MEETING #05 – OUTCOMES

Meeting	Meeting #05 – National Environmental Monitoring Sites Register Working Group
Chair	Andre Zerger, Bureau of Meteorology
Meeting Date	13 November 2018 – 2.00pm to 3.30pm
Attendees	Andre Zerger (BoM), Chantelle Doan (BoM), Nathan Campbell (BoM), Christine Price (BoM), Karl Monnik (BoM), Natalia Atkins (IMOS), Siddeswara Guru (TERN), Ben Seddon (MDBA), Jasmine Howorth (DAWR)

1. Welcome, introductions and actions (Andre Zerger)

Andre welcomed attendees to the meeting. Apologies were note from Geoscience Australia. Andre advised that Mardi Albert who had been leading our NEMSR data onboarding work had recently left the Bureau and Christine Price has joined the NEII team replacing Mardi.

There were no outstanding actions from the Meeting #04 and minutes were accepted. Members were reminded that the minutes are available on the www.neii.gov.au website.

2. NEMSR update (Andre Zerger)

Andre advised that owing to Mardi's departure there had been only limited NEMSR onboarding activity since the last meeting. The development of the NEII Vocabulary Service had also taken priority. Recent network updates include updated NSW air quality sites (following a request from NSW EPA), and an update to the AusPollen network with four new monitoring sites in Queensland and one site from Deakin University in Melbourne currently in on-boarding stage. The Bureau is seeking to de-commission the Environmental Information Explorer product and the team have been asked to encompass that data into NEMSR. It would be onboarded and classified as a decommissioned network. However, it is a large database (>50000 sites) and the validator and ingest systems have been failing. Recently completed back-end enhancements mean it should now be possible to handle large networks.

Andre noted we are trying to ensure annual updates for NEMSR and asked everyone to review their networks for updates. Nathan Campbell has some updates pertaining to Water Data Online and these will be uploaded shortly.

3. NEII User Analytics (Andre Zerger)

Andre noted that across the NEII program we don't have good information on what data are being accessed by our users. Through a small project Google Analytics capability has now been customised to provide some reports (refer to the NEII - Charts 12Nov2018 pdf, attached to the meeting invitation emailed 13 November). However, it's challenging to build a whole-of-program analytics capability as NEII is a federated system and the various components reside on different infrastructure. For example, the NEMSR application resides on Bureau servers while the Vocabulary Services is Amazon AWS hosted. Through the project the NEII programme have developed an initial analytics capability and the question to members is what type of analytics are

useful to NEMSR network owners? TERN noted that customised NEMSR reports, for example summarising the users accessing specific NEMSR networks would be helpful. The programme will consider developing regular reports to NEMSR network owners, potentially through future working group meetings.

4. NEMSR tracker update (Andre Zerger)

There are now 27 operational networks in NEMSR. The program would like to start more actively delivering and measuring benefits for example with respect to other systems that may use the NEMSR. This could include both national and international systems. One example was the global ecological sites register DEIMS-SDR for long term monitoring sites. The NEII program have contacted the product owners and have asked TERN to join in a meeting to consider system integration options. TERN also suggested the GEOS portal as a possible user of NEMSR data. The programme requested that members suggested additional ideas for system integration that could leverage NEMSR data including portals and systems. TERN noted that there is a groundwater system currently under consideration for decommissioning and ingesting this data into NEMSR as a decommissioned network could be considered. TERN will provide details regarding this system for consideration by the program.

5. Agency updates

Department of Agriculture and Water Resources – Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)

- The NEII vocabulary service for land use is embedded in the Land use of Australia website and being used to improve consistency of field validation. It would be useful to link to vocabulary service with online display of land use data such as through national map.
- While there are some other monitoring sites within the department, they are not able to be shared
- ABARES – the State of Forests, Australia report will be available soon
- ABARES - Catchment Scale Land Use Mapping for Australia – 2018 update has been prepared and is due for release in February 2019. This will include updates to WA, Vic and Qld Burdekin (and NSW pending approval).

TERN

- There have been one or two site changes, but nothing major
- TERN is looking at using NEII vocabularies to support some of their systems

Bureau of Meteorology

- There has been a strategic review of the solar radiation network
- Meteorological and marine observations could be looked at for inclusion in NEMSR
- Over the past two years, the number of agencies with water data on NEMSR has increased from nine to 26, with more than 5,400 watercourse level and streamflow sites currently on NEMSR
- In the next fortnight expecting to load water storage data for 35 organisations, EC, pH and water temperature data for eight organisations, and turbidity data for six organisations.
- Work is also being done on 2,411 non-bureau rainfall stations that are expected to be added to NEMSR next year

Andre asked whether the Water Data online data should be considered as one network, or many, such as surface water network, storages network, etc. Nathan believes they should be treated as individual networks and the team will look at incorporating these into NEMSR

IMOS

- There have been small updates to monitoring sites, but nothing major.
- Roger Proctor is retiring next month. Sebastien Mancini will replace him.

MDBA

- Owing to a recent restructure there is now a Data Services Section in the corporate area
- There is fish sampling, and fish and water bird-controlled vocabularies, which may be useful for NEMSR.

6. Other business and next meeting

Next meeting will be in March / April 2019 with the date to be confirmed in early 2019.

SUMMARY OF ACTIONS

NEMSR WG05.1	NEMSR network owners to consider annual updates/reviews of their NEMSR networks
NEMSR WG05.2	NEII program to consider how to best provide NEMSR-specific analytics to working group members and other network owners
NEMSR WG05.3	Suggestions from members for other portals or systems, domestic or international that could consume NEMSR networks through the API should be provided to the NEII Program
NEMSR WG05.4	TERN to update the NEII programme about possible inclusion of decommissioned groundwater data into NEMSR.