Water Stewardship in Semiconductor Manufacturing

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Sustainability Challenges

- Growing complexity due to:
  - Increased use of chemical, energy, and water
  - New materials introduced into the process
  - Chip structure design changes
  - Facilities are growing putting pressure on the external infrastructure
  - Climate change impacts on water resources
  - More stringent environmental compliance requirements
- Sustainability goals have become an important driver

Net Positive Water by 2030

We will achieve net positive water by:

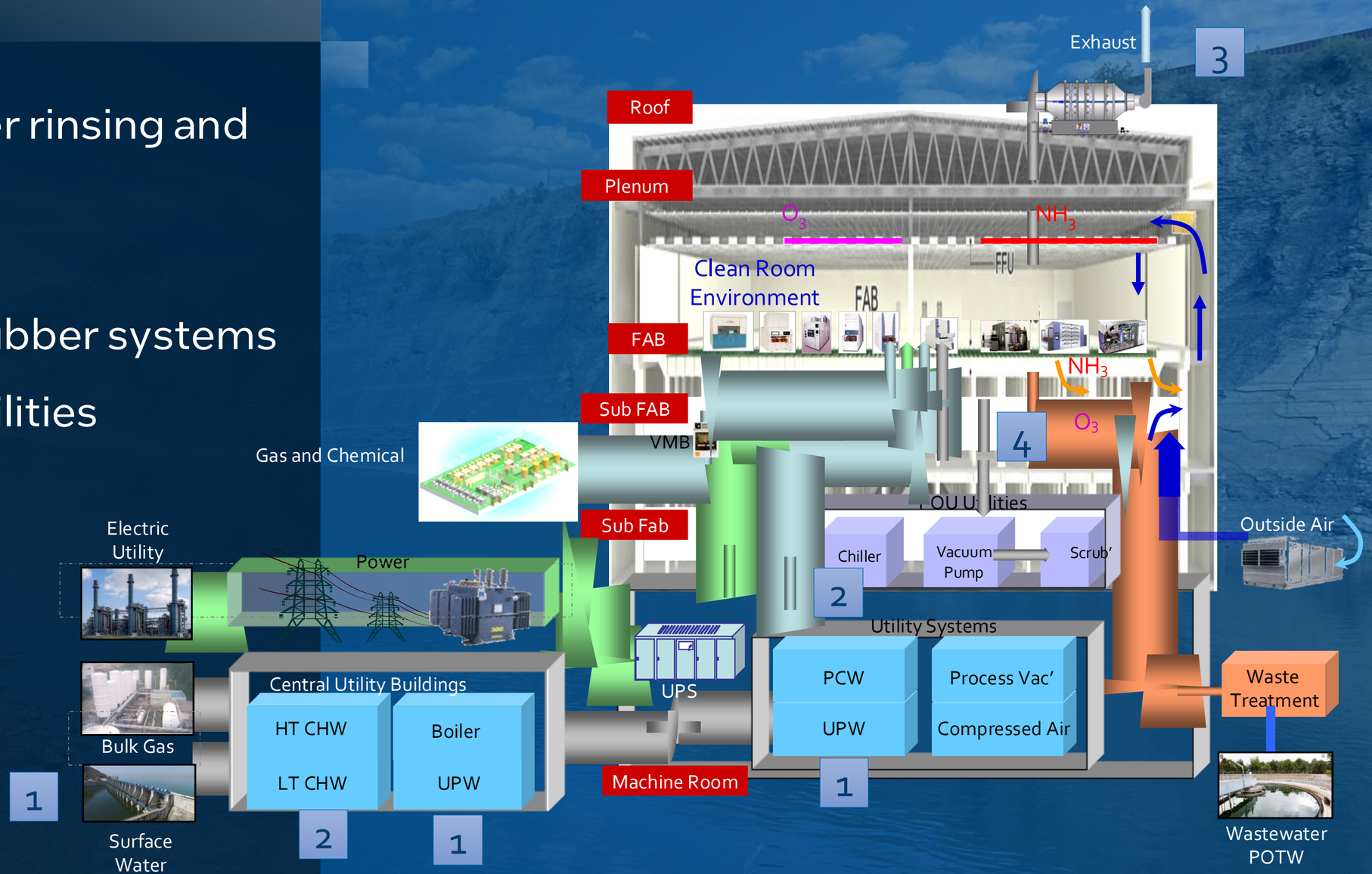
- **conserving 60 billion gallons of water in our operations and community partnerships**
- **funding external water restoration projects equivalent to >100% of our freshwater consumption**

