Oregon Water Resources Department

Registration No.
(Dept. Use Only)

Registration of Reclaimed Municipal Water Use

"Reclaimed water" means water that has been used for municipal purposes and after such use has been treated in a sewage treatment system and that, as a result of treatment, is suitable for a direct beneficial purpose or a controlled use that could not otherwise occur. (ORS 537.131 and 537.132)

NOTE: *Please type or print in dark ink. If your registration is found to be incomplete or inaccurate, we will return it to you. If any requested information does not apply to your registration, insert "n/a."*

Registrant(s) City of Donald c/o Heidi Bell, City Manager
(owner of the land where reclaimed water is to be used)

Mailing Address PO Box 388

Donald (*City*) OR (*State*) 97020-0388 (*Zip*) 503.678.5543 (*Daytime Telephone No.*)

1. Municipal Discharge Permit

NPDES Permit No. ---------- *Effective Date* _____ *Expiration Date* _____

WPCF Permit No. 101978 *Effective Date* 1-17-2013 *Expiration Date* 11-30-2022

Date use of Reclaimed Water began, or is scheduled to begin _____

Annual Period of Use: from March 1 *to* October 31 (See Remark 1)

2. Supplier of the Municipal Water which produces the Reclaimed Water

If more than one supplier is used, please provide a list in the ***Remarks*** *section on page 4.*

Name of Supplier City of Donald

Address PO Box 388, Donald OR 97020-0388

Telephone No. 503.678.5543 (City Hall) *Fax No.* 503.678.6538 (STP)

Original Source of Municipal Supply City of Donald STEP-Stabilization Lagoon @ Donald STP

3. Supplier of Reclaimed Water

Name of Supplier City of Donald

Name of Facility Donald STP

Street Address of Facility 10501 Donald Road Donald, Oregon

Name of Facility Owner City of Donald

Address of Facility Owner PO Box 388 Donald OR 97020-0388

Telephone No. of Supplier 503.678.5543 (City Hall) *Telephone No. of Facility* 503. 678.1411 (STP)

Fax No. 503.678-6538 (STP)

RECEIVED

APR 05 2016

WATER RESOURCES DEPT
SALEM, OREGON

- 4. User of Reclaimed Water

Name of Water User McKay Farms, Inc. Dean McKay

Address 19172 French Prairie Road NE PO Box 279 St. Paul, Oregon 97137

Telephone No. 503.633.4057 *Fax No.* _____

- 5. Agreement/Contract

Period of Agreement and Contract 2014-2019

Term of Agreement 5 years

Special Limitations (See Remark 5)

- 6. Total Amount of Reclaimed Water

Enter the amount to be applied to beneficial use:

(See Remark 6) *cubic feet per second, OR* _____ *gallons per minute*

If reclaimed water is to be used from more than one treatment facility, give the quantity from each.

- 7. Intended Use(s) of Reclaimed Water

Irrigation of grass seed crop

(If for more than one use, give the quantity of reclaimed water from each treatment facility for each use.)

*If for **IRRIGATION**, or other land application, state the **TOTAL** number of acres to receive reclaimed water under each use;*

Irrigation 47.7 Acres

Other (describe) None

(Temperature Control, Mitigation, Wetland, etc.)

- 8. Description of Delivery System

Include dimensions and type of construction of diversion works, length and dimensions of supply ditches or pipelines, size and type of pump and motor. If for irrigation, describe the type of system (i.e., flood, wheel line, hand line, drip, other).

Wet well/pump house at SE corner of Lagoon 2, pump capacity is 400 gpm, 30 HP. There are two buried PVC lines (5" & 8") running parallel with Donald Road to east of STP driveway then north between fields and across creek. Application is with an irrigation traveler with a big gun.

- 9. Existing Water Rights

Please provide a description of all the existing water rights appurtenant to the lands where the reclaimed water will be applied.

Application No. _____ *Permit No.* _____

Certificate No. 42031 *Decree vol & pg* _____

(Only one number needs to be provided. Attach a separate list if more than one water right is involved.)

Remarks

1. The permit does not specify a window for irrigation application; rather - "Applied at a rate and in accordance with site management practices that ensure continued agricultural, horticultural, or silvicultural productions and does not reduce the productivity of the site." (DEQ Permit Schedule A. 1.e.) Generally, irrigation is applied May through October, though climatic conditions can allow for application from March through October.

5. The contract with Dean McKay is to plant and harvest, only. The application of irrigation is made by City of Donald personnel, on City land, utilizing City equipment, under the terms and limitations of the DEQ permit and as outlined in Remark 1., above.

6. No rate is specified in the DEQ permit. The total capacity of the STP lagoons is 87.49 ac-ft. and is "Applied at a rate and in accordance with site management practices that ensure continued agricultural, horticultural, or silvicultural productions and does not reduce the productivity of the site." (DEQ Permit Schedule A. 1.e.)

Oregon
Kate Brown, Governor

Department of Environmental Quality
Western Region Eugene Office
165 East 7th Avenue, Suite 100
Eugene, OR 97401
(541) 686-7838
FAX (541) 686-7551
TTY 711

March 30, 2016

Mike McCord, Region Manager
Oregon Water Resource Department
725 Summer St NE, Suite A
Salem, Oregon 97301

Re: City of Donald, Recycled Water Use
DEQ File #24600
WQ – Marion County

Dear Mr. McCord:

Pursuant to ORS 537.132 that allows the exemption of reclaimed water from the provisions of ORS537.130, DEQ submits the following for City of Donald:

1. ORS 537.132(1)(a) The use of reclaimed water is authorized by the national pollutant discharge elimination system or water pollution control facilities permit issued pursuant to ORS 468B.050 or 468B.053.

   City of Donald is authorized by DEQ WPCF Permit # 101978 to use reclaimed water (currently referred to by DEQ regulations OAR 340-055 as recycled water).

2. ORS 537.132(1) (b) The Department of Environmental Quality, in reviewing an application for a permit pursuant to ORS 468B.050 or 468B.053, has consulted with the State Department of Fish and Wildlife on the impact to fish and wildlife to determine that the application of reclaimed water under ORS 537.130, 537.131, 537.132, 540.510 and 540.610 shall not have a significant negative impact on fish and wildlife.

   DEQ consulted with Ben Walczak, Asst. District Fisheries Biologist, ODFW Clackamas Office, 971-673-6013, and determined that the application of reclaimed water will not have a significant negative impact on fish and wildlife.

3. ORS 537.132(1) (c) The Department of Environmental Quality has determined the use of reclaimed water is intended to improve the water quality of the receiving stream.

   If treated wastewater water was discharged to receiving streams during summer months, the ammonia concentrations and temperatures of the wastewater would be too high to support healthy salmonid populations.

If you have additional questions, I may be reached at 503-378-5081.

