

NOTICE AND CALL OF MEETING

LAS VEGAS VALLEY WATERSHED ADVISORY COMMITTEE

Tuesday, October 17, 2023 2:00 p.m.
MEETING TO BE HELD VIRTUALLY

Join Microsoft Teams Meeting: **1-323-776-6758** / Conference ID: **230 901 930 505**

The Las Vegas Valley Watershed Advisory Committee makes reasonable efforts to assist and accommodate persons with physical disabilities who desire to attend the meeting. For assistance, please contact Keiba Crear at (702) 822-3388 at least 48 hours in advance of the meeting.

Visit our website at www.snwa.com for Las Vegas Valley Watershed Advisory Committee agenda postings, copies of supporting material and approved minutes. To receive meeting information, including supporting material, contact the Agenda Coordinator at (702) 258-3277 or agendas@snwa.com.

This meeting will be held via remote technology only pursuant to NRS 241.023, as amended by assembly bill 253 of the 81st legislative session, effective May 31, 2021. There will be no physical location for the meeting. Members of the public may hear, observe and participate in the meeting via the meeting link or telephone number identified above. If a member of the public is interested in viewing this meeting online or providing public comment, please e-mail jason.bailey@lvvwd.com no later than noon on October 17, 2023, to receive remote access.

Any Committee member may combine two or more agenda items for consideration, consider an item out of order, remove an item from the agenda or delay discussions relating to an item on the agenda at any time.

COMMENTS BY THE GENERAL PUBLIC

NO ACTION MAY BE TAKEN: This is a period devoted to comments by the general public pertaining to items on this agenda. If you wish to speak to the Committee about items within its jurisdiction, but not appearing on this agenda, you must wait until the "Comments by the General Public" period listed at the end of this agenda. Please limit your comments to three minutes or less. No action may be taken upon a matter not listed on the posted agenda.

ITEM NO.

1. *For Information Only:* Introductions
2. *For Possible Action:* Approve March 8, 2023 Meeting Minutes
3. *For Information Only:* Receive an Informational Update on Items Related to the Las Vegas Valley Watershed Advisory Committee (LVVWAC) that may appear on Future Regular Board Meetings of LVVWAC Members' Appointing Agencies
4. *For Possible Action:* Approve the Las Vegas Wash Long-Term Operating Plan 2024/2025 Budget
5. *For Information Only:* Receive an Update on the Las Vegas Wash Coordination Committee
6. *For Information Only:* Receive an Update on the Clark County Wetlands Park
7. *For Information Only:* Receive an Update on Regional Water Quality
8. *For Information Only:* Receive an Update from Members and Staff Regarding Water Resources, Stormwater, Wastewater and Water Quality, Including but Not Limited to Regulations, Permitting and Status of the Lower Las Vegas Wash
9. *For Possible Action:* Set Next Meeting Date and Propose Items for the Next Meeting's Agenda

COMMENTS BY THE GENERAL PUBLIC

NO ACTION MAY BE TAKEN: At this time, the Committee will hear general comments from the public on matters under the jurisdiction of the LVVWAC. Please limit your comments to three minutes or less.

Approved:

Charles Trushel

Charles Trushel, Chair
Las Vegas Valley Watershed Advisory Committee

THIS MEETING HAS BEEN PROPERLY NOTICED AND POSTED IN THE FOLLOWING LOCATIONS:

City of Boulder City, City Hall
401 California Avenue
Boulder City, NV 89005

City of Henderson, City Hall
240 Water Street
Henderson, NV 89015

Las Vegas Valley Water District
1001 S. Valley View Boulevard
Las Vegas, NV 89153

Clark County Water Reclamation District
5857 E. Flamingo Road
Las Vegas, NV 89122

City of North Las Vegas, City Hall
2250 Las Vegas Boulevard North
North Las Vegas, NV 89030

Clark County Government Center
500 S. Grand Central Parkway
Las Vegas, NV 89155

Southern Nevada Water Authority
100 City Parkway, Ste. 700
Las Vegas, NV 89106

City of Las Vegas, City Hall
495 S. Main Street
Las Vegas, NV 89101

The background features abstract, overlapping green geometric shapes, primarily triangles and polygons, in various shades of green, creating a modern and dynamic visual effect.

FY2024/25 Wash LTOP Budget

Of Note

- ▶ Budget tracked monthly by category
- ▶ Stabilization O&M deferred for two years while incidental take coverage is sought for federally listed bird species
 - ▶ >\$2M carried over
- ▶ \$300k reserve amount in the LTOP has been funded by unused dollars from FY2022/23 from non-stabilization programs
 - ▶ Escalated by 2.5%/year, to \$339k for FY2024/25

**PROPOSED FY24/25
LAS VEGAS WASH
LONG-TERM OPERATING PLAN BUDGET**

Category	Cost
Erosion & Stormwater (E&S)	\$1,357,281
Jurisdictional & Regulatory (i.e., Stakeholder Process)	\$92,056
Public Outreach	\$385,930
Funding	\$82,343
Shallow Groundwater (i.e., Water Quality)	\$70,728
Environmental Resources	\$718,204
TOTAL OPERATING BUDGET	\$2,706,542
 BUREAU OF RECLAMATION CONTRIBUTION*	 \$255,000
NV DIV. OF ENVIRONMENTAL PROTECTION*	\$34,750
 LOCAL CONTRIBUTION	 \$2,416,792
 Unused FY22/23, FY23/24 E&S funds for delayed O&M in FY24/25	 \$2,144,422
 RESERVE (\$300k escalated to 2024 dollars)	 \$339,422

* Grant amounts are best estimates as of October 3, 2023.

**PROPOSED FY24/25
LOCAL CONTRIBUTION CALCULATIONS**

Total Contribution	\$2,706,542
Total Local (-grants)	\$2,416,792

	50% of Erosion & Stormwater	% of Total Contribution
CCRFCD	\$678,641	25.07408%
-grants	\$605,988	

	Remaining	% of Total Contribution
Other Local Share	\$2,027,901	74.92592%
-grants	\$1,810,804	

Grants total \$ 289,750

**PROPOSED FY24/25
LOCAL CONTRIBUTION DISTRIBUTION**

LOCAL CONTRIBUTION	\$2,416,792	
CCRFCD (50% of Erosion & Stormwater minus portion of grants)	\$605,988	
REMAINING LOCAL SHARE	\$1,810,804	
Wholesale Delivery (44%)	\$796,754	
Dischargers* (43%)	\$778,646	
COH	\$100,445	12.9%
CCWRD	\$425,141	54.6%
CLV	\$179,089	23.0%
CNLV	\$73,971	9.5%
Clark County (13%)	\$235,404	

* Discharger contributions are based on the two-year running average flow rates reported by the Sewage and Wastewater Advisory Committee to the state (June 2023).

