NOTICE OF MEETING



LAS VEGAS WASH COORDINATION COMMITTEE Tuesday, October 26, 2021

8:30 a.m.

MEETING TO BE HELD VIRTUALLY VIA MICROSOFT TEAMS Call-in Information: 1-323-776-6758 ID: 295-554-34#

The Las Vegas Wash Coordination 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.lvwash.org for Las Vegas Wash Coordination 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 5 p.m. on October 25, 2021 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.

- I. For Information Only: Welcome/Call to Order
- II. For Information Only: Introductions
- III. For Possible Action: Approve April 27, 2021 Meeting Summary
- IV. For Information Only: Receive Presentation on Lake Las Vegas
- V. For Information Only: Receive Update on Recent Activities
 - a. Las Vegas Wash Project Coordination Team
 - b. Clark County Wetlands Park
 - c. Lake Mead
 - d. Las Vegas Valley Watershed Advisory Committee
 - e. Emerging Issues
- VI. For Possible Action: Set Next Meeting Date/Time 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 Las Vegas Wash Coordination Committee. Please limit your comments to three minutes or less.

LAS VEGAS WASH COORDINATION COMMITTEE - OCTOBER 26, 2021- PAGE TWO

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

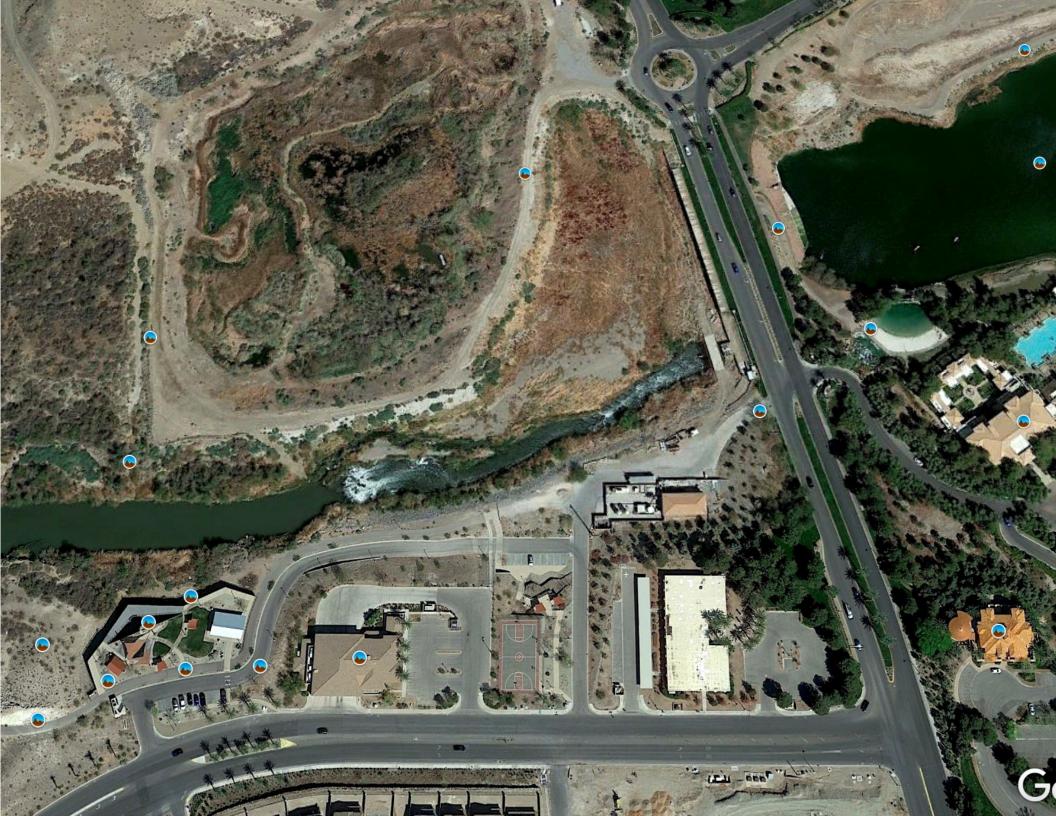
Las Vegas Valley Water District 1001 S. Valley View Boulevard Las Vegas, NV 89153

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 89106

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 89106





Las Vegas Wash Coordination
Committee Environmental Resources and
Outreach Update October 26, 2021







Las Vegas Wash Wildlife Mgt Plan Annual Update - 2021

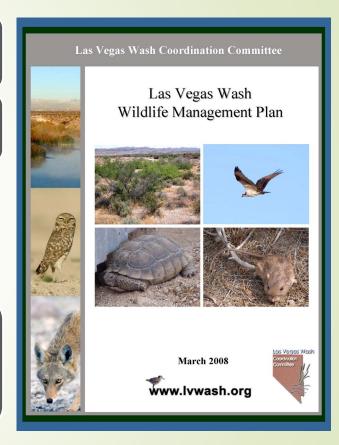
Developed from 2005 to 2008

Three management objectives

- Conserve native species
- Protect/& enhance their habitats
- Increase environmental awareness of these resources in the community

31 recommended actions (RAs) to achieve objectives

Also includes baseline & effectiveness monitoring

















Las Vegas Wash Wildlife Mgt Plan Annual Update - 2021

Recent Accomplishments

Conserving Native Species

Night Snake and Amphibian Surveys

Protecting and Enhancing Habitats

 Conserve and incorporate remnant native plant communities into revegetation efforts where possible

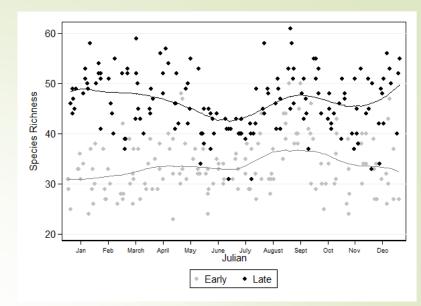
Increase environmental awareness of these resources in the community

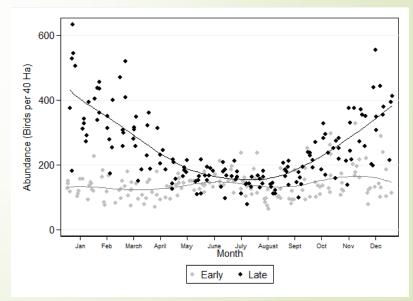
 Created outreach videos for elementary and secondary school programs with a grant from NDEP



Bird Surveys

- Biweekly avian point counts continue
- GBBO contracted to conduct surveys
 - 173 species detected in 2020/21 study year (Sep-Aug)
 - ~245 species detected since study began in 2005
- 2005-20 GBBO report documents significant increases in richness and abundance
 - Figures also show seasonal changes in # of species and individuals detected in the early (2005-11) versus late (2014-20) period

















T&E Bird Surveys

- Marsh birds/Yuma Ridgway's rail, April-May
 - Record population reported:
 - 1 upstream of Upper Narrows Weir
 - 4 at Mitigation Wetlands
 - **→**1 on Lower Wash
 - ► >1 had never been confirmed previously
- Southwestern willow flycatcher, mid-May-July
 - 1 territory (1st since 2013)
 - Yellow-billed cuckoo, mid-June-August
 - 3 detections: 1 at Pabco and 2 at NP



2021 southwestern willow flycatcher banded by SWCA













Herpetofauna Surveys

- **Baseline Night Snake Survey**
 - Species identified
 - Sidewinder*
 - Gopher snake
 - Desert nightsnake*
 - Speckled rattlesnake[†]
- **Amphibian Survey**
 - Same species as 2002-2003
 - American bullfrog
 - Woodhouse's toad

Both surveys concluded this month



Desert nightsnake



Sidewinder



American bullfrog



Woodhouse's toad













Selenium Standard - Fish Collection

- CCRFCD leading effort to create site-specific Se standard for the Wash
- Current proposed standard would likely make Wash and tributaries out of compliance
- Wash Team collecting carp and green sunfish for analysis to determine Se concentrations in tissue
- 15 carp and 1 green sunfish have been collected along the Wash and 15 carp from the Nature Preserve
- Samples have been sent to lab for analysis



Common Carp









Invasive Weed Management

- SNWA's contractor Soil-Tech is currently removing nonnative weeds from recently planted revegetation sites
- Annual vegetation monitoring will identify where upcoming efforts will be focused







Revegetation



Desert Milkweed

- More than 580 acres have been revegetated to date
- 2020 vegetation monitoring report being drafted
- 2021 vegetation monitoring has concluded
- Long-term revegetation management plan to start implementation in FY22-23
 - Additional plantings
 - Enhancements for wildlife









Wash Green-Ups

- Spring 2021 (5/1)
 - Sunrise Mtn. South
 - 9 acres
 - 1/39 volunteers

- Fall 2021 (10/23)
 - Sunrise Mtn. South
 - 12 acres
 - 250-300 volunteers
 - 5,000 plants

- To date:
 - Over 13,000 volunteers
 - Over 310 acres
 - Over 145,000 plants





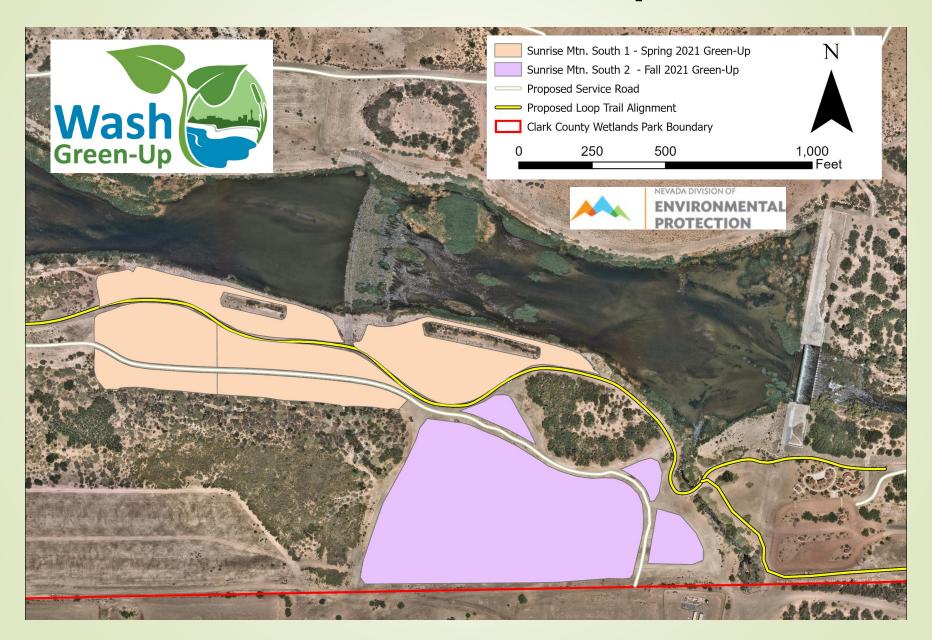








2021 Wash Green-Up Sites



Grants

Bureau of Reclamation

- \$150,000 in obligated funding for FY21
 - Revegetation
 n, water
 quality
 monitoring,

