NOTICE AND CALL OF MEETING

LAS VEGAS VALLEY WATERSHED ADVISORY COMMITTEE

Wednesday, March 8, 2023 9:00 a.m. MEETING TO BE HELD VIRTUALLY

Join Microsoft Teams Meeting: 1-323-776-6758 / Conference ID: 221 489 043 240

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 5:00 p.m. on March 7, 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 January 10, 2023, and February 9, 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 Revised LVVWAC Bylaws
5.	For Possible Action:	Approve the Las Vegas Wash Long-Term Operating Plan 2023/2024 Budget
6.	For Information Only:	Receive an Update from Wastewater Dischargers
7.	For Information Only:	Receive an Update on the Stormwater Quality Management Committee
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, Chair

Charles Trushel

Las Vegas Valley Watershed Advisory Committee

LAS VEGAS VALLEY WATERSHED ADVISORY COMMITTEE - MARCH 8, 2023 - 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 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

BYLAWS OF THE LAS VEGAS VALLEY WATERSHED ADVISORY COMMITTEE

A. Committee Name

1. The name of this organization is "Las Vegas Valley Watershed Advisory Committee", hereinafter referred to as the "LVVWAC."

B. Membership

- The Membership of the LVVWAC consists of one representative of each of the eight local government or political subdivisions ("LVVWAC Agency or LVVWAC Agencies") identified in the "Amended and Restated Agreement of the Las Vegas Valley Watershed Advisory Committee." The LVVWAC Agencies are the City of Henderson, City of North Las Vegas, City of Las Vegas, Clark County, Clark County Regional Flood Control District, Clark County Water Reclamation District, Las Vegas Valley Water District and the Southern Nevada Water Authority. Each representative of a LVVWAC Agency is hereinafter referred to as a "Member."
- 2. Each Member shall name at least one alternate to represent their respective LVVWAC Agency. An alternate shall only have voting privileges in the absence of the Member and only one vote per LVVWAC Agency will be allowed. Each Member or alternate shall represent the position of their respective LVVWAC Agency on issues concerning the Las Vegas Valley watershed.
- 3. Each LVVWAC Agency is expected to have its Member, or a designated alternate representative, at each meeting.
- 3.4.Each Agency's full interests in the Las Vegas Valley wWatershed, including but not limited to, water, wastewater, and stormwater, are represented by its Member.

C. <u>Functions</u>

The functions of the LVVWAC are to:

- 1. Adopt and maintain regional water quality goals for the Las Vegas Valley watershed and Lake Mead to help protect the quality and quantity of water resources in the Las Vegas Valley watershed and Lake Mead. In adopting regional water quality goals, the LVVWAC may discuss water quality as it relates to wastewater, drinking water and stormwater.
- 2. <u>Provide advice on a cohesive direction and integrated approach to address</u> treatment issues relating to wastewater, drinking water and stormwater.
- 3. Develop and maintain a Regional Water Quality Plan that includes the regional water quality goals and coordinates all plans, policies, documents and efforts related to water quality in the Las Vegas Valley watershed and Lake Mead. The goal of the Regional Water Quality Plan is to recommend mechanisms to enable

- the regional water quality goals to be met to help protect the quality and quantity of water resources in the Las Vegas Valley watershed and Lake Mead.
- 4. Develop and maintain a strategy document that describes the activities each LVVWAC Agency plans to perform to meet the goals of the Regional Water Quality Plan.
- 5. Biennially, in the even year, compile an accomplishments document that summarizes each LVVWAC Agency's activities to satisfy the strategies and goals in the prior two-year period.
- 6. Maintain a cooperative agreement among the LVVWAC Agencies that formalizes the oversight of Las Vegas Wash projects by the LVVWAC.
- 7. Review and approve the Las Vegas Wash Long-Term Operating Plan (LTOP) budget annually to fund actions needed for the operation and maintenance of assets and program attributes created through implementation of the Las Vegas Wash Comprehensive Adaptive Management Plan.
- 8. Maintain an interlocal agreement among the LVVWAC Agencies that formalizes funding allocations for the LTOP budget.
- 9. Biennially, in the even year, review and approve a two-year report of Las Vegas Wash activities.
- 10. Perform any other function necessary or proper in performing the functions __ enumerated in these bylaws and/or the goals listed in the "Amended and Restated Agreement of the Las Vegas Valley Watershed Advisory Committee."
- 11. LTOP funds received from LVVWAC Agencies may only be expended on functions, activities, and associated administrative support for matters within the scope of the LTOP.
- 10.12. Additional LVVWAC funds may be expended on matters outside the scope of the LTOP by unanimous vote of the Members.

D. Officers

- 1. Every year, at its first regular meeting, the LVVWAC shall select one of its Members to serve as Chairperson and one to serve as Vice Chairperson.
- 2. The Chairperson shall review and approve LVVWAC meeting agendas as prepared by project staff, preside over the meetings of the LVVWAC and shall sign documents on behalf of the LVVWAC. In the absence of the Chairperson, the Vice Chairperson shall perform the functions of the Chairperson. In the absence of both the Chairperson and the Vice Chairperson, the responsibility for presiding over the meeting is delegated to the Member alternate for the Chairperson or the Vice Chairperson. In the absence of the Chairperson, Vice Chairperson and both alternates, the responsibility for presiding over the meeting is delegated to the Las Vegas Wash Project Coordination Team Manager.
- 3. The Chairperson shall provide an update on the LVVWAC at quarterly Las Vegas Wash Coordination Committee meetings. In the absence of the Chairperson, the Vice Chairperson shall perform this function, or it can be delegated to the Las Vegas Wash Project Coordination Team Manager.

DI. Meeting Requirements

1. The LVVWAC shall hold twothree regular meetings each year, on the second

- Tuesday of January, April and October at 2:00 p.m., or at any other date or time set by the Chairperson. If the date of a regular meeting falls on a legal holiday, the LVVWAC shall schedule another date, if necessary.
- 2. The LVVWAC may hold special meetings in addition to its regular meetings. A special meeting may be called by the Chairperson at the request of any Member. Any business of the LVVWAC may be transacted at a special meeting.
- 3. Meetings shall be held at SNWA's Molasky building unless chosen differently by the Chairperson.
- 4. Email notice of all LVVWAC meetings, regular and special, shall be sent to all Members and alternates of the LVVWAC. The notice shall contain an agenda listing each item to be considered at the meeting.
- 5. Any Member may request inclusion or exclusion of an agenda item by contacting the Chairperson.
- 6. A final agenda will be posted in compliance with Nevada Revised Statutes Chapter 241. All meetings of the LVVWAC shall conform in all respects to the requirements of the Nevada Open Meeting Law, Chapter 241 of the Nevada Revised Statutes.
- 7. Any meeting of the LVVWAC may recess from day to day or time to time without further notice until the business thereof shall be completed, provided that no recess may be taken beyond the time of the next regular meeting of the LVVWAC.
- 8. A majority (at least five of eight) of the Members of the LVVWAC constitutes a quorum for the transaction of business. Each Member of the LVVWAC has one vote. A vote by a majority of the Members present for a motion is necessary to carry the motion.
- 9. Minutes of the previous meeting shall be delivered to the LVVWAC Members at least three days before the following regular meeting. Any amendments to the minutes of the previous meeting and approval of the minutes will be considered at the following regular meeting.

F. Amendments of Bylaws

1. These bylaws may be amended at any meeting of the LVVWAC only by an affirmative vote by a majority of the Members.

Approved and adopted at the April 19, 202	2March 8, 2023, meeting of the LVVWAC.
Chairperson	Date

PROPOSED FY 23/24 LAS VEGAS WASH LONG-TERM OPERATING PLAN BUDGET

Category	Cost
Erosion & Stormwater	\$1,324,177
Jurisdictional & Regulatory	\$89,811
Public Outreach	\$376,517
Funding	\$80,335
Shallow Groundwater	\$69,002
Environmental Resources	\$700,687
TOTAL OPERATING BUDGET	\$2,640,529
BUREAU OF RECLAMATION CONTRIBUTION*	\$154,580
OTHER CONTRIBUTIONS/GRANTS*	\$34,750
LOCAL CONTRIBUTION	\$2,451,199
SPECIAL PROJECTS & GRANT FUNDING**	\$900,500

^{*} Grant amounts are best estimates as of February 15, 2023.

^{**} Reclamation WaterSMART grant for special restoration project not accounted for in the total operating budget. This project will only go forward if the grant funds are received. There is no financial impact to LVVWAC members.

