I have worked in the region for over 45 years, and consider this proposal to be counterproductive to proper and long term use of some of the best agricultural cropping and grazing lands in the region.

These lands are in what is regarded as one of the safest rainfall areas and best soils in the entire Riverine area, with ability to feed the nation in those difficult years.

That the DPI dismisses this in a handful of words shows how this proposal is seriously flawed.

The proposal removes from agriculture, even on decommissioning the area to an industrial wasteland, as soils and agricultural land cannot be rehabilitated to any reasonable basis, no matter what the proponent says or allegedly undertakes to do at a point in the future.

Further, I believe that area should not be removed from agriculture, despite assurances that "...sheep grazing will be undertaken..."

Mustering of the sheep, no doubt, would be a hoot!! and result in serious management issues. Simply, how do you manage the sheep for the obvious problem of blowfly attack. Sheep will lie in areas that are quite inaccessible.

Thus, despite the best intentions, an approval will destine large numbers of animals to not only an uncertain future, but an agonising death.

And the most important is that of social licence.

Even the raw data shows that there is NO social licence for the proposal and the proposal should be rejected.

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Sincerely,

Rob Cumming

STATEMENT OF CAPABILITIES

Rob Cumming – November 2023

NOVEMBER 1, 2023

SOILMASTER
P.O Box 660, RAVENSHOE QLD 4888

Statement of Capabilities – Rob Cumming

Contact details:

Name: Rob Cumming

Business postal address: P.O Box 660, RAVENSHOE QLD 4888

Telephone: 0428 483 155, Fax:

E-mail address: robwcumming@gmail.com

ABN: 62 324 819 003

Registered for GST? Yes

Response to Accountabilities:

1.0 Setup and management of assets

- *Operated soil testing laboratory since 1988 to 2010 for over 7000 clients;*
- *Developed and implemented, throughout NSW (Tablelands and Riverina (and into QLD and VICT), unique Soilmaster™ programme, between 1988 and 2010*
- *Developed DSS (Decision Support Software) in the mining and Agricultural sector;*
- *Developed unique interpretation systems for mining, dairy, agriculture, government;*
- *Ability to develop and grow work place in a systemic fashion*

2.0 Working knowledge in planning, design and implementation of projects:

- *Uses and develops computer and conceptual models that have a specific target yields;*
- *Development of a team approach through developed procedures;*
- *Has a developed knowledge and contacts through rural Australia;*
- *Involved in recruiting and developing staff resources in a team environment;*
- *Have developed techniques to implement agronomy and soil testing for optimum economic return / farm benefit, within an agreed environmental framework;*
- *In 1998, undertook PIRD Sheepmax project, which developed on the Tablelands of NSW, better techniques of monitoring (in use of fertilisers and monitoring of the trial*
- *In 2004 developed techniques for monitoring a NIDP programme at Boorowa until 2008*

3.0 Working knowledge/ expertise Natural Resource Management Issues/ soil physical/ chemical/ biological properties /water /native vegetation and Relevant expertise in natural resource management and a sound understanding of the role of land use change in catchment management.

The Natural Resources Commission has developed a statewide standard and targets for natural resource management in the State: targets cover the areas of biodiversity, land, water and communities, with resource condition goals to be achieved by 2015.

Within this, Catchment Authorities must deliver catchment-based natural resource management outcomes within the catchment, by restoring and improving the condition of natural resources of the State at regional level.

In November 2009, I was a member of a team developing an expert response for defending the approval by Scone Council of a lime quarry. This involved all facets of the botany, geology, soils and water management as related to the local EEC [White box/ yellow box/ red gum community]. The requirements of the brief required a sound level of knowledge and show that the descriptive requirements for this EEC, for example, are flawed in regards to the basis for some definitions.

My review focussed the matters of the geology/ soils/ botany impacts of the site as related to the EEC impacts This was undertaken on a very short time frame, with very tight schedules and many conflicting views, requiring specific knowledge levels and re-direction of the information set.

The research required detailed skills to find relevant information and integrate this within a very diverse range of knowledge provided by other members of the team. The defence for the site was successful.

This applied catchment principles in the review, which integrated vegetation, land use and the relevance within the catchment of a range of regulatory requirements and of the site.

