



FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: GREAT BASIN WATER CO.

1240 EAST STATE ST S-115
PAHRUMP, NV 89048

Permit Number: NS2005503

Permit Type: GROUNDWATER DISCHARGE

Designation: GROUNDWATER

New/Existing: EXISTING

Location: THE PROPERTY, NYE
500 S. GLEN OAKS #01; MAIN POND PUMP HOUSE., PAHRUMP, NV 89048
LATITUDE: 36.194478, LONGITUDE: -116.005067
TOWNSHIP: T20S, RANGE: R53E, SECTION: S22

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	EFFLUENT DISCHARGED INTO HOLDING PONDS	External Outfall	002	36.1940	-116.0051	GROUNDWATER
002	RAPID INFILTRATION BASINS	External Outfall		36.1958	-116.0048	GROUNDWATER
003	IRRIGATION SYSTEM FOR DISCOVERY PARK	Land Application Site		36.1961	-116.0067	GROUNDWATER
004	LAKEVIEW GOLF COURSE	Land Application Site		36.1790	-115.9878	GROUNDWATER
005	PAHRUMP VALLEY HIGH SCHOOL	Land Application Site		36.1901	-116.0061	GROUNDWATER
006	SUM TOTAL OF OUTFALLS 001-003	Sum		36.1940	-116.0051	GROUNDWATER

Permit History/Description of Proposed Action

The Permittee, Great Basin Water Co., has applied for the renewal of permit NS2005503 for The Property, being within a portion of Discovery Park, located at 500 S. Glen Oaks #01, Pahrump, in Nye County, Nevada. The Permittee proposes to continue to use reclaimed water to irrigate an open space park, and associated landscaping, along with filling duck ponds falling within the park’s boundary. The reclaimed water is supplied by Great Basin Water Company’s (GBWC) Wastewater Treatment Plant #3 (WWTP #3)(permit NS0089063). The Property will be authorized to use the effluent for reuse or storage in various ponds onsite, along with sending portions of the water to Lakeview Golf Course (NS2004518) and Pahrump Valley High School (NS2019514).

This permit was first issued on September 30, 1997. The most recent permit was issued on October 01, 2016, and expired on September 30, 2021; the permit has been administratively continued since.

Facility Overview

The Property was the former site of the 160-acre Willowcreek Golf Course, which closed in August 2009. It is now operated as an open space park by Great Basin Water Co. The Property/Discovery Park includes walking trails (former cart paths) and several of the original water features (e.g. duck ponds). GBWC WWTP

#3 (permit NS0089063) supplies tertiary treated, denitrified, and disinfected reclaimed water which meets Category B bacteriological quality per Nevada Administrative Code (NAC) 445A.276 to The Property. Improvements by GBWC includes two aerated, lined reservoirs (the second being newly constructed to the southwest of Pond #9) which distribute reclaimed water between this park, Lakeview Golf Course (NS2004518), and Pahrump Valley High School (NS2019514). The lakes/ponds at The Property/Discovery Park also provide a portion of winter effluent storage for GBWC WWTP #3, with the rapid infiltration basins serving as secondary storage for irrigation use or during times when GBWC's WWTP #3 has limited capacity due maintenance activities. The main receiving ponds are also intermittently supplied with supplemental groundwater which is blended with effluent and supplied for irrigation when extra water is needed. Monthly bird watching outings to the Discovery Park are hosted by the Red Rock Audubon Society, which has been awarded an environmental beautification grant to plant native trees and a pollinator garden.

Construction has been completed of the additional pond next to Pond #9 along with the two overflow ponds being converted to Rapid Infiltration Basins (RIBs). The Construction Quality Assurance (CQA) letter and wet-stamped record drawings were received on March 16, 2020, and acknowledged by the Division on December 20, 2020. Monitoring wells were not required due to the level of treatment done at GBWC's WWTP #3, the groundwater level, and the RIBs actual applied usage periods.

Reclaimed Water Management Plan (RWMP) (formerly known as an Effluent Management Plan) was last reviewed and approved by the Division on July 5, 2015. The Technical, Compliance, and Enforcement (TCE) Branch of the Bureau of Water Pollution Control requires RWMPs be updated every two (2) permit cycles which equates to every ten (10) years; therefore, an updated RWMP will need to be submitted to the Division for review and approval by July 5, 2025. The RWMP shall follow guidance document, WTS1B General Design Criteria for Preparing a Reclaimed Water Management Plan.

Outfall Summary

Outfall 001 – This outfall is for the discharge of reclaimed water into two receiving ponds for distribution between The Property, the rapid infiltration basins (RIBs), or to down system users (Lakeview Golf Course, and Pahrump High School).