Nevada Division of Environmental Protection

- \$67,500 for FY 21-22
 - Mabel Hoggard classroom and field trips
 - Wash Green-Ups (+ plants and irrigation)











Completed Outreach

Stormwater Pollution Poster Contest

41 Schools910 Students59 Posters Submitted

Las Vegas Wash Virtual Education Experience

54 Schools 1,644 Students 387 students completed the questionnaire that went along with the videos

March 2021

Marc Kahre E.S. Reading Week – 50 Students

May 2021

Kesterson ES Career Day – 94 Students Spring Green-Up – 154 volunteers















Upcoming Outreach

Mabel Hoggard

- Working with teachers on the possibility of field trips this school year
- If not possible, we will repeat the virtual options of last year
 - Las Vegas Wash videos
 - Available on SNWA YouTube Channel

Green Valley Christian School

• February 2-3

Allegiant Stadium Staff Volunteer Planting

- 500 plants at Sunrise Mountain Weir
- October 11

World Wetlands Day

- February 2-3
- Working with interested teachers













LVWASH.ORG WEBSITE REDESIGN

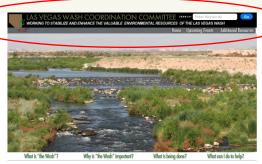
The new site:

- Launched October 11
- Has a modern design
- Is mobile friendly
- Utilizes new technology to display information
- Improves user experience
- Better exhibits photos and videos



LOGO REDESIGN





Stormwater poster contest winners selected





The Las Vegas Wash Coordination Committee recently selected the winners of an annual poster contest partially funded by the Nevada Division of Environmental Protection.

Biologists provided a virtual presentation to 41 elementary classrooms across the valley, introducing 910 students to the Las Vegas Wash and the dangers of stormwater pollution. Students then tapped into their creative talents, creating and submitting a poster with their depiction of stormwater pollution.

First-, second-, and third-place winners were selected from the 59 submissions and received a Chromebook, membership to the Springs Preserve, and a gift certificate.

Congratulations to Jasmine Mauvais (Matt Kelly Elementary), Madalynn Miller (Stanford Elementary), and Omari Mahamed (Matt Kelly Elementary).

Learn more about stormwater at the Wash.

Home | What is "the Wash"? | Why is "the Wash" important? | What is being done? | What can I do to help?

Upcoming Events | Additional Resources | Member Login | Contact Us | Privacy Policy.

Las Vegas Wash Project Coordination Team • 100 City Parkway, Suite 700 • Las Vegas, NV 89106 • (702) 822-3300

New website required new logo design

- Original in use for more than 20 years!
- Dated look
- Not mobile friendly

NEW BANNER LOGO







Ideal for:

- Website banner
- Report covers
- Outreach materials with sufficient spacing

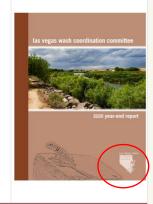
NEW MEDALLION LOGO





Year-End Report

- Work has begun on 2021 report
- Last annual report
 - Moving to biennial frequency with start of LTOP in FY22/23
- 2021 report will summarize CAMP progress and activities conducted during the year and 2022-23 objectives for 7 programs
- Prior reports posted to lvwash.org





October 202:







Ideal for:

- Mobile devices
- Year-End Report cover
- Presentation slide footers
- Any place where more concise branding is appropriate

Las Vegas Wash Long-Term Operating Plan (LTOP)



Aerial Imagery of the Las Vegas Wash

- Long-term operations for the Wash program and its assets will begin in FY22-23
- The LTOP was approved by the IVVWAC in March 2020
 - Annual cost ~\$2.4M (2019) dollars)
 - 36 actions covering 6 core elements from the Las Vegas Wash Comprehensive Adaptive Management Plan











QUESTIONS?











Water Quality Monitoring Update

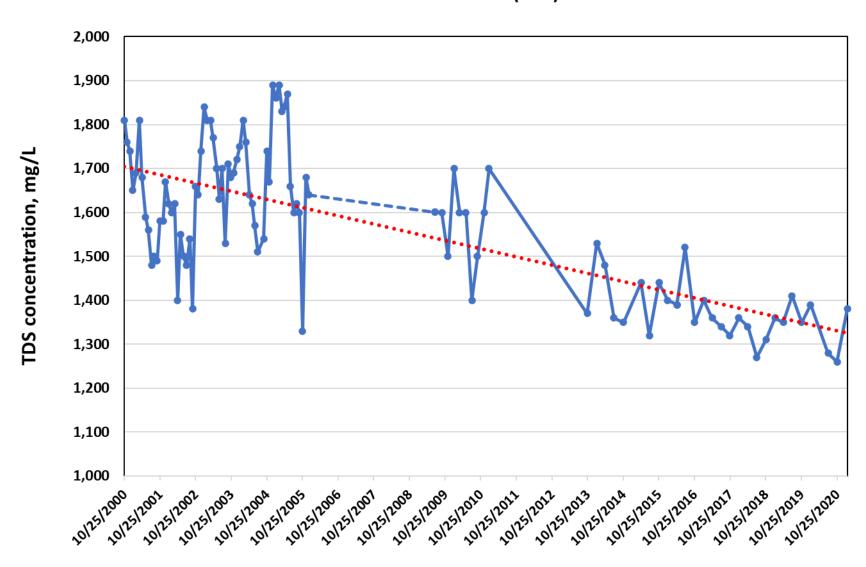
October 26, 2021

2021 Water Quality Sampling & Monitoring Schedule

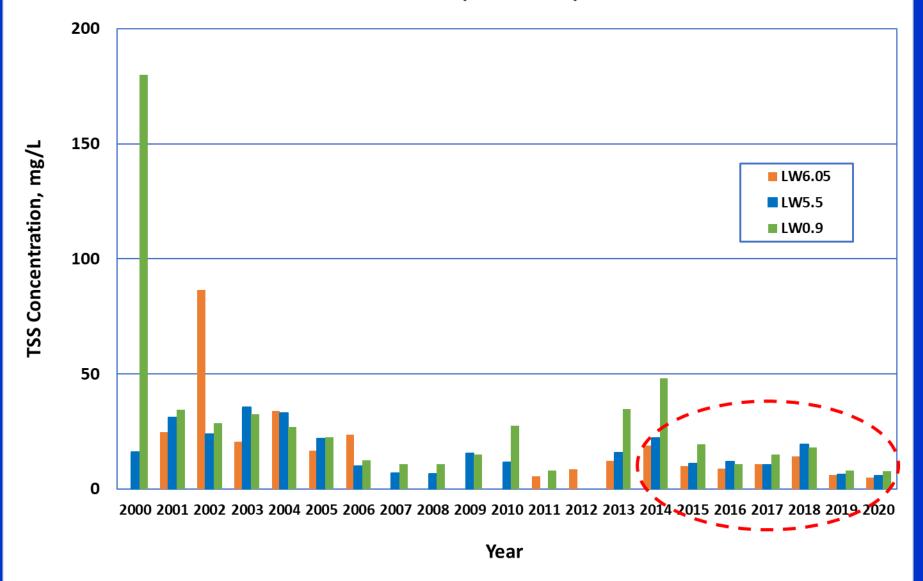
Project	Sample Frequency	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21
Mainstream Wash Water Quality Sampling	quarterly		x			X			x			х	
Tributary Water Quality Sampling	quarterly	X			X				x		X		
Tributary Flow Measurements and Se sampling	monthly	x	X	X	X	X	X	X	x	X	X	X	X
Real Time Water Quality Monitoring (Wash + MR) (6 sites)	bi-weekly	2x											
TSS and Perchlorate Study in the Wash	monthly	X		X	X		X	x		X	X		х
Shallow Groundwater Quality Sampling along the Wash	quarterly		X			X			x			X	
Water Quality from Muddy River (4 sites)	quarterly			X			x			х			x
Lake Mead and Lake Mohave WQ Monitoring	bi-weekly	2x											
Lake Mead Water Quality Platform	bi-weekly	2x											
Water Quality Sampling at Nature Preserve	monthly	x	х	х	X	x	x	х	x	х	x	х	х