Las Vegas Wash Coordination Committee: 2022/23 Accomplishments

October 17, 2023



LAS VEGAS WASH
COORDINATION COMMITTEE



Las Vegas Wash Coordination Committee

- Mission: working to stabilize and enhance the valuable environmental resources of the Las Vegas Wash
- Assisted by three study teams: Admin, REM and Ops with LVVWAC oversight



LAS VEGAS WASH
COORDINATION COMMITTEE



CAMP Progress

- All 44 action items implemented:
 - 22 complete or addressed by others
 - 22 ongoing





Erosion & Stormwater

- Completed benchmarking of weirs for transition to LTOP
- Worked on Stormwater BMPs for Soil Stockpile sites
- Consultant gained approval from FEMA for LOMR
- Developing contract for 2024/2025 O&M
 - Deferred while working on updated ESA compliance



Fall Flooding



Monson Weir



Lower Narrows Bank Protection



Looking downstream at Upper Diversion



Historic Lateral Weir

Fall Flooding



Downstream Pabco South



DU Wetlands 1 Bank Protection



Upstream Powerline Crossing Bridge

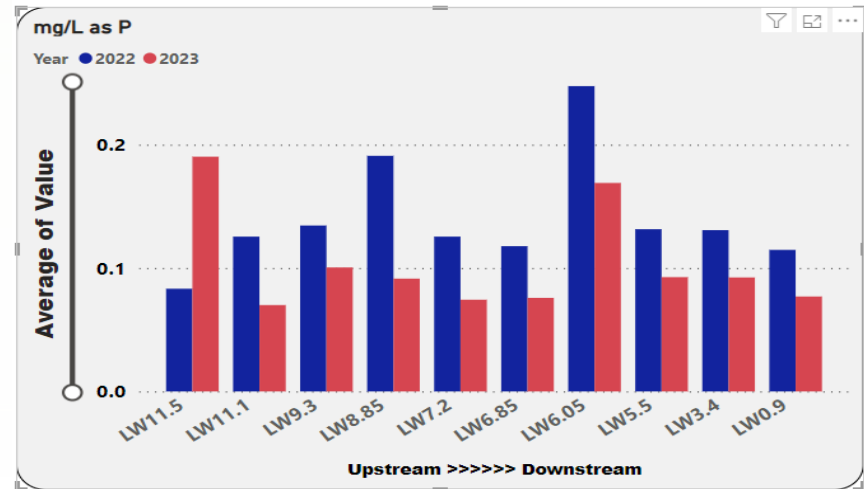


Three Kids Weir

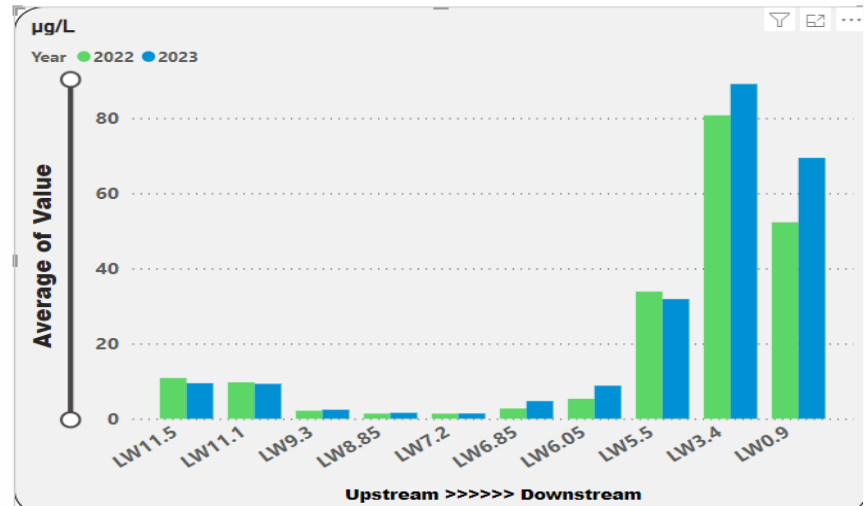
Water Quality

- All sampling/monitoring programs conducted per their regular schedule
- 2023 data versus 2022
 - Se continued to be low (<4.0 µg/L) at most sample sites
 - Perchlorate increased at the 2 downstream sites, but still < 70 µg/L at LW0.9
 - TP decreased at most sites, except for LW11.5 (urban runoff site)
- Data uploaded into database & displayed w/Power BI reports
- Move to Aquarius initiated

Yearly Average TP Concentrations in the Wash (2022 vs. 2023)



Yearly Average Perchlorate Concentrations in the Wash (2022 vs. 2023)



Environmental Resources: Wildlife

- Record T&E bird activity:
 - Yuma Ridgway's rail: 7-2022, 6-2023
 - 1st southwestern willow flycatcher pairs and successful nest
 - Yellow-billed cuckoo: 2-2022, 5-2023
 - BA submitted; County process underway



- Mammal surveys:

- Rodents/shrews
 - 9 species of small mammals; no shrews
- Bats
 - Acoustic monitoring since January 2023
 - Most capture work delayed to 2024, but WNS swabs from spring were negative

Rodent species detected:

- Western harvest mouse
- Cactus mouse
- Brush mouse
- House mouse
- Desert woodrat
- Black rat
- Desert pocket mouse
- Merriam's kangaroo rat
- Round-tailed ground squirrel



Environmental Resources: Vegetation Management

- Revegetated:
 - 9 acres-2022 (last new site)
 - 4.5 acres-2023 (existing site)
 - Total - 615 acres
- Tamarisk down 99%, to ~15 acres
- Contractor has focused weed treatments on newer sites
- 2022 monitoring data: >85% of sites maintained or increased cover



Environmental Resources: Cultural Resources

- The Programmatic Agreement (PA) expired in 2021
- While stakeholders discussed a new PA for O&M on Reclamation lands, they decided to address cultural concerns on a project-by-project basis instead





Public Outreach

- Attendance of ~12,500 at mostly in-person events since 2022
- NDEP grants – Green-Ups, 1/year, >250 vols; Mabel Hoggard, ~100 5th graders/year
- Other examples:
 - WWD - >150 high school students
 - Las Vegas Science Fair 2023 – staff interacted with nearly 1,000 people!
- Hosted ~13.7k unique visitors to lvwash.org
- Reached >1,450 FB followers
- Continued monthly e-newsletter



Upcoming Meetings

- October 24, 2023
 - In-person meeting at Molasky
 - Celebrating 25 years!
 - Update on Hollywood BLVD extension/bridge project, along with standing program updates
- April 23, 2024
 - Annual tour
 - Biennial report distribution



Questions?





