Oregon Department of Environmental Quality

RECYCLED WATER USE PLAN SUMMARY

Directions: Check (✓) appropriate boxes for tables and provide brief narrative where necessary. Submit with Recycled Water Use Plan to DEQ.

State of Oregon Department of Environmental Quality

APPLICANT INFORMATION

Facility Name: City of Baker City Wastewater Treatment Facility
Address: 42661 Imnaha Road Baker City, Oregon 97814
Contact Name/Phone Number: Michelle Owen, 541-524-2031

TYPE OF WASTEWATER TREATMENT PLANT

☐	Activated Sludge	☐	Re-circulating Gravel/Sand Filter
☐	Mechanically Aerated Lagoon	☐	Rotating Biological Filter
☑	Aerated Lagoon	☐	Other (Specify):

Average Dry Weather Flow, million gallons per day (MGD): 1.21

TREATMENT CLASS IN ACCORDANCE WITH OAR 340-055-0012

☐	Class A	☐	Class C
☐	Class B	☑	Class D
☐	Non-Disinfected water		

TREATMENT EFFICIENCY CAPABILITY DURING REUSE

☐	Tertiary Treatment	☑	85% or more BOD/TSS removal
☐	95% or more BOD/TSS removal	☐	Rotating Biological Filter
☐	90% or more BOD/TSS removal	☐	Other (Specify):

DISINFECTION METHOD

☑	Chlorine injection just prior to irrigation
☑	Chlorine injection with storage of recycled water
☐	Chlorine injection after storage just prior to irrigation
☐	UV exposure just prior to irrigation
☐	UV exposure with storage of recycled water
☐	UV exposure after storage just prior to irrigation
☐	Other (specify):

STORAGE IMPOUNDMENT

	Y	N
Is there a storage facility proposed for this project?	☑	☐
If yes, at the WWTP	☐	☑
If yes, located at a location other than the WWTP	☑	☐

If yes to either of the above, specify the location and length of time the storage facility will be used:

The new irrigation storage pond is located approximately 5 miles northeast of the wastewater treatment facility (see Figure A, attached). The irrigation storage pond will be used year-round.

ARE THERE ALARMS FOR VARIOUS UNIT PROCESSES?	Y	N
Are alarms independent of the normal power supply of the plant?	☐	☑
Failure of a disinfection treatment process?	☑	☐
Failure of a clarification process?	☐	☑
Failure of a coagulation process?	☐	☑
Failure of a filtration process?	☐	☑
Are the alarms on separate circuit breakers from the reuse pumps?	☐	☑
Is the Recycled Water back-up generator tested regularly?	☐	☑

IN THE EVENT OF POWER LOSS:	Y	N
Can the plant continue to discharge?	☑	☐
Can there be any irrigation of non-disinfected water?	☑	☐
If no to either of the above, specify control measures that will be in place to stop the irrigation as soon as possible.		

RECYCLED WATER WILL BE BENEFICIALLY USED FOR THE FOLLOWING (CHECK ALL THAT APPLY):

✓	Beneficial Purpose	Class				
		A	B	C	D	ND
	Irrigation					
☑	Fodder, fiber, seed crops not intended for human ingestion, commercial timber	Y	Y	Y	Y	Y
☐	Firewood, ornamental nursery stock, Christmas trees	Y	Y	Y	Y	N
☐	Sod	Y	Y	Y	Y	N
☑	Pasture for animals	Y	Y	Y	Y	N
☐	Processed food crops	Y	Y	Y	N	N
☐	Orchards or vineyards if an irrigation method is used to apply recycled water directly to the soil	Y	Y	Y	N	N
☐	Golf courses, cemeteries, highway medians, industrial or business campuses	Y	Y	Y	N	N
☐	Any agricultural or horticultural use	Y	N	N	N	N
☐	Parks, playgrounds, school yards, residential landscapes, other landscapes accessible to the public	Y	N	N	N	N
☐	**Industrial, Commercial, or Construction**					
☐	Industrial cooling	Y	Y	Y	N	N
☐	Rock crushing, aggregate washing, mixing concrete	Y	Y	Y	N	N
☐	Dust control	Y	Y	Y	N	N
☐	Nonstructural fire fighting using aircraft	Y	Y	Y	N	N
☐	Street sweeping or sanitary sewer flushing	Y	Y	Y	N	N
☐	Stand alone fire suppression systems in commercial and residential buildings	Y	Y	N	N	N
☐	Non-residential toilet or urinal flushing, floor drain trap priming	Y	Y	N	N	N
☐	Commercial car washing	Y	N	N	N	N
☐	Fountains when the water is not intended for human consumption	Y	N	N	N	N

✓	Beneficial Purpose	Class				
		A	B	C	D	ND
☐	**Impoundments or Artificial Groundwater Recharge**					
☐	Water supply for landscape impoundments including, but not limited to, golf course water ponds and non-residential landscape ponds	Y	Y	Y	N	N
☐	Restricted recreational impoundments	Y	Y	N	N	N
☐	Nonrestricted recreational impoundments including, but not limited to, recreational lakes, water features accessible to the public, and public fishing ponds	Y	N	N	N	N
☐	Artificial groundwater recharge	Y	N	N	N	N
☐	**Other (describe):**					

PAGES 4 & 5 REQUIRED FOR IRRIGATION ONLY

THE IRRIGATION AREA WILL BE USED FOR THE FOLLOWING (CHECK ALL THAT APPLY):

☑	Crops (specify types): Alfalfa hay
☑	Pasture
☐	Forest
☐	Public access areas (specify types):
☐	Natural areas (specify species or mix):
☐	Other (specify):

APPLICATION RATE	**Y**	**N**
Will irrigation be controlled not to exceed the water consumption rate of the crop being grown?	☑	☐
Will irrigation be controlled not to exceed the nutrient requirements of the crop being grown?	☑	☐

What is the proposed application rate of the recycled water? 450 to 900 gallons per minute
Acreage of irrigation site 596 total acres (see Figures B, C, and D for reuse sites)
The months that irrigation will be permitted April through October
If irrigation occurs with Class C recycled water at nighttime, will the public access be restricted to allow for sunlight contact on irrigated water? ☐ Yes ☐ No
If so, specify length of time _____

TRANSMISSION & DISTRIBUTION LINES/PIPES	**Y**	**N**
At the end of the irrigation day, will the transport lines/pipes be drained back to the wastewater treatment facility?	☐	☑
Is there a gate/ball shut off valve at the irrigation pump?	☑	☐
Is there an in line pressure relief valve to by-pass reuse water back into the source basin if there is a line transmission plug?	☑	☐
At the cessation of the irrigation season, will the transport lines/pipes be flushed and cleaned?	☐	☑
Is there a gate/ball shut off valve at the irrigation field, or at each irrigation zone?	☑	☐

ZONED LAND USE OF IRRIGATION SITE (CHECK ALL THAT APPLY)

☑	Exclusive Farm Use (EFU)	☐	Industrial
☐	Forestry	☐	State/Federal lands
☐	Rural Residential	☐	Other (Specify):

ZONED LAND USE OF AREA AROUND IRRIGATION SITE (CHECK ALL THAT APPLY)

☑	Exclusive Farm Use (EFU)	☐	Industrial
☐	Forestry	☐	State/Federal lands
☐	Rural Residential	☐	Other (Specify):

Prevailing wind direction during irrigation season (specify): North
Will irrigation be restricted when winds exceed 10 MPH?: As required by the DEQ.

THE NEAREST DEVELOPED PROPERTY FROM IRRIGATION SITE (ft):

North boundary: See Table 1.
South boundary: See Table 1.
East boundary: See Table 1.
West boundary: See Table 1.
What is the nearest developed property downwind of irrigation site (specify type and distance): See Table 1.
Are there any playgrounds, schools, or public parks within ½ mile of irrigation site? (specify): No.

DOMESTIC WELLS	Y	N
Are there any domestic wells or other domestic water sources located within the irrigation site?	☐	☑
Are there any domestic wells or other domestic water sources located within 150', 100, or 50' of the irrigation site?	☑	☐
If yes to either of the above, identify the number of wells or sources and identify their location on the attached site plan. See Table 2.		

