

# CERTIFICATION REPORT

## Alliance for Water Stewardship (AWS)



Audit Number: AO-000405

### SITE DETAILS

Site: **Apple Reno Data Center - Sparks**  
Address: 21505 Reno Technology Parkway W, 89434, Sparks, Nevada, UNITED STATES  
Contact Person: Laura Meadors  
AWS Reference Number: AWS-000510  
Site Structure: Single Site

### CERTIFICATION DETAILS

Certification status: Certified Core  
Date of certification decision: 2023-Feb-03  
Validity of certificate: 2026-Feb-03

### AUDIT DETAILS

Audited Service(s): AWS Standard v2.0 (2019)  
Audit Type(s): Initial Audit  
Audit Start Date: 2022-Nov-17  
Lead Auditor: Warrick Stewart  
Audit team participants:  
Kimberly Worsham, Local Auditor  
Warrick Stewart, Lead Auditor

Site Participants:

### AUDIT TIMES

Dates	Audit from	Duration	Auditor	Description
2022-Nov-17	09:00:00 - 17:30:00	08:30	Warrick Stewart	
2022-Dec-18	09:00:00 - 17:00:00	08:00	Warrick Stewart	

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### ADDITIONAL INFO

Summary of Audit Findings: A total of 13 findings were raised during the certification audit, 0 major non-conformities, 3 minor non-conformities, and 10 observations.

The Client is requested to perform a root cause analysis and define corrective actions for each of the non-conformities and to submit these to WSAS within 60 days of receipt of the audit report by 09 March 2023.

Minor non-conformities must be closed out by the time of the next annual audit.

The audit team recommends certification of the Apple Reno Data Center at Core level pending approval of the corrective actions plan.

#### CLOSURE OF FINDINGS AND CORRECTIVE ACTION PLAN:

The Client has successfully submitted the corrective action plans addressing all findings. Proof of implementation has been requested for the Minors and this will be evaluated during the Surveillance Audit.

Scope of Assessment: The scope of services covers the Initial certification audit 3 for assessing conformity of the Apple Reno Data Center against the AWS International Water Stewardship Standard Version 2.

The facility is located in the Truckee River catchment (HUC 160501). The Truckee River is fed by snowmelt from the eastern Sierra Nevada mountains of California and ultimately discharges to Pyramid Lake in Nevada. The Truckee River catchment is connected to the Carson River catchment (HUC 160502) via the Truckee Canal. Water is diverted from the Truckee River to the Carson River per the Truckee River Operating Agreement (TROA; Indicator 1.5.1). Source water for the site comes solely from groundwater within the Tracy Segment (Hydrographic Basin 6-083) within the Truckee River Region (Hydrographic Region 6) located in Storey, Washoe, and Lyon Counties. Treated wastewater remains onsite and is returned to groundwater (Hydrographic Basin 6-083) or used within the Truckee River Basin (HUC 16050102) in the case of agriculture or fire suppression.

The audit was conducted onsite on November 17 and 18, 2022.

### FINDINGS

#### NUMBER OF FINDINGS PER LEVEL

Observation	10
Minor	3

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### FINDING DETAILS

Finding No:	TNR-002102
Checklist Item No:	1.2.2
Status:	Open
Finding level:	Observation
Checklist item:	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.
Findings:	The site should also include assessment of their current or potential future impact or influence on stakeholders. This is fundamentally considered in the identification of shared water challenges and opportunities, but should more explicitly be stated in the stakeholder assessment process as a separate column.
Finding No:	TNR-002537
Checklist Item No:	1.3.1
Status:	Open
Finding level:	Observation
Due date:	2023-Dec-17
Checklist item:	Existing water-related incident response plans shall be identified.
Findings:	It is suggested that the site's risk assessment methodology be amended to decouple probability from timing, so they are reflected as unique criteria.
Finding No:	TNR-002538
Checklist Item No:	1.3.8
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2023-Nov-08
Checklist item:	Levels of access and adequacy of WASH at the site shall be identified.
Findings:	The quantities of WASH facilities were quantified and mapped for flushable toilets, sinks, and showers, but not for potable water fountains and water dispensers and eye-wash stations.  The number of facilities in relation to the number of staff per building and in total on site were not quantified.
Corrective action:	The site will update the maps that were already provided to include potable water fountains, water dispensers, and eye-wash stations. We will endeavor to quantify the number of facilities related to staff and building.

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Finding No: TNR-002103  
Checklist Item No: 1.5.5  
Status: Open  
Finding level: Observation  
Due date: 2023-Nov-17  
Checklist item: 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.  
Findings: The site should include information on the Endangered Species Act and other regulations for species and habitats in the catchment, to further inform the status of these catchment IWRAs in terms of their biodiversity value and threats/pressures.

Finding No: TNR-002104  
Checklist Item No: 1.5.6  
Status: Open  
Finding level: Observation  
Due date: 2023-Nov-17  
Checklist item: Existing and planned water-related infrastructure shall be identified, including condition and potential exposure to extreme events.  
Findings: The list of key existing and planned water-related infrastructure in the catchment could be expanded to include major reticulation systems.  
  
Exposure to extreme events was specified for some of this infrastructure (e.g., seismic events), but could be strengthened in the future by consideration of the risk of extreme rainfall events.

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Finding No:	TNR-001732
Checklist Item No:	2.1.1
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2023-Oct-25
Checklist item:	A signed and publicly disclosed site statement OR organizational document shall be identified. The statement or document shall include the following commitments: <ul style="list-style-type: none"><li>- That the site will implement and disclose progress on water stewardship program(s) to achieve improvements in AWS water stewardship outcomes</li><li>- That the site implementation will be aligned to and in support of existing catchment sustainability plans</li><li>- That the site's stakeholders will be engaged in an open and transparent way</li><li>- That the site will allocate resources to implement the Standard.</li></ul>
Findings:	The site has indicated that the Signed Commitment is posted at the Reno Data Center, though an image of proof needs to be provided. However, the site was not able to provide evidence of the Signed Commitment being readily accessible in a public location (such as the website or a prominent publicly visible space at the site entrance).
Corrective action:	We will post our Site Commitment at our guard shack locations which is visible to the public. Our annual environmental progress report will also reference our achieved AWS certifications by site.
Finding No:	TNR-002539
Checklist Item No:	2.3.2
Status:	Open
Finding level:	Observation
Due date:	2023-Dec-17
Checklist item:	A water stewardship plan shall be identified, including for each target: <ul style="list-style-type: none"><li>- How it will be measured and monitored</li><li>- Actions to achieve and maintain (or exceed) it</li><li>- Planned timeframes to achieve it</li><li>- Financial budgets allocated for actions</li><li>- Positions of persons responsible for actions and achieving targets</li><li>- Where available, note the link between each target and the achievement of best practice to help address shared water challenges and the AWS outcomes.</li></ul>
Findings:	Includes information on shared water challenges, site risks, and opportunities, these details have not fully informed the identification of actions that are prioritized according to urgency and level of risk.

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Finding No: TNR-001735  
Checklist Item No: 2.4.1  
Status: Open  
Finding level: Observation  
Due date: 2023-Oct-25  
Checklist item: A plan to mitigate or adapt to identified water risks developed in co-ordination with relevant public-sector and infrastructure agencies shall be identified.  
Findings: More explicit mitigation/adaptation coordination efforts with the public sector and infrastructure agencies should be pursued.