Sincerely,

Ranei Nomura

Ranei Nomura,
Water Quality Manager
Western Region

cc: File
Ben Walczak, ODFW Clackamas Office, 17330 SE Evelyn St., Clackamas OR 97015
Heidi Bell, City Manager, City of Donald, PO Box 388, Donald OR 97020-0388
Jeanne Boatwright, Boatwright Engineering, Inc., 2613 12th St. SE, Salem, OR 97302
ec: David Cole, NWR WQ-DEQ

Permit A—GI—T-70

STATE OF OREGON

COUNTY OF MARION

CERTIFICATE OF WATER RIGHT

This Is to Certify, *That* LINWOOD CROMWELL

of P. O. Box 384, Donald 97020, *State of* Oregon, *has made proof to the satisfaction of the STATE ENGINEER of Oregon, of a right to the use of the waters of* a well

a tributary of Ryan Creek *for the purpose of* irrigation of 71.9 acres

under Permit No. G-4135 *of the State Engineer, and that said right to the use of said waters has been perfected in accordance with the laws of Oregon; that the priority of the right hereby confirmed dates from* May 14, 1968

that the amount of water to which such right is entitled and hereby confirmed, for the purposes aforesaid, is limited to an amount actually beneficially used for said purposes, and shall not exceed 0.90 cubic foot per second

or its equivalent in case of rotation, measured at the point of diversion from the stream. The point of diversion is located in the Lot 4 (NW¼ NW¼), Section 17, T. 4 S., R. 1 W., W. M., 1400 feet North and 2480 feet East from SW Corner, Rees DLC 61.

The amount of water used for irrigation, together with the amount secured under any other right existing for the same lands, shall be limited to one-eightieth *of one cubic foot per second per acre,* or its equivalent for each acre irrigated and shall be further limited to a diversion of not to exceed 2½ acre feet per acre for each acre irrigated during the irrigation season of each year;

and shall conform to such reasonable rotation system as may be ordered by the proper state officer.

A description of the place of use under the right hereby confirmed, and to which such right is appurtenant, is as follows:

2.3 acres Lot 3 (NE¼ NW¼)
0.2 acre NE¼ NW¼
14.1 acres NW¼ NW¼
Both as projected within Rees DLC 61
15.6 acres Lot 4 (NW¼ NW¼)
29.6 acres SW¼ NW¼
As projected within Rees DLC 61
Section 17

0.8 acre Lot 3 (NE¼ NE¼)
2.7 acres NE¼ NE¼
6.6 acres SE¼ NE¼
Both as projected within Rees DLC 61
Section 18
T. 4 S., R. 1 W., W. M.

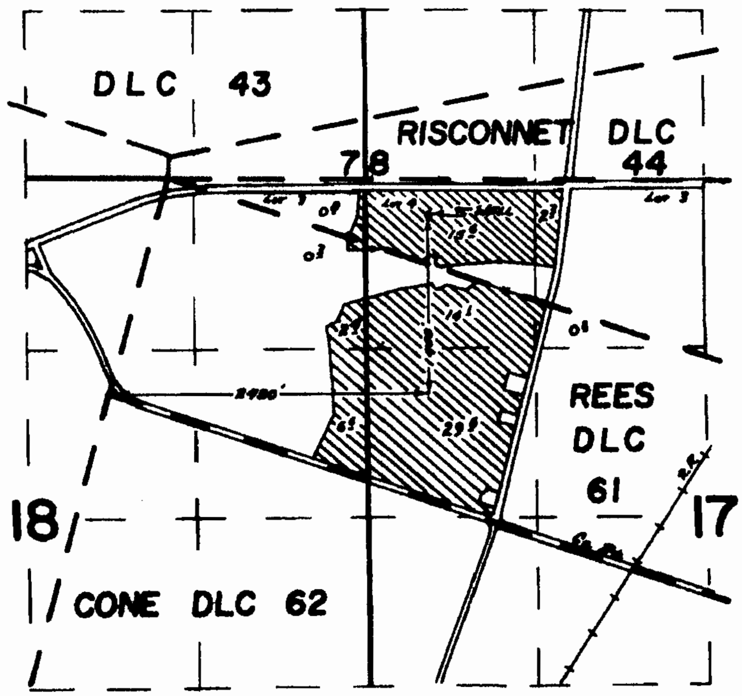
The right to the use of the water for the purposes aforesaid is restricted to the lands or place of use herein described.

WITNESS the signature of the State Engineer, affixed this date. April 14, 1975

Chris L. Wheeler
State Engineer

Recorded in State Record of Water Right Certificates, Volume 34 *, page* 42031

T.4S. R.1W. W.M.



FINAL PROOF SURVEY
UNDER

Application No. G-4383 Permit No. G-4135
IN NAME OF

LINWOOD CROMWELL

Surveyed June 4 19.73, by R.G. Mucken

DW-166-52 TJR

RESOLUTION No. 360-14

A RESOLUTION AUTHORIZING THE LEASE OF CITY REAL PROPERTY TO MCKAY FARMS INC.;

WHEREAS, pursuant to Ordinance 136-07 and Resolution 356-14 the City of Donald is party to a lease agreement with McKay Farms Inc., which lease will expire December 31, 2014; and

WHEREAS, it is the desire of the City of Donald and McKay Farms Inc., to renew the lease of city property until December 31, 2019 on the terms and conditions set forth in Exhibit "A" hereto; and

WHEREAS, renewal of the lease is in the best interest of the taxpayers and promotes the health, safety and welfare of the general public.

NOW, THEREFORE, BE IT RESOLVED that pursuant to ORS 271.360 the City of Donald City Council approves the lease attached as Exhibit "A", which lease is incorporated by reference as though fully set forth herein.

PASSED and ADOPTED by the City Council of the City of Donald this 13th day of May 2014 by the vote of 4 ayes and Ø nays.

DATE: May 13, 2014.

Daroll Nicholson
Mayor

ATTEST by the City Manager this 13th day of May 2014

Heidi Blaine, MPA
City Manager

AGRICULTURAL LEASE AGREEMENT

Lessor CITY OF DONALD, a municipal corporation
P.O. Box 388
Donald, Oregon 97020

Lessee McKAY FARMS, INC.
19172 French Prairie Road, N.E.
P.O. Box 279
St. Paul, Oregon 97137

Upon the mutual covenants herein, it is agreed as follows:

1. Premises

The "Premises" rented hereby are approximately 60 acres in Marion County, Oregon, belonging to Lessor located to the west of Butteville Road and to the north of Donald Road, adjacent to the City of Donald Sewage Treatment Plant, and as depicted in the map attached hereto as Exhibit "A", which is by this reference incorporated herein.

2. Rent, Term and Right to Possession, Release

(a) The term of this Agricultural Lease Agreement ("Agreement") shall begin on January 1, 2015 and terminate completely on December 31, 2019. Lessee shall have the right to use or possess the Premises for the purposes allowed in this Lease and to cultivate or harvest any crops growing or planted until December 31, 2019, when such rights shall terminate completely without any notice from Lessor. Rent shall be $21,744 per year, payable as follows:

July 1, 2014	$21,744.00
July 1, 2015	$21,744.00
July 1, 2016	$21,744.00
July 1, 2017	$21,744.00
July 1, 2018	$21,744.00
July 1, 2019	$10,872.00

(b) Lessee shall have the right to terminate this Agreement before December 31, 2019, and end all of its obligations herein in the event that the cost of complying with any new DEQ regulations as required by Section 3(a) are deemed unreasonably onerous, to the extent that the Lease is no longer cost effective solely because of the new regulation compliance, or if both of the following conditions are met:

(i) Lessee has been unable to make a reasonable profit from its use of the Premises after making a good-faith and reasonable effort to do so for a reasonable period of time; and

(ii) Lessee has given Lessor notice of its intention to terminate this Agreement not less than six (6) months prior to the effective date of any such termination. Rent for any incomplete terms shall be pro-rated and paid in advance.