POTENTIAL RUN-OFF POINTS ARE LOCATED AT THE (CHECK ALL THAT APPLY):

☑	North boundary (specify): General runoff will occur on north boundary of all sites as the Powder River flows north.
☐	South boundary (specify):
☐	East boundary (specify):
☐	West boundary (specify):

PUBLIC ACCESS WILL BE CONTROLLED BY THE FOLLOWING (CHECK ALL THAT APPLY):

☑	No trespassing or warning signs (specify spacing): ±200 linear feet
☑	Fencing (specify type): Barbed wire at reuse sites
☐	Other (specify):

BARRIERS ON BOUNDARIES THAT MAY MITIGATE AEROSOL DRIFT (CHECK ALL THAT APPLY)

☐	Natural vegetation (specify height and width):
☐	Natural topography (specify):
☐	Tree or fence row (specify height):
☐	Other (specify):
☑	None:

IRRIGATION METHOD (CHECK ALL THAT APPLY)

☐	Set sprinkler heads with spray height of _____ and spray diameter of _____
☐	Wheel irrigation line with spray height of _____ and spray diameter of _____
☐	Big gun irrigation with spray height of _____ and spray diameter of _____
☑	Other (specify): Pivot irrigation

IRRIGATION EQUIPMENT SPECIFICATIONS (insert more rows as needed)

Sprinkler head types (brand and model)	Irrigation zones/cells	PSI operating ranges
The City is currently working		
with landowners to obtain data.		

REQUIRED ATTACHEMENTS:

1. Overhead scale diagram/plan view of the wastewater treatment plant that identifies the treatment and disinfection components of the plant.
2. Overhead scale diagram/plan view of the transport line from wastewater treatment plant to the reuse area.
3. Overhead scale diagram/plan of the irrigation site showing surrounding properties and irrigation system layout.
4. A full copy of the Recycled Water Use Plan.

HEALTH DIVISION REVIEW COMMENTS:

Print Form

Oregon Water Resources Department

Municipal Reclaimed Water Registration Form

A water use permit may not be required if the water being used is reclaimed water as defined in ORS 537.131 ***and*** *the reclaimed water use is both authorized by the Oregon Department of Environmental Quality (DEQ)* ***and registered*** *with Oregon Water Resources Department (WRD)*(ORS 537.132). *Currently there is no fee for registering.*

Complete and send this Registration Form ***to the DEQ permit writer*** *managing the wastewater treatment facility discharge permit. DEQ will review and sign this Registration Form prior to sending it on to WRD in Salem. A response letter will be sent by WRD to all parties within 60 days of receipt.*

Instructions *are available to guide you. If you need assistance, please call 503-986-0900 and ask for the "Water Reuse Coordinator" or contact the local watermaster in your county. Insert "N/A" if the requested information does not apply to your situation.*

1. Name of "Registrant". Who will use the reclaimed water?

Name of Reclaimed Water User: Rob and Lori Thomas

County where reclaimed water use will occur: Baker County

Mail Address: 42734 Oregon Trail Road, Baker City, Oregon 97814
Street/P.O. Box *City* *State* *Zip*

Daytime Telephone: (541) 403-0562 *E-mail:* rob.thomas@thomasangusranch.com

2. Does the reclaimed water user own the land where the use will occur?

☒ YES ☐ NO If no, provide the landowner's name and contact information.

Landowner Name: _____

Mail Address: _____
Street/P.O. Box *City* *State* *Zip*

Daytime Telephone: _____ *E-mail:* _____

3. Are there existing water rights on the same land where the use will occur?

☒ YES (provide information below) ☐ NO

Application No. See Table 1. *Permit No.* See Table 1.

Certificate No. See Table 1. *Decree vol. & pg.* See Table 1.

Will the reclaimed water be used ***instead of*** *existing water rights OR used to* ***supplement*** *the continued use of the existing water rights?* Supplement

4. Has DEQ issued a Municipal Wastewater Treatment Facility Discharge Permit authorizing the use of reclaimed water? *(If yes, provide permit number)*

☒ YES *NPDES Permit No.* _____ or *WPCF Permit No.* 103287

Permit Effective Date: August 24, 2022 *Permit Expiration Date:* July 31, 2032

DEQ Region: (Check one) ☐ *Northwest Region* ☒ *Eastern Region* ☐ *Western Region*

☐ NO *Permit application was submitted to DEQ, but not yet issued.*

☐ NO *Permit application has not been submitted to DEQ.*

5. Who is treating and supplying the reclaimed water to the user?

Name of Supplier: City of Baker City *Telephone No.* (541) 524-2031

Treatment Facility Name: Baker City Wastewater Treatment Facility *Telephone No.* (541) 524-2031

Mail Address: P.O. Box 650, Baker City, Oregon 97814

Street/P.O. Box *City* *State* *Zip*

6. Which water provider supplies potable municipal water to the city/community that produces the sewage entering the treatment facility?

Municipal Water Provider: City of Baker City *Telephone No.* (541) 524-2031

Source(s) of Municipal Water: Surface water from Baker City watershed

(stream name, groundwater, and/or reservoir name)

7. Will the use of reclaimed water occur inside or outside the water service boundaries of the potable municipal water provider identified above in Question 6?

☐ INSIDE ☒ OUTSIDE

8. What is the length in years of the agreement/contract between the reclaimed water user and the reclaimed water supplier? Perpetual

Describe any conditions in the agreement that limit use of the reclaimed water.

Conditions include irrigating at acceptable agronomic rates, keeping livestock from direct contact with recycled water, observing property line setbacks, and other conditions outlined in the City of Baker City Recycled Water Use Plan.

9. Please describe the transmission system that delivers reclaimed water from the wastewater treatment facility to the place of reclaimed water use.

In 2022, the City of Baker City completed a Wastewater System Improvements project that included a new effluent pump station that diverts treated wastewater through a 6-mile, 14-inch effluent forcemain to a new effluent storage pond. Along the forcemain alignment there are irrigation connections for the recycled water user.

(Include type of construction of diversion works/pump capacity, length and dimensions of supply ditches/ pipelines)

10. What is the Intended Use(s) of Reclaimed Water?

Irrigation

(irrigation, aquifer recharge, wetlands, industrial, cooling, aquifer storage & recovery, etc.)

Irrigation Total Acres: 326 *What type of crop?* Pasture

(hay, pasture, golf course, wood fiber, etc.)

What is the irrigation application system? Center pivot

(flood, center pivot, wheel line, drip, micro-sprinklers)

How much Reclaimed Water will be used? 2,250 gallons per minute

(cubic feet per second, OR gallons per minute)

Date use began or will begin: September 2022 *Period of use (month/day): from* April 1 *to* October 31

11. What are the water user's motivations to use reclaimed water?

- ☐ My existing water rights are "junior" and not always reliable.
- ☐ Another water source is available, but reclaimed water is less expensive.
- ☐ Reclaimed water is the only source available and enables the use listed in Question 10.
- ☑ Reclaimed water allows a WRD transfer of existing water rights to a different location.
- ☐ Reclaimed water use reduces demand on the local municipal water supply.
- ☐ To assist the treatment facility in meeting DEQ regulatory permit requirements.
- ☐ To recharge the aquifer or store water in the aquifer for future recovery.
- ☐ Other (describe): _____

12. Describe the historic reclaimed water disposal method.

A) Into which stream was the reclaimed water discharged? Powder River

B) Has the reclaimed water been discharged into the stream for 5 or more years?

☒ YES ☐ NO

C) Where did the treated wastewater historically enter the stream?

River mile 116.3

(Township, Range and Section, or distance from landmark, or river mile, or Lat/Long)

D) Does the amount (rate in gpm or cfs) of reclaimed water proposed for use under this registration represent more than 50% of the total average annual flow of the stream?

☐ YES ☒ NO ☐ UNKNOWN

Source of information used to answer this? U.S. Geological Survey stream data for the Powder River at Baker City, Oregon

13. Is the required map attached showing the reclaimed water transmission system and place of use?

☒ YES ☐ NO (If No, please prepare and attach map).

The Registration Form is not complete without an adequate map.
See map requirement explanation on page 4.

14. MAP REQUIREMENTS:

This registration must be accompanied by a map, or maps, to show the location of the wastewater treatment facility, location of reclaimed water transmission system (pipelines, canals, etc.) and the place of reclaimed water use. Features of the map(s) should include the following:

- A north arrow.
- Drawn to scale at not less than 4" = 1 mile, with the scale identified.
- Township, Range, Section, Quarter-Quarters, and tax lot number(s).
- Place of use shown by Quarter-Quarter section with shading or diagonal lines.
- Acres, if land application, per Quarter-Quarter section (approximate if not certain).
- Location of main canals or pipelines to and within the reclaimed water use area.
- Streams and roads identified if they cross through the map.
- Other obvious features that would help someone in the field locate the place of use.
- A legend.