Water Quality Improvements in the Mainstream Wash

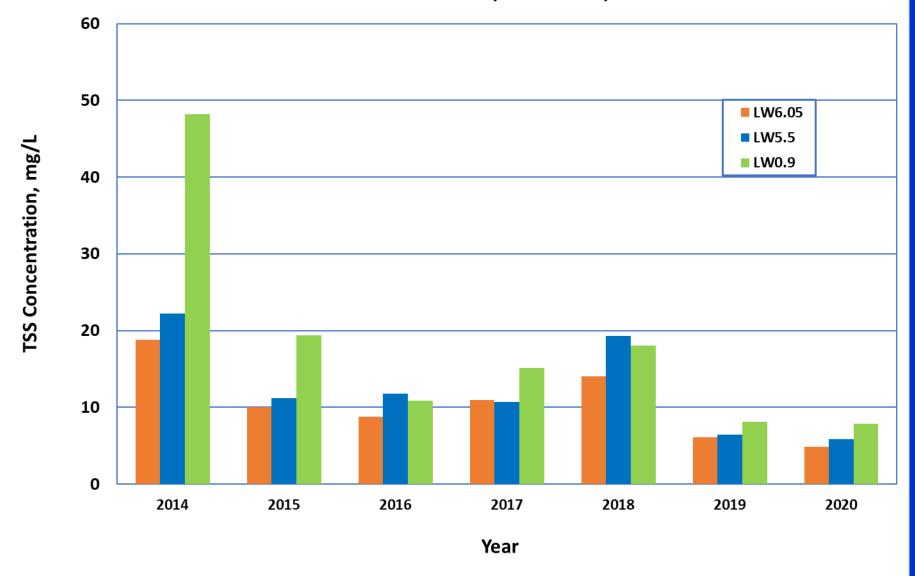
Total Dissolved Solids (TDS) at LW0.9



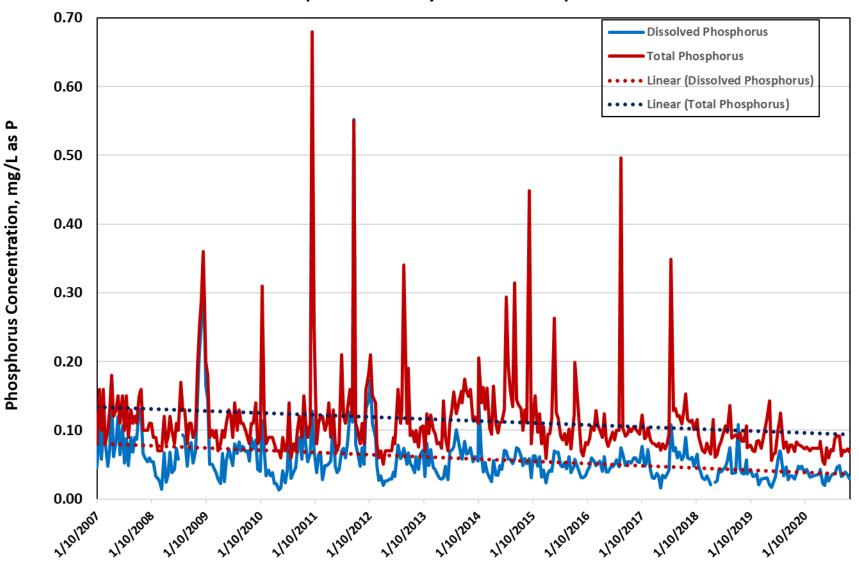
Average TSS Concentrations from LW6.05, LW5.5, and LW0.9 in the Wash (2000-2020)



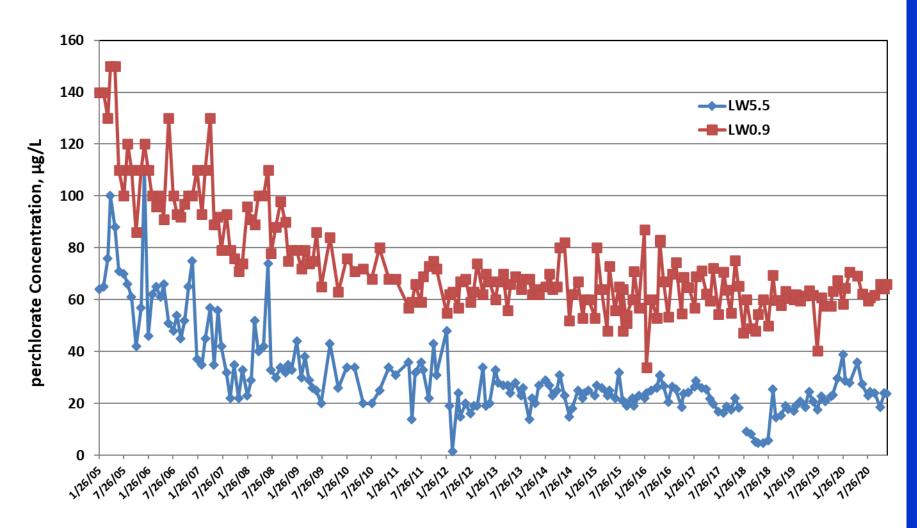
Average TSS Concentrations from LW6.05, LW5.5, and LW0.9 in the Wash (2014-2020)

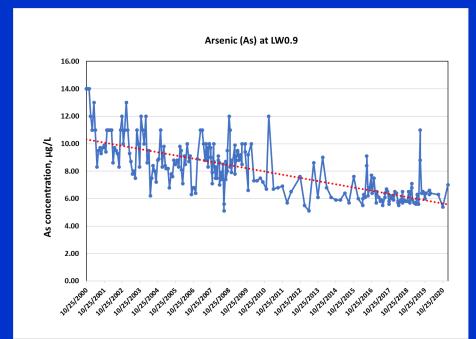


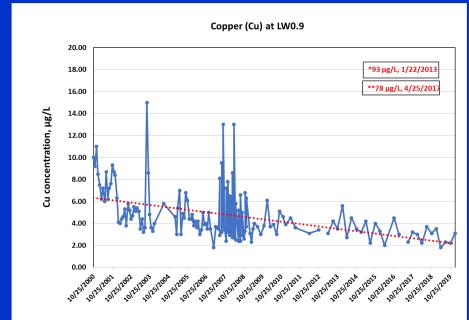
Phosphorus Concentrations at LW0.9 (Data from City of Henderson)

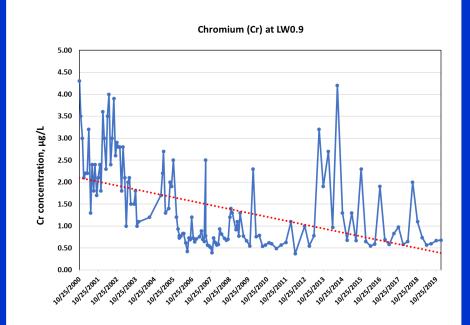


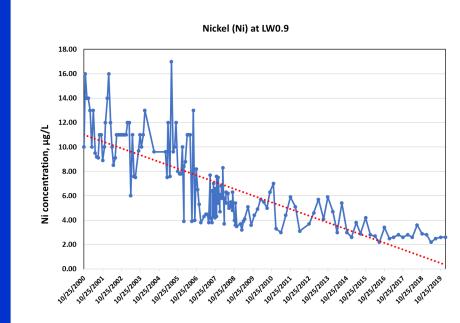
Perchlorate Concentrations from LW 5.5 and LW0.9 in the Las Vegas Wash (Based on the Data Collected during 2005-2020)







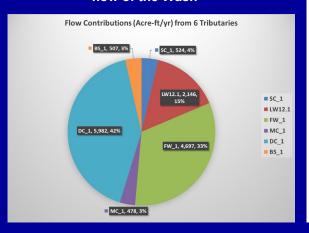




Mass Loadings from Tributaries to the Las Vegas Wash

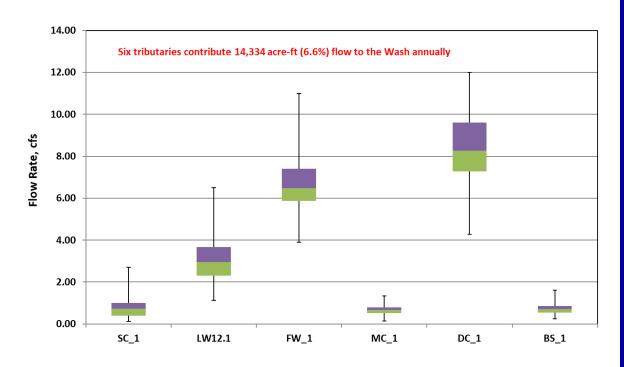
Flow Rates in Six Tributaries

- 19.8 cfs (12.8 MGD) from 6
 tributaries to the Wash
 - Major Tributaries:DC, FW, LV Creek (~90%)
 - Minor Tributaries:SC, MC, BS (~ 10%)
- 14,334 AF/yr to the Wash
- About 6.6% of the total
 flow of the Wash

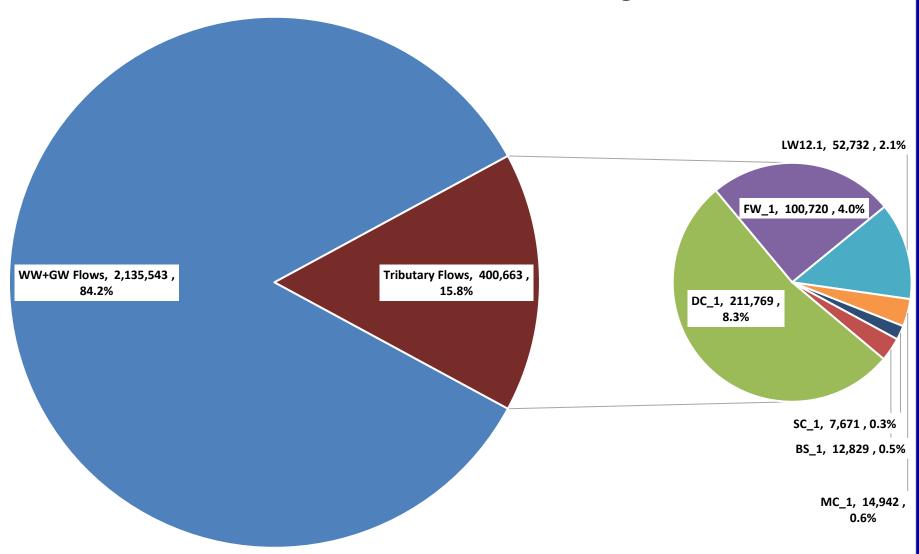


Box Plots of Flow Rates in Six Tributaries to the Wash

(Based on the data collected during 2001-2020)



TDS Mass Loading Rates (lbs/day) and Percentages from Tributaries to the Las Vegas Wash



Mass loading rates from tributaries are significant, such as As

Similar patterns for:

• Sb: 8.9%

Ba: 9.7%

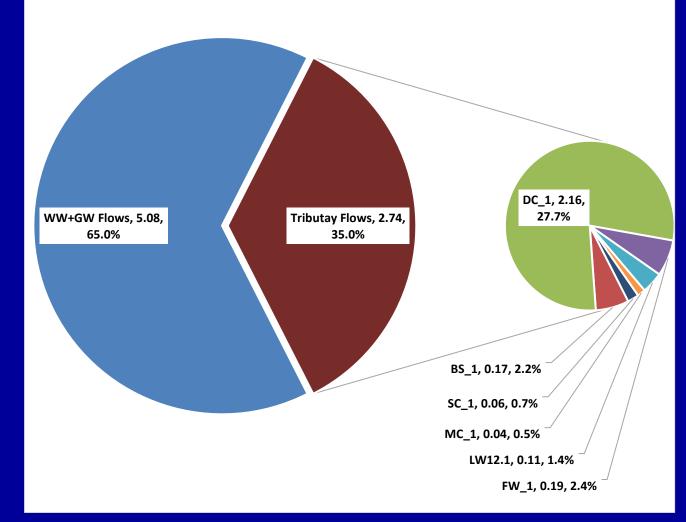
• Cr: 15.5%

Mo: 19.4%

• Ni: 9.2%

V: 28.6%

Arsenic (As) Mass Loading Rates (Ibs/day) and Percentages from Tributaries to the Las Vegas Wash



Mass loading rates from tributaries are less significant, such as Zn

Similar patterns for:

• Al: 1.2%

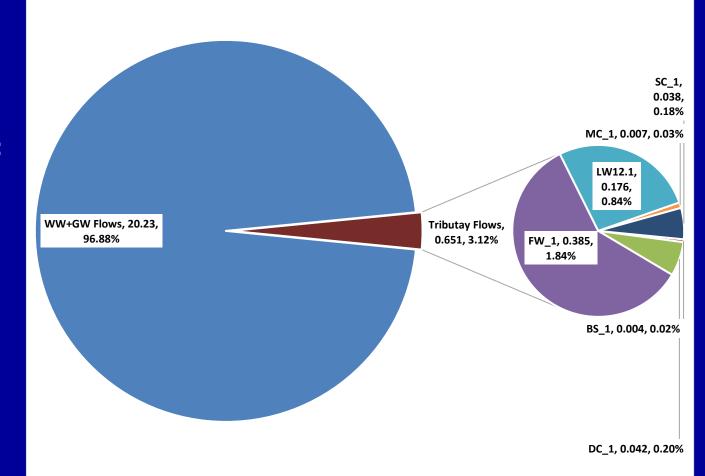
• Cu: 5.9%

• Fe: 1.6%

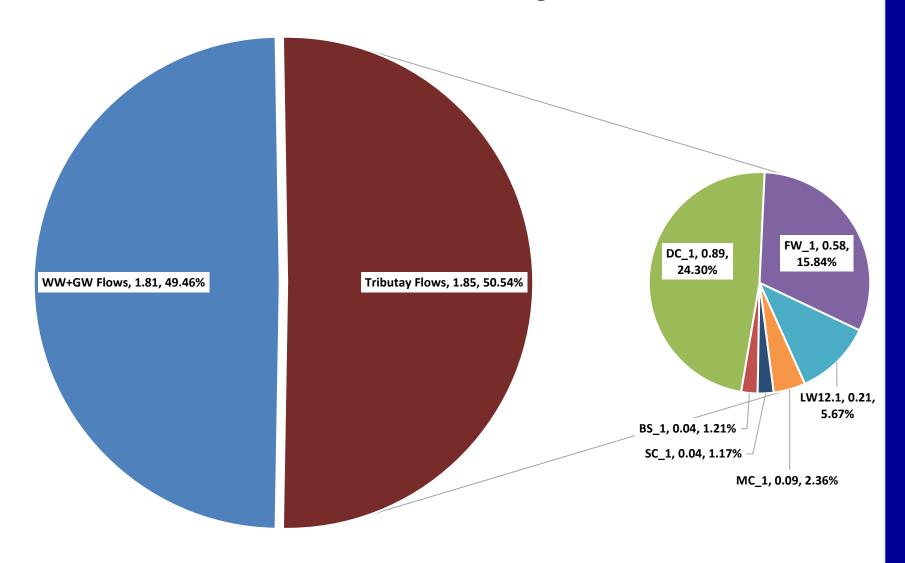
• Pb: 4.1%

Mn: 3.1%

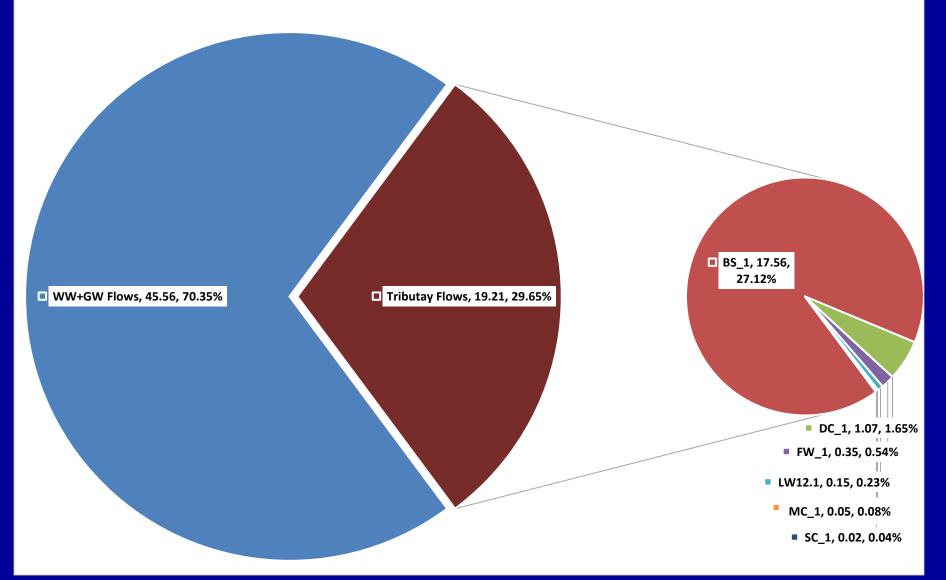
Zinc (Zn) Mass Loading Rates (lbs/day) and Percentages from Tributaries to the Las Vegas Wash



Selenium (Se) Mass Loading Rates (lbs/day) and Percentages from Tributaries to the Las Vegas Wash



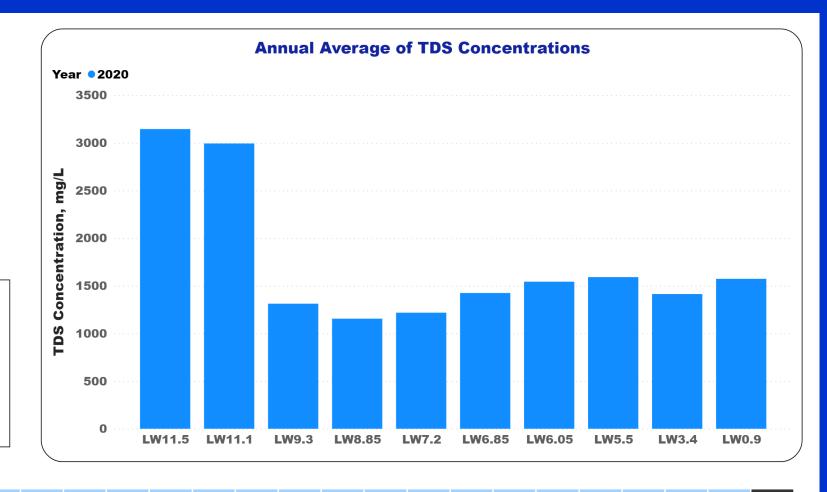
Perchlorate Mass Loading Rates (lbs/day) and Percentages from Tributaries to the Las Vegas Wash



Water Quality Monitoring Results in the Las Vegas Wash

with Power BI

(2000-2021 Data)