If Lessee exercises this option to terminate the Agreement, all of Lessee's rights to possess the Premises and to cultivate or harvest any crops growing or planted on the Premises shall end on the effective date of the termination, and Lessee shall immediately remove from the leased premises any and all emblements, equipment or other items deposited by Lessee on the leased premises. Lessee understands and agrees that it shall be solely responsible for any and all costs associated with restoring the leased premises to its pre-lease condition, except improvements, fixtures and features of the Premises made or affixed with Lessor's prior written consent.

(c) In the event the leased Premises shall become disqualified from its present

property tax exempt status, Lessee shall have the right to terminate this Agreement at any time following notice of said property tax disqualification before December 31, 2019, and terminate any annual payment obligations under the Lease from the date of termination. Lessor shall notify Lessee immediately of the Premises' disqualification from property tax exemption. For so long as Lessee does not exercise this option to terminate the Lease Agreement, Lessee shall be obligated to pay any and all property taxes accruing from date of notice of disqualification. Lessor shall use due diligence and its best efforts to prevent the property from being disqualified from the county tax property tax exemption and/or defend its exempt status.

3. Use of Premises

(a) Lessee shall use the Premises solely for farm activities and shall permit no strip or waste upon the Premises. Lessee shall till, cultivate, care for, harvest, fertilize and farm the Premises and crops thereon in a good and workmanlike manner at Lessee's own expense. Lessee shall conform to all applicable laws and regulations of any public authority affecting the Premises and its use, and correct at Lessee's expense any failure of compliance created by reason of Lessee's use. Lessee has been informed of regulations pertaining to the Premises, and to the extent Lessee has deemed necessary, Lessee has secured information from the Federal Environmental Protection Agency, the Oregon Department of Environmental Quality and like agencies and bodies regarding the use of the Premises. Lessee acknowledges that certain crops may be prohibited or their cultivation affected because the Lessor reserves the unqualified right to use the Premises for irrigation and other release of its sewage water after treatment. In the event that there is any conflict between Lessee's rights under this Lease, and Lessor's right to discharge sewage water after treatment, Lessor's rights shall prevail and Lessee's sole remedy shall be termination of this Lease. Subject to Lessee's right to terminate the Lease as provided in Section 2(b), Lessee shall comply with all DEQ regulations which affect the Premises and will conform its use of the Premises as required.

(b) Lessee shall refrain from any use which would reasonably be offensive to neighboring premises or which would tend to create a nuisance or to damage the

reputation of the Premises.

(c) Lessee shall not use any herbicides or other substances which would affect the growing of general farm crops including livestock after the term of this Agreement.

(d) Lessee shall not make any improvements to or erect any structures on the Premises without first obtaining the written consent of Lessor. Any improvements so allowed and made shall remain as part of the realty upon termination at no cost to Lessor.

(e) In deference to the Lessor's use of its neighboring sewage treatment facilities, Lessee agrees that it will reasonably cooperate in tilling, cultivating, caring, harvesting and fertilizing in such a manner so as to facilitate Lessor's irrigation or other and spreading of its treatment waters after treatment. Such use of Lessor may be made without notice to Lessee and without liability for damage to Lessee's crops or machinery, except for damage due, caused or resulting from Lessor's gross negligence. Nevertheless, Lessor shall endeavor to notify Lessee two weeks in advance but not less than as may be reasonable under the circumstances of its intention to irrigate.

(f) Lessee agrees to notify the Oregon Department of Environmental Quality of the use to which it will put the Premises.

(g) Lessee understands that the City of Donald does not guarantee crops grown on the Premises, and makes no guarantees as to the amount or timing of any irrigation from disposal of effluent. Lessee further understands that Lessor's need for irrigation disposal of effluent takes precedence over Lessee's interests, and Lessor therefore shall have sole control over the amount and timing of the disposal of effluent. If any disposal of effluent is made, Lessor agrees to reasonably cooperate with Lessee in discharging the effluent by a disposal pattern consistent with Lessee's direction; however Lessor reserves the right to employ a disposal pattern in its irrigation of the Premises consistent with the requirements and needs of Lessor's sewage treatment plant and public interest. The disposal pattern established shall not discharge any effluent into state waters. All waste water shall be distributed on land for dissipation by evaportranspiration and

controlled seepage, and shall observe sound irrigation practices so as to prevent 1) prolonged ponding of waste on the ground surface; 2) surface runoff or subsurface drainage through drainage tile; 3) creating of odors, fly and mosquito breeding and other nuisance conditions; and 4) overloading of land with nutrients or organics.

(h) Lessee shall be responsible for weed control between the fence surrounding the Premises and roadways, and shall ensure that such weed control is undertaken in a timely manner.

(i) Possession. Lessee shall be entitled to possession as provided herein so long as it shall not be in default of this Lease.

(j) Conditions and Representations. Lessee accepts the land and all the other aspects of the Premises in its present condition, AS IS, including latent defects, without any representations, or warranties, expressed or implied, unless they are in writing signed by Lessor. Lessee agrees that Lessee has ascertained, from sources other than Lessor, the applicable zoning, building, housing and other regulatory ordinances and laws as they may affect the present use or any intended use of the Premises, and Lessor has made no representations with respect thereto. Upon termination of the Lease, Lessee shall leave the soil in the same or in better condition than at the outset of the Lease, except that if the worsening of the condition is due to Lessor's discharge of effluent, then Lessee shall not be responsible for soil condition and shall have no responsibility for affirmatively correcting soil condition by chemicals or otherwise.

4. Liability to Third Persons

(a) Except with respect to activities for which Lessor is responsible, Lessee shall pay as due all claims for work done on and for services rendered or material furnished to the Premises and shall keep the Premises free from any liens. If Lessee fails to pay any such claims or to discharge any liens, Lessor may do so and collect the costs as additional rent which shall bear interest at the then highest legal rate allowable by Oregon law from the date expended by Lessor and shall be payable upon demand. Such action by Lessor shall not constitute a waiver of any right or remedy which Lessor may

have on account of Lessee's default.

(b) Lessee shall pay, indemnify and defend Lessor on account of any claim, loss or liability arising out of or related to any activity of Lessee in the Premises or any condition in the possession or control of Lessee.

(c) Subordination. Lessor agrees to subordinate any interest Lessor may have, or claim to have, in and to the inventory and crops of the Lessee or sublessee, including trees, shrubs, and nursery stock growing, or to be grown upon or located upon the Premises, to any financial institution which Lessee may from time to time, select.

5. Assignment.

No part of the leased Premises may be assigned, mortgaged or subleased nor may any right of use of any portion of the Premises be conferred on any third person by any other means, without the prior written consent of Lessor, which consent shall not be unreasonably withheld.