PROPOSED FY 23/24 LOCAL CONTRIBUTION CALCULATIONS

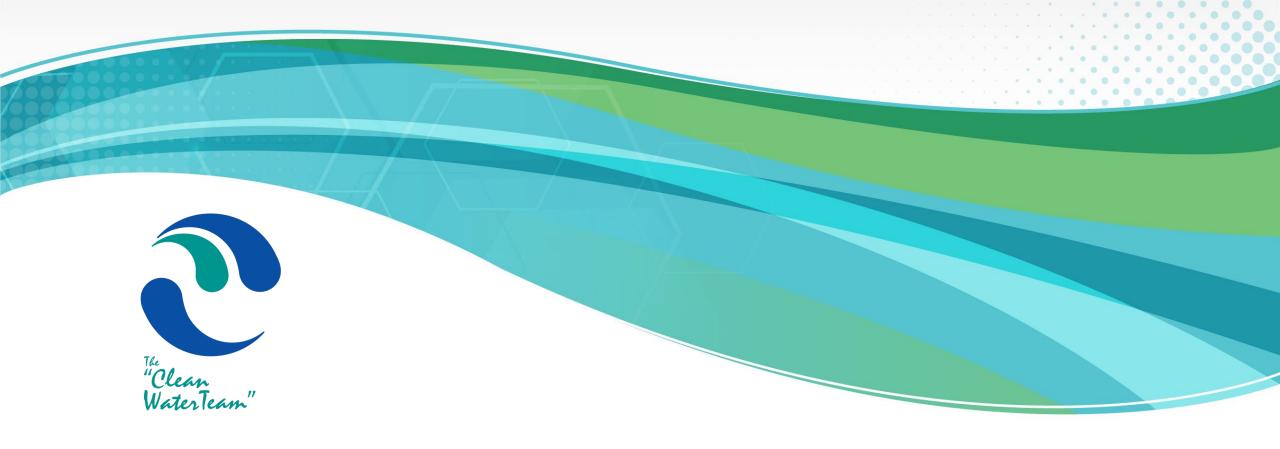
-00/ 6F : 0	\$2,451,199
- 00/ CT	
50% of Erosion &	% of Total
Stormwater	Contribution
\$662,089	25.07408%
\$614,616	
	% of Total
Remaining	Contribution
\$1,978,441	74.92592%
\$1,836,583	
189,330	
	\$662,089 \$614,616 Remaining \$1,978,441 \$1,836,583

PROPOSED FY 23/24 LOCAL CONTRIBUTION DISTRIBUTION

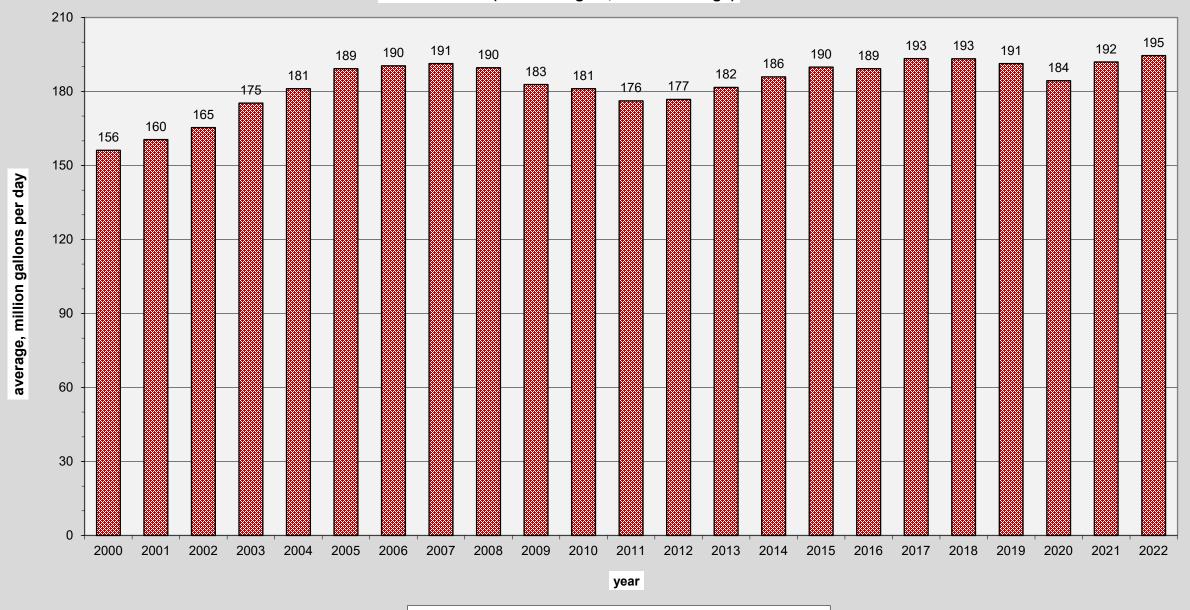
LOCAL CONTRIBUTION	\$2,451,199	
CCRFCD (50% of Erosion & Stormwater minus portion of grants)	\$614,616	
REMAINING LOCAL SHARE	\$1,836,583	
Wholesale Delivery (44%)	\$808,096	
Dischargers* (43%) COH CCWRD CLV	\$789,731 \$105,034 \$432,773 \$176,900	13.3% 54.8% 22.4%
CNLV	\$75,024	9.5%
Clark County (13%)	\$238,756	

^{*} Discharger contributions are based on the two-year running average flow rates reported by the Sewage and Wastewater Advisory Committee to the state (September 2022).

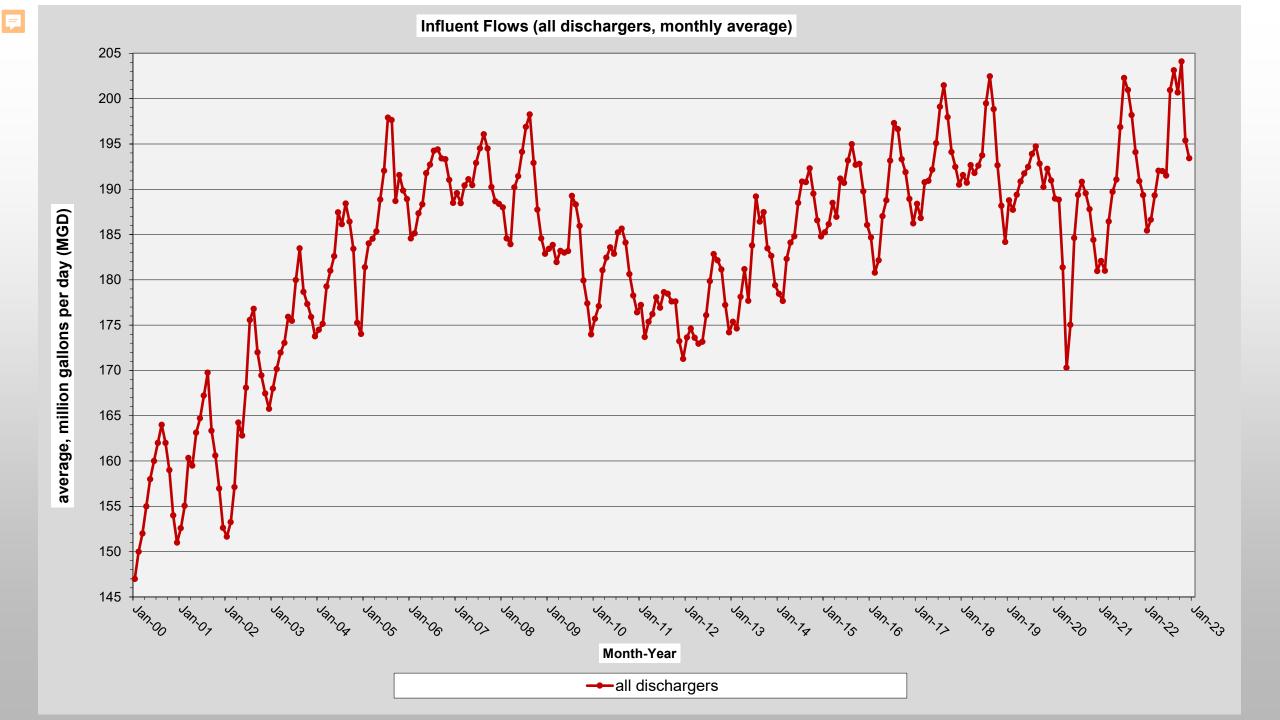
CCWRD UPDATE FOR LVVWAC MARCH 8, 2023 DAN FISCHER

