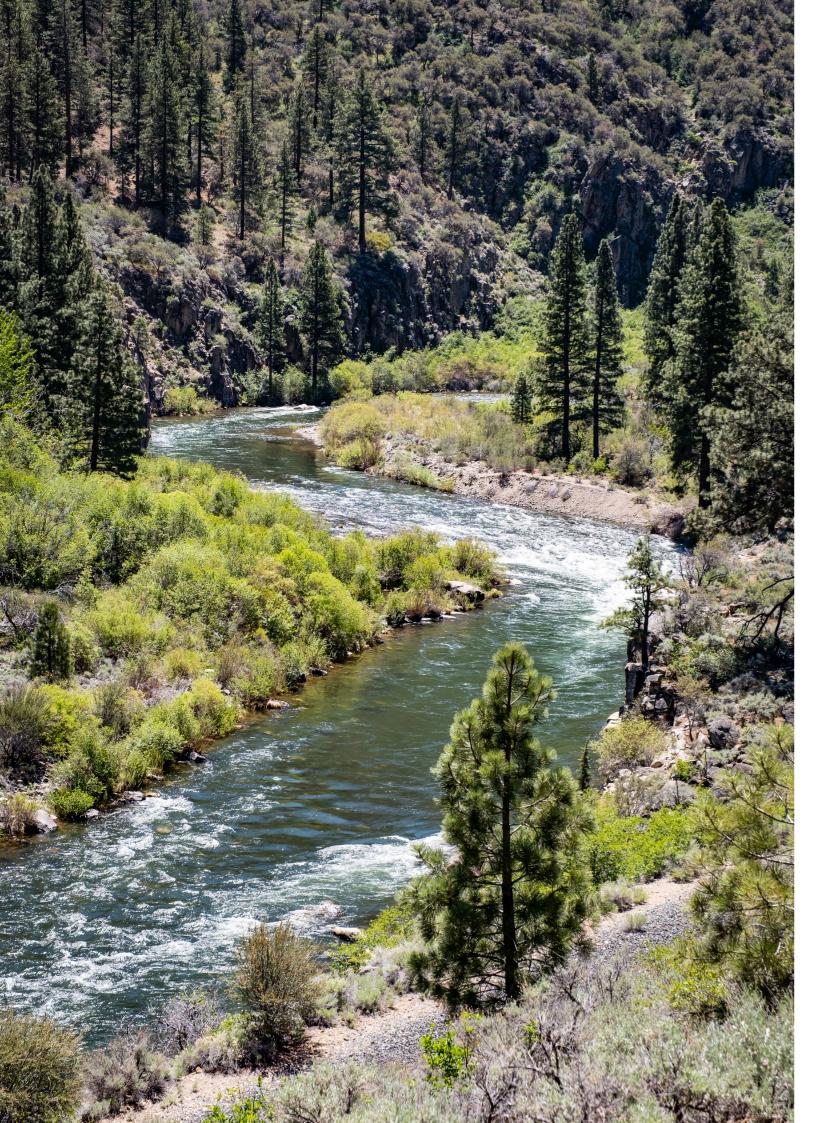


# WATER STEWARDSHIP IN DATA CENTRES

Featuring a case study on Apple







# **ABOUT THIS REPORT**

The technology sector will experience huge growth over the coming years, with 29.3 billion devices expected online by 2030 and requiring data connectivity.

To meet this expansion, the sector must prepare itself by identifying and addressing the key water risks that present a threat to business continuity and resilience.

This report is the third in a series by the Alliance for Water Stewardship (AWS) that explores the impact of technology company value chains on water resources. Building on previous AWS publications Water Risk in the ICT Sector: The Case for Action (2021) and Water Strategy in the ICT Sector: Steps to Start your Water Stewardship Journey (2022), it examines the water-related impacts of data centres and identifies opportunities for water stewardship.

AWS and Apple have a multi-year partnership that promotes the adoption of water stewardship within the technology sector. This report provides details on those efforts.

# **ABOUT AWS**

The <u>Alliance for Water Stewardship</u> is a global membership collaboration including businesses, NGOs and the public sector. Our members contribute to the sustainability of local water resources through their adoption and promotion of a universal framework for the sustainable use of water - the International Water Stewardship Standard, or AWS Standard - that drives, recognises and rewards good water stewardship performance.

