project options are fully incorporated for the full appraisal period. This includes costs avoided from doing the project.

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- +Economic methodology statement and INSW/DPIE health check:
 - The Stage 2 funding application did not require a formal options assessment or cost-benefit analysis as would be required of a strategic business case under the NSW Treasury/INSW assurance framework. The Gateway Review for the strategic business case would normally be used to guide development of the final business case.
 - Prior to undertaking the economic and financial appraisal we therefore propose to share the economics methodology and monetisation metrics with the assessment branch for feedback.
 - Once we have received feedback from NSW DPIE/INSW on the appropriateness of the approach and monetisation metrics, we will measure the benefits.
 - The business case team would welcome the involvement of NSW DPIE/INSW at any stage of the FBC development.





+Economic and financial appraisal:

- An economic appraisal report will be prepared in accordance with NSW Government Business Case Guidelines (2018) and Guide to Cost-Benefit Analysis (2017) and the Safe and Secure Water Program Cost Benefit Analysis Guiding Principles (2018), including an incremental cost-benefit analysis to compare the options taken through to the final business case against the defined base case. A financial appraisal (FAP) and financial impact statement (FIS) will also be prepared in accordance with the relevant guidelines.
- The examination of core costs and benefits are expected to include the following:
- Costs:
 - Capital expenditure (at both P50 and P90 level)
 - Recurrent expenditure such as operating and maintenance costs
- Benefits
 - Benefits from consumptive water uses (determined based on histological modelling and gross margin analysis of likely water uses, taking into consideration changes to both security and reliability of supply)
 - Avoided capital expenditure on existing infrastructure
 - Residual value of infrastructure
 - Tourism, recreation and amenity
 - Environmental impacts



+Business case preparation:

- The business case team will prepare the following attachments for the final business case:
 - Options Assessment report
 - Economic Appraisal report
 - Financial Appraisal and Financial Impact Statement report
 - Risk register and Risk Management Plan
 - Benefits Realisation Plan
 - Delivery Strategy
- +The business case team will also review all other attachments to the business case.

+While the final business case is likely to be prepared using the NSW Government's template for regional infrastructure funding, the deliverables will be broadly consistent with those required for the INSW Final Business Case Template.





+Gate 2 Review:

- The business case team will assist the PMO in responding to the comments from the INSW Assurance Gateway Review team.
- The business case team will make the relevant team members available to attend the Planning Day and the Gateway 2 Review Interview Day, and other days to support the PMO.
- The business case team has experience of attending the INSW Gateway interviews as either consultants supporting the client project team or as observers from IA, so we are familiar with the process and the types of questions which are likely to emerge.



- +Funding core obligations:
 - Funding to be used for the Project only and no other purpose (clause 2.3).
 - Achieving the required milestones and using the Funding Amount in line with the Funding Deed ('use it or lose it' provision) (clause 2.4).
 - Submitting Progress Payments within 7 days after the end of each month (clause 2.6).
 - Co-operate with the nominated Treasurer's Representative (clause 3.2).
 - Provide Progress Reports monthly, with the Final Report submitted within 20 Business Days after completion of construction of the Project (clause 3.5).
 - Providing reasonable access to all sites, information or material for the purposes of auditing (clause 3.6).



+Funding core obligations (cont):

- Complying with all laws and policies (clause 3.7).
- Not undertaking any significant changes to the Project without notice (clause 3.8).
- Delivering and updating the Project Plans (clause 3.9).
- Not abandoning the Project without one months' notice (clause 3.10).
- Not bringing the Project into disrepute (clause 3.11).
- Effecting and maintaining the following insurances (clause 4.1).
 - Public liability insurance and insurance of the works.
 - Workers compensation.
 - Where appropriate, professional indemnity insurance.



+RNSW provided \$1,016,037 through Grant RNSW1865. To be claimed through monthly progress payments.

+PSC providing \$1,016,037.

Grant number	RNSW1865
Project title	Parkes Town Water Security Program (Business Case)
Project description	Preparation of a Business Case for Parkes Town Water Security Program
Funding Amount	\$1,016,037
(Clause 2.1(a))	
Prograss	Milastana Davimente



- +Lachlan Duplication Pipeline:
 - Milestone 1 Upon review of Draft Business Case Report 26/02/2021
 - Milestone 2 Upon review of Final Business Case Report 26/03/2021
 - Milestone 3 Final Report 30/04/2021 (07/05/2021)

+CENTROC Water Grid:

- Milestone 1 Upon review of Draft Business Case Report 30/04/2020
- Milestone 2 Upon review of Final Business Case Report 28/05/2020
- Milestone 3 Final Report 25/06/2021



+Eugowra Road Pump Station to Forbes Bore 3 pipeline.

+Refurbishment of existing Parkes bores 1, 3, 4, and 5.

+Additional bore (on Ulmarra Property).

+Funding being provided from:

- RNSW \$3.4M.
- DPIE \$0.6M.
- PSC \$70k (ViK).



ERPS to FB3 Pipeline

- +Design and Construction of a 9km pipeline connecting the existing Parkes Eugowra Road Pump Station to Forbes Bore 3.
- +Pipeline will allow PSC to access the Lachlan Aquifer south of Lachlan River.
- +Pipeline forms part of the CENTROC water grid.
- +KBR progressing IFT Designs.
- +ELA completed draft REF.
- +PSC progressing RFI to assist understanding of best approach to engage open market for D&C.









Refurbishment of Parkes Bores

- Refurbishment of existing Parkes bores 1, 3, 4, and 5.
- Bores feed raw water to the ERPS, which is then pumped to the PSC WTP.
- Refurbishment works required to prevent significant deterioration of existing critical infrastructure.
- +HH2O completed scoping study and prioritisation workshop.
- +ELA completed draft REF.
- +PSC progressing RFT to engage contractor to complete refurbishment work.





