

Independent Pricing and Regulatory Tribunal
New South Wales

Assessment of Flow Systems Operations Pty
Ltd's application to vary its network operator's
licence and Flow Systems Pty Ltd's
application to vary its retail supplier's licence
for the Shepherds Bay scheme

Prepared in accordance with the *Water Industry
Competition Act 2006 (NSW)*

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Tribunal Members

The Tribunal members for this review are:

Dr Paul Paterson, Chair

Ms Deborah Cope

Ms Sandra Gamble

Enquiries regarding this document should be directed to a staff member:

Christine Allen (02) 9290 8412

Robert Aposhian (02) 9290 8406

Contents

Tribunal Members	iii
1 Executive Summary	1
2 Recommendations	2
3 Consultation and Submissions	4
3.1 Consultation on the Network Operator Licence Application	4
3.2 Consultation on the Retail Supplier Licence Application	5
4 Assessment of application	7
4.1 The applicants are eligible for a licence	7
4.2 The applications are consistent with the licensing principles	8
4.3 The applicants would continue to meet the licensing criteria	10
5 Environmental assessment of the Stage 7A of the Shepherds Bay scheme	20
5.1 Part 5 of the EP&A Act	20
5.2 Environmental assessment	20
Appendices	23
A Draft Licences	1
B Detailed capacity analysis of FSO's and Flow Systems' applications	2
C Flow Systems Operations' ownership structure and related licensees	8
D Summary of submissions	10
E Assessment of FSO's Addendum REF	16

1 Executive Summary

We recommend that the Minister for Water, Property and Housing¹ (Minister) grants Flow Systems Operations Pty Ltd (FSO) a varied network operator's licence and Flow Systems Pty Ltd (Flow Systems) a varied retail supplier's licence.²

FSO currently provides sewerage services and drinking water for residents and businesses at Shepherds Bay in Meadowbank. It also recycles sewage and provides non-potable water for specific end-uses.

The variation to FSO's network operator's licence would:

- ▼ Expand the area of operation to allow FSO to provide sewerage services, drinking water and non-potable water for Stage 7A³ of the Shepherds Bay development.
- ▼ Authorise FSO to provide non-potable water to its customers for four new end-uses.
- ▼ Include transfer pumps and tanks to store and reticulate sewage in each building (Stages 2 -7, 7A and 8-9) as approved water industry infrastructure.

The variation to Flow Systems' retail supplier's licence would:

- ▼ Authorise Flow Systems to supply (retail) sewerage services, drinking water and non-potable water to the Stage 7A development.
- ▼ Authorise Flow Systems to supply non-potable water for four new end uses to its Shepherds Bay customers.

In assessing FSO's application for a varied network operator's licence (Network Operator Licence Application) and Flow Systems' application for a varied retail supplier's licence (Retail Supplier Licence Application), we considered the licensing criteria set out in sections 10(3) and (4) of the *Water Industry Competition Act* (2006) (WIC Act), and had regard to the licensing principles in section 7(1) of the WIC Act.

We recommend licence conditions for the Minister to consider when granting the varied licences in chapters 4 and 5, and include a draft varied network operator licence and draft varied retail supplier licence in **Appendix A** of this report.

¹ The Minister for Water, Property and Housing administers the *Water Industry Competition Act 2006* (NSW).

² Where this report refers to a *varied* licence, it is referring to a *new* licence granted by the Minister that replaces the previous licence.

³ Each Stage of the Shepherds Bay development refers to an individual building.

2 Recommendations

We recommend that the Minister for Water, Property and Housing:

- 1 Grant a varied network operator's licence to FSO (licence number 17_042) for the Shepherds Bay scheme, subject to the conditions as set out in the attached draft licence.
- 2 Grant a varied retail supplier's licence to Flow Systems (licence 13_001R) for the Shepherds Bay scheme, subject to the conditions as set out in the attached draft licence.

The Minister must consider, but is not bound to accept, any advice or recommendation in this report in determining the licence applications. The Minister may, if circumstances so require, seek further advice from us in relation to the licence applications.⁴

The Minister is required to provide us with a notice of the decision for each licence and the reasons for the decision when deciding whether or not to grant the licences.⁵ We would then publish the notices on our website, in accordance with requirements of the WIC Act.⁶

2.1 The applicants and parent organisation

FSO has no employees and relies on the full support of Flow Systems to provide technical, financial and organisational capacity. Flow Systems is the parent company of eight WIC Act licensees, including FSO. Flow Systems itself holds a retail supply licence so that nine WIC Act licences are held within the Flow Systems group. Flow Systems is named on the proposed network operator's licence as an Authorised Person to construct, operate and maintain non-potable water, drinking water and sewerage infrastructure.

Flow Systems' parent entity, Sustainable Communities Infrastructure Pty Ltd (**SCI**) is a special purpose vehicle with three shareholders, the New Zealand Superannuation Fund, the Commonwealth Superannuation Corporation (**CSC**) and MGIF SCIT PV Pty Ltd.

Under the proposed structure HRL Morrison & Co (Australia) Pty Ltd (**Morrison & Co**) will manage SCI and the Sustainable Communities Infrastructure Trust (**SCIT**) on behalf of SCI's shareholders. Morrison & Co is an investment management fund, founded in 1988.

A diagram illustrating Flow Systems ownership structure and related licence holders is provided at Appendix C.

2.2 Existing licences

FSO currently holds a network operator's licence which authorises it to construct, operate and maintain drinking water, non-potable water and sewerage infrastructure at the Shepherds Bay development in Meadowbank (the area of operations) with the support of Flow Systems.

⁴ WIC Act, section 10(2).

⁵ WIC Act, section 10(5).

⁶ WIC Act, section 10(6).

The Minister administering the WIC Act granted FSO a network operator's licence on 13 October 2017 and subsequently approved the commercial operation of the drinking water and sewerage infrastructure on 1 November 2017.⁷

Flow Systems holds a corresponding retail supplier's licence (licence number 13_001R) granted by the Minister administering the WIC Act on 17 April 2013. The retail supplier's licence authorises Flow Systems to provide (retail) drinking water, non-potable water and sewerage services at various Flow Systems' schemes, including Shepherds Bay and eight other schemes (detailed in Appendix C).⁸ The area of operations for retail activities does not extend to Stage 7A of the Shepherds Bay development.

2.2.1 The variation applications seek to add a new stage to the network and retail licences; use non-potable water for four new end-uses; and construct additional infrastructure for storage and transfer of sewage.

The Network Operator Licence Application seeks to:

- ▼ Expand the currently licensed area of operations to include Stage 7A of the Shepherds Bay development, by constructing, operating and maintaining new reticulation infrastructure.
- ▼ Add four new end-uses for non-potable water to the licence (general wash-down, street cleaning, dust suppression and process water at the recycled water treatment plant).
- ▼ Include new sewage transfer tanks and pumps in the basements of each building of the Shepherds Bay development.

The Retail Supplier Licence Application seeks to extend the retail of drinking water, non-potable water and sewerage services to the additional area proposed by the Network Operator Licence Application, and to add four new end uses for non-potable water to supply its Shepherds Bay customers.

⁷ The then Minister for Energy and Utilities was the Minister administering the WIC Act when the network operator's licence was varied.

⁸ Pitt Town, Discovery Point, Wyee, North Cooranbong, Huntlee, Green Square, Box Hill North and Shepherds Bay.

3 Consultation and Submissions

3.1 Consultation on the Network Operator Licence Application

On 24 October 2019, we provided the Network Operator Licence Application and Retail Supplier Licence Application to, and invited submissions from, the following Ministers and their relevant departments:

- ▼ Minister administering the WIC Act and Chapter 2 of *Water Management Act 2000* (NSW) (Minister for Water, Property and Housing)
- ▼ Minister administering the *Public Health Act 2010* (NSW) (Minister for Health and Medical Research)
- ▼ Minister administering the *Protection of the Environment Operations Act 1997* (NSW) (POEO Act) (Minister for Energy and Environment)
- ▼ Minister administering the *Environmental Planning and Assessment Act 1979* (NSW) (EP&A Act) (Minister for Planning and Public Spaces).⁹

At the same time, we also provided copies of the licence applications to Sydney Water, Fire and Rescue NSW (FRNSW) and Ryde City Council. Ryde Council is the relevant consent authority under the EP&A Act and the appropriate regulatory authority under the POEO Act.

We notified Sydney Water of the licence application because FSO will continue to use Sydney Water's water industry infrastructure (as defined in the WIC Act), as part of the activities in relation to which it seeks variations to its network operator's licence.

We also called for submissions on the application from the public.¹⁰ The closing date for submissions was 21 November 2019

We considered all submissions

We received five submissions in total from Ryde Council, the NSW Department of Planning, Industry and Environment (DPIE), NSW Environment Protection Authority (EPA), NSW Health and Sydney Water.¹¹

We considered all submissions against the relevant licensing principles and criteria as part of our assessment of the application. Where necessary, we sought more information from FSO to satisfy ourselves that issues raised in the submissions would be addressed.

A summary of all the submissions we received is presented in Appendix D (Table D.1).

⁹ WIC Act, section 9(1)(b) and *Water Industry Competition (General) Regulation 2008* (WIC Regulation), clause 17(1).

¹⁰ WIC Act, section 9(1)(c).

¹¹ The submissions are available on our website at:

<https://www.ipart.nsw.gov.au/Home/Industries/Water/Alternate-water-utilities-WICA/WICA-Licenses-Listing-pages/Applications-licences/Flow-Systems-Operations-Pty-Ltd/Shepherds-Bay-%e2%80%93-Network-variation-2019?qDh=2>

Our recommended licence conditions are summarised in chapters 4 and 5.

In addition to inviting submissions, we sought expert advice from Insurance and Care NSW (icare self-insurance, formerly NSW Self Insurance Corporation SICorp) to inform our assessment of appropriate insurance arrangements (see chapter 4).

3.2 Consultation on the Retail Supplier Licence Application

Flow Systems initially submitted an application for a varied retail supplier's licence on 20 June 2019, with a subsequent revision submitted on 25 September 2019.