AWS is registered as a Scottish Charitable Incorporated Organisation (SCIO) (SCO45894). To learn more about AWS visit <u>a4ws.org</u>

### INTRODUCTION

Freshwater is a fundamental resource for communities, ecosystems and the economy. However, less than one percent of all water on the planet is available for human and environmental use (Figure 1). With areas of water stress increasing, as well as extreme weather events linked to climate change, it is clear that businesses need to better understand its reliance on local water resources and how to reduce its impacts. Addressing water challenges now is the only way to build resiliency for the future.

AWS's first technology (tech) focussed report, Water Risk in the ICT Sector (2021), looked at the crucial role that water plays in the sector's supply chain, sharing data and insights into the many faces of water risk and identifying opportunities for the industry to respond collectively. The second report, Water Strategy in the ICT Sector (2022), gave an overview of how companies can mitigate water risks in owned operations and supply chains and begin its water stewardship journey.

This publication goes a contextual step further to consider the water risks and water stewardship opportunities for data centres, some of the largest water consuming entities in the day-to-day use of technology products. The report outlines the concept and practice of water stewardship, explains the reliance and impact of data centres on water resources, and looks in detail at how Apple has responded to these challenges through its pioneering water stewardship role.

### **BACKGROUND**

All businesses are reliant on water, whether as a raw material in operational processes, a cleaning or cooling agent, or to meet the water, sanitation and hygiene (WASH) needs of employees.

Access to water depends entirely on the resources available within the local catchment. Ensuring sufficient quantity or quality of water is dependent on the condition of the water available, as well as the state of the water resource management and infrastructure used to manage, capture, protect, store and supply it. The needs of communities, ecosystems and other businesses, and the governance of local water resources, will also determine access and supply.

Changes within the local catchment and fluctuating water requirements can create water risks for businesses. For this reason, corporate water strategies must always consider the bigger picture. The starting point is understanding the local context: when it comes to water, there is definitely no 'one-size-fits-all' approach.

Water risks revolve primarily around the catchment – how much water there is, when it is available, who needs it, who has influence, who does not. The list goes on, but these examples highlight why focusing on internal activities such as efficiency, whilst welcome and necessary, does not guarantee that a business will have access to the water it requires. Understanding and navigating the physical, social and political dimensions of water is where water stewardship plays its fundamental role.

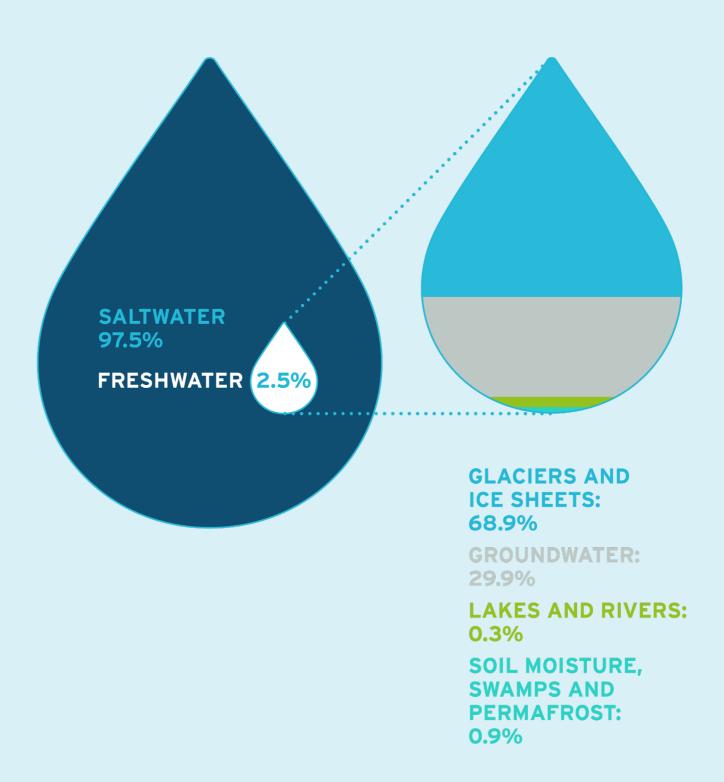


Figure 1: The amount of freshwater available on Earth Source: Shiklomanov, Igor A. (1998). 'World water resources: a new appraisal and assessment for the 21st century.' Available at: https://unesdoc.unesco.org/ark:/48223/pf0000112671

# THE ALLIANCE FOR WATER STEWARDSHIP

Water stewardship recognises that both on- and off-site actions are required if businesses are to address their complex water challenges. Water stewards acknowledge that water issues within a catchment are not the responsibility of any individual entity but must be addressed collectively.