Outfall 002 - This outfall is to monitor and report any reclaimed water diverted to the rapid infiltration basins (RIBs).

Outfall 003 - This outfall is to monitor and report any reclaimed water diverted to the irrigation system that serves the Discovery Park (previously Willow Creek Golf Course).

Outfall 004 - This outfall is to monitor and report any reclaimed water delivered to the Lakeview Golf Course (NS2004518).

Outfall 005 - This outfall is to monitor and report any reclaimed water delivered to Pahrump Valley High School (NS2019514).

Outfall 006 - This outfall is for the measurement of the sum total of reclaimed water being delivered to the system, being the total of water discharged through Outfalls 001-003.

Effluent Characterization

Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from the years July 2019 to June 2024, was reviewed as part of this permit renewal process. The long-term average discharge flow rate for Outfall 001 was 0.84 million gallons per day (MGD). The daily maximum discharge flow rate for Outfall 001 was limited to 1.5 MGD, but now applies to Outfall 001 through Outfall 003. There were no reported exceedances for this limit.

The GBWC WWTP #3 provides tertiary treated, denitrified, and disinfected reclaimed water which meets Category B bacteriological quality per Nevada Administrative Code (NAC) 445A.276 to The Property;

therefore, the reclaimed water should meet, at a minimum, a daily maximum fecal coliform of 23 colony forming units (CFU) / 100 mL and a 30-day geometric mean of 2.2 CFU / 100 mL. The long-term average for the daily maximum fecal coliform reported was 3.5 CFU / 100 mL. There were three (3) reported instances of the daily maximum fecal coliform being over 23 CFU / 100 mL. There were also two (2) reported instances of the 30-day geometric mean being over 2.2 CFU / 100 mL.

Total nitrogen levels reported over the last five years were below the Profile 1 threshold with no instances of exceedance during that time.

Pollutants of Concern

Pollutants of concern are any pollutants or parameters that are believed to be present in the discharge and could affect or alter the physical, chemical, or biological condition of the receiving water. Common pollutants of concern for denitrified reclaimed water are fecal coliform and total nitrogen.

Receiving Water

Receiving water is groundwater of the State via percolation. Depth to groundwater at the site is approximately 100 feet below ground surface (bgs).

Compliance History

The facility was in substantial compliance during the July 2019 to June 2024 reporting period.

Proposed Effluent Limitations

The discharge shall be limited and monitored by the Permittee as specified below.

Re-use Discharge Limitations Table for Sample Location 001 (Effluent Discharged Into Holding Ponds) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Coliform, fecal, colony forming units ^[1]	30 Day Geometric Mean		<= 2.2 Most Probable Number per 100ml T (MPN/100mL)	Effluent Gross	001	Monthly	DISCRT
Coliform, fecal, colony forming units ^[1]	Daily Maximum		<= 23 Most Probable Number per 100ml T (MPN/100mL)	Effluent Gross	001	Monthly	DISCRT
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER
Nitrogen, total ^[1]	30 Day Average		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	DISCRT
Nitrogen, total ^[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	DISCRT

Notes (Re-use Discharge Limitations Table):

1. Fecal coliform and total nitrogen levels can be secured from the sampling data reported by Utilities Inc. of Great Basin Water Company's Plant #3 under permit NS0089063.

Re-use Discharge Limitations Table for Sample Location 002 (Rapid Infiltration Basins - External Outfall) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	002	Continuous	METER
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	002	Continuous	METER

Re-use Discharge Limitations Table for Sample Location 003 (Irrigation System For Discovery Park - Land Application Site) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	003	Continuous	METER
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	003	Continuous	METER

Re-use Discharge Limitations Table for Sample Location 004 (Lakeview Golf Course - Land Application Site) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	004	Continuous	METER
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	004	Continuous	METER

Re-use Discharge Limitations Table for Sample Location 005 (Pahrump Valley High School - Land Application Site) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	005	Continuous	METER
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	005	Continuous	METER

Re-use Discharge Limitations Table for Sample Location 006 (Sum Of Outfalls 001-003) To Be Reported Monthly^[1]

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	30 Day Average	<= 1.50 Million Gallons per Day (Mgal/d)		Effluent Gross	006	Continuous	CALCTD
Flow rate	Daily Maximum	<= 1.50 Million Gallons per Day (Mgal/d)		Effluent Gross	006	Continuous	CALCTD

Notes (Re-use Discharge Limitations Table):

1. The sum total should include flow rates from Outfall 001 through Outfall 003.

Summary of Changes From Previous Permit

Latitude/Longitude have been updated to the discharge location.