Additional Bore (Ulmarra Property)

- Design and Construction of a new bore on the Ulmarra Property to feed into the Parkes raw water infrastructure near the LRPS.
- Additional bore shall spread the load on the Lachlan Aquifer hence making draw more sustainable.
- +Designs to be progressed.
- +TEF completed draft REF.
- +PSC progressing site inspections and discussions with stakeholders to feed into designs.





+Funding core obligations:

- Funding to be used for the Project only and no other purpose (clause 2.3).
- Ensuring the Progress Payments earned are 50% or more than the Progress Payments Council was expected to have earned at that time ('use it or lose it' provision) (clause 2.4).
- Submitting Progress Payments within 7 days after the end of each month (clause 2.6).
- Co-operate with the nominated Treasurer's Representative (clause 3.2).
- Provide Progress Reports monthly, with the Final Report submitted within 20 Business Days after completion of construction of the Project (clause 3.5).
- Providing reasonable access to all sites, information or material for the purposes of auditing (clause 3.6).



+Funding core obligations cont:

- Complying with all laws and policies (clause 3.7).
- Not undertaking any significant changes to the Project without notice (clause 3.8).
- Delivering and updating the Project Plans (clause 3.9).
- Not abandoning the Project without one months' notice (clause 3.10).
- Not bringing the Project into disrepute (clause 3.11).
- Effecting and maintaining the following insurances (clause 4.1):
 - Public liability insurance and insurance of the works.
 - Workers Compensation.
 - Where appropriate, professional indemnity insurance.



+RNSW provided \$3.4M through Grant RNSW2688. To be claimed through monthly progress payments.

Grant number	RNSW2688						
Project title	Parkes Water Supply Stage 1						
Project description	 The Parkes Water Supply Stage 1 project involves: Construction of an 8.6km pipeline from Forbes Bore 3 to Parkes Eugowra Road Pump Station. Procurement of an additional bore, pump station, and connecting pipeline to the existing bore water infrastructure. Refurbishment of existing Parkes bores 1, 2, 4, and 5. Engineering and Planning to support the infrastructure development. 						
Funding Amount	\$3,400,000						
(Clause 2.1(a))	Excludes GST						

+DPIE provided \$0.6M.

With regards to funding arrangements, as indicated previously, DPIE will release 15% of the project funding to Council, with the remaining 85% of the funding to be payable by INSW (as per the requirements of the funding deed with INSW).

Project	Total funding from NSW Government	Amount to be released by DPIE (15%)	Amount payable by INSW (85%)
Parkes Water Security Stage 1	4,000,000	600,000	3,400,000





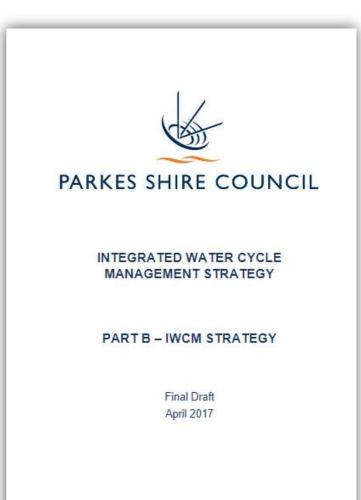
+Project Milestones:

- Milestone 1 Prelim Design and EIS complete
- Milestone 2 Construction Procurement complete
- Milestone 3 Ground Breaking Ceremony
- Milestone 4 Construction Complete
- Milestone 5 Project Complete

06 Jun21 10 Sep21 10 Sep21 18 Mar22 29 Apr22



- +PSC is currently progressing the IWCM Strategy update for 2020.
- The IWCM Strategy includes Council's 30year strategy for the provision of appropriate, affordable, cost-effective and sustainable urban water services that meets the community's needs and protects public health and the environment.
- +Funding being provided by:
 - DPIE \$218k (50%).
 - PSC \$218k (50%).





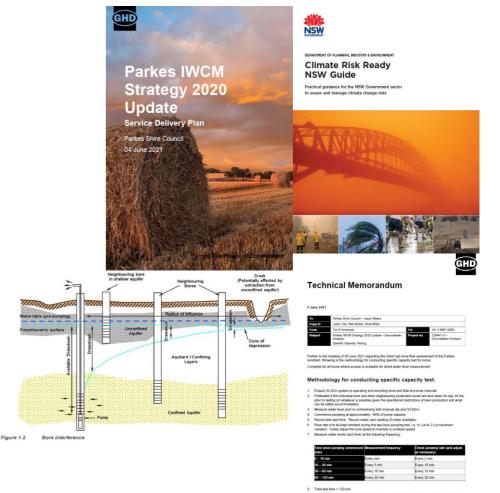
- +The IWCM Strategy will update the 2016 IWCM and provide new scenarios to manage the recent changes to the future of Parkes.
- +Recent changes include:
 - Demand from the development of the Special Activation Precinct / National Logistics Hub.
 - Northparkes Mine production / demand increase.
 - Parkes population growth.

DAILY ML/DAY			202	0 Projectio	n Estimate P	Range					
Year	2016	2020	2025	2030	2035	2040	2045	2050			
Total Demand HIGH GROWTH	6.85	6.93	7.74	8.28	8.88	9.53	9.59	9.86			
Total Demand MOD	6.85	6.92	7.12	7.11	7.18	7.25	7.32	7.40			
Total Demand LOW	6.85	6.86	6.92	6.99	7.06	7.13	7.20	7.26			
SAP Demand	0.00	0.82	4.11	4.11	10.96	17.26	17.26	21.10		L/sec	
Northparkes Mine Demand	5.48	10.96	10.96	10.96	10.96	10.96	10.96	10.96			
Future mines											
HIGH DEMAND TOTAL	12.33	18.71	22.81	23.35	30.79	37.75	37.81	41.92	15300	1.3292	
Lisec	155.67	236.28	288.05	294.82	388.80	476.68	477.38	529.27			
Sust. Yield from Dams	3.01	4.11	4.11	4.11	4,11	4.11	4.11	4,11			
Bores Licence	12.88	12.88	12.88	12.88	12.88	12.88	12.88	12.88			
Expanded borefield	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Purchased licences		0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Lachlan River High Security	8.84	8.84	8.84	8.84	8.84	8.84	8.84	8.84			
Lachlan River General Security	4.52	4.52	4.52	4.52	4.52	4.52	4.52	4.52			
NPM bore High Security	7.26	7.26	7.26	7.26	7.26	7.26	7.26	7.26			
NPM bore General Security	14.44	14.44	14.44	14.44	14.44	14.44	14.44	14.44			
NPM River High Security	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07			
NPM River General Security	10.31	10.31	10.31	10.31	10.31	10.31	10.31	10.31			
Recycled Water		2	2	2	2	2	2	2			
SAPLicence											
YIELD TOTAL	16.78	30.34	30.34	30.34	30.34	30.34	30.34	30.34			