The International Water Stewardship Standard or AWS Standard provides a mechanism through which any operational facility, such as a farm, factory, mine or data centre, can follow a globally endorsed approach to assess and understand both internal and external water contexts.

Developed through global multi-stakeholder agreement, the AWS Standard is a series of criteria and indicators structured around a five-step management framework:

Step 1: Gather and understand data

Step 2: Plan and commit Step 3: Implement

Step 4: Evaluate
Step 5: Communicate and disclose

AWS is ISEAL Code Compliant. The AWS
System has been independently evaluated
against ISEAL's Codes of Good Practice - a
globally recognised framework for effective,
credible sustainability systems. To find out
more, visit isealalliance.org

The five steps of the AWS Standard enable businesses to understand their site's reliance and impact on water in their local catchment, as well as its effects on those individuals, businesses and ecosystems that share the same resource.

By adopting the comprehensive approach of the AWS Standard and AWS Certification, businesses can contribute towards the five outcomes at the core of resilient water systems:

- 1. Good water governance
- 2. Sustainable water balance
- 3. Good water quality status
- 4. Healthy important water-related areas
- 5. Safe water, sanitation and hygiene (WASH) for all

# THE DEFINITION OF WATER STEWARDSHIP

AWS defines water stewardship as 'the use of water that is socially and culturally equitable, environmentally sustainable, and economically beneficial, achieved through a stakeholder-inclusive process that includes both site- and catchment-based actions.'

Figure 2: The AWS Standard V2.0 framework

# AN ACCESSIBLE 'HOW TO' FRAMEWORK FOR SITES TO IMPLEMENT WATER STEWARDSHIP

🤵 iseal

THE AWS STANDARD FRAMEWORK
IS BUILT AROUND FIVE STEPS:

- 1. GATHER AND UNDERSTAND
- 2. COMMIT AND PLAN
- 3. IMPLEMENT
- 4. EVALUATE
- 5. COMMUNICATE AND DISCLOSE

Download the AWS Standard V2.0 at a4ws.org



THE STANDARD IS INTENDED TO ACHIEVE FIVE MAIN OUTCOMES:

GOOD WATER
GOVERNANCE

SUSTAINABLE WATER BALANCE

GOOD WATER
QUALITY STATUS

MPORTANT WATER-RELATED AREAS

SAFE WATER, SANITATION
AND HYGIENE FOR ALL (WASH)

# TECH SECTOR WATER DEPENDENCIES

AWS and the Responsible Business Alliance (RBA)'s report Water Risk in the ICT Sector (2021) takes a closer look at the water risks facing the tech sector. The report outlines the work undertaken by AWS, RBA and the World Wide Fund for Nature (WWF) to conduct a water risk assessment for all the tiers in microelectronics supply chains. It is based on the aggregated, anonymous data of 3,300 facilities belonging to RBA members and their suppliers. The WWF Water Risk Filter, a diagnostic tool that allows scoring of water risks by water basin, was then used to explore the different types of water risk found in sites around the world.

It is clear that tech product manufacturing faces significant water challenges, but these are not the only issues for the sector. As the global workforce moves increasingly online, there is an accelerating demand for internet infrastructure. For this reason, data centres have become the backbone of the tech sector's growth as well as infrastructure of national and international importance. The concern is that data centres are highly resource intensive operations that depend upon significant amounts of energy and water. As demand for data increases, so does the need for data centres and, with that, for energy and water. This means that water stewardship in the tech sector – particularly in data centres – has never been more important.

of locations face high or very high risk due to DEGRADED ECOSYSTEM SERVICES







Figure 3: Water risks across the tech sector as identified in 'Water Risk in the ICT Sector' (2021)

### DATA CENTRES AND WATER

The development of data centres to meet growing global demand is becoming one of the largest global infrastructure projects ever undertaken. Microsoft alone has committed to spending more than US \$50 billion on data centres per year from 2024 onwards<sup>2,3</sup>. Thousands of data centres, housing millions of servers to support online services, have now been built around the world. In order to operate, each data centre often requires electricity as well as access to water for cooling<sup>4</sup>.

