

las vegas wash coordination committee



2024–2025 biennial report



mission

working to stabilize and enhance
the valuable environmental
resources of the Las Vegas Wash



LAS VEGAS WASH COORDINATION COMMITTEE

Basic Management, Inc.
Bureau of Reclamation
Citizen Members
City of Henderson
City of Las Vegas
City of North Las Vegas
Clark County Parks and Recreation
Clark County Regional Flood
Control District
Clark County Water Quality
Clark County Water Reclamation District
Colorado River Commission
Conservation District of Southern Nevada
Desert Wetlands Conservancy
Lake Las Vegas Resort
Las Vegas Boat Harbor
National Park Service
Natural Resources Conservation Service
Nevada Department of Wildlife
Nevada Division of Environmental
Protection
Nevada State Health Division
Southern Nevada Health District
Southern Nevada Water Authority
University of Nevada, Las Vegas
U.S. Army Corps of Engineers
U.S. Environmental Protection Agency
U.S. Fish and Wildlife Service
U.S. Geological Survey

LAS VEGAS VALLEY WATERSHED ADVISORY COMMITTEE

City of Henderson
City of Las Vegas
City of North Las Vegas
Clark County
Clark County Regional Flood
Control District
Clark County Water Reclamation District
Las Vegas Valley Water District
Southern Nevada Water Authority

Left: Riparian vegetation at Historic Lateral Weir



Birds enjoying a misty morning on the Las Vegas Wash

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from the chair

Dear Friends:

For more than 25 years, the Las Vegas Wash Coordination Committee has worked to stabilize and enhance the Las Vegas Wash, implementing a significant capital improvements program, conducting baseline monitoring and revegetating areas impacted by construction.

In 2022, we transitioned to long-term operations. This second biennial report highlights successes from 2024–2025, among them:

- Approving a five-year interlocal agreement for funding
- Removing 2,166 truckloads of clean spoils and vegetation during maintenance of weirs and bank protection
- Monitoring of water quality continued, documenting low selenium in the Wash
- Detecting threatened and endangered bird species, including the second confirmed southwestern willow flycatcher fledgling
- Enhancing more than 10 acres with native plants through three events involving nearly 550 participants

Thanks to the committee's efforts, as well as its partners and dedicated volunteers, the Las Vegas Wash is now a vital community resource. I look forward to continuing our work to sustain this important waterway together.

Sincerely,



Joemel Llamado
Las Vegas Valley Watershed Advisory Committee Chair

Emergent vegetation reflected in the Wash

background

As the primary drainage channel for the Las Vegas Valley watershed, the Las Vegas Wash (Wash) carries more than 200 million gallons of highly treated effluent, urban runoff and shallow groundwater to Lake Mead daily (along with occasional stormwater), and its wetlands filter sediment and other impurities from its flows. These flows help to sustain plants and animals that would not otherwise be found in the dry Mojave Desert and extend our water supply through return-flow credits.

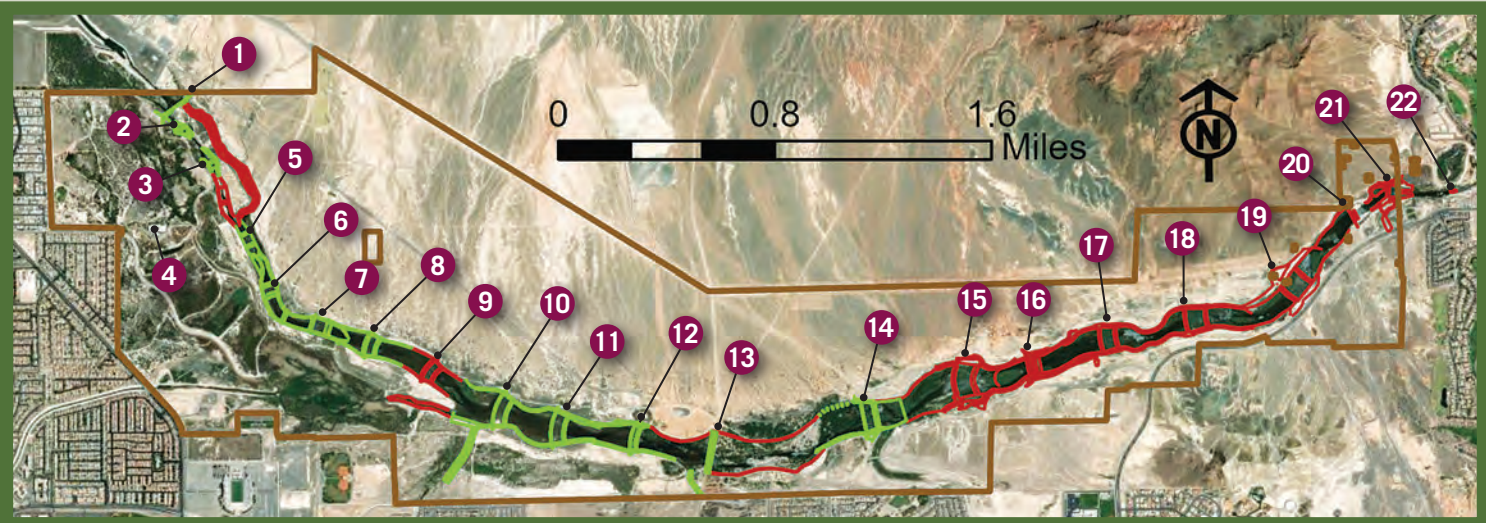
As the valley's population grew in the 20th century, the Wash's flows increased significantly, eroding the channel's bed and banks, which threatened wildlife habitats, water quality and utility infrastructure.

