**Supplementary Submission No 115c**

# INQUIRY INTO PLANNING SYSTEM AND THE IMPACTS OF CLIMATE CHANGE ON THE ENVIRONMENT AND COMMUNITIES

**Name:** Bronwyn Wannan

**Date Received:** 30 November 2023

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Portfolio Committee No 7 – Planning and Environment
NSW Parliament, Legislative Council

# Planning system and the impacts of climate change on the environment and communities

## Executive Summary

That Portfolio Committee 7 inquire into and report on how the planning system can best ensure that people and the natural and built environment are protected from climate change impacts and changing landscapes.

The flaws in the planning system are many and I refer below to some of those flaws which confirm a complete failure of the planning system in reference to the Bowdens Project at Lue and its impacts on climate change, communities and the environment including:

1. **The entire amount of average 924 megalitres per year of water to be caught on the mine site in "excluded works dams" is unlicenced and has not been acknowledged or assessed by DPE Water, NSW Department of Planning or the Independent Planning Commission. There are mines and other projects in NSW that are using contaminated water that is exempt from licensing and entirely unassessed. As we move forward these supplies of contaminated water will be impacted by climate change resulting in the environment and communities being adversely affected by the lack of planning and accounting for this contaminated water.**
2. Water caught in excluded works dams has not been assessed.
3. How much water is caught each year in NSW in excluded works dams?
4. All contaminated water caught in NSW must be accounted for.
5. Incorrect assessment of the impacts of the leakage of contaminated water on the environment and the community and how climate change will impact that assessment.
6. Employment by Bowdens of an elected local Government councilor and the lack of proper and unbiased discussion and assessment of the project by Mid Western Regional Council.
7. Improper assessment of the impacts to Mudgee town water supply and denial by NSW DPE of Tailings Dam Leakage of 1.6 ML and its impacts on surface and groundwater.
8. Release of the NSW Department of Planning (NSW DPE) Assessment on 22 December 2022 without properly assessing crucial water reports provided by experts shortly before the Assessment.
9. Flawed determination of the Project by the Independent Planning Commission which did not consider the merits of the Project, including the disproportionate water use on the mine site compared to other water users and incorrect acceptance that water was already damaged and degraded and therefore it was acceptable for the downstream water to be contaminated and unable to be consumed by humans.
10. No proper assessment of the merits of the project by the Independent Planning Commission.

11. The NSW DPE did not properly consider the impacts of Greenhouse Gas emissions and lead dust emissions of the Project on the Community, Wildlife, and the Environment.
12. No transparency of the Planning System and no easy access to Submissions made to NSW DPE in the EIS process with NSW DPE blaming the IT department. Expert reports were not available to the Community until after Assessment.
13. No proper assessment by DPE Water or NSW DPE of water licensing or water use or water supply to the mine site. All surface water caught on the mine site (av 924 megalitres per year) required for processing in unlicensed and unassessed by DPE Water. This rainfall and runoff water was not considered by the NSW DPE or the IPC or properly considered by Bowdens in the EIS. Only 177 megalitres of 924 megalitres were considered.
14. The CEO of Bowdens is not concerned with the community, environment and the water and air pollution or any climate change impacts caused by his project.
    a. CEO *gaslighted* Cate Faerhmann by correcting her question re 1.6 megalitre per day leakage from mine site and incorrectly stating the site had 1.6 megalitres leakage per year.
    b. CEO denigrated the community of Kandos by making statements that are not in line with the latest census or Kandos community opinions.
    c. The NSW DPE has stated Bowdens will provide blood testing for lead levels but the CEO said Bowdens had not commenced the program when they should have.

Please see below an information report on correspondence and communications including letters from DPE Water and others attempting to explain and justify the lack of water assessment on the Bowdens site and the fact that Water Management Plans and other Management Plans will be passed on to NSW DPE who are clearly unable to adequately manage Water Resources.

NSW DPE are in such a hurry to approve some projects that they disregard communities, the environment and important matters such as water resources and the contamination of those resources.

## Information regarding major water sources for the Bowdens Project –

**Harvestable Rights and Contaminated Water**, both exempt from licencing.

The Bowdens Project has been recommended by the NSW Department of Planning (NSW DPE) and approved by the Independent Planning Commission (IPC) without accounting for the contaminated water (av 924 megalitres per year of rainfall and runoff) to be caught on the mine site and used in processing. This contaminated water is entirely exempt from licencing and neither the Water Management Act 2000 nor the Water Management (General) Regulation 2018 set out how contamination of a water source should be assessed and determined. DPE Water had insufficient time or was prevented from giving proper advice to the IPC and the public.