We will achieve our goal of net positive water use when:

Water from operations treated and returned to communities or environment **+** Water restored through watershed projects **>** Water coming in from fresh water sources

Drivers for Water Use

1. Water for wafer rinsing and abatement
2. Cooling water
3. Exhaust & scrubber systems
4. Point of use utilities



Intel's water strategy

REDUCE

our water footprint through innovative water conservation projects

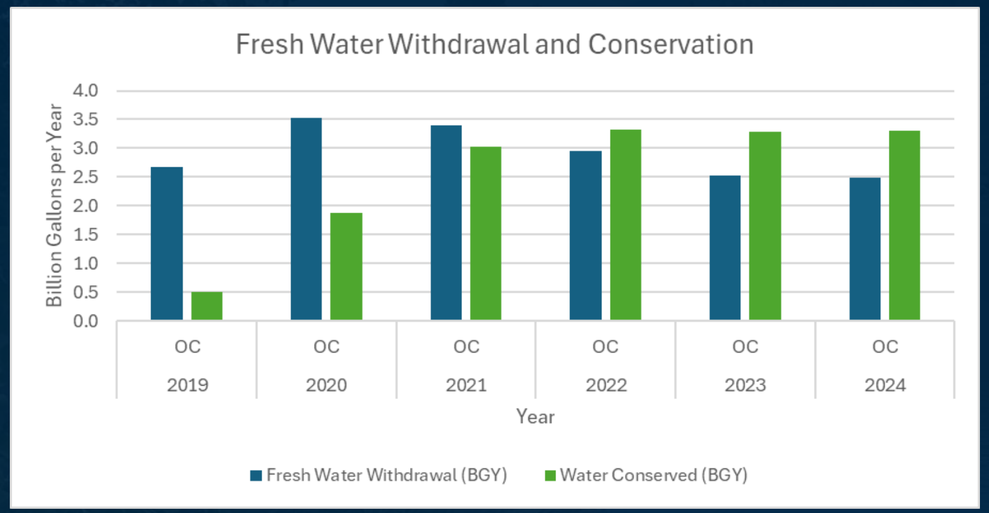
REUSE

water in our operations and within our communities

RESTORE

fund projects that restore water to the local watersheds that we impact

Water Usage and Conservation
(billions of gallons)



Conserving Water

in our operations and through collaboration with governments and communities

- Onsite water reclaim facilities
- Efficient operations
- Community reuse
- Onsite reuse
- Global water management team
- Project implementation

