SIWSAP's Progress towards its Development Objective 2014-2016

Objective/Outcome	Description of Indicator	Baseline Level	Target Level at end of project	Activities implemented in 2016	Results Achieved to date (2014-2016)
Objective: To improve the resilience of water resources to the impacts of climate change in order to improve health, sanitation and quality of life, and sustain livelihoods in targeted vulnerable areas	• At least 6 Water Sector Climate Adaptation Response Plans developed and implemented (aligned with AMAT 1.1, 2.1, & 2.3)	• Water and adaptation responses are not integrated into national policy or on the ground actions	• Water Sector Climate Change Adaptation Response Plans (WS-CCA) inform and guide policy implementation for multi-sector adaptation response investments	A team of international and local experts was secured in the third and final quarter of 2015 to carry out and complete the 6 Climate Change Vulnerability Assessments (CCVA) and the 6 Water Sector - Climate Change Adaptation Response Plans (WS-CCARP). The team comprised of the: Team Leader (international), Water and Sanitation Specialist (international), GIS Specialist (local), Climate Scientist (international), Cost Benefit Analysis Specialist (international) and Gender and Livelihood Specialist (international). The 6 CCVAs and WS-CCARP has now been completed for all 6 pilot sites. The 6 CCVAs are fundamental to the overall SIWSAP process as they provided key stakeholders both at national, provincial and community level with a better understanding of the nature of vulnerabilities at the pilot sites' level. These CCVAs are also useful advocacy tool that set out recommendations and insights into what adaptive capacity and mechanisms are needed to increase resilience in each of the pilot sites. The Adaptation Planning Phase which followed the CCVA process constituted the weighing of options and strategizing about	The CCVA and WS-CCA reports formed the basis for planning and implementation of WASH activities and infrastructure programs across the 6 pilot sites. They also provided valuable planning tools to assist in securing government/donor funding for larger long-term WASH infrastructure projects - such as in Gizo Town. The CCVA and WS-CCARP process methodology provides a global standard and a useful and practical evidence based approach for broad scale replication across the Solomon Islands WASH sector. Not only does the methodology provide a step by step guide on community engagement and bottom up decision making processes, it provides a minimum bench mark standard that should be expected of Water, Sanitation and Hygiene (WASH) implementing partners. The greatest benefit of the WASH Safety Plan approach developed by SIWSAP is the very strong and grounded community engagement process. The community was vested from the beginning participating in Climate Change (CC) risk and WASH planning workshops. Feedback from communities was very positive. They feel vested in the SIWSAP program and see that their inputs

				adaptation projects. The process itself involved the development of a method for evaluating costs and benefits associated with each potential option. The end product from CCVA to the Adaptation Planning Phase is the formation/development of 6 pilot specific WS-CCARP.	and decisions form the basis for SIWSAP and Government future interventions. This bolsters strong ownership and retention and sustainability of implemented infrastructure. This strong community engagement process also makes it easier to build on future activities and gain community trust such that they have faith in SIWSAP to test and introduce new and innovative approaches such as water user guidelines, pay per use water and CLTS. Moving forward it is imperative to continue to build the capacity of SIWSAP POs and to enable them to be based in their respective communities as much as possible. This will be particularly necessary during implementation of education and infrastructure interventions.
	• Resilient and safe water supplies to climate change impacts for 50,000 people and improvised sanitation for 25,000 people (disaggregated by gender) (aligned with AMAT 3.1)	• Rural water supply and sanitation is focused on service delivery and not medium to long term sustainability of water resources and supplies	• At least 6 sites across 6 Provinces have resilient water supply options and improved sanitation with sustainable financing and operation and maintenance plans for over 12,000 people (at least 5,760 women)	Quick-fix infrastructure activities focusing on water security have been implemented across 6 pilot sites reaching a total population estimated at 11,763. As part of this initiative, 1 hand dug well in Taro and 3 in Gizo with Solmark pumps were rehabilitated as well as the piped water supply system in Tigoa. Draft Operations &Maintenance (O&M) and User Guidelines for communal rainwater harvesting tanks have been completed for all sites using a community-led approach. These user guidelines incorporates both traditional and modern knowledge/information on water management/conservations particularly in the three pilot communities. Adaptation Planning workshops have also been completed across 6 sites where each community evaluated and prioritized WASH infrastructure (hardware) and management (software) interventions. Selected projects based on the WS-CCARP	The results of the quick-fix program is increased fresh water storage and fresh water reserves in Tigoa, Gizo and Taro, totalling some 5,000+ people. Lesson learned from the implementation of quick fix interventions in the pilot sites will aid a smoother implementation phase for future infrastructure and community engagement activities under the project in 2017, 2018 and beyond. Additional skilled engineering capacity is recommended to support the project to ensure quality workmanship of infrastructure activities, with possible consideration given to engaging regional/international contractors with proven experience.