On 24 October 2019, we provided the Retail Supplier Licence Application to, and invited submissions from, the following Ministers and their relevant departments:

- ▼ Minister for Water, Property and Housing
- ▼ Minister for Health and Medical Research
- ▼ Minister for Planning and Public Spaces¹²
- ▼ Minister for Energy and Environment.

We also notified Sydney Water, Ryde Council and FRNSW of the application.¹³

We called for submissions on the application from the public.¹⁴ The closing date for submissions was 21 November 2019.

We considered all submissions

We considered all submissions against the relevant licensing principles and criteria as part of our assessment of the application.¹⁵

A summary of all the submissions we received is presented in Appendix D.

We requested information after the sale to Morrison & Co

Subsequent to our consideration of submissions, the Flow Systems group was sold and now has new owners (ie, New Zealand Superannuation, Commonwealth Superannuation Corporation, MGIF SCIT PV Trust). We have therefore re-assessed the technical, organisational and financial capacity of the applicants under the new ownership structure.

¹² As required under the section 9(1)(b) of the WIC Act and clause 17(1) of the *Water Industry Competition (General) Regulation 2008*.


¹³ Letter to Sydney Water, IPART, 24 October 2019; Letter to City of Ryde Council, IPART, 24 October 2019 and Letter to Fire and Rescue NSW, IPART, 24 October 2019

¹⁴ WIC Act, section 9(1)(c).

¹⁵ The submissions are available on our website at:

<https://www.ipart.nsw.gov.au/Home/Industries/Water/Alternate-water-utilities-WICAWICA-Licenses-Listing-pages/Applications-licences/Flow-Systems-Pty-Ltd/Shepherds-Bay-%e2%80%93-Retail-variation-2019?qDh=2>

Assessment of Flow Systems Operations Pty Ltd's application to vary its network operator's licence and Flow Systems Pty Ltd's application to vary its retail supplier's licence for the Shepherds Bay scheme **IPART**



We sought further information to understand the impact of the sale on Flow Systems' and Central Park Water's capacity to undertake activities that the licence would authorise. Information sought included:

- ▼ Details of the sales, new ownership structure, changes to Directors, management
- ▼ Copies of agreements between the shareholders and the Flow Systems group, and relevant trust deeds and details of facilities or arrangements for funding
- ▼ Financial including budgeting and financial forecasts.

4 Assessment of application

The WIC Act sets out licensing principles which the Minister must have regard to in considering whether or not to grant a licence.¹⁶ The WIC Act also prohibits a licence from being granted to a disqualified corporation or related entity¹⁷ and requires the Minister to be satisfied that the applicant meets specific criteria set out in the WIC Act or the regulations in order to grant a licence.¹⁸ The Minister can consider other relevant matters, having regard to the public interest.¹⁹

This section of our report contains our assessment of the Network Operator Licence Application and the Retail Supplier Licence Application against:

- ▼ The eligibility of the applicant (section 4.1)
- ▼ The licensing principles (section 4.2)
- ▼ The licensing criteria (section 4.3).

This section also includes reasons for our recommendations.

4.1 The applicants are eligible for a licence

We consider that FSO and Flow Systems are not disqualified corporations or corporations that are a related entity of a relevant²⁰ disqualified corporation.

We relied on the following information:

- ▼ ASIC reports that we obtained for FSO and Flow Systems, and for any relevant related entities, confirmed that these companies are not disqualified nor are their directors or persons concerned in the management disqualified individuals.²¹
- ▼ Information provided by Flow Systems and FSO regarding details of the:
 - Relevant related entities²²

¹⁶ WIC Act, section 7.

¹⁷ WIC Act, section 10(3).

¹⁸ WIC Act, section 10(4)(a) to 10(4)(e).

¹⁹ WIC Act, section 10(4)(f).

²⁰ A related entity that would have a direct or indirect interest in, or influence on, the carrying out of the activities that the licence authorises. WIC Act, section 10(3)(b).

²¹ The relevant searches were completed on 13 February 2020.

²² FSO identified the following relevant related entities: Sustainable Communities Infrastructure Pty Limited as trustee for the Sustainable Communities Infrastructure Trust (ACN 633 957 918), Flow Systems Constructors Pty Ltd (ACN 605 967 280), Flow Systems Pty Limited (ACN 136 272 298), Central Park Water Pty Ltd (ACN 151 072 838), Pitt Town Water Pty Limited (ACN 141 705 660), Discovery Point Water Pty Limited (ACN 142 392 541), Cooranbong Water Pty Limited (ACN 169 450 453), Huntlee Water Pty Limited (ACN 167 418 608), Wyee Water Pty Limited (ACN 160 953 775), Flow Systems Operations Pty Limited (ACN 603 106 305), and Meter 2 Cash Solutions Pty Ltd (ACN 130 008 196).

- Names of the Directors, Chief Financial Officer and Chief Executive Officer for each of Flow Systems' and FSO's relevant related entities (subsidiary companies and holding companies within Australia).
- ▼ Statutory declarations²³ signed by Flow Systems and FSO's Acting Chief Executive Officer and sole director, stating that:
 - Flow Systems and FSO are not disqualified corporations within the meaning of the WIC Act
 - Flow Systems and FSO are not related entities of a disqualified corporation that would have a direct or indirect interest in, or influence on, the carrying out of activities that the licence would authorise if granted²⁴.

4.2 The applications are consistent with the licensing principles

In considering whether or not to recommend that the Minister grants the varied licences, and the conditions to which the new licences should be subject (if granted), we had regard to the licensing principles set out in the WIC Act.

Box 4.1 Licensing principles under section 7(1) of the WIC Act

"In considering whether or not a licence is to be granted under this Part and what conditions are to be imposed on such a licence, regard is to be had to the following principles:

- a) the protection of public health, the environment, public safety and consumers generally,
- b) the encouragement of competition in the supply of water and the provision of sewerage services,
- c) the ensuring of sustainability of water resources,
- d) the promotion of production and use of recycled water,
- e) the promotion of policies set out in any prescribed water policy document,
- f) the potential for adverse financial implications for small retail customers generally arising from the activities proposed to be covered by the licence,
- g) the promotion of the equitable sharing among participants in the drinking water market of the costs of water industry infrastructure that significantly contributes to water security."

4.2.1 The Network Operator Licence Application is consistent with licensing principles

We consider that the proposed extension of the scheme to extend sewerage services, drinking water and non-potable water services to Stage 7A, to include new sewage transfer pumps and tanks within the basements of each of the buildings within the Shepherds Bay scheme and the addition of four new end-uses, is consistent with each of the licensing principles set out in the WIC Act.

We analysed the information in the Network Operator Licence Application, and considered our assessment undertaken for the original network operator licence application in 2017. We conclude that there have not been any material changes to how licensing principles (b) and

²³ Signed statutory declarations dated 24 and 25 September 2019.

²⁴ WIC Act, section 10(3)(b).

(d)-(g) apply, and that our analysis contained in the reports provided to the Minister in 2017,²⁵ in which we recommended that FSO be granted a network operator licence, continue to apply.

Our analysis of the new activities against licensing principle (a) and (c) are set out below.

Protection of public health, the environment, public safety and consumers generally (licensing principle (a))

We had regard to FSO's capacity to undertake the proposed new activities in a manner that does not present a risk to public health, the environment, public safety and consumers generally.

Protection of public health

We assessed FSO's capacity to manage the key risks posed to public health by the new activities to be licensed, having regard to the protection of public health in section 4.3 of this report.

Protection of the environment

In chapter 5 of this report we assess whether FSO has met the requirements for environmental assessment under the EP&A Act in relation to the proposed activities.

FSO obtained development approvals, under Part 4 of the EP&A Act, for the construction of the recycled water treatment plant and potable water reticulation infrastructure in the original Shepherds Bay scheme, before applying for the network operator's licence in 2017.²⁶ The environmental impacts from construction of the infrastructure were considered by Ryde Council when FSO applied for development approvals. We also considered the environmental impacts of the construction of the non-potable water reticulation infrastructure in our assessment of the original Shepherds Bay application.²⁷

In its submission on the Network Operator Licence Application, DPIE confirmed that it found no record of enforcement action undertaken or carried out against FSO or Flow Systems under the EP&A Act. Similarly, the EPA was not aware of any breaches of the POEO Act by FSO or Flow Systems and it had not taken any actions against them.

Protection of public safety

We assessed FSO's capacity to manage key risks with regard to public health specifically and public safety in general in section 4.3 of this report.

²⁵ IPART, *Report to the Minister, Assessment of Flow Systems Operations network operator's licence application for Shepherds Bay, August 2017*, <https://www.ipart.nsw.gov.au/files/sharedassets/website/shared-files/wica-water-licensing-applicant-files-flow-systems-operations-pty-ltd-shepherds-bay-network-operator/working/report-to-minister-flow-systems-operations-network-operator-shepherds-bay-august-2017.pdf>

²⁶ Ryde Council granted development consent for the recycled water treatment plant on 13 March 2018 under Part 4 of the EP&A Act (Consent no. LDA2017/0426). FSO's development application was accompanied by a Statement of Environmental Effects. The treatment plant will be located in the basement of buildings 2 and 3.

²⁷ FSO submitted *Review of Environmental Factors (REF) for proposed sewage and recycled water reticulation systems, 7 August 2017*, RPS Australia East Pty Ltd, for our review and the Minister's determination under Part 5 of the EP&A Act.

Protection of consumers generally

We considered whether any consumers would be disadvantaged as a result of a decision by the Minister to grant FSO a varied licence.

We also assessed the financial capacity of the applicant and the revised scheme over the next 10 years. We consider consumers will remain protected against loss of essential services (see section 4.3).

If the Minister grants a varied licence, we consider that consumers generally will continue to be protected in relation to the activities licensed.

Ensuring the sustainability of water resources (licensing principle (c))

We had regard to FSO's ability to reduce demand on Sydney Water's drinking water and sewerage networks by sourcing sewage from the Shepherds Bay development to produce non-potable water to replace drinking water for permitted end-uses within the development.

4.2.2 The Retail Supplier Licence Application is consistent with the licensing principles

We consider that the proposed extension of Flow Systems' area of operation to include Stage 7A for the retail of sewerage services, drinking water and non-potable water and to add end uses (ie, general washdown, car washing, dust suppression and process water at the recycled water plant), is consistent with each of the licensing principles set out in the WIC Act.