Finding No: TNR-001748  
Checklist Item No: 3.4.1  
Status: In Progress - CA plan approved  
Finding level: Minor  
Due date: 2023-Oct-26  
Checklist item: Status of progress towards meeting water quality targets set in the water stewardship plan shall be identified.  
Findings: The Water Stewardship Plan indicates which action items have been implemented related to Good Water Quality Status. However, no quantitative targets were set for water quality against which the status of progress can be determined.  
Corrective action: We will endeavor to formalize a chlorine residual target of 1 ppm.  
Evidence of implementation: Updated water stewardship plan with chlorine residual target.  
Chlorine residual reports for 2022, which have been sent to the Bureau of Safe Drinking Water and Washoe County Health District quarterly, have been uploaded.

Finding No: TNR-001749  
Checklist Item No: 3.4.2  
Status: Open  
Finding level: Observation  
Due date: 2023-Oct-26  
Checklist item: 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.  
Findings: Continual improvement to achieve best practice for the site's effluent has not been quantified.

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## Alliance for Water Stewardship (AWS)

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Finding No: TNR-001738  
Checklist Item No: 4.1.1  
Status: Open  
Finding level: Observation  
Due date: 2023-Oct-25  
Checklist item: Performance against targets in the site’s water stewardship plan and the contribution to achieving water stewardship outcomes shall be evaluated.  
Findings: Quantitative targets are not currently reflected in the Water Stewardship Plan for all actions, as Apple is value and outcome focussed as opposed to solely chasing hard targets.  
  
Explicit time-frames for all actions should be specified. Progress needs to be assessed against quantitative targets and explicit time-frames for each action, and the contribution to achieving water stewardship outcomes determined.

Finding No: TNR-001740  
Checklist Item No: 4.1.3  
Status: Open  
Finding level: Observation  
Due date: 2023-Oct-25  
Checklist item: The shared value benefits in the catchment shall be identified and where applicable, quantified.  
Findings: The quantification of some shared values would strengthen the site's current conformity.

Finding No: TNR-001949  
Checklist Item No: 5.3.1  
Status: Open  
Finding level: Observation  
Due date: 2023-Nov-08  
Checklist item: A summary of the site’s water stewardship performance, including quantified performance against targets, shall be disclosed annually at a minimum.  
Findings: As the site has not reached the end of its first year of implementation of its Water Stewardship Plan, it is currently unrealistic to expect the site to disclose a summary of the site’s water stewardship performance. However, the WSP needs to be strengthened to include a more comprehensive assessment of progress to date against the proposed actions in the WSP for the current year of implementation.

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A handwritten signature in black ink, appearing to read 'M. Waidler', written in a cursive style.

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Signature WSAS



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### Report Details

Report	Value
Report prepared by	Warrick Stewart
Report approved by	Lurdes Guerra
Report approved on (Date)	04/01/2023

### Surveillance

**Proposed date for next audit**  
2023-Nov-16

### Stakeholder Announcements

Date of publication	Location
2022-Oct-05	WSAS and AWS Website
2023-Jan-31	<a href="https://twitter.com/LimnoTech/status/1587063440920780811?s=20&amp;t=qBNgD2RmWCwIS-fU3Inj_g">https://twitter.com/LimnoTech/status/1587063440920780811?s=20&amp;t=qBNgD2RmWCwIS-fU3Inj_g</a>

### Catchment Information

#### Catchment Information

The site is located at 21505 Reno Technology Parkway W, Sparks, NV 89434 (Latitude 39.57023, Longitude -119.536). It is owned and managed by Apple, and been operational as an Apple Data Center since 2012.

The facility is located in the the Truckee River catchment (HUC 160501). The Truckee River is fed by snowmelt from the eastern Sierra Nevada mountains of California and ultimately discharges to Pyramid Lake in Nevada. The Truckee River catchment is connected to the Carson River catchment (HUC 160502) via the Truckee Canal. Water is diverted from the Truckee River to the Carson River per the Truckee River Operating Agreement (TROA; Indicator 1.5.1). Source water for the site comes solely from groundwater within the Tracy Segment (Hydrographic Basin 6-083) within the Truckee River Region (Hydrographic Region 6) located in Storey, Washoe, and Lyon Counties. Treated wastewater remains onsite and is returned to groundwater (Hydrographic Basin 6-083) or used within the Truckee River Basin (HUC 16050102) in the case of agriculture or fire suppression.

### Client Description and Site Details

#### Client/Site Background

The site is located at 21505 Reno Technology Parkway W, Sparks, NV 89434 (Latitude 39.57023, Longitude -119.536). It is owned and managed by Apple, and been operational as an Apple Data Center since 2012. Catchments that the site is located in are the Truckee River catchment (site; discharge) and Tracy Segment Hydrographic Basin (groundwater) (source; discharge).

Comment

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### Summary of Shared Water Challenges

#### Summary of Shared Water Challenges

Shared Water Challenges in the catchment include Water Scarcity and Drought, Impaired Surface Water Quality (Nutrients), Climate Change Impacts, Impaired Natural Habitat due to Low River Flows, Inefficient Historical Regulation and Use of Water, Seismic Activity (Earthquakes), Lack of WASH Services in some areas, Groundwater Policy Reform, and Tahoe-Reno Industrial Center (TRIC) Effluent Redirect Project.

### 0.1 General Requirements for Single Sites, Multi-Sites and Groups

#### 0.1.1 Eligibility Criteria

**0.1.1.1** *The site(s) occupy one catchment OR an exception has been granted.* ✔  
Yes

Comment The site occupies one catchment.

**0.1.1.2** *The scope of the proposed certification shall be under the control of a single management system.* ✔  
Yes

Comment The site is under the control of a single management system.

**0.1.1.3** *The scope of the proposed certification shall be homogeneous with respect to primary production system, water management, product or service range, and the main market structures.* ✔  
Yes

Comment The site is homogeneous with respect to its primary production system, water management, product or service range, and the main market structures.

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### 1 STEP 1: GATHER AND UNDERSTAND

**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:*

- 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

Comment: Assessment:  
The systems provides water for domestic use for employees, cooling, and fire protection. Apple is the only user of this water. Source water for the sites comes solely from groundwater within the Tracy Segment (Hydrographic Basin 6-083) within the Truckee River Region (Hydrographic Region 6) located in Storey, Washoe, and Lyon Counties. The site needs to confirm the location of the three underground on-site wells, and the labels for these wells, on the maps provided.

All discharge is treated and remains onsite. Sewage is treated via septic systems at each building, which is then returned to groundwater via leach fields. Storm water is collected in dry detention ponds that collect up to the 100-year storm. Blowdown is used for irrigation, and can also be used for dust control or fire suppression.

The site boundary is mapped.

Water-related infrastructure, including the piping network owned or managed by the site or its parent organization, are reflected. No discharge leaves the site. Reflects the location of the location of the site within its catchment, that it affect(s) and is reliant upon for water, has been mapped. The direction of flow of the river system/s in the catchment is also illustrated.