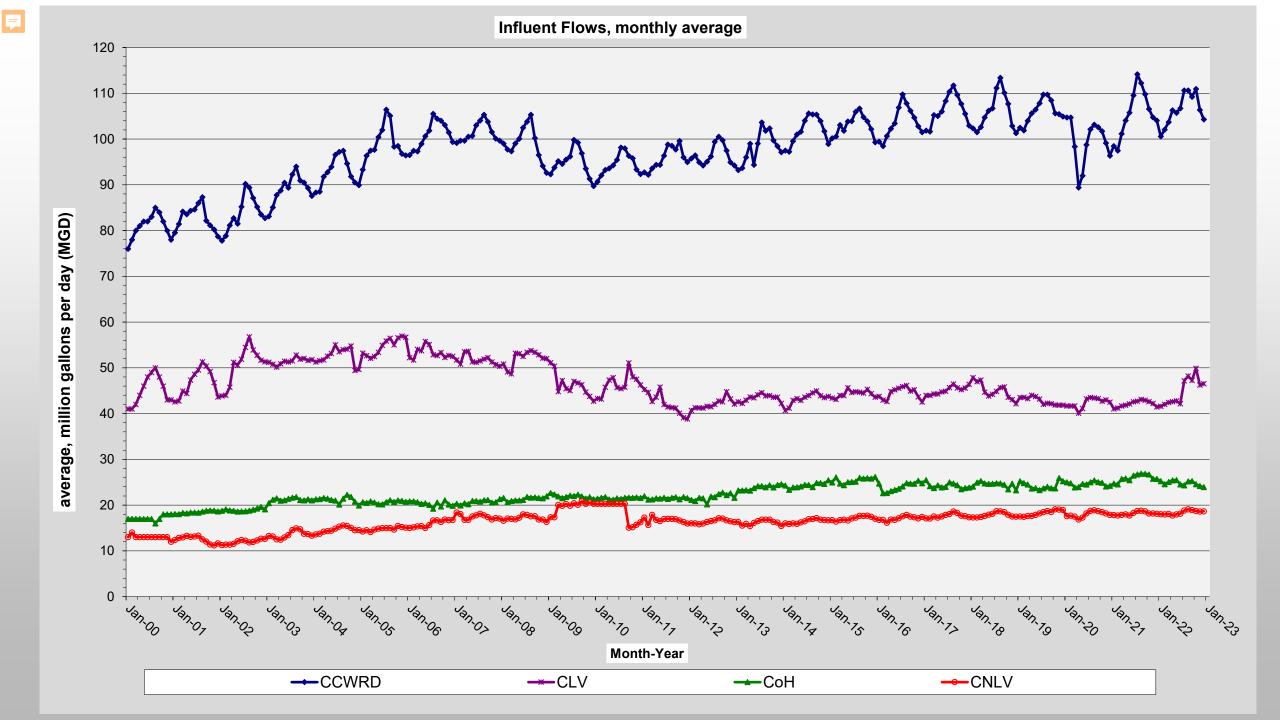


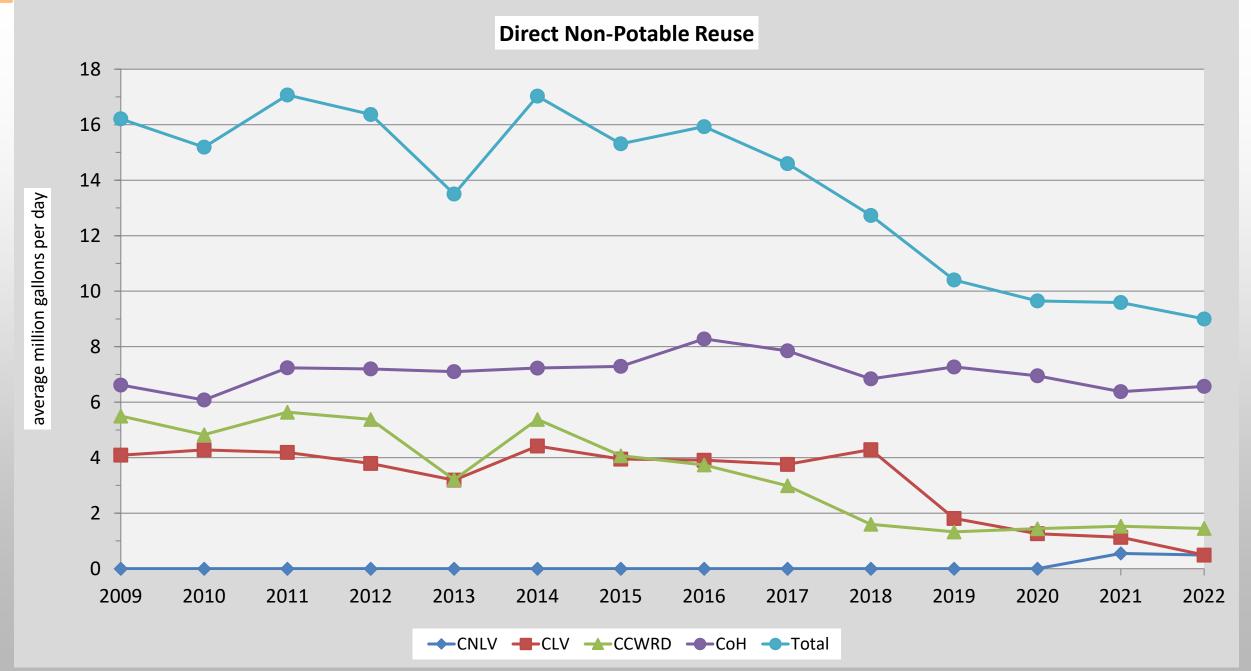
Influent Flows (all dischargers, annual average)