During the past 20 years, I have developed a broad range of techniques to manage change at both farm and regional level.

These techniques include:

1. On-farm family farm needs analysis and the implementation of change using the following techniques:

- Challenge analysis;
- Comparative analysis;
- Farm walks

2. Involvement in regional change analysis and implementation;

- *Use of training seminars;*
- *Group comparative analysis;*
- *Team and group direction*

4.0 Implementation of NRM projects:

- *Developed and implemented, throughout NSW (Tablelands and Riverina (and into QLD and VICT), unique Soilmaster™ programme, between 1988 and 2009, which develops and leads to implementation of soil testing for optimum economic return / farm benefit, within an agreed environmental framework on a group and individual farmer base.*

- *In 1998, undertook PIRD Sheepmax project, which developed on the Tablelands of NSW, better techniques of monitoring (in use of fertilisers and monitoring of the trial), involving two farms and a range of off-site issues;*

- *In 2004 I developed techniques for monitoring a NIDP programme at Boorowa [1250 ha farm] until 2009. This process involved a series of parts to the programme [soils, yield, landscape, climate, agronomy, equipment changes, GIS, spatial data] within an agreed time frame, giving changes to how the property was currently operated and would operate into the future.*

All these projects involved a team approach, with defined objectives and outcomes. This is best shown by the following:

- *Operated soil testing laboratory since 1988 for 7000 clients ;*
- *Developed DSS (Decision Support Software) to assist interpretation;*
- *Developed unique interpretation systems;*
- *Undertake soil testing to NATA/ASPAC/ISO 9001 standards*

5.0 Well developed project management skills and a proven ability to conduct groups and achieve positive outcomes:

Development of the Atherton Tablelands Dairy Factory management project [2 permanent staff, milking farm (18 500 litres/ ha in 2009 – from 8000 litres/ha in 1997). Suitable team approach to handling farm activities, factory wastes, environmental recovery action plan [this involved a team of 35 people for 10 days] and site redesign – 7 people for 10 days.

- *1977 – 1985 Development of acid soils programme of management) in Pejar and Nerrimunga areas of the Southern Tablelands (over 150 farms) – on farm, which expanded to*
- *> 1987 research in Southeastern Australia*

6.0 Understanding of landholder issues and barriers to change.

Barriers to change are wide ranging, including:

As Furnham (2002) emphasises that although agricultural industries are considered "unique", mainstream change management concepts can still be utilised effectively.

This understanding is important in the effective management of change. I recognised this in the mid-1980's and went to an Australian Institute of Management two week school. I have used these principles since that time in effectively carrying out all my tasks and work.

Assisting my actions are:

- Ensuring participation in plans and activities;
- Relevance of the change to the participant/s;
- Early involvement;
- Ensure facts are properly conveyed - words, actions diagrams;
- Ensure commitment;
- Listen to concerns and act on these;
- Ensure concerns and suppositions do not collide;
- Recognition of old ideas and the fear of replacement with new.

7.0 Demonstrated understanding of the needs and issues facing landholders in achieving sustainable economic development:

> 1988 to 2009 Development of the Soilmaster™ approach directly on farm for over 336 farmers and land managers, with 30 to 150% yield increases for over 100 000 ha of farming and grazing lands between Corryong, Yarrawonga, Wagga and Tumut.

- *> 2007 Involvement in the Eyre Peninsula Bushfire Recovery programme in S Australia [see attached for scope]*

8.0 Demonstrated knowledge of government and community processes in natural resource planning at a catchment scale.

- See above
- A part of the focus group – "Meeting in the Middle" formed at Holbrook.
- Involved at the management focus team input for the programme.
- Through the mid-eighties, I developed the original soils data programme for Goulburn 1:250000sheet, together with the approach to land capability mapping at both regional and catchment scale.

This information was then taken to local scale and implemented a programme to rank local catchments for earthwork and major works implementation. This technique continues today at a local level.

This involved Sydney Catchment Authority, Soil Conservation Service, local landholders and Councils

9.0 Demonstrated ability to develop and implement activities to clients in a team environment

- See above

A part of the focus group – "Meeting in the Middle" formed at Holbrook.

