FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: INDIAN HILLS GENERAL IMPROVEMENT DISTRICT

3394 JAMES LEE PARK RD. #A
CARSON CITY, NV 89705

Permit Number: NS0080039

Permit Type: GROUNDWATER DISCHARGE

Designation: GROUNDWATER

New/Existing: EXISTING

Location: INDIAN HILLS GID WASTEWATER TREATMENT FACILITY, DOUGLAS
1001 HOBO HOT SPRINGS ROAD, CARSON CITY, NV 89705
LATITUDE: 39.061111, LONGITUDE: -119.796944
TOWNSHIP: 14 N, RANGE: 19 E, SECTION: 24

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	INFLUENT	Internal Outfall		39.0610	-119.80	GROUNDWATER
002	EFFLUENT	External Outfall		39.06	-119.7950	GROUNDWATER
003	SUNRIDGE GOLF COURSE	Land Application Site		39.0590	-119.7970	GROUNDWATER
004	YARD HYDRANTS & HEADWORKS	External Outfall		39.0610	-119.80	GROUNDWATER
005	MONITORING WELL - MW1	Monitoring Well		39.0590	-119.7980	GROUNDWATER
006	MONITORING WELL - MW2	Monitoring Well		39.06	-119.7910	GROUNDWATER

Permit History/Description of Proposed Action
The Permittee, Indian Hills General Improvement District (IHGID), has applied for the renewal of permit NS0080039 for their wastewater treatment facility (WWTF) located approximately 5 miles from Carson City in Douglas County, Nevada. The Permittee proposes to continue discharging tertiary-treated, denitrified wastewater to the Sunridge Golf Course (permit NS0096008), onsite winter storage ponds, yard hydrants, and/or facility headworks.

This permit was first issued November 18, 1982. The most recent permit was issued on March 1, 2017, and expired on February 28, 2022; the permit has been administratively continued since.

Facility Overview
The IHGID WWTF serves residential subdivisions in the IHGID (Sunridge, Indian Hills, and Genoa Lakes), with commercial areas including Target, Home Depot and several restaurants and shops, a mobile home park, and a school. No industrial users are connected. The IHGID WWTF has provided sewer treatment to the area since 1973. The peak daily design capacity of the plant is 0.875 million gallons per day (Mgal/d), with a 1-hour peak design flow of 1.5 Mgal/d, with current flows averaging 0.31 Mgal/d.

The IHGID WWTF Sequential Batch Reactors (SBRs), an intermittent cycle extended aeration system, provide Category "B" bacteriological quality, per Nevada Administrative Code (NAC) 445A.276, being

disinfected, and denitrified reclaimed water for seasonal reuse at the Sunridge Golf Club (permit NS0096008), winter storage in onsite ponds, supply for yard hydrants, and/or facility headworks. In winter, IHGID WWTF stores its reclaimed water in six (6) clay-lined storage ponds located at the WWTF. Dewatered, Class "B" biosolids from IHGID are composted at Bently Ranch, operating under Bently Enterprises (permit NS0097012).

The IHGID WWTF's treatment system is made up of headworks, biological treatment, digester, sludge de-watering, sludge holding, effluent distribution, effluent storage, hypochlorite disinfection, and filtration.

Headworks: Raw sewage into IHGID WWTF is received from the Hobo Road and Genoa Lakes force mains. The headworks are made up of an auger (rotary) screen, vortex grit removal basin, and a grit washer/classifier conveyor. Dewatered screenings and grit are separately bagged in rolloff bins.

Biological Treatment: There is a common prereaction tank to provide continuous inflow of screened sewage into the two reactors via submerged baffle inlets. The intermittent cycle extended aeration system (ICEAS) reactor supervisory control and data acquisition (SCADA) cycling includes aerobic/anoxic reaction, suspended solids settling, and final effluent decanting. For effluent nitrification and denitrification, the quoted Mean Cell Residence Time (MCRT) range is 912 days.

Digester: The common aerobic sludge digester treats the Waste Activated Sludge discharged from the two (2) SBRs (aerobic) and the lined sludge holding pond (anaerobic). Typical aerobic digestion periods range from a few days for holding pond solids and up to three weeks for the SBR solids.