6. Default.

The following shall be events of default:

(a) Default in rent for more than ten (10) days;

(b) Failure of Lessee to comply with any terms or condition or fulfill any obligation of this Lease;

(c) Insolvency or assignment by Lessee for the benefit of creditors, or the filing of bankruptcy or the appointment of a receiver of Lessee's properties;

(d) Lessor shall notify Lessee in writing of its intent to find Lessee in default of this Lease and Lessee shall have thirty (30) days after Lessee is notified in writing by Lessor to cure the default or if such default is of a nature that it cannot be cured within the thirty (30) day period for such time period as is reasonably required to cure the default. Lessee shall not be deemed in default under this Lease unless Lessor has provided Lessee with thirty (30) days written notice of its intent to take a default and

Lessee has not cured the default within the shorter of thirty (30) days or the reasonable time necessary to cure the default.

7. Remedies.

(a) Termination. In the event of default, the Lease may be terminated at the option of the Lessor by notice in writing to Lessee, subject to Section 6(d) above.

(b) Damages. The Lessor may be entitled to damages for breach whether or not it elects to terminate this Lease. If the Lease is terminated:

(i)The Lessee shall vacate the Premises immediately and peacefully return the Premises subject to any lien interest Lessor may have against existing crop or proceeds therefrom for damages which Lessor has reasonably incurred. Lessee or any superior lien holder shall be entitled to all nursery stock located and growing upon the Premises and shall have a right to come upon the Premises to harvest and remove said nursery stock subject to Lessor's lien interest described above for which purpose Lessee or assigns may sell such stock as is necessary in a reasonable manner to satisfy any said lien(s) against the stock, including but not limited to Lessor, if any, with the balance of the crop and/or proceeds to be retained by Lessee.

(ii) Lessor may re-enter, take possession of the Premises and remove any persons or property by legal action or by self help with the use of reasonable force and without liability for damages, subject to the rights of Lessee and/or creditors and assigns to the nursery stock.

(iii) Lessor may relet the Premises at its discretion.

(iv) Lessor shall be immediately entitled to, without waiting for the due date, any future rent, or until the date fixed for expiration hereof, the following amounts:

A. Any excess of (A) the value of all Lessee's obligations (including rent) from the date of default to the end of the term, over (B) the reasonable

value of the Premises for the same period as of the date of default.

B. The reasonable costs of re-entry and reletting including attorney's fees and costs and broker's commissions and advertising costs.

C. The loss of reasonable rental value from the date of default until a new Lessee has been, or with reasonable efforts could have been secured.

(v) Each remedy is cumulative and in addition to the others.

8. Non Waiver.

Waiver by either patty of strict performance of any provision of this Lease shall not be a waiver of or prejudice the party's right to require strict performance of the same provision in the future or of any other provision.

9. Attorney Fees.

If suit or action is instituted in connection with any controversy arising out of this Lease, the prevailing party shall be entitled to recover, in addition to costs, such sums as the court may adjudge reasonable as attorney's fees on trial or appeal.

10. Notices.

Any notice hereunder shall be deemed given when actually delivered or deposited in the U.S. Mail as certified mail addressed as follows:

Lessor	Lessee
Daroll Nicholson, Mayor	Dean McKay
City of Donald	McKay Farms, Inc
P.O. Box 388	P.O. Box 279
10710 Main ST. N.E.	19172 French Prairie Road, N.E.
Donald, OR 97020	ST. Paul, OR 97137

With a copy to:
Andrew M. Cole
Donald City Attorney
1919 Willamette Falls Drive
West Linn, Oregon 97068

of such other address as may be specified from time to time by either of the patties in writing.

11. Succession.

Subject to the above limitations on transfer, this Lease shall be binding upon and insure to the benefit of the parties, their respective successors and assigns.

12. Prior Agreements.

All prior agreements and understandings are of no force and effect, as the complete understanding is set forth herein. This Agreement may not be changed orally, but only by an agreement in writing signed by the party against whom enforcement of any waiver, change, modification or discharge is sought.

IN WITNESS WHEREOF, the parties have executed this instrument in duplicate on the

30 day of May, 2014.

LESSOR

City of Donald

By _____

Title: Mayor

LESSEE

McKay Farms, Inc.

By _____

Title: _____

STATE OF OREGON)
) ss.
County of ~~Marion~~ Washington)

On the 30th day of May, 2014, personally appeared the above named Daroll Nicholson, who, being duly sworn, did say that he is Mayor of the City of Donald, a Municipal Corporation and that said Agricultural Lease Agreement was signed in behalf City of Donald by authority of its City Council; and he acknowledge said instrument to be his voluntary act and deed.

OFFICIAL STAMP
AMY E VOAS
NOTARY PUBLIC - OREGON
COMMISSION NO. 921124
MY COMMISSION EXPIRES OCTOBER 13, 2017

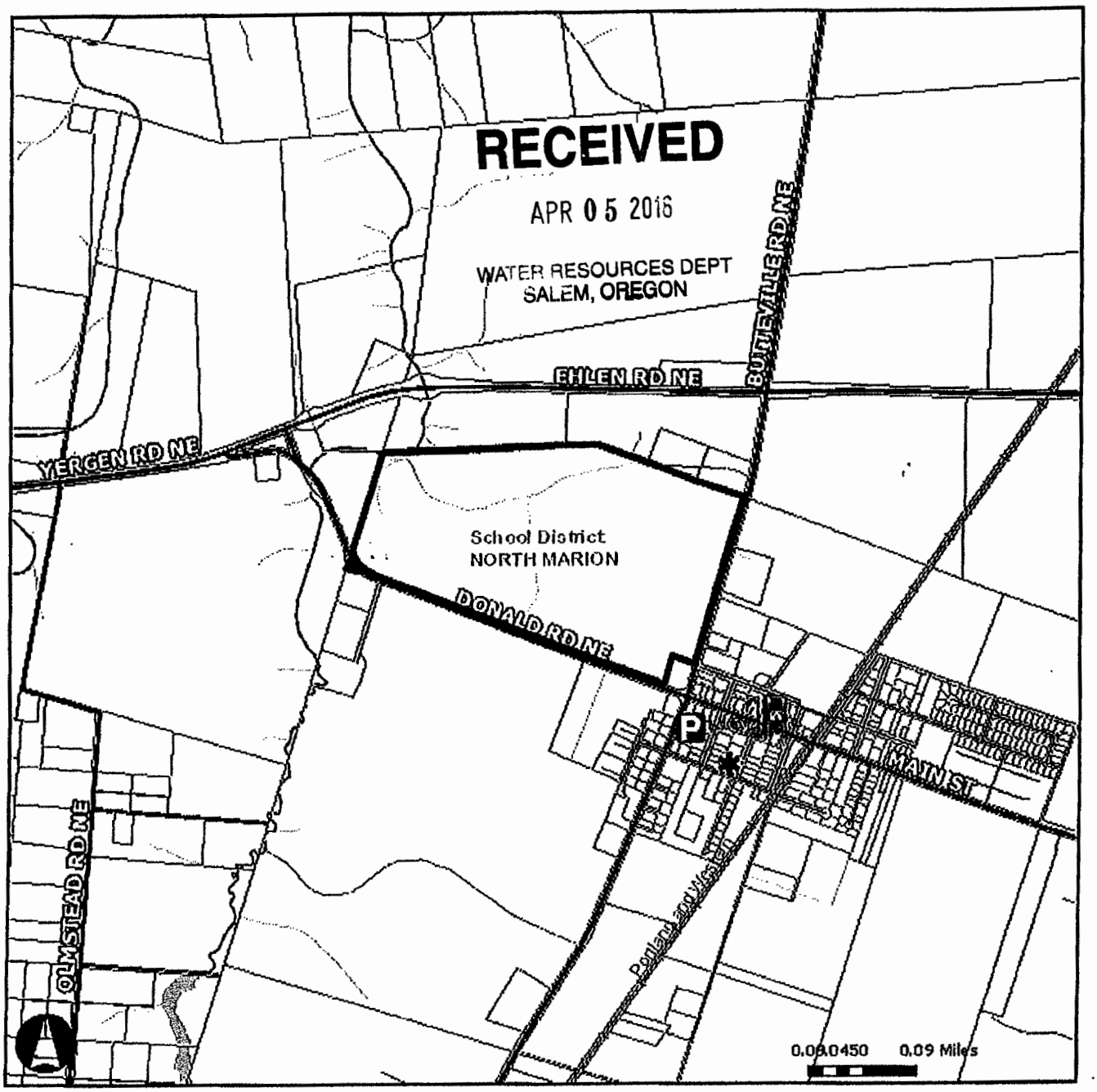
Amy E. Voas
Notary Public for Oregon
My commission expires: October 13, 2017