We analysed the information in the Retail Supplier Licence Application, and considered our assessment undertaken for the original retail supplier licence application in 2017. We consider that there have not been any material changes to how licensing principles (a)-(g) apply, and that our the analysis contained in the report provided to the Minister in 2017,²⁸ in which we recommended that Flow Systems be granted a retail supplier licence for the Shepherds Bay scheme, continue to apply.

4.3 The applicants would continue to meet the licensing criteria

In making our recommendation that the Minister grant the varied licences, and the conditions to which these licences should be subject (if granted), we considered the licensing criteria set out in the WIC Act.

²⁸ IPART, *Report to the Minister, Assessment of Flow Systems Pty Ltd's retail supplier's licence no. 13_001R, August 2017*, <https://www.ipart.nsw.gov.au/Home/Industries/Water/Alternate-water-utilities-WICA/WICA-Licenses-Listing-pages/Applications-licences/Flow-Systems-Pty-Ltd/Shepherds-Bay-Retail-variation/25-Aug-2017-Report-to-Minister/Report-to-the-Minister-Licence-Variation-Flow-Systems-retail-supplier-25-August-2017>

Box 4.2 Licensing criteria under section 10(4) of the WIC Act

“A licence may not be granted unless the Minister is satisfied as to each of the following:

- a) that the applicant has, and will continue to have, the capacity (including technical, financial and organisational capacity) to carry out the activities that the licence (if granted) would authorise,
- b) that the applicant has the capacity to carry out those activities in a manner that does not present a risk to public health,
- c) that the applicant has made, and will continue to maintain, appropriate arrangements with respect to insurance,
- d) in the case of an application for a licence to supply water, that, if such a licence is granted, sufficient quantities of the water supplied by the licensee will have been obtained otherwise than from a public water utility,
- e) such matters as are prescribed by the regulations,
- f) such other matters as the Minister considers relevant, having regard to the public interest.”

4.3.1 FSO meets the licensing criteria

We consider that the application to vary the existing licences, (ie, the proposed extension of the scheme to provide sewerage and non-potable water services to Stage 7A, to include new sewage transfer pumps and tanks within each Stage²⁹ of the development, and the addition of four new end-uses) meets the requirements to satisfy the licensing criteria set out in the WIC Act. Our analysis of the new activities against licensing criteria (a), (b) and (c) is set out below. We consider that licensing criteria (d) relates to the supply of water which is an activity authorised under a retail supplier licence and we have not considered it in the context of the current network operator licence application.

For licensing criteria (e) and (f), we analysed the information in the Network Operator Licence Application, and considered our assessment undertaken for the original network operator’s licence application in 2017. We conclude that there have not been any material changes to our assessment on licensing criteria (e) and (f).

Technical capacity (licensing criteria (a))

We are satisfied that FSO has the technical capacity to undertake the proposed new activities.

FSO relies on the full support of Flow Systems staff and its systems for its technical capacity. Flow Systems provides technical services to FSO under a Corporate Services Agreement³⁰ between the parties. Therefore, we consider that Flow Systems’ expertise is critical to FSO’s technical capacity. Where necessary we have considered information and evidence relevant to both Flow Systems and FSO for the purpose of establishing FSO’s capacity. We note that Flow Systems will remain named as an Authorised Person on the varied licence.

²⁹ The Shepherds Bay development comprises of Buildings 2 to 7, 7A and 8- 9. The new sewage transfer tanks will be located within the basements of each of these buildings.

³⁰ Executed as an agreement on 17 June 2016

Evidence of technical capacity

FSO demonstrated its technical capacity by providing plans and documents developed by Flow Systems for the Shepherds Bay scheme which show an understanding of design, operation and maintenance of non-potable water infrastructure.

We also considered FSO's relevant experience and compliance history to inform our assessment of technical capacity and provide detail in the sections below. We have included more detail of FSO's technical capacity assessment in Appendix B.

Relevant experience

FSO, supported by Flow Systems, operates infrastructure at Shepherds Bay under its network operator's licence. Flow Systems will continue to provide sufficient technical capacity to FSO to operate under a varied licence. We assessed position descriptions and professional experience of specific personnel nominated in the application. We consider that the expertise required by FSO/Flow Systems' personnel under a varied licence is not different to the expertise required under its current licence.

Compliance history

FSO has demonstrated its capacity to construct, operate and maintain recycled water industry infrastructure at Shepherds Bay since it was licensed in 2017.

Recent audit reports for audits of schemes operated by other Flow Systems subsidiaries at Discovery Point, Central Park and Green Square identified several material non-compliances, in regards to full implementation of management plans and safe operation of plant and equipment. While the non-compliances indicate that improvement is required, they did not result in a failure of treatment processes or adversely impact public health and safety.

We have also considered similar non-compliances identified for other Flow Systems subsidiary licensees as relevant to Flow Systems' ability to provide technical capacity to FSO. IPART is undertaking a range of actions so that non-compliances are addressed and the risk of repeat non-compliances is reduced.

On balance, we consider that the ongoing operation of several treatment plants by Flow Systems subsidiaries demonstrates Flow Systems' capacity to safely and reliably design, construct, operate and maintain water industry infrastructure, when supported by the additional conditions. We have recommended two additional licence conditions to mitigate the risk of similar non-compliances at Shepherds Bay and will undertake further audits to monitor ongoing compliance.

Table 4.1 Recommended new licence conditions for technical capacity

Clause number	Condition
Schedule A, clause 5.1	The Licensee must ensure that its Water Quality Plan is a single, cohesive and structured scheme-specific document which specifies the actions the licensee must take to implement the 12 elements of the framework for recycled water quality management and use set out in the Australian Guidelines for Water Recycling.
Schedule A, clause 6.1	The Licensee must develop and document, consistent with element 4 of the Australian Guidelines for Water Recycling, the following Operational Procedures: <ul style="list-style-type: none">a) Monitoring protocols for operational performance of the recycled water supply system, including the selection of operational parameters and criteria, and the routine analysis of results;b) Procedures for corrective action where operational parameters are not met;c) Procedures for rapid communication systems to deal with unexpected events; andd) Programs for regular inspection and maintenance of all equipment, including monitoring equipment.
Schedule A, clause 6.2	The Licensee must: <ul style="list-style-type: none">a) fully implement the Operational Procedures;b) ensure that all of its activities are carried out in accordance with the Operational Procedures; andc) keep records to demonstrate the extent to which the Operational Procedures have been implemented and complied with.

Note: Schedule A contains special licence conditions.

Financial capacity (licensing criteria (a))

We are satisfied that FSO has the financial capacity to undertake the proposed new activities.

FSO currently relies on the support of Flow Systems for financial capacity as it does not have financial capacity as a stand-alone entity. In November 2019, the sale of the Flow Systems group to a consortium of investors (Shareholders), was completed.

We therefore re-assessed the financial capacity of the applicants under the new ownership structure and have concluded that the sale has not materially impacted Flow Systems or FSO's financial capacity.

With support from the Shareholders, FSO and Flow Systems have adequate levels of solvency and liquidity to undertake licensed activities under the network operator's licence.

We have included more detail of Flow Systems' financial capacity assessment in Appendix B.

We note that our financial assessment represents financial capacity at a point in time. Our recommendation to grant FSO a varied licence should not be viewed as an endorsement of its future, ongoing viability of FSO or Flow Systems. The assessment is based on a combination of information sources, none of which is to be regarded as individually determinative. We undertake this assessment for our own purposes and for the Minister's purposes in making a determination on the application. Our conclusion is not to be relied upon for any other purpose or by any other person.

We do not recommend additional licence conditions on financial capacity, should the Minister grant FSO a varied licence. We consider that the existing condition in Schedule B, clause 1.1 adequately manages any risk on financial capacity.

Organisational capacity (licensing criteria (a))

We are satisfied that FSO has the organisational capacity to undertake the proposed new activities

We note that FSO has no employees and relies on the full support of Flow Systems to provide it with organisational capacity. Flow Systems underwent a period of administration and a subsequent sale during the assessment of this application. We consider that despite the associated changes to the organisational structure, FSO and Flow Systems' organisational capacity remains materially unchanged.

Our detailed assessment of FSO's organisational capacity is in Appendix B.

Capacity to carry out those activities in a manner that does not present a risk to public health (licensing criteria (b))

We are satisfied that FSO has the capacity to undertake the proposed new activities in a manner that does not present a risk to public health.

We assessed FSO's capacity to manage key risks to public health posed by the:

- ▼ Construction, operation and maintenance of additional water infrastructure (reticulation) connecting Stage 7A to the rest of the licensed development.
- ▼ Inclusion of new sewage transfer tanks and pumps in each stage (building) of the Shepherds Bay development.
- ▼ Use of non-potable water for four new end-uses: general wash-down, street cleaning, dust suppression and process water at the recycled water treatment plant.

We considered a range of information and evidence to establish FSO's capacity. Our detailed assessment is in Appendix B.

NSW Health raised concerns regarding FSO's application

We received one submission from NSW Health regarding FSO's capacity to protect public health. The submission is available on our website and discussed in the summary of submissions in Appendix D. NSW Health generally supported the licence application but advised that a risk assessment with relevant stakeholders is required to ensure that the treatment is appropriate for all intended end uses and the public health risks are managed appropriately.³¹

NSW Health subsequently raised concerns with IPART regarding a draft of FSO's revised risk assessment methodology and NSW Health's participation in the process of developing the risk assessment³².

³¹ Letter from NSW Health, dated 21 November 2019 (D19/30311).

³² Meeting between NSW Health and IPART on 17 October 2019 (D19/26686).

IPART and NSW Health have provided feedback to FSO. Under clause B3.1 of the current network operator's licence, FSO must carry out the activities in compliance with any requirements of NSW Health that IPART has agreed to and notified in writing. One such requirement is a requirement to "consult with NSW Health during the detailed risk assessments for drinking and recycled water".³³ Flow Systems has advised that it is consulting with NSW Health to address concerns with the risk assessment.³⁴

FSO must update its water quality plan to address the risks associated with the new proposed end-uses prior to supplying non-potable water for those purposes. As part of the update, FSO must finalise the risk assessment and identify appropriate controls. Such change to the water quality plan is significant, and FSO will require an audit to assess the adequacy of the revised plan under Schedule 1, clause 7(5)(a) of the *Water Industry Competition (General) Regulation (NSW) 2008* (WIC Regulation).