Sludge Dewatering: The sludge volute press produces a Class "B" filter cake with 21% (typical) dry solids content. The haul trailer is filled two (2) days per week and unloaded at Bently Ranch the following day for additional treatment via windrow (see description below) composting and land application for crop production. Bently Ranch produces a Class "A" Exceptional Quality soil amendment.

Note: Windrow composting is a large-scale, aerobic method of creating compost by forming organic waste into long, aerated piles called “windrows”, which are periodically turned, either manually or by machinery, to add oxygen, manage moisture, and speed decomposition.

Sludge Holding: The East Pond is high-density polyethylene (HDPE)-lined and furnished with a movable (handcranked), submersible sludge pump to return excess sludge into the aerobic digester for aerobic treatment (e.g., Volatile Suspended Solids reduction) prior to volute press dewatering. The West Pond is cleaned and abandoned. The East Pond is monitored for potential liner leakage at monitoring well 2 (MW-2). The sludge pond operates in anaerobic mode.

Effluent Distribution: Effluent is first decanted into the aerated, primary distribution pond. Twin surface aspirators are operated in the pond for supplemental aeration and algae control. There is also the secondary distribution pond for optional use.

Effluent Storage: IHGID WWTF Effluent Storage Ponds #1-6, can hold approximately 95 acre-feet (31 million gallons), or about three months of winter storage.

Disinfection: During spring through fall, chlorine is added at the pump station for the golf course reuse. Chlorine is also added year-round at the effluent return line to the WWTF for yard hydrants and plant reuse water. The golf course receives reclaimed water about 9 of 12 months yearly from IHGID WWTF.

Reclaimed Water Management Plan: The Reclaimed Water Management Plan (RWMP) (formerly known as an Effluent Management Plan) for the reclaimed water used at Sunridge Golf Course was last reviewed and approved by the Division on February 6, 2017, and is filed under Sunridge Golf Course’s permit NS0096008.

Outfall Summary

Outfall 001 – This internal outfall is for measuring the domestic sewage (Influent) flowing into the IHGID WWTF.

Outfall 002 - This external outfall is for the monitoring of the treated effluent prior to being diverted to the holding pond.

Outfall 003 – This external outfall is for the measuring and monitoring of the reclaimed water being diverted to the Sunridge Golf Course (permit NS0096008).

Outfall 004 – This internal outfall is for measuring and monitoring of the treated effluent discharged to the yard hydrants and headworks.

Outfall 005 – This monitoring well outfall (MW-1) is for the monitoring of groundwater conditions downgradient of the IHGID WWTF.

Outfall 006 – This monitoring well outfall (MW-2) is for the monitoring of groundwater conditions downgradient of the IHGID WWTF.

Facility Upgrades since last issued permit
There have been no facility upgrades since the last issued permit.

Solids Handling
The sludge volute press produces a Class "B" filter cake with 21% (typical) dry solids content which is taken to Bently Ranch for additional treatment via windrow composting and land application for crop production. Bently Ranch produces a Class "A" Exceptional Quality soil amendment.

Effluent Management and Reuse
Effluent is either diverted to the Sunridge Golf Course (permit NS0096008) for the majority of the year or into clay-lined storage ponds at the IHGID WWTF for storage during winter months, with an reported average daily maximum flow rate of 0.195 Mgal/d discharged during the period reviewed (January 2020 through December 2025).

There is also the option to divert reclaimed water for yard hydrants and headworks uses at the facility, with an reported average daily maximum flow rate of 0.003 Mgal/d use during the period reviewed (January 2020 through December 2025).

Design Flow (and basis) and Measurement & Current Capacity
Design flows are based on the process design critera for the WWTP:

30-day average flow rate for influent is limited to <= 0.60 Mgal/d.

Daily maximum flow rate for influent is limited to <= 0.875 Mgal/d.

1-Hour peak design flow rate for the influent is limited to <=1.5 Mgal/d.

Note: The Permittee has requested a daily maximum influent flow rate of 1.0 Mgal/d.

Current Measurements and Estimated Capacity:

The average reported daily maximum flow rate of the influent during the period reviewed (January 2020 through December 2025) was 0.31 Mgal/d. Based on this flow rate, the estimated capacity of the plant is currently at 35%.