Site Name

LW11.5

LW11.1

LW9.3

LW8.85

LW7.2

LW6.85

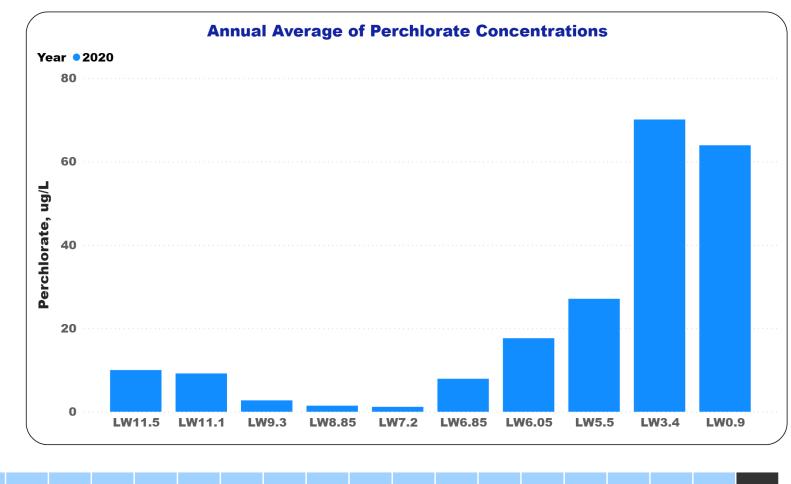
LW6.05

LW5.5

LW3.4

LW0.9

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------



Site Name

LW11.5

LW11.1

LW9.3

LW8.85

LW7.2

LW6.85

LW6.05

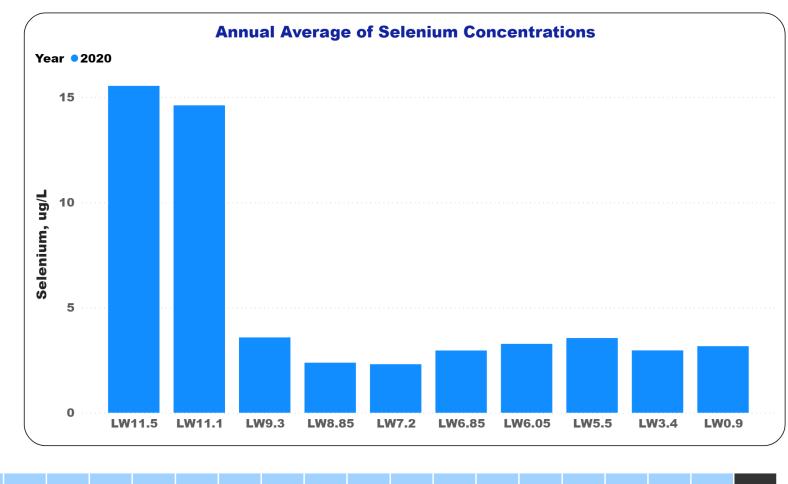
LW5.5

LW5.5

LW3.4

LW0.9

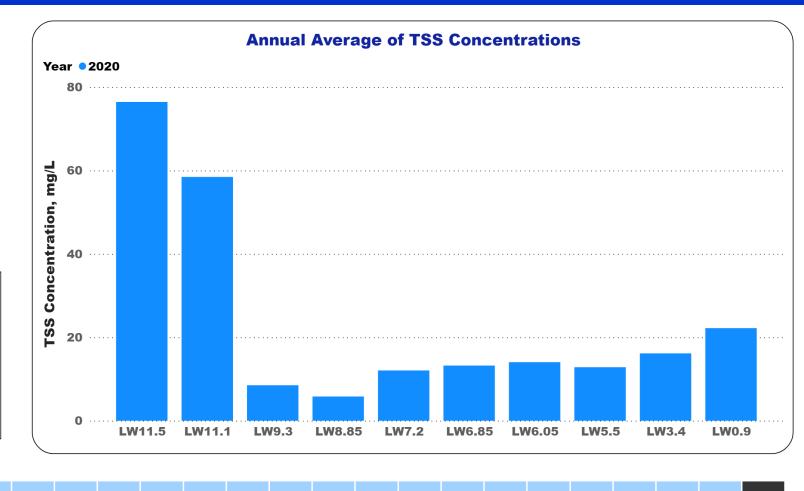
2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------



LW11.5
LW11.1
LW9.3
LW8.85
LW7.2
LW6.85
LW6.05
LW5.5
LW3.4
LW0.9

Site Name

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020



Site Name

LW11.5

LW11.1

LW9.3

LW8.85

LW7.2

LW6.85

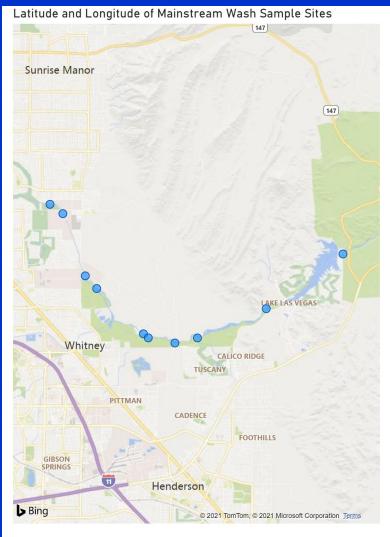
LW6.05

LW5.5

LW3.4

LW0.9

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020



Site Name	Sample Date	Parameter	V۸
LW0.9	Tuesday, December 15, 2020	Perchlorate	(
LW11.1	Tuesday, December 15, 2020	Perchlorate	
LW11.5	Tuesday, December 15, 2020	Perchlorate	•
LW3.4	Tuesday, December 15, 2020	Perchlorate	5
LW5.5	Tuesday, December 15, 2020	Perchlorate	2
LW6.05	Tuesday, December 15, 2020	Perchlorate	
LW6.85	Tuesday, December 15, 2020	Perchlorate	
LW7.2	Tuesday, December 15, 2020	Perchlorate	
LW8.85	Tuesday, December 15, 2020	Perchlorate	
LW9.3	Tuesday, December 15, 2020	Perchlorate	
LW0.9	Tuesday, November 24, 2020	Perchlorate	(
Total			4~

Site Name	Sample Date	Parameter ^
LW0.9	Wednesday, October 25, 2000	Selenium To
LW11.1	Wednesday, October 25, 2000	Selenium To
LW5.5	Wednesday, October 25, 2000	Selenium To
LW6.05	Wednesday, October 25, 2000	Selenium To
LW0.9	Monday, November 20, 2000	Selenium To
LW11.1	Monday, November 20, 2000	Selenium To
LW5.5	Monday, November 20, 2000	Selenium To
LW6.05	Monday, November 20, 2000	Selenium To
LW0.9	Wednesday, December 20, 2000	Selenium To
LW11.1	Wednesday, December 20, 2000	Selenium To
LW5.5	Wednesday, December 20, 2000	Selenium To
LW6.05	Wednesday, December 20, 2000	Selenium To
LW0.9	Thursday, January 18, 2001	Selenium To
LW11.1	Thursday, January 18, 2001	Selenium To
LW5.5	Thursday, January 18, 2001	Selenium To
Total		· ·
<		>

Site Name	Sample Date	Parameter
LW0.9	Wednesday, October 25, 2000	Total Dissolv
LW0.9	Monday, November 20, 2000	Total Dissolv
LW0.9	Wednesday, December 20, 2000	Total Dissolv
LW0.9	Thursday, January 18, 2001	Total Dissolv
LW0.9	Wednesday, February 21, 2001	Total Dissolv
LW0.9	Wednesday, March 28, 2001	Total Dissolv
LW0.9	Wednesday, April 25, 2001	Total Dissolv
LW0.9	Wednesday, May 30, 2001	Total Dissolv
LW0.9	Wednesday, June 27, 2001	Total Dissolv
LW0.9	Monday, July 30, 2001	Total Dissolv
LW0.9	Wednesday, August 22, 2001	Total Dissolv
Total		

Site Name	Sample Date	Parameter ^
LW0.9	Wednesday, October 25, 2000	Total Susper
_W11.1	Wednesday, October 25, 2000	Total Susper
_W5.5	Wednesday, October 25, 2000	Total Susper
_W6.05	Wednesday, October 25, 2000	Total Susper
_W0.9	Monday, November 20, 2000	Total Susper
_W11.1	Monday, November 20, 2000	Total Susper
_W5.5	Monday, November 20, 2000	Total Susper
_W6.05	Monday, November 20, 2000	Total Susper
_W0.9	Wednesday, December 20, 2000	Total Susper
LW11.1	Wednesday, December 20, 2000	Total Susper
_W5.5	Wednesday, December 20, 2000	Total Susper
LW6.05	Wednesday, December 20, 2000	Total Susper
LW0.9	Thursday, January 18, 2001	Total Susper
_W11.1	Thursday, January 18, 2001	Total Susper
_W5.5	Thursday, January 18, 2001	Total Susper
Total		~











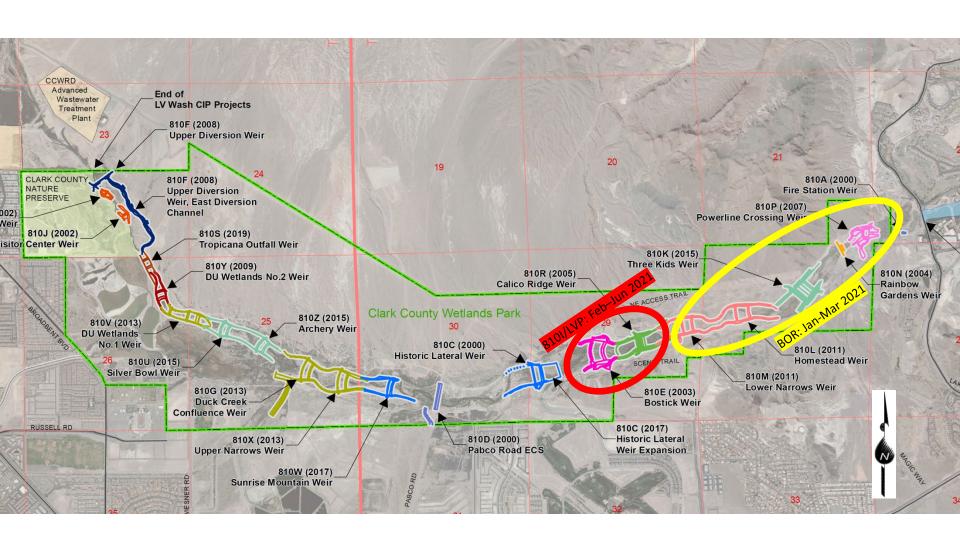
Status Updates

SOUTHERN NEVADA WATER AUTHORITY®

Las Vegas Wash Coordination Committee

October 26, 2021

Locations





Wash Activities

- Reconstruction of Existing Weir Structures
 - Bostick and Calico Ridge weirs
 - 810I/LVP: Feb–June 2021
 - Lower Narrows thru Powerline Crossing weirs
 - BOR: Jan–March 2021
- Place Facilities Back to Originally Constructed Lines and Grades
 - Removal of Vegetation and Sediment from Structures
 - Reposition and Installation of Rip Rap



810 – Final Weir Modification - Bostic



810 – Final Weir Modification - Bostic



BOR – Homestead Before



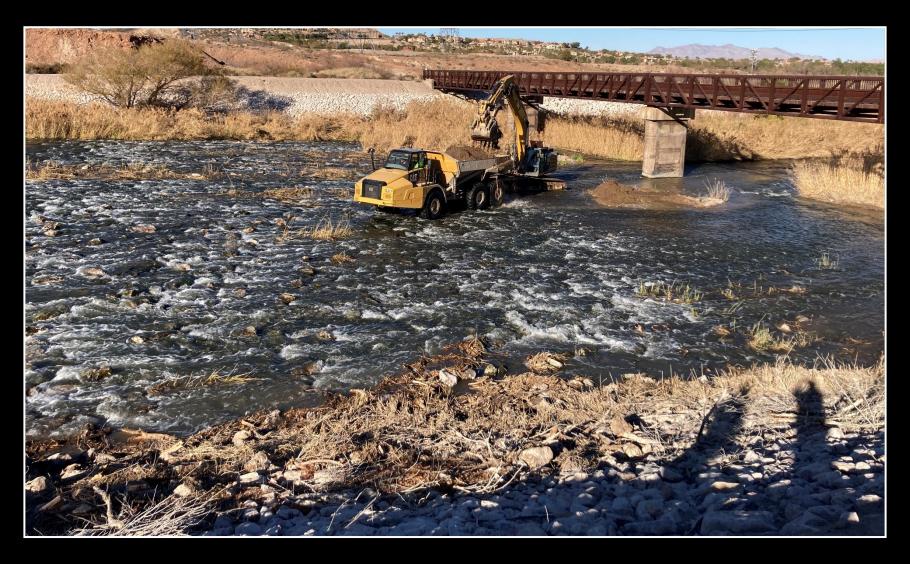
BOR – Homestead After



BOR – Lower Narrows Before



BOR – Lower Narrows After



BOR – Powerline Before



BOR – Powerline After



BOR – Rainbow Gardens Before



BOR – Rainbow Gardens After



BOR – Three Kids Before



BOR – Three Kids After

Consultant Engineering Services

• Objective:

- professional services for the review of existing Las Vegas Wash stabilization facilities and stream sections for compliance with all local, regional, state and federal regulations and recommendations for remediation of any areas not in compliance
- Louis Berger

Consultant Engineering Services

Task Name	Finish Date
DRAFT Facilities Assessment Report	complete
FINAL Facilities Assessment Report	complete
FINAL Long Term Operating Plan (LTOP)	complete
DRAFT Letter of Map Revision (LOMR)	Ongoing FEMA approval coordination

Questions



Clark County Wetlands Park LVWCC Update

October 26, 2021

Elizabeth Bickmore, Senior Program Administrator

Preserving and enhancing natural and cultural resources and providing educational, recreational, and research opportunities for the public.



Nature Center Fully Operational

Nature Center Operations 6 days a week

> Tuesday – Sunday 9:00 AM 3:00 PM



Programs

Families & Adults:

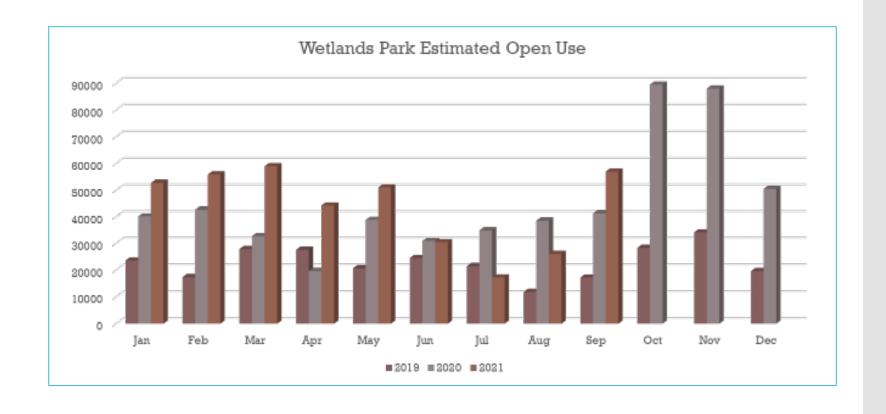
Discovery Walks, Birding, Art

Stewardship:

Monthly & Special Requests

Kids ages 3 - 8:

Wetlands Explorers, Nature Tales & Storytime



Field Trips Four Options



Requested to date: 10 schools, 548 students

Self-Guided Field Trips

• Requested to date: 3 schools, 128 students

Virtual Field Trips

- Requested to date: 6 schools, 504 students
- 8 schools with 1,915 students have requested the link to the WP Virtual Field Trip video

Fee-Based Private Field Trips

Reserved to date: 2 schools, 80 students



Art @ Wetlands Park



Art in the Park

- PLAY Temporary Art June 2021
- Plein Air Paintout April 18, 2021
- Art Gallery
 - Plein Air Exhibit June 2021
 - National Audubon 2019 Photography Awards Traveling Display April through September 2021
 - North American Nature Photography Association (NANPA) College Scholars Photography Show August through September 2021

Studio WP Art Programs

- Nature Art for Kids
- Nature Journaling
- Charcoal Drawing
- Relief Printmaking







Annual Events

Haunt the Wetlands – October 29

BioBlitz – Spring 2022

Migratory Bird Day – Spring 2022









Wildfires

February 18 & 20, 2021



RD 15 SNPLMA

Project Timeline

Monument Construction - March 2021 Substantial Completion - Winter 2022

Nature Play Corner Interpretive Signs Wayfinding







Signage Plan

Significant Points

Location & Directional Regulatory and Safety Waypoints





TRAIL SIGNAGE









SIGNAGE AT WEIRS

Fencing & Barriers Planning

Implementation

Bollards at Bridge Crossings

Fencing and gates

Signage

Enforcement

Vehicle Permit Process





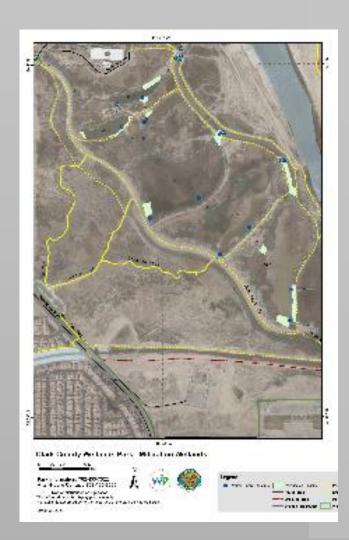
Fuel Reduction & Restoration

Fuel Reduction & Restoration

- NPS expanded 4-year management agreement
 - 2021-25
- Bureau of Land Management grant
- Nevada Division Forestry grant
 - Fire Crew Staff
 - Conservation Camp

Resource Planning

- Phragmites Management Plan
- Wildlife Rehabilitation Plan
- Mowers for aquatic terrestrial vegetation

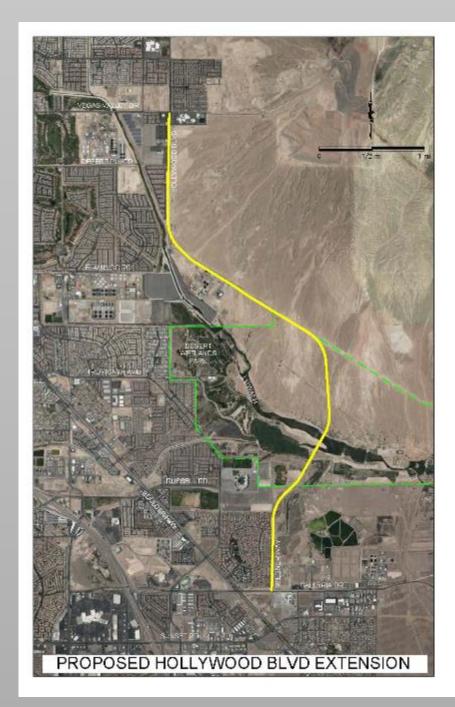


Hollywood Extension Project

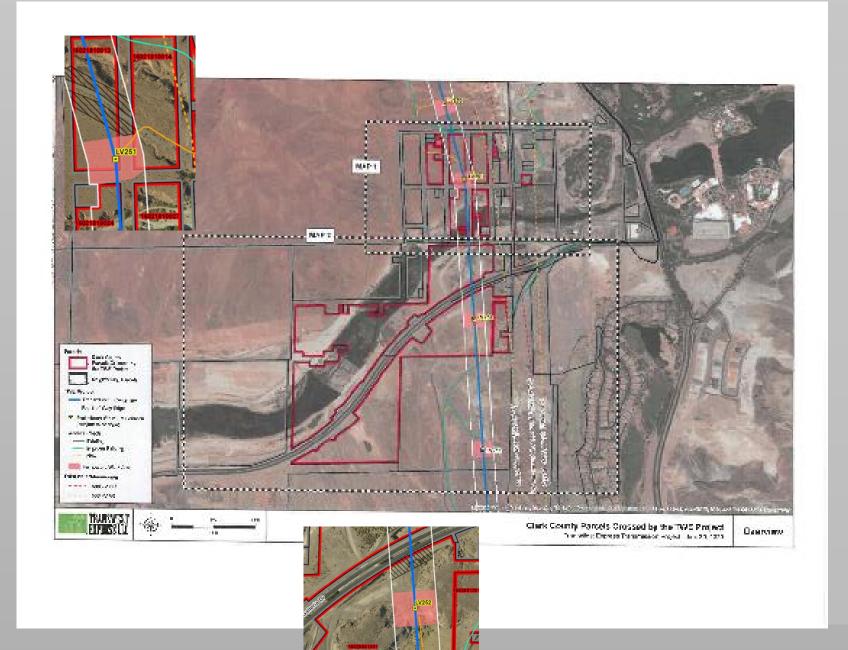
Public Works

Louise Steeps
Principal Civil Engineer
702-455-6216

- Alignment
 - 1B
- Design Phasing
 - I Galleria Wetlands Park
 - II Wetlands Park to Hollywood
- Permitting
 - BOR Lead Agency
 - USACOE
 - BLM



Transwest Powerline Corridor



Cadence Sports Park RCB Channel

- New location
- RCB 12'x6'
- Potential Impacts
 - Trail
 - Service road
 - Revegetation



Questions?