**1.2** *Understand relevant stakeholders, their water related challenges, and the site’s ability to influence beyond its boundaries.*

**1.2.1** *Stakeholders and their water-related challenges shall be identified. The process used for stakeholder identification shall be identified. This process shall:*

- 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

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Comment	<p>Assessment: A stakeholder mapping exercise was conducted by the site in a workshop setting, using input from site staff and desktop research.</p> <p>The site used a larger water replenishment consultation process to reach out to entities, to identify key stakeholders.</p>	
<b>1.2.2</b>	<p><i>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.</i></p>	<p> Obs.</p>
Comment	<p>Observation: The site should also include assessment of their current or potential future impact or influence on stakeholders. This is fundamentally considered in the identification of shared water challenges and opportunities, but should more explicitly be stated in the stakeholder assessment process as a separate column.</p>	
<b>1.3</b>	<p><i>Gather water-related data for the site, including: water balance; water quality, Important Water-Related Areas, water governance, WASH; water-related costs, revenues, and shared value creation.</i></p>	
<b>1.3.1</b>	<p><i>Existing water-related incident response plans shall be identified.</i></p>	<p> Obs.</p>
Comment	<p>Assessment: Existing incident response plans include:</p> <ul style="list-style-type: none"> <li>• Spill Prevention, Control and Countermeasure Plan for documenting all spills and determining if spills are reportable to the appropriate agencies.</li> <li>• Apple Data Center Reno Water Technology Park Water System Water Conservation Plan which includes a contingency plan for situations where well water levels are low.</li> </ul> <p>The Water Conservation Plan is specific to the Reno Data Center and includes contingency measures for drinking water provision to staff on site in the event of major water availability constraints, but no contingency measures for operations under such conditions. However, the site is a self-sustaining entity, so are not reliant on other parties to provide water. Drinking water could be provided to the site via other sources.</p> <p>Reno West Campus RTP-4 Well Construction and Testing Report shows well depth and testing of well/aquifer.</p> <p>Apple Facility Recovery Plan: Reno lists the key risk factors, including drought and flooding. Site is located well outside of flood prone areas and designed for a 1: 00 year flood. Therefore, no response actions for flooding have been identified as needed, other than observation to inform any potential actions.</p> <p>The site has also mapped its fault traces, to understand the risk of earthquakes.</p> <p>Response actions are in place for water interruptions (e.g., due to earthquakes), but are not in place in the event of aquifer contamination, which is deemed as highly unlikely due to the location of potential sources of contamination.</p> <p>NATHAN Geohazard assessment reflected that water-related risks are all of low significance and/or probability.</p> <p>It is suggested that the site's risk assessment methodology be amended to decouple probability from timing, so they are reflected as unique criteria.</p>	
<b>1.3.2</b>	<p><i>Site water balance, including inflows, losses, storage, and outflows shall be identified and mapped</i></p>	<p> Yes</p>

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Comment

Assessment:  
The site's water balance, including inflows, uses, losses, and outflows were quantified. Detailed water balance maps and associated maps for each building were provided.

- 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

Comment

Assessment:  
The site water balance, inflows, losses, storage, and outflows have been quantified for 2 annual periods from November 2019 to October 2020, and November 2020 to October 2021. These datasets reflect monthly variances and variances between the two annual periods, including graphical plots, for both production and usage.

- 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

Comment

Assessment:  
Source Water  
Water sourced from the Tracy Segment groundwater basin is tested by a third party (Silver State Analytical Laboratories) against state and national drinking water quality standards. The site's groundwater is generally very good and has not experienced any water quality related risks in the last 10 years.

Provided Waters  
Apple supplies its own water.

Monitoring data was provided for source water, septic tanks, and site effluent, with a suite of relevant parameters analyzed for each. Samples are collected quarterly and the associated data spans from 2018 to 2021. Results "outside of specification" were flagged in the monitoring reports and comparisons of the results against legal requirements were undertaken (i.e., reflecting the extent of exceedances) and illustrated in graphs.

An indication of annual and seasonal high and low variances (via bi-annual, quarterly, and monthly data) were also quantified.

- 1.3.5** *Potential sources of pollution shall be identified and if applicable, mapped, including chemicals used or stored on site.* ✔  
Yes

Comment

Assessment:  
The site has mapped its chemical stores at multiple locations across the campus. The types of chemical stored at each building are reflected.

- 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

Comment






Assessment:  
The site advised that it does not have any on-site Important Water-Related Areas from a environmental, community or cultural perspective. There are no perennial water bodies on site.

During site acquisition, a due diligence process assessed if any cultural heritage or biological resources were present on site. None related to water were identified as priorities at a local, state, national, or global scale.

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<b>1.3.7</b>	<i>Annual water-related costs, revenues, and a description or quantification of the social, cultural, environmental, or economic water-related value generated by the site shall be identified and used to inform the evaluation of the plan in 4.1.2.</i>	 Yes
Comment	<p>Assessment: Annual water-related costs have been documented. No direct water-related revenues have accrued by virtue of Apple's business.</p> <p>A description of the social and cultural value generated by the site and Apple's global business has been identified, but this is not directly related to water.</p>	
<b>1.3.8</b>	<i>Levels of access and adequacy of WASH at the site shall be identified.</i>	 No
Comment	<p>Assessment: WASH on site is deemed as adequate by Apple. The site complies with all local and state building, plumbing, and sewer codes. Potable water fountains and water dispensers, flushable toilets, showers, and eye-wash stations are available for use on site. During the on-site audit these were deemed sufficient in terms of their number, locations, and condition.</p> <p>The quantities of WASH facilities were quantified and mapped for flushable toilets, sinks, and showers, but not for potable water fountains and water dispensers and eye-wash stations.</p> <p>The number of facilities in relation to the number of staff per building and in total on-site were not quantified.</p> <p style="text-align: right;"><b>Finding No: TNR-002538</b></p>	
<b>1.4</b>	<i>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.</i>	
<b>1.4.1</b>	<i>The embedded water use of primary inputs, including quantity, quality and level of water risk within the site's catchment, shall be identified.</i>	 Yes
Comment	<p>Assessment: The site uses 100% renewable electricity and has no primary inputs.</p>	
<b>1.4.2</b>	<i>The embedded water use of outsourced services shall be identified, and where those services originate within the site's catchment, quantified.</i>	 Yes
Comment	<p>Assessment: The site has no outsourced services, other than catering that makes up a very small percentage of water use.</p>	
<b>1.5</b>	<i>Gather water-related data for the catchment, including water governance, water balance, water quality, Important Water-Related Areas, infrastructure, and WASH</i>	
<b>1.5.1</b>	<i>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.</i>	 Yes

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Comment

Assessment:

The site has identified a number of water governance initiatives, to help inform possible opportunities for water stewardship collective action, including:

Groundwater

Ruling 5747: The USGS had previously estimated the available groundwater supply from the Tracy Segment at 6,000 acre-feet per year. In Ruling 5747 the Nevada State Engineer increased that volume to 11,500 acre-feet per year. In the most recent Tracy Segment Groundwater Report, 12,759 acre-feet of water had been appropriated by the State Engineer (NDWR, 2020). The Tracy Segment Groundwater Basin is closed for further appropriation.

U.S. v. Orr Water Ditch Co. states that diminishment of a senior surface right by a junior groundwater right would constitute a legal injury.