The Las Vegas Wash Coordination Committee (LVWCC) first gathered in 1998 to address management and protection of the channel and its resources, and developed the Las Vegas

Wash Comprehensive Adaptive Management Plan (CAMP) to guide on-the-ground activities. The Las Vegas Wash Project Coordination Team (Wash Team) implemented the CAMP and associated Las Vegas Wash Capital Improvements Plan, which directed installation of stabilization facilities.

In 2022, with the CAMP fully executed and capital construction complete, the Wash Team shifted to maintaining assets and programs under the Las Vegas Wash Long-Term Operating Plan (LTOP) as approved and funded by the Las Vegas Valley Watershed Advisory Committee (LVVWAC).

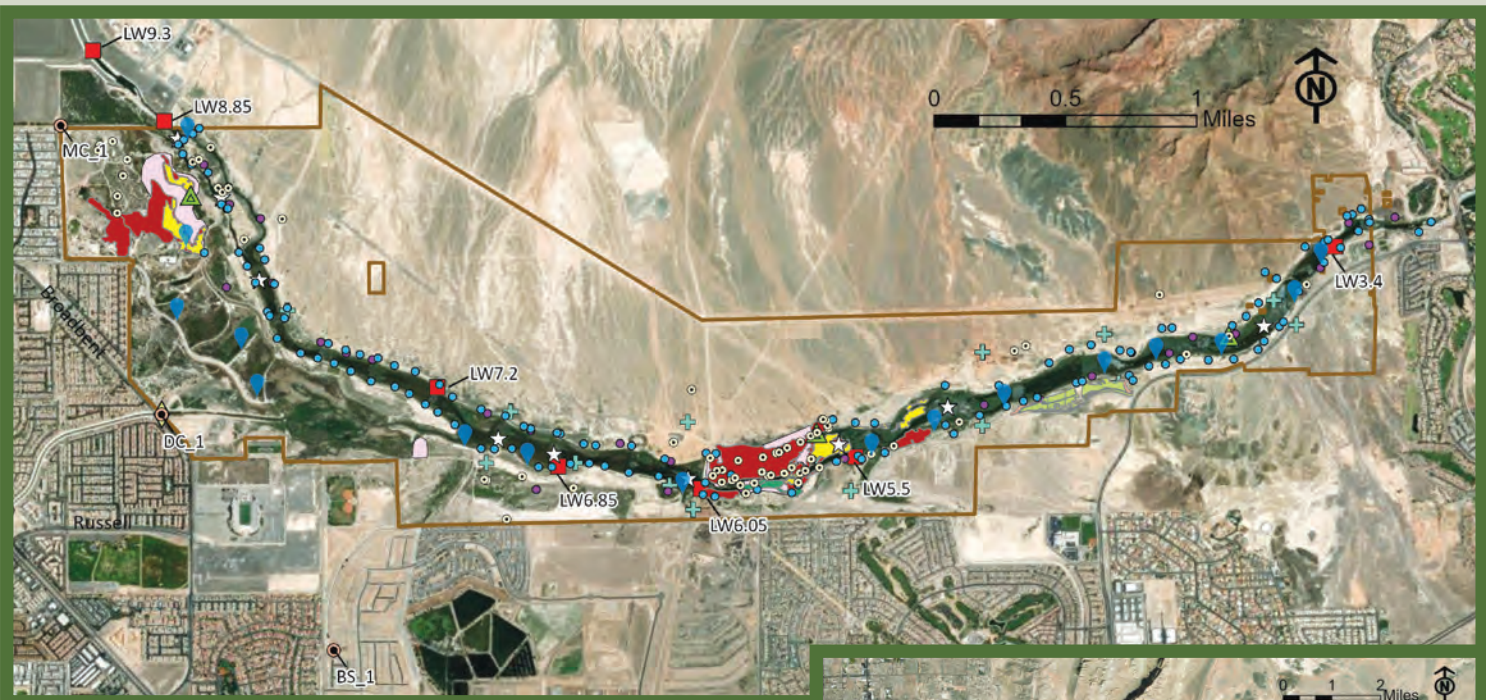
This biennial report begins with maps of locations and activities, a summary of CAMP progress and a list of LTOP actions. It then provides descriptions of accomplishments over more than 25 years, highlights from 2024–2025 and objectives for 2026–2027 for major programs.



LOCATIONS and STABILIZATION MAP

- | | | |
|--|--------------------------------|--|
| 1. Upper Diversion Weir, Bridge and Bypass Channel | 8. Silver Bowl Weir | 16. Calico Ridge Weir |
| 2. Monson Weir | 9. Archery Weir | 17. Lower Narrows Weir |
| 3. Visitor Center Weir | 10. Duck Creek Confluence Weir | 18. Homestead Weir |
| 4. Nature Center | 11. Upper Narrows Weir | 19. Three Kids Weir |
| 5. Tropicana Weir | 12. Sunrise Mountain Weir | 20. Rainbow Gardens Weir |
| 6. DU Wetlands No. 2 Weir | 13. Pabco Weir | 21. Powerline Crossing Weir and Bridge |
| 7. DU Wetlands No. 1 Weir | 14. Historic Lateral Weir | 22. Fire Station Weir |
| | 15. Bostick Weir | |

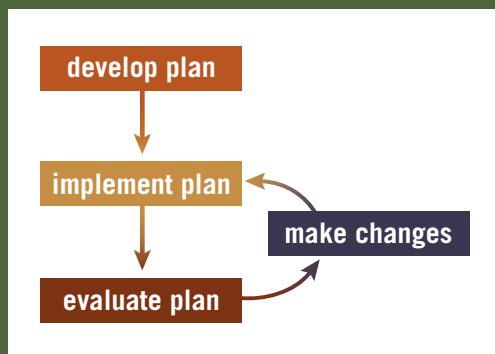
- Clark County Wetlands Park
- Weirs
- Contractor Work



ACTIVITY MAPS

- | | |
|---|--|
| Mainstream and Total Suspended Solids/Perchlorate Monitoring | Marsh Bird Monitoring |
| Macroinvertebrate Sampling | Tributary Sampling |
| Large Mammal Survey | Avian Point Count |
| Selenium Sampling and Stream Gaging | Bat Acoustic Monitoring |
| Real-time Water Quality Monitoring | Green-Up |
| Shallow Groundwater Monitoring | Bat Mist Netting |
| Photo Comparative Analysis | Howard Hughes Planting |
| Southwestern Willow Flycatcher Habitat | Bureau of Reclamation Grant Project |
| Yellow-billed Cuckoo Habitat | |





summary of progress on CAMP action items

The LVWCC uses an adaptive process to meet its mission and presents in this section a summary of progress on the 28 CAMP action items for which it, the study teams and LVVWAC are responsible. Sixteen of the 44 total action items are addressed by others.