This proliferation of data centres looks set to continue with the increasing adoption of artificial intelligence (AI) technology, which relies heavily on internet infrastructure. Al applications are computationally intensive and their growth means more data centres, and increased demand for electricity and water supplies at each one. While the tech sector has faced water-related challenges for some time, AI technology is likely to intensify the demand for water, making challenges more acute and widespread.

### THE WATER-ENERGY SUSTAINABILITY TRADE-OFF

A data centre is a physical facility that houses a network of computing and storage resources. The internet is connected across multiple data centres. When anyone uses the internet or cloud-based services on their phone, laptop, watch, car or television, they are usually using data centres<sup>5</sup>.

Data centres require a vast amount of energy to operate. In 2018, the global electricity demand for data centres was 205 terawatt-hours (TWh), about one percent of the global total<sup>6</sup>. Large quantities of water are also required, both directly for cooling and indirectly to produce electricity.

In order to provide a fast and reliable internet, data centres are situated close to population centres. With two-thirds of the world's population living in regions experiencing water scarcity, a significant number of data centres are faced with the same water concerns. In the United States (U.S.) alone, about 20% of data centres rely on watersheds that are under moderate to high stress from drought and other water-related issues, and 50% of servers are either fully or partially powered by power plants located in water stressed regions<sup>7</sup>.

Compounding the issue is the fact that data centres are often located in water-starved regions, in part due to the availability of solar and wind energy. When it comes to cooling data centres, there is often a trade-off between energy and water, with companies using either more electricity and less water, or vice versa<sup>8</sup>. Due to water being an effective and relatively inexpensive coolant, this trade-off is made frequently in favour of saving energy, resulting in an increase in water demand. For company sustainability strategists it becomes a case of prioritising, and trying to balance, both climate and water goals.

### WATER USE IN DATA CENTRES AND OPERATIONAL RISK

Equipment in data centres generates heat that must be managed in order to maintain operations and prevent equipment failure. The most common way to remove this heat from the building involves evaporating water, though system designs can differ according to local climates. Evaporation is a consumptive use of water, meaning it is not returned to the watershed.<sup>9</sup> (see Figure 4). To give some idea of scale, a typical mid-sized data centre uses the same amount of water daily as 1,000 households in the U.S. (about 300,000 gallons)<sup>10,11</sup>. Due to their high on-site, consumptive water use, data centres are one of the top ten largest water users in the industrial and commercial sector<sup>12</sup>.

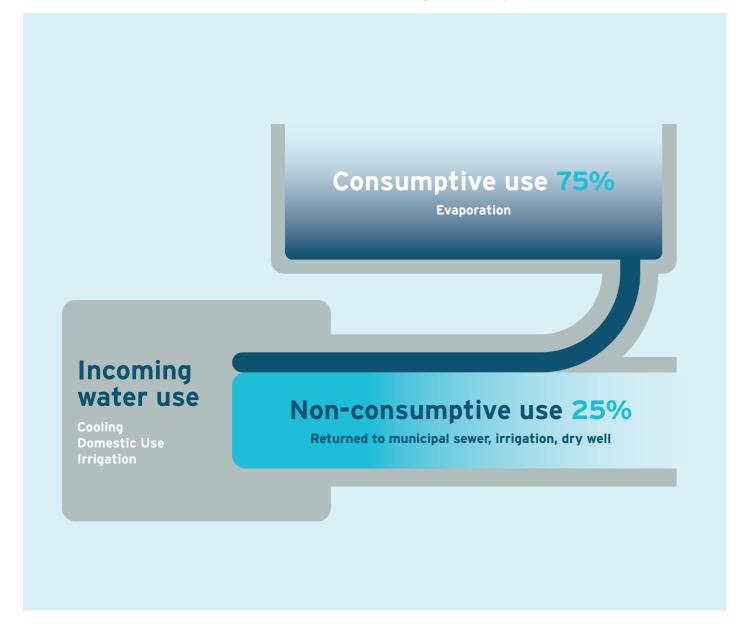
The quality of source water is a factor in determining how much water may be required for a cooling system. The better the water quality (e.g., low hardness, dissolved solids and silica), the more times the water can be cycled through the system and the less total water is withdrawn. While water can be reused in the system, it will eventually reach a threshold concentration of impurities and then will need to be

discharged. This discharge water is known as 'blowdown' and varies widely in quality depending on the original quality of the source water and the number of times it is cycled within the system. This water can either be treated on-site and re-used or discharged to local water sources such as municipal wastewater treatment or used for irrigation<sup>13</sup>.