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- +Reid Environmental has been engaged to co-ordinate the IWCM Strategy Update, including management of the Stage 3 Specialist Studies.
- +The following Stage 3 Specialist Studies are being progressed:
 - Climate Change Risk Assessment (GHD)
 - Demand Management (Reid Environmental)
 - Demand Analysis (GHD)
 - System Modelling and Monitoring (Water and Sewer) (GHD)
 - Ground Water Analysis (GHD)



It all adds up.

9. If bore pump shuts down if low level sensor is triggered, test will rate.
 10. Record meter and reading (if meter available)

PARKES SHIRE COUNCIL

The Power of Commitment

+Funding core obligations:

- Funding to be used for the approved Project only.
- Ensure that the Project is carried out in accordance with the approved scope to meet with Objectives.
- Complying with all laws, policies, guidelines and reasonable directions from the Department.
- Acknowledging the support of the Department in any communications about the Project with the approved statement in clause 3.2.
- Complete the Project to the Department's satisfaction.
- Provide any reports and other information to the Department which the Department reasonably requires from time to time concerning the Project.





+DPIE providing \$217,592.95.

+Milestones described below.

						Stage	WO	Task	A	pproved Budget
						Stage 1	9001842	Procurement and Project Management	\$	35,870.23
				Project Costs		Stage 1	9001844	Preliminary Tasks	\$	24,314.62
ltem	Name of		Grant (excluding		Dura data	Stage 1	9001845	Establish PRG & Hold Routine Meetings	\$	23,066.08
No.	Activity	Description of Activities	GST)	(excluding	Due date	Stage 1	9001846	PRG Workshop of Draft Scenarios	\$	17,947.30
	Activity		331)	GST)		Stage 1	9001847	Present Final to PRG	\$	9,009.76
									\$	110,208.00
1	Milestone 1	Submit IWCM Issues Paper to SSWP	\$55,104.00	\$110,208.00	20 August 2021	Stage 2	9001861	Update Issues Paper	\$	29,627.13
-		-	+	+		Stage 2	9001862	Review IWCM Strategy Against New Checklist	\$	26,421.07
		for review and concurrence				Stage 2	9001863	Prepare Draft Scenarios	\$	33,852.72
						Stage 2	9001864	Finalise Scenarios	\$	26,421.07
2	Milestone 2	Submit IWCM strategy report to	\$69,209.00	\$138,418.00	10 September 2021	Stage 2	9001865	Prepare Final Strategy Document	\$	22,096.01
-			\$03,203.00	<i>\$150,110.00</i>					\$	138,418.00
		SSWP for review and concurrence				Stage 3		Redo Population Forecast & Demand Analysis	\$	-
						Stage 3		Ground Water and Security Yield	\$	-
						Stage 3		Climate Change Risk Assesssment	\$	31,123.80
						Stage 3		Demand Management	\$	14,800.00
						Stage 3		Demand Assessment	\$	45,582.30
3	Milestone 3	Completion of Stage 2 for review	\$93,279.95	\$186,559.90	12 November 2021	Stage 3		System Modelling and Monitoring(water & sewr)	\$	54,970.00
3	willestone 5	Completion of Stage 3 for review	\$95,279.95	\$190,559.90	12 NOVEITIBEI 2021	Stage 3		Groundwater Analysis	\$	31,888.80
		and concurrence including							\$	178,364.90
		approved optional Items						TOTAL (Stage 1, 2 and 3)	\$	426,990.90
								Optional items system modelling:		
						Provisional		Review of Funding Allocation (Item 8 table 6.1)	\$	2,047.00
						Provisional		Review of Software Approach (Item 5 table 6.1)	\$	2,348.00
						Provisional		scenario model fireflow (email 12/3/21)	\$	1,250.00
		Capped Grant is lesser of	Total	\$435,185.90		Provisional		scenario model fireflow trunk main break (email 12/3/21	\$	1,250.00
		\$217,592.95 or 50% of actual up to	\$217,592.95			Provisional		SCADA-inperson collection by GHD (email 12/3/21)	\$	1,300.00
			22.35 57.135					Total	\$	8,195.00
		\$435,185.90						Deed amount cap	\$	435,185.90



PARKES SHIRE COUNCIL

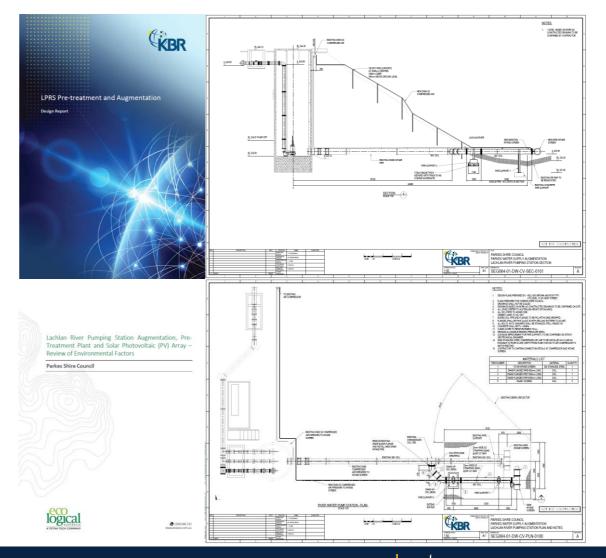
Water Security Project – Package 1

- +Lachlan River Pump Station Augmentation.
- +Lachlan River Pump Station Pre-treatment Plant.
- +Additional Lachlan Aquifer Bore.
- +Eugowra Road Solar System.
- +Parkes WTP Raw Water Supply Reservoir.
- +Funding being sought from:
 - Building Better Regions Fund (Feds) \$6M.
 - Northparkes Mine \$4M.
 - PSC \$4.403M.