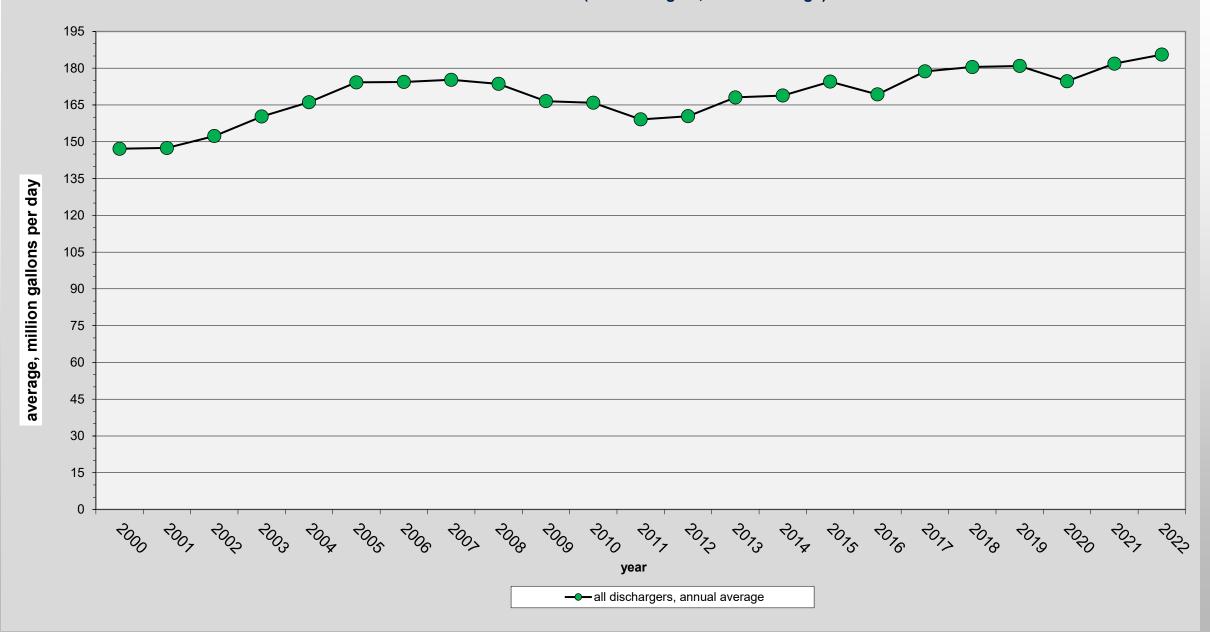
■ all dischargers, annual average



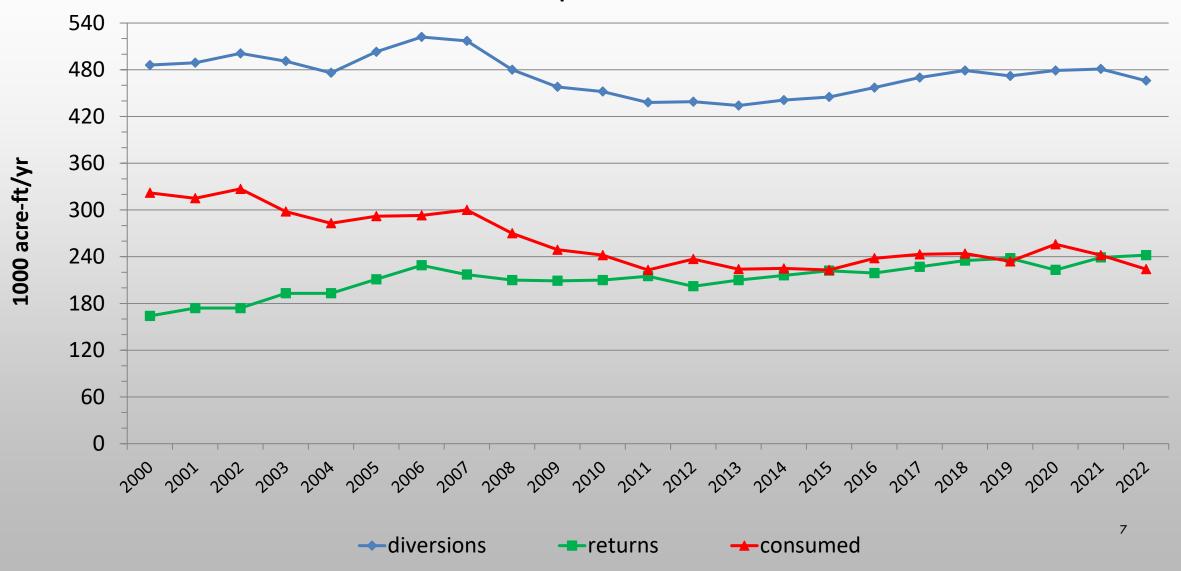




Effluent to Wash (all dischargers, annual average)



Nevada's Consumptive Use of the CO River



IMPACT OF INDOOR CONSERVATION FLOW VS. STRENGTH

	flow influent		strength	
year			sludge cake	
	Mgal/day	change	dry tons/day	change
2018	105.9		98	
2019	106.0	0%	105	7%
2020	99.4	-6%	95	-9%
2021	105.6	6%	104	9%
2022	106.4	1%	111	6%

0.5%



2018 to 2022

13%

2022 COLLECTION SYSTEM ACCOMPLISHMENTS

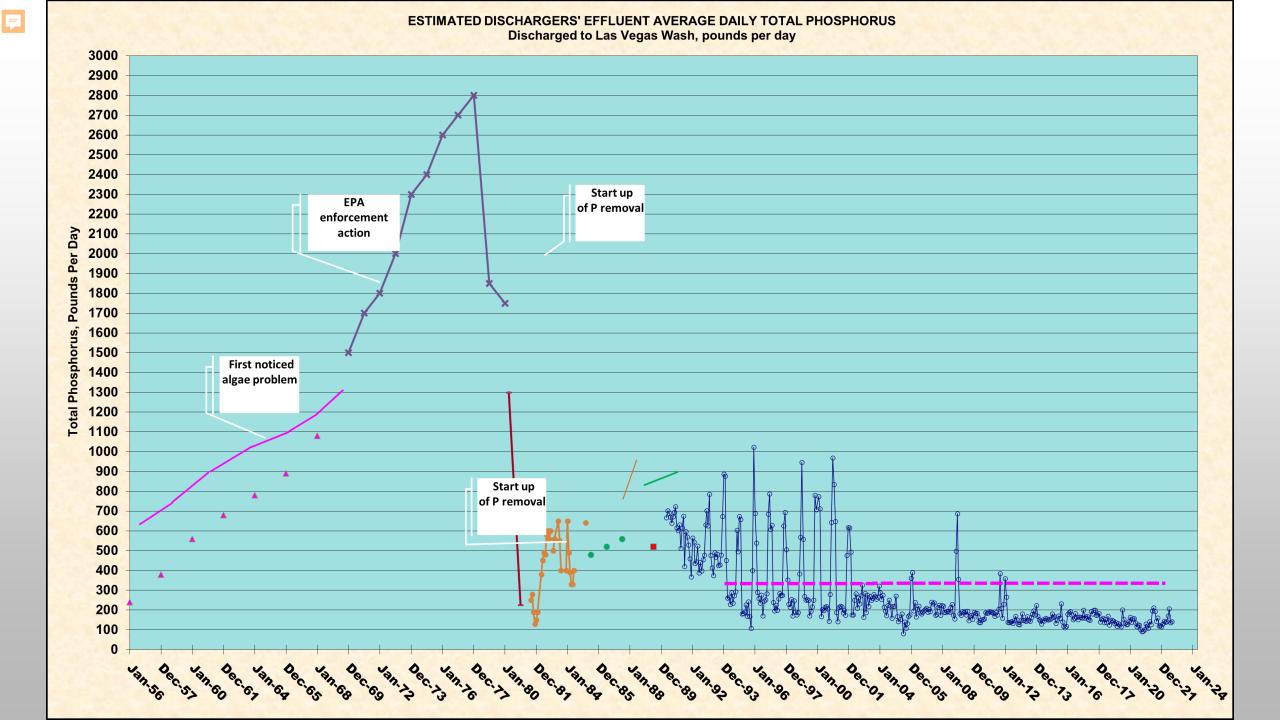
- Effectively maintained:
 - 2300 miles of pipe
 - 50,000 manholes
 - 24 lift stations
- Conducted 6400 FOGG interceptor (sand/oil and grease) inspections
- Experienced 7 SSOs
 - 0.3 SSOs/100 miles of pipe
 - EPA standard is 2 SSOs/100 miles of pipe
- 10 odor complaints related to our collection systems



2022 TREATMENT PLANT ACCOMPLISHMENTS

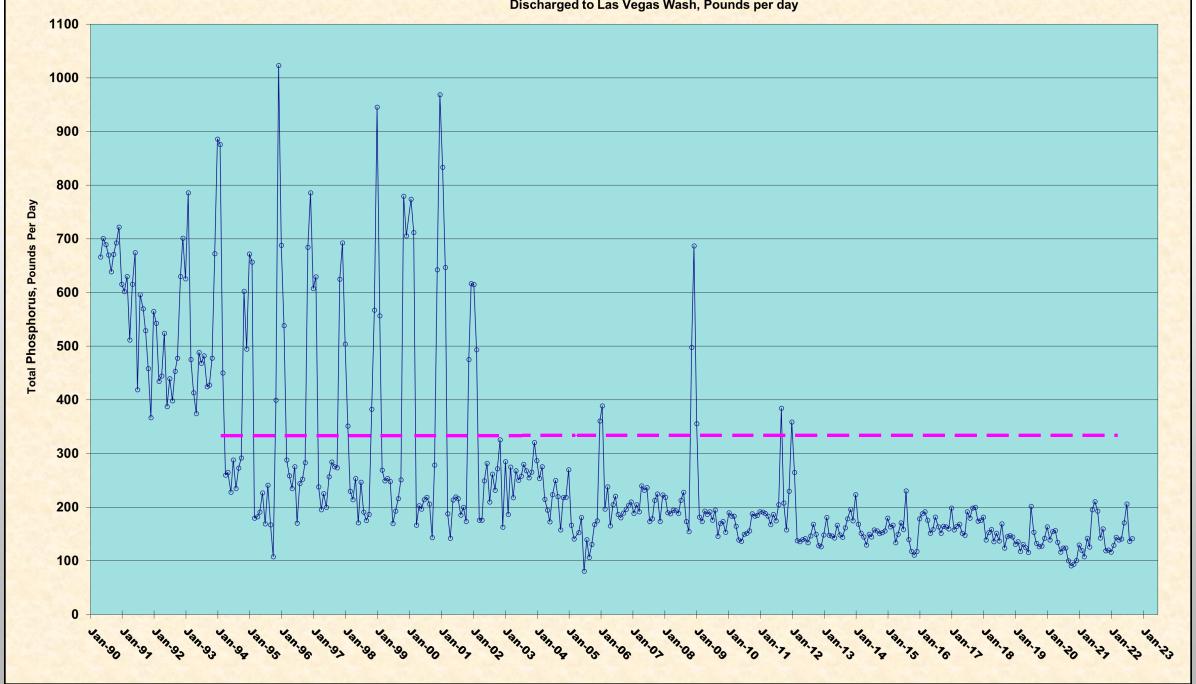
- treated 39 billion gallons of sewage at 6 wastewater treatment plants (for the lovers of zeros that is 39,000,000,000 gallons)
- returned a total of 120,000 acre-ft of reclaimed water to the Colorado River System from our Flamingo and Laughlin plants
- NACWA Peak Performance Awards
 - Flamingo Platinum 11
 - Laughlin Platinum 10
 - Moapa Valley Gold
 - Indian Springs Gold
- Flamingo phosphorus removal, effluent total phosphorus
 - TMDL 0.21 mg/L, internal CCWRD goal 0.10 mg/L
 - \circ Annual avg. 0.06 mg/L, greater than 99% removal
- Raised the rate for direct non-potable reuse water from \$1.05/kgal to \$2.33/kgal to reflect the "value" of water