A map showing the wastewater treatment facility, transmission system, and place of use at a scale of 4" = >1 mile is fine **only if a second map is provided showing the place of use at not less than 4" = 1 mile.*

15. ADDITIONAL COMMENTS: Provide additional information here or attach additional pages.

The following figures from the City's Recycled Water Use Plan are attached:

- Figure 1-1, Location and Vicinity Maps
- Figure 2-1, Thomas Reuse Sites
- Figure 8-1, Tax Lot Map

16. Signatures of Registrant and Reclaimed Water Supplier:

I/We certify that the information provided in this Registration Form is an accurate representation of the proposed reclaimed water use to the best of my knowledge:

Registrant Printed Name: Rob Thomas *Title:* Landowner/Reclaimed Water User

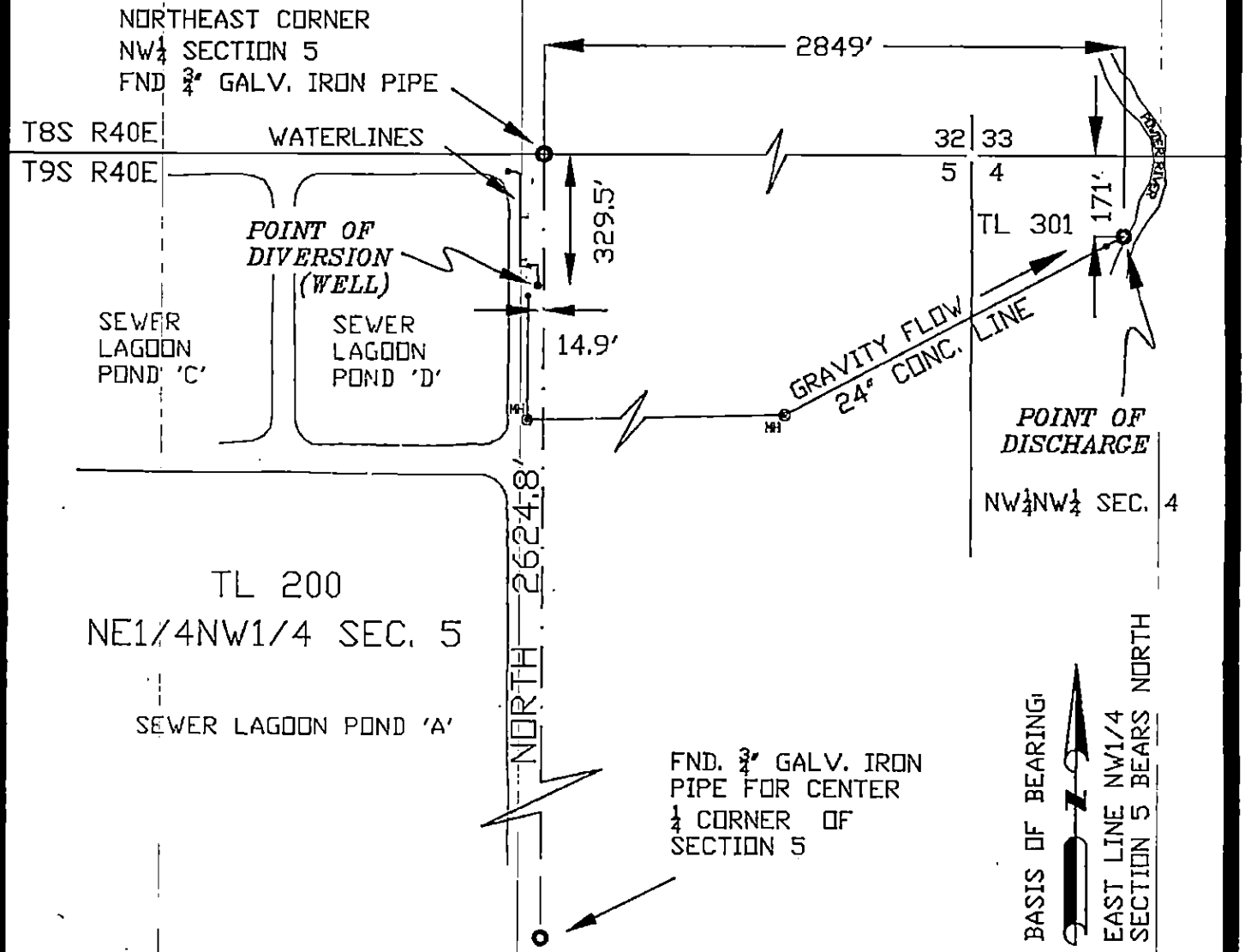
Registrant Signature: Rob Thomas (Aug 23, 2022 16:12 PDT) *Date:* Aug 23, 2022

Supplier Printed Name: Michelle Owen *Title:* Public Works Director

Supplier Signature: *Date:* 8/23/2022

***NOTE:** Once completed and signed, keep a copy and **send this form to the DEQ permit writer** responsible for the wastewater treatment facility permit. DEQ will sign and forward the form to WRD in Salem. A response letter will be sent by WRD to all parties within 60 days.*

T.9S., R.40E., W.M.
$NW\frac{1}{4}NW\frac{1}{4}$ SECTION 4 & $NE\frac{1}{4}NW\frac{1}{4}$ SECTION 5



SCALE 1"=400'

WATER RIGHTS MAP OF FINAL PROOF SURVEY

RECEIVED
OCT 26 2007
WATER RESOURCES DEPT
SALEM, OREGON

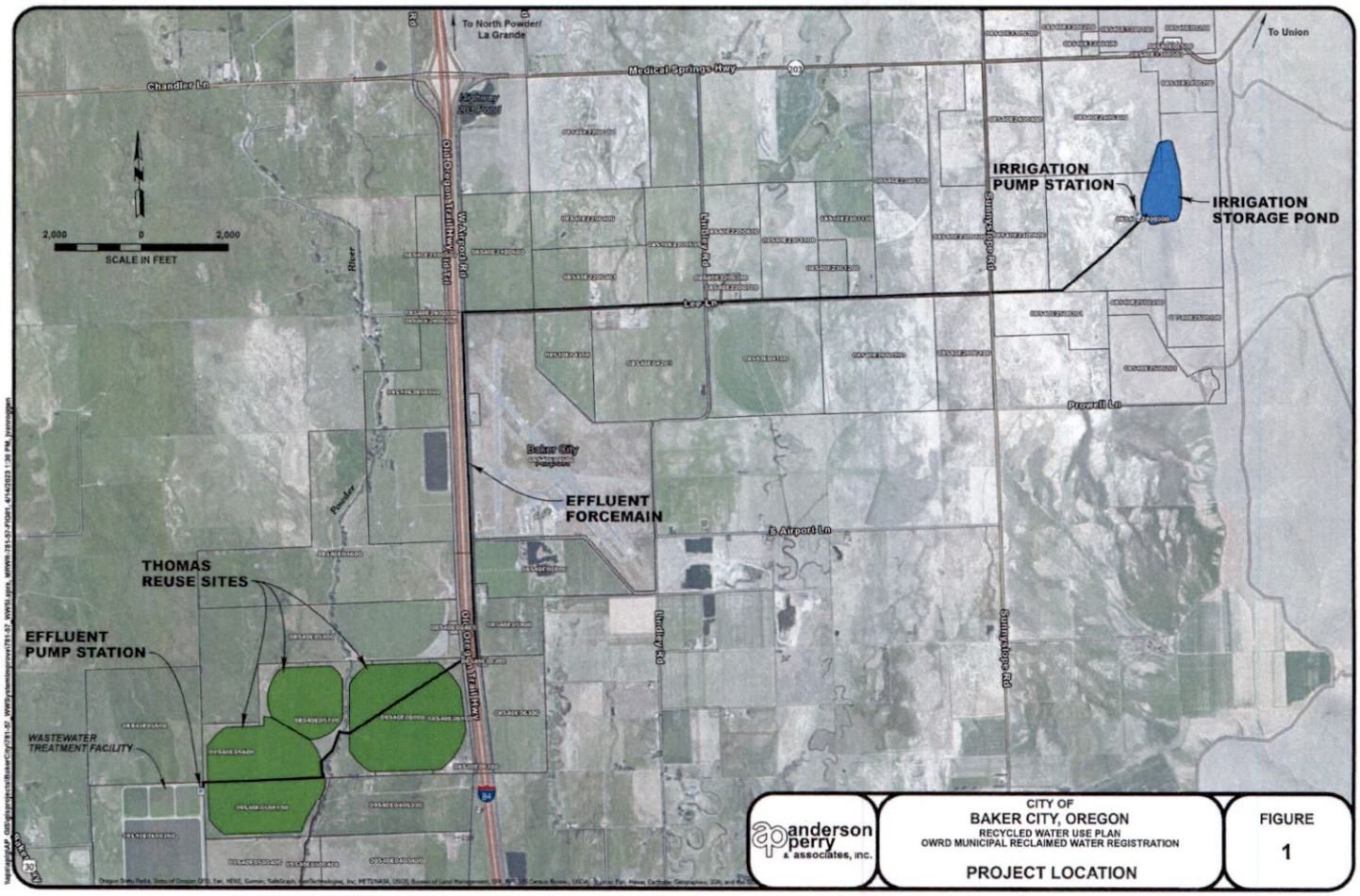
Certified Water Right Examiner #315
Thomas D. Fiak
May 19, 1992
STATE OF OREGON