- Involved at the management focus team input for the programme;
- Development (2004) of the farmer focus issues in the Farm nutrient Loss Index.
- Development of a multi-factorial EIS response to the Land and Environment court for a limestone quarry in 2010
- Long-term interest in vertically integrated structures within the broader agricultural and environmental industry, which include:
  - Development of minimum cost agriculture;
  - Optimal use of resources [fiscal, soils, environment, energy, human, water etc];
  - Resource management;
  - Extension of the organisational position to develop better environmental management by reducing carbon footprint and re-use of resources in such areas as water management, energy capture and re-use;
  - Development of EMS and EMP's into the future.
  - Integration of agriculture into the community by fostering better understanding of issues that affect all land users.

10.0 Demonstrated ability to analyse problems and plan strategically.

- *1977 – 1985 Development of acid soils programme of management) in Pejar and Nerrimunga areas of the Southern Tablelands (over 150 farms) – on farm, which expanded to > 1987 research in Southeastern Australia*

- *> 1988 to 2010 Development of the Soilmaster™ approach directly on farm for over 336 farmers and land managers, with 30 to 150% yield increases for over 100 000 ha of farming and grazing lands between Corryong, Yarrawonga, Wagga and Tumut. Some participants have been involved continuously since 1996;*

- *Development of the Atherton Tablelands Dairy Factory management project [2 permanent staff, milking farm (18 500 litres/ ha in 2009 – from 8000 litres/ha in 1997) [3000mm/ year rainfall];*

  Suitable team approach to handling farm activities, factory wastes,

- *Environmental recovery action plan [this involved a team of 35 people for 10 days] This recovery plan involved EPA [Environmental Protection Authority - QLD, the local Council, Dairy Farmers Company and locaal landholders. The action prevented pollution of the Upper Johnstone World Heritage Area in the Atherton Tablelands.*

- *Environmental soil erosion and water management site redesign – 7 people for 10 days.*

11.0 Demonstrated project management skills and ability to work in and foster a team environment

- *> 1988 to current: Development of the Soilmaster™ approach directly on farm for over 336 farmers and land managers, with 30 to 150% yield increases for over 100 000 ha of farming and grazing lands between Corryong, Yarrawonga, Wagga and Tumut. Some participants have been involved continuously since 1996;*
- *> 2007 Involvement in the Eyre Peninsula Bushfire Recovery programme in S Australia*
- Shown through on-going management of soil test lab, provision of field advice and development of new business opportunities in agriculture and beyond.
- Developed (from 1977) an "all new" approach to soil chemistry, salinity, sodicity (and soil structure), which has benchmarked information within a range of soils. This benchmarking follows a long-term approach.
- This has been further implemented in the Soilmaster™ approach, with the ability to spatially and temporally review data.
- This approach has involved a range of industry, CSIRO, and community.
- It also involved a field-testing programme through time, which is reviewed annually to test, then, where necessary, implement appropriate change to known parameters.
- This process involved a proactive team of individuals from apprentice level through to university graduate. The processes used have been robustly tested for over 20 years and involve working to ISO 9001 standards.
- Shown through on-going management of soil test lab, provision of field advice and development of new business opportunities in agriculture and beyond.
- Multi-faced capacity shown with Atherton Tablelands example, which has been on-going since 1997 and continues to provide a stable base to the Dairy Farmers operation at Malanda. EPA Queensland have requested a paper on the process to promulgate through their newsletter.

12.0 Well developed oral and written communication, facilitation and negotiation skills:

- See above and in appended data;
- Routinely writes newspaper articles and
- Has developed a routine newsletter sent to over 200 farmers
- Routinely gives interviews to ABC radio on topical issues

13.0 Proven ability in the recording and dissemination of spatial data (GIS), including the management of a soils data base, use spreadsheets:

- *Development of a relational database information system since 1988;*
- *Use of GPS data and relational mapping data - EIS studies and in support of the later (DAg) acid soils action programme;*
- *Use of GPS data and relational mapping data;*
- *Database management (for soils lab) of over 300 000 data points;*
- *Development of DSS;*
- *Implementation and usage of GIS;*
- *Development in 2004 a project to investigate and implement precision agriculture and beyond in the moderate to high rainfall zone [Boorowa]*
- *Implementation of essential elements of "precision agriculture" into farming enterprises.*

14.0 Proven ability to fulfil standard conditions of contract such as liability insurance, work procedures, privacy, record keeping and intellectual property.