Bowdens Surface Water Sources

**Harvestable Rights Dams**

- 180.6 megalitres calculated on an area of 2580 ha
    - Unclear megalitres needed for farm use
    - Unclear what lands are included in harvestable rights calculations
    - Oct 2023 Newsletter states Bowdens have 2000 hectares of farmland

**Excluded Works Dams**

- 924 (av) megalitres to be caught in sediment dams on the mine site
    - Unclear what area of the mine site is used in calculations
    - Impacts of 177 megalitres assessed

Timeline –

31 August 2020 - DPE Water Advice (OUT20/6406) - EIS
https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-5765%2120200914T033951.180%20GMT

Microsoft Word - DPIE Water response - Groundwater Model - Attachment B to letter - Bowdenâ•Žs Silver Project (SSD 5765).DOCX (nsw.gov.au)

13 August 2021 – DPE Water Advice (OUT21/9450) – Response to Submissions (RTS)

https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=PAE-24169513%2120210816T010447.451%20GMT

14 April 2022 – DPE Water Advice (OUT22/3668) – Second Amendment Report (signed by Liz Rogers)

https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=PAE-39737098%2120220414T045629.604%20GMT

1 March 2023 – IPC letter to Clay Preshaw
https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2022/12/bowdens-silver/correspondence/department-of-planning-and-environment/230301-out_ipc-to-dpe_request-for-information_redacted.pdf

7 March 2023 – DPE Water Response to IPC Questions (prepared by Liz Rogers) (REF OUT23/3551) NSW Department of Planning, Industry and Environment correspondence

8 March 2023 – DPE Steve O'Donoghue letter to IPC attaching DPE Water response to questions
https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2022/12/bowdens-silver/correspondence/department-of-planning-and-environment/230309_in_dpe-to-ipc_rfi-response_redacted.pdf

5 September 2023- Liz Rogers made a submission to the Parliamentary Inquiry (Submission 181)

https://www.parliament.nsw.gov.au/lcdocs/submissions/82142/0181%20Liz%20Rogers.pdf

Information

1. **Submission 181 received from Liz Rogers, retired DPE Water assessor. Ms Rogers assessed the Bowdens Project for the IPC in March 2023.**

In her submission to the Parliamentary Inquiry Ms Rogers states that the advice that agencies provide prior to determination is made public on the major projects portal although much of that advice was not available until well after submissions had closed and in some cases after determination. The public and the community had no opportunity to question or clarify advice given by DPE Water or any other agency. Ms Rogers states that *"there are not clear guidelines on engagement".* She goes on to say that there is *no transparency for any person involved or for the community.*

See below for more information about Ms Rogers assessment and advice to the IPC.

2. **Please refer to the IPC letter to DPE Director, Clay Preshaw, dated 1 March 2023, requesting clarification on various matters and stating the IPC would consider any written response provided on or before 8 March 2023.**

The following response is prepared by Liz Rogers – Manager Assessments (REF OUT23/3551) and sent to Stephen O'Donoghue on 7 March 2023 NSW Department of Planning, Industry and Environment correspondence

Please note that Ms Rogers did not answer the unnumbered question following question d) regarding contaminated water impacts on downstream users or the ML/year over the life of the project. It is unclear whether or not she was directed not to answer that question. Mr O'Donoghue answered the unnumbered question in (e) in his letter to IPC. See Paragraph 6 highlighted in red below.

Ms Rogers also stated regarding Harvestable Rights that *"provisions allow landowners in applicable rural areas to catch up to 10 percent of the average regional rainfall for their landholding in dams without requiring a licence."* She did not make it clear that landowners might be able to catch 10% of the average regional rainfall more than once, and many times in one year.

**3. Schedule 1 below states that harvestable rights are calculated by constructing a dam with the capacity to hold up to 10% of average annual rainfall.** Therefore in theory a harvestable rights dam could be filled by runoff, emptied, refilled with runoff, emptied, and so on, meaning it is possible to catch far in excess of 10% of average annual rainfall depending when the rain falls.