LOWER LAS VEGAS WASH

Current Status

(10/17/2023)

Design

- Weir 5 = 100% Design
- Weirs 6-9 = 30% Design

Environmental Compliance

- Categorical Exclusion received from NPS
- Preparing BA and EA for Weirs 6-9

Permitting

- Received 404 Permit from the US Army Corps
- Pending Groundwater Discharge and Working in Waterways from NDEP

Construction

- Las Vegas Paving awarded CMAR
- Anticipate construction of Weir 5 beginning spring 2024



CLARK COUNTY WETLANDS PARK

LVVWAC UPDATE

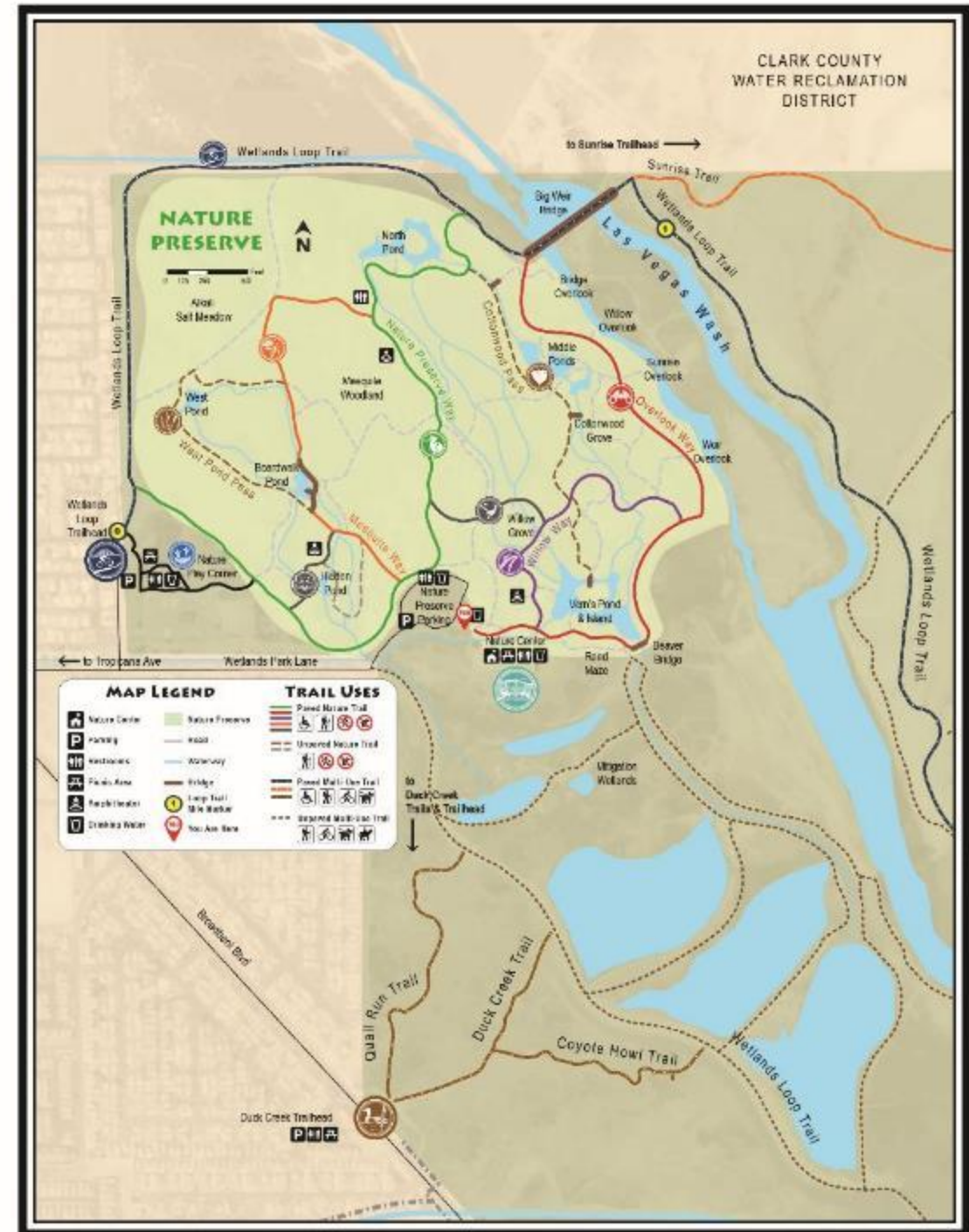
OCTOBER 17, 2023

**Elizabeth Bickmore,
Senior Program Administrator**

WETLANDS PARK MISSION: *Preserving and enhancing natural and cultural resources and providing educational, recreational, and research opportunities for the public.*



- Unnamed Frenchman Wash
- Las Vegas Wash
- Monson Channel
- Tropicana Wash
- Duck Creek Channel





Labor Day Weekend Flood

WETLANDS PARK LANE,
TROPICANA WASH





LABOR DAY WEEKEND FLOOD

OVERLOOK #2,
DOWNSTREAM OF MONSON WEIR,
LAS VEGAS WASH





OVERLOOK #2 & COTTONWOOD GROVE





LABOR DAY WEEKEND FLOOD

MINI GRAND CANYON,
LAS VEGAS WASH





NATURE PRESERVE





OFFICE OF PUBLIC SAFETY: FORMERLY PARK POLICE

- Created in 2022
- Combined “Park Police” functions with Security
 - Police
 - Security Officers
 - Contract Security
 - 100+ County Parks
- Roving Security
 - Lock bathrooms & gates
 - Patrols