We are able to direct FSO and other licensees to undertake further consultation with NSW Health regarding FSO's risk assessment.³⁵ We will continue to engage with NSW Health on FSO's level of consultation with NSW Health.

On balance, we consider that FSO has the capacity to continue to protect public health under a varied licence when supported by a combination of the regulatory measures outlined above and additional licence conditions. We have identified three additional special licence conditions in Schedule A, clause 1.1 of the proposed licence. We recommend that FSO should also be subject to the standard licence conditions in Schedule B of the licence (refer to Attachment A for the proposed licence) in relation to its capacity to protect public health, if the Minister grants a varied licence. The proposed new licence conditions are summarised in Table 4.2.

³³ Letter to Flow Systems Operations Pty Ltd, from IPART, Notification of NSW Health Requirements under Licence Clause B4, 7 December 2018 (D17/29411)

³⁴ Email to IPART, Executive Manager - Risk and Compliance, Flow Systems – 12 December 2019.(D19/30986)

³⁵ This arrangement is set out in condition B3.1 of the current network operator's licence.

Table 4.2 Recommended new licence conditions for the protection of public health

Clause number	Condition
Schedule A, clause 5.1	The Licensee must ensure that its Water Quality Plan is a single, cohesive and structured scheme-specific document which specifies the actions the licensee must take to implement the 12 elements of the framework for recycled water quality management and use set out in the Australian Guidelines for Water Recycling.
Schedule A, clause 6.1	The Licensee must develop and document, consistent with element 4 of the Australian Guidelines for Water Recycling, the following Operational Procedures: <ul style="list-style-type: none">d) Monitoring protocols for operational performance of the recycled water supply system, including the selection of operational parameters and criteria, and the routine analysis of results;e) Procedures for corrective action where operational parameters are not met;f) Procedures for rapid communication systems to deal with unexpected events; andg) Programs for regular inspection and maintenance of all equipment, including monitoring equipment.
Schedule A, clause 6.2	The Licensee must: <ul style="list-style-type: none">h) fully implement the Operational Procedures;i) ensure that all of its activities are carried out in accordance with the Operational Procedures; andj) keep records to demonstrate the extent to which the Operational Procedures have been implemented and complied with.

Note: Schedule A are special licence conditions and Schedule B standard licence conditions.

We have restricted one of the proposed new end-uses for non-potable water

FSO is currently authorised to supply non-potable water at the Shepherds Bay scheme for the purposes of toilet flushing, clothes washing, cooling tower top-up water, car washing, irrigation and water features. The Network Operator Licence Application seeks to include four new end-uses for non-potable water to include general wash-down, street cleaning, dust suppression and process water at the recycled water treatment plant.

We consider that the risk mitigation measures that FSO has proposed for these end-uses, in its Risk Register, are adequate to demonstrate FSO's technical capacity to undertake the end-uses. However, this is not an endorsement of FSO's current Risk Register by IPART, which should be further developed with NSW Health prior to commencing commercial operation of the new infrastructure.

The existing licence authorises FSO to supply non-potable water for "water features" generally. We consider that it is appropriate to limit this end-use to "ornamental water features" only, consistent with our recommendation for other network operator licence applications for Flow Systems' schemes. We consider that the public health risks posed by authorising the use of non-potable water in water features is high. This is because water features can include splash park type features or shallow pools, as may be present at the Shepherds Bay development, with which children or adults may interact resulting in a high likelihood of ingesting non-potable water.

Therefore, we propose to limit this end-use as follows³⁶:

Ornamental water features means water features that:

- (a) are provided primarily for aesthetic or beautification purposes, and
- (b) do not, by their design or accessibility, encourage interaction with the water.

Appropriate arrangements with respect to insurance (licensing criteria (c))

We are satisfied that FSO has made, and will continue to maintain, appropriate insurance arrangements for the Shepherds Bay scheme.

We requested advice from Insurance and Care NSW (icare) on the adequacy of FSO's insurance arrangements. As a result of its review, icare concluded that FSO's insurance arrangements are sufficient for the existing and proposed activities under the Network Operator Licence Application.³⁷ Based on the advice from icare, we consider that FSO has demonstrated that it has made, and will continue to maintain, appropriate insurance arrangements for the scheme.

Further details of our assessment of FSO's insurance arrangements are in Appendix B.

We received no submissions regarding FSO's insurance arrangements.

We recommend no additional licence conditions on insurance, should the Minister grant FSO a varied licence. We consider that the existing conditions in Schedule B, clause 2 adequately manage insurance risks related Shepherds Bay scheme.

4.3.2 Flow Systems meets the licensing criteria

We consider that the proposed extension of Flow Systems area of operation to include Stage 7A as a customer for the supply of sewerage and non-potable water services satisfies each of the licensing criteria set out in the WIC Act. We analysed the information in the Retail Supplier Licence Application, and considered our assessment undertaken for the original retail supplier licence application in 2013, and subsequent variations throughout the period 2013-2019 for each of Flow Systems various schemes. We conclude that there have not been any material changes to how licensing criteria (d)-(f) apply, and that our the analysis contained in the report provided to the Minister in 2013, in which we recommended that Flow Systems (then Water Factory Company Pty Ltd) be granted a retail supplier licence continue to apply.

We have undertaken further analysis of the Retail Supplier Licence Application in relation to licensing criteria (a) - (c) as described below.

Technical capacity (licensing criteria (a))

We are satisfied that Flow Systems has the technical capacity to supply sewerage and non-potable water services to the Shepherds Bay scheme.

³⁶ In Table 1.3 of the proposed network operator's licence in Attachment A.

³⁷ Emails to IPART, icare Insurance and Reinsurance Strategy Manager, 2 August 2019 (D19/19900) and 5 November 2019 (D19/28620) and 10 February 2020 (D20/2754)

Flow Systems proposes to use the same systems, procedures and resources to supply its intended customers for the varied licence at Shepherds Bay.³⁸

Flow Systems has demonstrated its technical capacity as a retail supplier of sewerage and non-potable water services through the provision of plans, codes of practice and policies that show its understanding of retail supply of water and sewerage services to customers.

We have included more detail of Flow Systems' technical capacity assessment in Appendix B.

Financial and organisational capacity (licensing criteria (a))

We are satisfied that Flow Systems has the financial and organisational capacity to supply sewerage and non-potable water services to the Shepherds Bay scheme.

With support from the Shareholders, Flow Systems has adequate levels of solvency and liquidity to undertake licensed activities under the retail supplier's licence.

We have included more detail of Flow Systems' financial capacity assessment in Appendix C.

We note that our financial assessment represents financial capacity at a point in time. Our recommendation to grant Flow Systems a varied licence should not be viewed as an endorsement of its future, ongoing viability of Flow Systems. The assessment is based on a combination of information sources, none of which is to be regarded as individually determinative. We undertake this assessment for our own purposes and for the Minister's purposes in making a determination on the application. Our conclusion is not to be relied upon for any other purpose or by any other person.

We do not recommend additional licence conditions on financial capacity, should the Minister grant Flow Systems a varied licence. We consider that the existing condition in Schedule B, clause 1.1 adequately manages any risk on financial capacity.

Our detailed assessment of Flow Systems' organisational capacity of Flow Systems is in Appendix B.

Capacity to carry out those activities in a manner that does not present a risk to public health (licensing criteria (b))

We are satisfied that Flow Systems has the capacity to supply sewerage and non-potable water services to the Shepherds Bay scheme in a manner that does not present a risk to public health.

Flow Systems will retail sewerage services, drinking water (supplied by Sydney Water) and non-potable water (produced by FSO at the Shepherds Bay recycled water treatment plant). The management of public health risks is therefore relevant and relies on FSO's management of public health risks. We have considered the issues regarding the protection of public health in section 4.3.1 above.

Our detailed assessment of Flow Systems' capacity to undertake licensed retail activities in a manner that does not pose a risk to public health is in Appendix B.

³⁸ The RSMP, codes and compliance procedures are standard documents that apply across all of Flow Systems' schemes.

Appropriate arrangements with respect to insurance (licensing criteria (c))

We are satisfied that Flow Systems has made, and will continue to maintain, appropriate insurance arrangements for the Shepherds Bay scheme.

We have previously assessed Flow Systems' insurance as adequate for the retail supply activities undertaken under the retail supplier's licence, which covers a number of schemes including the Shepherds Bay scheme.³⁹ The insurance arrangements set out in the Retail Supplier Licence Application have not materially changed from Flow Systems' existing insurance arrangements. We consider that Flow Systems insurance arrangements with respect to the activities undertaken under the retail supplier's licence are sufficient to cover Stage 7A in the Shepherds Bay scheme.

³⁹ IPART, *Report to the Minister, Assessment of Flow Systems Pty Ltd's retail supplier's licence no. 13_001R, August 2017*, <https://www.ipart.nsw.gov.au/Home/Industries/Water/Alternate-water-utilities-WICA/WICA-Licenses-Listing-pages/Applications-licences/Flow-Systems-Pty-Ltd/Shepherds-Bay-Retail-variation/25-Aug-2017-Report-to-Minister/Report-to-the-Minister-Licence-Variation-Flow-Systems-retail-supplier-25-August-2017>

5 Environmental assessment of the Stage 7A of the Shepherds Bay scheme

5.1 Part 5 of the EP&A Act

In addition to a licence application assessment, the Shepherds Bay network operator's variation application requires a Part 5 infrastructure and environmental assessment to be undertaken. We have examined and taken into account to the fullest extent possible all matters affecting or likely to affect the environment should the Minister vary the licence for the Shepherds Bay scheme.

5.2 Environmental assessment

We reviewed the REF provided with the application and assessed that it has addressed to the fullest extent possible all matters under Part 5 of the EP&A Act affecting or likely to affect the environment associated with the variation application for Shepherds Bay scheme. We consider that it meets the requirements for determination under Part 5 of the EP&A Act.