DISCHARGERS' EFFLUENT AVERAGE DAILY TOTAL PHOSPHORUS Discharged to Las Vegas Wash, Pounds per day





CCWRD CAPITAL IMPROVEMENT PROGRAM

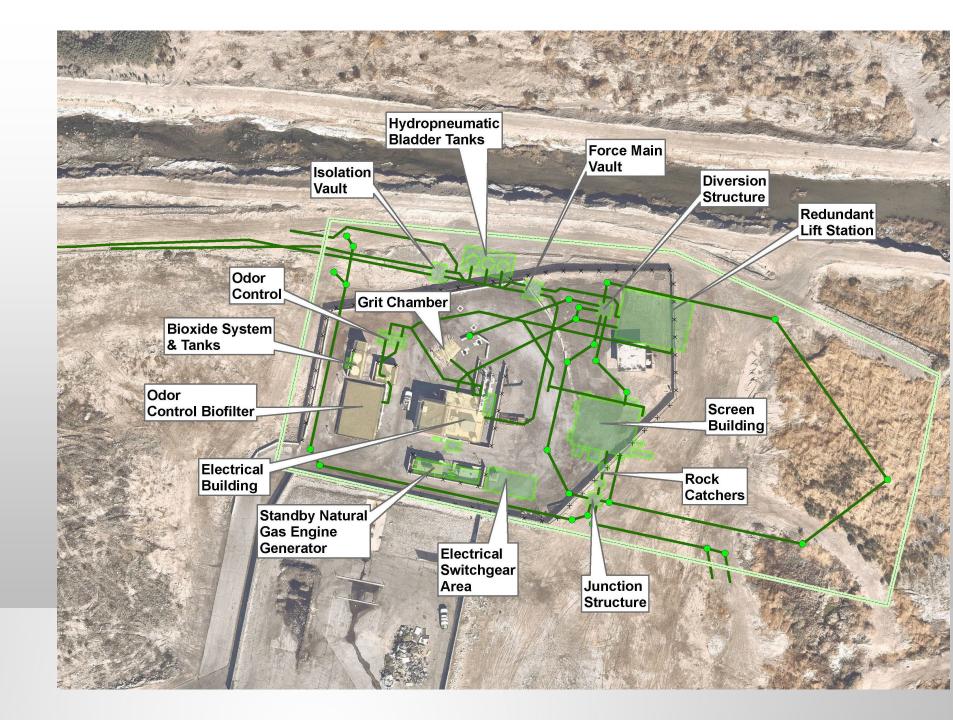
Facility	5 Year CIP FY 23-27		
	\$M	major projects	
Flamingo Water Resource Center	\$670	Preliminary/Primary/Secondary expansions; DAFT; sludge thickening; demolition of abandoned facilities	
LV Valley Collection System	\$390	Whitney and Lincoln Lift Stations; Crosstown Interceptors; Capacity Upgrades; Oversizing	
Outlying Areas	\$36	Laughlin Lift Station and Force Main; Moapa Valley Lift Station and Force Main	
Reclaimed/Reuse	\$4	System Improvements	
O&M Capital	\$31	Plant and Collection System Rehabilitations; Rapid Response	
Administration/Engineering	\$72	Administration, Professional/Engineering Services	
Total	\$1.2 B	13	





WHITNEY LIFT STATION

- \$70M CMAR
- 100% design
- 2023-2026
- New redundant lift station to 12 MGD
- New flood wall
- Rock catchers and screenings
- Electrical and generator redundancy
- New 20-inch force main to plant

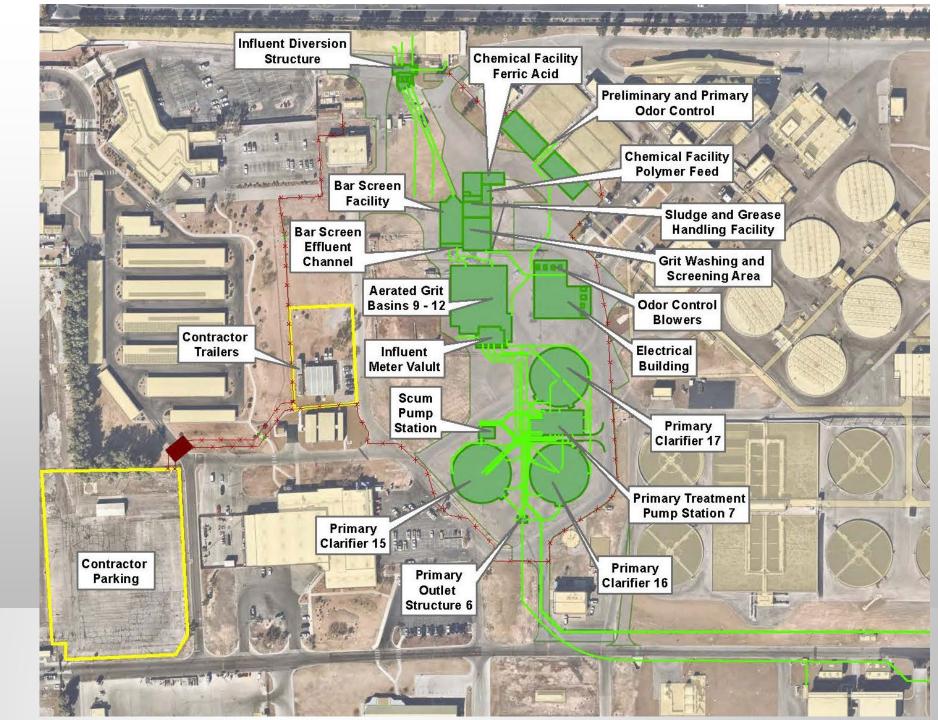






PRELIMINARY AND PRIMARY TREATMENT

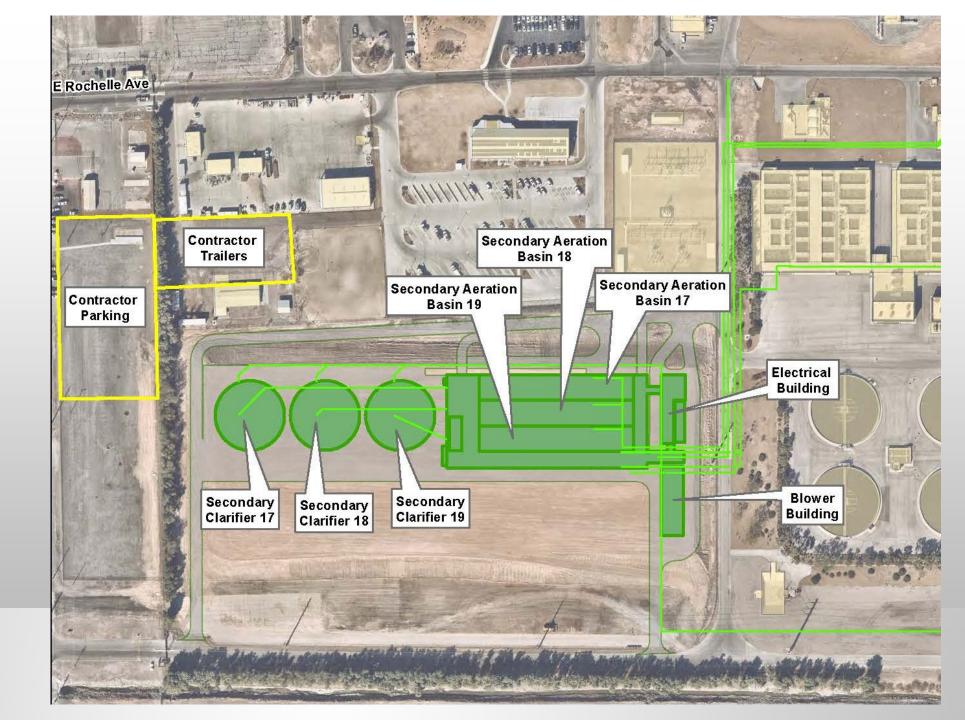
- \$200M CMAR
- 30 MGD
- in construction
- 2022-2026
- New Bar Screen Facility
- 4 Grit Basins
- New Blower Facility
- Odor Control Biofilters
- 3 Primary Clarifiers
- Primary Sludge Pumping Station





SECONDARY TREATMENT

- \$220M CMAR
- 30 MGD
- 100% design
- 2023-2026
- 3 Aeration Basins
- 3 Secondary Clarifiers
- Blower Facility
- Electrical Building





WALT JOHNSON, 1929-2023

- WASTEWATER GIANT
- CONSUMMATE PROFESSIONAL
- TURE GENTLEMAN



the end, questions?

