



Client Name: Google – Mountain View, CA Campus
AWS Registration Number: AWS-000194
Client Representative: Eddie Corwin, Google REWS
Auditor Team: Rae Mindock, SCS (Lead)
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Shana Golden
Audit Dates: February 18-19, 2020
Stakeholder Notification: AWS, SCS, LimnoTech Websites, 1/13/2020
Site Location: 1600 Amphitheatre Parkway, Mountain View, CA
Report Date: 3 /19/2020
Standard: AWS International Water Stewardship Standard
Version 2.0, March 22, 2019

Audit Type	<input type="checkbox"/> Gap Analysis	<input checked="" type="checkbox"/> Initial Certification	<input type="checkbox"/> Surveillance
	<input type="checkbox"/> Pre-assessment		<input type="checkbox"/> Recertification

Site Information

Site Description

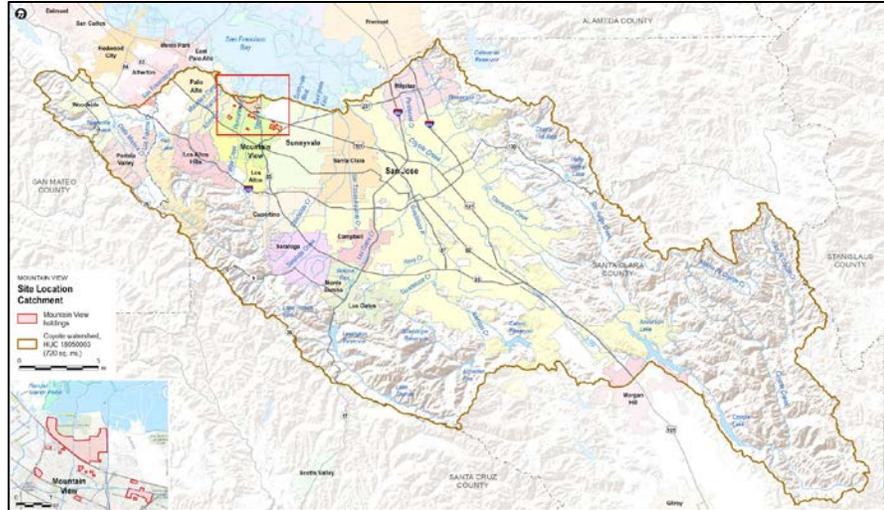
The Mountain View campus is the corporate headquarters complex of Google and its parent company, Alphabet Inc. The office campus is located within the City of Mountain View, CA, with the majority of buildings located north of US-101 and west of Stevens Creek. The campus is comprised of numerous office buildings. Approximately 70% of the buildings are owned by Google and 30% are leased.

The Palo Alto Regional Water Quality Control Plant (RWQCP) and City of Palo Alto manage the sewer system. Stormwater generated on the site is routed to the Mountain View stormwater system, Permanente Creek and Stevens Creek. Major water uses of the office campus include irrigation (reclaimed water from City of Mountain View is blended with potable water), cooking in cafes, and interior water fixtures.



Catchment Description`

The site is located in the Coyote Watershed (HUC 18050003). The site receives potable water from the City of Mountain View, purchased from the San Francisco Public Utilities Commission (SFPUC). The ultimate source of SFPUC’s water is in the Upper Tuolumne River Watershed and the Alameda Watershed. Wastewater from the site is treated by the Palo Alto Regional Water Quality Control Plant and discharged into the South San Francisco Bay. The site uses reclaimed water from the Palo Alto Regional Water Quality Control Plant (RWQCP) for irrigation.



Shared Water Challenges

Shared water challenges are catchment water related issues shared by the site and stakeholders. Stakeholder engagement was documented in the Stakeholder Prioritization Table and Stakeholder Meeting Minutes. Auditor interviews confirmed the topics of engagement. Primary water related risks to the site include infrastructure reliability, water availability, water quality and flooding. A prioritized list of shared water challenges addressing the outcomes was provided. Catchment issues shared by the site and stakeholders include:

- Aridification/Drought
- Flooding, coastal and local
- Population growth, urbanization, and increasing water demand
- Water Infrastructure resiliency
- Receiving water quality
- Wildfire impacts
- Increased salinity in reclaimed water
- Inadequate water governance and planning

Site water infrastructure to address shared challenges include the use of native landscape to reduce potable water use, the implementation of the Charleston Detention Basin to reduce stormwater runoff to San Francisco Bay (an IWRA), and water conservation practices.

Audit Attendees

Participant/Title	Opening Meeting	Document Review	Site Inspection	Closing Meeting
Google REWS/Sustainability Partner	X	X	X	X
Head of Facilities, Bay Area	X			
Regional Portfolio Director, C&W	X	X	X	X
Energy Manager, C&W	X			
Emergency Preparedness Manager	X			
EHS Manager, C&W	X			
LimnoTech, Water Stewardship Support	X	X	X	X
LimnoTech, Water Stewardship Support	X	X	X	X
Isabella Polenghi-Gross/Wood	X	X	X	X
Rae Mindock/SCS	X	X	X	X
Shana Golden/SCS	X	X	X	X

The Google Mountain View Campus provided the following documentation to support conformity with the AWS Standard:

- Mountain View _AWS Standard Conformity_V2 – providing evidence for the five Criteria and each Indicator. Maps, links and other documents are provided in the deck.
- Mountain View _AWS-Deliverables-Template – providing evidence for stakeholder prioritization, shared water challenges, site risks, site opportunities and the water stewardship plan.
- Mountain View _AWS Stakeholder Contact List – providing stakeholder organizations and contacts.
- AWS Implementation Case Study – providing evidence on the AWS process, journey and progress achieved during implementation of the Standard.