LRPS Augmentation

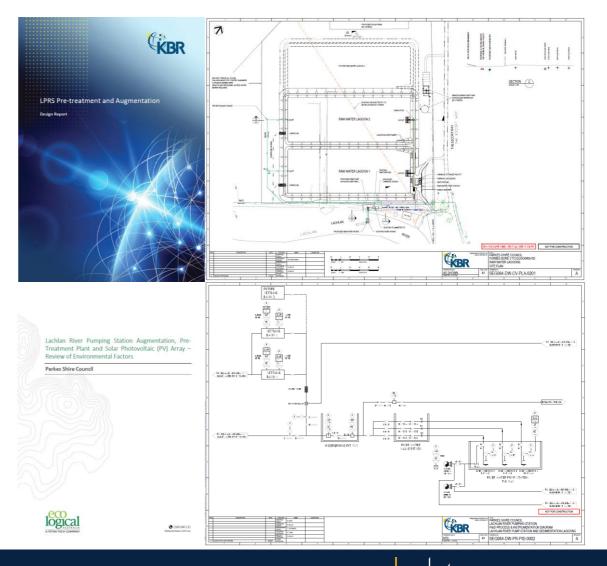
- +Design and Construction of an augmentation to the existing LRPS.
- +Augmentation capability was factored into the existing LRPS when it was constructed in 2015.
- +Augmentation of the existing LRPS allows a larger flow draw from the Lachlan River.
- +KBR completed Detail Designs.
- +ELA completed draft REF.





LRPS Pre-treatment Plant

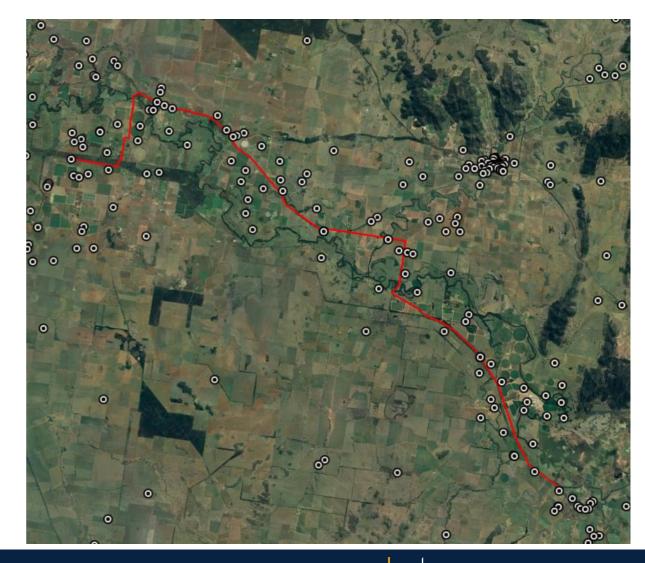
- Design and Construction of a river water pre-treatment plant near the existing LRPS.
- Pre-treatment allows river water to be provided to Parkes / NPM when NTU levels are unsuitably high (>80NTU).
- Pre-treated river water allows a more stable draw from the Lachlan River and means less operational impact to the bores during periods of high NTU.
- +GHD completed Detail Designs.
- +ELA progressing draft REF.
- +PSC progressing RFI to assist understanding of best approach to engage open market for D&C.





Additional Lachlan Aquifer Bore

- Design and Construction of a new bore in the Lachlan Aquifer to feed into the existing Parkes raw water infrastructure.
- + Additional bore shall spread the load on the Lachlan Aquifer hence making draw more sustainable.
- It is envisaged that the additional bore shall feed into the CENTROC water grid pipeline.
- + PSC progressing site inspections and discussions with stakeholders to feed into designs and environmental assessment.
- Sketch shows concept CENTROC water grid alignment and known existing bores.

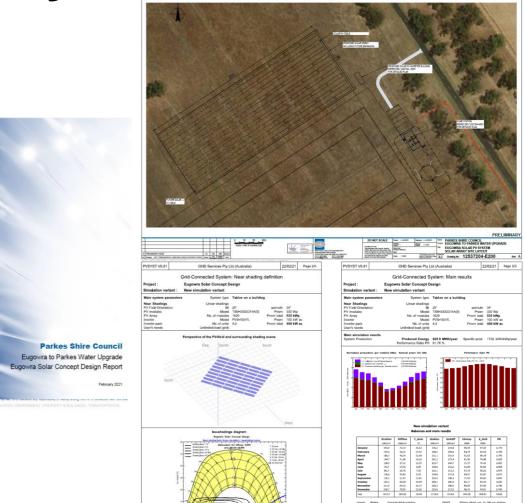






Eugowra Road Solar System

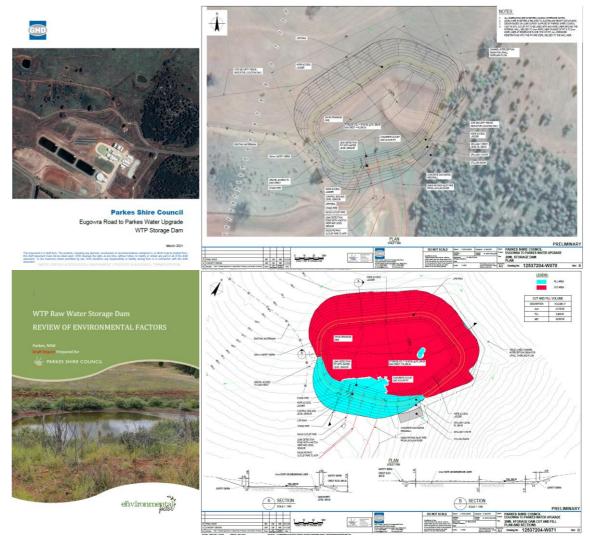
- Design and Construction of a Solar System near ERPS.
- +GHD completed Detail Designs.
- +ELA progressing draft EIS.
- +PSC progressing RFI to assist understanding of best approach to engage open market for D&C.