Jurisdictional & Regulatory, administered by the LVVWAC and LVWCC

- **Further investigate and define structure for local oversight of the CAMP:** Established by cooperative agreement, creating the LVVWAC. Southern Nevada Water Authority appointed lead agency.
- **Ensure interagency coordination:** Meetings convened at least semi-annually.

Funding, administered by the Administrative Study Team

- **Further investigate potential funding sources identified by the team:** Funding sources include local, state, federal and private contributions.
- **Anticipate future funding needs:** Operating budget prepared annually.
- **Work with the Wash management entity to review funding options:** Budgets reviewed and approved by the LVVWAC annually. Operating expenditures not reimbursed by state, federal or private grants are paid for by the member agencies.
- **Develop method to identify specific projects for grant funding:** Vetted by the study teams and Wash Team.
- **Utilize existing resources and staff whenever possible:** Regular coordination helps prevent duplication.

Erosion & Stormwater, administered by the Operations Study Team

- **Install erosion control structures:** All 21 planned weirs in place.
- **Obtain topography and geophysical data:** Collected as needed.
- **Conduct sediment transport modeling:** Models developed and runs conducted as needed.
- **Establish off-stream wetlands with alternate discharge considerations:** Feasibility study concluded wetlands primarily should be established within active floodplain.
- **Evaluate stormwater detention/retention basins:** Addressed by Clark County Regional Flood Control District master plan.

Shallow Groundwater, administered by the Research and Environmental Monitoring (REM) Study Team

- **Develop a central database:** Done.
- **Locate and inventory existing shallow monitoring wells:** Done.
- **Identify issues of concern:** Addressed through ongoing monitoring programs and stakeholder data-sharing forums.
- **Develop a long-term monitoring plan:** Finalized and implemented.
- **Develop a method to identify the potential for future contaminant discovery:** Data assessed regularly.
- **Develop and implement a notification plan:** Managed by outside agencies.
- **Promote interagency coordination:** Meetings convened at least semi-annually.
- **Develop a bibliography:** Done.

Environmental Resources, administered by the REM Study Team

- **Develop long-term management and monitoring plans:** Done.
- **Conduct additional research:** Various studies ongoing.
- **Preserve and address cultural resource issues:** Compliance addressed project by project.
- **Identify funding needs:** Vetted by the study teams and Wash Team.
- **Facilitate interagency coordination to ensure projects are implemented:** Meetings convened at least semi-annually.

Public Outreach, administered by the Administrative Study Team

- **Establish a method to continue implementation of the public outreach program:** Implementation funded annually and directed by the 2013 update of the outreach plan.
- **Continue implementation of feedback mechanisms and measurements of progress and results:** Feedback obtained at events and on lvwash.org. Progress measurements (e.g., numbers of website visitors, event attendees, etc.) recorded and reported to stakeholders.
- **Provide updates to elected officials:** Member agencies use the Wash e-newsletter and LVWCC reports to keep elected officials informed.

Addressed by Others

- **Alternate Discharge:** Deemed unnecessary for the foreseeable future, five action items.
- **Land Use:** Administered by individual member agencies, five action items.
- **Wetlands Park:** Administered by Clark County, six action items.



Great blue heron



Osprey on a willow snag

LTOP actions

The LTOP includes 36 actions to preserve the ecosystem, involve the public and maintain the capital assets the LVWCC has developed. The Wash Team leads implementation. All actions are meant to be ongoing; any exception is noted.

Jurisdictional & Regulatory

- Host at least two LVVWAC meetings annually
- Host at least two LVWCC meetings and a Wash tour annually
- Host at least two meetings of each study team annually
- Host at least two Cultural Resources Coordinating Committee (CRCC) meetings annually*
- Meet with LVVWAC senior managers annually
- Maintain the Wash members' website

*CRCC dissolved. Action no longer applicable.

Funding

- Seek partnerships to help offset LTOP costs
- Seek and manage grant funding to offset LTOP costs

Erosion & Stormwater

- Administer the operations and maintenance (O&M) plan
- Conduct facility inspections
- Identify and prioritize maintenance needs
- Secure maintenance services
- Oversee maintenance activities
- Comply with regulatory and permit conditions
- Coordinate payments and funding processing
- Conduct O&M agency coordination

Shallow Groundwater

- Monitor shallow groundwater and field parameters
- Collect water level and water quality data from 16 wells quarterly
- Coordinate with agencies on Wash water quality issues and regulatory compliance

Environmental Resources

- Collect quarterly Wash water quality samples and report data annually
- Maintain real-time water quality stations weekly or biweekly
- Collect quarterly dry weather data on tributaries
- Measure water flow at four sites in the Wash
- Upload water quality data to the Lower Colorado River Water Quality Database
- Analyze water quality data for contaminants of potential concern
- Track regulations, rules and legislation relevant to the Wash

- Implement activities related to the weed management plan, revegetation plan and the species and habitat components of the wildlife management plan
- Track the status and trends of cultural sites
- Conduct research about Wash cultural resources