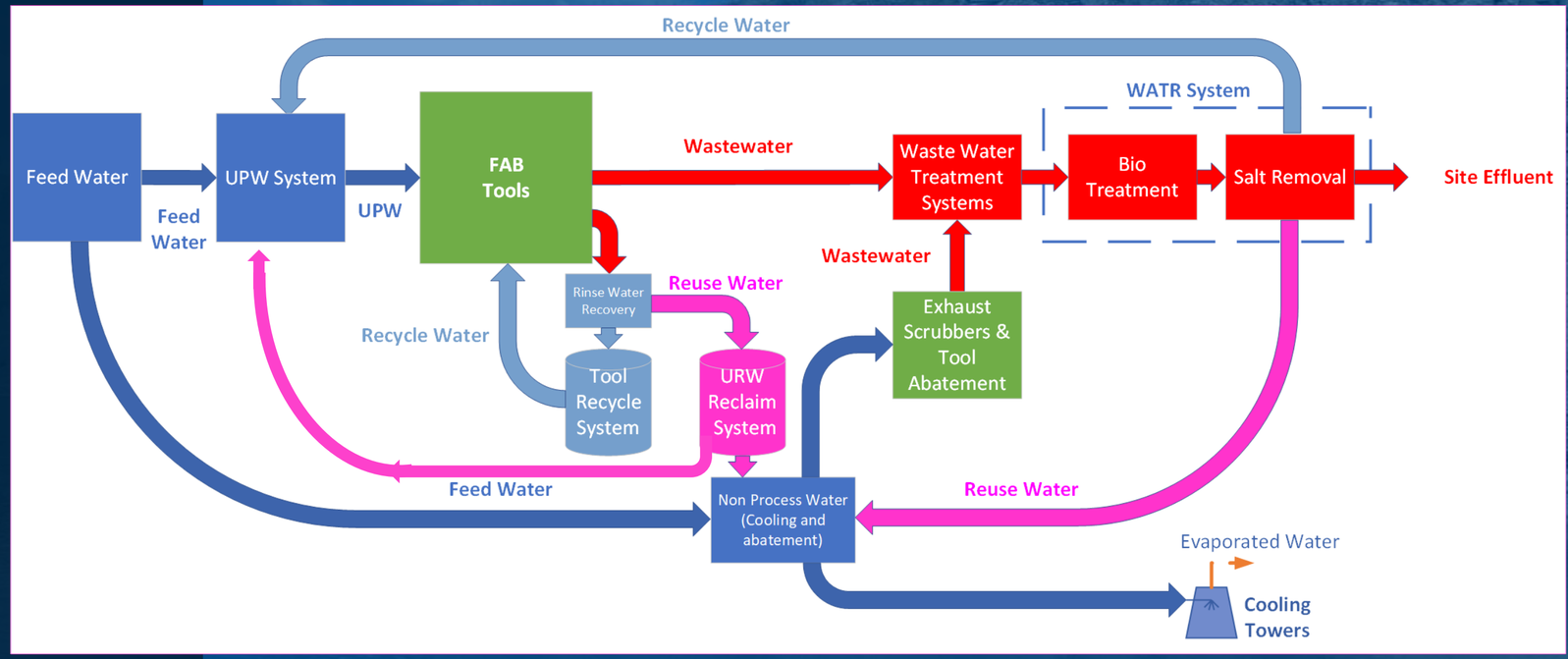
Water Is A Precious Resource - How Do We Conserve It?