WTP Raw Water Supply Lagoon

- Design and Construction of a raw water supply lagoon near the existing WTP.
- +Lagoon allows for buffer volume for the WTP if the raw water transfer infrastructure is out of commission.
- Lagoon also allows WTP to treat water during the day (using PV system) and have raw water transfer occur during off-peak periods.
- +GHD completed Detail Designs.
- +TEF completed draft REF.





Water Security Project – Package 1

+Funding core obligations:

• TBC when Funding Deed is executed (expected Sep21).

+Project Milestones (TBC when Funding Deed is executed):

- Secure Funding from BBRF
- Construction Procurement complete
- Construction Complete
- Project Complete

Sep21

- Oct21
 - Jun22

Jul₂₂



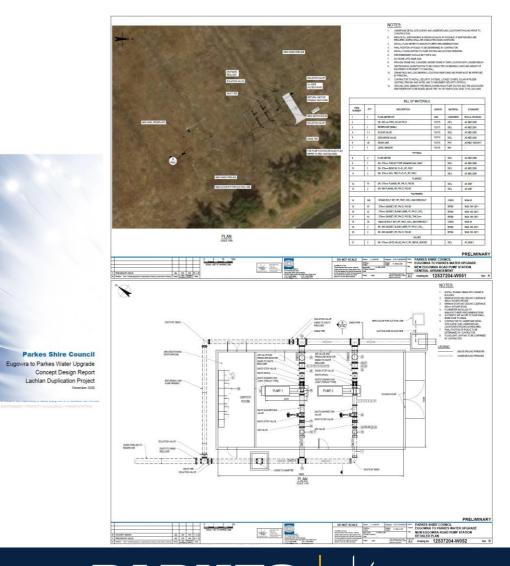
Water Security Project – Package 2

- +Eugowra Road Pump Station.
- +Akuna Road Pump Station.
- +New Eugowra Road Pump Station Solar System.
- +Funding received from:
 - Regional Recovery Partnerships (Feds) \$5M.
 - Northparkes Mine \$2M.
 - PSC \$2.063M.



Eugowra Road Pump Station

- Design and Construction of a raw water pump station near the existing LRPS.
- +GHD completed Detail Designs.
- +ELA progressing draft REF.
- +PSC progressing RFI to assist understanding of best approach to engage open market for D&C.





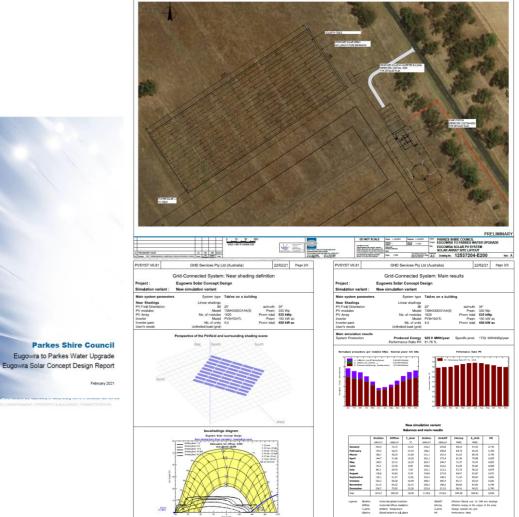
Akuna Road Pump Station

- +Design and Construction of a raw water pump station near the existing STP.
- +GHD completed Detail Designs.
- +ELA progressing draft EIS.
- +PSC progressing RFI to assist understanding of best approach to engage open market for D&C.



New Eugowra Road Pump Station Solar System

- +Design and Construction of a Solar System near ERPS.
- +GHD completed Detail Designs.
- +ELA progressing draft REF.
- +PSC progressing RFI to assist understanding of best approach to engage open market for D&C.





Water Security Project – Package 2

+Funding core obligations:

• TBC when Funding Deed is executed (expected Aug21).

+Project Milestones (TBC when Funding Deed is executed):

- Secure Funding from RRP Construction Procurement complete Nov21
- Construction Complete
- Project Complete

Aug21

- - Nov23

Dec21



Safe and Secure – Package 3

- +Lachlan Pipeline Duplication:
 - Pipeline from ERPS to Akuna Road Pump Station.
 - Pipeline from Akuna Road Pump Station to WTP Raw Water Supply Reservoir.
- +Akuna Road Pump Station Solar System.
- +Funding being sought from:
 - Safe and Secure \$12M.
 - Special Activation Precinct \$5M.
 - Northparkes Mine \$14M.
 - PSC \$7.27M.



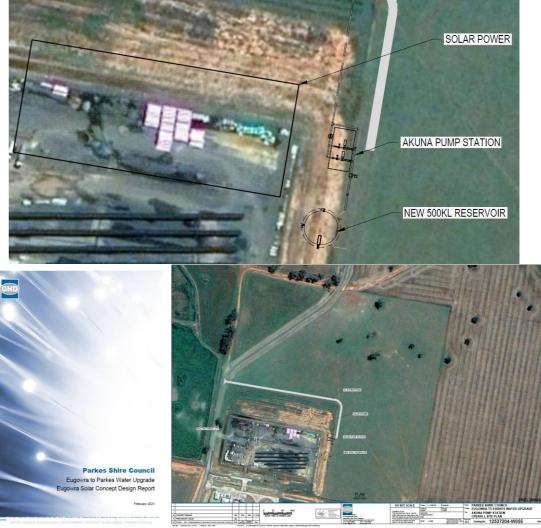
Lachlan Pipeline Duplication

- Design and Construction of a pipeline from the ERPS to the Parkes WTP Raw Water Supply Reservoir.
- +GHD completed Concept Designs.
- +ELA completed draft REF.