Surface Water

Orr Ditch Decree": The Orr Ditch Decree adjudicated water rights in the Truckee River and its tributaries in Nevada and established amounts, places, types of use, and priorities of the various rights. The Decree set the total volume of mainstem and tributary water rights at 224,000 acre-feet. Water rights can be converted from one use to another but the total number of water rights does not change from what was set by the Decree.

Truckee River Water Quality Settlement Agreement ended the longstanding lawsuit initiated by the Pyramid Lake Paiute Tribe (PLPT) against the Cities of Reno, Sparks, the State of Nevada, and the U.S. Environmental Protection Agency (EPA). The agreement establishes a joint program to improve water quality in the Truckee River through the purchase of Truckee River water rights to enhance water quality and using wastewater treatment plant effluent in place of fresh water for certain uses to help achieve water quality standards in the Truckee River and Pyramid Lake. Pyramid Lake is home to the endangered cui-ui fish, which has a significant cultural role and subsistence for the PLPT. In addition, water will be stored in federal reservoirs for use during dry periods to improve instream flows.

Truckee River Operating Agreement (TROA) is a strategic and coordinated approach to water management on the Truckee River negotiates a settlement between the Truckee Meadows Water Authority (TMWA), PLPT, State of California, State of Nevada, and Federal Government. The agreement resolves the interstate allocation of water and ensures that Nevada will receive 90% of water on the Truckee River as well as ensuring a minimum of 39,500 acre-feet of water be stored at Stampede and other reservoirs for times of drought. Under TROA, the U.S. Department of the Interior (DOI) is authorized to spend no less than \$9 million to acquire water rights to benefits the wetlands of the Stillwater National Wildlife Refuge. Additionally, TROA authorized the Federal Government to appropriate \$25 million through which PLPT could operate and maintain the Pyramid Lake Fishery.

The Lake Tahoe TMDL was adopted by the States of California and Nevada to regulate and improve water quality in Lake Tahoe after decades of declining water quality.

1.5.2

*Applicable water-related legal and regulatory requirements shall be identified, including legally-defined and/or stakeholder-verified customary water rights.*



Yes

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Comment

Assessment:  
The site identified the following applicable water-related legal and regulatory requirements:

Federal Regulations  
U.S. Environmental Protection Agency (EPA) Clean Water Act (CWA)  
CWA 303d Impaired Waters  
Total Maximum Daily Loads  
Safe Drinking Water Act  
Endangered Species Act (ESA) (Cui-oi fish in Pyramid Lake)

State Regulations  
Nevada Water Law is based on prior appropriation through a permitting system administered by the State Engineer. All water in Nevada belongs to the public and is appropriable for beneficial use. All persons must apply for and obtain a permit to appropriate water.  
The General Water Law Act of 1913 recognized underground water as public property, "The waters of all sources of water supply within the boundaries of the State, whether above or beneath the surface of the ground, belong to the public."  
The Nevada Underground Water Act (1939) made all groundwater subject to appropriation and regulation by the State Engineer.

Designated Groundwater Basins are subject to heightened management by the State Engineer.

State of Nevada Laws include:  
NRS 333- Adjudication of Vested Water Rights; Appropriation of Public Waters  
NRS 334- Underground Water and Wells.

1.5.3

*The catchment water-balance, and where applicable, scarcity, shall be quantified, including indication of annual, and where appropriate, seasonal, variance.*



Yes



# CERTIFICATION REPORT

## Alliance for Water Stewardship (AWS)

Audit Number: AO-000405

### Comment

Assessment:

The site identified the following:

#### Groundwater

The Tracy Segment Hydrographic Basin had been estimated to contain 6,000 acre-feet of water available for annual withdrawal. Recharge is determined by seasonal precipitation, accumulation of dry deposition, evapotranspiration (ET), and intermittent streamflow infiltration. Evapotranspiration in the Tracy Segment Hydrographic Basin increases in the winter through early spring (USGS, 2006). In 2007, the Nevada State Engineer increased that volume to 11,500 acre-feet based on multiple recharge methodologies done by the USGS (NDWR, 2007). In the latest pumpage report published by the Nevada Division of Water Resources, the total volume of committed groundwater resources for the Tracy Segment was 12,759 acre-feet. Allocation includes 11,500 acre-feet of permitted rights and unpermitted tribal domestic use. Of those 12,759 committed acre-feet, only 4,434 acre-feet (35%) were actually withdrawn from the groundwater basin (NDWR, 2020). Approximately 60% of the usage is designated as municipal and quasi-municipal, the designation generally used by office and industrial parks. In 2012, the Tahoe-Reno Industrial Center applied for an additional 11,000 acre-feet in groundwater allocations but was only granted 2,700 acre-feet. As a result, the Tracy Segment is closed for further groundwater appropriation, as the basin is over allocated. The Nature Conservancy released the Stressor and Threat Assessment of Nevada Groundwater Dependent Ecosystems report in which they concluded that groundwater levels in the Tracy Segment have not experienced any significant increases or decreases since 1984.

#### Surface Water

The site does not source water from surface water in the catchment. The Orr Ditch Decree, issued in 1944, adjudicated water rights to the Truckee River and its Tributaries. The Orr Ditch Decree set the total volume of mainstem and tributary water rights at 224,000 acre-feet. Water rights can be converted from one use to another but the total number of water rights does not change from what was set by the Orr Ditch Decree (TMWA, 2020). The Truckee River Basin is interconnected with the Carson River Basin via the Truckee Canal. A large amount of river flow is diverted downstream of Reno and Sparks at Derby Dam into Lahontan Reservoir via the Truckee Canal. The purpose of this federal inter-basin transfer is to augment flows available from the Carson River to provide irrigation water for the Newlands Project, a Bureau of Reclamation program initiated in 1903. Water demand for the Truckee River is expected to increase as water users fully exercise their water rights. Under existing growth trends in the basin, those experienced in the late 2000s post-recession, water demand is projected to increase to 411,000 acre-feet per year by the year 2100. In a scenario where the region experiences robust economic growth, such as was seen in the late 1990s and early 2000s, pre-recession water demand may increase to 440,000 acre-feet per year by the year 2100 (USBR, 2015).

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

# CERTIFICATION REPORT

## Alliance for Water Stewardship (AWS)

Audit Number: AO-000405

### Comment

Assessment:

The site identified the following:

#### Groundwater

Groundwater quality in Nevada is generally good for most uses, although naturally occurring minerals may affect aesthetics like taste and color. In Nevada, the most common groundwater contaminants include nitrate, fluoride, arsenic, radon, radionuclides, and mercury (NDEP, 2012). Samples collected from the Tracy Segment and the Truckee River reveal that generally, the Truckee River is more dilute than the groundwater but concentrations overlap frequently, particularly for river samples collected at low flow and groundwater samples near recharge areas (USGS, 2006).