Summary of Findings

Step	Major	Minor	Observations	Total Points
1. Gather & Understand	0	0	4	4
2. Commit & Plan	0	0	0	14
3. Implement	0	0	0	29
4. Evaluate	0	0	0	
5. Communicate & Disclose	0	0	0	
TOTAL	0	0	4	47

Findings and Corrective Action

Citation	Finding	Description and Corrective Action
OBS 2020.01	1.1.1	The water-related infrastructure managed by the site was identified and discussed during the site walk by the site managers for the MTV location. The piping network managed by the site should be mapped, including information on cooling towers. Observation 2020.01 was closed as described in Audit Report.
OBS 2020.02	1.1.1	Multiple catchments maps were provided including: site catchment, source watersheds, local groundwater basins and receiving water for wastewater and stormwater. The information is extensive and should be distilled and summarized focusing on what is relevant to the indicator. Observation 2020.02 was closed as described in Audit Report.
OBS 2020.03	1.5.3	The water balances presented provide an analysis of the total developed/dedicated supplies, uses, and operational characteristics for each region ranging from 2010 data to current. A well-defined timeframe should be defined to establish a baseline period. Given that water scarcity is identified as a challenge in the site and/or source watersheds, annual high and low variances shall be provided. Observation 2020.03 was closed as described in Audit Report.
OBS 2020.04	1.5.4	Links to water quality reports are provided for the site catchment and source watersheds, local groundwater basins with water quality data, water quality problems and issues, monitoring programs, restoration plans, and anticipated changes in future water quality conditions. The relevant information in these links should be distilled and summarized to clearly and concisely describe the water quality status. Given that water quality is identified as a challenge in some or all the listed watersheds, annual high and low variances shall be identified. Observation 2020.04 was closed as described in Audit Report.

Certification Decision

<i>Auditor's recommendation for initial, continued or re-certification based on compliance with requirements:</i>	X	Recommended
		Not Recommended
<i>Level of Certification recommended</i>		AWS Core
	X	AWS Gold
		AWS Platinum
<i>SCS Certification Decision:</i>	X	Approved
		Denied
<i>Certification Decision by:</i>		 Nicole Munoz, May 5, 2020 Vice President - ECS
<i>Technical Review by:</i>		 Nicole Munoz, May 5, 2020 Vice President - ECS
<i>Date of Decision:</i>		
<i>Surveillance Schedule:</i>		Next audit is scheduled for: March 2021 or Sept 2021 <i>(dependent on AWS approval of CAB recommendation)</i>

AWS International Water Stewardship Standard, Version 2.0, March 22, 2019

Surveillance audits shall cover at a minimum those requirements highlighted in light green.

STEP 1: Gather and Understand

Level	Criteria	Indicator	Yes	No	NA	Objective Evidence/Finding	Points
Core	1.1 Gather information to define the site's physical scope for water stewardship purposes, including: its operational boundaries; the water sources from which the site draws; the locations to which the site returns its discharges; and the catchment(s) that the site affect(s) and upon which it is reliant	1.1.1 The physical scope of the site shall be mapped , considering the regulatory landscape and zone of stakeholder interests, including: <ul style="list-style-type: none"> - Site boundaries; - Water-related infrastructure, including piping network, owned or managed by the site or its parent organization; - Any water sources providing water to the site that are owned or managed by the site or its parent organization; - Water service provider (if applicable) and its ultimate water source; - Discharge points and waste water service provider (if applicable) and ultimate receiving water body or bodies; - Catchment(s) that the site affect(s) and is reliant upon for water. 	Yes			<p>The Mountain View site is located southwest of South San Francisco Bay. It includes multiple buildings (not all contiguous).</p> <ul style="list-style-type: none"> - A map showing the site boundaries of the Mountain View (MTV) site was provided. - Multiple cooling towers are mapped within the site boundaries. - No water sources are owned or managed by the organization. - Water service providers are identified (City of Mountain View and San Francisco Public Utilities Commission) and listed together with the main water bodies from which they abstract water: Tuolumne River (fed by Sierra Nevada snowmelt and fills Hetch Hetchy reservoir) and six reservoirs in Alameda and Peninsula watersheds. Additional drinking water comes intermittently from Upcountry Non-Hetch Hetchy Sources. The site also uses water coming from recycled water. - Palo Alto Regional Water Quality Control Plant (RWQCP) and City of Palo Alto wastewater collection system are their wastewater service providers who discharge into South San Francisco Bay (on locations that are mapped). Some of the water gets recycled. <p>The site discharges stormwater to South San Francisco Bay. Other Municipal Separate Storm Sewer System Permittees discharge stormwater to Central, Lower, and South San Francisco Bay, and Suisun and San Pablo Bays under NPDES.</p> <ul style="list-style-type: none"> - A map of the following catchments was provided: site catchment (corresponding to the Coyote watershed); Source watershed (Upper Tuolumne River Watershed, Alameda Watershed) and Receiving water for wastewater and stormwater (South San Francisco Bay) <p>Observation 2020.01 was issued. The water-related infrastructure managed by the site was identified and discussed during the site walk by the site managers for the MTV location. The piping network managed by the site should be mapped, including information on the cooling tower and other water related infrastructure.</p> <p>Observation 2020.01 was closed. This observation was closed based on information provided in the updated MTV_AWS Standard Conformity_v2 Slides.</p>	