				will be implemented over the coming 18-months.	
		• Little attention is paid to protection / restoration of natural infrastructure capturing, storing, cleaning and conveying water • NAPA is implemented mainly through development partner projects – no national learning mechanism in place	• At pilot sites, watersheds, including groundwater are better managed and protected (confirmed by water quality testing and flow/yield measurements)	Rainwater gauge installed in Santa Catalina and daily measurements recorded by a designated community member. Such equipment was crucial in addressing the lack of rainfall data in local communities necessary to track rainfall trends. Also during this period, strong project focus hinges on sustainable management (set up of fundraising committees) and ownership (software systems) of community WASH assets. This is pertinent in ensuring long term sustainability of big investments in WASH infrastructures. The project also piloted community rainwater tank level gauges in Santa Catalina as an improved local management tool. The appropriateness of the technology was assessed and based on positive feedback, this simple technology was replicated in remaining 5 pilot sites. Baseline water quality assessments were also completed for the 6 pilot sites. Parameters measured were limited by the remoteness of sites and limited National laboratory capacity. Due to challenges encountered in collecting baseline water quality information, SIWSAP had procured a water quality monitoring kit and are awaiting delivery and training. Completed the procurement of Automatic Hydro-Meteorological Stations (AHS) and rain gauges. Automatic Hydro-Meteorological Stations to be installed over the next 12-months. A draft M&E Plan had	Rainwater data is being collected and this data will be useful for planning and design of WASH infrastructure activities long term. For example, longer term rainfall data can be used to size rainwater tanks and catchment systems and for projection of dry and wet seasons so user management guidelines can be activated. Information will be shared with and managed by the MET office. Ongoing capacity building activities planned across all 6 sites include Operations & Maintenance (O&M) training, establishment of WASH rules and guidelines in rural communities and by-laws in townships, training on construction of improved wells and toilets, and community led total sanitation awareness campaigns. Communities have shown great initiative in developing their own draft user guidelines and future work will focus on working with them to make such systems sustainable. Preliminary water quality results indicated that in general ground water resources are of high quality and underutilized and under appreciated by communities and planning bodies. Baseline water quality data will be used to assess and prioritize needs across each pilot site. They will also be used as a bench mark to track progress and