Pretreatment Program
The IHGID WWTF does not meet the U.S. Environmental Protection Agency's (EPA) guidelines requiring them to have a pretreatment program.

Operations & Maintenance (O&M) Manual status
The IHGID WWTF's O&M Manual was last reviewed and approved on July 30, 2018. The Technical, Compliance, and Enforcement Branch of the Bureau of Water Pollution Control requires O&M Manuals to be updated every ten (10) years with an updated O&M Manual due on July 30, 2028.

Effluent Characterization
Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from January 2020 to December 2025, was reviewed as part of this permit renewal process. The IHGID WWTF discharges reclaimed water to the Sunridge Golf Course, onsite yard hydrants, plant headworks, and onsite winter storage ponds.

The IHGID WWTF provides tertiary treated, denitrified, and disinfected reclaimed water which meets Category B bacteriological quality, per NAC 445A.276, to the Sunridge Golf Club, onsite yard hydrants, and WWTF headworks; therefore, the reclaimed water should meet, at a minimum, a daily maximum general fecal coliform concentration of 23 colony forming units (CFU) / 100 mL and a 30-day geometric mean of 2.2 CFU / 100 mL. The long-term averages for the daily maximum concentrations for general fecal coliform are listed below under the associated outfalls (003, 004).

The following reported averages were taken from January 2020 to December 2025 reporting period:

Abbreviations:
BOD5 – Biochemical Oxygen Demand, 5-day
Depth – Depth to water level feet below land surface
TDS – Total Dissolved Solids
TSS – Total Suspended Solids
Water Level - Water level relative to mean sea level
mg/L – Milligrams per Liter
Mgal/d – Million Gallons per Day
S.U. – Standard Units

Outfall 001 (Influent):
Flow Rate: 0.31 Mgal/d
BOD5: 336.52 mg/L
TSS: 308.26 mg/L

Outfall 002 (Effluent):
BOD5: 8.59 mg/L
Nitrogen: 2.20 mg/L
pH: 7.50 S.U.
TSS: 2.99 mg/L

Outfall 003 (Sunridge Golf Course):
Fecal Coliform, general: 4.05 CFU/100ml

Outfall 004 (Yard Hydrants and Headworks):
Fecal Coliform, general: 1.30 CFU/100ml

Outfall 005 (MW-1):
Chloride: 66.56 mg/L
Depth: 25.39 Feet
Nitrogen: 15.30 mg/L
TDS: 584.78 mg/L
Water Level: 4,649.25

Outfall 006 (MW-2):

Chloride: 75.52 mg/L
Depth: 30.72 Feet
Nitrogen: 3.17 mg/L
TDS: 446.96 mg/L
Water Level: 4675.04 Feet

The average rate of removal, after treatment, for both BOD5 and TSS, was approximately 98%.

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 the reclaimed water and groundwater are:

Reclaimed Water: BOD5, General Fecal Coliform, Nitrogen, and pH, along with potential inorganic chemicals and metals (Profile 1 contaminants).

Monitoring Wells: Chloride, Nitrogen, and TDS.

Receiving Water
Receiving water is groundwater of the State via percolation. Depth to groundwater near the IHGID WWTF is approximately 30 feet below ground surface. Groundwater samples are collected and analyzed quarterly from two downgradient monitoring wells.

Compliance History
The IHGID WWTF has been in compliance during the period reviewed (January 2020 through December 2025).

Proposed Effluent Limitations
The discharge shall be limited and monitored by the Permittee as specified below:

WWTP Discharge Limitations Table for Sample Location 001 (Internal Outfall) To Be Reported Monthly[2]

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Daily Maximum	<= 1 Million Gallons per Day (Mgal/d)		Raw Sewage Influent	001	Monthly	DISCRT
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Raw Sewage Influent	001	Monthly	DISCRT
BOD, 5-day	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Monthly	DISCRT
BOD, 5-day	Monthly Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Monthly	DISCRT
Solids, total suspended	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Monthly	DISCRT
Solids, total suspended	Monthly Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Monthly	DISCRT

Notes (WWTP Discharge Limitations Table):

2. Sampling of BOD, 5-day and Total Suspended Solids should be done concurrently when sampling the same parameters in the effluent (Outfall 002) to allow for determination of actual removal rates achieved.