Finding sufficient availability of good quality water and responsibly managing discharge can be operational challenges for data centres. Understanding the local context – who and what is dependent on the local water resource, and its variability – is therefore critical to operational continuity.

The contextual nature of water challenges is why the AWS Standard is site-based, rather than enterprise-based. Water stewardship is not a desktop exercise. Drivers and commitments to practice water stewardship typically come from company headquarters but the practice of stewardship can only happen locally – at sites and in catchments. Global models of water availability and quality, where they exist, are no substitute for a local perspective on water resources.

Figure 4: Example of water use within a data centre





The Colorado River at Horseshoe Bend, Arizona. Credit: KeYang, Pixabay

# WATER AND SOCIAL LICENSE TO OPERATE

Water is a shared resource, with local ecosystems, communities and many businesses all requiring access. It is governed by complex national, regional and local regulations. Water is also a human right and, as a result, water issues tend to evoke a human emotional response. All of these factors make the use of water both a physical challenge as well as a social and political one.

For example, Arizona is a highly water stressed state. Despite this, its capital city Phoenix is one of the fastest growing data centre hubs in the United States<sup>14</sup>. The region is faced with the dual problems of climate change exacerbating already high temperatures and drought, and diminishing water resources. In 2023, it experienced a scorching summer with temperatures exceeding 43 degrees Celsius for 55 days, making it the hottest summer on record. Phoenix also relies on dwindling water supplies from the Colorado River to provide hydropower and drinking water for local communities<sup>15</sup>.

As the general public becomes increasingly aware of data centres, and they are seen as competing for scarce drinking water resources, technology companies' social license to operate could be jeopardised. The Arizona Attorney General, Kris Mayes, has stated with regard to data centres, "We're going to have to make tough choices in the near future to make sure our state is protected for future generations." 16

Recognising the importance of social license to operate, the AWS Standard is built on two pillars: data collection and local stakeholder engagement. The AWS Standard provides businesses with a globally recognised and endorsed process through which they can engage local stakeholders who share, and potentially compete, for water resources. It provides a process through which companies can engage local stakeholders in discussing water issues, identify those which are shared issues and begin to work toward collective action to address them. Certification against the AWS Standard, achieved through a third-party audit, is a means of public-facing assurance that a business is following global best practice on water stewardship at the certified site.

# WATER STEWARDSHIP AT APPLE DATA CENTRES

The multitude of risks facing the tech sector may appear overwhelming but Apple, among the world's leading technology companies, has integrated water stewardship principles and actions across its operations, from supply chains in the Asia Pacific region to data centres in North America and Europe.

Apple became a member of AWS in 2018. Its initial focus was on water within its supply chain because, as is common to tech companies involved in physical product manufacturing, the water in its supply chain accounts for nearly all of its overall water footprint.

A few years later, Apple's success in helping suppliers achieve AWS Certification led them to wonder if there was value in pursuing AWS Certification for its own sites. Aware of the vital role that water plays across every aspect of the tech sector and the increasing water risks from climate change, Apple carried out a context-based water risk analysis of its direct operations. It soon became clear that its water and electricity intensive data centres should become the primary focus of its water stewardship.

In 2021, Apple's data centre in Prineville, Oregon, became the first in the world to attain AWS Certification. By 2023, Apple had a comprehensive, enterprise-wide water strategy in place, and was implementing the AWS Standard at all of its owned and operated data centres.

They have now achieved AWS Certification at all of its operational U.S. data centres in Arizona, Nevada, North Carolina and Oregon, as well as its international data centres in Viborg, Denmark, Unlangab, China and Gu'an China. By implementing and certifying to the AWS Standard, Apple has made significant headway in carrying out its five-pillar water strategy (see box, below).

### **APPLE WATER STRATEGY**

The Apple Water Strategy is based on five pillars that support a holistic approach to water stewardship, with the goal of advancing water availability, quality and equity. Apple's strategy addresses water issues both on-site, through lowwater use design, site efficiency and conservation, and in the wider water catchment through water stewardship, replenishment and nature-based solutions, and leadership and advocacy.