					<p>Observation 2020.02 was issued. Multiple catchments maps were provided in the slides or through links: site catchment, source watersheds, local groundwater basins and receiving water for wastewater and stormwater. The information the site provided is very extensive and should be distilled and summarized focusing on what is relevant to the indicator.</p> <p>Observation 2020.02 was closed. This observation was closed based on information in the updated MTV_AWS Standard Conformity_v2 Slides.</p>	
	1.2 Understand relevant stakeholders, their water related challenges, and the site's ability to influence beyond its boundaries.	<p>1.2.1 Stakeholders and their water-related challenges shall be identified. The process used for stakeholder identification shall be identified. This process shall:</p> <ul style="list-style-type: none"> - Inclusively cover all relevant stakeholder groups including vulnerable, women, minority, and Indigenous people; - Consider the physical scope identified, including stakeholders, representative of the site's ultimate water source and ultimate receiving water body or bodies; - Provide evidence of stakeholder consultation on water-related interests and challenges; - Note that the ability and/or willingness of stakeholders to participate may vary across the relevant stakeholder groups; - Identify the degree of stakeholder engagement based on their level of interest and influence. 	Yes		<p>The Stakeholder Engagement Plan used during stakeholder mapping exercise was reviewed. Stakeholders identified include City of Mountain View, City of Palo Alto, Water Enterprise, SFPUC, San Francisco Estuary Institute, Sustainable Silicon Valley, and Tuolumne River Preservation Trust. The stakeholders interviewed were aware of Google, including issues of surrounding the shared water challenges in the area.</p>	
		1.2.2 Current and potential degree of influence between site and stakeholder shall be identified , within the catchment and considering the site's ultimate water source and ultimate receiving water body for wastewater.	Yes		<p>Information on degree of influence provided in the Stakeholder Prioritization Table was reviewed. Stakeholders are related to the site's catchment and identifies the stakeholders' ability to influence or be influenced.</p>	
	1.3 Gather water-related data for the site,	1.3.1 Existing water-related incident response plans shall be identified .	Yes		<p>Google developed water risk response plans and activities related to water scarcity and winter storm/flooding risks including a Bay Area</p>	

	including: water balance; water quality, Important Water-Related Areas, water governance, WASH; water-related costs, revenues, and shared value creation.				Water Conservation SOP and SPCC Plans. Incident response was addressed in the plans.	
		1.3.2 Site water balance, including inflows, losses, storage, and outflows shall be identified and mapped .	Yes		Google prepared and provided a schematic adequate representation of the water balance showing the main water components at the site.	
		1.3.3 Site water balance, inflows, losses, storage, and outflows, including indication of annual variance in water usage rates, shall be quantified . Where there is a water-related challenge that would be a threat to good water balance for people or environment, an indication of annual high and low variances shall be quantified .	Yes		Water balance equations for the MTV site were provided for year 2018. The water components provided include inputs from municipal supply potable and recycled water as well as stormwater (calculated based on historical annual precipitation values), and outputs to irrigation runoff (based on site area & percent impervious surface), and to waste water treatment system (estimated as SFPUC wastewater factor). Onsite water storage is negligible (small pools and a mostly empty Charleston Retention Basin). Yearly and monthly trends and annual variances were provided for some key (i.e.: largest contributing) water balance components. Normalized consumption by headcount calculated over a period of ~2000-2017 shows a decrease in total water usage. Google MTV set a goal to reduce potable water intensity 5% in 2019 against a 2017 baseline. In 2018, a 3% reduction was achieved (no later data are available yet).	
		1.3.4 Water quality of the site's water source(s), provided waters, effluent and receiving water bodies shall be quantified . Where there is a water-related challenge that would be a threat to good water quality status for people or environment, an indication of annual, and where appropriate, seasonal, high and low variances shall be quantified .	Yes		Links were provided to the 2018 City of Mountain View water quality report and to 2016 SFPUC water quality data (the site water providers) showing that the substances of concern meet their regulatory standards in the water they provide. A link was provided to the Palo Alto RWQCP 1988-2009 effluent data.	
		1.3.5 Potential sources of pollution shall be identified and if applicable, mapped , including chemicals used or stored on site.	Yes		A list of all onsite chemicals stored at the site was provided. Chemical storage was inspected during audit of the facility.	
		1.3.6 On-site Important Water-Related Areas shall be identified and mapped , including a description of their status including Indigenous cultural values.	Yes		IWRA's identified and mapped include the Charleston Retention Basin and Permanente Creek. Descriptions including cultural value were provided.	
		1.3.7 Annual water-related costs, revenues, and a description or quantification of the social, cultural, environmental, or economic water-	Yes		Costs were provided and shared value creation was described. The site does not have any water-related revenues. The shared value generated included:	

		related value generated by the site shall be identified and used to inform the evaluation of the plan in 4.1.2.				<ul style="list-style-type: none"> Central dish washing by trained personnel/high efficiency equipment minimizes water and cleaning product use. Similar value is achieved through central waste sorting/disposal. Use/purchase of renewable energy to support global operations provide water savings compared to traditional energy sources. “Hermit crabbing” or the use of existing buildings reduces demo/construction conserving resources and water impacts. 	
		1.3.8 Levels of access and adequacy of WASH at the site shall be identified .	Yes			WASH is available on-site with potable water, showers and toilets for employees and visitors.	
	1.4 Gather data on the site’s indirect water use, including: its primary inputs; the water use embedded in the production of those primary inputs the status of the waters at the origin of the inputs (where they can be identified); and water used in out-sourced water-related services.	1.4.1 The embedded water use of primary inputs, including quantity, quality and level of water risk within the site’s catchment, shall be identified .	Yes			No primary inputs with associated embedded water use were identified and provided by the site. The site has identified one relevant source of indirect water use in their Google Food Program to its employees. A summary of the Global standards for Sustainable Practices in the Food Program was provided including sustainable practices related to indirect water use and direct water use in kitchens.	
		1.4.2 The embedded water use of outsourced services shall be identified , and where those services originate within the site’s catchment, quantified .	Yes			The primary outsourced service with water use was identified to be the laundry for gym and massage services. The location of the outsourced service was provided, and the water use quantified.	
	Advanced Indicator	1.4.3 Advanced Indicator The embedded water use of primary inputs in catchment(s) of origin shall be quantified .				This Advanced Indicator was not considered for the Site.	
	1.5 Gather water-related data for the catchment, including: water governance, water balance, water quality, Important Water-Related Areas, infrastructure, and WASH	1.5.1 Water governance initiatives shall be identified , including catchment plan(s), water-related public policies, major publicly-led initiatives under way, and relevant goals to help inform site of possible opportunities for water stewardship collective action.	Yes			A list of significant publicly led initiatives and water related public policy goals for the catchment was provided. A description of the purpose and relevance of the water-related legal and regulatory requirements was summarized.	
		1.5.2 Applicable water-related legal and regulatory requirements shall be identified , including legally-defined and/or stakeholder-verified customary water rights.	Yes			A list of governmental, local permits and regulatory requirements was for Federal, State, Regional/Local was provided.	