 # Liability Insurance – Professional Insurance Policy
 # Work Procedures - Procedures Manual
 # Record keeping - Procedures Manual
 # IP - Implementation of copyright and trademarks to protect IP plus agreements.

15.0 Ability to implement Occupational Health & Safety practices, Equal Employment Opportunity, Principles of cultural diversity and ethical practices.

I have in place suitable OHS (recent audit by Insurer revealed no deficiencies), EEO, and CDEP in the workplace, with a defined implementation schedule and in line with the Company's QA (Quality Assurance) manual and policies to ISO 9001.

I can interpret EEO and other legislation to a variable workplace.

16.0 Proven ability to develop /apply innovative opportunities to operations

- Developed (from 1977) an "all new" approach to soil chemistry, salinity, sodicity (and soil structure), which has benchmarked information within a range of soils. This benchmarking follows a long-term approach. This has been further implemented in the Soilmaster™ approach, with the ability to spatially and temporally review data.
- This approach has involved a range of industry, CSIRO and community.
- It also involved a field-testing programme through time, which is reviewed annually to test, then, where necessary, implement appropriate change to known parameters.

17.0 Referees:

Mr Stewart Heriot, "Ladykirk", Morven NSW 2660 (02) 6036 5243
Dr Brian Murphy, DIPNR, Cowra 0412 261 230
Mr Graham Lieschke, "Blossom Farm", Henty 0418 274 901

Also:

Mr. Stephen McPherson, HACIP/ Environment Dairy Farmers Malanda QLD
Dr Colin Williams (Ret - Principal Senior Scientist - CSIRO)
Regents Professor Malcolm Sumner (Soil Science) - Georgia University
Mr Tony Morrison South East Chairman NSW Farmers
Dr Baden Williams (Ret - Principal Senior Scientist - CSIRO)

18.0 CV – Complete - Robert William Cumming

ADDRESS – P.O Box 660, RAVENSHOE QLD 4888
Phone: 0428 483 155 and 0269 293 058
Country (61) Area (0269)

- MARITAL STATUS - Married
- NATIONALITY - Australian
- HEALTH - no disabilities or health problems
- LANGUAGE - English
- EDUCATION - Bachelor of Science in Agriculture (Hons.) University of New England (Soil Science MAJOR)
- Bachelor of Science (Geology) Macquarie University incomplete 1986
- Australian Institute Management - Middle Management Programme 1985
- Diploma of Education (Technical) 1989
- Private pilots licence with Command Instrument rating and twin rating – 1996 - current

Employment

- Present – 2014 Soil and Environmental Consultant
- 2014-1988 Soil and Environmental Consultant Director - Reme Pty Ltd
- 1988 - 1994 Lecturer - Rural Studies Agronomy and Soils Goulburn TAFE
- 1987-1988 Visiting Scientist CSIRO Division of Soils
- 1985 District Soil Conservationist - Scone
- 1982-1985 Research Officer - Goulburn/Southeast Region
- Mining and Soil Consultant - Woodlawn Mine
- 1978-1982 Investigations Officer - Metropolitan Area
- 1978-1987 Lecturer (Part time) Goulburn TAFE
- 1975-1978 District Soil Conservationist – Henty
- 1974 District Soil Conservationist - Gundagai
- 1973-1975 Soil Conservationist - Young

LEARNED SOCIETIES

- Australian Institute of Agricultural Science (1970-1987 and >1996)
- Certified Practising Soil Scientist (CPSS)
- Certified Practicing Agriculturalist (CPAg)
- AAAC member since 1995
- Soil Science Society of Australia (> 1983)
- Soil and Water Conservation Association of Australia (>1987)
- Australian Institute of Management (> 1986 to 1998)
- Agricultural Technologists of Australasia (Member) (> 1989 to 1996)
- Australasian Register of Agricultural Consultants (> 1989)
- Grasslands Society (> 1985)