### **LOW-WATER DESIGN**

Minimising water impacts in the design of products, services and sites



### SITE EFFICIENCY AND CONSERVATION

Improving performance of existing sites and processes



### SITE WATER STEWARDSHIP

Demonstrating responsibility beyond our facilities through watershed-level management



### REPLENISHMENT AND NATURE-BASED SOLUTIONS

Improving water availability, quality and access through regenerative approaches



### **LEADERSHIP AND ADVOCACY**

Advancing water management through policy, advocacy and technology innovation



Lake Norman in North Carolina which is near the Apple's Maiden Data Center. Credit: Jon Bilous, iStock

# APPLE'S WATER STEWARDSHIP JOURNEY

Apple's experience with water stewardship pre-dates its involvement with AWS. Since 2013, Apple's Supplier Clean Water Program has supported suppliers to reach 'best in class' on-site water management through activities that include process water efficiency and wastewater treatment. In 2016, Apple launched its Corporate Water Program, which began with a global context-based water risk analysis and incorporated that into site selection due diligence as well as prioritising site locations for conservation efforts.

By working with AWS, Apple used the platform and its experience to build corporate and supplier understanding of water use, from facility through to catchment. As a result, Apple started working on its data centres with a developed sense of what the water challenges in the local catchments might entail. These expectations included:

- Impaired water quality
- Water scarcity and drought
- Impaired natural habitats
- Increasing seasonal variability of water flows

They had not yet pressure-tested assumptions from global water stress datasets with local knowledge experiences on the ground. Following the processes of local data collection and stakeholder consultation that form the core of the AWS Standard, Apple's water and data centre teams were able to evaluate whether their assumptions matched reality. As it turned out, there were some unexpected results.

For example, in their Maiden Data Centre in North Carolina, Apple discovered that its initial analysis overestimated baseline water stress, and that the region had actually seen significant reductions in water use in recent decades. Catchment water quality turned out to be a more significant driver of water stress, and they were able to adjust its replenishment and nature-based solutions plans accordingly.

At its Prineville, Oregon data centre, global water stress data sets suggested the site was at low baseline water stress. However, knowledge that the region was actually in a high desert climate, combined with stakeholder consultation feedback, led the team to determine that water availability was a challenge, driven by high seasonal variability. Furthermore, the data centre only used water for cooling during peak summer months, further exacerbating the summer peak demand. In order to address the source of impact, Apple worked with the City of Prineville to invest in an aquifer storage and recovery project. Like a bank account, the project withdraws small amounts of water over the course of low-demand winter months and stores it in a confined aquifer. During the peak summer months, water is withdrawn from the aquifer to serve the data centre's (and others) peak demand, relieving pressure on the rest of the City's system and allowing groundwater levels to recover over time.



Salt River and the Bulldog Cliffs near Apple's Mesa Data Center. Credit: Brent 1, iStock

# COLLABORATING WITH STAKEHOLDERS

Around 90% of Apple's water use across its data centres, retail stores, distribution centres and corporate offices comes from municipal freshwater sources. The shared nature of this type of water underpins the importance of taking a collective approach to water challenges. For this reason, Apple has engaged with diverse local stakeholder groups and participated in local watershed management projects.

When Apple first established its data centre in Prineville, Oregon, they worked closely with the City of Prineville on water issues. When they decided to pursue AWS Certification, the city was already a key stakeholder and partner. Casey Kaiser, the Public Works Director for the city, noted, "We have had a strong, open relationship with Apple ever since they set up in Prineville in 2012. We've partnered on several water-related initiatives together, from the aquifer storage and recovery project, to evaluating wastewater reuse, to habitat restoration and water quality work."

In Kaiser's opinion, their relationship and history of looking at water as a shared challenge stood Apple in good stead for implementing the AWS Standard. He explained, "When Apple embarked on the AWS Certification, it felt like a natural extension of the way we'd always worked with them, and we appreciate the open-door we have to discuss water issues as they arise. Their reputation is as a company that does what they say they are going to, and we appreciate that."

Similarly, in Arizona, the Apple data centre team leveraged its existing utility relationship with Salt River Project (SRP) to develop a plan to protect water quality and replenish water quantity, which served as the foundation for implementing the AWS Standard. According to Elvy Barton, Water and Forest Sustainability Senior Manager for SRP, "We started talking to Apple several years ago about partnering on a forest-based replenishment project in the Colorado River basin, but going through the AWS process and achieving AWS Certification was what solidified our shared water challenges – and goals – and helped us work together to better structure the replenishment project in a way that met both our needs."