		1.5.3 The catchment water-balance, and where applicable, scarcity, shall be quantified , including indication of annual, and where appropriate, seasonal, variance.	Yes		<p>A water balance with precipitation, point source flows, subsurface flow, runoff, and ET data was provided for the Coyote Creek Watershed (site catchment) and Tuolumne watershed (source catchment) as a 30-year average (from Model My Watershed Multi Year Model) spanning from 1930-1990. Both mass balance equations balance. Seasonal variances of precipitation (the main input component) and surface runoff are provided. Several links were also provided to real data on stream flows, precipitation, evapotranspiration, and groundwater levels, up to the daily scale. Recent steady declines in both water supply and demand in Mountain View and at the State level have been quantified and provided. The site also summarized the water-related challenges faced by the Bay Area; and reported that Mountain View has significant remaining guaranteed water supply currently and projected in 2040.</p> <p>Observation 2020.04 was issued. The water balances presented provide an analysis of the total developed/dedicated supplies, uses, and operational characteristics for each region ranging from 2010 data to current. A well-defined timeframe should be defined to establish a baseline period. Given that water scarcity is identified as a challenge in the site and/or source watersheds, annual high and low variances shall be provided.</p> <p>Observation 2020.04 was closed. This observation was closed based on information in the updated MTV_AWS Standard Conformity_v2 Slides.</p>	
		1.5.4 Water quality, including physical, chemical, and biological status, of the catchment shall be identified , and where possible, quantified . Where there is a water-related challenge that would be a threat to good water quality status for people or environment, an indication of annual, and where appropriate, seasonal, high and low variances shall be identified .	Yes		<p>A summary was provided describing the physical, chemical, and biological status of the Coyote Creek watershed near the Google MTV site (defined as moderate). Links to 2017 water quality reports were provided to show that municipal water coming from both providers (Mountain View and SFPUC) is monitored and treated according to federal and state standards to remove any possible harmful contaminants.</p> <p>Observation 2020.04 Links to water quality reports are provided for the site catchment and source watersheds, local groundwater basins with water quality data, water quality problems and issues, monitoring programs, restoration plans, and anticipated changes in future water quality conditions. The relevant information in these links should be distilled and summarized to clearly and concisely describe the water quality status. Given that water quality is identified as a challenge in some or all the listed watersheds, annual high and low variances shall be identified.</p> <p>Observation 2020.04 was closed. This observation was closed based on information in the updated MTV_AWS Standard Conformity_v2 Slides.</p>	

		1.5.5 Important Water-Related Areas shall be identified, and where appropriate, mapped , and their status assessed including any threats to people or the natural environment, using scientific information and through stakeholder engagement.	Yes			IWRAs have been identified by Google and a description of their water related issues was provided. IWRAs include: Stevens Creek, Permanente Creek, Hetch Hetchy Reservoir, San Francisco Bay, and Renzel March Pond.	
		1.5.6 Existing and planned water-related infrastructure shall be identified , including condition and potential exposure to extreme events.	Yes			A list of publicly available reports/data of water-related infrastructure with a description, exposure scenarios and opportunities. SFPUC infrastructure has issues with risks from earthquakes, wildfire, leaks, drought, climate change, tap water quality in low income and immigrant communities, increased demand on infrastructure due to population growth. Palo Alto RWQCP infrastructure has issues with aging, increasing regulatory requirements, increasing interest in alternative to the solids incineration process, and saltwater intrusion in reclaimed wastewater.	
		1.5.7 The adequacy of available WASH services within the catchment shall be identified .	Yes			WASH for the catchment is adequate based on demographic information. Local agencies work to meet the needs of populations who do not have access to WASH.	
	Advanced Indicator	1.5.8 Advanced Indicator Efforts by the site to support and undertake catchment level water-related data collection shall be identified.				This Advanced Indicator was not considered for the Site.	
	Advanced Indicator	1.5.9 Advanced Indicator The adequacy of WASH provision within the catchments of origin of primary inputs shall be identified.	Yes			The Google Supplier Code of Conduct requires suppliers to provide WASH to their employees. The code is posted on the Responsible Supply Chain page.	1
	1.6 Understand current and future shared water challenges in the catchment, by linking the water challenges identified by stakeholders with the site's water challenges.	1.6.1 Shared water challenges shall be identified and prioritized from the information gathered.	Yes			A prioritized list with rationale of shared water challenges was provided and reviewed. Drivers (risks) and public-sector agency efforts are noted.	
		1.6.2 Initiatives to address shared water challenges shall be identified .	Yes			Initiatives to address shared water challenges including public sector agency efforts such as Sustainable Silicon Valley, Plan Bay Area 2040, Bay Area Regional Collaborative, SFPUC Water System Improvement Program, Clean Bay 2018 Pollution Prevention Program, City of Mountain View Sustainability Program.	
	Advanced Indicator	1.6.3 Advanced Indicator Future water issues shall be identified, including anticipated impacts and trends	Yes			Google has developed two climate resilience assessments (Corporate 2017 and Bay Area 2018) that identify possible future impacts and trends. These documents were provided and reviewed.	3