> ***Harvestable Rights (central inland-draining catchments) Order 2023 under the Water Management Act 2000, Dated 21 of 9 2023*** sl-2023-542 (nsw.gov.au)

*Schedule 1 Method for calculating the maximum capacity of harvestable rights dams on a landholding*

*a) The maximum capacity of a harvestable rights dam or dams on a landholding (in megalitres) is to be calculated using the online 'maximum harvestable rights dam capacity calculator' on the WaterNSW website (online calculator).*

*Notes:*

*1. The online calculator gives one dam capacity output for landholdings in the harvestable rights area – representing up to 10% of the average annual regional rainfall runoff for the landholding.*

*2. The online calculator is used in the method for accounting for harvestable rights water in mixed-rights dams that exceed the maximum harvestable right volume for a landholding in Schedule 2.*

*b) The method applied by the online calculator is as follows:*

*i. identify the location of the landholding,*

*ii. identify the total size of the landholding (in hectares) within the harvestable rights area,*

*iii. to calculate the capacity for a harvestable rights dam or dams which represents up to 10% of the average annual regional rainfall runoff on the landholding - multiply (ii) by the harvestable rights multiplier*.

**4. The question (e) regarding contaminated water being retained on site was answered by Steve O'Donoghue in his letter to the IPC dated 8 March 2023.** (Highlighted in red below) In his letter Mr O'Donoghue did not reveal how much water would be retained on site (av 924 ML/yr) and stated that *"Bowdens would release some sediment laden water if water quality monitoring indicates that the water is suitable for discharge".*

In fact, Bowdens require a large percentage of rainfall and runoff, of an average 924 ML/yr, for processing and therefore all contaminated water will be retained on site. Even though the IPC asked for the amounts of water that would be caught on the site, the DPE, did not provide those numbers.

The DPE requested "*In May 2022 the Harvestable Rights Orders were amended with a provision that disallows water to be moved from harvestable rights dams to excluded works or other dams in the landholding. Please provide consideration of the implications of this amendment to the project, noting that Bowdens Silver was proposing to transfer water between water storages.*" WRM Water and Environment on 28 September 2022 can be found on DPE Major Projects Website but fails to provide the requested information. See Table 5.5b. WRM have not considered other water requirements of adjacent lands where water is collected in farm dams.

https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=RFI-47291956%2120221005T221605.749%20GMT

**5. IPC Correspondence below from Ms Rogers answering questions asked by IPC on 1 March 2023 and sent to DPE Water on 3 March 2023. (ATTACHMENT A)**

*Subject: Bowdens Silver Project (SSD-5765) Advice on Independent Planning Commission*

*(IPC) questions regarding Harvestable Rights provisions (in blue)*

*Dear Stephen O'Donoghue*

*I refer to your request for advice sent on 3 March 2023 to the Department of Planning and*
*Environment (DPE) Water seeking advice on questions from the IPC (below in blue) regarding*
*Harvestable Water Rights. Our suggested response is in italics.*

*1. Given the requirement for the retention of contaminated water on-site, can the Department confirm the following:*
*a) Whether this water would be subject to the 'harvestable rights' provisions under the*
*Water Management Act 2000, and if so, to what extent (in ML/yr over the life of the project?*

*No, this water would not be subject to the harvestable rights provisions under the Water Management Act 2000. The Harvestable Rights provisions allow landholders in applicable rural areas to collect up to 10 percent of the average regional rainfall for their landholding in dams without requiring a licence. Harvestable rights dams must be located on a minor stream and capture rainfall runoff.*

*b) If, as per (a) above, this water is subject to the 'harvestable rights' provisions, will take of this water be exempted from requiring a Water Access Licence (WAL)*

*As outlined above, the contaminated water is not subject to the harvestable rights provisions.*

*However, Clause 3 of Schedule 1 of the Water Management (General) Regulation 2018*
*allows an exemption for dams that prevent contamination of a water source. Please note the new DPE Fact Sheet Interpreting excluded works dams (www.dpie.nsw.gov.au/water/licensing-and-trade/licensing/water-licensing-andworks-approvals-exemptions).*

*c) If, as per (b) above, take of this water is exempted from requiring a WAL, how will any WAL exemptions be dealt with under the relevant Water Sharing Plan?*

*Excluded works dams (which include those that hold contaminated water) are exempted from requiring a WAL. These exemptions are not required to be considered under the relevant water sharing plan.*

*d) If, as per (a) above, this water is subject to the 'harvestable rights' provisions, will those harvestable rights result in a reduction to the Long Term Annual Average Extraction Limit (LTAAEL), and therefore Available Water Determinations/WAL allocations under the relevant Water Sharing Plan? If so, to what extent (in ML/yr over the life of the Project)?*