Additional outfalls have been added to reflect reclaimed water sum total, reclaimed water stored in the RIBs, reclaimed water sent to Lakeview Golf Course, and reclaimed water delivered to Pahrump Valley High School. These four new outfalls are described as: Outfall 002 for the reclaimed water discharged into the RIBs, Outfall 003 for the irrigation water at Great Basin Park, Outfall 004 for Lakeview Golf Course, Outfall 005 for Pahrump Valley High School, and Outfall 006 for the sum total of Outfall 001 through Outfall 003.

Changes in management have been reflected with Wendy Barnett, prior company president, updated into the current president's name, being James Eason.

Technology Based Effluent Limitations

Technology based effluent limitations are not applicable to this permit.

Water Quality Based Effluent Limitations

Water quality based effluent limitations are not applicable to this permit.

Proposed Water Quality Based Effluent Limits (monthly/weekly/daily)

Water quality based effluent limitations are not applicable to this permit.

Rationale for Permit Requirements

The proposed permit establishes the requirement to sample for fecal coliform to assess the quality of reclaimed water being applied and for the protection of human health and the environment.

The proposed permit establishes the requirement to report the total nitrogen applied to ensure groundwater of the State is not being degraded.

The proposed permit establishes the requirement to report the total nitrogen uptake to ensure groundwater of the State is not being degraded.

New outfalls were added for flow rate measurements due to additional end users being added and the completion of the rapid infiltration basins.

Anti-backsliding

None of the proposed permit limits were changed to a less restrictive limit compared to those in the previous permit.

Antidegradation

The Division has developed an antidegradation regulation that is applied on a statewide basis, and which meets the statutory requirements of Nevada’s water pollution control law found at Nevada Revised Statute (NRS) 445A.520 and NRS 445A.565 and is consistent with the federal antidegradation policy found at Title 40 in the Code of Federal Regulations (CFR) § 131.12. The objective of the Division’s antidegradation regulation is to prevent degradation of Nevada’s surface waters and maintain the unique attributes and special characteristics and water quality associated with high-quality waters.

As this permit is for discharges to groundwater, and not surface water, the new antidegradation rule is not applicable. There are currently no specific water quality standards that have been formally adopted by the State for groundwater, however, data reviewed during the renewal process does not indicate the potential for degradation of the groundwater from the reclaimed water discharged within the compliance limits of the proposed permit.

Special Conditions

See Special Approvals/Conditions table below.

SA – Special Approvals / Conditions Table

Item #	Description
1	The Permittee may submit additional irrigation sites and pond locations to the Division for review and approval prior to construction. For additional irrigation sites and pond locations not on the Permittee's property, submittals to the Division shall include the end user name and be submitted within fourteen (14) days of completing a delivery agreement with a user of a proposed site. Delivery of reclaimed water is prohibited until the proposed new site user has an active permit issued by the Division to receive and use reclaimed water.
2	All Discharge Monitoring Reports (DMRs) shall be submitted electronically through the Nevada NetDMR website https://netdmr.ndep.nv.gov/netdmr/public/home.htm .

Discharges From Future Outfalls/ Planned Facility Changes

Not Applicable - there are currently no planned improvements or additions to the facility or outfalls.

Corrective Action Sites

There are no Bureau of Corrective Actions sites within one mile of this facility.

Wellhead Protection Program

The nearest Public Water Supply (PWS) well is located approximately 4,500 feet to the northeast of the facility. There are other PWS wells located to the north, south and east of the discharge locations. The discharge locations are not located within a Wellhead Protection Area, which represents an approximate 10-year capture zone of a well, or within a Drinking Water Protection Area, which is defined by a 3,000-foot radius around a PWS well.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two copies (one electronic copy, one hard copy) of an updated RWMP (prev. EMP) for review and approval by the Division. The submitted RWMP shall include any changes made to the treatment system since the last Division approved edition.	7/5/2025

Deliverable Schedule:

DLV– Deliverable Schedule for Reports, Plans, and Other Submittals

Item #	Description	Interval	First Scheduled Due Date
1	Annual Report	Annually	1/28/2026
2	Quarterly Report	Quarterly	4/28/2025

Procedures for Public Comment:

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to groundwater of the State of Nevada subject to the conditions contained within the permit, is being mailed to interested persons on our mailing list and will be posted on our website at <https://ndep.nv.gov/posts>. Anyone wishing to comment on the proposed permit can do so in writing until 5:00 P.M. **12/13/2024**, a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator of EPA Region IX or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted. Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determined to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Proposed Determination:

The Division has made the tentative determination to issue/re-issue the proposed 5-year permit.

Prepared by: **Melissa Marr**

Date: **11/8/2024**

Title: **Staff II Engineer**