	Advanced Indicator	1.6.4 Advanced Indicator Potential water-related social impacts from the site shall be identified, resulting in a social impact assessment with a particular focus on water.				This Advanced Indicator was not considered for the Site.	
	1.7 Understand the site's water risks and opportunities: Assess and prioritize the water risks and opportunities affecting the site based upon the status of the site, existing risk management plans and/or the issues and future risk trends identified in 1.6.	1.7.1 Water risks faced by the site shall be identified , and prioritized, including likelihood and severity of impact within a given timeframe, potential costs and business impact.	Yes			A prioritized list of water risks was provided and reviewed. Water risks matched shared water challenges.	
		1.7.2 Water-related opportunities shall be identified , including how the site may participate, assessment and prioritization of potential savings, and business opportunities.	Yes			A prioritized list of water-related opportunities for the site identified during a workshop was provided which corresponded to the shared water challenges and water risks lists. A list of projects and value creation was reviewed.	
	1.8 Understand best practice towards achieving AWS outcomes: Determining sectoral best practices having a local/catchment, regional, or national relevance.	1.8.1 Relevant catchment best practice for water governance shall be identified .	Yes			Google has identified multiple best practices toward achieving AWS outcomes at the site and in the catchment. The following best practices are examples for Indicators 1.8.1 - .1.8.5. A dedicated cross functional team supporting site water stewardship at targeted Google campuses to ensure program continuation was created.	
		1.8.2 Relevant sector and/or catchment best practice for water balance (either through water efficiency or less total water use) shall be identified .	Yes			Established an efficiency metric (liters/Googler/day) to track onsite efficiency and established a targets to monitor continual improvement.	
		1.8.3 Relevant sector and/or catchment best practice for water quality shall be identified , including rationale for data source.	Yes			Require suppliers to conform with the Google Supplier Code of Conduct which promotes reduction or elimination of wastewater and stormwater impacts.	
		1.8.4 Relevant catchment best practice for site maintenance of Important Water-Related Areas shall be identified .	Yes			Best practices document was provided. Best practices identified include support of external entities in addressing needs related to on-site and adjacent IWRAs.	
		1.8.5 Relevant sector and/or catchment best practice for site provision of equitable and adequate WASH services shall be identified .	Yes			There is adequate WASH in the catchment. The Supplier Code of Conduct provides best practice from suppliers.	

STEP 2: Commit and Plan							
Level	Criteria	Indicator	Yes	No	NA	Objective Evidence	Points
	2.1 Commit to water stewardship by having the senior-most manager in charge of water at the site, or if necessary, a suitable individual within the organization head office, sign and publicly disclose a commitment to water stewardship, the implementation of the AWS Standard and achieving its five outcomes, and the allocation of required resources.	2.1.1 A signed and publicly disclosed site statement OR organizational document shall be identified . The statement or document shall include the following commitments: - That the site will implement and disclose progress on water stewardship program(s) to achieve improvements in AWS water stewardship outcomes - That the site implementation will be aligned to and in support of existing catchment sustainability plans - That the site's stakeholders will be engaged in an open and transparent way - That the site will allocate resources to implement the Standard.	Yes			A commitment letter was reviewed, signed by the Head of Facilities, containing the elements described in this criterion.	
	Advanced Indicator	2.1.2 Advanced Indicator A statement that explicitly covers all requirements set out in Indicator 2.1.1 and is signed by the organization's senior-most executive or governance body and publicly disclosed shall be identified.				This Advanced Indicator was not considered for the Site.	
	2.2 Develop and document a process to achieve and maintain legal and regulatory compliance.	2.2.1 The system to maintain compliance obligations for water and wastewater management shall be identified , including: - Identification of responsible persons/positions within facility organizational structure - Process for submissions to regulatory agencies.	Yes			There are no water permits issued for the site.	
	2.3 Create a water stewardship strategy and	2.3.1 A water stewardship strategy shall be identified that defines the	Yes			A Water Stewardship Strategy document for the MTV site was provided and reviewed. Google MTV strategy contains a vision and mission around	

	plan including addressing risks (to and from the site), shared catchment water challenges, and opportunities.	overarching mission, vision, and goals of the organization towards good water stewardship in line with this AWS Standard.				water stewardship, with high-level overarching goals, which address the identified risks and opportunities and set goals that are in line with this AWS Standard.	
		2.3.2 A water stewardship plan shall be <i>identified</i> , including for each target: - How it will be measured and monitored - Actions to achieve and maintain (or exceed) it - Planned timeframes to achieve it - Financial budgets allocated for actions - Positions of persons responsible for actions and achieving targets - Where available, note the link between each target and the achievement of best practice to help address shared water challenges and the AWS outcomes.	Yes			A detailed water stewardship plan was created as part of the AWS process. The plan is broken into objectives, targets, and actions. There are different actions corresponding to different targets, each with their own metrics, budget, responsible person, status, and other criteria.	
	Advanced Indicator	2.3.3 Advanced Indicator The site's partnership/water stewardship activities with other sites within the same catchment (which may or may not be under the same organizational ownership) shall be <i>identified</i> and described.	Yes			Google is a member of California Water Action Collaborative (CWAC). Water stewardship activities involve collaboration with sites in the same catchment and include funding facilitation services and hosting meetings and tours of local projects implemented. Google supported the restoration of the Charleston Retention Basin and is collaborating with local agencies on a joint proposal for shoreline resilience.	4
	Advanced Indicator	2.3.4 Advanced Indicator The site's partnership/water stewardship activities with other sites in another catchment(s) (either under same corporate structure or with another corporate site) shall be <i>identified</i> .	Yes			See 2.3.3 regarding membership in CWAC. Google collaborated with the European Commission's Joint Research Centre (JRC) to create a Global Surface Water Mapper tool.	4
	Advanced Indicator	2.3.5 Advanced Indicator Stakeholder consensus shall be sought on the site's water stewardship plan. Consensus should be achieved on at least one target. A list of targets that have consensus and in which stakeholders are involved shall be <i>identified</i> .				This Advanced Indicator was not considered for the Site.	