PREPARED FOR:
THE CITY OF BAKER CITY
OCTOBER 19, 2007.
APPLICATION #G-14237
PERMIT #G-12888

DISCLAIMER

"THIS MAP IS NOT INTENDED TO PROVIDE LEGAL DIMENSIONS OR LOCATIONS OF PROPERTY OWNERSHIP LINES"

FILE:CAD\WASTEWATER\LAGOON WATER RIGHTS 2007.DWG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La Grande
To Union
Chandler Ln
Medical Springs Hwy
203
Old Oregon Trail Hwy
Airport Rd
Lindley Rd
Sunnyslope Rd
IRRIGATION
PUMP STATION
IRRIGATION
STORAGE POND
Lee Ln
Prowell Ln
2,000
0
2,000
SCALE IN FEET
River
Powder
Baker City
EFFLUENT
FORCEMAIN
S Airport Ln
THOMAS
REUSE SITES
EFFLUENT
PUMP STATION
WASTEWATER
TREATMENT FACILITY
84
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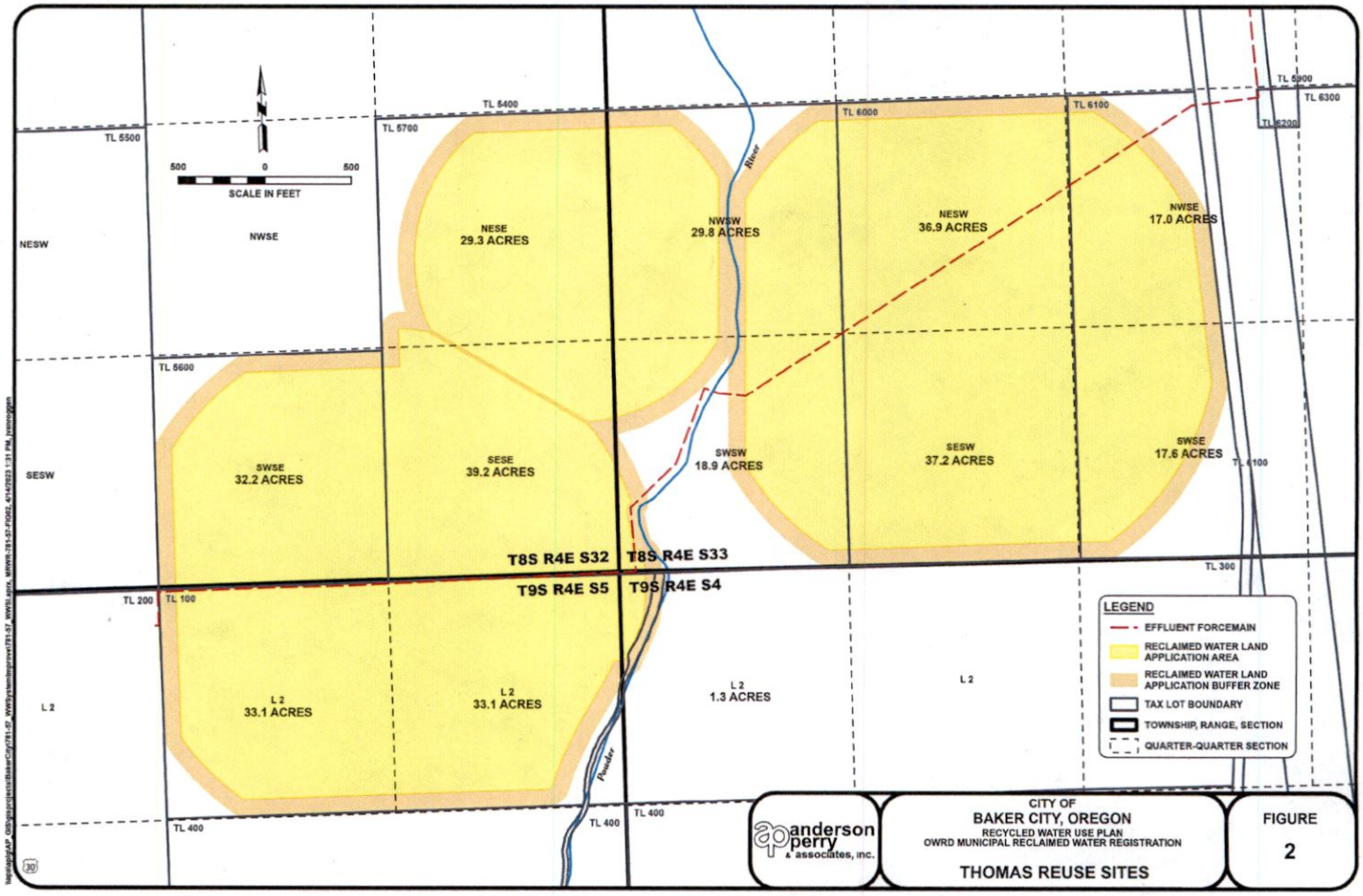
& associates, inc.
CITY OF
BAKER CITY, OREGON
RECYCLED WATER USE PLAN
OWRD MUNICIPAL RECLAIMED WATER REGISTRATION
PROJECT LOCATION
FIGURE
1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SCALE IN FEET
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NWSE
NESE
29.3 ACRES
NWSW
29.8 ACRES
NESW
36.9 ACRES
NWSE
17.0 ACRES
River
TL 5600
SESW
SWSE
32.2 ACRES
SESE
39.2 ACRES
SWSW
18.9 ACRES
SESW
37.2 ACRES
SWSE
17.6 ACRES
TL 4100
T8S R4E S32
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T9S R4E S4
TL 300
TL 200
TL 100
L 2
L 2
33.1 ACRES
L 2
33.1 ACRES
L 2
1.3 ACRES
L 2
Powder
TL 400
TL 400
TL 400
LEGEND
EFFLUENT FORCEMAIN
RECLAIMED WATER LAND APPLICATION AREA
RECLAIMED WATER LAND APPLICATION BUFFER ZONE
TAX LOT BOUNDARY
TOWNSHIP, RANGE, SECTION
QUARTER-QUARTER SECTION
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CITY OF
BAKER CITY, OREGON
RECYCLED WATER USE PLAN
OWRD MUNICIPAL RECLAIMED WATER REGISTRATION
THOMAS REUSE SITES
FIGURE
2

This section is to be completed by DEQ

17. Signature of DEQ Water Quality Manager:

Date registration form received at DEQ: 3/23/2023

Pursuant to ORS 537.132 DEQ has:

a) **Authorized the use of reclaimed water (referred to by DEQ regulations as "recycled water") as evidenced by the NPDES or WPCF permit issued and described below.**

Permit Number: 103287 *DEQ File Number:* _____

Printed DEQ Permit Writer's Name: Anna Morgan-Hayes

Mail Address: 475 NE Bellevue Dr. Ste 110, Bend, OR 97701
Street/P.O. Box *City* *State* *Zip*

Telephone: 541-246-4562 *E-mail:* anna.morgan-hayes@deq.oregon.gov

b) **Consulted with State Department of Fish and Wildlife and determined this use of reclaimed water shall not have a significant negative impact on fish or wildlife.**

ODFW contact name: Becky Anthony

ODFW contact phone number: 971-375-7394

c) **Determined the use of reclaimed water is intended to improve the water quality of the receiving stream.**

The reclaimed water is (e.g. too warm for salmonids): The reclaimed water is not an impact to salmonids.

I certify the provisions of ORS 537.132(1)(a)(b) and (c) for this application are satisfied.