WETLANDS LOOP TRAIL SAFETY

Exploring Options

- Ebikes
- Rules and Etiquette
- Speed limits
- Signage

Barriers

- Fencing repairs
- Plan segments





INVASIVE SPECIES REMOVALS

Domestic rabbits – 150+ released

- Animal Control
- Offender identified

Australian red claw crayfish

- NDOW
- Unknown perpetrator & extent of release





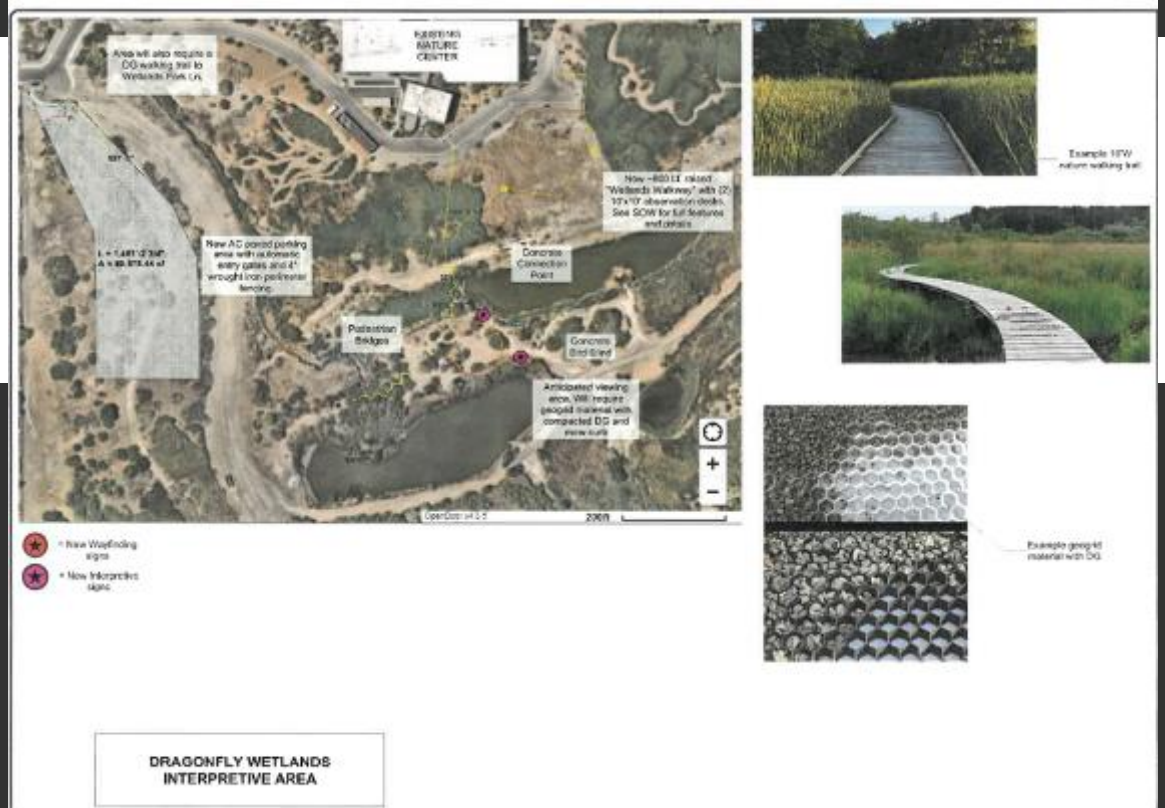
SNPLMA RD 20 PROPOSAL

Dragonfly Wetland Interpretation Area

- Bird Viewing area
- Wetland Walkway
- Expanded parking
- Gate, lights

Duck Creek Event Area

- Event Area
- Nature art trail
- Expanded parking
- Gate, lights



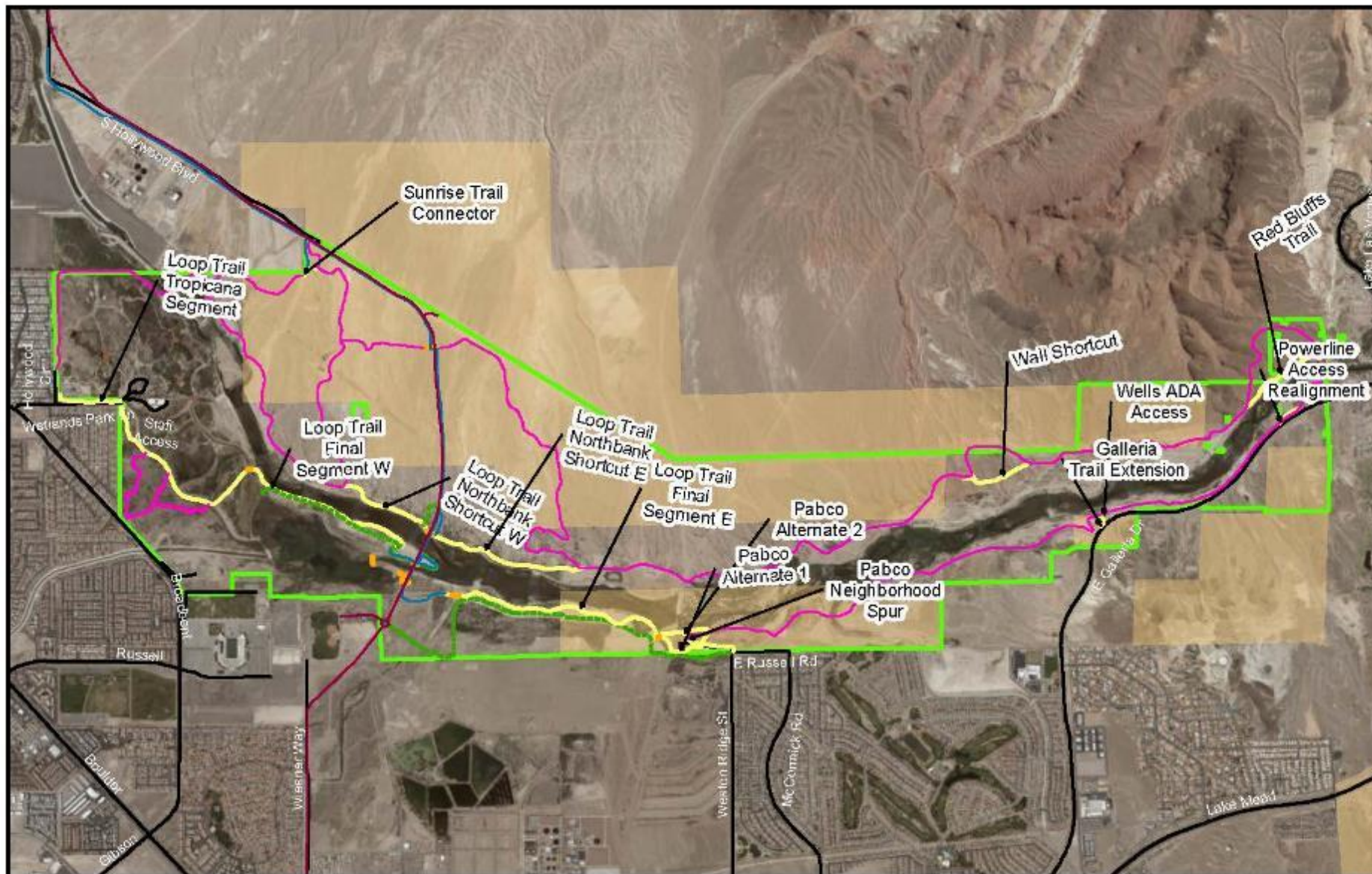


WETLANDS LOOP TRAIL COMPLETION

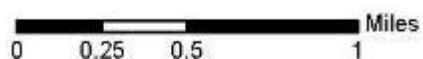
Trail Completion

- Conserve Nevada
 - \$10M allocation, proceeds from bond sales AB 84
- Phase I – December 2024
 - \$2M
 - Design approximately 4.9 miles (paved and service road)
 - Pave initial segment and associated service road
- Future Phases
 - \$6M
 - Pave remaining miles and associated service road