OTHER

- National committee soil testing and accreditation 1988 - 1997
- Committee 2006- 2008 “Meeting in the Middle” Murray CMA Soils management in the Murray Catchment.
- David Stead Foundation - Wirrimbirra - President 2004 -2006
- Rotary Club Goulburn Mulwaree (1987-2004) including. Director
- Goulburn Action Group (>1991 - 2004) President
- Rotary Club Scone (1985-1987) Director
- Scone Neighbourhood Watch 1985/6 Deputy Chairman
- Rotary Club Goulburn Mulwaree (1978-1985) incl. Director
- Scouts Association Goulburn & Scone (1979-88) incl. President
- Rotary Club Henty (1975 - 1978) Director
- Member of Goulburn City Council Environment Committee 1996- 2004
- Member of Working Party for Sustainable Agriculture - Sydney Basin 1996 - 2000

PROFESSIONAL EXPERIENCE

Soils Interpretation

- Preparation of and development of techniques for soil survey in the Urban and Rural environment on the Southeast and Metropolitan regions;
- Responsible for all aspects of soils inputs into South east Region reports from 1978 to 1985.
- Responsible for the preparation and technical competence of urban capability reports. (exceeding 2000 ha) for Soil Conservation Service between 1978 and 1985.
- Developed an interactive database for assessment of soil test results for direct reporting to clients;
- Developed new techniques for soil analysis;
- Developing techniques for new methods of soil analysis, waste water and plant which can be used in a range of predictive situations;
- Development of new diagnostic techniques for soil and property monitoring as applied to the derived yield of crops and pastures which is embodied in the Soilmaster ™ programme;;

Environmental Management/ Implementation

- Development of a Plan of Management for an operating Lead-Copper-Zinc mine. this type of planning is being adopted by the NSW Department of Mines.
- Responsible for the implementation of monetary control and technical content of consultancies to private industry involving the Soil Conservation Service, Public Works Department and Private Contractors of $1.5m.

Urban and Rural Development

- Development of assessment techniques on urban and rural development sites for water control and reduction of sedimentation.
- Development of the concept - "Constraints to Development" in an Urban/ semi urban environment which has been accepted by Southern NSW Councils.
- Development of a system of comment on geo-technical reports in difficult areas of Urbanisation. This has been embodied in Soil Conservation Service Policy.
- Responsible for re-mapping of the Warragamba Dam catchment area and development of the concept of "Areas of priority for erosion treatment"
- Responsible for (at commencement) of the mapping of the Shoalhaven River catchment area and development of the concept of "Areas of priority for erosion treatment"
- Represented the Soil Conservation Service as an expert witness at Land and Environment hearings.

- Represented private clients as an expert witness at Land and Environment hearings including:

- Narran Lake [Keech] 2004 Opinion on the land management issues and cropping of lake beds in the terminal Western area lakes [included large cattle feedlot];
- Scone 2009 – Opinion on the development of a hard rock quarry – limestone;
- Bungendore 2010 – Disposal of treated effluent in peri-urban area
- Developed a strategic and unique approach to disposal of effluent on semi-rural and urban blocks to 10 ha's

Environmental Management

- Responsibility for the design, supervision and construction of rehabilitation works in an operating heavy metals mine in a high rainfall area. This program exceeded $5m in value.
- Responsible for design and development of rehabilitation programs for derelict mine sites in the South east (Captains Flat and Mt. Costigan)
- Developed innovative techniques for erosion and sediment control on a range of sites;
- Produced EIS and Statement of Environmental Effects for a range of extractive sites including sand, clay and gravel piggeries, abattoirs, wool scours and poultry farms

Soil Conservation and Environmental Management Plans

- Review of over 250 development proposals to ensure adequate erosion control content and environmental protection at EIS and Development Application levels.
- 25 years experience in applied and general soil conservation, with 13 years District and specialised regional responsibilities.
- Design supervision and implementation of broad acre soil conservation works programs for farming and grazing lands in the Central and Southern Slopes and Tablelands of NSW.
- Responsible of implementation of erosion control works programs in both intensive horticulture and broad acre agricultural undertakings.
- Preparation of Environmental management and farm Plans for grazing, horticultural, piggeries and agricultural industries of NSW/QLD. Piggeries up to 1200 sow units and up to 300 cow dairies.