				also been developed incorporating UNDP results based framework and key indicators to assess the management of water sheds and water resources across pilot sites. Further work is required to finalise this.	outcomes of SIWSAP's work. Additional baseline monitoring is necessary across all sites with a focus on microbiological testing. The arrival of the Bacteria Test Kit procured by the project will greatly enhance the capacity of the project to carry out this tack. The completion of baseline monitoring is very important as a platform to evidence based reporting in the future. SIWSAP aims to collect as much data in the next 12 months of 2017.
			• Multi-sectoral understanding and integrated use of climate information, including budget allocations	Multi-sectoral integration is addressed primarily through the following Integrating Water Resources Management (IWRM) focus: • Integration of key sectors of water resources, environment and health (i.e. MMERE, MECDM & MHMS) at national and provincial levels; • Integration of surface, ground and rainwater sources and environmental impacts (for example sanitation interactions) • Strong community engagement focus on awareness and participatory planning and management practices. Specific tasks that have contributed to improved multi-sectoral understanding and integrated use of climate information during the reporting period include: • Weather station data will be linked to National Government cloud based website for dissemination of climate	SIWAP is making very good progress thus far in educating and working with communities to identify, understand and protect multi-sectorial natural assets. This IWRM approach has been valued by communities. SIWSAP has moved beyond simply providing information, but to also workshop with communities to identify key risks and reasons for failures of assets and environmental protection of important natural reserves. There was clear early evidence and feedback from communities that the high level of community engagement and ownership will result in improved and sustained outcomes beyond the life of SIWSAP. SIWSAP is setting the example in terms of bottom up WASH, as opposed to the usual heavy top down approach. WASH committees have been formed and provide a valuable link between communities, government, SIWSAP and other NGOs. The sustainability of WASH committees needs further attention from SIWSAP over the remainder of the project.

				information across Government stakeholders and to SI residents. • Climate Change Vulnerability Assessments (CC-VA) have been presented to each community. WS-CCA plans will also be shared back to each community and Provincial Government. • M&E baseline results have been presented back to each pilot community by SIWAP project officers in an easy to understand format. • National level advocacy undertaken during the National Feedback Session in August 2016 with key WASH stakeholders (including national and provincial government and NGOs). The objective was to share the CC-VA and WS-CCA methodology and share lessons learnt.	Often committees dissolve or slowly lose capacity and drive after projects are completed. SIWSAP will continue to work with various committees in addressing issues such who is responsible for repairs and maintenance of assets, who owns assets and who pays. Strong committees can hold communities together and provide a valuable evidence based conduit to government and sector players. The National Feedback Forum provided a platform for community and provincial leaders to provide valuable feedback to SIWSAP. The results should be seen as a valuable resource for SIWSAP to continue improving their efforts so as to achieve its objective.
Outcome 1: Water Sector Climate Change Adaptation Response plans formulated, integrated and mainstreamed in water sector-related and in broader policy and development frameworks	Vulnerability assessment and Climate Change Adaptation Response Plans for the Water Sector inform the development of (i) SIG Provincial Plans incorporating water adaptation, (ii) budget allocations, and (iii) institutional capacity development for adaptation (aligned with AMAT 1.1, 2.1)	No adaptation plans or adaptation guidance exists for the water sector at the National or Provincial levels (including both for water resources and water supply, sanitation and hygiene). Sporadic and anecdotal data and lessons on adaptation at Provincial level. Lack of downscaled details from national	At least 6 Water Sector Climate Change Adaptation Response Plans at Pilot Site level developed. At least 6 Provincial Water Adaptation Plans developed and budgets allocated. At least 6 additional Water Sector Climate Change Adaptation Response Plans at replication sites developed (1 per Province). Training of relevant Provincial and National Staff in the Water Vulnerability	• Key tasks completed comprised: the WS-CCARP, the Climate Change Vulnerability Assessments, WASH baseline assessments, and Water Sector Climate Change Adaptation workshops across all pilot. • CCVA and Adaptation Planning workshops completed across 6 sites in mid July 2016. As part of the Adaptation Planning phase, each community/township evaluated and prioritized WASH infrastructure (hardware) and management (software) interventions. Selected projects will be implemented over the coming 18-months.	The completed CCVA and WS-CCARP documents provided an evidence based report for the planning of sustainable IWRM and WASH activities tailored to each township/community's needs. These documents will assist implementing organizations and government meet the future needs of each community. Furthermore, these will assist in prioritizing funding. SIWSAP also shared key findings and recommendations of these documents with the SI WASH sector. Completion of AKVO training and procurement of hardware means that SIWSAP is now well placed to complete WASH baseline monitoring activities. This platform will also provide an easy to use and