*As outlined above, this water is not subject to the 'harvestable rights' provisions. However DPE Water notes that harvestable rights provisions are included in the estimation of the LTAAEL. If a dam satisfies the harvestable rights provisions, this volume has been considered in the WSP development and therefore the LTAAEL and Available Water Determinations should be unaffected.*

*Should you have any further queries in relation to this submission please do not hesitate to*
*contact DPE Water Assessments water.assessments@dpie.nsw.gov.au. or the following*
*coordinating officer within DPE Water:*

*Liz Rogers – Manager Assessments*
*E:*
*M:*
*Yours sincerely*
*Mitchell Isaacs*
*Chief Knowledge Officer*

**6. The following response is from Steve O'Donoghue dated 8 March 2023**

Questions in bold print

***Harvestable Water Rights***

1. ***Given the requirement for the retention of contaminated water on-site, can the Department confirm the following:***
   - ***(a) whether this water would be subject to the "harvestable rights" provisions under the Water Management Act 2000, and if so, to what extent (in ML/yr over the life of the Project)?***

*The Department consulted with DPE Water to assist with the response to the Commission's questions on harvestable water rights. DPE Water's advice is attached for information (see **Attachment A**).*

*The requirement for retention of sediment-laden and mine water (contaminated) water on site is separate to harvestable rights provisions under the Water Management Act 2000 (WM Act).*

*Retention of contaminated water is exempt from the requirement for a water access licence (WAL) as an 'excluded work' under Clause 3, Schedule 1 of the Water Management (General) Regulation 2018. This exemption is subject to certain requirements, including that such dams are kept as small as practicable and are located on minor streams. Further details are provided in DPE-Water's Interpreting Excluded Works Dams Fact Sheet (see link in* ***Attachment B****).*

*Harvestable rights are provided under the WM Act, and allow landholders in applicable rural areas to collect up to 10 percent of the average regional rainfall for their landholding in dams without requiring a licence. Harvestable rights dams must be located off-stream or on a minor stream and capture rainfall runoff.*

*A summary of the exemptions and harvestable rights provisions is outlined in Bowden's Surface (WRM, Feb 22, see sections 8.1.1 and 8.1.2).*
*https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-5765%2120220314T053729.664%20GMT*

***(b) if, as per (a) above, this water is subject to the "harvestable rights" provisions, will take of this water be exempted from requiring a Water Access Licence (WAL)?***

*As outlined above, the contaminated water is not subject to harvestable rights provisions, and is exempted from requiring a WAL (subject to certain requirements including those outlined above).*

*It is noted that some contaminated surface water, such as that captured in the Tailings Storage Facility (TSF) (which is not located on a minor stream), is not exempt from requiring a WAL, and has been addressed in the water licencing requirements for the project (see para. 139 and Table 6 of the Department's assessment report).*

***(c) if, as per (b) above, take of this water is exempted from requiring a WAL, how will any WAL exemptions be dealt with under the relevant Water Sharing Plan?***

*Excluded works dams are exempt from requiring a WAL, and are therefore not addressed in the relevant water sharing plan, which in this case is the Water Sharing Plan for the Macquarie Bogan Unregulated and Alluvial Water Sources, 2012 (Lawsons Creek Water Source) (the WSP).*

*Whilst exempt from requiring a WAL under the WSP, the potential impacts associated with the removal of this water from the catchment is required to be considered as part of the development application, and has been assessed by the Department in its consideration of the project (see below).*

***(d) If, as per (a) above, this water is subject to the "harvestable rights" provisions, will those harvestable rights result in a reduction to***

***the Long Term Annual Average Extraction Limit, and therefore Available Water Determinations / WAL allocations under the relevant Water Sharing Plan? If so, to what extent (in ML/yr over the life of the Project)?***

*As outlined above, contaminated water retention is separate to the harvestable rights provisions, and is exempted from requiring a WAL (subject to certain requirements including those outlined above).*

*It is noted that water for basic landholder rights, including domestic and stock rights and harvestable rights, is addressed in the WSP and considered in the setting of Long Term Annual Average Extraction Limits (LTAAEL). If a dam satisfies the harvestable rights provisions, this volume has been considered in the WSP development and therefore the LTAAEL and Available Water Determinations should be unaffected.*