_____ Date 4/3/2023

DEQ Water Quality Manager Signature

Mike Hiatt

DEQ Water Quality Manager's printed name

Once signed by DEQ, this completed form is to be sent to:

Oregon Water Resources Department
C/O Water Reuse Coordinator
725 Summer St. NE, Suite A
Salem, OR 97301-1266

THOMAS REUSE SITE
EXISTING WATER RIGHTS

Thomas West Reuse Site

First Name	Last Name	Use Description	Priority Date	Application	Permit	Certificate	Decree Title
Richard	Kruger	Irrigation	12/31/1869	-	-	92197	Powder River
Robert	Thomas	Irrigation	05/06/1876	-	-	92198	Powder River
William E	Widman	Supplemental Irrigation	11/23/1965	G 3305	G 3078	37997	-

Thomas North Reuse Site

First Name	Last Name	Use Description	Priority Date	Application	Permit	Certificate	Decree Title
Robert	Thomas	Irrigation	05/06/1876	-	-	92198	Powder River

Thomas East Reuse Site

First Name	Last Name	Use Description	Priority Date	Application	Permit	Certificate	Decree Title
Robert	Thomas	Irrigation	05/06/1876	-	-	92198	Powder River
ODFW		Anadromous and Resident Fish Habitat (In-stream)	1/29/1992	IS 72191	-	-	-

Note: Data shown on this table were obtained from the Oregon Water Resources Department Water Rights Mapping Tool.

ODFW = Oregon Department of Fish and Wildlife

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CITY OF
BAKER CITY, OREGON
OREGON WATER RESOURCES DEPARTMENT
MUNICIPAL RECLAIMED WATER REGISTRATION FORM
THOMAS REUSE SITE
EXISTING WATER RIGHTS

TABLE
1

This section is to be completed by DEQ

17. Signature of DEQ Water Quality Manager:

Date registration form received at DEQ:_____

Pursuant to ORS 537.132 DEQ has:

a) **Authorized the use of reclaimed water (referred to by DEQ regulations as "recycled water") as evidenced by the NPDES or WPCF permit issued and described below.**

*Permit Number:*_____ *DEQ File Number:*_____

*Printed DEQ Permit Writer's Name:*_____

*Mail Address:*_____
Street/P.O. Box *City* *State* *Zip*

*Telephone:*_____ *E-mail:*_____

b) **Consulted with State Department of Fish and Wildlife and determined this use of reclaimed water shall not have a significant negative impact on fish or wildlife.**

*ODFW contact name:*_____

*ODFW contact phone number:*_____

c) **Determined the use of reclaimed water is intended to improve the water quality of the receiving stream.**

*The reclaimed water is (e.g. too warm for salmonids):*_____

_____

I certify the provisions of ORS 537.132(1)(a)(b) and (c) for this application are satisfied.

_____ Date_____
DEQ Water Quality Manager Signature

_____
DEQ Water Quality Manager's printed name

Once signed by DEQ, this completed form is to be sent to:

Oregon Water Resources Department
C/O Water Reuse Coordinator
725 Summer St. NE, Suite A
Salem, OR 97301-1266

anderson perry & associates, inc.

CITY OF
BAKER CITY, OREGON
RECYCLED WATER USE PLAN SUMMARY

MACKENZIE REUSE SITES

FIGURE
C

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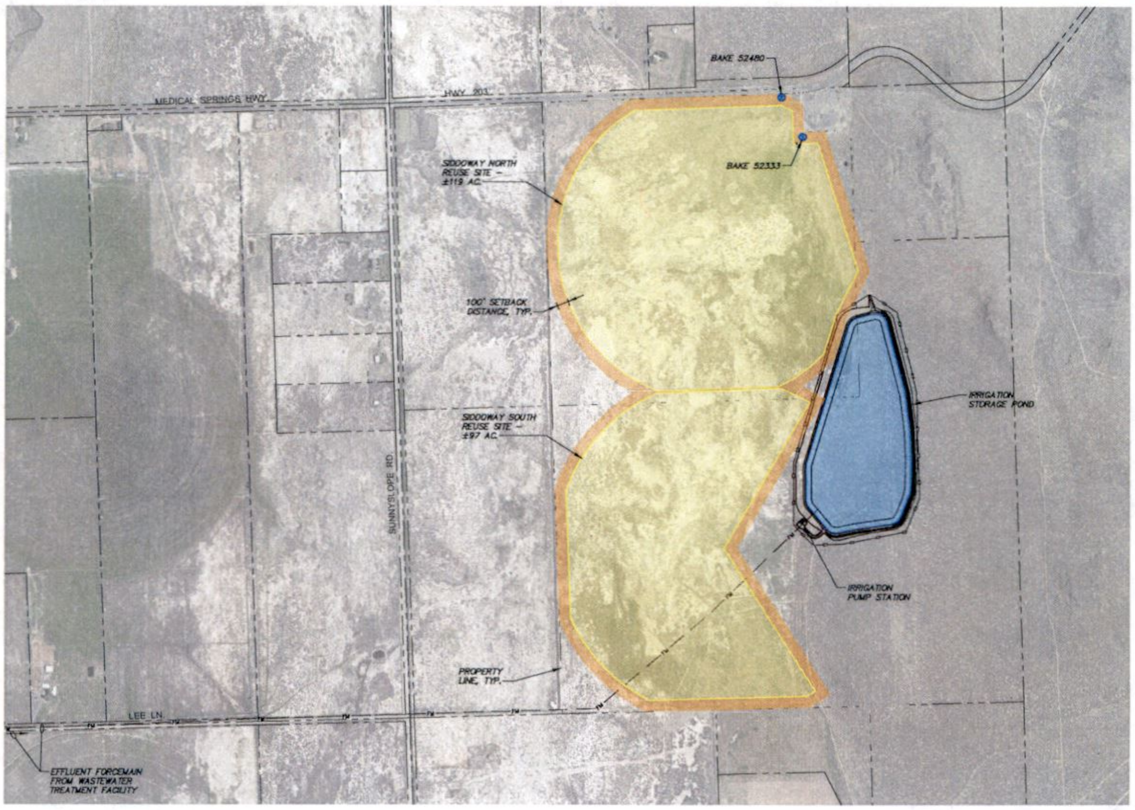


SCALE IN FEET: 400 0 400 800 1200

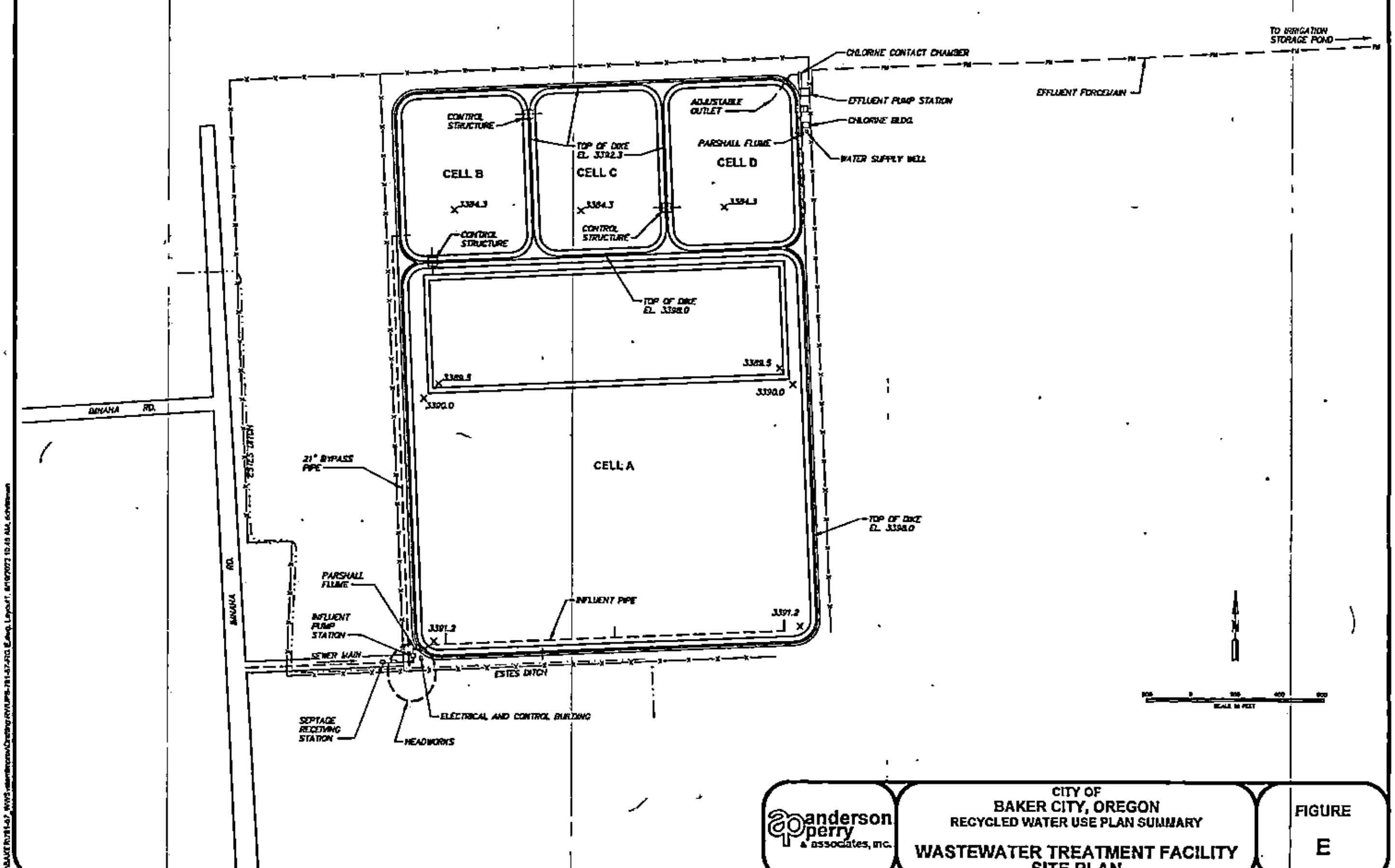
anderson perry & associates, inc.