Reduce

- Reduce water usage in both process tools and facilities

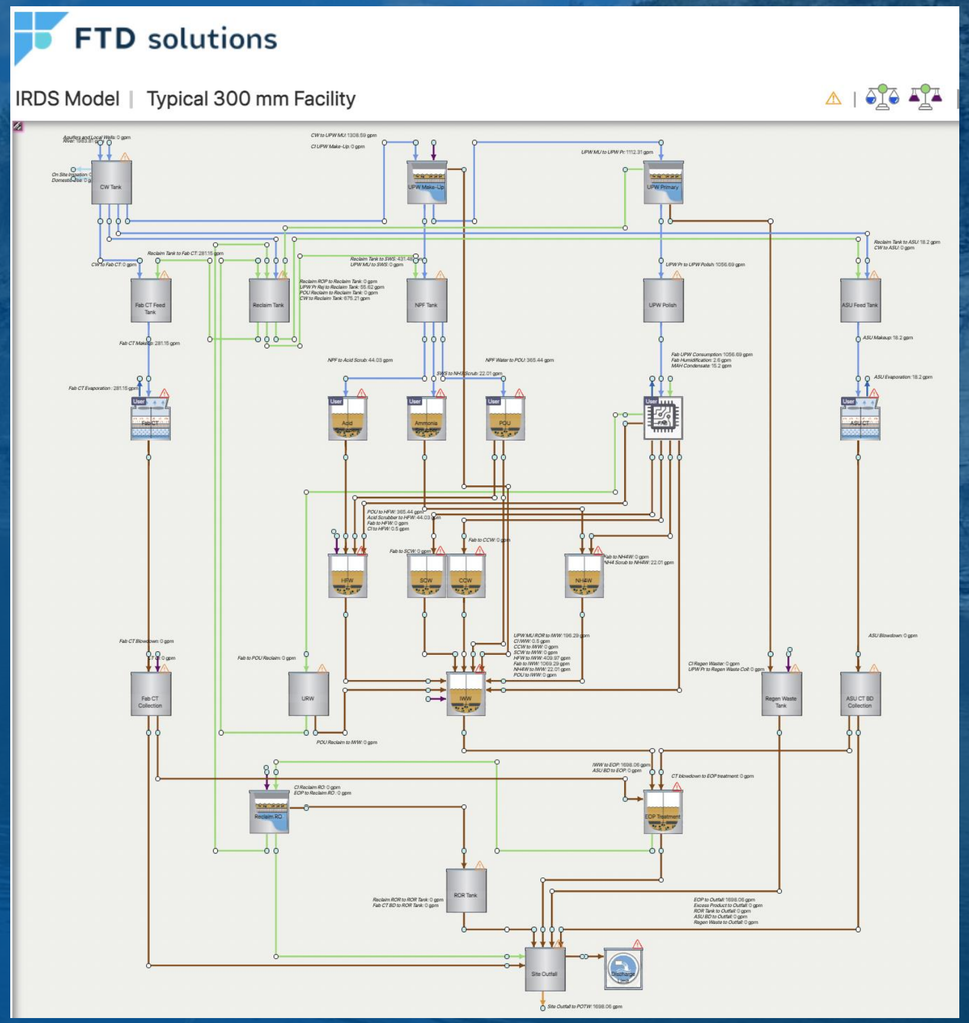
Reuse

- Recover rinse water and purges from tools for non process use via URW system
- Treat and recover wastewater at WATR for non process use
- Partner with industry to incorporate water reuse into tool design
- Recycle water at tool or point of use
- Recycle wastewater to UPW for process use



Key Water Management Considerations

- Incorporating recycle
  - Must understand overall picture of site flows and areas for potential water conservation
    - Standardized map
    - Validated input data
      - Flow, Chemistry, Capacity
      - Boundaries: tool demand, effluent compliance requirements, reliability indicators
    - Modeling steps:
      - Build digital twin for current or hypothetical future state
      - Include input data representing relevant conditions
      - Model Validation
      - Run simulation to support decision



Key Water Management Considerations

- POTW capacity- do we treat offsite or onsite?
  - Offsite
    - Reduced capital/operational cost
    - Higher risk for compliance issue
    - Minimal control over reclaim water quality
    - Stresses POTW treatment capacity
    - Consideration of interaction with flows and loads from other sources
  - Onsite
    - Emergency storage capability to prevent compliance issues
    - Ability to increase site production without risking environmental compliance
    - Control of reclaim water quality
  - Both require strategic alliance with municipalities
    - Building bridges early on is very important

Restoring Water

by funding a portfolio of watershed projects that save, protect, treat, and return water to the watersheds we impact

Contextual approach	Partner with watershed experts
Long-term or permanent benefits	Support natural resilience of the watershed
Support habitats and biodiversity	Hydrologic or community connection

Water Stewardship in Arizona

To support Intel's commitment to achieve net positive water use, we have funded 21 water restoration projects benefiting Arizona. These projects restored more than

1.3 billion

gallons of water in 2024*

*2025 numbers will be published in May 2026

On-site Conservation:

