WRP Water Security/Resilience Fact Sheet

Water Security is a National Security Issue

The WRP Water Security/Resilience Deep-Dive Chapter in the 2026 WRP Report details these three risk categories with associated summary information, case studies, best practices and findings for further agency collaboration.

Strategic Overview

Water Security: *Protected affordable, resilient water supply supported by reliable data, sound policy and regulation, best practice-technologies and infrastructure capable of maintaining adequate quality and quantity through acute disruptions and long-term stressors.*

Cascading Risk: *Scarcity, contamination, and infrastructure failure can impact military ops, agriculture, ecosystems, public health, and wildfire response across deeply interconnected systems.*

KEY POLICY HIGHLIGHTS

- **Colorado River:** Multi-stakeholder negotiations ongoing; alternatives pending if no consensus reached
- **1944 Water Treaty:** U.S.–Mexico coordination on Rio Grande water rights and Tijuana River border sanitation
- **Waters of the U.S. Rule:** EPA and Army proposed rule following 2023 SCOTUS Clean Water Act decision
- **Good Samaritan Act 2024:** EPA grants and liability protections for abandoned hardrock mine remediation
- **NEPA Reform and NDAA: S**treamlined permitting; 2026 NDAA addresses military water security
- **EPA Reorganization 2025:** New state-partnership functions

CROSS-CUTTING FINDING: *Durable water resilience across the WRP Region demands coordinated federal–state–tribal governance, real-time data and monitoring, adaptive infrastructure investment, and proactive integration of non-traditional water supplies to meet the compounding pressures of drought, growth, etc.*

Key Takeaways:

- Water security is not just an environmental issue but a national security issue. Every sector of society depends on reliable water: agriculture, energy, firefighting, tribal trust obligations, data centers, ecosystems, and military readiness.
- When water fails, the failures cascade. A single drought or infrastructure breakdown can simultaneously impact military operations, public health, wildfire response, and economic stability.
- Across the WRP Region, water supplies draw from a uniquely complex mix: Colorado River allocations, interstate compact rivers, in-state rivers, groundwater, and reclaimed water, governed by layers of federal, state, tribal, and local authority.
- Several major policy developments are reshaping this landscape right now: the Colorado River renegotiations, the 1944 Water Treaty with Mexico, the EPA's proposed Waters of the U.S. rule following the 2023 Supreme Court decision, and the 2025 EPA reorganization.
- The Tijuana River situation is a concrete example of how cross-border infrastructure failure, driven by population growth and aging systems, creates real public health and water quality problems on the U.S. side, including elevated bacteria levels in San Diego's South Bay.
- Durable water resilience requires four things: integrated planning, stronger data and monitoring, watershed-scale coordination, and sensible financing mechanisms.
- On regulatory complexity: Western water law is a layered system, state allocation doctrines, federal and tribal reserved rights, interstate compacts, and aging infrastructure is struggling to keep pace with declining supplies and growing demand.
- **The bottom line:** durable resilience demands coordinated governance, real-time data, adaptive infrastructure, and proactive development of non-traditional supplies.

Highlights of the WRP Water Security/Resilience Deep-Dive focus areas:

1. Complexity of Regulatory Laws, Infrastructure and Water Resource Management

- Western water law blends state allocation systems, federal/tribal reserved rights and interstate compacts.
- Aging infrastructure plus declining supplies demand integrated, science-based cross-jurisdiction planning.
- **Case Study:** Great Salt Lake, an ambitious lake-recovery.
- **Case Study:** Southern Nevada Water Authority (SNWA)/Las Vegas: reduced Colorado River use 36% and per-capita use 55% despite adding 750K residents.

- **Case Study**: New Mexico Integrated Water Financing Plan built upon successful groundwork, trust and lessons learned/best practices.
- **Case Study:** Water Resiliency at Fort Huachuca and the San Pedro River Watershed: 36,000 ac-ft recharged via community-based model replicable at other military bases
- **Case Studies** on land use planning, California Efforts, USACE Flood Risk, etc.

2. Weather

- More extreme floods AND deeper droughts, traditional hydrology policies lag behind
- Drought, wildfire, and debris flow events can lead to compounding flooding, and season run-off after wildfires.
- Case Study: Atmospheric rivers supply ~50% of California's annual precipitation in just 20–24 hours; storms shifting later in season.
- Case Study: Diversity of Upper Colorado River Basin Droughts: over-allocated; natural flows ~15M ac-ft vs. historical projections, storage critically low.
- Case Study: California Drought Resilience Interagency and Partners (DRIP) Collaborative builds proactive between-drought capacity among state agencies, tribes, community groups, water systems, and technical experts.
- Tools: Flood-MAR, managed aquifer recharge, Forecast-Informed Reservoir Operations (FIRO) reservoir ops, stormwater capture, water trading, etc.

3. Water Quality

- Build resilience to the impacts of hazards, long term management infrastructure solutions. Treatment facilities face emerging contaminants never anticipated in original designs.
- Non-traditional supplies (desalination, brackish, reclaimed) are increasingly cost-competitive.
- **Case Study:** Non-traditional Water Use in the West: exploring brackish aquifers at 2,000 ft depth, horizontal wells yield significantly more than vertical.

For more information please see 2026 WRP Report.