Clark County Wetlands Park
Proposed Paved Multi-Use Trail Improvements
MAP A



DRAFT. Not for distribution. Date: 8/11/2022





HOLLYWOOD EXTENSION: CC PUBLIC WORKS

UPDATE at 10/24/23 LVWCC Meeting

Phase 1

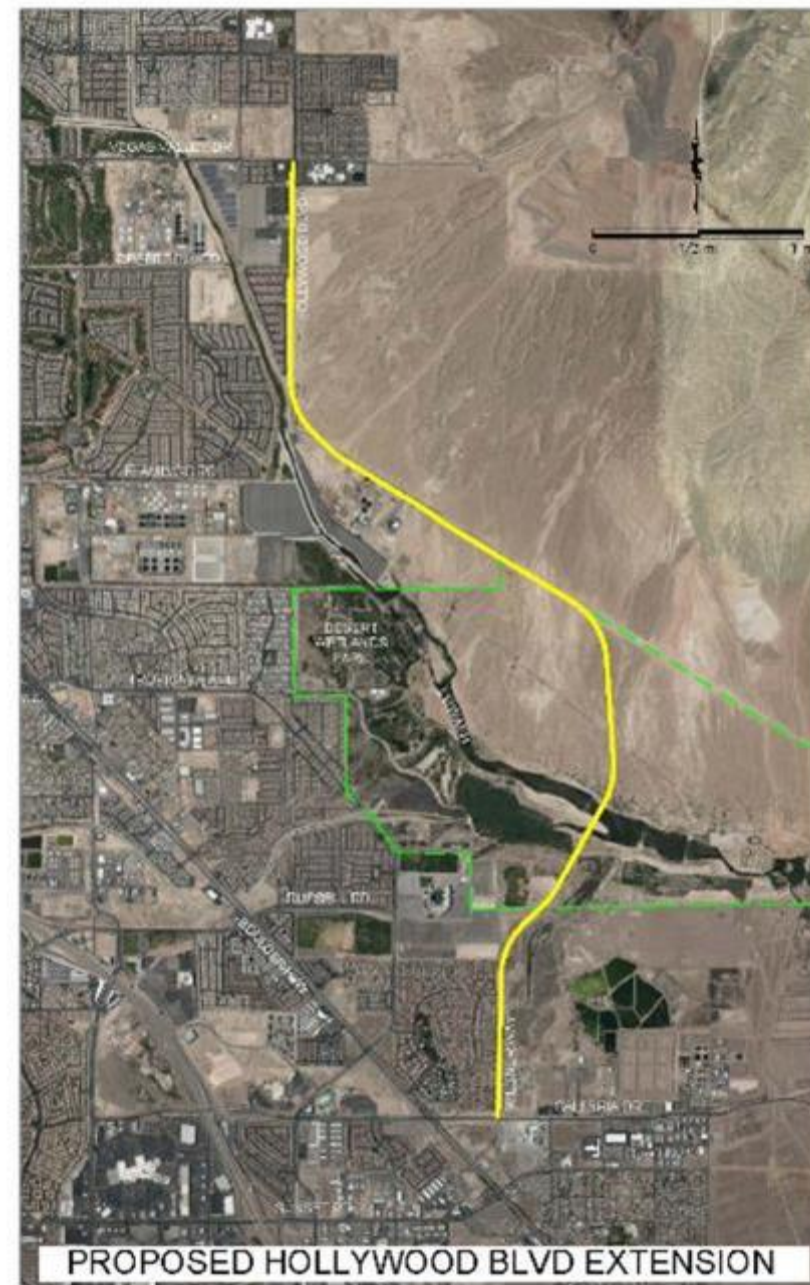
- Galleria to include roundabout
- Completion early 2025

Phase 2

- Wetlands Park to Hollywood, bridge over Wash
- Permitting & Coordination
 - USBOR Lead Agency
 - USACOE, BLM
 - CCWRD

WETLANDS PARK PLANNING

- WP Loop Trail continuity via Wash bridge
- Trailhead west of Pabco Trailhead – event area
- Sunrise Trailhead rehabilitation





COORDINATION: SILVERBOWL - PABCO WEIR



Outfalls existing/proposed



SCREWBEAN MESQUITE DIE-OFF



Screwbean mesquite affected throughout their range

- AZ, UT, NV – including Wetlands Park
- Study Causes - Unknown
 - Insect vector, fungal pathogen, climate change?

Mesquite Common Garden Wetlands Park Proposed

- Trees propagated from various areas in southwest



STEWARDSHIP

- Events
 - Wetlands Hands On & Community (14)
 - 715 public volunteers
 - 1520 total public volunteer hours
 - 589 WP staff and volunteer hours
- Wetlands Watch Volunteer Program
 - 59 volunteers
 - 1,216 reports submitted (Avg 3 per day)
 - 1,867 volunteer hours
 - 27,556 visitors contacted on the trails
- NFL Greening Superbowl
 - Nature Play Corner
 - December 7, 2023
 - Sponsors
 - NFL Green, Verizon, Wetlands Park Friends





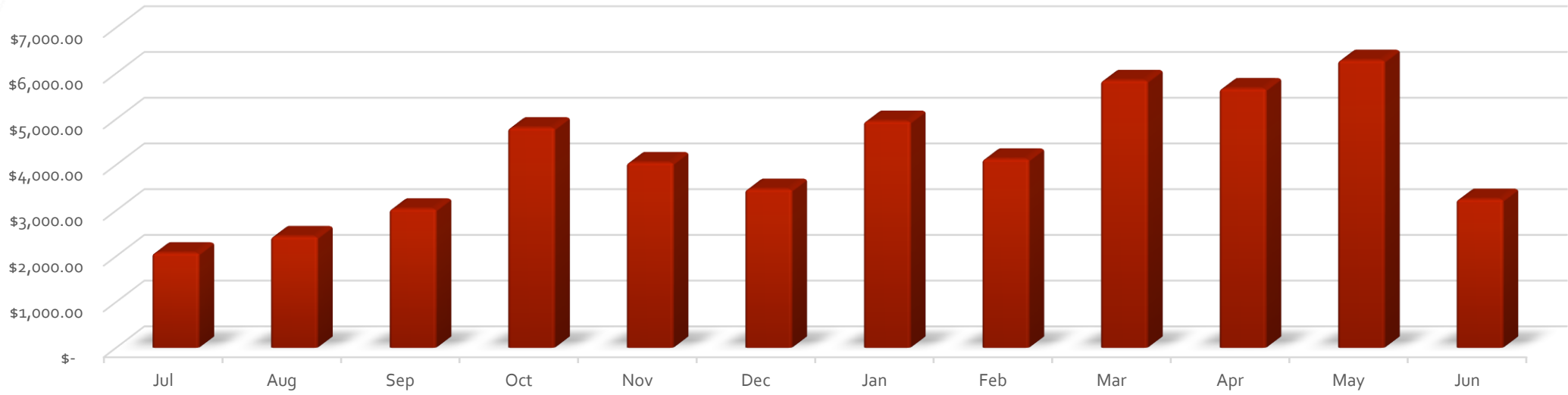
SPOTLIGHT ON NATURE GALLERY (SONG)