		assessments across a wide area.	Framework and Adaptation Response Plan. Provincial package of relevant information to guide adaptation investments for the water sector. Replication sites mirror the process at pilot sites implemented by SIG.	• M&E Plan developed incorporating UNDP results based framework and key indicators to assess the management of water sheds and water resources across pilot sites. ***Total Amount Spent: USD302,898***	manage results based evidence reporting tool.
Outcome 2: Increased reliability and improved quality of water supply in targeted areas	Number of people provided with access to safe water supply and basic sanitation services given existing and projected climate change (AMAT 1.2) No. of accurate warnings disseminated resulting appropriate adaptive responses ad community and household levels	**Tuwo:** 100% of community have no water >5 times per annum. Gizo: reticulated system operates at 70% supply, with a further 70% leakage rate. **Manaaoba**: 90% of community has no RW supply >5 times per annum. **Taro**: 73% of community have no access to a toilet and no alternative safe water supply than existing RW tank system covering only 70% of community (empty >5 times per annum.) **Santa Catalina**: 94% of community have inadequate roofing to capture water, with 79%	Increased Water Storage at six sites provides a diversified approach to capturing and storing freshwater safely through island appropriate technologies (100% of communities have regular annual supply) Strategic freshwater reserves are rehabilitated and protected (where necessary) for pilot site locations (at least 1 site) Construction of appropriate sanitation technologies (e.g., composting toilets) at pilot sites (at least 4) to protect groundwater and other sources of water supply Trial sites for sanitation options working with local and national campaign on sanitation futures (>6	The completion of the WS-CCARP has framed water adaptation interventions across the six pilot sites to be implemented in the coming 18 months. Also during this reporting period, 1 hand dug well in Taro and 3 in Gizo with Solmark pump were rehabilitated so as a piped water supply system in Tigoa Township. Rain gauge installed in Santa Catalina and daily measurements recorded by a designated community member. SIWSAP has finalised the procurement of Automatic Hydro-Meteorological Stations (AHS) and ground water equipment with the National Institute of Water and Atmospheric (NIWA) Research, a Research Institute in New Zealand through a direct contracting arrangements. Automatic Hydro-Meteorological Stations to be installed over the next 12-months of 2017. Negotiations are well underway with a local NGO (Ecological Solutions) in Gizo and in Taro (Lauru Land Conference of Tribal Chiefs in partnership with The Nature	The results of the quick-fix program can be described as good, and provided valuable lessons moving forward. The main positives are that 6 pilot communities have received a significant improvement in accessing safe and clean water (some 11,000+ people). The challenges of this program included low quality work by a local contractor and prolonged delays in the implementation of works in two sites. Such a delivery model has therefore been revisited. A few lessons learned from the implementation of quick fix interventions provided valuable insights moving forward to the next phase of addressing the various project options as per the WS-CCARP. It is proposed that an independent engineering contractor be hired to oversee and monitor construction works. It has also been proposed that the project should only engaged 1 national/regional/internationally recognised contractor to undertake all works across all sites. This should contribute to significantly reduce the burden on SIWSAP to administer too many construction contracts. Furthermore, this approach

		of tanks empty >5 times per annum. **Tiggoa:** 55% of the community have no water supply >5 times per annum.	campaigns) to facilitate adoption and maintenance of sanitation technologies Clean up and protection of key groundwater recharge areas (i.e. Taro wetland for >3 sties) Community based Early Warning Systems (CBEWS) in place at more than 6 sites	Conservancy) to carry out various awareness programs on behalf of the project through the Grant Agreement mechanisms. These NGOs have been identified as having the necessary assets at the provincial level that the project requires. Initial awareness identified and discussed with the NGOs included but not limited to; water management regulations, protection of existing water sources, waste management, climate change impacts on water resources, and sanitation (discourage open defecation and alert people on the common WASH diseases, as well as the need to adopt appropriate sanitation technology to protect ground water). SIWSAP through recommendation from the Ministry of Health and Medical Services has undertaken negotiations with Red Cross on a possible Grant Agreement covering sanitation and the software aspect of SIWSAP's work (water management and protection, waste management etc). Change in Red Cross's management has slowed down work in this area. This is to be further pursed in 2017. In terms of ground water assessment, consultation were made with SPC Geoscience Division on the possibilities of engaging their technical team (as well as their equipment) to undertake ground water assessment in specific pilot sites (e.g Gizo). However, due to their busy schedule in 2016, this was not possible. The project will therefore pursue this work under the IC	should hopefully ensure that all works are completed in a timely manner to the quality expected by all partners