Public Outreach

- Participate in at least four local outreach events annually
- Conduct at least three Mabel Hoggard events annually
- Conduct two volunteer events at the Wash annually
- Conduct at least four tours or field trips of the Wash annually
- Provide information to the public by maintaining the lvwash.org website
- Prepare biennial report of activities
- Implement increasing awareness component of the wildlife management plan



Rainbow Gardens area along the Wash



The sun sets behind Sunrise Mountain Weir





stakeholder process

2024–2025 AT A GLANCE

- Held 21 stakeholder meetings
- Executed a five-year interlocal agreement for Wash funding
- Approved budgets for \$2.77 million and \$2.84 million
- Agreed upon one year of operating expenses as a reserve fund target
- Awarded grants totaling \$750,000 from Bureau of Reclamation and \$62,750 from Nevada Division of Environmental Protection
- Initiated on-the-ground activities for a \$900,500 grant project downstream of Pabco Weir



Wash tour participants pose with the 25-year anniversary bench

PROJECT SUMMARY

The LWWCC stakeholder process is vital to the success of the Wash program. The group first met in 1998 and organized nine study teams to develop the CAMP. The Management Advisory Committee (MAC) provided local oversight and funding. Over time, the nine study teams were reduced to three—Operations to address stabilization, REM to oversee environmental monitoring and Administrative to guide outreach and funding—and the MAC became the LVVWAC. Today, the groups meet at least semi-annually. At meetings, members hear updates on projects, receive presentations on related topics and coordinate on issues.

2024–2025 IN REVIEW

The LVVWCC, LVVWAC and Administrative REM and Operations study teams met each April and October, with the LWWCC's April meetings including a Wash tour. The 2024 tour made a special stop at the concrete bench installed next to Powerline Crossing Weir to commemorate the LWWCC's 25th anniversary.

The LVVWAC held a special meeting in May 2024 where the group approved a five-year interlocal agreement for the Wash budget to implement LTOP actions,

covering fiscal year (FY; July–June) 2024–2025 through FY 2028–2029, but the committee continues to review and approve the budget annually. The group approved a \$2.77 million budget for FY 2025–2026 and a \$2.84 million budget for FY 2026–2027. Operating expenditures are paid for by the City of Henderson, City of Las Vegas, City of North Las Vegas, Clark County, Clark County Regional Flood Control District, Clark County Water Reclamation District (CCWRD) and Southern Nevada Water Authority (SNWA).

The LVVWAC also approved a draft LTOP reserve fund policy, setting a target amount of one year of operating expenses. The reserve is currently \$730,938. The new reserve target will be reached slowly, by adding any unused operating funds at the end of each FY.

In addition, the Bureau of Reclamation (BOR) awarded grant funding of \$350,000 for FY 2024–2025 and \$400,000 for FY 2025–2026 through a five-year agreement covering water quality monitoring, revegetation management, Las Vegas Wash Wildlife Management Plan (WMP) implementation and LWWCC program management. Nevada Division of Environmental Protection (NDEP) partially

funded Mabel Hoggard fifth-grade field trips and the Wash Green-Up in 2024 and the Green-Up in 2025, with grants of \$34,750 and \$28,000, respectively. Funds for regular programs reduced LVVWAC member contributions. Excess funds supported special projects, like cleaning up old irrigation equipment from sites.

Finally, crews initiated on-the-ground activities for a \$900,500 BOR WaterSMART grant project downstream of Pabco Weir in October 2025 (see Environmental Resources).

2026–2027 OBJECTIVES

The Wash Team will continue to host semi-annual stakeholder meetings and the annual Wash tour, and the LVVWAC will revise its bylaws to include the reserve fund policy. Staff will also continue to apply for grant funds, implement grant-funded special projects and comply with funding requirements. As part of this work, the Wash Team will complete the grant project near Pabco Weir and begin two others: (1) a \$663,875 WaterSMART wildlife habitat enhancement project, and (2) a \$1,048,553 Southern Nevada Public Land Management Act (SNPLMA) riparian and wetland restoration project.



erosion & stormwater

2024–2025 AT A GLANCE

- Maintained and repaired stormwater containment features at stockpile sites
- Designed two weir-maintenance projects
- Rebuilt bank protection between Monson and Visitor Center weirs
- Re-established lines and constructed positions of seven weirs
- Cleared vegetation and debris from backwaters of Upper Diversion and Pabco weirs
- Removed 2,166 truckloads of clean spoils and vegetation



Crew conducts maintenance clearing in the impoundment of Upper Diversion Weir

PROJECT SUMMARY

The Wash drains urban and storm flows from the 1,600-square-mile Las Vegas Valley watershed. In the past, these flows tore at the bed and banks of the channel, increasing total suspended solids (TSS) and degrading water quality, but installation of weirs and bank protection have reduced erosion and sediment transport. The LVWCC has completed all 21 planned weirs and installed more than 13 miles of bank protection between the CCWRD outfall and Lake Las Vegas. The Federal Highway Administration constructed four weirs on the channel on National Park Service (NPS) land between Lake Las Vegas and Las Vegas Bay at Lake Mead. SNWA evaluated constructing more weirs in partnership with NPS but decided not to move forward in 2025 due to significantly increased costs.

Sustainable floodplain management requires maintaining the investment in facilities. To that end, project managers worked with a consultant to develop a stabilization facilities assessment report, a five-year work plan and an O&M plan. Using information from these documents, Wash Team staff prepared the LTOP to guide management of program assets.

2024–2025 IN REVIEW

In 2024, crews maintained and repaired stormwater containment features (i.e., best management practices) at the soil stockpile site, stockpile 8 and stockpile 15 to bring them into compliance with the Stormwater Pollution Prevention Plan. Additionally, engineers designed weir-maintenance projects for the following year.