#### Surface Water

Generally, source water quality for the Truckee River Basin is good but agricultural, urban, and municipal and industrial discharge all impact surface water quality. In the 1980's, water quality sampling indicated that the Truckee River was impaired for low dissolved oxygen. An overabundance of benthic algae (attached algae that grow on solid surfaces such as river bed rocks and submerged logs) was determined to be the primary cause of low dissolved oxygen. Benthic algae, also called periphyton, thrive in conditions with ample bioavailable nutrients (nitrogen and phosphorus) and shallow water depth (allowing for light penetration to the bottom) and increased opportunity for photosynthesis. Primary sources of nutrients to the Truckee River included natural background sources, nonpoint sources (e.g., stormwater, irrigation return flows, septic systems), and point source discharges. The largest point source in the watershed is the Truckee Meadows Water Reclamation Facility (TMWRF) that serves the cities of Reno and Sparks and portions of Washoe County. The management of nutrient, algae and dissolved oxygen continues to be a challenge in the lower Truckee River. Final Truckee River TMDLs and WLAs were adopted by the state and approved by the EPA in 1994 (EPA, 1994) (NDEP, 1994).

The 2022 Water Quality Report, published by the Truckee Meadows Water Authority, reported no exceedances for any of the 19 water quality parameters tested for. Within the Truckee River Basin, water quality in Lake Tahoe is of great concern. Lake Tahoe water quality is mostly affected by development around the lake and urban discharge. Nitrogen concentrations in the lake has been steadily increasing since the 1980s and phosphorus concentrations in the lake have been increasing since 2004 (TERC, 2021). Monitoring and water quality data under the TMDL for the Lake Tahoe Basin is extensive and ongoing due to the regulatory regime governing discharges into the lake as well as incentives program for containing point and non-point discharges to the lake.

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.*

Q  
Obs.

# CERTIFICATION REPORT

## Alliance for Water Stewardship (AWS)

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Comment

Assessment:  
The site has identified and mapped the following catchment IWRAs:

Truckee River  
Status: Poor to fair. Heavily regulated river. The Truckee River is impaired for TDS, nitrogen, and phosphorus (NDEP, 1994).

Lake Tahoe  
Status: Poor to fair. Extended drought has resulted in lowered surface water levels (UC Davis, 2020). Warmer water and increased concentration of nutrients has resulted in an increased presence of algae in nearshore regions (UC Davis, 2021).

Pyramid Lake  
Status: Poor to fair. Impaired water quality threatens the Lake's endangered species (TROA, 2015). Invasive quagga and zebra mussels threaten trout and cui-ui hatcheries (USBR, 2016) (CDFW, 2021).

Stillwater National Wildlife Refuge  
Status: Fair to good. Stillwater National Wildlife Refuge uses Newlands Project water rights for maintenance of wetlands and conservation of cui-ui (TROA EIS, 2008).

Truckee Carson Irrigation District (Newlands Project)  
Status: Fair to good. The Newlands Project makes maximum use of Carson River water and minimizes diversions from the Truckee River as much as possible (TROA, 2015).

The site should include information on the Endangered Species Act and other regulations for species and habitats in the catchment, to further inform the status of these catchment IWRAs in terms of their biodiversity value and threats/pressures.

**1.5.6** *Existing and planned water-related infrastructure shall be identified, including condition and potential exposure to extreme events.*

  
Obs.

# CERTIFICATION REPORT

## Alliance for Water Stewardship (AWS)

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Comment

Assessment:  
The site identified the following existing and planned water-related infrastructure in the catchment:

**Existing Infrastructure**  
Lake Tahoe Dam is 18 feet high and 109 feet long concrete dam with a storage capacity of 744,600 acre-feet of water.  
Boca Dam is 116 feet high and 1,630 feet long with a storage capacity of 40,000 acre-feet. The Boca Dam provides flood protection to the cities of Reno and Sparks as well as regulating flow in the Truckee River. Seismic activity is likely to damage the dam and so the USBR began modifications in 2019 and completed work in 2020.  
Stampede Dam and Reservoir is 239 feet high and 1,511 feet long earth and gravel fill dam with a storage capacity of 226,500 acre-feet. Water is mainly reserved by the TROA for fishery enhancement along the Truckee River and Pyramid Lake Fishery facilities.  
Derby Dam is 31 feet high and 1,331 feet long dam that diverts water from the Truckee River into the Truckee Canal for delivery to the Lahontan Reservoir and the Newlands Project. Diversions resulted in the drying of Winnemucca Lake.  
Marble Bluff Dam is 22 feet high and 1,622 feet long with a capacity of 19,700 cfs through the spillway. Main function is to halt erosion within PLPT Reservation and control water used by Pyramid Lake Fishway.  
Truckee Canal is a 32 mile concrete channel that diverts water from the Truckee River to the Lahontan Reservoir in the Carson River Basin. In 2008, a 50-foot section of the canal broke as the result of rodent holes underneath the canal and flooded the nearby town of Fernley.  
Lahontan Dam, Reservoir, and Hydroelectric Plant is 162 feet high and 1,500 feet long earth and gravel fill dam with a storage capacity of 289,721 acre-feet up to 312,984 acre-feet. The powerplant provides hydroelectric power to the area and Indian reservations and rural areas.  
Carson River Diversion Dam 23 feet high and 241 feet long concrete dam used to divert water into two main canals for irrigation of lands of the Newlands Project

**Planned Infrastructure**  
Tahoe-Reno Industrial Center Expansion: Plans include a downtown town center with a man-made lake and 13 mile pipeline to provide TRIC with treated wastewater from the Truckee Meadows Water Reclamation Facility.  
Truckee Canal Extraordinary Maintenance: Will line the Truckee Canal with an impermeable layer to improve the structural integrity of the canal and prevent future breaches.

Risk assessment information was provided for the site and its immediate surrounds via catchment.

The list of key existing and planned water-related infrastructure in the catchment could be expanded to include major/bulk reticulation (i.e., pipeline) systems.

Exposure to extreme events was specified for some of this infrastructure (e.g., seismic events), but could be strengthened in the future by consideration of the risk of extreme rainfall events.

1.5.7

*The adequacy of available WASH services within the catchment shall be identified.*



Yes

# CERTIFICATION REPORT

## Alliance for Water Stewardship (AWS)

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Comment

Assessment:

The site identified that WASH is generally not a concern in the catchment. Stakeholders expressed concerns over lack of WASH services for homeless populations in Reno, which has cascading public health impacts, including impaired surface water quality.

The Indian Health Service estimates that nearly 48% of households on tribal land lack adequate access to drinking water, sewage, or solid waste disposal facilities. In the State of Nevada there are four major Indigenous groups on over 20 separate reservations, bands, and colonies. Within the Truckee River Basin are the Pyramid Lake Paiute Tribe and Reno-Sparks Indian Colony.

**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

Comment

Assessment:

Shared water challenges were identified and prioritized through a workshop with site staff, desktop research, and stakeholder meetings. A summary of shared water challenges are as follows:

- Impaired Surface Water Quality (Nutrients)
- Climate Change Impacts
- Impaired Natural Habitat due to Low River Flows
- Inefficient Historical Regulation and Use of Water
- Seismic Activity (Earthquakes)
- Lack of WASH Services in some areas
- Groundwater Policy Reform
- TRIC Effluent Redirect Project

**1.6.2** *Initiatives to address shared water challenges shall be identified.*



Yes

Comment

Assessment:

The information in this section has been removed on request of the site as it is considered to be confidential.