- Grand Opening July 22, 2023
 - 50 lineal feet of wall space
 - Hanging track system, lights
- Gifts of the Wetlands
 - Inaugural Exhibit
- Friendly Pollinators
 - Free to Fly, Bobbie Ann Howell,
September 6 – October 22
- Beyond the Desert
 - Photographs by Philip Martini,
November 2 – December 22





WETLANDS PARK NATURE STORE



TOTAL FY 2023 SALES: \$50,036.10



FIELD TRIPS 2023-2024

Guided Field Trips

- Start October 5th
- Buses provided by Wetlands Park Friends

Self-Guided Field Trips

Virtual Field Trips

Assemblies

Fee-Based Private Field Trips



57,800 students have attended Field Trips at Wetlands Park since 2001



WETLANDS PARK FRIENDS



- \$11,500 for CCSD Field Trip Buses
- Wetlands Park Mobile APP
- Stewardship programs
 - NFL ProBowl
 - plants, gloves, auger, food
- Events
 - Haunt the Wetlands & Holiday Lane
 - Decorations and supplies
- Park Promotions
 - Volunteer recruitment, programs, tabling
- Support WP Animal Ambassadors



CCWetlands/8888/Volunteers



EVENTS

Haunt the Wetlands October 27

2024 Events

- Wetlands Art Day - March 23
- BioBlast – April 27
- Discovery Day - June 8
- Pollinator Party - JUNE
- Stalking Twilight – August 15
- Astronomy in the Park - September

CLARK COUNTY PARKS & RECREATION PRESENTS



CLARK COUNTY WETLANDS PARK

FRIDAY, OCTOBER 27, 2023

HAUNT THE WETLANDS

WALK AMONG THE CREATURES OF THE NIGHT! BRAVE THE SPOOKY MAZE!

4 PM - 8 PM

ADVANCED TICKETS: \$6
DAY OF TICKETS: \$10
TICKETS REQUIRED AGES 4 TO ADULT.
AGE 0-3 FREE. NOT A TRICK-OR-TREAT EVENT.

TICKETS: [EVENTS.CCNWETLANDSPARK.COM](https://events.ccnwetlandspark.com)

Clark County Wetlands Park
7060 Wetlands Park Lane
Las Vegas, NV 89122
(702) 455-7522
wetlands@clarkcountynv.gov

Special Thanks to:



together for better



NEWS AND SOCIAL MEDIA



Wetland Navigator

- Nearly 1000 individual users
- 22K uses of the app
- Average 30-minute engagement time



Stormwater Pollution Awareness Month

Facebook

- 11,148 likes
- 12,000 followers
- 19,702 people checked at WP



Instagram

- 4,162 followers
- 749 posts

Twitter, Youtube

QUESTIONS?

Nominated: Best Place to Take Visitors



BEST OF LAS VEGAS
2023



[CLICK TO VOTE](#)