Our assessment considered the following information:

Addendum REF for the proposed sewage and recycled water reticulation systems:⁴⁰

FSO provided an Addendum REF which, when read with the Approved Project REF (ie, the REF approved for the original licence application) provides a full assessment of the works under the variation application. These reports outlines FSO's assessment of the environmental impacts of the construction, operation and maintenance of the proposed sewerage and non-potable water reticulation networks for Stage 7A, and the sewage transfer tanks and associated pumps for all stages of the Shepherds Bay scheme. The REFs concluded that the proposed activities, in conjunction with the proposed mitigation measures, are not likely to significantly affect the environment.

We reviewed the Addendum REF (along with the relevant sections of the Approved Project REF) provided by FSO and concluded that:

- ▼ The Addendum REF meets the requirements for determination under the EP&A Act and has taken into account to the fullest extent possible all matters affecting or likely to affect the environment associated with the proposed development.
- ▼ The proposed activities are not likely to significantly affect the environment or any protected biodiversity.
- ▼ The Addendum REF provides a range of mitigation measures to be implemented during construction that would adequately mitigate any environmental risks.

⁴⁰ RPS, *Addendum REF for proposed sewage and recycled water reticulation systems, Shepherds Bay, NSW*, Version 1, 2 July 2019.

- ▼ Appropriately qualified and experienced personnel prepared and approved the Addendum REF.
- ▼ With regard to protection of the environment, we are satisfied that the proposed activities can be carried out with acceptable risk to the environment, provided the protection and mitigation measures specified in the REF are implemented.

We include our assessment checklist and REF assessment report in Appendix E.

We recommend the inclusion of additional licence conditions to ensure mitigation measures identified in the REFs are incorporated in the construction, operation and maintenance of the water industry infrastructure licensed at Shepherds Bay. The proposed new licence conditions are summarised in Table 5.1.

Table 5.1 Recommended new licence conditions for protection of the environment

Clause number	Condition
Schedule A, clause 1.1	The Licensee must only construct, maintain and operate, and must ensure that any Authorised Person only constructs, maintains and operates, the water industry infrastructure specified in paragraph 2) of Table 1.2 or paragraph 2) of Table 3.2 to the extent that such construction, maintenance or operation: <ol style="list-style-type: none"> a) has been granted development consent under the EP&A Act as at the date this Licence is granted; b) is exempt development under the EP&A Act and may be carried out without development consent under section 76(3)(a) of the EP&A Act; c) is the subject of the REF.
Schedule A, clause 2.1	Where the Licensee carries out any activities authorised by this Licence, the Licensee must: <ol style="list-style-type: none"> a) implement environmental risk mitigation measures substantially consistent with the environmental risk mitigation measures identified in the REF; and b) specify, in any Plan or combination of Plans, how the Licensee will implement environmental risk mitigation measures substantially consistent with the environmental risk mitigation measures identified in the REF.
Schedule A, clause 3.1	The Licensee must not commence, or authorise the commencement of, the construction of any Specified Water Industry Infrastructure until after the Licensee has provided a Construction Environmental Management Plan to IPART, and IPART has provided written approval of the Construction Environmental Management Plan to the Licensee.
Schedule A, clause 3.2	The Licensee must ensure that the construction of any Specified Water Industry Infrastructure is carried out in accordance with the approved Construction Environmental Management Plan.

Note: Schedule A of the proposed varied licence contains special licence conditions.



Appendices





A Draft Licences

Provided as separate attachments for Tribunal convenience

B Detailed capacity analysis of FSO's and Flow Systems' applications

We considered the following as part of our assessment:

Evidence of technical capacity with respect to the Network Operator Licence Application

From our assessment, we consider that FSO, with the support of Flow Systems, has the relevant technical capacity to carry out the activities that the varied licence (if granted) would authorise.

- ▼ **Compliance history and understanding of relevant legislative frameworks:** Recent audits of schemes operated by other Flow Systems subsidiaries at Discovery Point, Central Park and Green Square identified several material non-compliances, in regards to full implementation of management plans and safe operation of plant and equipment. While the non-compliances indicate that improvement is required, they did not result in a failure of treatment processes.

On balance, we consider that the ongoing operation of several treatment plants by Flow Systems subsidiaries demonstrates Flow Systems' capacity to safely and reliably design, construct, operate and maintain water industry infrastructure, when supported by the additional conditions. We have recommended an additional licence condition to mitigate the risk of similar non-compliances at the Shepherds Bay scheme and will undertake further audits to monitor ongoing compliance.

- ▼ **Risk assessment for the non-potable water infrastructure:**⁴¹

The draft risk assessment identifies key hazards and risks related to the scheme's non-potable water infrastructure and business systems, and identifies control measures to manage these risks. Further development of the risk assessment in consultation with NSW Health is required to address shortcomings identified by NSW Health. However, on balance, we consider that the current draft risk assessment demonstrates FSO's technical capacity to understand and implement the AGWR.

- ▼ **Flow Systems recycled water quality plan (WQP):**⁴² The WQP describes how the operation and maintenance of infrastructure for Flow Systems schemes (including at Shepherds Bay) would be consistent with the AGWR.
- ▼ **Flow Systems infrastructure operating plan (IOP):**⁴³ The IOP describes the asset lifecycle planning, system redundancy and condition monitoring for water industry infrastructure, amongst other infrastructure management considerations.

⁴¹ *Shepherds Bay Scheme Risk Register (SB-WAT-NSW-RG-OPS-2656)*, Flow Systems, dated 18 September 2019. (Appendix C8 in D19/26697)

⁴² *Recycled Water Quality Plan (FS-wat-aus-pl-ops-1311)*, Flow Systems, revision 12 dated 11 December 2018. (Appendix C9(b))

⁴³ *Infrastructure Operating Plan (FS-WAT-AUS-PL-OPS-1787)*, Flow Systems, revision 4 dated 30 December 2018. (Appendix C9(c))

- ▼ **Shepherds Bay scheme management plan (SMP):**⁴⁴ The SMP describes the framework for the management of the (existing) Shepherds Bay scheme. It includes scheme-specific details from relevant Flow Systems' plans (eg, WQP and IOP) for the Shepherds Bay scheme infrastructure. It also integrates elements from the asset management plan, incident management plan and operations environmental management plan.
- ▼ **Shepherds Bay water servicing strategy:** FSO has included both the original water balance report as well as an addendum report that assesses the effect on the overall water balance of the Shepherds Bay scheme including Stage 7A. The reports provide staged forecasts for drinking water and non-potable water demands and wastewater production at each stage of the development. The servicing strategy (developed from the water balance report) demonstrates FSO's technical capacity (supported by Flow Systems) to forecast parameters (eg, non-potable water demand, end-uses and top-up volumes), and consider key information such as weather conditions and system losses. The 2019 addendum report provides additional data for the new Stage 7A development. The additional 43 units do not affect the outcomes of the original water balance report with respect to sufficient volumes of water being available for drinking and for providing non-potable water for authorised end uses.
- ▼ **Hydraulic flow diagram:** The hydraulic flow diagram confirms the scope of the works under the variation application.

The above statements are not an endorsement of the adequacy or approval of the listed documents and procedures. This assessment only relates to the applicant's demonstration of technical capacity. Many of these documents associated with sewage and non-potable water management will be subject to audits for adequacy prior to commencing commercial operations.

Evidence of technical capacity with respect to the Retail Supplier Licence Application

From our assessment, we consider that Flow Systems has the relevant technical capacity to carry out the activities that the varied licence (if granted) would authorise.

- ▼ **Retail Supply Management Plan (RSMP):** The RSMP describes the retailing activities to supply drinking water, non-potable water and provide sewerage services to retail customers.
- ▼ **Code of practice for customer complaints:**⁴⁵ The Code of Practice describes the processes Flow Systems uses to respond to complaints (includes handling, resolution, escalation, compliance and continuous improvement) by customers (including owners, tenants and customers) in relation to the services provided. Flow Systems' code of practice for customer complaints has been developed to be consistent with the Australian Standard AS ISO 10002-2006 and addresses complaints handling, including complaint definition, contact details to make a complaint, tracking of complaints, assessment of complaints, response to complaints and escalation of complaints to the Energy and Water Ombudsman NSW.

⁴⁴ *Shepherds Bay Scheme Management Plan (SB-WAT-NSW-PL-OPS-1344)*, Central Park Water, revision 5 dated 30 October 2018. (Appendix A4(h) in D19/26695)

⁴⁵ *Flow Systems, Complaints and Dispute Resolution Policy (FS-ALL-AUS-PO-RET-1249)*, revision 4, 14 March 2018. (Appendix D6(b) in D19/26794)

- ▼ **Missed Payments Policy:**⁴⁶ The policy outlines how Flow Systems responds when customers (eg, tenants or businesses) have missed one or more payments, and outlines Flow Systems' approach to customers who are having difficulty paying or are concerned about not being able to pay on time. In situations of financial hardship, (ie where a customer does not pay its water bill), we understand that FSO would continue to provide non-potable water at a reasonable flow for basic health and hygiene purposes. Flow Systems, as the retail supplier, would give reasonable notice to its customers if it intended for FSO to restrict supply.
- ▼ **Incident Management Plan:**⁴⁷ The plan addresses continuity of service during interruptions due to incidents or operational problems, including interruptions non-potable water supply and disruptions to the customer centre.
- ▼ **Customer contract:**⁴⁸ The contract provides the standard terms under which Flow Systems would supply water and provide sewerage services and describes Flow Systems' responsibilities and its customers' responsibilities in relation administration of accounts, disputes and levels of service.
- ▼ **Compliance management procedure:**⁴⁹ which describes at a high level the compliance management within Flow Systems' organisation.
- ▼ **Technical performance and previous retail experience** in the Australian water industry in preparing and implementing required retail systems and procedures at existing operational schemes⁵⁰ and the specific personnel nominated in the information provided to us in the application. Flow Systems proposes to use the same systems, procedures and resources to supply its intended customers under a varied licence at the Shepherds Bay Scheme.⁵¹
- ▼ **Compliance history.** Flow Systems' RSMP was last audited in August 2016. The audit report on the RSMP provided to IPART did not find any non-compliances or any opportunities for improvement.⁵²

Evidence of financial capacity with respect to the network operators and retail supplier's licence applications

From our assessment, we consider that both FSO and Flow Systems have the relevant financial capacity to carry out the activities that the varied licences (if granted) would authorise.