STATE OF OREGON)
) ss.
County of Marion)

On the ____ day of _____, 2014, personal appeared the above named Dean McKay who, being duly sworn, did say that he is the President of McKay Farms, Inc., a _____ corporation and that said Agricultural Lease Agreement was signed in behalf of said corporation by authority of its Board of Directors; and he/she acknowledge said instrument to be its voluntary act and deed.

_____
Notary Public for Oregon
My commission expires:

McKay Land Lease Map



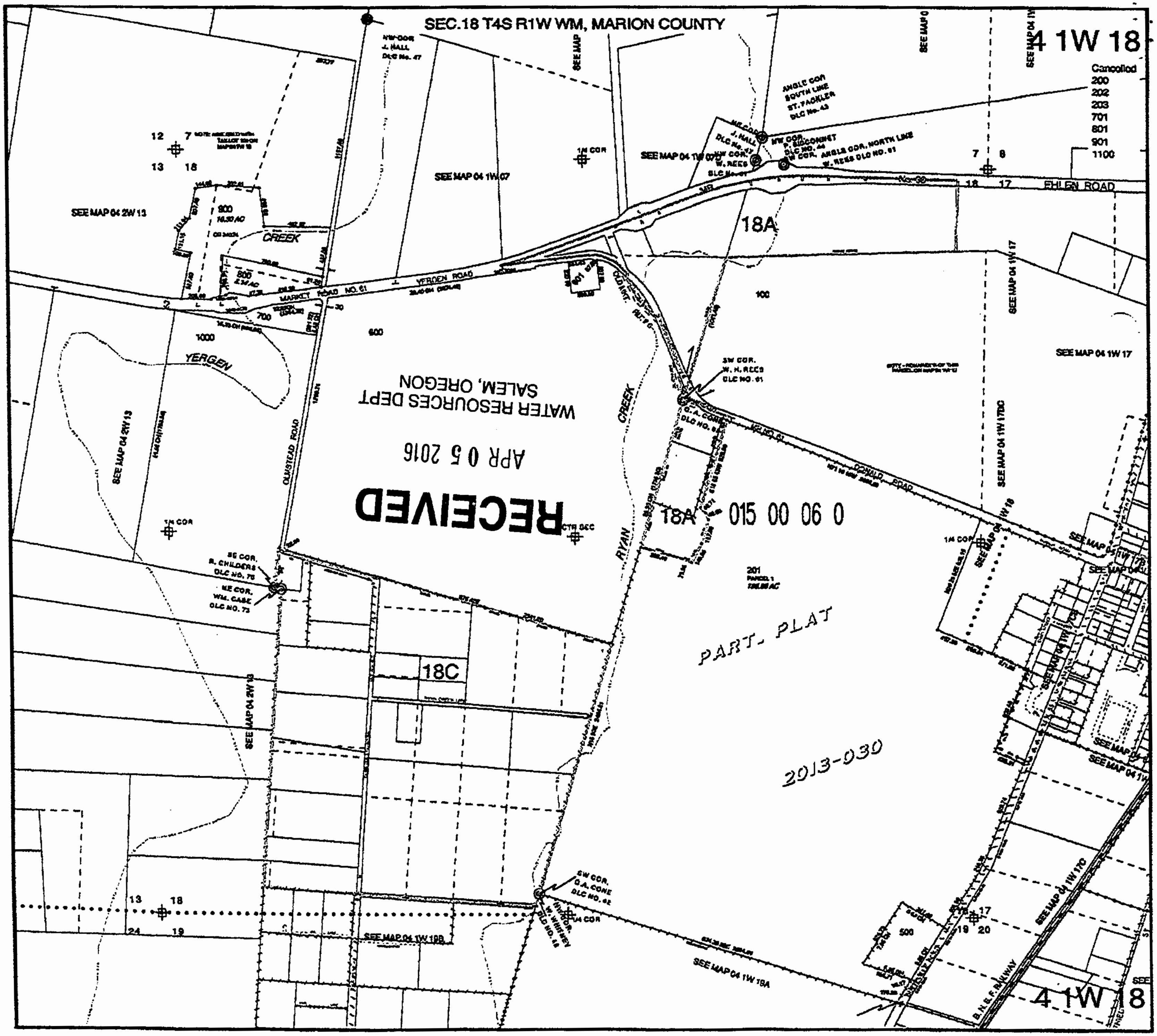
Marion County Disclaimer

The map information made available on this web site does not represent legally recorded maps or surveys and is not intended to be used as such. Nor should this information be used for navigational, tracking or any other purpose requiring exact measurement of distance or direction or precision in the depiction of geographic features.

The data provided hereon may be inaccurate or out of date and any person or entity who relies on this information for any purpose whatsoever does so solely at his or her own risk. In no way does Marion County warrant the accuracy, reliability, scale or timeliness of any map information on this web site.

To report any errors or discrepancies or if additional information is desired please contact: GIS@co.marion.or.us.

The User expressly acknowledges and accepts that the use of any information appearing on My Community Internet Mapper is at the User's sole risk.



LEGEND

LINE TYPES

- TAX LOT BOUNDARY
- OLD PROPERTY LINE
- ROAD RIGHT-OF-WAY
- VACATED RIGHT-OF-WAY
- RAILROAD
- RAILROAD RIGHT-OF-WAY
- STREAM, LAKE, ETC. TAX LOT BOUNDARY
- STREAM, LAKE, ETC. NON-BOUNDARY
- SUBDIVISION BOUNDARY
- PARTITION PLAT BDY.
- TAX CODE BOUNDARY
- EASEMENT

SYMBOL TYPES

- D.L.C.
- CONTROL POINTS
- SURVEY MONUMENTS
- D.L.C. CORNERS
- SECTION
- 1/4 SEC
- 1/16 SEC

NUMBERS

TAX CODE NO.