CITY OF
BAKER CITY, OREGON
RECYCLED WATER USE PLAN SUMMARY

SIDDOWAY REUSE SITES

FIGURE D

119.0
97.0
216.0

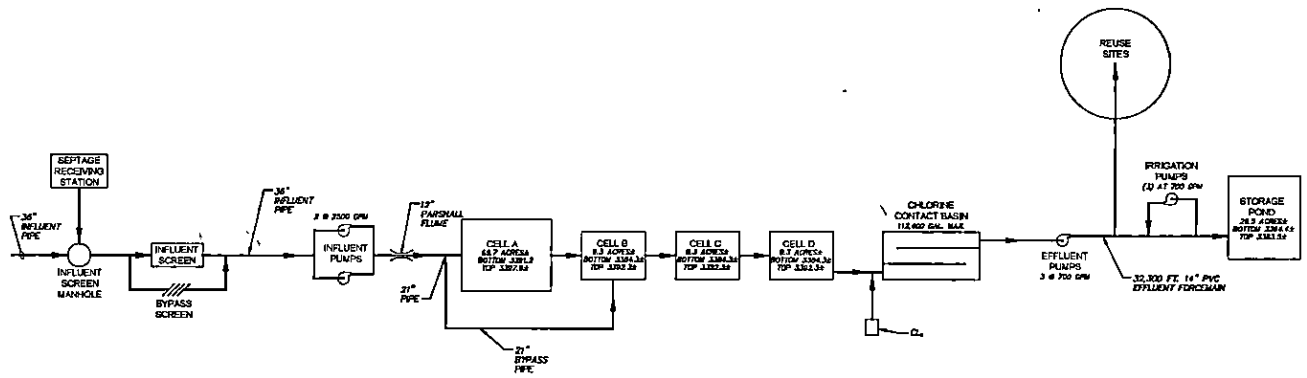


anderson perry & associates, inc.

CITY OF
BAKER CITY, OREGON
RECYCLED WATER USE PLAN SUMMARY

WASTEWATER TREATMENT FACILITY SITE PLAN

FIGURE
E



PROCESS FLOW DIAGRAM

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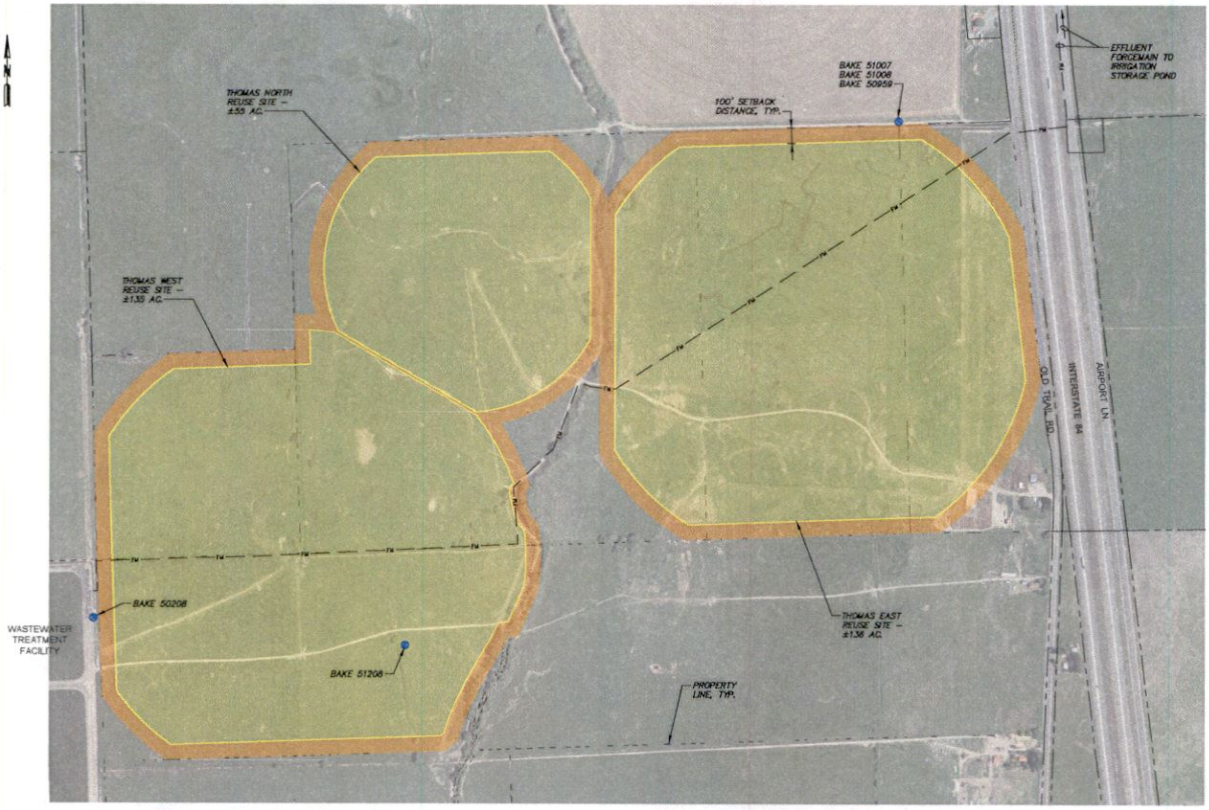
CITY OF
BAKER CITY, OREGON
RECYCLED WATER USE PLAN SUMMARY