				modality. The outcomes of the ground water assessments in each of the pilot sites is so crucial in guiding sanitation interventions as per the WS-CCARP. ***Total Amount Spent: USD576,149***	
Outcome 3: Investments in cost-effective and adaptive water management interventions and technology transfer	No. of pilot sites adopting cost-effective and adaptive water management technologies based on community driven Water and Adaptation Response Projects at >20 sites aligned with (AMAT 3.1) National Water investments include adaptation interventions to maintain medium to long term sustainability and provide resilience to community water needs and requirements (aligned with AMAT 1.1 & 3.1)	No current direct access to funding for community projects focusing on adaptation and water risks Development partner and national interventions focused on rural WASH provision do not include adaptation response in project delivery-investments or in climate proofing projects Only 1 publicly owned portable water filter/desalination unit exists for the entire country	At least 20 community driven, designed and developed Water and Adaptation Response Projects (aligned with co-financer interventions) National Water investments to adaptation investments doubled by fourth year of project implementation Appropriate water supply equipment successfully procured and delivered to pilot sites and key disaster stakeholders such as NDMO for enhanced preparation and response to water scarcity Maintenance and operational guidelines developed and budgeted at the provincial and/or community levels	Quick fix initiatives were formalized and ratified through the WASH Committees based on a technical assessment carried out by a technical team from RWASH and the Water Resources Division. Construction of quick fixes were outsourced to 5 private construction companies through an open competition tender process in line with the RWASH Policy for WASH infrastructures in late 2015/2016. Quick-fix infrastructure activities focusing on water security have been implemented and completed across 6 pilot sites reaching a total population estimated at 11,763. As part of this initiative 63 communal rainwater harvesting tanks have been installed across the 6 pilot sites. 5 new hand dug wells with Solmark pumps were also installed in Taro. Further investments in cost effective and adaptive water management interventions will be implemented in the next 18 months based on the WS-CCARP. Also through a competitive process, TRUNZ (a Switzerland company) was issued a contract for the procurement of specialized disaster relief equipment (desalination and water treatment systems), inclusive of installation and training. These equipment will address the lack of available water	The installation of 63 communal rainwater harvesting systems for 11,763 people is evidence that rainwater tanks are an effective low cost mechanism and can be implemented and scaled in a short period. Overall, the quick fix interventions has contributed a total of 415,000 litres of additional rain water storage capacity across all six pilot sites. This does not include the 5 new hand dugs wells. Similar to outcome 2, lessons learned in the implementations of the quick fix interventions have provided valuable insights on a proposed way forward in the implementations of prioritized project options as per the WS-CCARP. For the Trunz equipment, since these are yet to be installed and piloted, it will be important for SIWSAP to document the implementation of the Trunz solar systems and to share evidence based results with the SI WASH sector. Since these are quite expensive equipment, there needs to be clear justification to scale such technology in the future beyond the pilot sites.

				security equipment at the Provincial and community level. A training component of national, provincial and community members is embedded in this procurement to ensure effective management, maintenance and support mechanisms during and beyond the life of the project. The specifications of equipment were drawn in close consultation and collaboration with the National Disaster Management Office of MECDM, and the WRD of MMERE. In addition to the water treatment systems, the procurement of a man pack series transceivers in early 2016 will contribute to address current challenges in the communications of provincial situations and needs during disasters. The successful recruitment of the Technical Officer Communication and Community Engagement (TOCCE) in July 2015 paved the way for the development of national products explaining the project and communication materials for awareness raising on various project activities in 2016. The TOCCE has worked closely with the Provincial Officers (POs) in collecting and documenting lessons learnt and best practices from the various pilot sites. Best practices will later (in 2017) be translated into guidance documents, supported with training videos both in pidgin and english and where appropriate in the local dialect of pilot communities. The project also engaged an international consultant to put together its communication strategy.	