The AWS Standard's systematic approach to data gathering and sharing, stakeholder mapping, engagement and transparent disclosure has helped Apple's data centres to build on and leverage activities and relationships they already had, whilst building trust with new stakeholders. Achieving AWS Certifications has provided local, regional, and global stakeholders with certainty about the efficacy of its work – it is not just Apple saying they are good water stewards, there is independent evaluation of progress to support its claims.

# APPLE'S WATER STEWARDSHIP ACHIEVEMENTS

Apple built on its water stewardship achievements, both in its supply chain and at its data centres, to reach AWS Certification. Although the AWS Standard was designed as a framework for all sites to make progress against five key outcomes, the local context of the site makes some outcomes more pertinent than others. For example, as Apple implemented the Standard at its data centres, the outcomes of sustainable water balance, water governance and protection of important water-related areas (IWRAs) often emerged as key areas of focus. In contrast, when working within its supply chain, water quality and water access, sanitation and hygiene (WASH) typically demanded more attention.

Here are some examples of Apple's progress in water stewardship against the five AWS Standard outcomes, across both its data centres and its supply chain.

### **GOOD WATER GOVERNANCE**

- All Apple data centres now have water management plans in place that include input from local government, protect water quality and human health, and meet or exceed local regulations.
- Apple continues to engage with local stakeholders to address shared water challenges and promote good water governance. For example, in Maiden, North Carolina, Apple joined the local water management group as an advisory board member, to engage more actively on basin management and drought issues.
- Apple representatives spoke at the Responsible Business
   Alliance (RBA) Annual Conference in 2022 and the AWS Global
   Water Stewardship Forum in 2022, 2023 and 2024 to promote
   collective action in the technology sector and accelerate supplier
   participation in water stewardship efforts.
- Apple also joined the UN Water Conference in 2023 to promote the importance of corporate leadership in supply chain actions and good catchment governance.

### SUSTAINABLE WATER BALANCE

- Apple partnered with the City of Prineville in Oregon to develop an aquifer storage and recovery (ASR) project that responds to seasonal variability of water supplies and helps provide water security and drought resilience for the region.
- Apple piloted a resin water treatment system that reduces makeup water use by 30% and discharge by up to 60%. Based on this success, Apple is implementing the technology at its data centres in Prineville, Oregon and Mesa, Arizona.
- Apple purchases servers that are more energy efficient than the most efficient equivalent Energy Star-rated server. In 2023, the reduced energy consumption resulted in 29 million gallons of annual water savings, or about 40% less than the Energy Star alternative.

To learn more about Apple's achievements in water, read its 'Environmental Progress Report' at apple.com/environment and 'People and Environment in Our Supply Chain', available at <a href="https://www.supplychainreports.apple">www.supplychainreports.apple</a>

### **GOOD QUALITY STATUS**

- The Apple Supplier Clean Water Program drives suppliers to minimise process water impacts and adopt best practices in wastewater treatment, reuse and on-site water management. Since the program's launch in 2013, the average reuse rate of the 246 participating suppliers has increased to 42 percent, saving Apple suppliers 12.7 billion gallons of freshwater in 2023 and a total of over 76 billion gallons of water savings.
- Apple piloted a plant-based water treatment programme at its Reno, Nevada data centre using sustainably harvested sphagnum moss, helping to eliminate the need for chemical treatment and improve water quality. This programme has since completed permanent installations at the Reno and Maiden, North Carolina data centres and a pilot is underway in at the Mesa, Arizona data centre.

### IMPORTANT WATER-RELATED AREAS

- Apple is helping to restore and maintain the healthy status
  of identified IWRAs within data centre catchments as part of
  its replenishment and nature-based solutions work. Activities
  include forest management, seasonal flow augmentation, and
  protection and maintenance of onsite water features. Apple has
  made a public commitment to replenish 100% of its freshwater
  withdrawals in highly water stressed areas by the end of 2030.
- Apple has partnered with The Nature Conservancy for restoration and clean-up efforts of natural habitats along the Truckee River in Reno. Nevada and surrounding areas.
- Apple is working with the Salt River Project in Arizona to restore approximately 30,000 acres of degraded and at-risk forest near its data centre in Mesa. This work will help scale the efforts by the United States Forest Service and Arizona Department of Forestry and Fire Management to reduce wildfire risks, thereby protecting the quality of water sources and providing 1.8 billion gallons of volumetric water benefits over the next 20 years.