	2.4 Demonstrate the site's responsiveness and resilience to respond to water risks	2.4.1 A plan to mitigate or adapt to identified water risks developed in co-ordination with relevant public-sector and infrastructure agencies shall be identified .	Yes			Google MTV site provided: - the Bay Area Water Conservation SOP to address Water Scarcity. - Summary of June 2019 Rare Disaster Simulation Exercise and the Incident Command System to address winter Storm / Flooding Risk - Other plans are included in the documentation shown by the site.	
	Advanced Indicator	2.4.2 Advanced Indicator A plan to mitigate or adapt to water risks associated with climate change projections developed in co-ordination with relevant public-sector and infrastructure agencies shall be identified .	Yes			Google's water risk response plans and activities identified in 2.4.1 relate to water scarcity and winter storm/flooding risks which are key risks associated with climate change projections. These response plans and activities were developed in relation to Google's climate resilience assessments documented under 1.6.3 (Future Issues).	6
STEP 3: Implement							
Level	Criteria	Indicator	Yes	No	NA	Objective Evidence	Points
	3.1 Implement plan to participate positively in catchment governance.	3.1.1 Evidence that the site has supported good catchment governance shall be identified .	Yes			Google Mountain View provided documentation of their efforts to support good catchment governance through engagement with City of Palo Alto RWQCP, San Francisco Public Utilities Commission (SFPUC), City of Mountain View Public Works, City of Mountain View Sustainability Team and local catchment authorities.	
		3.1.2 Measures identified to respect the water rights of others including Indigenous peoples, that are not part of 3.2 shall be implemented .	Yes			Google Mountain View's water use is within the water rights identified by the City of Mountain View. Water rights of others is not identified for the site.	
	Advanced Indicator	3.1.3 Advanced Indicator Evidence of improvements in water governance capacity from a site-selected baseline date shall be identified .	Yes			In 2019 a dedicated water stewardship team was established. Meeting agenda, notes and presentation materials were provided and reviewed. Google-wide Water Strategy Framework is under development (to be final March 2020) to better represent Google's ongoing and future water stewardship work.	2
	Advanced Indicator	3.1.4 Advanced Indicator Evidence from a representative range of stakeholders showing consensus that the site is seen as positively contributing to the good water governance of the catchment shall be identified .				This Advanced Indicator was not considered for the Site.	
	3.2 Implement system to comply with water-related legal and regulatory requirements and respect water rights.	3.2.1 A process to verify full legal and regulatory compliance shall be implemented .	Yes			Legal and regulatory requirements and individuals responsible were identified, with a process to verify compliance.	
		3.2.2 Where water rights are part of legal and regulatory requirements, measures identified to respect the	Yes			Water rights are not part of the site's legal or regulatory requirements.	

		water rights of others including Indigenous peoples, shall be implemented .					
	3.3 Implement plan to achieve site water balance targets.	3.3.1 Status of progress towards meeting water balance targets set in the water stewardship plan shall be identified .	Yes			The site has implemented several projects to improve its water efficiency including installation of low flow fixtures, identify and reduce leaks, investigate on-site non-potable water reuse, landscape conversion to native and drought tolerant species, reduce landscape water consumption.	
		3.3.2 Where water scarcity is a shared water challenge, annual targets to improve the site's water use efficiency, or if practical and applicable, reduce volumetric total use shall be implemented .	Yes			Site targets to improve water balance and status towards these targets are summarized under 3.3.1., including those with quantified benefits towards improving efficiency or reducing volumetric total. Prior to pursuing AWS certification, Google set a goal to reduce potable water intensity at the Bay Area Headquarters (MTV) by 5% in 2019 against a 2017 baseline. In 2018, a 3% reduction was achieved.	
		3.3.3 Legally-binding documentation, if applicable, for the re-allocation of water to social, cultural or environmental needs shall be identified .	Yes			There is no re-allocation of water use required in the catchment.	
	Advanced Indicator	3.3.4 Advanced Indicator The total volume of water voluntarily re-allocated (from site water savings) for social, cultural and environmental needs shall be quantified .				This Advanced Indicator was not considered for the Site.	
	3.4 Implement plan to achieve site water quality targets.	3.4.1 Status of progress towards meeting water quality targets set in the water stewardship plan shall be identified .	Yes			The site has implemented several projects to improve its water quality including stormwater attenuation, rainwater harvesting, and championing a local water related project.	
		3.4.2 Where water quality is a shared water challenge, continual improvement to achieve best practice for the site's effluent shall be identified and where applicable, quantified .	Yes			There is no site effluent. Google is working on catchment stormwater and site runoff initiatives.	
	3.5 Implement plan to maintain or improve the site's and/or catchment's Important Water-Related Areas.	3.5.1 Practices set in the water stewardship plan to maintain and/or enhance the site's Important Water-Related Areas shall be implemented .	Yes			Site IWRAs and status of progress toward related targets are identified in the Water Stewardship Plan. Plan elements related to IWRAs include development of resources and championing local water related projects.	
	Advanced Indicator	3.5.2 Advanced Indicator Evidence of completed restoration of non-functioning or severely degraded	Yes			Google supported the restoration of the Charleston Retention Basin from a stormwater ditch into a marsh and nature trail. A map and project	6