**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

Comment

Assessment:

Site water risks were identified and scored (based on likelihood and severity) through a workshop with site staff, desktop research, and stakeholder meetings. The suite of risks is very comprehensively identified, understood, and assessed.

**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

Comment







Assessment:

Site water risks were identified and scored (based on likelihood and severity) through a workshop with site staff, desktop research, and stakeholder meetings.

# CERTIFICATION REPORT

## Alliance for Water Stewardship (AWS)

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<b>1.8</b>	<i>Understand best practice towards achieving AWS outcomes: Determining sectoral best practices having a local/catchment, regional, or national relevance.</i>	 Yes
<b>1.8.1</b>	<i>Relevant catchment best practice for water governance shall be identified.</i>	 Yes
Comment	<p>Assessment: Best practice for catchment water governance within the site's context is multi-stakeholder participation in water-related initiatives. For Apple Reno, this means continuing water-specific stakeholder engagement and identifying opportunities for collaboration. Ongoing implementation of the Truckee River Operating Agreement and groundwater-related policy reform are opportunities to engage and inform best practice for all stakeholders in the basin.</p>	
<b>1.8.2</b>	<i>Relevant sector and/or catchment best practice for water balance (either through water efficiency or less total water use) shall be identified.</i>	 Yes
Comment	<p>Assessment: The site identified best practice for water balance as replenishment of water at or above the level of water withdrawn from the catchment by the site.</p>	
<b>1.8.3</b>	<i>Relevant sector and/or catchment best practice for water quality shall be identified, including rationale for data source.</i>	 Yes
Comment	<p>Assessment: The site identified catchment best practice for water quality as ensuring that site discharge does not contribute to water quality challenges in the catchment.</p> <p>The site identified sector best practice for managing water quality as zero liquid discharge, which this is a rare and expensive outcome.</p>	
<b>1.8.4</b>	<i>Relevant catchment best practice for site maintenance of Important Water-Related Areas shall be identified.</i>	 Yes
Comment	<p>Assessment: The site did not identify any onsite IWRAs as currently being present. Future initiatives may increase the site's involvement in catchment IWRA activity, related to habitat restoration and maintenance for forests, meadows and instream flows.</p>	
<b>1.8.5</b>	<i>Relevant sector and/or catchment best practice for site provision of equitable and adequate WASH services shall be identified.</i>	 Yes
Comment	<p>Assessment: The site identified best practice for site provision of WASH as provided in the local building code, with which the site is compliant.</p> <p>The site also identified that globally there is strong guidance from UN-Water on provision of WASH. The site has proposed to evaluate the relevance of the WBCSD WASH Pledge and whether that exceeds current building code and Apple standards.</p>	

# CERTIFICATION REPORT

## Alliance for Water Stewardship (AWS)

Audit Number: AO-000405

2 STEP 2: COMMIT & PLAN - Commit to be a responsible water steward and develop a Water Stewardship Plan	
2.1	<p><i>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.</i></p>
2.1.1	<p><i>A signed and publicly disclosed site statement OR organizational document shall be identified. The statement or document shall include the following commitments:</i></p> <ul style="list-style-type: none"> <li>- <i>That the site will implement and disclose progress on water stewardship program(s) to achieve improvements in AWS water stewardship outcomes</i></li> <li>- <i>That the site implementation will be aligned to and in support of existing catchment sustainability plans</i></li> <li>- <i>That the site's stakeholders will be engaged in an open and transparent way</i></li> <li>- <i>That the site will allocate resources to implement the Standard.</i></li> </ul>
Comment	<p>Assessment:</p> <p>The publicly available Signed Commitment states that:</p> <ul style="list-style-type: none"> <li>-The site will implement and disclose progress on water stewardship to achieve A4WS water stewardship outcomes.</li> <li>-The site will ensure that its efforts are aligned with and in support of existing catchment water plans and initiatives.</li> <li>-The site will engage openly and transparently with water-related stakeholders.</li> <li>-The site will allocate resources as necessary to support this commitment.</li> </ul> <p>The site has indicated that the Signed Commitment is posted at the Reno Data Center, which is located in the site cafeteria. However, the site was not able to provide evidence of the Signed Commitment being readily accessible in a public location (such as the website or a prominent publicly visible space at the site entrance).</p> <p style="text-align: right;"><b>Finding No: TNR-001732</b></p>
2.2	<p><i>Develop and document a process to achieve and maintain legal and regulatory compliance.</i></p>
2.2.1	<p><i>The system to maintain compliance obligations for water and wastewater management shall be identified, including:</i></p> <ul style="list-style-type: none"> <li>- <i>Identification of responsible persons/positions within facility organizational structure</i></li> <li>- <i>Process for submissions to regulatory agencies.</i></li> </ul>

  
No

  
Obs.

# CERTIFICATION REPORT

## Alliance for Water Stewardship (AWS)

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Comment

Assessment:

The site's Water Related Compliance system indicates the following information for maintaining compliance with water and wastewater management:

- Identification of responsible persons/positions within facility's organizational structure
- Process for submissions to regulatory agencies
- Duration and expiry dates.

Apple EHS has appointed a consultant to manage the sites' compliance calendar. They help Apple comply with various environmental permit and regulatory obligations, including, but not limited to:

- Applications to modify and renew industrial and non-contact cooling water discharge permits
- Compliance with all elements of air quality permits, including associated reporting
- Management of chemical inventories, including associated reporting

As a programmatic element of this support, the consultant has helped Apple develop and maintain systems that track the associated regulatory and reporting deadlines. These systems also record the detailed status of compliance with regulatory requirements and associated submittals.

The site's water rights exist in perpetuity, they do not expire.

**2.3**

*Create a water stewardship strategy and plan including addressing risks (to and from the site), shared catchment water challenges, and opportunities.*

**2.3.1**

*A water stewardship strategy shall be identified that defines the overarching mission, vision, and goals of the organization towards good water stewardship in line with this AWS Standard.*



Yes

Comment

Assessment:

The Water Stewardship Strategy identified the goals and vision for the Reno Data Center's water stewardship. As follows:

- Apple's Environmental Strategy defines water stewardship as core to its mission. Specifically, Apple aims to ensure availability, quality, and equity of water resources among people and ecosystems.
- Apple also aims to continually improve in the five A4WS outcomes of good water stewardship: sustainable water balance, good water quality status, good water governance, healthy status of Important Water-Related Areas, and safe water, sanitation and hygiene for all.

The strategy for Apple's Reno Data Center is to fulfil this mission by implementing a water stewardship system that includes:

- Low water design
- Efficiency
- Watershed level engagement
- Replenishment
- Leadership and Advocacy.

**2.3.2**

*A water stewardship plan shall be identified, 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.*



Obs.



# CERTIFICATION REPORT

## Alliance for Water Stewardship (AWS)

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Comment

Assessment:

The stewardship plan includes details for each target:

- How it will be measured and monitored
- Actions to achieve and maintain (or exceed) it
- Metrics of measurement
- 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 practices to help address shared water challenges and the AWS outcomes.

While RENO includes information on shared water challenges, site risks, and opportunities, these details have not fully informed the identification of actions that are prioritized according to urgency and level of risk.

**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.*

Q  
Obs.