Dan Fischer dfischer@cleanwaterteam.com







Wastewater Infrastructure

WPCF

- 45 MGD Average
- Reuse for two Golf Courses
 - 3 MW Solar Site

DHWRC

- 10 MGD Capacity
- Currently off-line

LMLS

• 1 MGD Average

Collection System

- 1,916Miles of pipeline (8-inch to 104-inch)
 - 46,000+ Manholes







Significant Achievements in 2022

Wastewater Treatment

- 233K service points, 374K ERUs in total
- 16.3 billion gallons treated (45 MGD average)
- 178 million gallons of reclaimed water distributed (1.1% of total treatment), down from 413 MG in 2021
- 66,100 tons of biosolids disposed or repurposed



 WPCF received the NACWA Peak Performance Platinum Award for 23 years of full permit compliance in CY2021



Significant Achievements in 2022

Collections System

- 492 miles of sewer lines cleaned (~2.6M linear feet)
- 21 SSO events
- Completion of Phase 7 of the Large Diameter Pipeline
 Assessment Program 5 Year Cycle which performed condition
 assessment on 1,275 miles of pipeline and associated
 structures with recommendations for critical defects valued at
 \$44.5M.
- Approximately 4 miles of new sanitary sewer constructed



Significant Achievements in 2022

Sewer Rate Study

- Passed by City Council on September 7, 2022
- 4% per year + CPI for 10 years for both service and connection fees
- Provides the rate increases needed to meet our Capital Project (treatment plant and collection system capacity increases to meet growth demands and rehab of aging infrastructure) and Operational needs (rates had not been increased beyond CPI since 2005)



Collection System Rehabilitation





WPCF Capital Improvements

Projects Completed

- Digester Condition Assessment and Rehabilitation (\$37M)
- Biological Nutrient Removal Facility (\$14M)
- Clark Count SID Project for Desert Inn Road (\$2.4M)

Construction Phase

- Filtration Facility Rehabilitation (\$28M)
- Process Air Improvements (\$18M)
- SCADA System Controls Upgrades (\$20M)

Design Phase

- Dewatering Facility Rehabilitation (\$25M estimate, @50%)
- Headworks Facility Rehabilitation (\$45M estimate, @0%)
- WPCF and Solar Site Security Improvements (\$8.5M estimate, @90%)



Challenges and Opportunities

Budget

- Inflationary pressures
- Significant chemical cost increases
- Increased construction related costs, long lead times delaying projects

Staffing

- Ongoing difficulty filling technical trades positions
- Focus on succession planning and employee development

Security of physical and virtual environments

- Physical facilities hardening and future planning
- Acts to target and disable critical infrastructure
- Cyber related incidences increasing





Utility Services

LVVWAC Annual Update: March 8, 2023

Wastewater Treatment

- 9 billion gallons treated
- 2.4 billion gallons reclaimed water delivered
- 0.0 permit violations
- Received NACWA Platinum Award for 18 years of full permit compliance







- Reclaimed Water Usage Reduced
- 2007 peak of 6,060 acre feet
- 2022 reduced to 4,087 acre feet
- 2022 Boulder Highway landscape conversion.
- 2022 Palm Mortuary no longer reclaim customer.
- Combined Reduction of 226 Ac/ft.

- Employee Recruitment and Development
- 15% Technical staff replaced in 2021 and through December 2022
- Assistant Manager recruited

T2P Methodology

Prep T2P Team & Critical Event Timeline Conduct Job Classification Survey T2P Facilitators · Determine Difficulty, Importance & Frequency for · Each employee assigned to a job classification each Essential Function · Used to plan, schedule & document training Section Manager & Position Supervisor · Maintain current training & qualification status

- Subject Matter Experts (SMEs) · Partners and Staff (As required)
- Develop Critical Event Timeline

Review Job Classification Information

- Job Description
- · DUS Body of Knowledge (BOK):
- o Safety Requirements & Standards
- o Industry Competency Models
- o Training Materials & Resources
- o Qualification Documents
- o Standard Operating Procedures (SOPs)
- o Operations & Maintenance (O&M) Manuals

Validate Job Classification Information

- · Job Classification Master Training List:
- o Knowledge Areas
- o Essential Functions
- o Training & Development Timeline
- o Technical & Non-Technical Training

- Determine Training Strategy: o Informal Training
- o Formal Training
- o Formal Just-In-Time Training Analyze & Validate Survey Results

Develop Training Plans

- Training Development Tools:
- o Course Card o Course Planner
- o Course Syllabus

Create Utility Course Catalog

- Consolidated list of all Job Classification Course Cards Maintained by Workforce Development

Updated System Of Record

Update Systems of Record

Job Classification Information

· Technical & Professional Information

 Program Tools Systems of Record

Training Plans

Create Employee Qualification Card

Create Career Advancement Plan

Cross-reference with Employee Qualification Card

Manage Body of Knowledge

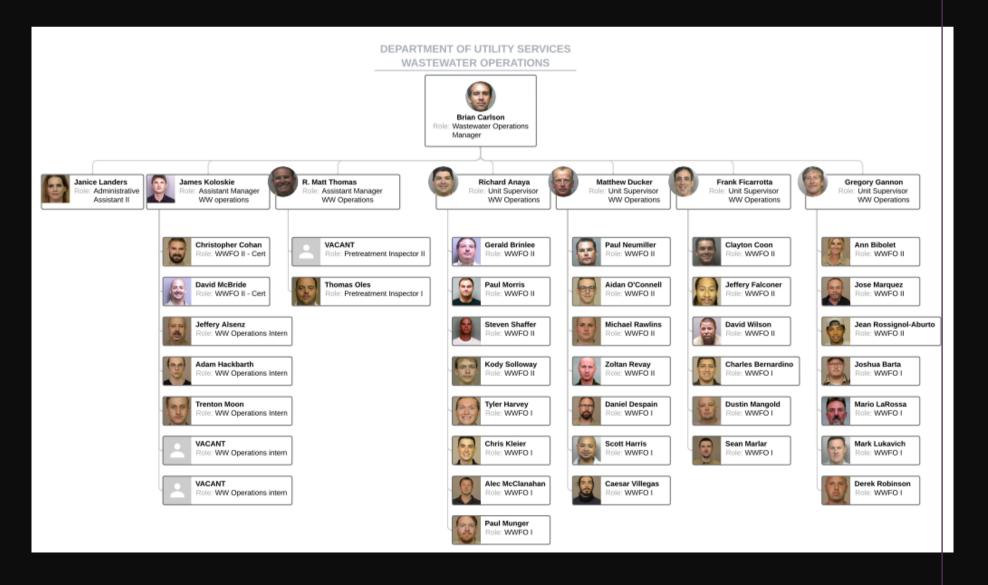
Establish & Review Career Advancement Plan

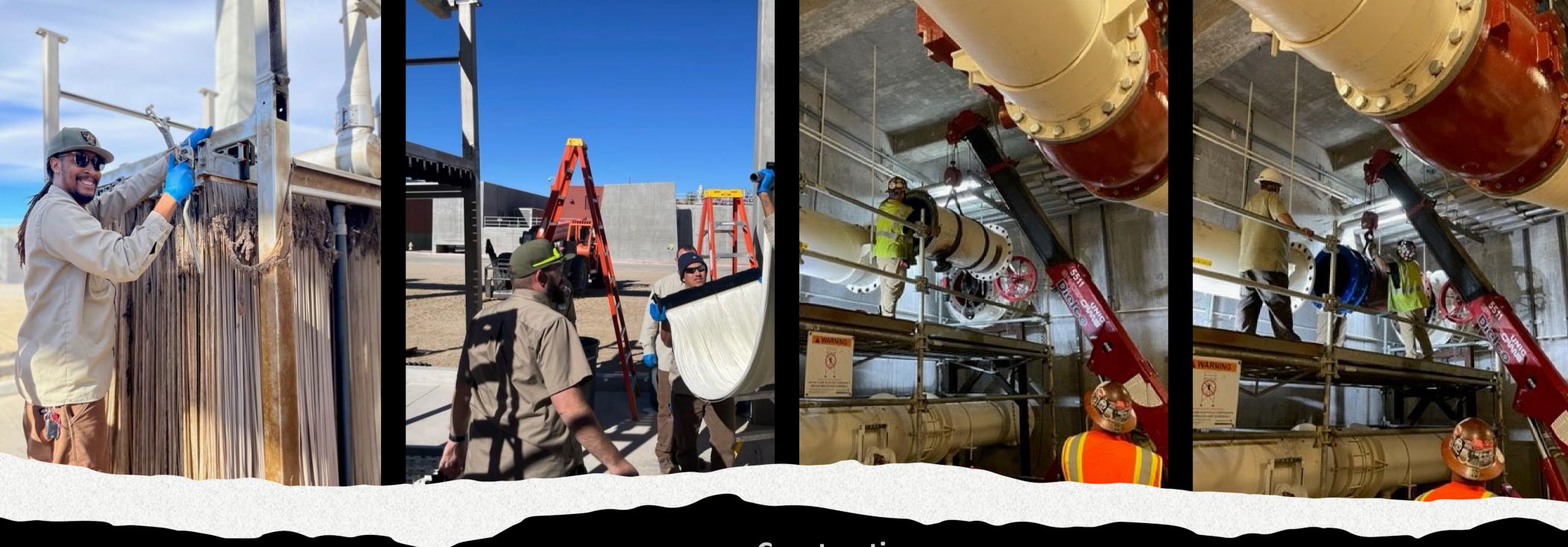
Build Capability & Capacity

· Manage Employee Training & Development

Department of Utility Services, Workforce Development Program

V2.2 28JA





- Construction
- **SWRF** Membrane replacement
 - Replaced 3 trains. Part of 3-year staged project to replace membranes with more efficient equipment
 - 12 cassettes/546 modules
- WRF
 - Replacement of 24" flow meter with in house talent!

