

**JOB DESCRIPTION**

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| Job Title:  | Hydrologist |
| Division/Project: | Geosciences, Energy and Maritime Division (GEM), Australian Water Partnership (AWP) partnership for hydrological support  |
| Location: | Suva, Fiji |
| Responsible To: | Water Resources Assessment and Monitoring Coordinator and Senior Hydrologist |
| Responsible For: | Supporting the design, development and delivery of a bespoke flash flood early warning system; and development of project proposal to support a regional programme of hydrological support; in collaboration with Senior Hydrologist.  |
| Purpose of role: | The primary purpose is to provide support to the project, Senior Hydrologist, and member countries in the identification of flood risk catchments in selected countries, development of a flash flood early warning system, piloting of the flash flood early warning system methodology, and development of a detailed project proposal to support a regional programme of hydrological support to address country and regional needs for surface water hydrology and specifically flash flooding early warning systems. |
| Date: | September 2021 |

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| **Vision:** |

“All CROP (Council of Regional Organisations in the Pacific) agencies contribute to achieving the vision embodied in the Pacific Plan of a region of peace, stability, economic growth, good governance and sustainable development. SPC is committed to these values and to working in partnership with national, regional and international organisations and development partners to serve its members.”

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| **Organisation Context:** |

The overall objectives of this activity include:

* Identification and prioritisation of at-risk catchments to flash flooding to be developed in consultation with SPC and country counterparts, at national and regional scale and review of existing infrastructure, systems and institutional capacity to maintain effective flash flood EWS and hydrological services.
* Develop an appropriate methodology for a flash flood early warning system that builds on existing capacities and infrastructure and is relevant to the Pacific setting.
* Piloting of developed flash flood EWS methodology in up to two sites to demonstrate the technology and operational appropriateness for Pacific Island settings.
* Secure additional technical and financial support to national and regional hydrological services.
* Development of a detailed project proposal to support SPC in the development of a regional programme of hydrological support proposal to address country and regional needs for surface water hydrology and specifically flash flooding early warning systems.
* Explore opportunities for future knowledge exchange on surface water hydrology between the Pacific region and Australia. Links with regional advisory bodies PMC, SPREP, and country specific hydrological agencies will be promoted through coordinated regional meetings (online or physical) to further extend the exchange of knowledge.

The project is implemented in Fiji, and other selected Pacific Island countries, which may include amongst others, Samoa, Solomon Islands, and Vanuatu.

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| **Key Result Areas:** |

The position of the Hydrologist for the AWP partnership for hydrological support encompasses the following major functions or Key Result Areas:

1. Technical advice and support
2. Networking and communications
3. Capacity building
4. Reporting

The requirements in the above Key Result Areas are broadly identified below.

| **Jobholder is accountable for**  | **Jobholder is successful when** |
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|  **1. Technical advice and support** * Provide high quality technical advice and support on surface water related technical and research needs at the regional, national and local levels.
* design and implementation of hydrological monitoring activities, including the collection, management and analysis of associated data.
* design and implementation of hydrological flash flood early warning system, including effective communication of early warnings.
* assessment of the post-disaster impacts especially flooding and inundation.
* Support the design and implementation of information systems such as geographic information systems to manage and communicate surface water resource information
* emergency response and early warning for hydro/meteorological disasters
* Develop conceptual models supported by observations, experience and available literature on surface water systems encountered in the Pacific.
 |  * Member countries and SPC are able to demonstrate improvements in hydrological monitoring of surface water.
* Flash flood Early Warning Systems and communications are adopted and sustained by countries for long-term use
* Surface water resource data sets and information needs improved and with greater accessibility
* Technical and administrative requirements of projects are delivered as agreed and within time to a standard which meets expectations of SPC, and project partners
* Timely response and advice to countries and SPC on hydrometeorological disasters

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| **2. Networking and Communications** * Establish and develop effective communication and relationships within member countries, development partners, and SPC to promote water resource assessment and development for the region.
* Ensure accurate, audience focused sensitive surface water, flood and inundation information is accessible and available to a wide variety of relevant stakeholders.
* Support strategic communications to promote the application and awareness of surface water information in line with regional strategies.
 | * Project counterparts, associated agencies and ministries, community, member countries, regional agencies, and development partners, are aware of project activities and the support provided.
* Relationships are cultivated resulting in long term effective communications with country counterparts and other stakeholders to the mutual benefit of all.
* Surface water information is archived according to SPC formats which promotes security, accuracy, and accessibility of data.
* Information provided in a timely manner upon request in formats understanding at both the community and technical level.
* Information products are accessible and relevant to communities and government
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| **3. Capacity Building** * Actively support and encourage the development of capacity building to strengthen the long-term capacity of country counterparts to undertake surface water monitoring and flash flood early warning through on-the-job training and specially designed training.
* Actively develop capacity building and teamwork across SPC and with counterparts in integrated strategic approach
* Design and implement training and development of staff within SPC and member countries in hydrology, data analysis, flash flood early warning, and other post flood assessment and analysis skills
 | * Surface water monitoring, and flash flood EWS are demonstrably improved within SPC and country counterparts.
* Improved technical capacity developed within member countries for surface water monitoring and flash flood EWS information
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| 1. **Reporting**
* Provision of high-quality technical reports ensuring SPC standards are met for publication.
 | * Reporting is provided in accordance with SPC requirements
* High quality timely technical reports produced in accordance with SPC standards and within expected timeframes.
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**Note**

The above performance standards are provided as a guide only. The precise performance measures for this position will need further discussion between the jobholder and supervisor as part of the performance development process.