In 2025, a contractor conducted maintenance of stabilization facilities in two cycles. In January–March, crews worked on five weirs: Monson, Visitor Center, Historic Lateral, DU Wetlands No. 1 and Upper Narrows. The contractor diverted the main stem of the Wash through a diversion channel and rebuilt the bank protection between Monson and Visitor Center weirs. Crews removed clean spoils and vegetation from the remaining weirs and hauled them to the permitted North Stockpile. However, the contractor was unable to re-establish the lines and grades of the weirs to their original designed and constructed positions due to limitations imposed by the temporary Working in Waterways permit related to total dissolved solids (TDS) downstream of the construction areas. NDEP reissued the permit for work completed in late 2025, allowing

for the placement of riprap as well as vegetation removal.

In November, the contractor began a vegetation-removal and weir-restoration project at 10 weirs, completing work at seven by year's end: Upper Diversion, Tropicana, DU Wetlands No. 2, Silver Bowl, Duck Creek Confluence, Sunrise Mountain and Pabco. Activities included clearing vegetation and debris from the backwaters of the Upper Diversion and Pabco weirs.

In total, crews removed 2,166 truckloads of clean spoils and vegetation during maintenance activities.

2026–2027 OBJECTIVES

Maintenance of the three remaining weirs—Bostick, Three Kids and Powerline—should be completed in early 2026. Staff will conduct annual weir inspections to determine priorities for annual maintenance. Contractor crews will regularly maintain the stabilization facilities following the five-year work plan and O&M plan.

Staff have also been tasked with developing a plan to assess the remaining life cycle of existing grade control structures and estimate replacement costs if needed.



water quality

2024–2025 AT A GLANCE

- Conducted surface water quality monitoring programs in the Wash and tributaries; results were normal with no major concerns
- Maintained and collected water quality data from three real-time monitoring stations
- Monitored and sampled shallow groundwater wells along the Wash
- Added nearly 110,000 lines of data and initiated water quality database improvements



Wetlands along the Wash help filter its flows

PROJECT SUMMARY

Hydrologists have monitored water quality in the Wash and its tributaries regularly since 2000. The weirs and wetlands along the Wash have played an important role in reducing concentrations of many constituents, including TSS, nutrients, several trace metals and some organic contaminants. The decline in TSS resulted in the removal of the Wash from the 303(d) list of impaired waters.

In addition to the regular quarterly sampling, hydrologists collect selenium, TDS and flow data from 12 sites along eight tributaries and TSS and perchlorate samples along the Wash monthly. Field staff also monitor 16

shallow groundwater wells along the Wash quarterly, and three permanent monitoring stations provide real-time water quality data from the Wash and its tributaries every 15 minutes.

The Wash Team developed the Las Vegas Wash Surface Water Quality Monitoring and Assessment Plan to better coordinate sampling efforts across agencies and update the plan annually. Staff have also developed and implemented a shallow groundwater monitoring plan.

The water quality data collected by the Wash Team and other stakeholders is uploaded, stored and accessed via the password-protected Lower Colorado River

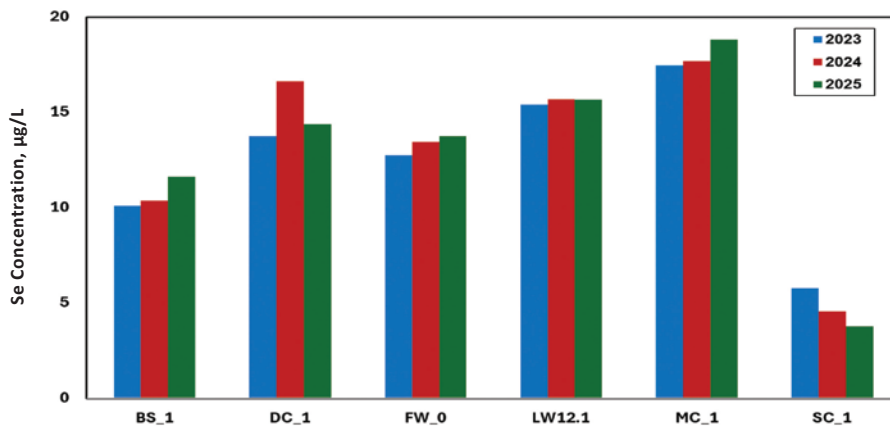
Water Quality Database, which contains millions of lines of data from dozens of projects covering more than 60 years of monitoring in the basin.

2024–2025 IN REVIEW

Hydrologists conducted scheduled water quality sampling, uploaded data into the database, analyzed and displayed data with Power BI, and shared results with internal and external working groups.

Mainstream Monitoring

Average water temperatures (18.3–27.1 °C), pH (7.4–8.5) and dissolved oxygen (DO; 6.9–14.5 mg/L) were generally consistent with 2023. Ammonia concentrations were higher (0.34–0.67 mg/L as N) in 2024 but lower (0.10–0.30 mg/L as N) in 2025. Nitrate plus nitrite concentrations were 3.45–4.20 mg/L as N for the two most upstream sites, which are dominated by urban runoff, and 7.81–13.56 mg/L as N for other mainstream sites. Orthophosphate (OP) concentrations were 0.039–0.062 mg/L as P in 2024 and 0.024–0.073 mg/L as P in 2025 at sites downstream of LW9.3, with the highest OP concentrations at LW6.05. Total phosphorus (TP) concentrations decreased dramatically at the two most upstream sites but just slightly at other mainstream sites.