WWTP Discharge Limitations Table for Sample Location 002 (Effluent) To Be Reported Monthly[1]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
BOD, 5-day[2]	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	DISCRT
BOD, 5-day	Monthly Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	DISCRT
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Effluent Gross[1]	002	Monthly	DISCRT
pH, maximum	Daily Maximum		<= 9 Standard Units (SU)	Effluent Gross[1]	002	Monthly	DISCRT
pH, minimum	Daily Minimum		>= 6 Standard Units (SU)	Effluent Gross[1]	002	Monthly	DISCRT
Solids, total suspended[2]	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	DISCRT
Solids, total suspended[2]	Monthly Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	DISCRT
BOD, 5-day, percent removal	Monthly Average Minimum		>= 85 Percent (%)	Effluent Gross	002	Monthly	CALCTD
Solids, suspended percent removal	Monthly Average Minimum		>= 85 Percent (%)	Effluent Gross	002	Monthly	CALCTD

Notes (WWTP Discharge Limitations Table):

1. Samples shall be obtained prior to discharge into the holding pond.
2. Sampling of BOD, 5-day and Total Suspended Solids should be done concurrently when sampling the same parameters in the influent (Outfall 001) to allow for determination of actual removal rates achieved.

WWTP Discharge Limitations Table for Sample Location 002 (Effluent) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Alkalinity, bicarbonate (as CaCO3)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Alkalinity, total (as CaCO3)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Aluminum, dissolved (as Al)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Antimony, dissolved (as Sb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Arsenic, dissolved (as As)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Barium, dissolved (as Ba)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Beryllium, dissolved (as Be)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Cadmium, dissolved (as Cd)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Calcium, dissolved (as Ca)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Chromium, dissolved (as Cr)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
			M&R				

WWTP Discharge Limitations Table for Sample Location 002 (Effluent) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Copper, dissolved (as Cu)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Fluoride, total (as F)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Iron, dissolved (as Fe)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Lead, dissolved (as Pb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Magnesium, dissolved (as Mg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Manganese, dissolved (as Mn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Mercury, dissolved (as Hg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Nitrite plus nitrate total 1 det. (as N)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Potassium, dissolved (as K)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Selenium, dissolved [as Se]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Silver, dissolved (as Ag)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
			M&R				

WWTP Discharge Limitations Table for Sample Location 002 (Effluent) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Sodium, dissolved (as Na)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Sulfate, total (as SO4)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Thallium, dissolved (as Tl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Uranium, natural, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Cyanide, weak acid, dissociable	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Zinc, dissolved (as Zn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT

Groundwater Monitoring Wells Table for Sample Location 005 (Monitoring Well - Mw1) To Be Reported Quarterly

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	005	Quarterly	DISCRT
Depth to water level ft below landsurface[1]	Daily Minimum	M&R Feet (ft)		Groundwater	005	Quarterly	VISUAL
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	005	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	005	Quarterly	DISCRT
Water level relative to mean sea level[2]	Daily Maximum	M&R Feet (ft)		Groundwater	005	Quarterly	CALCTD

Notes (Groundwater Monitoring Wells Table):

1. Depth to groundwater, ft.
2. Groundwater elevation above mean sea level (AMSL).

Groundwater Monitoring Wells Table for Sample Location 006 (Monitoring Well - Mw2) To Be Reported Quarterly

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	006	Quarterly	DISCRT
Depth to water level ft below landsurface[1]	Daily Minimum	M&R Feet (ft)		Groundwater	006	Quarterly	VISUAL
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	006	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	006	Quarterly	DISCRT
Water level relative to mean sea level[2]	Daily Maximum	M&R Feet (ft)		Groundwater	006	Quarterly	CALCTD

Notes (Groundwater Monitoring Wells Table):