000 00 00 0

ACREAGE – ALL ACREAGES EXCLUDE ANY PORTION THAT MAY LIE WITHIN THE INDICATED PUBLIC RIGHT OF WAYS.

TICK MARKS – WHEN A TICK MARK IS INDICATED ON THE EXTENSION OF A LINE, THEN THE DIMENSION GOES TO THE TICK MARK. GENERALLY THIS IS USED WHEN DIMENSIONS GO INTO PUBLIC RIGHT OF WAYS.

ARROWS ARE USED WITH DIMENSIONS IN AREAS OF GREATER COMPLEXITY.

NOTICE: This map was created for Assessor's Office use ONLY.

Assessor GIS "We Care"
Geographic Information System

SCALE 1" = 400'
or 1:4800

Plot file created: December 13, 2013

WATER POLLUTION CONTROL FACILITIES
WASTE DISCHARGE PERMIT

Oregon Department of Environmental Quality
Western Region – Salem Office
750 Front Street NE, Suite 120, Salem, OR 97301-1039
Telephone: (503) 378-8240
Issued pursuant to ORS 468B.050

ISSUED TO:

City of Donald
PO Box 388
Donald, OR 97020-0388

SOURCES COVERED BY THIS PERMIT:

Type of Waste	Outfall Number	Outfall Location
Recycled Water	001	Specified in Recycled Water Use Plan

FACILITY TYPE AND LOCATION:

STEP- Stabilization Lagoons
Donald STP
10501 Donald Rd
Donald, OR 97020-0388

Treatment System Class Level: 1
Collection System Class Level: 1

RECEIVING STREAM INFORMATION:

WRD Basin: Willamette
USGS Subbasin: Middle Willamette
Receiving Stream: N/A
LLID: 1227618456580
County: Marion

Issued in response to application #971250 received October 21, 2009 and based on the land use compatibility statement in the permit record.

Steve Schnurbusch, Acting Water Quality Manager-Western Region

12/28/12
Issuance Date

1/17/2013
Effective Date

PERMITTED ACTIVITIES

Until this permit expires or is modified or revoked, the permittee is authorized to: 1) operate a wastewater collection, treatment, control and disposal system; and 2) discharge treated wastewater only from the authorized discharge point or points in Schedule A in conformance with the requirements, limits, and conditions set forth in this permit.

Unless specifically authorized by this permit, by another NPDES or WPCF permit, or by Oregon statute or administrative rule, any other direct or indirect discharge of pollutants to waters of the state is prohibited.

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List of Tables

SCHEDULE A
Waste Discharge Limits

1. **Treated Effluent Outfall 001**
The permittee is authorized to distribute recycled water if it is:
   a. The Permitee must notify DEQ in writing which recycled water treatment, Class D or Class C is employed prior to irrigation. DEQ must be notified prior to any change in treatment Class. Once notified, DEQ will give written approval to the permittee for recycled water treatment class prior to recycled water use.
   b. Treated and used according to the criteria listed in Table A1 (below).
   c. Managed as described in its DEQ-approved Recycled Water Use Plan unless exempt as provided in Schedule D, condition D.3.
   d. Used in a manner and applied at a rate that does not impact groundwater quality.
   e. Applied at a rate and in accordance with site management practices that ensure continued agricultural, horticultural, or silvicultural production and does not reduce the productivity of the site.
   f. Irrigated using sound irrigation practices to prevent:
      i. Offsite surface runoff or subsurface drainage through drainage tile;
      ii. Creation of odors, fly and mosquito breeding, or other nuisance conditions; and
      iii. Overloading of land with nutrients, organics, or other pollutants.

Table A1: Recycled Water Limits

Class	Level of Treatment (after disinfection unless otherwise specified)	Beneficial Uses
C	Oxidized[1] and disinfected. Total coliform may not exceed: • A median of 23 total coliform organisms per 100 mL, based on results of the last 7 days that analyses have been completed[2]. • 240 total coliform organisms per 100 mL in any two consecutive samples.	• Class D and nondisinfected uses. • Irrigation of processed food crops; irrigation of orchards or vineyards if an irrigation method is used to apply recycled water directly to the soil. • Landscape irrigation of golf courses, cemeteries, highway medians, or industrial or business campuses. • Industrial, commercial, or construction uses limited to: industrial cooling, rock crushing, aggregate washing, mixing concrete, dust control, nonstructural fire fighting using aircraft, street sweeping, or sanitary sewer flushing.
D	Oxidized[3] and disinfected. *E. coli* may not exceed: • A 30-day log mean of 126 organisms per 100 mL. • 406 organisms per 100 mL in any single sample.	• Nondisinfected uses. • Irrigation of firewood, ornamental nursery stock, Christmas trees, sod, or pasture for animals.

2. **Groundwater Protection**
The permittee may not conduct any activities that could cause an adverse impact on existing or potential beneficial uses of groundwater. All wastewater and process related residuals must be managed and disposed of in a manner that will prevent a violation of the Groundwater Quality Protection Rules (OAR Chapter 340, Division 40).

3. **Septage Requirements**
Septage may not be accepted at this facility for treatment or processing without written approval from DEQ.

SCHEDULE B
Minimum Monitoring and Reporting Requirements

1. **Monitoring and Reporting Protocols**
   a. Quality Assurance and Quality Control (QA/QC)
   For instructions on proper sampling techniques, test methods and QA/QC procedures, see Schedule F, Sections B.1 and C.

   b. Re-analysis, Re-sampling and Reporting of Data if QA/QC Requirements Not Met
   If QA/QC requirements are not met for any analysis, the permittee must have the sample re-analyzed. If the sample cannot be re-analyzed, the permittee must re-sample at the earliest available opportunity. If a sample result does not meet QA/QC requirements, the result must be included in the DMR along with a notation but must not be used in any calculation required by the permit.

   c. Reporting Procedures
      i. Significant Figures
      The permittee must report the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding conventions used by the permittee (i.e., rounding 5 up for the calculated results or, in the case of laboratory results, rounding 5 to the nearest even number), the permittee must use the convention consistently, and must ensure that laboratories employed by the permittee use the same convention.

2. **Influent Monitoring Requirements**
   The permittee must monitor influent from both the City's collection system and the Fargo Interchange Service District at the following locations:
   -Sampling port in the shop building (for the City)
   -Vault in front of shop building (for the Fargo Interchange Service District).

Table B1: Influent Monitoring

Item or Parameter	Time Period	Minimum Frequency	Sample Type	Report
Total Flow (MGD)	Year-round	Daily	Measurement	Daily values
Flow Meter Calibration	Year-round	Annually	Verification	Report that calibration was completed is due by January 31 of each year.

3. **Effluent Monitoring Requirements**
   The permittee must monitor effluent for Outfall 001 from the discharge side of the irrigation pump as listed below in Table B2.

4. **Recycled Water Monitoring Requirements: Outfall #001.**
   The permittee must monitor recycled water as listed below. The samples must be representative of the recycled water delivered for beneficial reuse at a location identified in the Recycled Water Use Plan.