⁴⁶ Flow Systems, *Missed Payments Policy*, (FS-WAT-AUS-PO-RET-1286),.version 1. (Appendix D6(c) in D19/26794)

⁴⁷ Flow Systems, *Incident Management Plan* (FS-WAT-AUS-PL-INC-1266), revision 8, 19 December 2018. (Appendix D6(d) in D19/26794)

⁴⁸ Flow Systems, *Customer Contract*, 30 October 2015, see <http://flowsystems.com.au/governance/CustomerContract.pdf>, accessed on 8 November 2019.

⁴⁹ Flow Systems' Compliance Management Procedure, (FS-ALL-AUS-PR-GOV-1366), revision 3, 29 August 2017. (Appendix A9(b) in D19/26791)

⁵⁰ Existing operational schemes are Box Hill North, Central Park, Discovery Point, Green Square, Huntlee, North Cooranbong, Pitt Town, and Shepherds Bay schemes.

⁵¹ The RSMP, codes and compliance procedures are standard documents that apply across all of Flow Systems' schemes.

⁵² Report on the Retail Supply Management Plan Audit of Flow Systems: Retail Supplier's Licence No. 13_001R (Flow Systems), Water Futures, 5 August 2016.

We have reviewed information provided by Flow Systems regarding the changed ownership structure for the Flow Systems group.⁵³ We conclude that, on balance, FSO (the applicant for the network operator licence) and Flow Systems (the applicant for the retail supply licence) have, and will continue to have, financial capacity to carry out the activities that would be carried out under the respective licences for the Shepherds Bay scheme through the new ownership structure. We considered:

- ▼ An agreement facilitating the funding of the day-to-day operations of FSO and Flow Systems.
- ▼ The new owners include large superannuation and sovereign wealth funds who have injected equity into the Flow Systems business and imposed increased financial reporting on Flow Systems.
- ▼ The Flow Systems group has improving levels of solvency (ie, Net Assets) and working capital.
- ▼ Flow System's financial forecasts indicate profitability for the Flow Systems group and individual schemes.
- ▼ A directors' declaration from Flow Systems regarding financial capacity for the applicants for the period up until 30 June 2020.

Further confidential information relating to financial capacity of the licensees is included in the Briefing to the Minister accompanying this report.

Evidence of organisational capacity with respect to the network operators and retail supplier's licence applications

From our assessment, we consider that both FSO and Flow Systems have the relevant organisational capacity to carry out the activities that the varied licences (if granted) would authorise.

- ▼ **Organisational structure:**⁵⁴ Flow Systems owns and manages its subsidiaries, including FSO. Flow Systems and FSO manage third parties to deliver the proposed works based on contractual arrangements and agreements.
- ▼ **Organisational chart:**⁵⁵ key personnel for areas such as business development, project delivery, operations, retail, finance technology, legal, risk and compliance are shared across the subsidiaries as required.⁵⁶
- ▼ **An outline of the experience of key personnel:**⁵⁷ namely the Directors, Chief Executive Officer, Executive Manager Project Delivery, Executive Manager Scheme Operations and Executive Manager Risk and Compliance, which match the role descriptions.

⁵³ Information provided includes copies of a Securityholder's Agreement, Subscription Agreement, and a Trust Deed for the applicant's holding company, A Directors' Declaration, replies to our formal requests for information and informal correspondence with the applicant.

⁵⁴ Flow Systems Operations Ownership Structure, as at 20 May 2019.

⁵⁵ Flow Systems Organisational Chart, 20 May 2019.

⁵⁶ We consider the slight changes to organisational chart from the application package that was consulted on does not impact our assessment that Central Park Water has organisational capacity.

⁵⁷ Appendix A3(c) *Biographies and Position Descriptions* of the application form.

- ▼ **Key personnel curricula vitae:**⁵⁸ which outlines relevant experience in the water industry and specific personnel nominated to the Shepherds Bay scheme.

Capacity to carry out those activities in a manner that does not present a risk to public health with respect to the network operators and retail supplier's licence applications

From our assessment, we consider that both FSO and Flow Systems have the capacity to carry out the activities that the varied licences (if granted) would authorise in a manner that does not present a risk to public health.

- ▼ **Risk management method:** we reviewed FSO/Flow Systems' risk assessment⁵⁹ and consider that FSO and Flow Systems have demonstrated capacity to identify and manage key hazards and risks related to recycled water components of an amended scheme, to acceptable levels of risk, and would have in place reasonable control and mitigation measures as discussed in chapters 4.3 and 5 of this report.
- ▼ **Source water quality:** FSO will continue to source non-potable water from the licensed Shepherds Bay recycled water treatment plant. Drinking water top-up for the recycled water network would be sourced from Sydney Water as per the existing scheme.
- ▼ **Fit for purpose recycled water quality:** FSO operates water infrastructure at the Shepherds Bay scheme under its existing licence. FSO and Flow Systems have demonstrated its capacity to treat sewerage and provide fit for purpose non-potable water, consistent with the requirements of the AGWR, at its licensed schemes. We consider that FSO is likely to need to further revise its risk assessment with NSW Health to adequately manage risks posed by the proposed new end-uses under the varied licence.
- ▼ **Cross connection mitigation measures:** FSO has identified appropriate controls to ensure the risks of cross connections are minimised. In addition, FSO will continue to conduct quality assurance inspections of non-potable water connections prior to commercial operation of the new infrastructure and would follow a specific notification protocol in the case of possible cross connection incidents.
- ▼ **Non-potable water supply interruption:** Any interruption to the provision of non-potable water should pose a limited risk to public health because drinking water top up for non-potable water is available from Sydney Water. In situations of financial hardship, (ie, where a customer does not pay its water bill), we understand that FSO would continue to provide non-potable water at a reasonable flow for basic health and hygiene purposes. Flow Systems, as the retail supplier, would give reasonable notice to its customers if it intended for FSO to restrict supply.

Appropriate arrangements with respect to insurance for the network operator's and retail supplier's licence applications

From our assessment, we consider that both FSO and Flow Systems have appropriate insurance arrangements.

⁵⁸ Appendix A3(c) *Biographies and Position Descriptions* of the application form.

⁵⁹ *Shepherds Bay Scheme Risk Register (SB-WAT-NSW-RG-OPS-2656)*, Flow Systems, dated 18 September 2019. (Appendix C8 in D19/26697)

▼ **Insurance information for Flow Systems and all its subsidiaries (including FSO) was provided:**

- Insurance certificates of currency
- Works and legal liability insurance policy
- Industrial special risk insurance policy
- Insurance experts report detailing the following insurances:
 - Workers compensation
 - Contractors pollution liability
 - Industrial special risks
 - Combined public and products liability and professional indemnity
 - Contract works
 - Cyber risk
 - General business
 - Management liability
 - Portable equipment property

▼ **icare review:** As part of its review, icare examined:

- FSO's proposal under a varied licence.
- The scheme risk assessment.
- Insurance coverage details, certificates of currency and product disclosure statements related to professional indemnity, public liability and product liability.
- A Deed of Guarantee and Indemnity⁶⁰ between FSO and its Guarantor, Water Factory Company Pty Ltd (subsequently changed to Flow Systems)
- Insurance experts report.⁶¹

⁶⁰ Dated 17 June 2016. (Appendix A9(e) in D19/26695)

⁶¹ Prepared by Arthur J. Gallagher & Co. (Aus) Limited, dated 30 July 2019. (Appendix A8(d) in D19/26695)

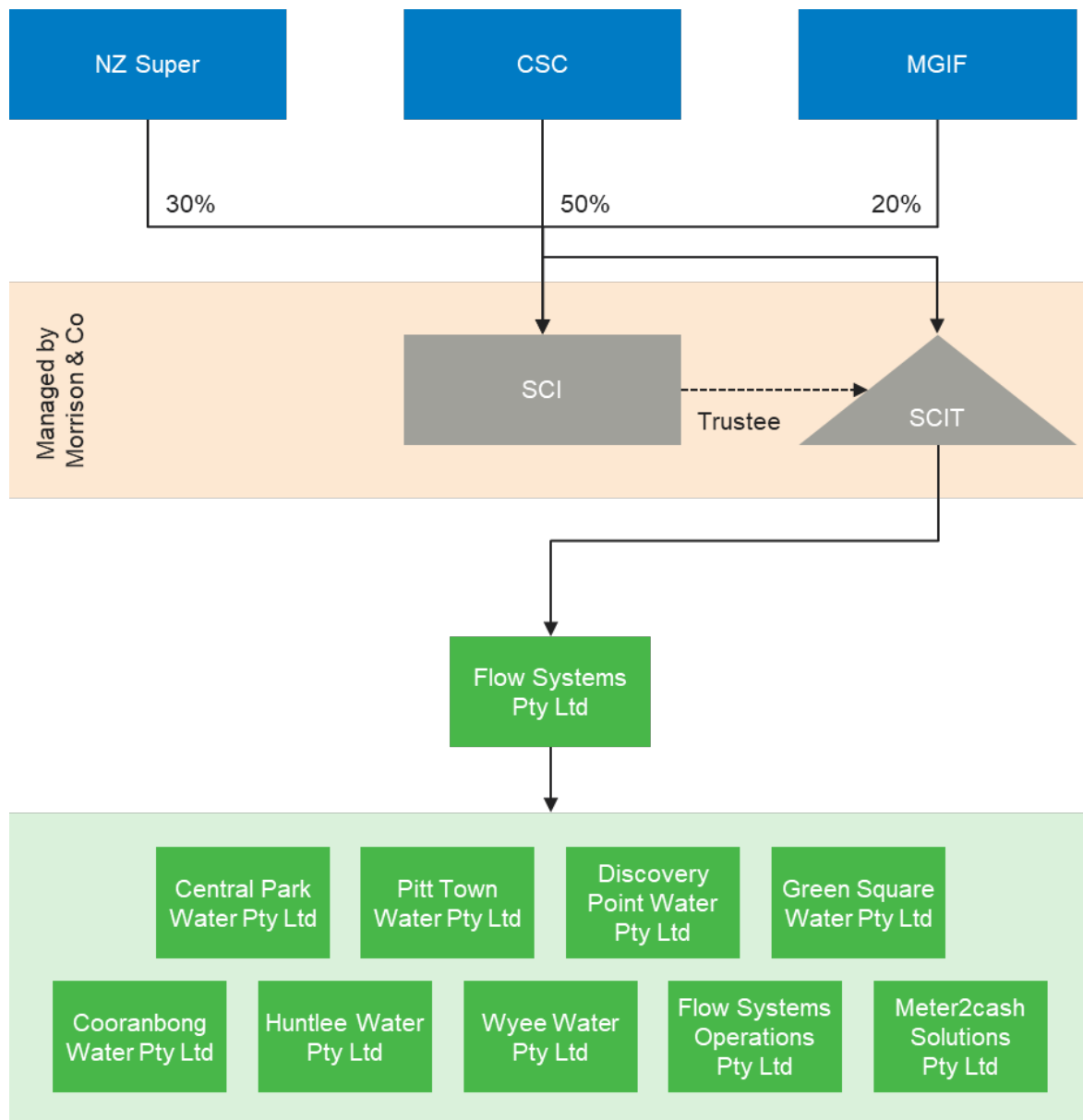
C Flow Systems Operations' ownership structure and related licensees