Lake Mead Update October 26, 2021

Todd Tietjen, Ph.D.
Regional Water Quality Manager
Research and Development Acting Manager
Southern Nevada Water Authority
Todd.Tietjen@snwa.com

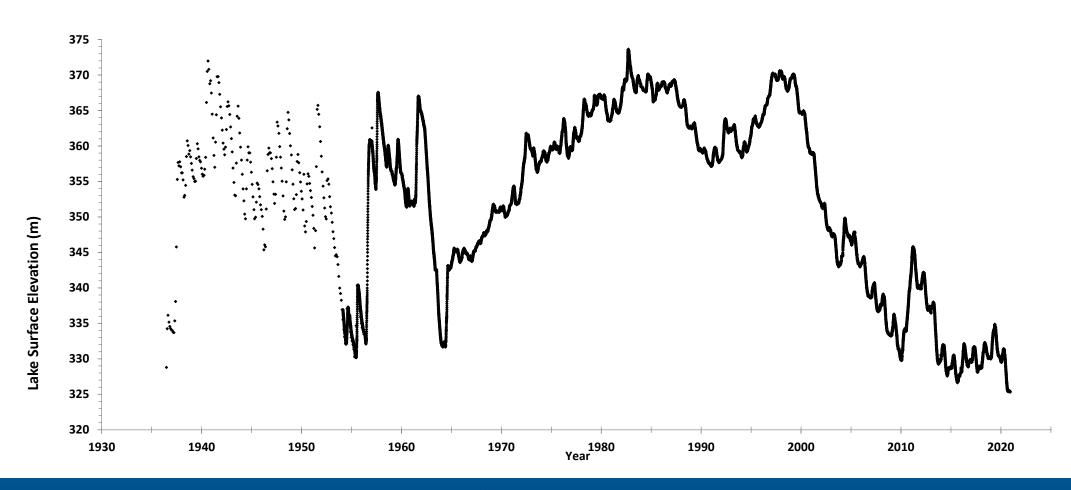


Lake Mead

- Talking about Water Quality, Not Water Quantity.
- All things considered water quality remains high in Lake Mead and Mohave
 - Localized issues
 - Toxin producing Algae
 - Lower lake levels are not going to be helpful in the long run
 - Short residence time continues to benefit water quality in Lake Mead.
- Modeling of Lake Mead is becoming more important in considering nearer term conditions in the lake.