Opportunities

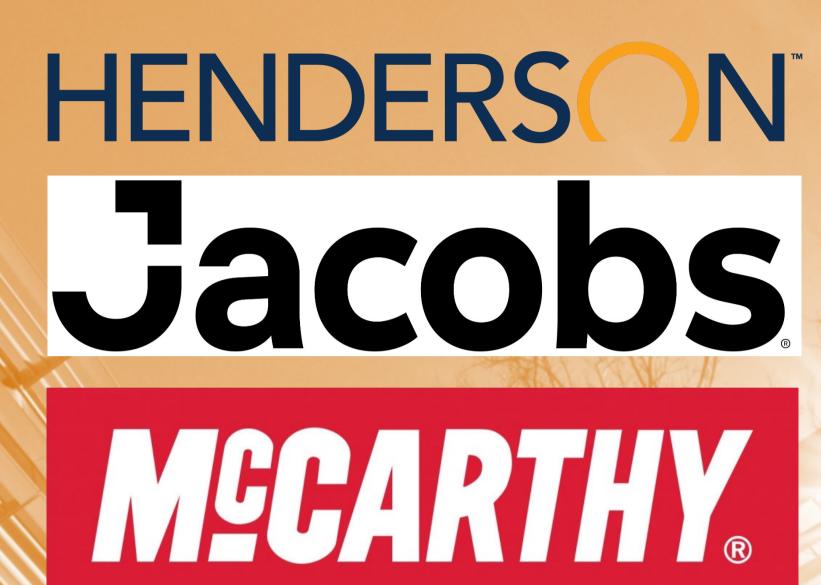
- Upcoming Opportunities in 2023
- Staffing Workforce training due to turnover
- Growth Plant capacity expansion, lift station construction
- Rehabilitation Aging facilities
- Parts and Supplies lead times and availability
- Water Conservation do our part!



Opportunities

Phase 4 KRSWRF Plant Expansion nearing design completion

CMAR delivery process
Construction in and through live processes
8 mgd capacity expansion, select process enhancements
Activities through 2026







THANK YOU



LVVWAC WASTEWATER DISCHARGERS UPDATES 2023





WATER RECLAMATION FACILITY

- WATER RECLAMATION FACILITY CAME ONLINE JUNE 2011
- MEMBRANE BIOREACTOR FACILITY WITH ENHANCED BIOLOGICAL NUTRIENT REMOVAL
- 25 MGD ADF CAPACITY
- 6 BIOREACTORS AND 12 MEMBRANE TRAINS
- AVERAGE DAILY FLOW OF 19.7 MGD
- FINAL EFFLUENT DISCHARGES TO THE LAS VEGAS WASH
- SOLIDS ARE DEWATERED UTILIZING GBT'S, CENTRIFUGES AND DISPOSED OF IN THE APEX LANDFILL





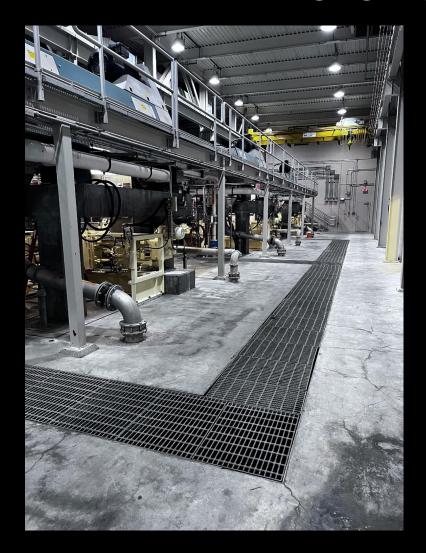
PAST, PRESENT AND UPCOMING PROJECTS

- COMPLETED SLUDGE CONVEYANCE PROJECT
- COMPLETED MEMBRANE RECOATING PROJECT
- BROKE GROUND ON OUR FLOW EQUALIZATION BASIN
- BROKE GROUND ON OUR SEPTAGE RECEIVING STATION
- BEGAN MEMBRANE CASSETTE EXPANSION INSTALLATION
- BEGINNING THE DESIGN AND BIDDING PROCESS OF OUR BIOREACTOR COATING REFURBISHMENT





SLUDGE CONVEYANCE



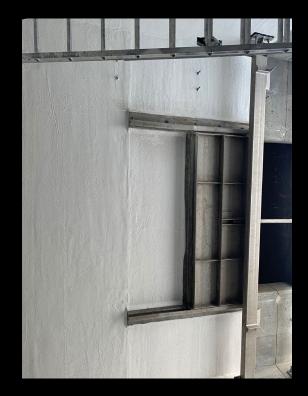
- REPLACEMENT OF MOYNO PREGRESSIVE CAVITY PUMPS WITH SCHWING PISTON PUMPS
- ELIMINATION OF LUBE PUMPING SYSTEM
- MINIMIZE MAINTENANCE AND REPAIR ASSOCIATED WITH PROGRESSIVE CAVITY PUMPS



MEMBRANE COATING

- REPLACE AND RESTORE FAILING COATINGS
- TNEMEC MULTI COAT SYSTEM









- 2.2 MG PARTIAL EQUALIZATION BASIN
- DAMPEN DIURNAL FLOWS AND FINE TUNE RECIRCULATION RATES

FLOW EQUALIZATION BASIN



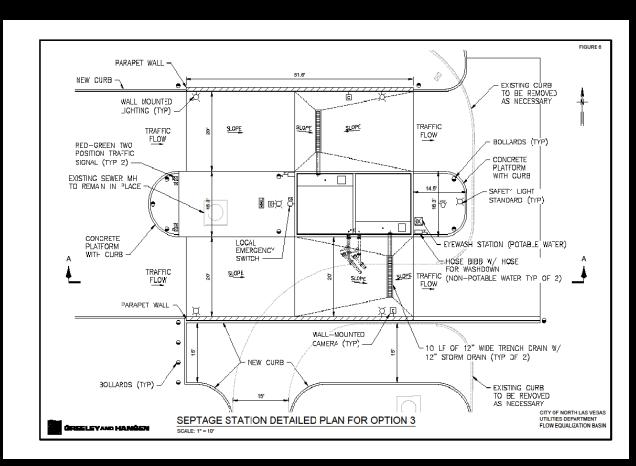




SEPTAGE DUMP STATION

- CNLV TO OFFER DUMP STATION FOR APEX CUSTOMERS UNTIL INFRASTRUCTURE IS IN PLACE
- MULTIPLE TRUCK LOAD OUT
- ANTICIPATING 59 LOADS A WEEK BY THE END OF SUMMER





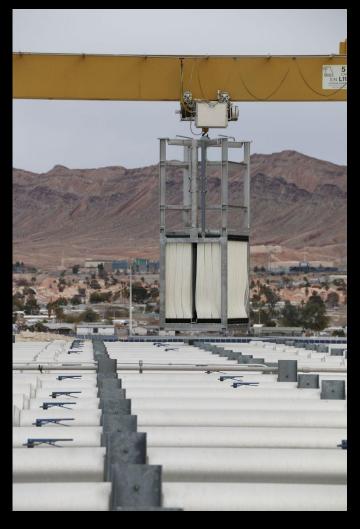


MEMBRANE CASSETTE EXPANSION AND REPLACEMENT

- ADDING 36 ADDITIONAL CASSETTES TO 3 EMPTY TRAINS
- 52 MODULE CASSETTES OF 430SQ FT ZEEWEED 500D MODULES
- EXPAND AVERAGE DAILY FLOW CAPACITY FROM 25MGD TO 35MGD
- BEGIN FIRST REPLACEMENT OF 16 48M CASSETTES WITH 12
 52M CASSETTES, OCTOBER 2023