Table B2: Recycled Water Monitoring

Item or Parameter	Minimum Frequency	Sample Type
Total Flow (MGD) or Quantity Irrigated (inches/acre)	Daily	Measurement
Flow Meter Calibration	Annually	Verification
Quantity Chlorine Used (lbs)	Daily	Measurement
Chlorine, Total Residual (mg/L)	Daily	Grab
pH	2/Week	Grab
Total Coliform (See note a)	Weekly (Class C)	Grab
E. coli (See note a)	Weekly (Class D, See note b)	Grab
Nutrients (TKN, NO_2+NO_3-N, NH_3, Total Phosphorus)	Quarterly	Grab
Note a: Only one bacteria monitoring requirement is required at this time. The permittee may use both Class D and/or C in the same year with written approvals (C and/or D) from the Department. b. The permittee must have a DEQ approved, Recycled Water Reuse plan prior to land applying Class D recycled water. See Schedule D, Item 3 for details		

5. Minimum Reporting Requirements

The permittee must report monitoring results as listed below. This permit requires monitoring results to be submitted monthly. Monthly reports must be submitted by the 15th day of the following month (including "no discharge" reports if any) as follows:

a. Monitoring results must be reported on approved forms. The reporting period is the calendar month. Reports must be submitted to the appropriate DEQ office by the 15th day of the following month.

b. State monitoring reports must identify the name, certificate classification and grade level of each principal operator designated by the permittee as responsible for supervising the wastewater collection and treatment systems during the reporting period. Monitoring reports must also identify each system classification as found on page one of this permit.

c. Monitoring reports must include a record of the quantity and method of use of all sludge removed from the treatment facility and a record of all applicable equipment breakdowns and bypassing.

Table B3: Reporting Requirements and Due Dates

Reporting Requirement	Frequency	Due Date	Report Form (unless otherwise specified in writing)	Submit To:
1. Recycled water annual report describing effectiveness of recycled water system in complying with the DEQ-approved recycled water use plan, OAR 340-055, and this permit. See Schedule D for more detail.	Annually	January 15	2 hard copies	One each to: • DEQ Regional Office • DEQ Water Reuse Program Coordinator
Inflow and infiltration report	Annually	February 1	1 hard copy	DEQ Regional Office

Notes:
a. Name, certificate classification, and grade level of each responsible principal operator as well as identification of each system classification must be included on DMRs.
b. Equipment breakdowns and bypass events must be noted on DMRs.

SCHEDULE D
Special Conditions

1. **Inflow and Infiltration**
An annual inflow and infiltration report must be submitted to DEQ as directed in Schedule B. The report must include the following:
   a. Details of activities performed in the previous year to identify and reduce inflow and infiltration.
   b. Details of activities planned for the following year to identify and reduce inflow and infiltration.
   c. A summary of sanitary sewer overflows that occurred during the previous year.

2. **Emergency Response and Public Notification Plan**
The permittee must develop and maintain an Emergency Response and Public Notification Plan (the Plan) per Schedule F, Section B, and Conditions 7 & 8. The permit holder must develop the plan within six months of permit issuance and update the Plan annually to ensure that telephone and email contact information for applicable public agencies are current and accurate. An updated copy of the plan must be kept on file at the wastewater treatment facility for Department review. The latest plan revision date must be listed on the Plan cover along with the reviewer's initials or signature.

3. **Recycled Water**
   a. Recycled Water Use Plan
   The permittee must maintain a Recycled Water Use Plan meeting the requirements in OAR 340-055-0025. Prior to distributing Class D recycled water for beneficial use, the permittee must submit to DEQ a Recycled Water Use plan for public comment and approval meeting the requirements in OAR 340-055-0025.. Application of Class D recycled water is only allowed after final approval by DEQ. The permittee must submit substantial modifications to an existing plan to DEQ for approval at least 60 days prior to making the proposed changes. Conditions in the plan are enforceable requirements under this permit.

   b. Exempt Activities
   The permittee is exempt from the requirement to prepare a Recycled Water Use Plan and the limits in condition A.1 when recycled water is used at the wastewater treatment system for landscape irrigation or for in-plant processes at a wastewater treatment system and all of the following conditions are met:
      i. The recycled water is an oxidized and disinfected wastewater.
      ii. The recycled water is used at the wastewater treatment system site where it is generated or at an auxiliary wastewater or sludge treatment facility that is subject to the same NPDES or WPCF permit as the wastewater treatment system. Contiguous property to the parcel of land upon which the treatment system is located is considered the wastewater treatment system site if under the same ownership.
      iii. Spray or drift or both from the use does not occur off the site.
      iv. Public access to the site is restricted.

4. **Lagoon Solids**
At least six months prior to the removal of accumulated solids from the lagoon, the permittee must submit to DEQ a biosolids management plan and land application plan developed in accordance with OAR 340-050. DEQ will provide an opportunity for comment on the biosolids management plan and land application plan as directed by OAR 340-050-0015(8).The permittee must follow the conditions in the approved plan.

5. **Operator Certification**
   a. Definitions
      i. "Supervise" means to have full and active responsibility for the daily on site technical operation of a wastewater treatment system or wastewater collection system.
      ii. "Supervisor" or "designated operator", means the operator delegated authority by the permittee for establishing and executing the specific practice and procedures for operating the wastewater treatment system or wastewater collection system in accordance with the policies of the owner of the system and any permit requirements.
      iii. "Shift Supervisor" means the operator delegated authority by the permittee for executing the specific practice and procedures for operating the wastewater treatment system or wastewater collection system when the system is operated on more than one daily shift.
      iv. "System" includes both the collection system and the treatment systems.

   b. The permittee must comply with OAR Chapter 340, Division 49, "Regulations Pertaining to Certification of Wastewater System Operator Personnel" and designate a supervisor whose certification corresponds with the classification of the collection and/or treatment system as specified on p. 1 of this permit.

   c. The permittee must have its system supervised full-time by one or more operators who hold a valid certificate for the type of wastewater treatment or wastewater collection system, and at a grade equal to or greater than the wastewater system's classification as specified on p. 1 one of this permit.

   d. The permittee's wastewater system may not be without the designated supervisor for more than 30 days. During this period, there must be another person available to supervise who is certified at no more than one grade lower than the classification of the wastewater system. The permittee must delegate authority to this operator to supervise the operation of the system.

   e. If the wastewater system has more than one daily shift, the permittee must have another properly certified operator available to supervise operation of the system. Each shift supervisor, if any, must be certified at no more than one grade lower than the system classification.

   f. The permittee is not required to have a supervisor on site at all times; however, the supervisor must be available to the permittee and operator at all times.

   g. The permittee must notify DEQ in writing of the name of the system supervisor. The permittee may replace or re-designate the system supervisor with another properly certified operator at any time and must notify DEQ in writing within 30 days of replacement or re-designation of operator in charge. As of this writing, the notice of replacement or re-designation must be sent to Water Quality Division, Operator Certification Program, 2020 SW 4th Avenue, Suite 400, Portland, OR 97201.

   h. Upon written request, DEQ may grant the permittee reasonable time, not to exceed 120 days, to obtain the services of a qualified person to supervise the wastewater system. The written request must include a justification for the time needed, schedule for recruiting and hiring, date the system supervisor availability ceased, and name of the alternate system supervisor as required by above.