1. Depth to groundwater, ft.
2. Groundwater elevation above mean sea level (AMSL).

Re-use Discharge Limitations Table for Sample Location 003 (Sunridge Golf Course, Permit Ns0096008) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Daily Maximum	<= 0.86 Million Gallons per Day (Mgal/d)		Prior to Reuse	004	Continuous	METER
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse	004	Continuous	METER
Coliform, fecal general	Daily Maximum		<= 23 Colony Forming Units per 100ml T (CFU/100mL)	Prior to Reuse	003	Weekly	DISCRT
Coliform, fecal general	30 Day Geometric Mean		<= 2.2 Colony Forming Units per 100ml T (CFU/100mL)[1]	Prior to Reuse	003	Weekly	DISCRT

Notes (Re-use Discharge Limitations Table):

1. CFU or MPN/100 mL.

Re-use Discharge Limitations Table for Sample Location 004 (Yard Hydrants & Headworks) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse	005	Continuous	METER
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse	005	Continuous	METER
Coliform, fecal general	Daily Maximum		<= 23 Colony Forming Units per 100ml T (CFU/100mL)	Prior to Reuse	004	Monthly	DISCRT
Coliform, fecal general	30 Day Geometric Mean		<= 2.2 Colony Forming Units per 100ml T (CFU/100mL)[1]	Prior to Reuse	004	Monthly	DISCRT

Notes (Re-use Discharge Limitations Table):

1. CFU or MPN/100 mL.

Summary of Changes From Previous Permit

Under Outfall 001 (Influent) To Be Reported Quarterly, the following parameters were added or deleted:

ADDED – BOD, 5-day, with a “Daily Maximum” Base, a “M&R Milligrams per Liter (mg/L)” Concentration, a “Raw Sewage Influent” Monitoring Location, a “001” Sample Location, a “Monthly” Measurement Frequency, and “Discrt” Sample Type.

ADDED – BOD, 5-day, with a “Monthly Average” Base, a “M&R Milligrams per Liter (mg/L)” Concentration, a “Raw Sewage Influent” Monitoring Location, a “001” Sample Location, a “Monthly” Measurement Frequency, and “Discrt” Sample Type.

ADDED – Solids, total suspended, with a “Daily Maximum” Base, a “M&R Milligrams per Liter (mg/L)” Concentration, a “Raw Sewage Influent” Monitoring Location, a “001” Sample Location, a “Monthly” Measurement Frequency, and “Discrt” Sample Type.

ADDED – Solids, total suspended, with a “Monthly Average” Base, a “M&R Milligrams per Liter (mg/L)” Concentration, a “Raw Sewage Influent” Monitoring Location, a “001” Sample Location, a “Monthly” Measurement Frequency, and “Discrt” Sample Type.

DELETED – BOD, 5-day, with a “Quarterly Maximum” Base.

DELETED - Solids, total suspended, with a “Quarterly Maximum” Base.

ADDED – Footnote 2.

2. Sampling of BOD, 5-day and TSS should be done concurrently when sampling the same parameters in

the effluent (Outfall 002) to allow for determination of actual removal rates achieved.

Under Outfall 002 (Effluent) To Be Reported Monthly, the following parameters were either added or changed:

ADDED – BOD, 5-day, percent removal, with a “Monthly Minimum Average” Base, a >=85 Percent (%) Concentration, a “Effluent Gross” Monitoring Location, a “002” Sample Location, a “Monthly” Measurement Frequency, and a “Calctd” Sample Type.

ADDED – Solids, suspended percent removal, with a “Monthly Minimum Average” Base, a >=85 Percent (%) Concentration, a “Effluent Gross” Monitoring Location, a “002” Sample Location, a “Monthly” Measurement Frequency, and a “Calctd” Sample Type.

CHANGED – BOD5, Nitrogen, pH maximum, and Total Suspended Solids, with a “Quarterly Maximum” Base to a “Daily Maximum” Base, with the remaining monitoring requirements being unchanged from the previous permit.

CHANGED – pH minimum, with a “Monthly Minimum” to a “Daily Minimum” Base, with the remaining monitoring requirements being unchanged from the previous permit.

ADDED – Footnote 2.

2. Sampling of BOD, 5-day and Total Suspended Solids should be done concurrently when the influent (Outfall 001) is sampled to determine actual removal rates being achieved.