Akuna Road Pump Station Solar System

- Design and Construction of a Solar System near Akuna Road Pump Station.
- +GHD completed Concept Designs.
- +ELA progressing draft REF.







Water Security Project – Package 3

+Funding core obligations:

• TBC when Funding Deed is executed (expected Sep21).

+Project Milestones (TBC when Funding Deed is executed):

- Secure Funding from Safe and Secure TBC
- Construction Procurement complete TBC
- Construction Complete TBC
- Project Complete TBC



Procurement

+Procurement methodology:

- Council will need to determine and document the procurement methodology for each separate procurement.
- Public RFT for engagements expected to be over \$250,000 (\$200,000 under Council's Policy).
- ... unless a relevant exemption applies under s55(3) of the Act.
- Unsolicited Proposals Policy once prepared and formally adopted by Council.

+Procurement compliance:

- the Local Government Act 1993.
- the Local Government (General) Regulation 2005.
- the Tendering Guidelines for NSW Local Government (October 2009).
- Council's Procurement and Disposal Policy.





Procurement

+Procurement documentation:

- Procurement plans.
- Request for Tender documentation.
- Evaluation plans.
- Evaluation reports.
- Council resolutions (to decline/ negotiate/ accept tenders).
- +Probity:
 - Council will need to ensure that it is complying with all probity obligations
 - This may include seeking probity advice where required



Property

- +The environmental assessments superimpose study areas for the projects.
- The study areas will be analysed against property information held by the Council and various State government agencies to identify what (if any) land acquisition or easements may be required to support the various projects.
- It is anticipated that most acquisitions typically for easements – can be done by agreement with Council.
- Hore difficult acquisitions can be processed through processes under the Local Government Act 1993 and the Land Acquisition (Just Terms Compensation) Act 1991 (Public Works Advisory).





Property acquisition

+Statutory requirements:

Project	Input
WSP projects can be undertaken as an activity under Division 5.1 of Part 5 of the <i>EP&A Act</i>	Seek consent from private landowners to enter and undertake environmental assessment
Section 186(1) of the <i>Local Government Act</i> 1993 Council may acquire land to develop water supply activities by agreement or by compulsory process in accordance with the <i>Land Acquisition (Just Terms Compensation) Act</i> 1991.	 Acquisition of land or any interest in land will be progressed concurrently with the environmental approvals and approvals process: Private owners Crown land Other Councils Other state government agencies
Secondary Project Approvals	 Approvals and permits for the WSP package of project six (6) in total: 1. fisheries permits under the <i>Fisheries Management Act 1994</i> 2. approvals or licences under the <i>Water Management Act 2000</i> (WM Act); 3. permits under the <i>National Parks and Wildlife Act 1974</i> (NPW Act) where a Project may harm an Aboriginal object; 4. environment protection licences under the <i>Protection of the Environment Operations Act 1997</i> (POEO Act).

It all adds up. PARK



Property acquisition

+Roadmap:

• Desktop review and updated cadastral mapping to update existing landowner details; includes requests to other LGAs and authorities: Cabonne, Cowra, Gooloogong, Forbes

• Google mapping; project alignment affecting landowner access and property easement requirements for each project with reference to final designs and REFs

• Enter landowner data into Consultation Manager to track existing and future contacts with landowners

• Council reviews preferred land acquisition process; negotiated settlement or compulsory acquisition and acquisition delivery options (based on assessment of risk to the project delivery)

• Letters, emails and meetings on-site with appointed Council private landowner contact - legal review required

• Document meetings, in-coming correspondence and flag issues relating to protracted negotiation/landowner contact





Private Landowners

+WSP Private Landowners spreadsheet lists affected by WSP package of projects.

- Includes:
- Lot Number
- Cadastral mapping
- LGA
- Landowner Name
- Address details
- Contact details (partial)

+Council's adopted process:

The easement acquisition consultation process Council has adopted is considered best practice and consistent with the definition of *Easements in Gross* (Registrar General, Guidelines), as described below: a) Contact via letter to inform landowners of the project and the requirement for a proposed easement alignment on private land. Correspondence to include drawing of proposed easement alignment. b) Landowner access agreement (signed) and/or Memorandum of Understanding (MOU) to survey land, soils and other contract requirements. c) Survey of pipeline easement through private land.

d) Meetings with landowners to confirm the alignment.

e) Revisions/negotiations to reach agreement on the pipeline design, (within reasonable limits) if the landowners request specific conditions (e.g. protection of valuable shade trees).

Letter to confirm the final pipeline easement (to be signed by both parties).

g) Compensation valuation calculated (by a registered valuer) and negotiated with private landowners.

h) Landowner consent to acquire the easement including maintenance and operational access, or compulsory acquisition where consent is not given.

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Environmental Primary Project Approvals (REF) –

- + Each Project should be considered an 'activity' for the purposes of Part 5, Division 5.1 of the EP&A Act. Each Project will therefore require assessment under that Division, which will initially require an REF and then, if the outcome of the REF is that the Project is likely to have a significant effect on the environment, the development of an environmental impact statement (EIS).
- + Staggered project delivery and independent funding and operation with cumulative impacts assessed in the relevant REF.