### SAFE WATER, SANITATION AND HYGIENE (WASH)

- All of Apple's data centres that have achieved the AWS Standard have exceeded the 'satisfactory' rating for the WBCSD Wash for Work Pledge<sup>17</sup>. They provide, for example, complimentary sanitary supplies in women's restrooms and mother's rooms for nursing.
- Although WASH was not identified as a key issue for its North
   American or Denmark data centres, Apple has worked with Uptime
   Catalyst Facility in India on an innovative, performance-based
   programme that allows clean, cold water to be more widely
   distributed and maintained. This work generates an annual
   volumetric water benefit equivalent to Apple's direct freshwater
   use withdrawal in the country.
- Apple partnered with Frank Water in India in 2022 to develop and implement a water resource management plan through a communitybased WASH grant focused on increasing water stewardship through improved decision making around water and climate resilience. Frank Water works with local partners to help communities access safe WASH.

### LESSONS LEARNED

Apple's success in certifying its data centres to the AWS Standard demonstrates the benefits of a systematic approach to water stewardship, guided by clear principles. The AWS Standard helped Apple break down the complex task of figuring out what challenges were relevant to each location, and put together practical actions both inside and outside its fenceline to protect shared water resources and promote equitable access to water and sanitation.

As the first to certify its data centres to the AWS Standard, Apple's leadership is paving the way for the tech sector to formalise its water stewardship actions.

The following are Apple's key recommendations for those working towards AWS Certification:

- "Document your metrics, evidence and engagement as you go."
- "Start early with stakeholder engagement it guides the rest of the work."
- "The water stewardship plan is at the core of the AWS Standard. A thorough risk analysis will give you the insight you need to develop a water strategy and plan that is specific to your context."
- "Certification follows strategy. Using the AWS outcomes to guide your strategy will help everything fall into place naturally when you go to certify."

### **GET STARTED**

For those companies wanting to start their water stewardship journey, here is how you can go about it.

#### **SPEAK TO AWS**

If you are new to water stewardship or looking for advice on how to get started, get in touch and we can support you. Speak to the AWS Sectors Team via info@a4ws.org or follow Alliance for Water Stewardship on LinkedIn.

### **DOWNLOAD THE AWS STANDARD**

Downloading and reviewing the AWS Standard is often the first step on a company's water stewardship journey. Visit <a href="mailto:a4ws.org/the-aws-standard-2-0/">a4ws.org/the-aws-standard-2-0/</a> for your copy. If it seems daunting, please don't worry, AWS offers help through training, peer support and online tools.

#### TRAIN YOURSELF OR YOUR COLLEAGUES

AWS's bespoke training programme helps to build people's awareness and capacity in water stewardship and the AWS Standard. Courses are open to all and can be tailored to individual companies' requirements. Visit <a href="mailto:a4ws.org/training">a4ws.org/training</a>

#### **LEARN FROM AWS MEMBERS**

AWS Members play a pivotal role in growing and strengthening the water stewardship community. AWS convenes its membership in working groups and events to share knowledge and expertise. Any organisation that is motivated to tackle water-related challenges collectively can apply to join. Learn more about AWS membership at <a href="mailto:a4ws.org/membership">a4ws.org/membership</a>

### **ACCESS WATER STEWARDSHIP TOOLS AND RESOURCES**

Visit the AWS Tools Hub to access a range of AWS resources, including the AWS E-Standard and E-Guidance, online learning modules, webinars and more, with unlimited access for AWS Members. Visit tools.a4ws.org

### ATTEND THE AWS FORUM

Held annually in Edinburgh, the AWS Global Water Stewardship Forum is the pre-eminent, global water stewardship conference. The AWS Forum is an essential networking and learning opportunity for AWS Members old and new. Visit <u>a4ws.org</u> for details.

#### JOIN AN AWS IMPACT ACCELERATOR

AWS has developed the Impact Accelerator Programme as a cost effective, collective way for sites to implement the AWS Standard under AWS guidance. It is ideal for companies who have sites or supply chains clustered in hub locations. Visit <u>a4ws.org/impact-accelerator</u>

### **ADDITIONAL READING**

For more information about water risks in the tech sector and how AWS is helping to build a more resilient future, see these reports, written in collaboration with the Responsible Business Alliance<sup>18</sup>

- Water Stewardship: A Briefing for the ICT & Microelectronics Sector
- Water Risk in the ICT Sector: The Case For Action
- Water Strategy in the ICT Sector: Steps to Start a Water Stewardship Journey

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