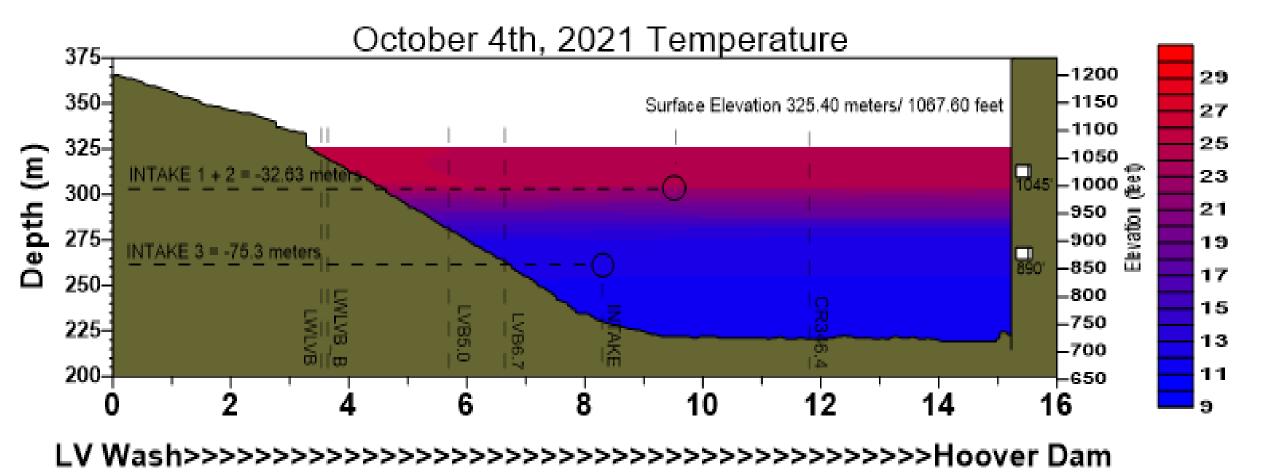


Lake surface elevation





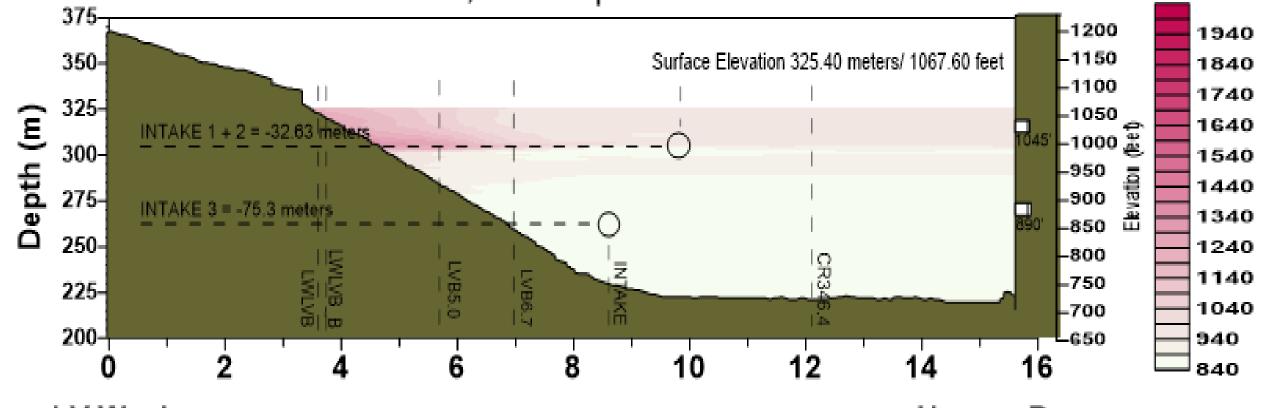
Lake Mead Temperature





Lake Mead Conductance

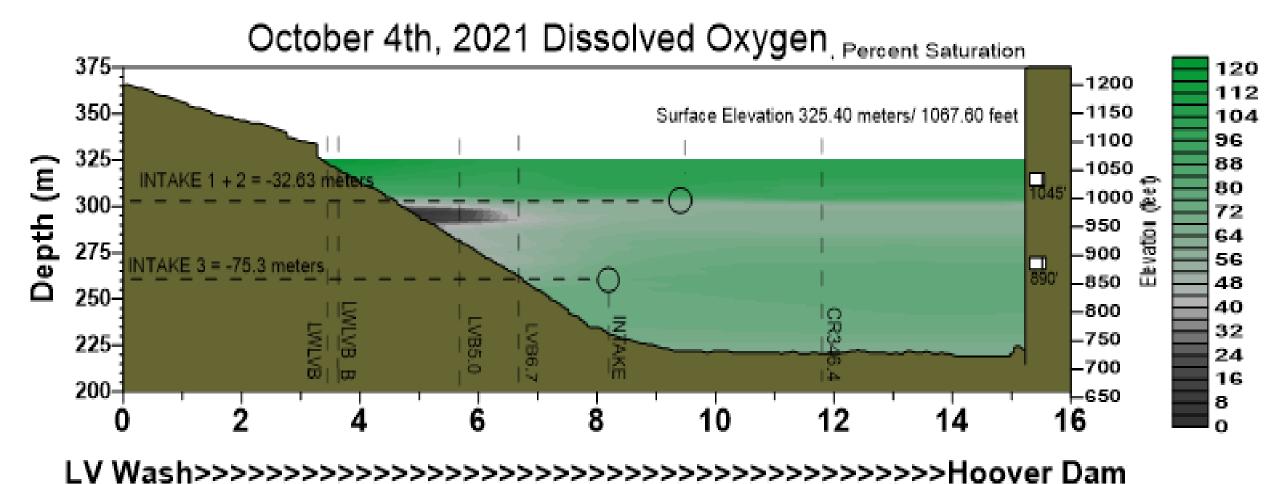
October 4th, 2021 Specific Conductance



LV Wash>>>>>>>>> Dam

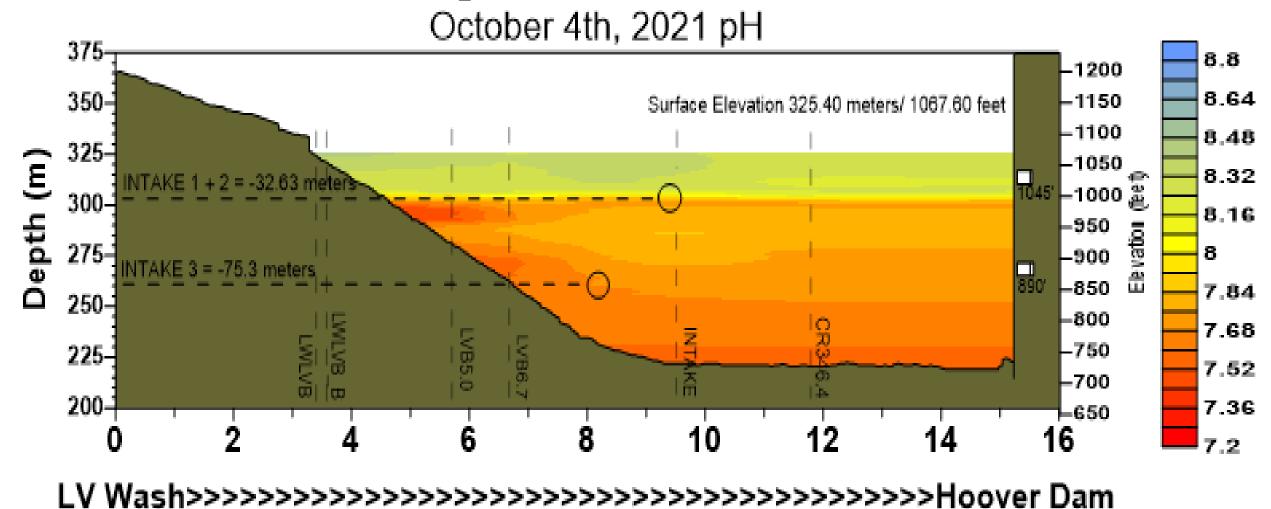


Lake Mead Dissolved Oxygen



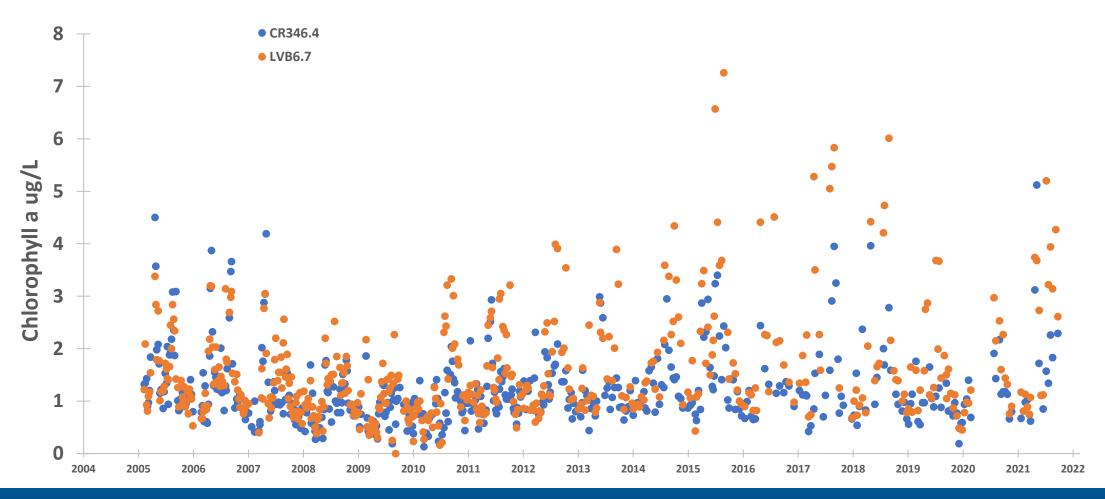


Lake Mead pH



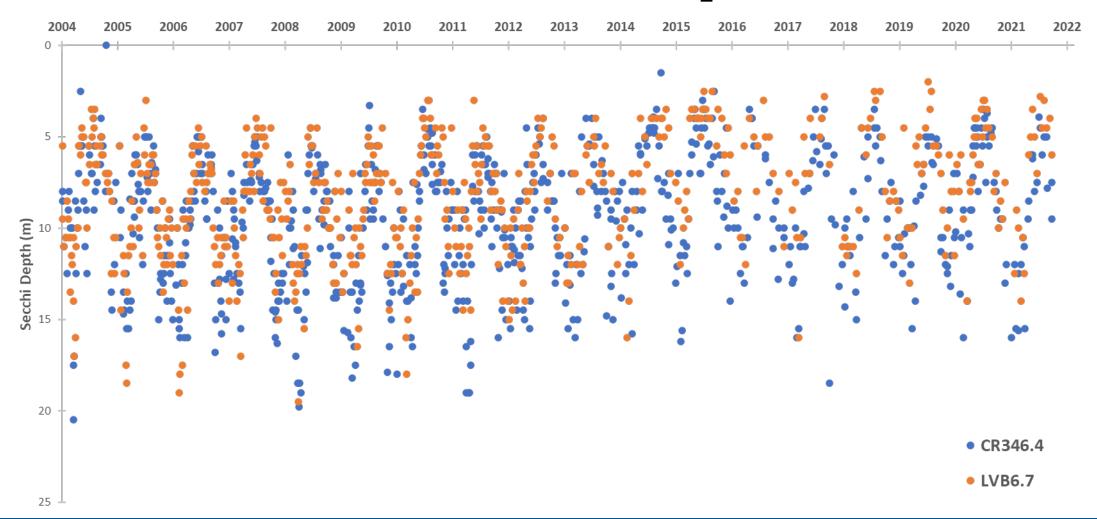


Lake Mead Chlorophyll a



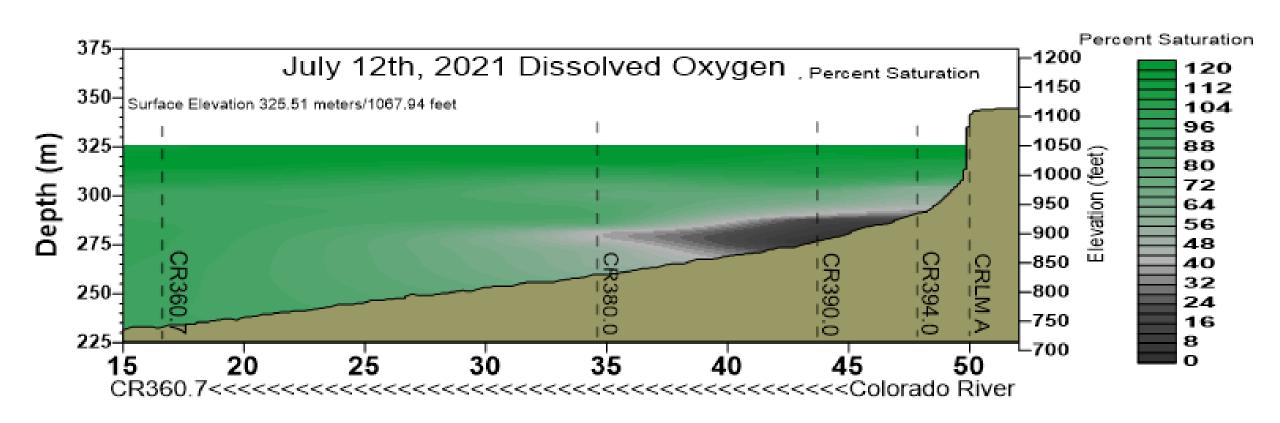


Lake Mead Secchi Depth





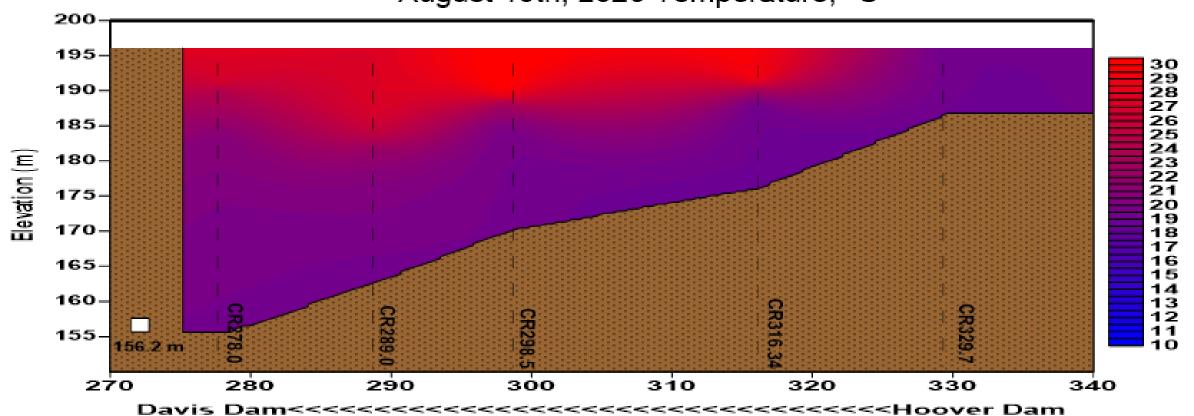
Lake Mead: Colorado Inflow





Lake Mohave Temperature

August 19th, 2020 Temperature, °C

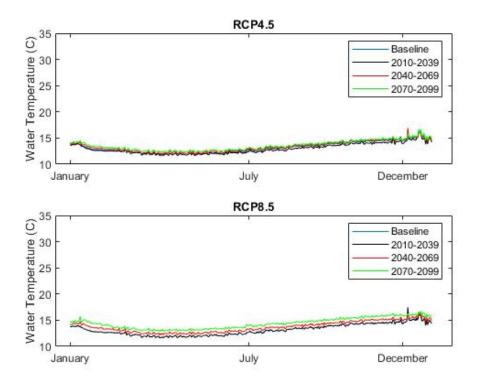


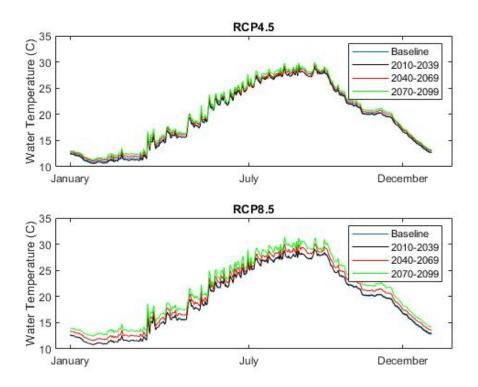


Algal Toxins

- Very few, low concentration detections in Lake Mead
 - Late summer months
- Fairly "consistent" detections in Lake Mohave
 - Most low concentrations
 - Most likely the product of aggregation by wind
 - Most in mid lake locations
 - Most recent detection was high
- This is an emerging problem that will need to be monitored







Model Results: Water Temperature

- 1100 ft WSEL (left); 900 ft WSEL (right)
- RCP8.5/late-century (2070-2099) scenario produces the most warming at L3PS
- Strong seasonal changes at 900 ft WSEL due to location of intake near surface

Questions?

Todd.Tietjen@snwa.com

Las Vegas Valley Watershed Advisory Committee (LVVWAC) Update

CS

October 26, 2021

LVVWAC Update: October 19, 2021 Meeting

03

Received update on Las Vegas Wash Coordination Committee logo Received update on the Clark County Wetlands Park

- The Nature Center is open Tuesday Sunday; programs, field trips and events in full swing
- The Nature Play Corner is under construction and will be completed in winter 2022; will include interpretive signage and wayfinding
- Land management activities to include fencing and barriers, signage and loop trail completion
- Coordination with CC Public Works on several zoning projects
- Working with CCWRD on a sewer line extension

LVVWAC Update: October 19, 2021 Meeting

03

Received update on the Clark County Advisory Board to Manage Wildlife's recommendation to open the Wetlands Park for fishing

- Tour of Wetlands Park was given to the Advisory Board in August; participants included CCWRD, SNWA, CC Park Police, CC Parks & Recreation and Wetlands Park
- MDEP: Non-contact designation
- MDOW: Closed to fishing
- Letters of opposition: Clark County, CCWRD, City of Henderson, City of Las Vegas and City of North Las Vegas
- LVVWAC unanimously approved its letter of opposition

LVVWAC Update: October 19, 2021 Meeting

03

Received update on regional water quality

- Considering drought, water quality remains high in Lake Mead and Lake Mohave
- Short residence time benefits water quality in Lake Mead
- Modeling of Lake Mead is becoming more important considering nearer term conditions in the lake
- Low concentration of algal toxins found in Lake Mead; more consistent detections found in Lake Mohave (emerging problem that will need to be monitored)

Next Meeting

03

January 11, 2022 2 p.m. Location: TBD