***(e) Finally, and in the context of the above, can the Department clarify whether, and if so, how, the requirement for the retention of contaminated water on-site has been factored into the assessment of water impacts in relation to downstream users?***

*The Department confirms that the retention of contaminated water on site has been factored into the water assessments, including the impacts on downstream water users.* (Only 177ML of the 924ML to be caught has been assessed)

*In this regard, for the purposes of assessing impacts on downstream flows, Bowdens' water assessments have conservatively assumed that all contaminated water would be retained on site. In practice, as outlined in the Department's assessment report (see para. 142), Bowdens would release some sediment-laden water if water quality monitoring indicates that the water is suitable for discharge.* (Bowdens have stated that they will not monitor water on site)

*The water assessments indicate that the project would not result in any significant impact on downstream water users. As outlined in the Department's assessment report (see paras. 122- 132), the project would not result in significant reductions in downstream flows in Hawkins Creek and Lawsons Creek, or significant changes to low or no-flow conditions.* (No flow data is available for Lawsons Creek)

Mr O'Donoghue's response to question (b) (in green) is not entirely accurate as Bowdens do not hold any surface water licences for the mine site or the Tailings Storage Facility. Mr O'Donoghue refers to unregulated water licences held in Lawsons Creek and water is only available under these licences when there is flow in Lawsons Creek.

Link to ATTACHMENT B Interpreting excluded works dams.pdf (nsw.gov.au)

**7. Bowdens Water Requirements and Sources**

See below the water requirements of the mine and its processing plant (in teal) and the graph below which indicates the water sources for the mine. An average of 924 meglitres of rainfall and runoff (in yellow) is intended to supply the water requirements of the mine processing and this contaminated water is entirely unlicenced.

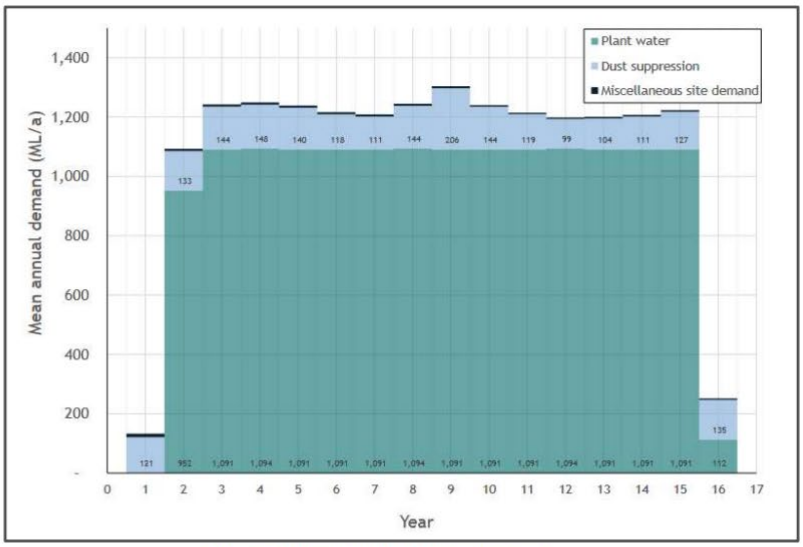


***Figure 7 | Project Water Requirements***

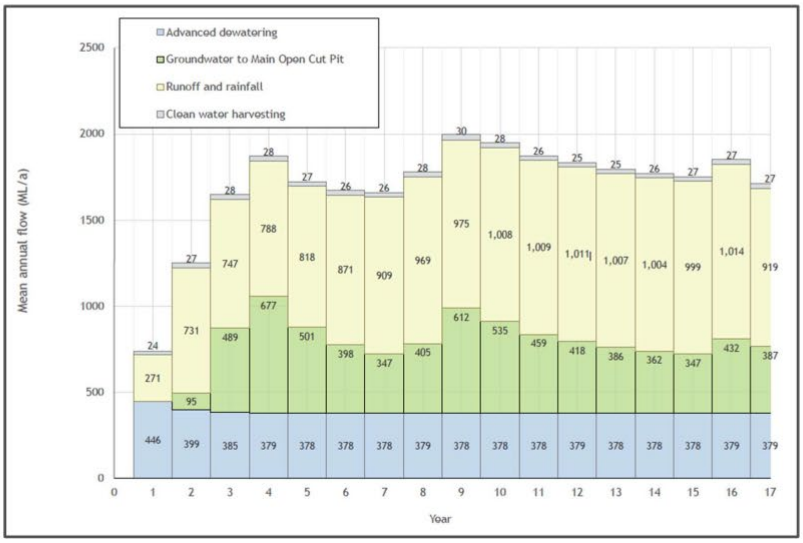


***Figure 8 | Water Supply Sources***

107. The water balance modelling for the mine indicates that, with the exception of extreme drought periods, there would be sufficient water to supply all site water demands. On average, water supply reliability for the processing plant demand would be 99.6% (96.3% under the worst-case

The entire amount of 924 megalitres of contaminated rainfall and runoff water (in yellow) is unlicenced.