Annual average selenium (Se) concentrations in six tributaries between 2023 and 2025



Clouds reflecting from the Wash

Selenium stayed low, ranging from 1.90 to 4.05 µg/L during 2024–2025 for all sites, below the site-specific standard of 6.0 µg/L approved by the U.S. Environmental Protection Agency. Perchlorate concentrations spiked at LW6.85 in 2024 (~320 µg/L) due to loading from the re-routed Burns Street (BS) Channel, then decreased to ~100 µg/L in 2025, but were consistent with 2023 values at other sites. TSS concentrations continued to be low (<10.5 mg/L in 2024 and <13.2 mg/L in 2025) between LW6.05 and LW0.9, with a spike (~80 mg/L) at LW6.85 in 2025 possibly due to fires and construction in the area. Arsenic was higher (~20 µg/L) at LW6.85 and copper was higher (~60 µg/L) at LW7.2 in 2024. However, most trace metals were under detection limits.

Tributary Sampling & Flow Measurements

Tributary sites had higher conductance and TDS than mainstream sites. The dominant cations were calcium, magnesium and sodium, and the dominant anions were sulfate, chloride and bicarbonate. Nutrients (N and P) were much lower than at mainstream sites. Iron and aluminum were the most dominant metals, followed by barium, manganese, molybdenum and zinc. Arsenic was high (35–50 µg/L) in Duck Creek (DC) and BS. Selenium Monitoring of water quality continued, documenting low selenium in the Wash to 18.2 µg/L. Most tributaries had low perchlorate concentrations (<17 µg/L) except BS, which averaged between 6,300 and 6,650 µg/L during 2024–2025. Most organic compounds were below the analytical detection limits.

Some elevated metal concentrations were caused by shallow groundwater,

which generally has higher concentrations of metals like arsenic and selenium due to the local geology. Shallow groundwater enters the tributaries by natural seepage and dewater pumping. Most of the metal concentrations were below the maximum contaminant levels for the primary and secondary standards under the Safe Drinking Water Act and were further diluted by the highly treated wastewater effluent in the Wash before reaching Lake Mead.

Real-time Monitoring

Field staff maintained the three stations in service: DC_1 and LW11.1 on the tributaries and LW0.9 on the Wash. Each station has an Aqua TROLL 600 unit and data logger that records and stores water temperature, pH, electrical conductance and DO every 15 minutes. The LW0.9 station is connected to the Geostationary Operational Environmental Satellites program; it transmits to the database hourly and data can be viewed online, displayed with Power BI.

Shallow Groundwater Monitoring

In 2024–2025, hydrologists monitored 16 shallow groundwater wells along the

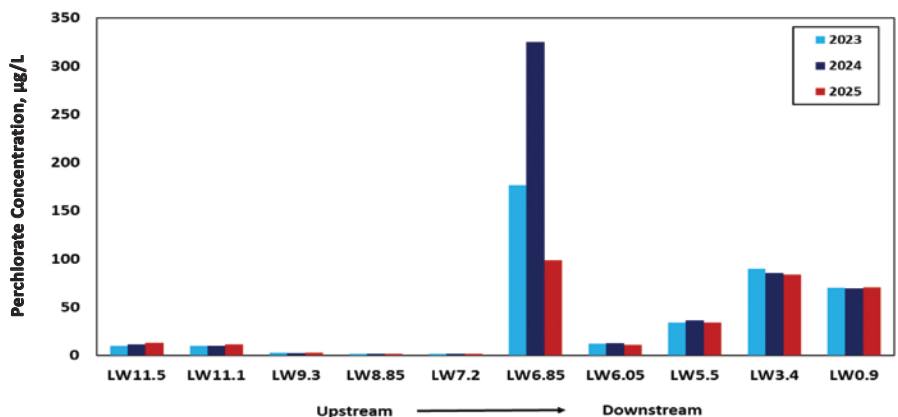
Wash quarterly. The data was consistent with previous years. Water quality in wells located in the floodplain (such as WMW5.7N) was strongly influenced by the Wash. TDS, nutrient and metal concentrations were similar to concentrations in the Wash. However, groundwater from the wells located on the banks of the Wash had higher TDS concentrations, which also increased from upstream to downstream. Perchlorate concentrations from wells located on the south side were much higher than those from wells located on the north side of the Wash. Of 19 metals analyzed, some had low concentrations or were not detected, and others had a broad range of concentrations. Data indicates that a known upgradient groundwater plume had a strong impact on water quality of the wells.

Water Quality Database

Members and staff added nearly 110,000 lines of data over the period. To address limitations in the original database—now at its technological capacity—SNWA began developing two complementary systems. Real-time Wash data is now available through the AQUARIUS WebPortal, while traditional database functions are being migrated to a new platform that streamlines searching, uploading and retrieval, offering particular benefits for new or infrequent users.

2026–2027 OBJECTIVES

All surface and ground water quality monitoring programs in the Wash and its tributaries will continue, with no major changes expected, and the new platform for the Lower Colorado River Water Quality Database should be deployed to the public in early 2026.



Annual average perchlorate concentrations in the Wash between 2023 and 2025



environmental resources

2024–2025 AT A GLANCE

- Planted more than 13 acres, monitored sites and reported data
- Removed 10,000 cubic yards of sediment and gravel from grant project site
- Coordinated weed control and clean-up of old irrigation materials and debris
- Collected panoramic photographs at 147 points
- Detected high threatened and endangered bird activity; re-initiated avian point counts
- Surveyed for bats and large mammals
- Inventoried 27 new invertebrates
- Addressed cultural resources compliance on a project-by-project basis



Yuma Ridgway's rail hiding in cattails

PROJECT SUMMARY

The Wash stabilization and enhancement program has reversed decades of environmental degradation. The LVWCC, its partners and volunteers have replaced invasive tamarisk with a diverse native plant community, revegetating approximately 615 acres. Wash Team staff monitor revegetation sites annually, providing valuable information that has led to improved plant species selection and focused weed removal.

The habitat created by these efforts is home to more than 390 species of vertebrate and nearly 650 species of invertebrate wildlife. The Wash Team

developed the WMP to conserve native species, protect and enhance their habitats, and increase community awareness of these resources. Surveys are conducted in support of the WMP.