PROCESS FLOW DIAGRAM

FIGURE
F



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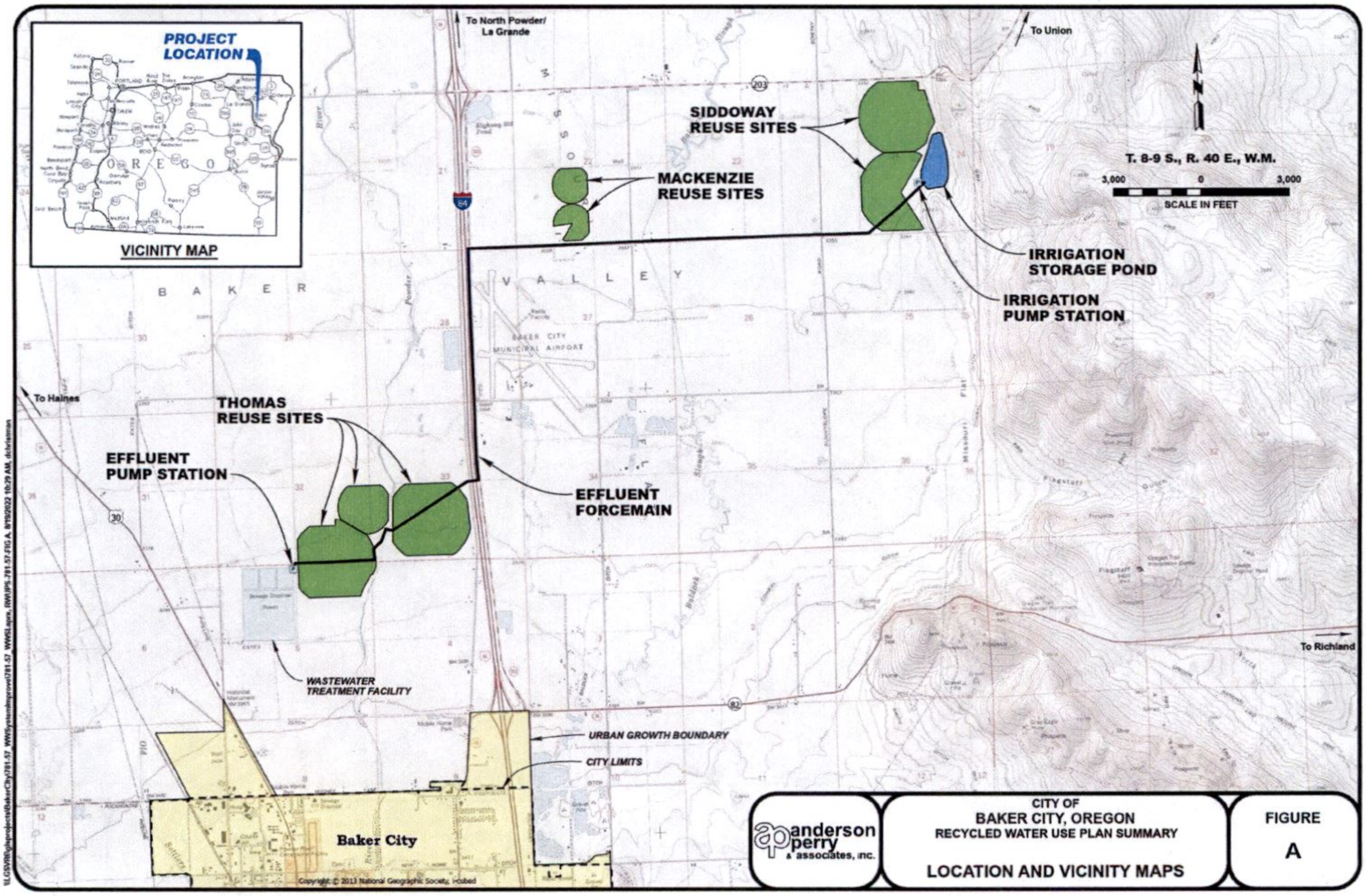
CITY OF
BAKER CITY, OREGON
RECYCLED WATER USE PLAN SUMMARY

THOMAS REUSE SITES

FIGURE
B

O:\BAKER\181-57_WWSystemImprovt\Drafting\RWUP\5-181-57-FIG B.dwg, Layout1, 8/19/2022 10:40 AM, dohnstean

136.0
55.0
135.0
376.0 total


PROJECT LOCATION
VICINITY MAP
To North Powder/ La Grande
To Union
SIDDOWAY REUSE SITES
MACKENZIE REUSE SITES
T. 8-9 S., R. 40 E., W.M.
3,000
0
3,000
SCALE IN FEET
IRRIGATION STORAGE POND
IRRIGATION PUMP STATION
BAKER
VALLEY
BAKER CITY MUNICIPAL AIRPORT
To Haines
THOMAS REUSE SITES
EFFLUENT PUMP STATION
EFFLUENT FORCEMAIN
To Richland
WASTEWATER TREATMENT FACILITY
URBAN GROWTH BOUNDARY
CITY LIMITS
Baker City
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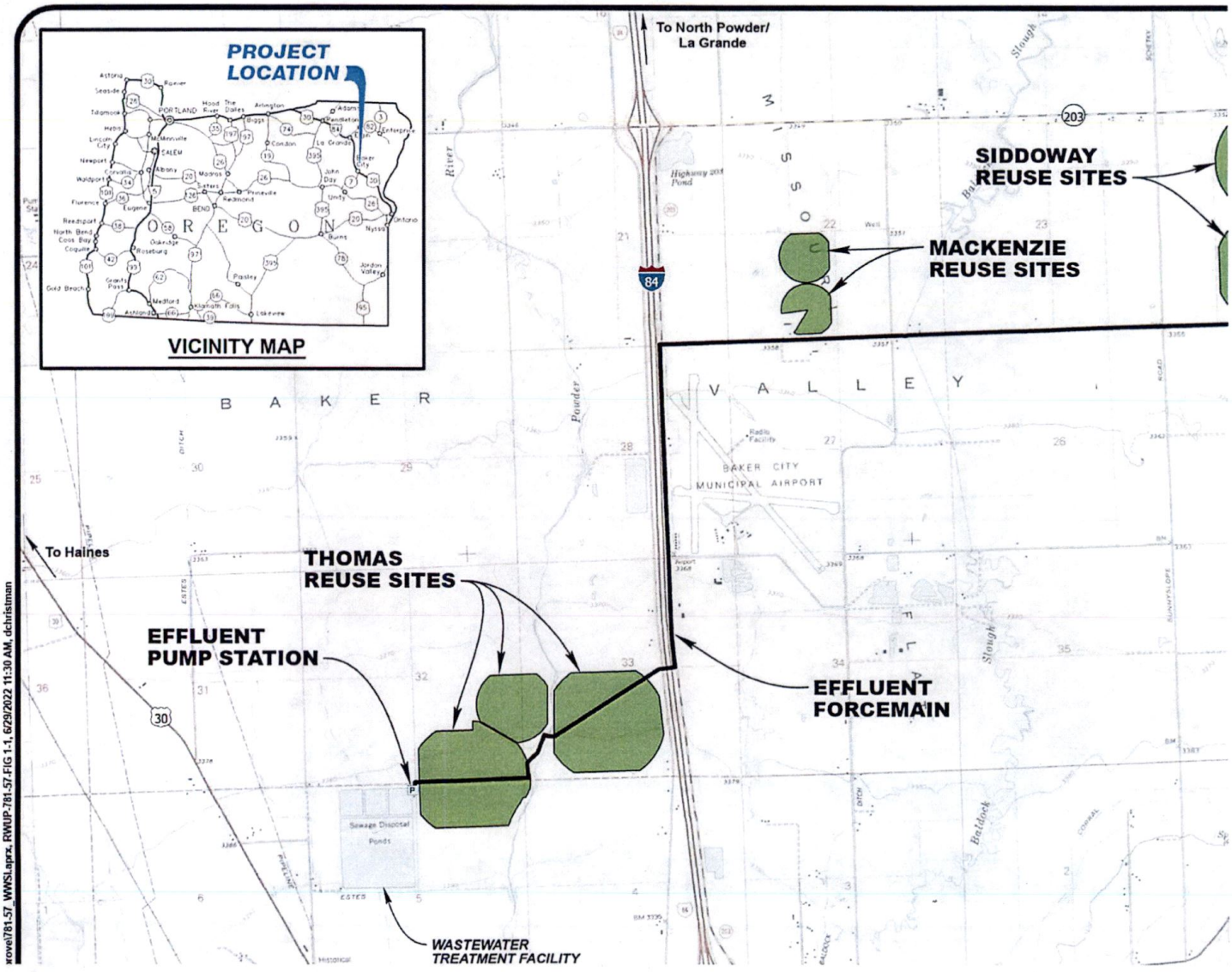
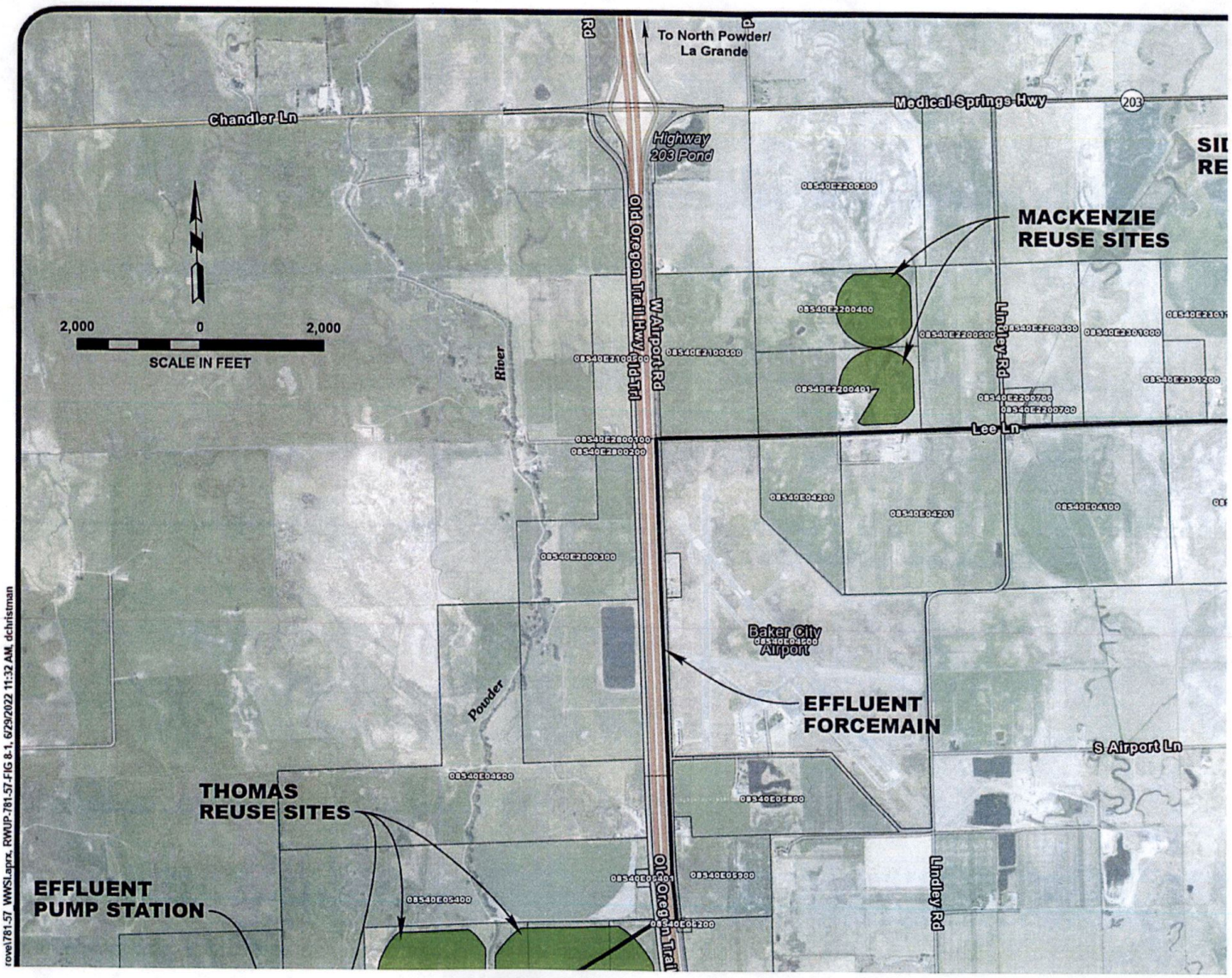
CITY OF BAKER CITY, OREGON
RECYCLED WATER USE PLAN SUMMARY
LOCATION AND VICINITY MAPS
FIGURE
A



