SIWSAP's Progress towards its Development Objective 2014-2016

Objective/Outcome	Description of Indicator		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) 	responses are not integrated into national policy or on the ground actions	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 	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.

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 The project also piloted rainwater quality of bi water quality as assess to state key again water The project also piloted rainwater quality on the assess. This is perfinent term sustainabile me sustainabile me assess. This is perfinent term sustainabile me assess replicated in remain assess replicated remain assess replicated remain as	this recorded by a remember. Such in addressing the ocal communities fall trends. Also ong project focus management (set up to in insature activities) and ownership community WASH at in ensuring long big investments inand 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.d community uuges in Santa ed and based on simple technology ining 5 pilot sites. assessments were 6 fo jilot sites. G bilot sites.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.WSAP had procured ring kit and are training.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

	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. Further work is required to finalise this. Understand 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 far in educating and working with Water Resources Management (IWRM) focus: Integration of key sectors of water resources, environment and health (i.e. MMERE, MECDM & beyond simply providing information, but MHMS) at national and provincial to also workshop with communities to identify key risks and reasons for Integration of surface, ground and rainwater sources and environmental impacts (for example sanitation interactions) Strong community engagement focus on awareness and participatory planning 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

				•	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	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)	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	•	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	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

		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 	
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	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	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	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	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	campaigns) to facilitate		should hopefully ensure that all works are
per annum.	adoption and maintenance	awareness programs on behalf of the	completed in a timely manner to the quality
Tiggoa: 55% of the	of sanitation technologies	project through the Grant Agreement	expected by all partners
	Clean up and protection of	mechanisms. These NGOs have been	
		identified as having the necessary assets at	
supply >5 times per	key groundwater recharge	the provincial level that the project	
annum.	areas (i.e. Taro wetland for	requires. Initial awareness identified and	
	>3 sties) Community based	discussed with the NGOs included but not	
	Early Warning Systems	limited to; water management regulations,	
	(CBEWS) in place at more	protection of existing water sources, waste	
	than 6 sites	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	

interventions and technology transfer	National Water investments include adaptation interventions to maintain medium to long term sustainability and provide resilience to community water needs	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	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	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.
			community levels	(a Switzerland company) was issued a	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.

	An annual National Water		1 academic/scientific	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	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 & amp; 2.3)	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	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, & amp; 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	following activities: • Completion of SIWSAP's new	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 approache to communicate, train, influence and provide		
to communicate, train,	5	