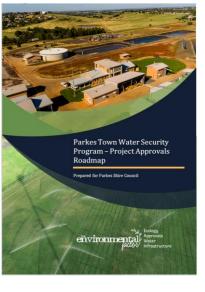
Potential Secondary Project Approvals

- + Part 7 Fisheries Permits under the Fisheries Management Act 1994 (FM Act);
- + Approvals or licences under the *Water Management Act 2000* (WM Act);
- Permits under the National Parks and Wildlife Act 1974 (NPW Act) where a Project may harm an Aboriginal object
- + Environment Protection Licences (EPL) under the *Protection of the Environment Operations Act 1997* (POEO Act).
- + Crown Land permits under the *Crown Land Management Act 2016*
- + Amendment to existing water supply work approvals (WM Act, NRAR)
- + Amendment to Section 60 approval (if required) under the *Local Government Act 1993* (LG Act)



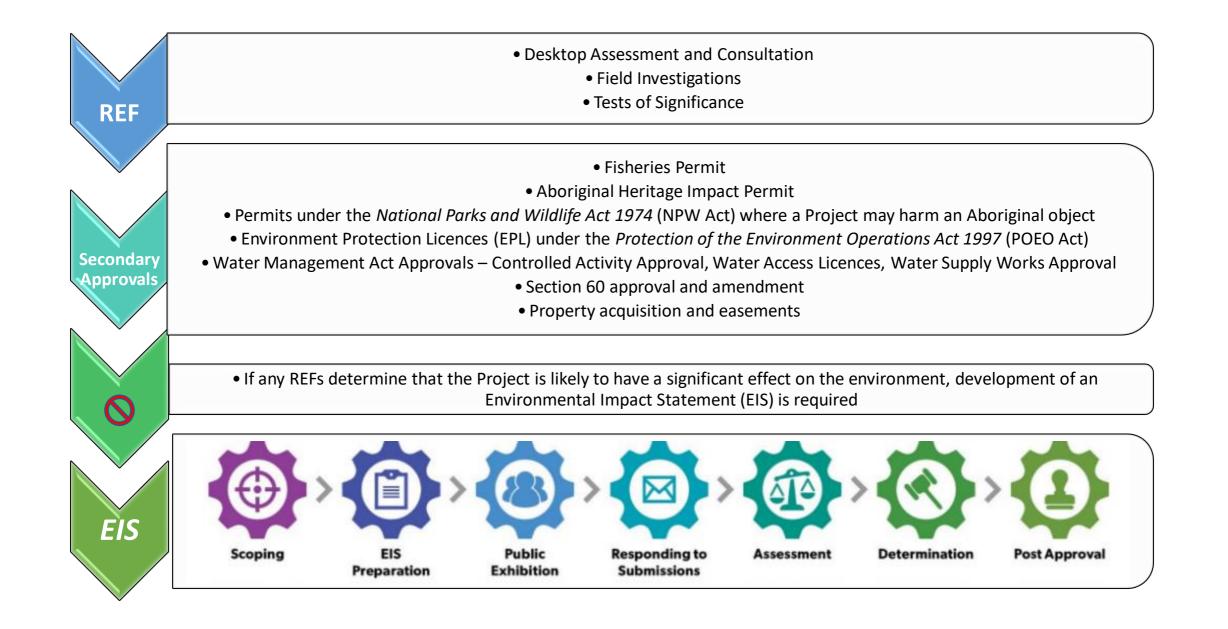
Project Approvals

		Approvals					
Project	Infrastructure	Planning	Potential Secondary / Third Party*				 Part 7 Permit (FM Act)
Project 1: Eugowra Road Pump Station to Forbes Bore 3	a) Pipeline to connect existing infrastructure	Environmental assessment under Part 5, Division 5.1 EP&A Act	 Water use and water supply work approvals required under s91A and s91B of the WM Act AHIP (NPW Act) Crown Land permits 	Project 4b: Lachlan to Parkes Duplication Pipeline	 a) New Eugowra Road Pump Station b) Lachlan Duplication Pipeline c) Akuna Road Pump Station d) Akuna Road Pump Station Solar System e) 20.26 ML storage dam 	Environmental assessment under Part 5, Division 5.1 EP&A Act	 TBD – AHIP (NPW Act) Species Impact Statement (BC Act) or development of Biodiversity Development Assessment Report (BDAR); if required Referral to the Cth Minister for the Environment (EPBC Act), if required
Project 2: Eugowra Road Pump Station to Gooloogong Pipeline	Pipeline to connect existing infrastructure	Environmental assessment under Part 5, Division 5.1 EP&A Act	 Part 7 Permit (FM Act) AHIP (NPW Act) 				
Project 3: Borefield Refurbishment	Refurbishment of existing Parkes Bores	Environmental assessment under Part 5, Division 5.1 EP&A Act	Amendment to the existing water supply work approval (WM Act, NRAR)	Project 5: Ulmarra Bore	Establishment of a new Bore on Ulmarra property and	Environmental assessment under Part 5, Division 5.1 EP&A Act	 New and amended water supply work approval (NRAR; WM Act)
Project 4a: Lachlan River Pumping	Environmental		connecting pipeline to LRPS		ADD to be completed; AHIP may be required		
Station treatment Plant assessment under Augmentation, Pre- b) Lachlan River Pump Part 5, Division 5.1	Part 7 Permit (FM Act) AHIP (NPW Act)	Project 6: WTP Raw Water Storage Dam	Establishment of 20 ML RWSD at Parkes WTP	Part 5, Division 5.1 EP&A Act 'Review of Environmental Factors' (REF)	Water supply work approval (NRAR; WM Act)		



It all adds up. PARKES







- +Community Engagement is a two-way process that seeks to inform, identify issues and seek resolution with the community using a range of techniques.
- Parkes Shire Council's Community Engagement Strategy has been developed to guide ongoing communication between Council and the community for planning for the future.
- +Council is committed to having open, honest, respectful and truthful communication with the community and its stakeholders.
- Council applies the International Association of Public Participation (IAP2) spectrum to identify the level and tools of engagement required.

LEVEL	OUR PROMISE
INFORM	We will make sure you have the information you need
CONSULT	We will seek your feedback on options so we make better decisions
INVOLVE	We will explore options and priorities together so we know what is preferred
COLLABORATE	We will work together and share the responsibility

It all adds up. PARK



It is crucial to seek stakeholder and community input to ensure that project outcomes will meet the needs of the community and customers. The IWCM and Safe & Secure Business Case both prescribe a minimum level of community and stakeholder participation.