***"Neither the Water Management Act 2000 nor the Water Management (General) Regulation 2018 set out how contamination of a water source should be assessed and determined."*** Interpreting excluded works dams.pdf (nsw.gov.au)

Contaminated water is not metered, licenced, even calculated in order to determine its impact on the Water Sharing Plan or its impact on any other water users in the Murray Darling Basin. ,

Contaminated water is not considered in the Long Term Annual Average Extraction Limits (LTAAEL) or in Available Water Determinations. There is a real flaw in the WSP and the assessment of water sources in NSW if an average of 924 megalitres each year are allowed to be caught and used in a SSD or any development without WALs. How many projects in NSW have the NSW DPE recommended that catch contaminated water and rely on that water for their own purposes.

The Project will either shut down or slow production during dry times. What is not explained is where water will be sourced for dust suppression and make up water for impacted neighbours during dry times when the mine does not have adequate water to operate. Should neighbouring lands be contaminated, would they expected to dam all contaminated lands and prevent water from entering the river system? Who is responsible for ensuring contaminated water doesn't enter the river system?

**8. Insufficient water**

Earth Systems, the surface water consultants engaged by NSW DPE, query if there is sufficient water available for the water requirements of the project. https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-5765%2120221221T052917.765%20GMT

See responses found on the NSW DPE website under "Additional Information" by RW Corkery. This information was not available to the public and the community until after the DPE Recommendation. Some of the RW Corkery responses below are consultant gobbledegook at its best. Especially note that *"Bowdens has weighed up the magnitude and duration of duration of the loss of production in deciding what is commercially sustainable for the project"* in Q11 but there is no evidence of that, no triggers for shut down, no budget for costs of shut down, no evidence whatsoever that Bowdens have calculated what loss of production is commercially sustainable for the project.

*Q8. The sensitivity analysis of the water supply arrangements is intended to demonstrate the sensitivity of the outcome to changes in particular parameters used in the assessment. It provides an indication of outlier outcomes resulting from underestimated parameters used in the assessment. The sensitivity analysis is an assessment of risk factors but should not be used for planning operations. The application of assumptions concerning evaporation rates and dust suppressant effectiveness is considered to be well constrained by the approach to modelling and the experience from other mining operations. As WRM considered the model most sensitive to runoff parameters and groundwater flows, the assessment of the sensitivity of additional factors or cumulative uncertainty in the site water balance is not considered necessary. Bowdens Silver has carefully considered the proposed water management strategies and the implications of the approach on the financial viability of the Project. Bowdens Silver remains committed to these strategies.*

*Q4. Fundamentally, environmental impact assessment requires the establishment of the existing environmental conditions, identification of potential changes to the existing*

*condition as the result of the proposed development and assessment of the implications of those changes on the existing environment. By considering the streamflow implications from the loss of 177ML/year, WRM have appropriately assessed the change to the existing setting should the Project proceed. As the estimated 856 ML/year of runoff would only eventuate if the Project was approved, assessing this as a change to the local setting is not appropriate. Finally it is noted that DPE-Water did not query these findings or conclusions in their review of the Surface Water Assessment.*

*Q 11 The response by Corkery (2022a; Table A1) states that: "Bowdens has weighed up the magnitude and duration of the loss of production in deciding what is commercially sustainable for the project."*

Earth Systems have also raised concerns about impacts on water quality by the project. These have not been answered satisfactorily. Bowdens do not intend to test water quality on the mine site.

Liz Rogers has raised serious concerns in her submission to the Parliamentary Inquiry and it appears that at the very least the water requirements and use of unlicenced contaminated water on the Bowdens site must be reassessed prior to any further work being carried out. Ms Rogers states that DPE Water is often time constrained and it is obvious that this project should never have gone past the SEARs phase in the approvals process without a secure water supply.