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| **Work Complexity:** |

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|  **Most challenging duties typically undertaken:*** Ensuring technical advice is relevant to the needs and requirements of countries.
* Managing multiple tasks in terms of efficiency, accuracy and timeliness under frequently demanding circumstances.
* Ensure communities are fully informed and are willing to support the project aspirations and be involved in the project activities.
* Ensuring lessons learnt are fully captured for application to future project implementation.
* Involving all stakeholders in such a way that they take ownership of the project’s activities and thereby contribute to its long-term sustainability.

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| **Functional Relationships & Relationship Skills:** |

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| **Key internal and/or external contacts** |  **Nature of the contact most typical** |
| **External:** * Australian Water Partnership and partners, CROP agencies, UN agencies, donors, member countries.

  | * Ensure that project objectives are being progressed.
* Technical support.
* Maintaining professional relationships with other technical practitioners.
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| **Internal:*** Sectors within SPC Division.
* Other SPC staff.

  | * Develop linkages with other projects and activities coordinate these actions for the benefit of projects and countries.
* Reporting on the technical and management issues with SPC managers.
* Technical support with other professional staff.
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| **Level of Delegation:** |

Routine Expenditure Budget: *0 Eur*

Budget Sign off Authority without requiring approval from direct supervisor: *0 Eur*

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| **Person Specification:** |

*This section is designed to capture the expertise required for the role at the 100% fully effective level. (This does not necessarily reflect what the current position holder has.) This may be a combination of knowledge / experience, qualifications or equivalent level of learning through experience or key skills, attributes or job specific competencies.*

###### Qualifications

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| Essential:  | Desirable:  |
| * Bachelor’s degree in a relevant field such as hydrology, disaster management, climate science, or water engineering.
 | * A postgraduate qualification, MSc, or professional qualifications in hydrology, climate change, or disaster risk management.
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**Knowledge / Experience**

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| Essential:  | Desirable:  |
| * At least 5 years’ experience in surface water hydrology and demonstrated experience with communities and complex project activities.
* Proven track record of working with teams and producing high quality results with minimum supervision.
* Knowledge of Gender Equity and Social Inclusion, (GESI), and People Centred Approaches (PCA) in delivery of projects.
* Excellent oral and written communications skills
* Advanced computer skills in applications such as Microsoft Word, Excel and PowerPoint
* Demonstrated experience of hydrologic databases
* Fluency in English
 | * Knowledge of disaster risk management and climate change adaptation across the Pacific.
* Knowledge in community engagement approaches
* Experienced in the application of hydrological data to develop information products for flash flood EWS
* Knowledge in Pacific Islands Flash Flood challenges
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**Key Skills /Attributes / Job Specific Competencies**

The following levels would typically be expected for the 100% fully effective level:

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| Expert level | * Planning and organizational skills and delivering to tight schedules and deadlines.
* Prioritization and time management
* Analytical and problem-solving skills
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| Advanced level | * Advanced knowledge and experience in surface water hydrology and flash flooding in Pacific Island settings
* Communicating complex concepts to a range of different stakeholders. Effective communicator and team player
* Hydrological data management
* Advanced data analysis skills
* Advanced technical reporting skills
* Analysis of climate information
* Computer skills including data handling and the use of word processing, spreadsheet and database applications with Microsoft Word, Excel, PowerPoint
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| Working Knowledge | * Design and construction of surface water monitoring installations suitable for remote locations
* Flash flood needs in Pacific Island countries
* Human rights, GESI and PCA principles
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| Awareness | * Pacific Islands culture
* Ability to deal with confidential information in a professional manner
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###### Key Behaviours

*All employees are measured against the following* ***Key Behaviours*** *as part of Performance Development:*

* Change and Innovation
* Interpersonal Skills
* Teamwork
* Promotion of Equity and Equality
* Judgement
* Building Individual Capacity

## **Personal Attributes**

* Self-motivated
* Demonstrates cultural and gender sensitivity
* Ability to think and act on initiative
* Strong client orientation and continuous improvement attitude
* Highly motivated and strong affinity to teamwork
* Analytical and smart thinking – solutions oriented
* High work standards, good work ethic and positive attitude to work
* Proactive with creative ability to meet deadlines, manage heavy workloads, achieve objectives and master new material quickly
* Performs well under pressure and strongly committed to work
* Positive attitude, excellent interpersonal skills, well organized, dependable and honest

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| **Change to Job Description:** |

From time to time it may be necessary to consider changes in the job description in response to the changing nature of our work environment – including technological requirements or statutory changes. Such change may be initiated as necessary by the Director Corporate Services. This Job Description may be reviewed as part of the preparation for performance planning for the annual performance cycle.