In addition to its importance for flora and fauna, the Wash has been significant for humankind for thousands of years. Cultural resource experts have identified more than 30 sites in the Las Vegas Wash Archaeological District, from a site with a 10,000-year-old projectile point (the earliest evidence for Paleoindian activity in the valley), to indigenous habitations, to an early homesteader's ranch.

2024–2025 IN REVIEW

Vegetation Enhancement & Management

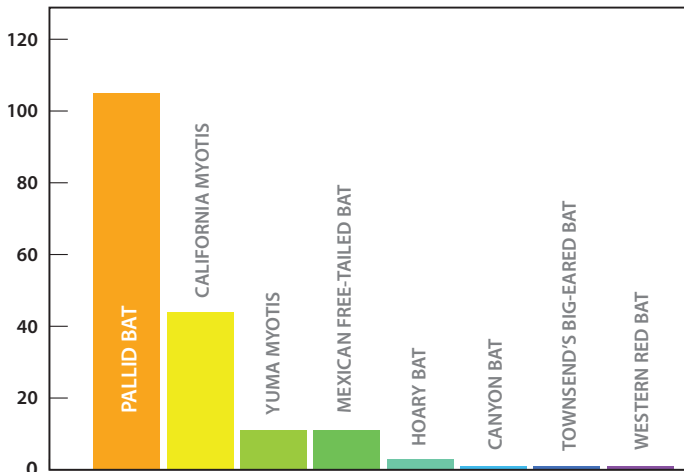
Volunteers enhanced more than 10 acres with native plants near the Lower Narrows and Homestead weirs, revegetating 9.5 acres at two Wash Green-Ups and 0.64 acres at a smaller event.

In October 2025, construction commenced on the WaterSMART riparian restoration grant project, with crews removing 10,000 cubic yards of gravel and sediment downstream of Pabco Weir to bring the ground surface closer to the water table. Revegetation of the site began in December, with a contractor planting over 8,000 riparian and wetland plants (e.g., cottonwoods, willows, milkweed and bulrush) over three acres, including a new backwater.

The Wash Team followed a revised vegetation monitoring protocol in the two-year period that reduced the number of revegetation sites from 158 to 74. Staff monitored 17 sites in the field in 2024 and 20 in 2025. Five sites are good candidates for future enhancement and another site qualified for targeted invasive and other undesirable species removal.



BOR grant project area downstream of Pabco Weir after sediment removal



Bats captured at the Wash in 2024–2025

Project staff directed the revegetation contractor to focus weed control on roughly 24 acres at recently planted sites and to remove old irrigation materials and debris at Sunrise Mountain North and South, Historic Lateral North and South and other areas, totaling more than 27 acres.

Field staff also took panoramic photos at 147 points along the Wash for the annual photo comparative analysis project.

Wildlife

Wash Team biologists conducted annual surveys for three federally threatened and endangered (T&E) bird species. Field crews identified five Yuma Ridgway's rails (endangered) in 2024 and seven in 2025, continuing the high detections documented since 2021, indicating improved habitat. Field personnel also confirmed the second southwestern willow flycatcher (endangered) fledgling in the project area. In 2024, field staff reported one pair with one successful, and one failed, nest attempt. In 2025, the same pair made two nest attempts, both of which failed. Biologists detected one yellow-billed cuckoo (threatened) in



Pallid bat

2024 and a pair on a probable breeding territory in 2025.

BOR received a biological opinion (BO) from U.S. Fish and Wildlife Service (USFWS) authorizing limited incidental take of the three T&E bird species for projects funded by BOR and/or conducted on its land. An active BO for desert tortoise

also remains in effect. Separately, USFWS concluded that activities on Clark County lands as described by project proponents would not result in incidental take of Yuma Ridgway's rail.

In March 2025, Great Basin Bird Observatory re-initiated biweekly avian point counts, which paused in fall 2023. The study has identified more than 250 species and documented statistically significant increases in species richness and abundance since 2005.

From January 2023 through December 2024, the Wash Team surveyed bats acoustically, detecting 14 species and one species group. In addition, field staff completed 24 nights of mist netting in 2024 and five nights in 2025, resulting in the capture of 177 bats representing eight species (see chart). Notably, this included the western red bat, which had been detected acoustically but had never before been captured at the Wash. Staff swabbed 60 of the bats for the presence of the fungus that causes white-nose syndrome, a deadly bat disease. All samples were negative.

Biologists launched a large mammal survey in April 2025, placing trail cameras at predetermined locations once each season. During the fall, the Snapshot USA protocol was followed, and the data was submitted to the program's national database. By the end of 2025, staff had identified all species except kit fox documented by the 2018–2019 survey. Staff also recorded the spotted skunk for the first time since the 2009–2011 survey.

The Wash Team conducted a survey of benthic macroinvertebrates at nine weirs and two backwaters. Samples were

collected in September and December of 2024 and March and June of 2025 and were sent to a lab for analysis. Over 70 different taxa were identified, including the non-native freshwater jellyfish.

A total of 27 new invertebrates were added to the inventory in 2024–2025, and three monarch butterfly observations and one monarch caterpillar observation were reported on iNaturalist in 2025. The monarch is a candidate for listing under the Endangered Species Act.



Queen butterfly on common reed

Cultural Resources

Cultural resources compliance issues continued to be addressed on a project-by-project basis.

2026–2027 OBJECTIVES

The 2026 Wash Green-Up will be at Sunrise Mountain South with volunteers planting approximately 4,500 plants over 9.5 acres.

The Wash Team will plant an additional three acres to complete the grant-funded riparian/wetland restoration project at Pabco and start on two others: (1) the WaterSMART grant to restore approximately 12.5 acres at multiple sites along the Wash and (2) the SNPLMA grant at Historic Lateral North to remove excess gravel and sediment and revegetate six acres.