		Important Water-Related Areas including where appropriate cultural values from a site-selected baseline date shall be identified . Restored areas may be outside of the site, but within the catchment.				information was provided and reviewed, and the area was observed during the on-site audit.	
	Advanced Indicator	3.5.3 Advanced Indicator Evidence from a representative range of stakeholders showing consensus that the site is seen as positively contributing to the healthy status of Important Water-Related Areas in the catchment shall be identified .	Yes			See 3.5.2. The habitat restoration has been supported by local nature groups, including the Sierra Club and the Audubon Society. Environmental groups credit Google officials for preserving more land than expected.	2
	3.6 Implement plan to provide access to safe drinking water, effective sanitation, and protective hygiene (WASH) for all workers at all premises under the site's control.	3.6.1 Evidence of the site's provision of adequate access to safe drinking water, effective sanitation, and protective hygiene (WASH) for all workers onsite shall be identified and where applicable, quantified .	Yes			WASH is available on-site and within the catchment.	
		3.6.2 Evidence that the site is not impinging on the human right to safe water and sanitation of communities through their operations, and that traditional access rights for Indigenous and local communities are being respected, and that remedial actions are in place where this is not the case, and that these are effective.	Yes			Evidence for on-site WASH containing indicator requirements was described. Google Mountain View is not impacting WASH of communities.	
	Advanced Indicator	3.6.3 Advanced Indicator A list of actions taken to support the provision to stakeholders in the catchment of access to safe drinking water, adequate sanitation and hygiene awareness shall be identified .				This Advanced Indicator was not considered for the Site.	
		3.6.4 Advanced Indicator In catchments where WASH has been identified as a shared water challenge, evidence of efforts taken with relevant public-sector agencies to share information and to advocate for change to address access to safe				This Advanced Indicator was not considered for the Site.	

		drinking water and sanitation shall be identified .				
	3.7 Implement plan to maintain or improve indirect water use within the catchment.	3.7.1 Evidence that indirect water use targets set in the water stewardship plan, as applicable, have been met shall be quantified .	Yes			Indirect water use is not targeted in the Water Stewardship Plan due to insignificant inputs.
		3.7.2 Evidence of engagement with suppliers and service providers, as well as, when applicable, actions they have taken in the catchment as a result of the site's engagement related to indirect water use, shall be identified .	Yes			No primary inputs associated with embedded water use were identified. Outsourced services includes laundry, gym and massage services and is considered minor. A relevant source of indirect water use is Google's Food Program. All Google offices provide food and drinks to employees. Google provides Global standards for Sustainable Practices in the Food Program.
	Advanced Indicator	3.7.3 Advanced Indicator Actions taken to address water related risks and challenges related to indirect water use outside the catchment shall be documented and evaluated.				This Advanced Indicator was not considered for the Site.
	3.8 Implement plan to engage with and notify the owners of any shared water-related infrastructure of any concerns the site may have.	3.8.1 Evidence of engagement, and the key messages relayed with confirmation of receipt, shall be identified .	Yes			Evidence of stakeholder engagement associated with water-related infrastructure is documented in Summaries of Stakeholder Meetings.
	3.9 Implement actions to achieve best practice towards AWS outcomes:	3.9.1 Actions towards achieving best practice, related to water governance, as applicable, shall be implemented .	Yes			Dedicated cross functional team expanded water stewardship education of Googlers on water system and Google's on-going efforts.
	continually improve towards achieving sectoral best practice	3.9.2 Actions towards achieving best practice, related to targets in terms of water balance shall be implemented .	Yes			Initiated program to implement offsite projects in local or source watershed to balance Google's water use.
	having a local/catchment, regional, or national relevance.	3.9.3 Actions towards achieving best practice, related to targets in terms of water quality shall be implemented .	Yes			Stormwater is 100% managed onsite with ongoing maintenance, inspection and monitoring.
		3.9.4 Actions towards achieving best practice, related to targets in terms of the site's maintenance of Important Water-Related Areas shall be implemented .	Yes			Google supports external entities to identify, evaluate, restore and improve on-site and adjacent IWRAs. Actions taken toward best practice include development of regional and site resources.
		3.9.5 Actions towards achieving best practice related to targets in terms of WASH shall be implemented .	Yes			There is adequate WASH in the catchment. The Supplier Code of Conduct provides best practice from suppliers.

	Advanced Indicator	3.9.6 Advanced Indicator Achievement of identified best practice related to targets in terms of good water governance shall be quantified .				This Advanced Indicator was not considered for the Site.	
	Advanced Indicator	3.9.7 Advanced Indicator Achievement of identified best practice related to targets in terms of sustainable water balance shall be quantified .				This Advanced Indicator was not considered for the Site.	
	Advanced Indicator	3.9.8 Advanced Indicator Achievement of identified best practices related to targets in terms of water quality shall be quantified .				This Advanced Indicator was not considered for the Site.	
	Advanced Indicator	3.9.9 Advanced Indicator Achievement of identified best practices related to targets in terms of the site's maintenance of Important Water-Related Areas have been implemented .				This Advanced Indicator was not considered for the Site.	
	Advanced Indicator	3.9.10 Advanced Indicator Achievement of identified best practice related to targets in terms of WASH shall be quantified .	Yes			Site has achievement WASH best practice. The Google Supplier Code of Conduct requires all companies that contract with Google to provide adequate WASH to their employees. This includes vendor partners in the food and agriculture industry, as well as all partners in the hardware supply chain.	4
	Advanced Indicator	3.9.11 Advanced Indicator A list of efforts to spread best practices shall be identified .	Yes			A list of efforts both internal and external was provided and reviewed.	3
	Advanced Indicator	3.9.12 Advanced Indicator A list of collective action efforts, including the organizations involved, positions of responsible persons of other entities involved, and a description of the role played by the site shall be identified .	Yes			A list of collective action efforts was provided and reviewed. Actions included membership in and extensive participation with CWAC, funding facilitation services to support the watershed, and donations to a number of local groups.	12
	Advanced Indicator	3.9.13 Advanced Indicator Evidence of the quantified improvement that has resulted from the collective action relative to a site-selected baseline date shall be identified and evidence from an appropriate range of stakeholders				This Advanced Indicator was not considered for the Site.	