ADDED – Outfall 002 (Effluent), To Be Reported Once During the Permit Term, with the following parameters added:

ADDED – Profile 1 parameters, with a “Daily Maximum” Base, a “M&R Milligrams per Liter (mg/L)” Concentration, an “Effluent Gross” Monitoring Location, a “002” Sample Location, a “Once Per Permit Term” Measurement Frequency, and a “Discrt” Sample Type.

Note: Profile 1 parameters are Alkalinity (as $CaCo_{3)}$, Aluminum, Antimony, Arsenic, Barium, Beryllilum, Cadmium, Calcium, Chloride, Chromium, Copper, Fluoride, Iron, Lead, Magnesium, Manganese, Mercury, Nitrate + Nitrite (as N), Nitrogen, pH, Potassium, Selenium, Silver, Sodium, Sulfate, Thallium, Total Dissolved Solids, Uranium, Cyanide, and Zinc.

Under Outfall 003 (Sunridge Golf Course), To Be Reported Monthly, the following parameters were changed:

CHANGED - Coliform, general fecal, with a "Daily Maximum" Base, from a "Daily" Measurement Frequency to a "Weekly" Measurement Frequency, with the remaining monitoring requirements being unchanged from the previously issued permit.

CHANGED - Coliform, general fecal, with a "30-Day Geometric Mean" Base, from a "Daily" Measurement Frequency to a "Weekly" Measurement Frequency, with the remaining monitoring requirements being unchanged from the previously issued permit.

Under Outfall 004, To Be Reported Monthly, the following parameters was changed:

CHANGED - Coliform, general fecal, with a "Daily Maximum" Base, from a "Daily" Measurement Frequency to a "Monthly" Measurement Frequency, with the remaining monitoring requirements being unchanged from the previously issued permit.

CHANGED - Coliform, general fecal, with a "30-Day Geometric Mean" Base, from a "Daily" Measurement Frequency to a "Monthly" Measurement Frequency, with the remaining monitoring requirements being unchanged from the previously issued permit.

Under Outfalls 005 and 006, (Monitoring Wells – MW1 and MW2) To Be Reported Quarterly, the following changes were made:

CHANGED – Chloride, Nitrogen, Total Dissolved Solids, and Water Level relative to mean sea level, from a “Quarterly Maximum” Base to a “Daily Maximum” Base, with the remaining monitoring requirements being unchanged from the previous permit.

CHANGED – Depth to water level ft below land surface, with a “Quarterly Maximum” to a “Daily Minimum” Base, with the remaining monitoring requirements being unchanged from the previous permit.

Technology Based Effluent Limitations
Technology based effluent limitations (TBELs) are required as promulgated by the United States (U.S.) EPA for Publicly Owned Treatment Works (POTWs). The following limits are based on secondary treatment standards as allowed by the Code of Federal Regulation (CFR) Title 40, Section 133, and which has been adopted by the State of Nevada. The U.S. EPA published federal secondary treatment standards at 40 CFR 133 based on an evaluation of performance data for POTWs practicing a combination of physical and biological treatment. Performance is measured by monitoring biodegradable organics, suspended solids in the effluent, and ensuring pH remains within regulatory limits. Federal secondary treatment standards are defined under 40 CFR 133 for maximum BOD5 as a 30-day average of 30 mg/L and a 7-day average of 45 mg/L and for maximum TSS as a 30-day average of 30 mg/L and a 7-day average of 45 mg/L. In addition to describing the minimum levels of effluent quality attainable by secondary treatment, 40 CFR 133.102 states that the 30-day average percent removal of BOD5 and TSS shall not be less than 85%. The Division has adopted these standards for discharges from treatment facilities, and has applied the same 7-day average thresholds as daily maximum effluent limits for BOD5 and TSS.

The following performance standards for POTWs with secondary treatment standards have been included in the permit:

BOD5: Monthly average limit: <= 30 mg/L; Daily maximum limit: <= 45 mg/L.

TSS: Monthly average limit: <= 30 mg/L; Daily maximum limit: <= 45 mg/L.

pH: Daily Maximum: <= 9.0 Standard Units.

pH: Daily Minimum >= 6.0 Standard Units.