Field personnel will capture bats to sample for white-nose syndrome, pause avian point counts and conclude the large mammal survey in spring 2026. Biologists will also conduct surveys for T&E birds, fish and chuckwallas, as well as any desert tortoise compliance needed. Finally, staff will support stabilization O&M and coordinate with BOR on cultural resources compliance.



public outreach

2024–2025 AT A GLANCE

- Hosted annual World Wetlands Day science symposiums for 441 students
- Conducted outreach with Mabel Hoggard Elementary School's fifth-grade classes
- Held three planting events, attracting nearly 550 volunteers
- Participated in or hosted 41 events, reaching more than 29,000 people
- Hosted about 8,000 unique visitors annually on lvwash.org
- Increased monthly e-newsletter subscribers by more than 75 percent
- Posted about the Wash on SNWA social media accounts



A Wash Team biologist educates attendees about fish at the Wetlands Park BioBlast

PROJECT SUMMARY

Since 1998, the LVWCC's outreach program has fostered public understanding of the Wash and awareness of its activities along the channel. In 2013, the Wash Team published an outreach plan to further guide program implementation. The plan lays out core messages, strategies and goals, and emphasizes the importance of effectiveness monitoring. To date, the Wash Team has participated in nearly 900 events, reaching more than 360,000 people.

The LVWCC uses a variety of web-based resources to interact with the public. The lvwash.org website provides in-depth project information and houses a library of research reports and other documents. The site has a strong visual presentation, showcasing photographs and videos, and the ability to organize information into scrollable slides and accordion sections that can be expanded and collapsed. Project staff also develop and deliver an e-newsletter monthly and create social media posts to engage with the public.

2024–2025 IN REVIEW

Since 2015, the LVWCC has celebrated World Wetlands Day by hosting a science

symposium for high school students at the Clark County Wetlands Park (Wetlands Park). In 2024, the two-day event with the theme "Wetlands and Human Wellbeing" attracted 199 students from six local schools. The 2025 theme was "Protecting Wetlands for Our Common Future," and 242 students from six schools participated. The symposium gives students an overview of the Wash project and other wetlands research and promotes interest in environmental fields. The students experience the Wash firsthand on a

short walk after the science talks. The LVWCC also offers wetlands-related photo and essay contests to encourage further engagement; the winner of each is awarded an iPad.

The Wash Team continued its long-standing relationship with Mabel Hoggard Math and Science Magnet Elementary School, leading field trips for fifth-grade students from three school years. Before field-trip day, students received an in-class introduction to the Wash. On field-trip day, students



A class poses at Upper Diversion bridge during their World Wetlands Day tour

toured the City of Henderson's Kurt R. Segler Water Reclamation Facility in the morning and then visited the Wetlands Park, where they learned to identify and document plants and animals using the Seek and iNaturalist apps. In a follow-up classroom visit, students participated in a water quality activity, analyzed the data they collected during the field trip, created graphs of their results and presented their findings to one another, helping them understand what it is like to be scientists.

The LVWCC hosted two Wash Green-Ups, one in April 2024 and the other in March 2025, at sites near the Lower Narrows and Homestead weirs. At the 2024 event, more than 230 volunteers helped plant about 3,500 native trees and shrubs on 4.1 acres. The 2025 event attracted 295 volunteers, who helped plant about 4,000 native trees and shrubs on 5.4 acres. Both Wash Green-Ups enhanced previously planted sites, improving aesthetics and increasing wildlife habitat.

Also in 2024, 20 staff from the Howard Hughes Corporation planted 290 native trees and shrubs in the same area, on a site that was dominated by creosote bush and had a total cover of less than 50 percent. The planting event augmented the area with additional native species, increasing overall diversity.

By the end of the two-year period, the Wash Team had participated in or hosted 41 events that attracted more than 29,000 people. The two largest events by participant numbers were the Las



Volunteers at the 2024 Wash Green-Up

Vegas Science and Technology Festival and Nevada Day at the Nevada State Museum. Staff wrote annual outreach reports summarizing all activities for 2024 and 2025.

For the web-based side of public outreach, lwwash.org hosted 7,987 unique visitors in 2024 and 8,363 in 2025. Data managers uploaded 23 project reports to the site's document library. The monthly e-newsletter was delivered to 482 subscribers, a 76 percent increase over the previous two-year reporting cycle; staff offered a special giveaway item to individuals who signed up for the newsletter during events as an incentive. Examples of e-newsletter article topics include new grant agreements, outreach events and Wash wildlife.

On the social media front, the Wash's Facebook page was retired. Staff now post about the Wash through SNWA's social media accounts, significantly increasing the reach of project information. Posts seek to actively engage the public with eye-catching photos and fun facts. They also provide important updates and help recruit Wash Green-Up volunteers. Due to recent industry-wide algorithm changes on social media platforms, SNWA's outreach approach there shifted in 2025, putting a larger focus on content quality and increasing follower engagement. Over the past year, posts related to the Wash generated 13,940 impressions, 871 engagements, 156 post link clicks and 31,988 video views. While some numbers decreased significantly from the previous year, two key metrics of SNWA's new approach increased—video views by 8 percent and the engagement rate by 567 percent—reflecting the value of the change in direction.

2026–2027 OBJECTIVES

The Wash Team will host World Wetlands Day science symposiums and Wash Green-Ups. Mabel Hoggard field trips will continue, and the team will participate in other events in continued support of the outreach plan.

The Wash Team will also continue to utilize data resources, including lwwash.org and social media, to increase awareness of the LVWCC and Wash project.



Aboard the Desert Princess for a special field trip



mission
working to stabilize and enhance
the valuable environmental resources
of the Las Vegas Wash



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