+Project requirements:

- Develop and adopt a project engagement strategy
- Demonstrate that the views of key stakeholders are considered and addressed
- Demonstrate that project/s have full support of other relevant local water utilities

+Engagement objectives:

- Facilitate meaningful dialogue between Council and stakeholders
- Develop effective partnerships with neighbouring Water Utilities
- Identify potential opportunities & benefits, and potential risks & barriers that could affect project delivery and success
- Satisfy regulatory and funding partner engagement requirements





+Stakeholders mapped to the PSWP:

Project	Input
Business Cases (stakeholder sections)	Stakeholder interests, level of participation & proposed engagement techniques
Environmental Assessment (consent and concurrence)	Private property acquisition requirements, agency concurrence requirements, impact and mitigation measures (CEMP)
IWCM PRG (Stakeholder and community input into the Integrated Water Cycle Management (Information Sheet 1, DPIE)	a) Project overview and purpose b) climate change effect on water infrastructure c) supply and demand forecasts in IWCM d) public outreach activities – water awareness
Stakeholder Plan (Issues Management approach during project delivery)	Engagement plan to manage communication to meet stakeholder interests during delivery and anticipate emerging issues and management via appropriate engagement techniques



+Stakeholder Engagement Plan – Overview:

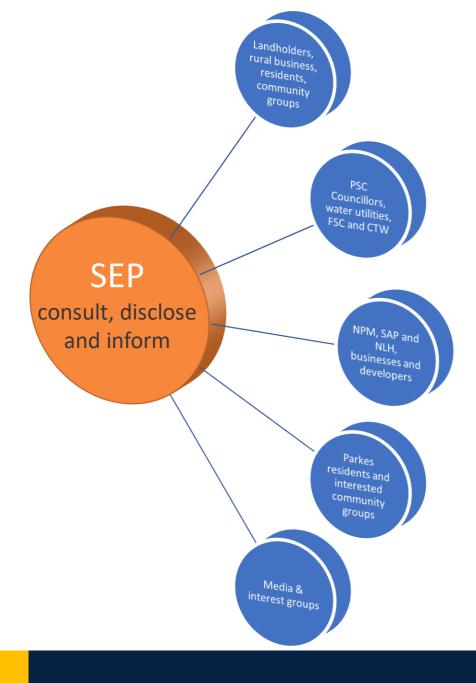
	Parkes Shire Council
Communications Context	Communications & Stakeholder Engagement Plan
SEP and its applicability to Project Roadmaps and Plans	1 Alexandree
Communications Management; roles and responsibilities, protocols, communication risks	Parkes Shire Water Security Projects
Issues Management approach – 5 steps	R. 3 10
Assessment of communications risks & potential scenarios	
Stakeholder mapping and stakeholder listings	
Engagement techniques and options to manage information flow	

It all adds up. PARK

Stakeholder Engagement Plan (V1.0)

June 2021

PARKES SHIRE COUNCIL



Stakeholders	Engagement Methods and Activities
Landholders and rural business operators	On-site meetings, small group discussions (irrigators), centralise property acquisition negotiations
PSC Councillors and other Water Utilities, including FSC and CTW	CENTROC Working Group – led by DPIE, regular briefings (Council)
Parkes residents and interested community groups	Online/social media and IWCM PRG
Northparkes Mines, SAP and NLH	Provide communications support and advice; briefing papers for state and local MPs, media support
Media & interest groups	FAQ's revised and updated to respond to questions, agree project positioning and key messages, present project facts





+Issues Management Approach:

Step 1 - One point of contact

- Appoint a Council project spokesperson
- Prepare messages and materials for project beneficiaries
- Clear roadmap for private property acquisition negotiations (with legal support)

Step 2 – Manage information flow

- Update FAQs/project materials to reflect changing project activities at regular points
- Briefings and small group discussions to manage project interest (vs public exhibition)
- Alert Councillors/project beneficiaries and state agencies to emerging issues

Step 3 - Scan the communications environment

- Scan media for emerging stakeholder interests/positions
- Consider response options with PMO, PSC Ops and Councillors
- Assess the communications environment with informal networks

Step 4 – Scenario Planning

Quarterly scenario planning workshop with Council, PMO

Anticipates emerging issues and possible responses

Step 5 – Report and Monitor

Maintain Consultation Manager database to track stakeholder interests





+SEP Roadmap:

- Approve current project materials & messaging
- Review SEP and issues management approach
- Present risk scenarios and approve communications management
- Establish stakeholder monitoring and data management (Consultation Manager)
- Approve information 'toolkit' and agree project 'go live date' based on staging and funding announcements
- Brief project beneficiaries, Councillors, state and fed MPS, partner Councils prior to 'go live' date





+Internal and External Stakeholders

- Conduct stakeholder mapping. Develop and maintain comprehensive contact databases
- Employ IAP2 Public Participation Spectrum to help define level of participation required for each stakeholder
- Develop relationships, establish & maintain two-way communication channels with stakeholders
- Provide regular project updates
- Maintain activity register and record any stakeholder issues/complaints regarding the project.

+ Project Reference Group

- Coordinate PRG comprising of key stakeholders and community members
- Facilitate PRG workshops to help identify problems, evaluate solutions, and ensure that feasible options meet the community/customer expectations and needs.
- +Water Utilities Working Group
 - Seek formal endorsement from Forbes Shire Council and Central Tablelands Water
 - Coordinate regular meetings to provide project updates to neighbouring Water Utilities and funding agencies.





PSWP Delivery Support

+PSC has engaged a suite of consultants and TSS to support the PWSP project delivery:

- PMO.
- Design and Engineering.
- Environmental.
- Geotechnical and Topographical Survey.
- Legal and Probity.
- Economic/ Feasibility/ Probabilistic Risk Contingency.
- Business Case Development.