Technology Usage

- Innovative developments of computer modeling techniques to model water use related to actual rainfall leading to provision of adequate site water controls in mining and developmental situations. These models (including Runoff 2000) are used to assess individual proposals.
- Development of database management systems to control client contact and data acquisition of results from the laboratory
- Development of intuitive spreadsheets to apply and interpret data in the field from measured data sets
- Use of GIS at paddock level to implement survey information and plan management systems
- Ability to quickly learn and implement intuitive systems

Research

- Specialised research experience in all aspects of acid soils research in high level research environments.
- Development of techniques for land management and its control;
- Development of techniques to identify areas prone to acidity and salinity.
- Development of and involvement in soil acidity research to lead to treatment of acid soils in Southeast Australia.
- Development and introduction of new analytical techniques for soil fertility management in Australia
- Recognition as an expert in the field of acid soil management and soil fertility assessment and effluent management for wool scours, abattoirs, and piggeries.

Education experience and staff Training

- Organisation and leadership of field days for agriculturalists in research, extension and practice.
- Broad experience in teaching of adults at Certificate level
- Development of technical curriculum for State wide programs in soils and agronomy;
- Implementation of new and existing curricula for adults
- Responsible for development of Training seminars for the Soil Conservation Service and Valuers General Department in 1982-1987
- Developed a direct education programme with Regional Newspapers, which has appeared monthly in 150 000 papers, known as: ***POKING ABOUT IN THE DIRT***
- Regularly invited to speak to rural groups on issues of importance to agriculture of over 1 500 people every year; Development of and participation in training programs for staff of a number of Government Departments including Valuer Generals, State Rail, Dept.Agriculture, Education Department and Soil Conservation Service.

Publicity

- Experienced in a broad range of extension and research activities including the preparation of press releases, radio and television interviews;
- Experienced in a broad range of Public Speaking;
- Contribute on a regular basis to Rural Publications to extend the knowledge and education of farmers in Australia (eg. FarmMagazine)

REFEREES: [I am happy to provide contact phone numbers and e-mail addresses.]

- Mr. Stephen McPherson, HACIP/ Environment Dairy Farmers Malanda QLD
- Dr Colin Williams (Ret - Principal Senior Scientist - CSIRO)
- Regents Professor Malcolm Sumner (Soil Science) - Georgia University
- Mr Tony Morrison South East Chairman NSW Farmers
- Dr Baden Williams (Ret - Principal Senior Scientist - CSIRO)
- Mr Graham Lieschke, “Blossom Farm”, Henty
- Mr Bruce Wheaton, “Ridgeway Farm”, Totenham

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Agricultural and Contaminated Site Assessment

Cumming R.W (1996) Site Assessment - Arsenic Dip Contamination - Bungendore
Cumming R.W (1996) Site Assessment - Petroleum Site Assessment Goulburn
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Cumming R.W (2001) Environmental Management Plan – Bega Cheese

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Cumming R.W (1996 to 2010) Environmental Management Plan **Malanda Milk QLD**

Publications - Contaminated Site Assessment.

1990 Finley - Pesticide
1991 Wagga - Wool scour waste disposal
Nambucca - Heavy metal contamination of waterways
Tarago - Heavy metal contamination - Management
1992
1994 Arsenic - Queenbeyan
1997 Arsenic Crookwell
1998 Industrial Site - Fuel Station
1999 Industrial Site - Brickworks
2004 Industrial Site - Metal Fabrication
2006 Industrial site - Aviation

Industrial Sites and Publications

Cumming R.W (1990) Limestone and clay works - site management

Large dams for water storage / effluent management

1990 Bullamalita (1) Repair of 135 Ml dam

1991 Goulburn (1) Construct dam for effluent - 9.5 Ml - circular and 11 m deep

1992 Goulburn (1) Repair and Construct dam for effluent - 38 Ml - three dams to 10 m deep

1993 Goulburn (4) Design for Construction - dam for effluent - 150 Ml - four dams to 6 m deep

1994 Rugby - Design dam (1) 95 Ml for Irrigation
Cowra - Design dam (1) 80 Ml for Irrigation

1995 Taralga - Design dam and construct (1) 120 Ml for Irrigation

----------END-OF-FILE----------