Table C.1 Flow Systems' subsidiaries and their licence schemes

Subsidiary	Scheme	Network operator's licence	Licensed for		
			DW ^a	NP ^b	S ^c
Pitt Town Water Pty Ltd	Pitt Town scheme, Pitt Town, Sydney	10_014		✓	✓
Central Park Water Factory Pty Ltd	Central Park development, Chippendale, Sydney	12_022	✓	✓	✓
Discovery Point Water Pty Ltd	Discovery Point development, Wollie Creek, Sydney	13_025	✓	✓	✓
Wyee Water Pty Ltd	Wyee residential scheme, Wyee, Lake Macquarie	14_026	✓	✓	✓
Huntlee Water Pty Ltd	Huntlee residential scheme, North Rothbury, Hunter Valley	15_030	✓	✓	✓
Green Square Water Pty Ltd	Green Square Town Centre, Sydney	15_031		✓	
Cooranbong Water Pty Ltd	Cooranbong residential development, Cooranbong, Lake Macquarie	15_033	✓	✓	✓
Flow Systems Operations Pty Ltd	Box Hill North residential development, Hills Shire Council	16_037		✓	✓
Flow Systems Operations Pty Ltd	Shepherds Bay development, Meadowbank, City of Ryde Council	17_042	✓	✓	✓

- a. Drinking water infrastructure
- b. Non-potable water infrastructure
- c. Sewerage infrastructure

Figure C.1 Flow Systems group ownership structure



Legend:
 NZ Super = New Zealand Superannuation Fund
 CSC = Commonwealth Superannuation Corporation

MGIF = MGIF SCIT PV Pty Ltd
 SCI = Sustainable Communities Infrastructure Pty Ltd
 SCIT = Sustainable Communities Infrastructure Trust

D Summary of submissions

Table D.1 Summary of submissions for FSO’s and Flow Systems’ applications to vary their network operator’s and retail supplier’s licences for the Shepherds Bay scheme.

Agency	Summary of submission	Our response
NSW Health		
1.	<p>NSW Health noted the additional proposed end-uses (general wash down on hard surfaces, street cleaning, dust suppression and recycled water treatment plant process water).</p> <p>NSW Health requested that Flow Systems confirm how the water is intended to be used and how these uses will be controlled.</p> <p>NSW Health noted that swimming pools and interactive water features such as water splash parks are subject to requirements under the <i>Public Health Act 2010 (NSW)</i>. Flow Systems must not encourage, via its website or other means, any non-approved end-use such as recreational use of water features.</p>	<p>We understand that FSO is currently liaising with NSW Health in the development of its amended risk assessment for the scheme, including the additional end-uses identified in the application.</p> <p>We propose to restrict the network operator’s licence for Shepherds Bay, which currently authorises “water features” generally to “ornamental water features” only. Restricting to “ornamental water features” only will mitigate risks associated with inadvertent non-approved use of recycled water such as recreational use of water features.</p>
2.	<p>NSW Health requested that all new end-uses are subject to a risk assessment to ensure that risks are appropriately managed. NSW Health noted that “an exposure assessment is necessary” to determine log reduction values for end-uses that are not considered in the AGWR.</p> <p>NSW Health also noted that Flow Systems’ should update its risk methodology prior to conducting new risk workshops related to the scheme. The updates should address NSW Health’s and IPART’s feedback on previous risk assessments.</p>	<p>Flow Systems is currently liaising with NSW Health to amend its risk assessment for the scheme.</p>
3.	<p>NSW Health recommended that Flow Systems’ customers and other end users of recycled water are made aware of, and agree to, any requirements to manage the risk.</p>	<p>Under Schedule 2, clause 9 of the WIC Regulation, Flow Systems must inform customers of the authorised purposes of non-potable water and must not supply non-potable water for any other purpose.</p> <p>If the Minister grants the licence variation, we propose to write to Flow Systems, highlighting this requirement. We would include this condition in the next operational audit scope for Flow Systems’ retail supplier’s licence.</p>

Agency	Summary of submission	Our response
4.	NSW Health requested that Flow Systems review the risk assessments in consultation with relevant stakeholders including NSW Health, IPART and EPA. NSW Health expects an invitation to attend risk assessments. NSW Health requests that the management plans and incident notification protocols for drinking water and recycled water are updated if details of the scheme change.	<p>Our current practices would ensure that FSO and IPART consult with NSW Health at various stages during the development and auditing of the management plans and incident notification protocols for Shepherds Bay.</p> <p>Standard licence condition (Schedule B, clause 4.1) requires FSO to comply with requirements of NSW Health. The existing direction from NSW Health requires FSO to consult with NSW Health during the development of all documents identified.⁶²</p>
5.	NSW Health considers that IPART's audit process would confirm adequacy and compliance of the Recycled water management plan against the <i>Australian Guidelines for Water Recycling</i> .	<p>For the proposed new infrastructure:</p> <p>We would undertake a Licence Plans Audit as part of this variation. This audit would check the adequacy and compliance of licence plans against requirements in relevant guidelines.</p> <p>For already licensed infrastructure with the proposed new end-uses:</p> <p>We would expect FSO to update its Water Quality Plan to cover the proposed new end uses.</p> <p>FSO must notify us of its proposal to supply non-potable water for new end-uses at least three months before commencing such operation (Schedule B, clause 9.1 of the existing network operator's licence).</p> <p>FSO is required to update its Water Quality Plan and associated risk assessment to adequately identify risks and controls related to the new end uses. We will audit the plan to ensure that the risk assessment is (1) adequate and (2) implemented.</p>
6.	NSW Health noted that a licence under the WIC Act does not automatically exempt FSO from the requirement to develop and adhere to a drinking water management system under the <i>Public Health Act 2010</i> and <i>Public Health Regulation 2012</i> .	Noted.

⁶² Letter to Flow Systems Operations Pty Ltd, from IPART, Notification of NSW Health Requirements under Licence Clause B4, 7 December 2018 (D17/29411)

Ryde City Council (Ryde Council)

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| 7. | Ryde Council agreed that, pursuant to cl 106(3) of ISEPP that Division 5.1 of the EP&A Act applies to the proposed Stage 7A works at Shepherds Bay, and that the determining authority would be the Minister granting the WIC licence. | Noted. |
| 8. | Ryde Council does not believe that the proposed activity, if approved by the Minister, would pose an unacceptable risk to the environment if the system is properly designed and constructed, operated and maintained correctly. They further note that all trade waste must bypass any Local Water Service and should discharge directly to Sydney Water's sewerage system. | Noted. Ryde Council incorrectly noted that the scheme should meet the requirements of the <i>Interim Guidelines for Management of Private Water Schemes</i> . Under WICA the schemes must meet the requirements of AGWR. We also note that FSO has a trade waste policy, and that any trade waste that cannot be treated through the Shepherds Bay treatment plant will be diverted to Sydney water's sewerage system. |
| 9. | Ryde Council recommended that the licence variation should contain the conditions listed in its development approval – LDA2018/0048. | Noted. The WIC Act licence does not need to re-iterate the conditions of consent from Ryde Council. FSO still needs to meet all its regulatory requirements, including those set out in the network operator's licence for the construction and operation of the water industry infrastructure. |

Department of Planning, Industry and Environment (DPIE)

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| 10. | DPIE confirmed that it found no record of enforcement action undertaken or carried out against FSO or Flow Systems under the EP&A Act. | Noted. |
| 11. | DPIE noted that the then Planning and assessment Commission approved the Concept Plan for the Shepherds bay development in March 2013 following a recommendation made by the Department. DPIE further noted that Ryde Council is the appropriate consent authority responsible for granting consent for each subsequent stage of the development and therefore recommended that IPART should consult with Council to confirm that the development approvals and modifications provided in the application have been obtained. | Noted. |
| 12. | DPIE agreed that under the relevant provisions of ISEPP that Division 5.1 of the EP&A Act applies to the proposed Stage 7A works at Shepherds Bay, and agreed with our conclusion that the determining authority would be the Minister granting the WIC licence. | Noted |
| 13. | DPIE provided no comment on the potential for the variation to impose additional environmental risks. It also provided no recommendations for additional licence conditions. | Noted. We will include the standard licence conditions related to the protection of the environment in the varied network operator's licence. |

Environment Protection Agency (EPA)

14.	EPA is not aware of any breaches of the <i>Protection of Environment Operations Act 1997</i> (POEO Act) and has not taken any regulatory action against FSO or Flow Systems.	Noted.
15.	FSO does not require an environment protection licence (EPL) under the POEO Act, on the understanding that the proposed variations do not alter current waste disposal methods at the Shepherds Bay Scheme to include discharge to waters or lands. Therefore the current situation remains unchanged and EPLs are not required.	Noted.
16.	EPA has no recommended conditions relating to the environment that should be included in the NOL.	Noted. We will include the standard licence conditions related to the protection of the environment in the varied network operator's licence.
17.	EPA noted that it is the responsibility of the proponent to ensure that all relevant environmental legislation is complied with.	Noted.
18.	EPA noted that IPART should not duplicate legislated environmental requirements.	Noted.