Limits Based on Secondary Treatment Standards:

BOD5 Percent removal: >= 85 percent.

TSS: Percent removal: >= 85 percent.

Limits Based on Facility's Design Criteria Review:

30-day average flow rate for influent is limited to <= 0.60 Mgal/d.

Daily maximum flow rate for influent is limited to <= 0.875 Mgal/d.

1-Hour peak design flow rate for the influent is limited to <=1.5 Mgal/d.

Permitted 30-day average flow rate for influent is limited to <=1.0 Mgal/d., based on Permittee request during 2017 permit renewal.

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 limits are not applicable to this permit.

Basis for Effluent Limitations
There are currently no specific water quality standards that have been formally adopted by the State for groundwater. However, the Division has the discretion to implement effluent limitations outside water quality standards per NAC 445A.243, which states, “In establishing an effluent limitation to carry out the policy of this State set forth in NRS 445A.305, consideration must be given to, but is not limited by the following: ... (2) the need for standards that specify by chemical, physical, biological or other characteristics the extent to which pollution by various substances will not be tolerated.”

The requirement to monitor the effluent for Profile 1 pollutants once per permit term is included to evaluate the quality of the effluent and determine whether the effluent has potential to impact the receiving water. Although cyanide and uranium are not expected to be present in the effluent, the proposed permit requires the Permittee sample these constituents once during the permit term as they are included in the Profile 1 list and they have not been sampled before.

The constituents listed in Profile 1 have been vetted by the Division and have been included in groundwater discharge permits for many years as a means of regulating groundwater quality. Per Nevada Revised Statute (NRS) 445A.490, “No permit may be issued which authorizes any discharge or injection of fluids through a well into any waters of the State: ...(3) which would result in the degradation of existing or potential underground sources of drinking water.

Influent and Effluent Monitoring Requirements:

Monthly influent and monthly effluent monitoring for BOD5 and TSS are included to assess the treatment performance of the IHWWTF. A monthly sampling frequency for BOD5 and TSS is sufficient for determining compliance with the applicable effluent limitations. Percent removal requirements for BOD5 and TSS are established in the permit as monthly average minimums of 85%, based on secondary treatment standards.

Some wastewater treatment processes can increase or decrease wastewater pH; therefore, monthly monitoring for pH is included in assessing compliance with effluent limits of 6.0 S.U. as a daily minimum and 9.0 S.U. as a daily maximum.

Fecal coliform is required to be monitored to assess the quality of reclaimed water being applied and for the protection of human health and the environment.

Anti-backsliding
None of the proposed permit limits were changed to a less restrictive limit compared to those in the previous permit, with the exception of the sampling requirement for general fecal coliform. The sampling frequency was changed from a daily sampling requirement to a weekly sampling requirement (Outfall 003) and a monthly (Outfall 004) based on current Division requirements, plant size, influent flow rates, and historic levels of treatment achieved by the plant for fecal coliform.

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 treated wastewater discharged within the compliance limits of

the proposed permit.

Special Conditions
There are no special approvals/conditions applicable to this permit.

SA – Special Approvals / Conditions Table

There are no Special Approval / Condition items

Discharges From Future Outfalls/ Planned Facility Changes
There are no planned discharges from future outfalls or facility changes.

Corrective Action Sites
There are no active Bureau of Corrective Actions (BCA) remediation sites within a one-mile radius of the IHGID WWTF.

Wellhead Protection Program
The outfalls 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 hard copy and one electronic copy) of an updated Operations and Maintenance (O&M) Manual for review and approval by the Division. The O&M Manual shall follow the Division's guidance document, WTS-2 Minimum Information Required for an Operation and Maintenance Manual for a Wastewater Treatment Plant, and be prepared and wet stamped by a licensed, qualified Nevada engineer (P.E.).	7/30/2028

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	7/28/2026
2	Annual Report	Annually	1/28/2027

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. **3/16/2026,** a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator.