Comment

Assessment:

The Water Conservation Plan includes steps to mitigate or adapt to water risks at the site associated with climate change in compliance with the state of Nevada. It includes details on the following:





- a. Public education measures
- b. Water conservation measures
- c. Water management measures
- d. A contingency plan for drought conditions
- e. A schedule for Implementation
- f. A plan for meter installation
- g. Standards for water efficiency for new development
- h. Tiered water rate structure
- i. Water use restrictions

The site's WCP was developed in consultation with, and ultimately approved by, the State of Nevada Division of Water Resources.

# CERTIFICATION REPORT

## Alliance for Water Stewardship (AWS)

Audit Number: AO-000405

3 STEP 3: IMPLEMENT - Implement the site's stewardship plan and improve impacts		
3.1	<i>Implement plan to participate positively in catchment governance.</i>	
3.1.1	<i>Evidence that the site has supported good catchment governance shall be identified.</i>	 Yes
Comment	Assessment: The site is supporting good catchment governance by: <ul style="list-style-type: none"> <li>- Improving metering to better understand water use (Status: Deferred to address higher needs elsewhere. Metering is sufficient at this time)</li> <li>- Preserving the value, complying with permits, and managing the site's water rights</li> <li>- Tracking and understanding the evolving science and planning behind river and watershed health in the basin (Status: In progress)</li> <li>- Supporting improved literacy on environmental issues in the Truckee River Basin</li> <li>- Analyzing the policies, processes, and discussions on reform related to groundwater in Northern Nevada (Status: Working with a lobbyist to stay informed; Staff have engaged Nevada DWR on groundwater).</li> </ul>	
3.1.2	<i>Measures identified to respect the water rights of others including Indigenous peoples, that are not part of 3.2 shall be implemented.</i>	 Yes
Comment	Assessment: There are no non-regulatory water rights to consider.  The site has proposed in its WSP to	
3.2	<i>Implement system to comply with water-related legal and regulatory requirements and respect water rights.</i>	
3.2.1	<i>A process to verify full legal and regulatory compliance shall be implemented.</i>	 Yes
Comment	Assessment: The site's Water Related Compliance system indicates the following information for maintaining compliance with water and wastewater management: <ul style="list-style-type: none"> <li>- Identification of responsible persons/positions within facility's organizational structure</li> <li>- Process for submissions to regulatory agencies</li> <li>- Submission dates</li> <li>- Instances of non-compliance</li> <li>- Duration and expiry dates.</li> </ul> The site's water rights exist in perpetuity, they do not expire.  No non-compliance warnings have been reported.	
3.2.2	<i>Where water rights are part of legal and regulatory requirements, measures identified to respect the water rights of others including Indigenous peoples, shall be implemented.</i>	 Yes

# CERTIFICATION REPORT

## Alliance for Water Stewardship (AWS)

Audit Number: AO-000405

Comment

Assessment:

The Pyramid Lake Paiute Tribe (PLPT) protested the site's precursory water rights in 2007 (before Apple owned the water rights), but the protest was unsuccessful. PLPT argued that there was insufficient water to serve existing water rights in the basin, but the State Engineer determined additional water was available for appropriation. According to Nevada law, no other measures are required to respect the water rights of others.

The State Engineer reviews any pertinent information and either approves or denies the application. Any over utilization by the site could impact other rights holders, but the regulatory environment is very clear and a strong framework is in place to avoid such impacts materializing.

**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

Comment

Assessment:

The Water Stewardship Plan indicates which action items are related to Sustainable Water Balance, and the current status of implementation.

**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

Comment

Assessment:

The Water Stewardship Plan indicates which action items are related to Sustainable Water Efficiency, including:

**3.3.3** *Legally-binding documentation, if applicable, for the re-allocation of water to social, cultural or environmental needs shall be identified.*

  
Yes

Comment

Assessment:

The site does not re-allocate water directly, so this indicator is not relevant 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.*

  
No

Comment

Assessment:

The Water Stewardship Plan indicates which action items have been implemented related to Good Water Quality Status, including:

**Finding No: TNR-001748**

**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

Comment






Assessment:

The site does not discharge any effluent to surface water bodies in the catchment, as specified in Indicator 1.1.1, so is legally compliant.

# CERTIFICATION REPORT

## Alliance for Water Stewardship (AWS)





Audit Number: AO-000405

<b>3.5</b>	<i>Implement plan to maintain or improve the site's and/or catchment's Important Water-Related Areas.</i>	
<b>3.5.1</b>	<i>Practices set in the water stewardship plan to maintain and/or enhance the site's Important Water-Related Areas shall be implemented.</i>	 Yes
Comment	Assessment: The site has implemented actions as reflected in the WSP for catchment IWRAs.	
<b>3.6</b>	<i>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.</i>	
<b>3.6.1</b>	<i>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.</i>	 Yes
Comment	Assessment: From The site complies with all local and state building, plumbing, and sewer codes. There is potable water, flushable toilets, and showers available for use on site".  Provision of adequate WASH has been quantified per building.  Special needs are provided for in each building and more restrooms. This includes access to drinking water, toilets, washing facilities, showers, and hygiene areas for food and drink consumption.	
<b>3.6.2</b>	<i>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.</i>	 Yes
Comment	Assessment: From A4WS Standard Conformity STEP3 presentation: "There is no evidence the site is impinging on access to safe water and sanitation or traditional access. Apple holds groundwater permits for its use of groundwater from the Tracy Segment Groundwater Basin and is in compliance with water rights."	
<b>3.7</b>	<i>Implement plan to maintain or improve indirect water use within the catchment:</i>	
<b>3.7.1</b>	<i>Evidence that indirect water use targets set in the water stewardship plan, as applicable, have been met shall be quantified.</i>	 Yes
Comment	Assessment: The site does not have any major indirect water use and consequently did not identify any indirect water use related targets in its WSP.  The site uses 100% renewable electricity and has no primary inputs. More information can be found in the Annual Environmental Progress report here. See also Apex Assurance statement in the Report appendices for third-party assurance.	
<b>3.7.2</b>	<i>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.</i>	 Yes
Comment	Assessment: The site does not have any major indirect water use in its operation. Consequently, engagement with suppliers and service providers regarding indirect water use is not applicable.	