Sydney Water

19.	<p>Sydney Water supports measures that help to reduce the demand for drinking water, subject to:</p> <ul style="list-style-type: none"> ▼ Conditions may be needed to assure public health, safety and environmental outcomes (as determined by NSW Health, WorkCover and the Environment Protection Authority). ▼ Consistent definitions being used across licences for the same permitted uses. ▼ An assessment of impacts on the overall water balance for each scheme, including changes to the supply of drinking water for top-up. 	<p>Noted.</p> <p>Licences under the WIC Act do not typically have special conditions pertaining to safety and environmental outcomes because the Minister considers whether an applicant has the capacity to carry out the activities for which it seeks a licence in a manner that does not present a risk to public health. Further, in considering whether the licence is to be granted, the Minister has regard to the protection of public health, the environment, public safety and consumers generally.</p> <p>The current FSO licence does have one special licence condition requiring it to comply with NSW Health's' requirements that IPART has agreed to, and that are notified from time to time to the Licensee by IPART in writing.</p> <p>We have attempted to ensure that the definitions used across Flow Systems' subsidiary licences are consistent. Eg, the licences refer to "ornamental water features" rather than simply "water features" to reduce ambiguity about non-potable water use.</p>
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<p>20.</p>	<p>Sydney Water has stated its strong preference that all WIC Act Licence holders be required to develop a Code of Conduct (CoC) with any other utility that provides services to or within their area of operations, regardless of whether there is a direct interconnection of infrastructure. As a minimum, the CoC should cover matters such as:</p> <ul style="list-style-type: none"> ▼ Data sharing (for example, water quality) ▼ Incident management ▼ Customer communication and complaint protocols ▼ How the risk of cross connections will be managed/mitigated. 	<p>Noted.</p> <p>FSO is required to establish a CoC in accordance with clause B8 of its current network operator's licence, if the Minister has not already established a CoC under clause 25 of the <i>Water Industry Competition (General) Regulation 2008</i> (WIC Regulation).</p> <p>Clause B8 sets out the minimum requirements that must be included in the CoC. The WIC Regulation also sets out similar matters that the Minister may include in a CoC under clause 25 of the Regulation. The matters raised by Sydney Water go beyond these requirements. As this raises a broader issue that affects all licences and is not related to the variation being sought, we have not sought to address this issue through the licence variation process. We will however consider this issue as part of the next re-make of the WIC Regulation. We intend to consult further with Sydney Water and WICA licensees on the issues raised as part of that process.</p>
<p>21.</p>	<p>Sydney Water would welcome the opportunity to work with Flow Systems to ensure the safety of customers is prioritised, including better understanding Flow Systems' approach to communicating with recycled water customers during drought.</p> <p>Sydney Water noted that while historically recycled water has been exempted from water restrictions, demand in extended dry periods typically exceeds the available supply requiring significant volumes of drinking water top-up. This may compromise pressure and flow in Sydney Water's drinking water system which may lead to poor service outcomes for customers and could also present public safety risk to the community during incidents (for example, during bushfires).</p>	<p>Noted.</p> <p>The CoC is required under FSO's current licence (clause B8), and under clause 25 of the WIC Regulation, to set out who is liable in the event of the unavailability of water. This includes recycled water. Sydney Water can discuss with FSO the terms of provision of top-up potable water supply during extended dry periods under the terms of its Utility Services Agreement.</p> <p>If necessary, the Minister has the capacity to impose restrictions on recycled water use. We consider that this is a more appropriate and flexible mechanism than specific licence clauses which are not able to be updated dynamically in response to wet/dry periods.</p>

E Assessment of FSO's Addendum REF

E.1 Introduction

E.1.1 Purpose

Flow Systems Operations Pty Ltd (FSO) has submitted an application under the *Water Industry Competition Act 2006* (WIC Act) for a variation of their existing network operator's licence (NOL 17_042). The variation (NOLV) is to extend the current licensed reticulation network for sewage and recycled water to include Stage 7A of the Shepherds Bay development. The variation also seeks to add the installation and operation of dual sewer pumps and sewage transfer tanks in the basement of **each** building of the Shepherds Bay development area. The scheme is located in the Ryde City Council Local Government Area.

RPS Australia East Pty Ltd (RPS), on behalf of FSO, has prepared an environmental assessment (Review of Environmental Factors, REF) for the proposed scheme to satisfy the legal requirements of Part 5 of the *NSW Environmental Planning and Assessment Act 1979* (EP&A Act) and Clause 7 of the *Water Industry Competition (General) Regulation 2008*:

- ▼ *Addendum REF for proposed sewage and recycled water reticulation systems, Shepherds Bay NSW (RPS, 2 July 2019, Version 1).*

This report assesses the adequacy of the Addendum REF in identifying and assessing the potential environmental impacts of the proposed variation, to enable us to determine whether adequate consideration has been given to the environment and whether the proposed variation should be approved under Part 5 of the EP&A Act.

To assess whether the Addendum REF is sufficient to allow the Minister to make a determination under Part 5 of the EP&A Act, we have reviewed the REF with the provisions of:

- ▼ Sections 5.5 and section 5.7 of the EP&A Act
- ▼ Clause 228 of the *NSW Environmental Planning and Assessment Regulation 2000* (EP&A Regulation)
- ▼ Section 7(1)(a) and section 10(4)(e) of the WIC Act
- ▼ Clause 7 of the *NSW Water Industry Competition (General) Regulation 2008*
- ▼ Various other provisions relating to NSW statute and regulation (such as the *NSW Biodiversity Conservation Act 2016* and the *NSW National Parks and Wildlife Act 1974*)

- ▼ relevant provisions relating to Australian Government statute and regulation (including the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act))
- ▼ Environmental guidance and good practice relating to construction and operation (such as the *NSW Interim Construction Noise Guidelines 2009*) and
- ▼ Water industry guidelines such as the *Australian Guidelines for Water Recycling* (2006) and *Use of Effluent by Irrigation* (2004).

E.2 Proposal

FSO proposes to modify the Shepherds Bay sewage and recycled water reticulation systems in order to service an additional 43 residential dwellings, within Stage 7A of the Shepherds Bay Urban Renewal Project area (Shepherds Bay development) and to include the installation and operation of dual sewer pumps and sewage transfer tanks in the basements of the buildings of Stages 2 to 7, 7A, 8 and 9 within the Shepherds Bay development. The proposed works (the “proposed modification”) include the following:

- ▼ Sewer and recycled water reticulation systems works to service Stage 7A within 102 and 104 Bowden Street (Lot 1 DP 730371 and Lot 5 DP 12534) and existing Stage 7 in Meadowbank. This will entail the construction and operation of a dedicated pressurised 150mm diameter sewer main connecting a basement located transfer tank and sewer pump to Stage 7 of the Shepherds Bay Urban Renewal Project which in turn is connected to the Flow Systems Local Water Centre. It will also entail the construction and operation of a 150mm diameter recycled water main connecting Stage 7 to Stage 7A of the Shepherds Bay Urban Renewal Project.
- ▼ The installation and operation of dual sewer pumps and sewage transfer tanks within each stage of the Shepherds Bay development. These will be connected to Flow Systems’ approved sewage reticulation infrastructure.

The approved sewage reticulation system and recycled water reticulation system (under licence no. 17_042) will be connected to an approved water recycling facility, referred to as the Shepherds Bay Local Water Centre (Shepherds Bay LWC). The Shepherds Bay LWC is proposed at 12-16 Nancarrow Avenue in the basement levels of the building referred to as Stage 3 of the Shepherds Bay development. The Shepherds Bay LWC (to be constructed in 2020) has development consent from the City of Ryde (Ryde Council) (LDA 2017/0426) and is not part of the proposed activity that is the subject of the Approved REF or this Addendum REF. The Shepherds Bay LWC has been designed to ensure that it has adequate capacity to supply all the projected non-potable water demand for all approved and proposed development (including Stage 7A) within the Shepherds Bay development area.

E.3 Findings

The Addendum REF provides sufficient information regarding the construction and operational activities of the proposed works to enable us to examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment.

The key issues found through our assessment are:

- ▼ The Addendum REF clearly articulates the scope of the reticulation scheme it assesses. The scope of work is to add the sewage and recycled water reticulation systems for Stage 7A, and the dual transfer pumps and sewage transfer tanks for all stages of the development to the existing licence. Attachment B of the Addendum REF provides a schematic depiction of the scope of work.
- ▼ Environmental impacts have been assessed and are expected to be minor and/or consistent with the impacts described in the Approved Project REF. Minor environmental impacts have been identified in the Addendum REF and these are generally temporary in nature and in keeping with standard construction practices.
- ▼ Based upon the information provided in this Addendum REF and assessments supporting current development applications across the site it is unlikely that the proposed activity will have direct and indirect impacts on threatened species, populations and ecological communities listed pursuant to the *Biodiversity Conservation Act*, the *Fisheries Management Act* or impact on matters of National Environmental Significance pursuant to the *EPBC Act*.

E.4 Conclusion

The Addendum REF has:

- i. examined and taken into account relevant Commonwealth, NSW and local legislation and policies.
- ii. examined and taken into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of the proposed activity. Identified environmental impacts are within acceptable parameters, provided the mitigation measures outlined in the Addendum REF and the Approved Project REF are effectively implemented.
- iii. been prepared in accordance with Section 5.5 of the EP&A Act. It has concluded that the proposed activity is unlikely to significantly affect the environment and hence an EIS is not required to be prepared under section 5.7 of the EP&A Act. The proposed activity is also unlikely to affect Commonwealth land or have an impact on any matters of national environmental significance.

We therefore consider that the Addendum REF **meets the requirements for determination** under Part 5 of the EP&A Act and has taken into account to the fullest extent possible all matters affecting or likely to affect the environment associated with the proposed scope of work that is the subject of the variation application for Shepherds Bay scheme.