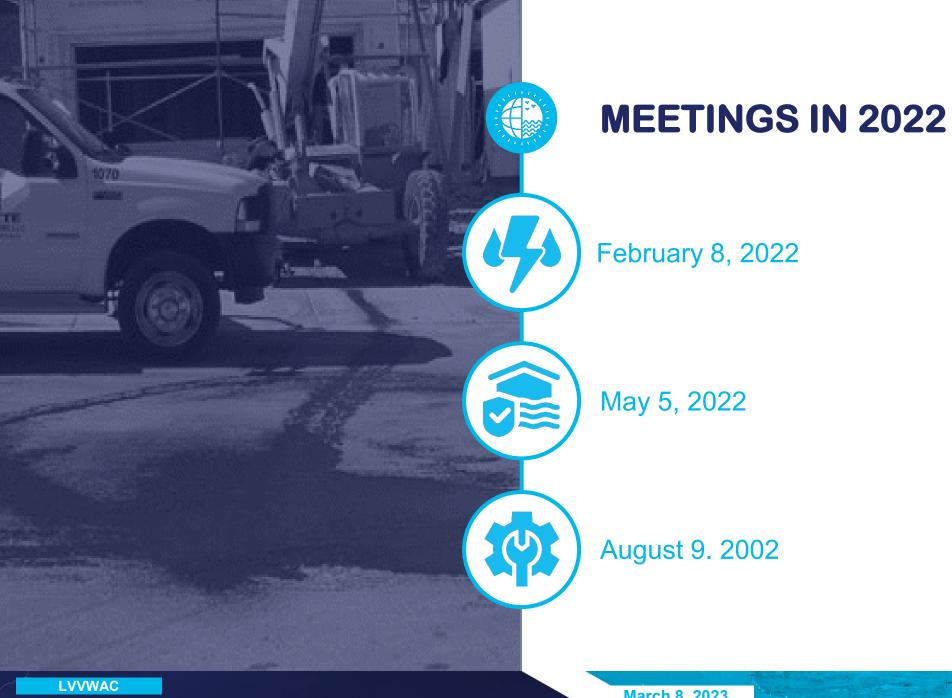
BIOREACTOR COATING PROJECT

- BIOREACTOR COATING PROJECT TO ENTER BID PHASE
- PROCEED WITH 1 OR 2 BIOREACTORS PER YEAR













MEETINGS IN 2022

The SQMC August 9, 2022 meeting was cancelled

Standing items included a review of quarterly reports, wet weather and dry weather monitoring reports, and updates from the Nevada Division of **Environmental Protection and other stakeholders**

Special topics included updates on Lower Las Vegas Wash, consulting services RFP for the stormwater program and presentation of the 2021 Annual Report



KEY ACTIVTIES

Draft Construction General Permit



Draft Municipal Separate Storm Sewer System (MS4) Permit



Site-specific Criteria for Selenium and Beneficial Use Designations for Channels Tributary to the Las Vegas Wash



DRAFT CONSTRUCTION GENERAL PERMIT (CGP)

Construction projects greater than 1 acre are required to obtain coverage under the Nevada **Construction Stormwater General Permit**

Permit is required to be renewed by the Nevada Division of Environmental Protection (NDEP) every five years



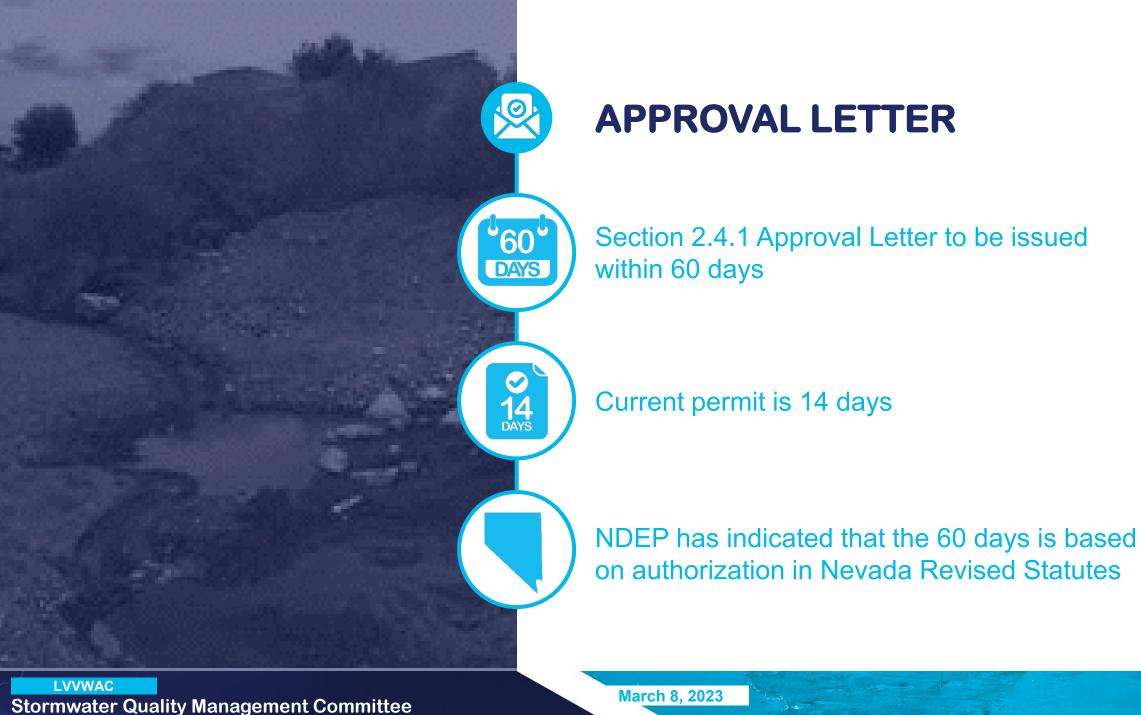


DRAFT PERMIT

On June 14, 2021, NDEP distributed a draft of the revised CGP for review by various stakeholders

Permittees and other stakeholders have provided multiple rounds of comments on the draft permit

While NDEP was responsive to a number of concerns expressed by the Permittees reviewing the permit, there remain concerns with the current version







INCIDENTAL DISCHARGE

Allowable Non-Stormwater Discharges and Allowable Non-Stormwater Incidental Discharges

It is NDEP's position that these provisions would essentially prohibit the intentional discharge of groundwater, potable water line flushing, and potable water well flushing

Applicants would be required to obtain a *de minimis* discharge permit for even minor discharges





PARAMETER LIMITS

Parameter limits for Incidental Discharges listed in Appendix B of the draft CGP should be revised back to the current approach

Many projects will be required to conduct costly monitoring that will result in noncompliance with the permit limits listed for incidental discharges





NEXT STEPS

NDEP held a public hearing on November 16, 2022

Permittees requested a follow-up meeting with NDEP on December 6, 2022





DRAFT MS4 PERMIT

Currently operating under the permit that was issued in 2010

Current permit expired in 2015 but was administratively extended by NDEP until a new permit can be developed

On April 13, 2021, NDEP distributed a draft of the new permit to the Permittees for their review and comment



DRAFT MS4 PERMIT

Bulk of the permit was largely unchanged from the previous permit

On June 30, 2021, the Permittees met with NDEP to review comments on the permit

NDEP provided a revised draft of the MS4 permit which incorporated most of the Permittees requested changes



DRAFT MS4 PERMIT

NDEP submitted a draft of the MS4 permit to EPA in September 2022

NDEP has received comments back from EPA but has not shared those comments with the Permittees yet





SITE-SPECIFIC CRITERIA

In December, 2019, the Nevada State Environmental Commission gave the NDEP three years to develop and propose site-specific criteria for selenium in the Las Vegas Wash

The District worked with NDEP and an ecotoxicology consultant team to meet this deadline





SITE-SPECIFIC CRITERIA

NDEP held a public workshop and met with EPA on two regulatory petitions related to the project in October 2022

First petition established site-specific criteria for selenium in the Las Vegas Wash

Second petition established beneficial uses for channels tributary to the Las Vegas Wash





REGULATORY PETITIONS

Proposed site-specific criteria was 6.0 µg/l for flowing water and 6.3 µg/l for non-flowing water (i.e. lakes and ponds)

Current statewide standard is 3.9 micrograms per liter

Nevada State Environmental Commission adopted both petitions on December 14, 2022





NEXT STEPS

Review and comment by EPA





QUESTIONS?