Lake Mead Water Quality Update

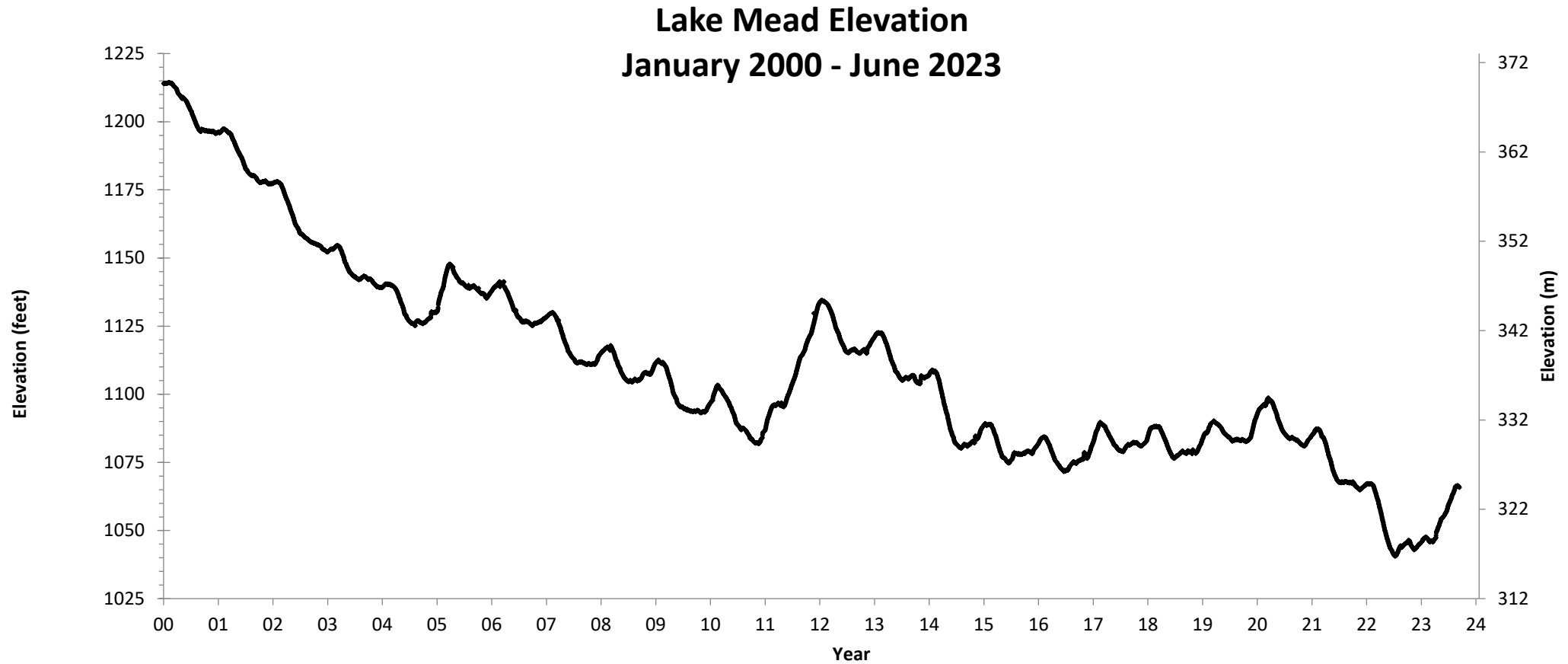
Todd Tietjen

SNWA Regional Water Quality

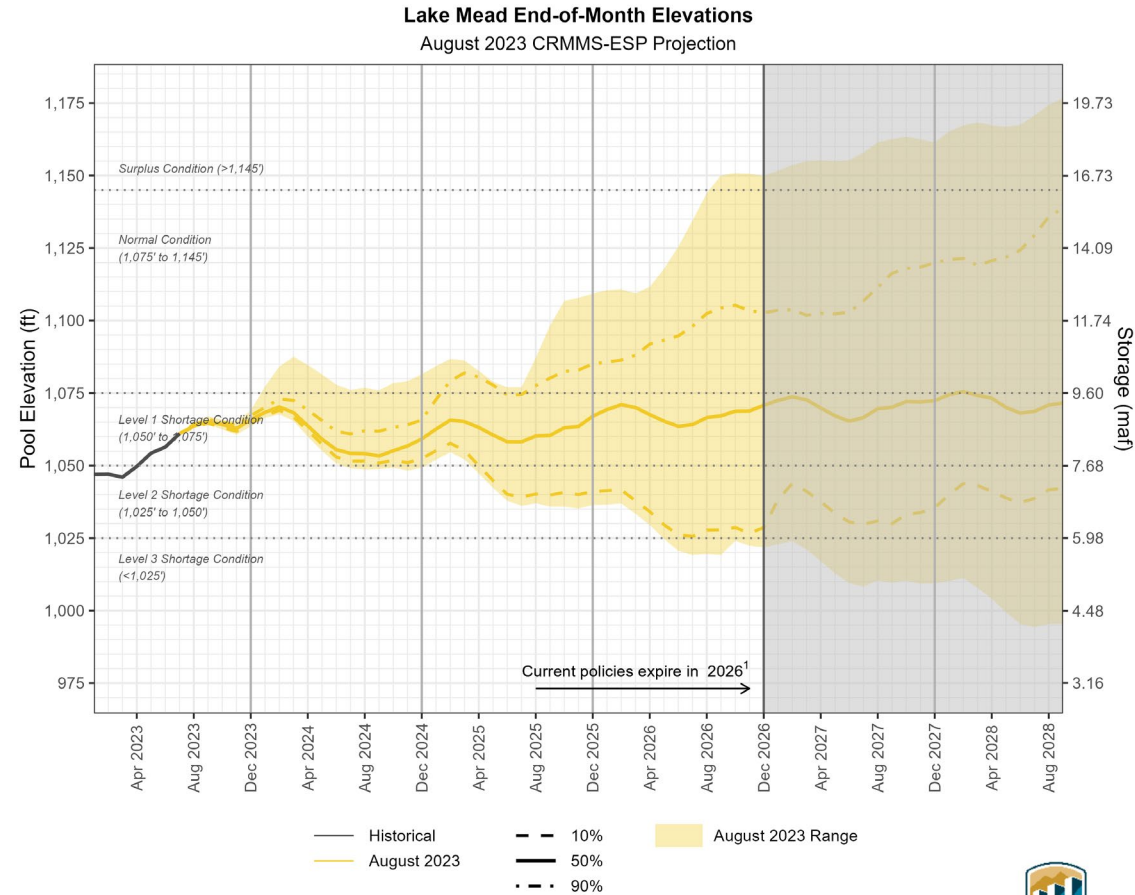
Todd.Tietjen@snwa.com

October 17, 2023

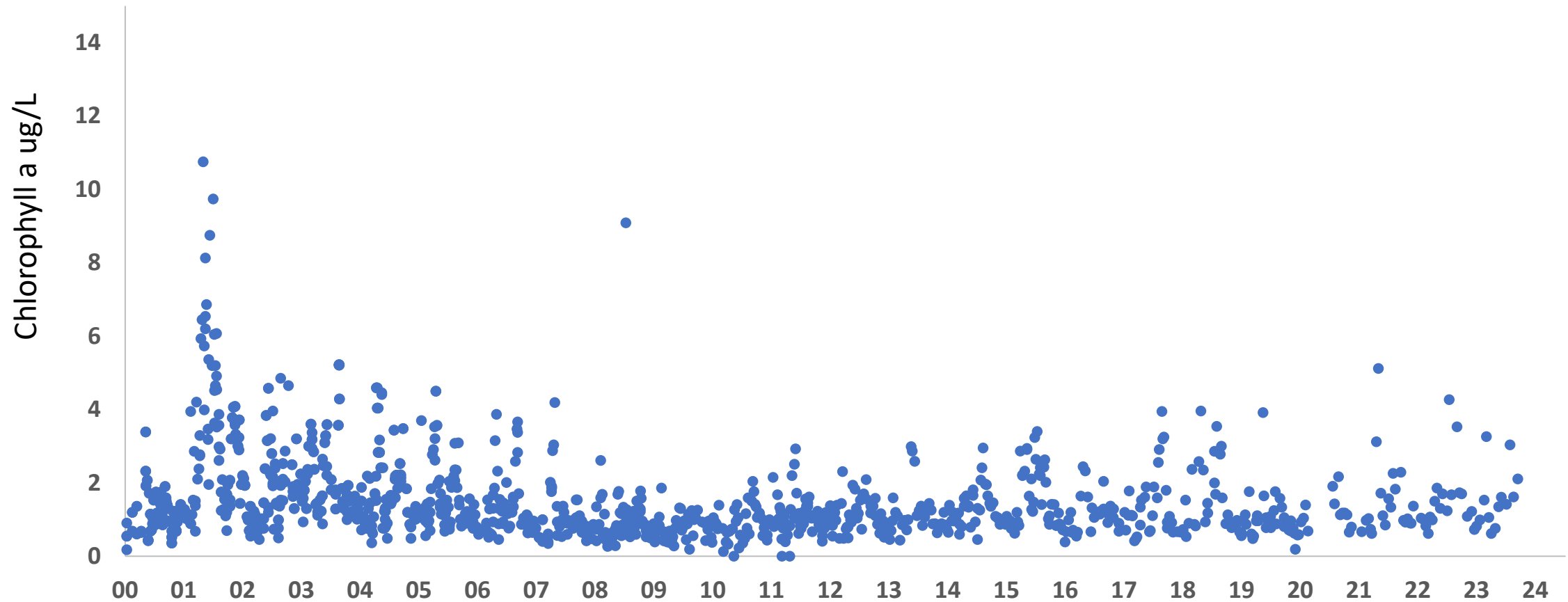
Lake Mead Surface Elevation



USBR Predictions for Lake Mead Levels



Lake Mead Chlorophyll

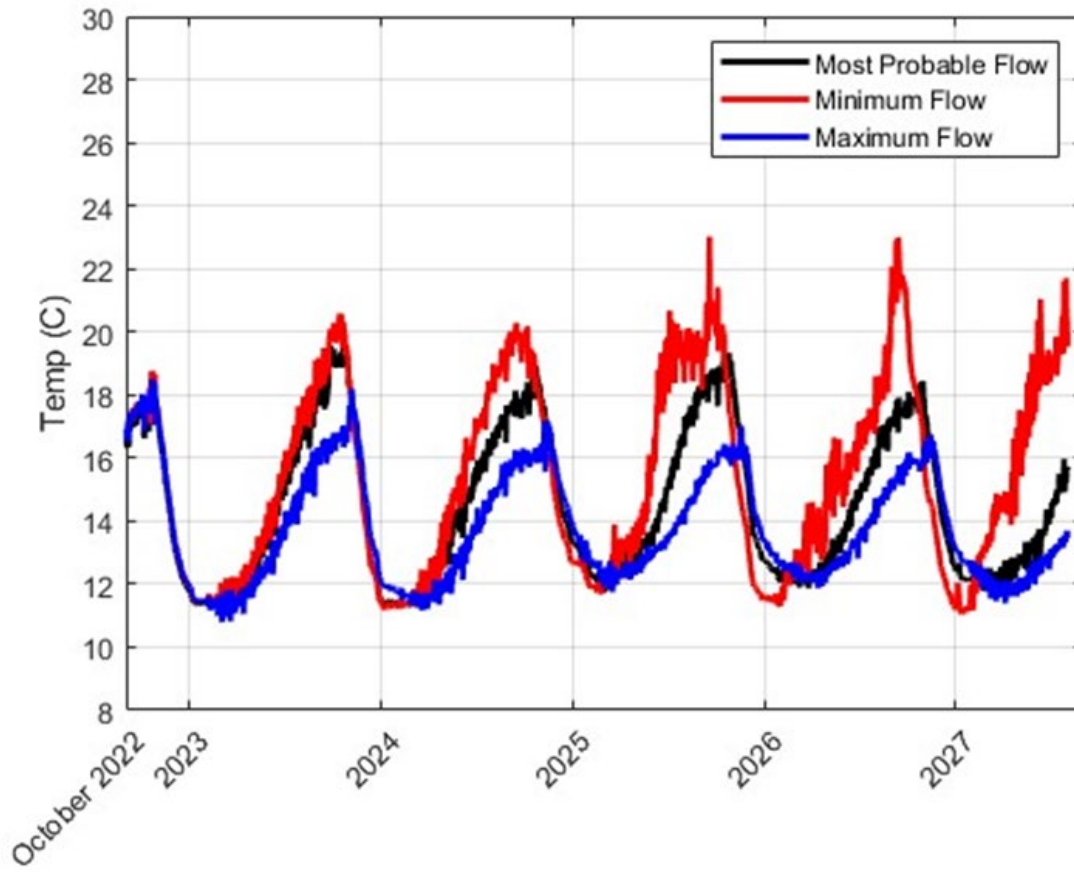


Lake Mead Algae

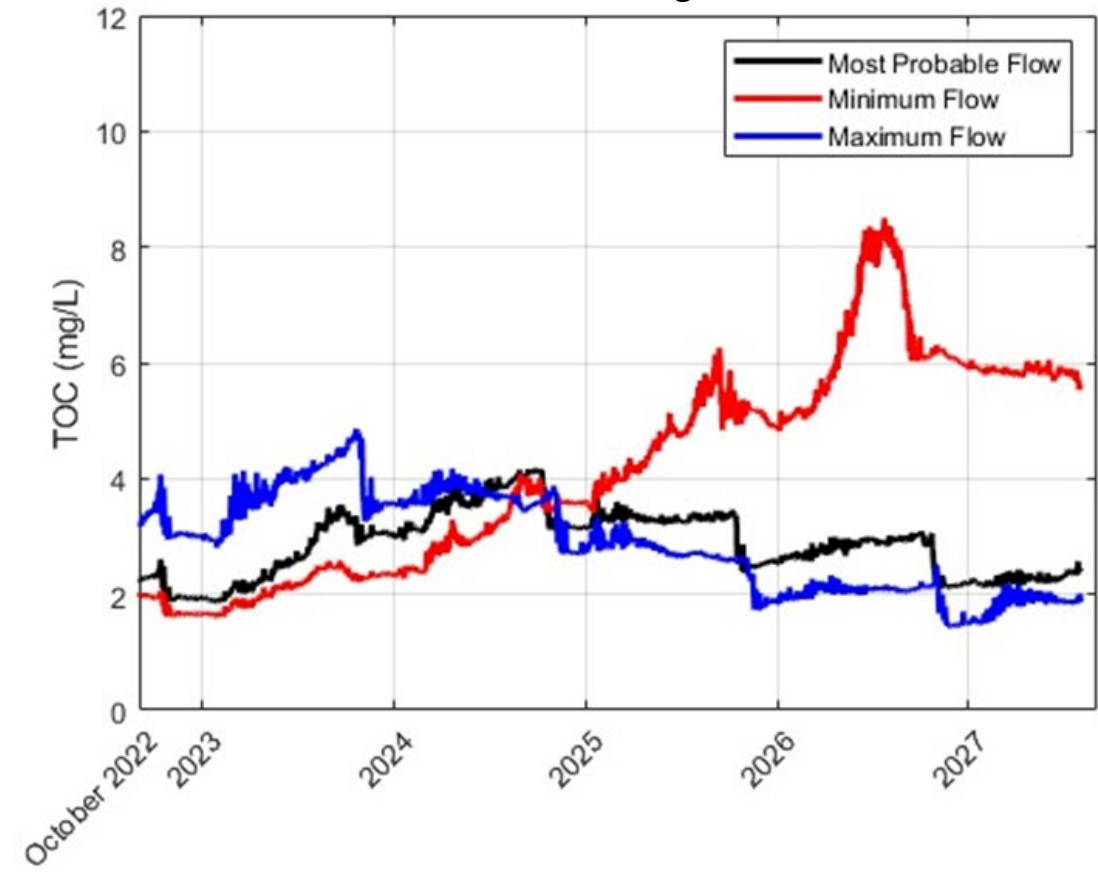
- The storms of late summer did cause some short-term changes
- First SNWA sampling following storm event found surface “blooms” of the species *Microcystis*: a potential toxin producer
 - Toxins were detected at the highest levels of the year
- Sampling by the City of Las Vegas the following day did not find the “bloom” when sampling the same area
 - Toxins only detected at some sites, near detection limits
- Toxins continue to be detected in Lake Mohave at low concentrations through the summer months.

Lake Mead Water Quality Predictions

SNWA Intake 3 Temperature



SNWA Intake 3 Total Organic Carbon



RWQ Current Projects

- Regression and Lake Mead Model (coupled) to study increases in flowrate of the Las Vegas Wash on drinking water quality withdrawn from Lake Mead through 2060
 - **Conclusion:** Projected Wash flowrates are not expected to affect water quality significantly through 2060.
 - **Implication:** Communities in the LVV can continue to grow, without negative impacts to water quality.
- Machine learning to investigate how phytoplankton dynamics may be shifting in Lake Mead
 - **Conclusion:** Overall, water quality and phytoplankton community structure have only been minimally impacted by climate change.
 - **Implication:** Continued climate change may lead to increased phytoplankton (especially cyanobacteria) growth near the Wash inflow. Many future directions for statistical analysis.
- Quantitative Microbial Risk Assessment model for the Las Vegas Valley (in progress)
- Lake Mead Model to continue simulating the five-year Lake Mead forecast based on BOR projections
 - **Conclusion:** Higher projected elevations of Powell and Mead show promise for improved water quality forecasts.
 - **Implication:** Continued “good” winters are crucial to maintaining high water quality in the basin.