				Total Amount Spent: USD624,531.87	
Outcome 4: Improved governance and knowledge management for Climate Change Adaptation in the water sector at the local and national levels	An annual National Water Forum where key stakeholders generate and exchange knowledge generation, and develop policies that facilitate climate change mainstreaming in the water sector Number of awareness materials on climate change risks and vulnerability of water sector, and appropriate adaptation and response measures produced through the SIWSAP project with national partners providing cross-sector adaptation relevant information (aligned with AMAT 2.1 & 2.3)	No specific guidelines exist for water resources, supply, and sanitation relative to climate change impacts and how to plan for these. No national forum exists for sharing, discussing, and learning from adaptation and water management programmes Rural sanitation coverage is at best only 18% of the population. Composting toilets are not well understood, and sanitation is not considered a viable option for rural communities Until recently, very little national advocacy for sanitation or understanding of climate change impacts. Existing hydrological monitoring systems is not adequate for existing climate variability, or for predicted (and often very localized) climate changes	1 academic/scientific and/or policy publication on the climate change impacts on the water resources of the Solomon Islands. Guidelines produced for climate resilient water supply and sanitation development in vulnerable areas of the Solomon Islands. A total of 3 Annual National Water and Adaptation Forum are held (in years 2, 3, & 4 of project implementation) Improvement in, and expansion of current national hydrological monitoring network with 4 more sites installed. Sanitation and Adaptation Partnership with IWRM participating countries (i.e. Tuvalu) in place. Designed and Implemented National Sanitation Campaign with partners reach more than 20% of national population.	Improved knowledge, advocacy and project promotion carried out through the following activities: • Completion of SIWSAP's new website by a private company called Novus; • Finalisation of SIWSAP's logo and slogan. • Solomon Star newspaper featured article on SIWSAP (9/7/16). SIWSAP articles were featured in other websites • Produced 4 Quarterly newsletters featuring various activities that took place in the pilot sites in 2016. • Akvo project communication platform launched in August 2016. • Representation at the International Water Centre WASH Futures Conference in Brisbane • Printing of various promotional items such as sign boards for water wells and water tanks, t-shirts, caps, posters etc. Key government partners and SIWSAP hosted a National Climate Change WASH Adaptation planning workshop for all key WASH stakeholders (including Government and NGOs) in August 2016. The objective was to present the CC-VA and WS-CCA methodology and to share lessons learnt.	The National Feedback Forum (National Climate Change WASH Adaptation Planning) allowed SIWSAP to share the CC-VA and WS-CCA methodology and results with the SI WASH sector and key government stakeholders and participating communities. The event was very successful with positive feedback provided to SIWSAP. Key challenges/lesson learned were summarized and submitted for SIWSAP to address and improve on in the future. The SIWSAP's website, newsletters and other promotional materials has contributed to enhance the visibility of SIWSAP's work. Attendance of the Deputy Director (WRD) and SIWSAP's Project Manager at the WASH futures conference was a good strategy to improve SIWSAP management and WASH technical capacity. It provided an opportunity for SIWSAP to learn from other WASH programs and research initiatives and to share evidence based learnings with the SI team.

			Peer-to-Peer Learning Network established across Pilot and Replication Sites (Outcome 2) National Diploma on Water and Adaptation with Solomon Islands National University in place. At least two creative and/or audiovisual products are produced utilizing participatory communications approaches to communicate, train, influence and provide learning from the project (participatory video, video diaries, theatre, music, etc)	***Total Amount Spent: USD147,972.89***	