>5 billion

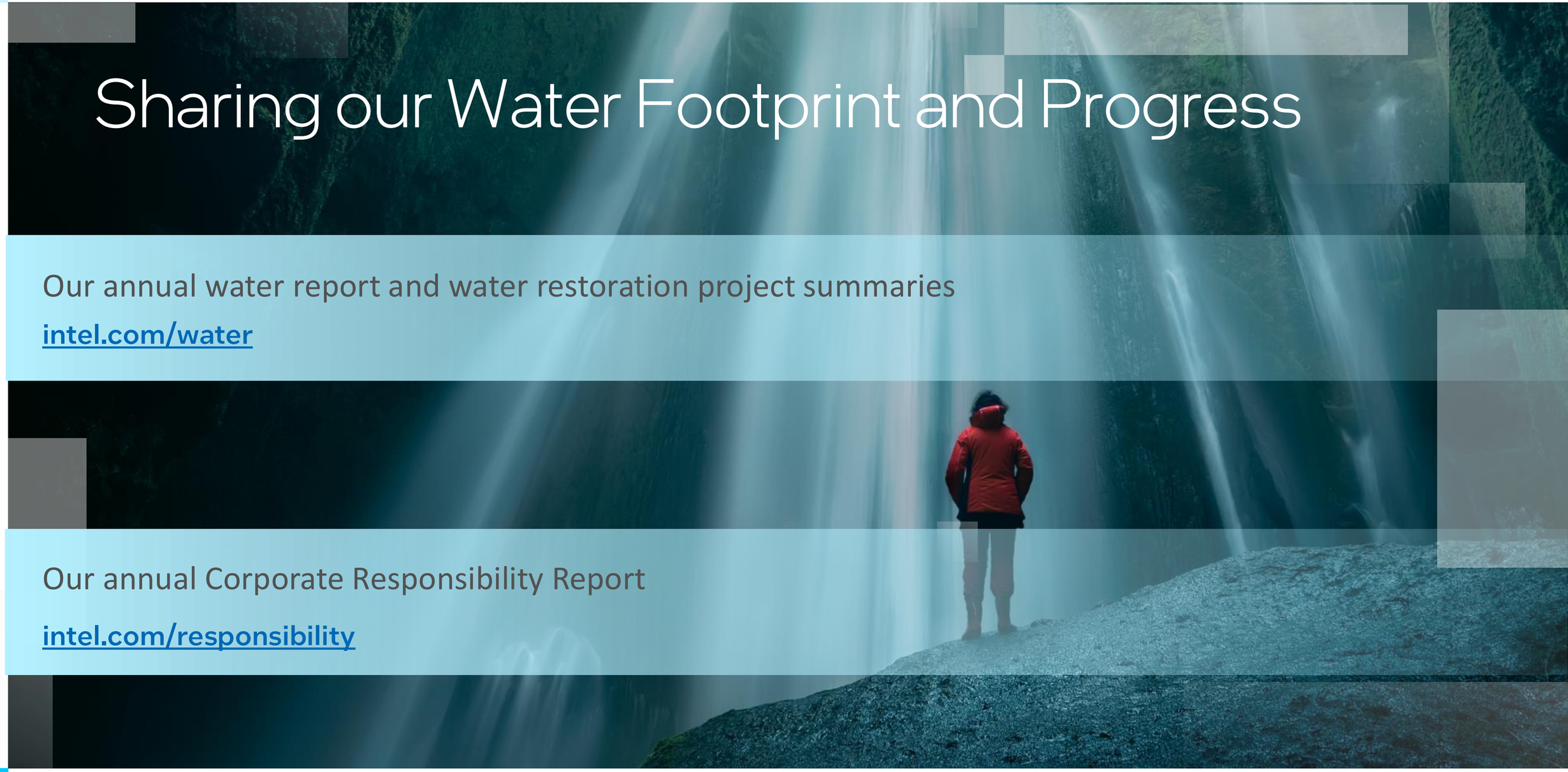
gallons of water reclaimed. Ocotillo Brine Reduction Facility, in partnership with the City of Chandler since 1995

On-site Conservation:
12-acre WATR recycling and treatment facility. Along with other projects conserved

3.3 billion

gallons of water in 2024*

Sharing our Water Footprint and Progress



Our annual water report and water restoration project summaries

intel.com/water

Our annual Corporate Responsibility Report

intel.com/responsibility

"Don't be encumbered by history. Go off and **do something wonderful**."

Robert Noyce
Co-Founder of Intel

Questions?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