xrovel\781-57_WWSLagrx, RWUP-781-57-FIG 1-1, 6/29/2022 11:30 AM, dchristman

57-FIG 2-1.dwg, Layout1, 6/29/2022 2:01 PM, dchristman



rowe\781.57_WWSI.aprx, RWUP-781.57-FIG 8-1, 6/29/2022 11:32 AM, dchristman

NEARBY DEVELOPED PROPERTIES

Site	Approximate Distance to Nearest Developed Property				Nearest Developed Property Downwind of Irrigation Site[1]
	North Boundary	South Boundary	East Boundary	West Boundary	
Thomas West Reuse Site	4,200 ft	2,600 ft	3,000 ft	2,500 ft	Residence located approximately 2,600 ft from south boundary.
Thomas North Reuse Site	2,600 ft	3,500 ft	2,800 ft	4,000 ft	Residence located approximately 4,000 ft from south boundary.
Thomas East Reuse Site	1,900 ft	1,300 ft	4,600 ft	6,200 ft	Barn/residence located approximately 1,300 ft from the south boundary.
Mackenzie North Reuse Site	2,100 ft	1,000 ft	1,900 ft	1,600 ft	Residence located approximately 1,000 ft from the south boundary.
Mackenzie South Reuse Site	950 ft	300 ft	1,150 ft	300 ft	Residence located approximately 300 ft from the south boundary.
Siddoway North Reuse Site	500 ft	2,400 ft	2,200 ft	1,600 ft	Residence located approximately 3,900 ft from the south boundary.
Siddoway South Reuse Site	2,100 ft	1,700 ft	3,000 ft	1,800 ft	Residence located approximately 1,700 ft from the south boundary.

[1]Assumes prevailing wind direction from the north.

ft = feet

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CITY OF
BAKER CITY, OREGON
RECYCLED WATER USE PLAN SUMMARY

NEARBY DEVELOPED PROPERTIES

TABLE
1

NEARBY GROUNDWATER WELLS

Site	Well	Well Owner[1]	Well Use	Reference Figure
Thomas West Reuse Site	BAKE 50208	City of Baker City	Domestic Use, Other - Washdown	Figure B
Thomas West Reuse Site	BAKE 51208	City of Baker City	Unknown[2]	Figure B
Thomas East Reuse Site	BAKE 50959	Diehl and Nicki Hiner	Domestic Use	Figure B
Thomas East Reuse Site	BAKE 51007	Diehl and Nicki Hiner	Pasture Irrigation	Figure B
Thomas East Reuse Site	BAKE 51008	Diehl and Nicki Hiner	Yard Irrigation	Figure B
Mackenzie South Reuse Site	BAKE 609	Wm. Burke	Livestock Irrigation	Figure C
Mackenzie South Reuse Site	BAKE 52646	Wannie Mackenzie	Domestic Use	Figure C
Siddoway North Reuse Site	BAKE 52480	Bert Siddoway	Pasture Irrigation	Figure D
Siddoway North Reuse Site	BAKE 52333	Bert Siddoway	Livestock Irrigation, Other - Exploratory	Figure D

[1]According to well log.

[2]Abandoned.

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CITY OF
BAKER CITY, OREGON
RECYCLED WATER USE PLAN SUMMARY

NEARBY GROUNDWATER WELLS

TABLE
2

RECLAIMED WATER REGISTRATION CHECKLIST

RM (assigned by Joan): **RM-240** County: **Baker** Registrant (User of Water): **Thomas Angus Ranch**

Place of Use:

IRRIGATION							
Twp	Rng	Mer	Sec	Q-Q	Acres	Location Description/Tax lot	Contract Length in Years
8 S	40 E	WM	32	NE SE	29.3	5700	10 Years August 2022 through July 31, 2032 *Use period April 1- October 31
8 S	40 E	WM	32	SW SE	32.2	5600	
8 S	40 E	WM	32	SE SE	39.2	5700	
8 S	40 E	WM	33	NE SW	36.9	6000	
8 S	40 E	WM	33	NW SW	29.8	5700	
8 S	40 E	WM	33	SW SW	18.9	5700	
8 S	40 E	WM	33	SE SW	37.2	6000	
8 S	40 E	WM	33	NW SE	17.0	6100	
8 S	40 E	WM	33	SW SE	17.6	6100	
9 S	40 E	WM	4	NW NW	1.3	100	
9 S	40 E	WM	5	NE NE	33.1	100	
9 S	40 E	WM	5	NW NE	33.1	100	
				Total	325.6		

Amount: **2,250 gpm (5.013 cfs)** Use: **SUPPLEMNTAL IRRIGATION** # of Acres (if for IR): **325.6** WM Dist #: **8**

Supplier of the Reclaimed Water: **City of Baker City** DEQ Muni WW Permit #: **WPCF 103287**

Source of Reclaimed Water (Wastewater treatment plant): **City of Baker City Wastewater Treatment Facility**

Point of Diversion:

Twp	Rng	Mer	Sec	Q-Q
9 S	40 E	WM	5	NE NW

Agent (*if any*): ----

☒ Property Ownership: Does Registrant own all land for the proposed project? ☒ Yes ☐ No

If No: ☐ The affected landowner's name and mailing address is listed. Notes:

☒ The **map** must meet the following minimum requirements.

- ☒ Township, Range, Section
- ☒ Streams and roads identified as they cross through the map
- ☒ Place of use, Q-Qs, and tax lot clearly identified
- ☒ Even map scale of not less than 44" = 1 mile (1" = 1320 ft.)
- ☒ Location of each diversion point (WW Treatment Plant)
- ☒ North Directional Symbol
- ☒ Number of acres per Q-Q if for irrigation, nursery, or agriculture
- ☒ Legend

* *A map showing the wastewater treatment facility, transmission system and place of use at a scale of 4" = 1 mile is fine, **only if** a second map is provided showing the place of use at not less than 4" = 1 mile.*

☒ Signature of ***all*** Registrants and Reclaimed Water Supplier

☒ DEQ section (17) is completely filled out and signed

☒ Existing Water Rights: **92197, 92198, 37997**

DO NOT send registration back to applicant if it is not complete. ALL registrations go to Joan Smith.

Reviewed by:  Date: **April 19, 2023**

*Remember there is no fee for Reclaimed Water Registrations