# CERTIFICATION REPORT

## Alliance for Water Stewardship (AWS)


Audit Number: AO-000405

<b>3.8</b>	<i>Implement plan to engage with and notify the owners of any shared water-related infrastructure of any concerns the site may have.</i>	
<b>3.8.1</b>	<i>Evidence of engagement, and the key messages relayed with confirmation of receipt, shall be identified.</i>	 Yes
Comment	Assessment: Site indicated it does not share water-related infrastructure, as its water source (groundwater) is solely owned and operated by Apple (at the Reno Data Center) and it does not discharge any effluent off-site.	
<b>3.9</b>	<i>Implement actions to achieve best practice towards AWS outcomes: continually improve towards achieving sectoral best practice having a local/catchment, regional, or national relevance.</i>	
<b>3.9.1</b>	<i>Actions towards achieving best practice, related to water governance, as applicable, shall be implemented.</i>	 Yes
Comment	Assessment: The site identified catchment best practice for water governance as multi-stakeholder participation in water-related initiatives. Apple Reno continues water-specific stakeholder engagement and identifies opportunities for collaboration. Ongoing implementation of the Truckee River Operating Agreement and groundwater-related policy reform are opportunities to engage and inform best practices for all stakeholders in the basin.  Actions taken towards achieving best practice related to water governance have included: - Development of site water stewardship plan and the A4WS process in consultation with key stakeholders (Indicator 1.2.1) - Preservation of the value, complying with permits, and managing site's water rights. The Campus Trigger Table is being maintained by Wesley Wightman to keep track of growth plans and activity - Tracking and understanding the evolving science and planning behind river and watershed health in the basin - Supporting improved literacy on environmental issues in the Truckee River Basin. Provided grant funding to the resilient lands initiative. The data center team has volunteered to clean up trash and debris as the McCarran Ranch Nature Preserve. Provided grant to Envirovolution to support programs that include training for teachers on sustainability concepts and hosting students - Working with a lobbyist to stay informed on groundwater policies, processes, and reforms; Staff have engaged Nevada DWR on groundwater.	
<b>3.9.2</b>	<i>Actions towards achieving best practice, related to targets in terms of water balance shall be implemented.</i>	 Yes
Comment	Assessment: The site identified best practice for water balance as replenishment of water at or above the level of water withdrawn from the catchment by the site.  Actions taken to date towards achieving best practice related to water balance include:	
<b>3.9.3</b>	<i>Actions towards achieving best practice, related to targets in terms of water quality shall be implemented.</i>	 Yes
Comment	Assessment: The site identified catchment best practice for water quality as ensuring that site discharge does not contribute to water quality challenges in the catchment. The sector best practice for managing water quality.	

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**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

Comment Assessment:  
The site did not identify any on-site IWRA’s. Consequently, no best practice actions for on-site IWRA’s were practically possible.

Research is underway on opportunities to support water stewardship through philanthropy and volunteerism. Some of Apple’s previous community engagements related to water include:

**3.9.5** *Actions towards achieving best practice related to targets in terms of WASH shall be implemented.*  Yes

Comment Assessment:  
The site has additional WASH facilities beyond building code, and has facilities available for visitors to site that are not staff. Showers are not building code requirements, but are LEED requirements that the site has met as a Lead Platinum certified site.

The site engages with communities to identify opportunities to provide access to WASH.

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### 4 STEP 4: EVALUATE - Evaluate the site's performance.

**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 evaluated. 🔍 Obs.

Comment

Assessment:  
The Water Stewardship Plan indicates in column I Performance for each action/objective, noting that the plan is still in the first year of implementation and fuller evaluations are expected in the future.

**4.1.2** Value creation resulting from the water stewardship plan shall be evaluated. ✅ Yes

Comment

Assessment:  
Shared value-creation evaluation is reflected in the evidence. The site noted that the plan is in its early stages of implementation (within year 1). Thus, a fuller evaluation of value creation is expected in future years. Evaluation should be undertaken at the end of the first year of implementation, and at least annually thereafter.

**4.1.3** The shared value benefits in the catchment shall be identified and where applicable, quantified. 🔍 Obs.

Comment

Assessment:  
The Water Stewardship Plan has identified qualified shared value benefits. The quantification of addition shared values. where application, would strengthen the site's current conformity.

**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 identified. ✅ Yes

Comment

Assessment:  
There have been no water delivery-related emergency incidents over the past year.

**4.3** Evaluate stakeholders' consultation feedback regarding the site's water stewardship performance, including the effectiveness of the site's engagement process.

**4.3.1** Consultation efforts with stakeholders on the site's water stewardship performance shall be identified. ✅ Yes

Comment

Assessment:  
Evidence of stakeholder disclosure emails sent to those stakeholders that were engaged as part of the A4WS process was provided. These emails include a description of the site's water stewardship objectives and progress/performance. The site will establish a mechanism to share a summary of its water stewardship performance annually.

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**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

Comment The site request the information here be removed to due confidentiality issues.



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5 STEP 5: COMMUNICATE & DISCLOSE - Communicate about water stewardship and disclose the site's stewardship efforts	
5.1	<i>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.</i>
5.1.1	<i>The site's water-related internal governance, including positions of those accountable for compliance with water-related laws and regulations shall be disclosed.</i>
Comment	<p>Assessment:</p> <p>Stakeholder disclosure emails were sent to those stakeholders that were engaged as part of the A4WS process. Those emails include a description of the site's water-related internal governance as follows:</p> <p>The site's water-related permits reflect those responsible at a site and corporate level who are responsible to ensuring compliance.</p>
5.2	<i>Communicate the water stewardship plan with relevant stakeholders.</i>
5.2.1	<i>The water stewardship plan, including how the water stewardship plan contributes to AWS Standard outcomes, shall be communicated to relevant stakeholders.</i>
Comment	<p>Assessment:</p> <p>Stakeholder disclosure emails were sent to those stakeholders that were engaged as part of the A4WS process. These emails include a description of the five AWS outcomes and the site's water stewardship objectives and progress/performance. The site will establish a mechanism to share a summary of its water stewardship performance annually.</p>
5.3	<i>Disclose annual site water stewardship summary, including: the relevant information about the site's annual water stewardship performance and results against the site's targets.</i>
5.3.1	<i>A summary of the site's water stewardship performance, including quantified performance against targets, shall be disclosed annually at a minimum.</i>
Comment	<p>Assessment:</p> <p>Stakeholder disclosure emails were sent to those stakeholders that were engaged as part of the A4WS process. These emails include a description of the five AWS outcomes and the site's water stewardship objectives and progress/performance to date. As the site has not reached the end of its first year of implementation of its Water Stewardship Plan, it is currently unrealistic to expect the site to disclose a summary of the site's water stewardship performance.</p> <p>The site advised that it will establish a mechanism to share a summary of its water stewardship performance annually.</p>
5.4	<i>Disclose efforts to collectively address shared water challenges, including: associated efforts to address the challenges; engagement with stakeholders; and co-ordination with public-sector agencies.</i>
5.4.1	<i>The site's shared water-related challenges and efforts made to address these challenges shall be disclosed.</i>

Yes

Yes

Obs.

Yes

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Comment

Assessment:

Stakeholder disclosure emails were sent to those stakeholders that were engaged as part of the A4WS process. These emails include a description of the five AWS outcomes and the site's shared water challenges and water stewardship objectives and progress/performance.

The site advised that it will establish a mechanism to share a summary of its water stewardship performance annually.

**5.4.2**

*Efforts made by the site to engage stakeholders and coordinate and support public-sector agencies shall be identified.*



Yes

Comment

Assessment:

Stakeholder disclosure emails were sent to those stakeholders that were engaged as part of the A4WS process. These emails include a description of the site's engagement with stakeholders as part of the A4WS process.

**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 disclosed.*



Yes

Comment

Assessment:

The site has not had any water related compliance violations in the past year, so there was nothing to disclose.

**5.5.2**

*Necessary corrective actions taken by the site to prevent future occurrences shall be disclosed if applicable.*



Yes

Comment

Assessment:

The site has not had any water related compliance violations in the past year, so there was nothing to disclose.

**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 disclosed.*



Yes

Comment

Assessment:

The site has not had any water related compliance violations in the past year, so there was nothing to disclose.

### Photographic Evidence from Audit



Yes