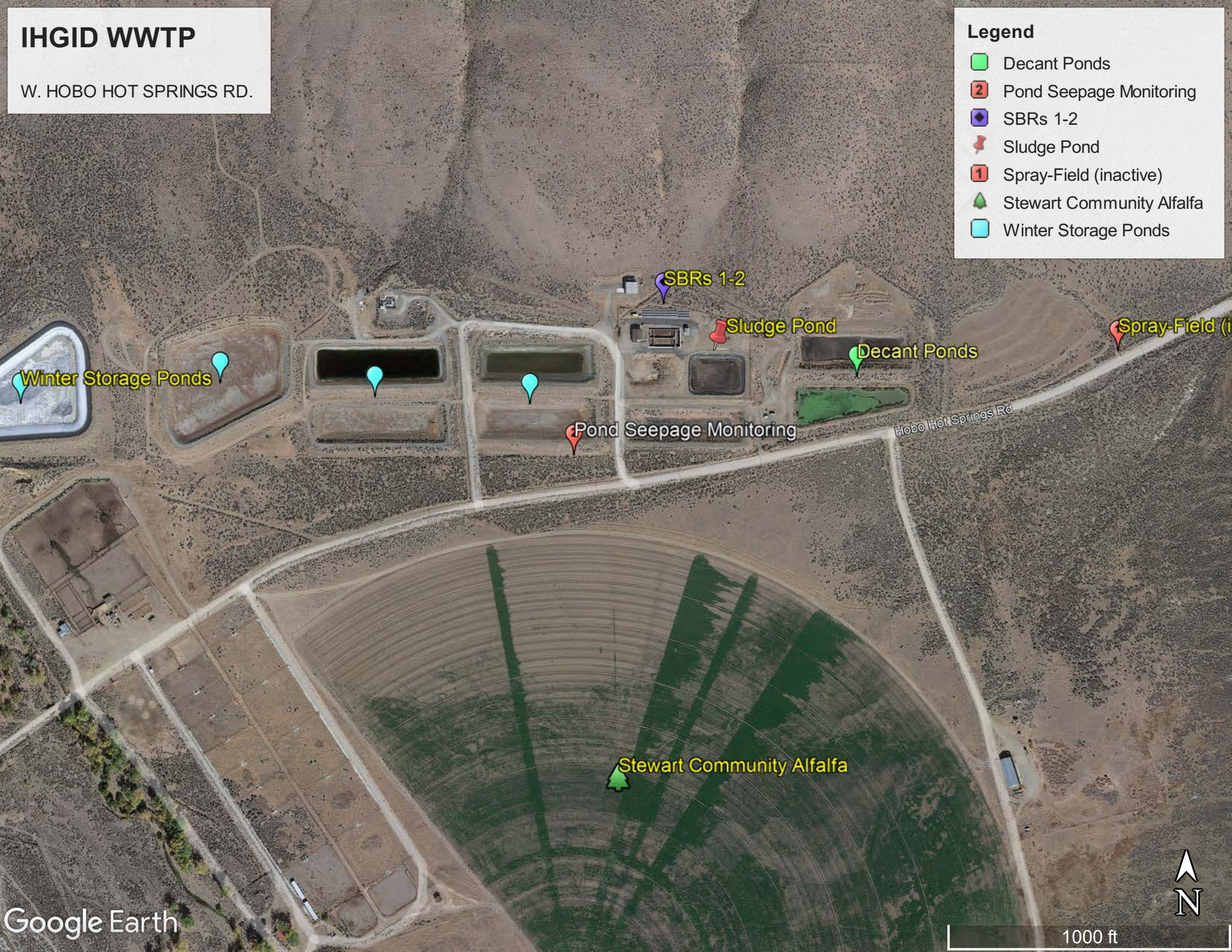
A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator of EPA Region IX or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate 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 Hanson**
Date: **2/10/2026**
Title: **Staff II Engineer**


IHGID WWTP
W. HOBO HOT SPRINGS RD.
Legend
Decant Ponds
Pond Seepage Monitoring
SBRs 1-2
Sludge Pond
Spray-Field (inactive)
Stewart Community Alfalfa
Winter Storage Ponds
SBRs 1-2
Sludge Pond
Spray-Field (i
Decant Ponds
Winter Storage Ponds
Pond Seepage Monitoring
Hobo Hot Springs Rd
Stewart Community Alfalfa
N
Google Earth
1000 ft