		linked to the collective action (including both those implementing the action and those affected by the action) that the site is materially and positively contributing to the achievement of the collective action shall be <i>identified</i> .					
STEP 4: Evaluate							
Level	Criteria	Indicator	Yes	No	NA	Objective Evidence/Findings	Points
	4.1 Evaluate the site's performance in light of its actions and targets from its water stewardship plan and demonstrate its contribution to achieving water stewardship outcomes.	4.1.1 Performance against targets in the site's water stewardship plan and the contribution to achieving water stewardship outcomes shall be <i>evaluated</i>	Yes			Google Mountain View has evaluated performance of the Stewardship Plan which is aligned with realizing the AWS Outcomes. Targets established in the Plan are tracked based on multiple actions with measurable metrics, documentation of stakeholder engagement, and evaluation of changes in water risk for each target.	
		4.1.2 Value creation resulting from the water stewardship plan shall be <i>evaluated</i> .	Yes			Refer to 4.1.1	
		4.1.3 The shared value benefits in the catchment shall be <i>identified</i> and where applicable, <i>quantified</i> .	Yes			Refer to 4.1.1	
		4.1.4 Advanced Indicator A governance or executive-level review, including discussion of shared water challenges, water risks, and opportunities, and any water-related cost savings or benefits realized, and any relevant incidents shall be <i>identified</i> .				This Advanced Indicator was not considered for the Site.	
	4.2 Evaluate the impacts of water-related emergency incidents (including extreme events), if any occurred, and determine the effectiveness of corrective and preventative measures.	4.2.1 A written annual review and (where appropriate) root-cause analysis of the year's emergency incident(s) shall be prepared and the site's response to the incident(s) shall be evaluated and proposed preventative and corrective actions and mitigations against future incidents shall be <i>identified</i> .	Yes			There were no water related emergency events at the site.	
	4.3 Evaluate stakeholders' consultation feedback regarding the site's water stewardship performance,	4.3.1 Consultation efforts with stakeholders on the site's water stewardship performance shall be <i>identified</i> .	Yes			Documentation on stakeholder engagement was provided.	

	including the effectiveness of the site's engagement process.						
	Advanced Indicator	4.3.2 Advanced Indicator The site's efforts to address shared water challenges shall be evaluated by stakeholders. This shall include stakeholder reviewing of the site's efforts across all five outcome areas, and their suggestions for continual improvement.				This Advanced Indicator was not considered for the Site.	
	4.4 Evaluate and update the site's water stewardship plan, incorporating the information obtained from the evaluation process in the context of continual improvement.	4.4.1 The site's water stewardship plan shall be modified and adapted to incorporate any relevant information and lessons learned from the evaluations in this step and these changes shall be identified .	Yes			This is the initial assessment; therefore, this indicator does not apply for this initial round of standard implementation.	

STEP 5: Communicate and Disclose

Level	Criteria	Indicator	Yes	No	NA	Objective Evidence/Findings	Points
	5.1 Disclose water-related internal governance of the site's management, including the positions of those accountable for legal compliance with water-related local laws and regulations.	5.1.1 The site's water-related internal governance, including positions of those accountable for compliance with water-related laws and regulations shall be disclosed .	Yes			The internal governance and the AWS Implementation Case Study was provided to the Mountain View Campus and shared with stakeholders.	
	5.2 Communicate the water stewardship plan with relevant stakeholders.	5.2.1 The water stewardship plan, including how the water stewardship plan contributes to AWS Standard outcomes, shall be communicated to relevant stakeholders.	Yes			Progress was summarized in the AWS Implementation Case Study. Communication and outreach confirmed through stakeholder interviews.	
	5.3 Disclose annual site water stewardship summary, including the relevant information about the site's annual water stewardship	5.3.1 A summary of the site's water stewardship performance, including quantified performance against targets, shall be disclosed annually at a minimum.	Yes			The AWS Implementation Case Study was provided to the Mountain View Campus and shared with stakeholders.	

	performance and results against the site's targets.					
	Advanced Indicator	5.3.2 Advanced Indicator The site's efforts to implement the AWS Standard shall be disclosed in the organization's annual report.	Yes			
	Advanced Indicator	5.3.3 Advanced Indicator Benefits to the site and stakeholders from implementation of the AWS Standard shall be <i>quantified</i> in the organization's annual report.				This Advanced Indicator was not considered for the Site.
	5.4 Disclose efforts to collectively address shared water challenges, including: associated efforts to address the challenges; engagement with stakeholders; and coordination with public-sector agencies.	5.4.1 The site's shared water-related challenges and efforts made to address these challenges shall be <i>disclosed</i> .	Yes			See 5.1.1
		5.4.2 Efforts made by the site to engage stakeholders and coordinate and support public-sector agencies shall be <i>identified</i> .	Yes			See 5.1.1
	5.5 Communicate transparency in water-related compliance: make any site water-related compliance violations available upon request as well as any corrective actions the site has taken to prevent future occurrences.	5.5.1 Any site water-related compliance violations and associated corrections shall be <i>disclosed</i> .	Yes			There were no water-related compliance violations at the site.
		5.5.2 Necessary corrective actions taken by the site to prevent future occurrences shall be <i>disclosed</i> if applicable.	Yes			See 5.5.1
		5.5.3 Any site water-related violation that may pose significant risk and threat to human or ecosystem health shall be immediately communicated to relevant public agencies and <i>disclosed</i> .	Yes			See 5.5.1