6. **Maintenance of septic tanks.** The permittee shall implement preventative maintenance practices or corrections in accordance with the following time schedule:
Pump residential septic tanks either when sludge and scum volume exceeds 25 percent of the liquid capacity of the tanks or every five (5) years, whichever is less; and commercial septic tanks either when sludge and scum volume exceeds 25 percent of the liquid capacity of the tanks or every 4 years, whichever is less.

SCHEDULE F

WPCF GENERAL CONDITIONS – DOMESTIC FACILITIES

SECTION A. STANDARD CONDITIONS

1. Duty to Comply with Permit

The permittee must comply with all conditions of this permit. Failure to comply with any permit condition is a violation of Oregon Revised Statutes (ORS) 468B.025 and grounds for an enforcement action. Failure to comply is also grounds for the Department to modify, revoke, or deny renewal of a permit.

2. Property Rights and Other Legal Requirements

Issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, or authorize any injury to persons or property or invasion of any other rights, or any infringement of federal, tribal, state, or local laws or regulations.

3. Liability

The Department of Environmental Quality or its officers, agents, or employees may not sustain any liability on account of the issuance of this permit or on account of the construction or maintenance of facilities or systems because of this permit.

4. Permit Actions

After notice by the Department, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including but not limited to the following:

a. Violation of any term or condition of this permit, any applicable rule or statute, or any order of the Commission;

b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts.

5. Transfer of Permit

This permit may not be transferred to a third party without prior written approval from the Department. The Department may approve transfers where the transferee acquires a property interest in the permitted activity and agrees in writing to fully comply with all the terms and conditions of this permit and the rules of the Commission. A transfer application and filing fee must be submitted to the Department.

6. Permit Fees

The permittee must pay the fees required by Oregon Administrative Rules.

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

At all times the permittee must maintain in good working order and properly operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to comply with the terms and conditions of this permit.

2. Standard Operation and Maintenance

All waste collection, control, treatment, and disposal facilities or systems must be operated in a manner consistent with the following:

a. At all times, all facilities or systems must be operated as efficiently as possible in a manner that will prevent discharges, health hazards, and nuisance conditions.

b. All screenings, grit, and sludge must be disposed of in a manner approved by the Department to prevent any pollutant from the materials from reaching waters of the state, creating a public health hazard, or causing a nuisance condition.

c. Bypassing untreated waste is generally prohibited. Bypassing may not occur without prior written permission from the Department except where unavoidable to prevent loss of life, personal injury, or severe property damage.

3. Noncompliance and Notification Procedures

If the permittee is unable to comply with conditions of this permit because of surfacing sewage; a breakdown of equipment, facilities or systems; an accident caused by human error or negligence; or any other cause such as an act of nature, the permittee must:

a. Immediately take action to stop, contain, and clean up the unauthorized discharges and correct the problem.

b. Immediately notify the Department's Regional office so that an investigation can be made to evaluate the impact and the corrective actions taken, and to determine any additional action that must be taken.

c. Within 5 days of the time the permittee becomes aware of the circumstances, the permittee must submit to the Department a detailed written report describing the breakdown, the actual quantity and quality of waste discharged, corrective action taken, steps taken to prevent a recurrence, and any other pertinent information.

Compliance with these requirements does not relieve the permittee from responsibility to maintain continuous compliance with the conditions of this permit or liability for failure to comply.

4. Wastewater System Personnel

The permittee must provide an adequate operating staff that is duly qualified to carry out the operation, maintenance, and monitoring requirements to assure continuous compliance with the conditions of this permit.

5. Public Notification of Effluent Violation or Overflow

If effluent limitations specified in this permit are exceeded or an overflow occurs that threatens public health, the permittee must take such steps as are necessary to alert the public, health agencies and other affected entities (e.g., public water systems) about the extent and nature of the discharge in accordance with the notification procedures developed under General Condition B.6. Such steps may include, but are not limited to, posting of the river at access points and other places, news releases, and paid announcements on radio and television.

6. Emergency Response and Public Notification Plan

The permittee must develop and implement an emergency response and public notification plan that identifies measures to protect public health from overflows, bypasses or upsets that may endanger public health. At a minimum the plan must include mechanisms to:

a. Ensure that the permittee is aware (to the greatest extent possible) of such events;
b. Ensure notification of appropriate personnel and ensure that they are immediately dispatched for investigation and response;
c. Ensure immediate notification to the public, health agencies, and other affected public entities (including public water systems). The overflow response plan must identify the public health and other officials who will receive immediate notification;
d. Ensure that appropriate personnel are aware of and follow the plan and are appropriately trained;
e. Provide emergency operations; and
f. Ensure that DEQ is notified of the public notification steps taken.

SECTION C. MONITORING AND RECORDS

1. Inspection and Entry

The permittee must at all reasonable times allow authorized representatives of the Department to:

a. Enter upon the permittee's premises where a waste source or disposal system is located or where any records are required to be kept under the terms and conditions of this permit;

b. Have access to and copy any records required by this permit;

c. Inspect any treatment or disposal system, practices, operations, monitoring equipment, or monitoring method regulated or required by this permit; or

d. Sample or monitor any substances or permit parameters at any location at reasonable times for the purpose of assuring permit compliance or as otherwise authorized by state law...

2. Averaging of Measurements

Calculations of averages of measurements required for all parameters except bacteria must use an arithmetic mean; bacteria must be averaged as specified in the permit.

3. Monitoring Procedures

Monitoring must be conducted according to test procedures specified in the most recent edition of **Standard Methods for the Examination of Water and Wastewater**, unless other test procedures have been approved in writing by the Department and specified in this permit.

4. Retention of Records

The permittee must retain records of all monitoring and maintenance information, including all calibrations, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. The Department may extend this period at any time.

SECTION D. REPORTING REQUIREMENTS

1. Plan Submittal

Pursuant to Oregon Revised Statute 468B.055, unless specifically exempted by rule, construction, installation, or modification of disposal systems, treatment works, or sewerage systems may not commence until plans and specifications are submitted to and approved in writing by the Department. All construction, installation, or modification shall be in strict conformance with the Department's written approval of the plans.

2. Change in Discharge

Whenever a facility expansion, production increase, or process modification is expected to result in a change in the character of pollutants to be discharged or in a new or increased discharge that will exceed the conditions of this permit, a new application must be submitted together with the necessary reports, plans, and specifications for the proposed changes. A change may not be made until plans have been approved and a new permit or permit modification has been issued.

3. Signatory Requirements

All applications, reports, or information submitted to the Department must be signed and certified by the official applicant of record (owner) or authorized designee.

4. Twenty-Four Hour Reporting

The permittee must report any noncompliance that may endanger health or the environment. Any information must be provided orally (by telephone) to DEQ or to the Oregon Emergency Response System (1-800-452-0311) as specified below within 24 hours from the time the permittee becomes aware of the circumstances.

a. Overflows.

(1) Oral Reporting within 24 hours.

i. For overflows other than basement backups, the following information must be reported to the Oregon Emergency Response System (OERS) at 1-800-452-0311. For basement backups, this information should be reported directly to DEQ.

a) The location of the overflow;
b) The receiving water (if there is one);
c) An estimate of the volume of the overflow;
d) A description of the sewer system component from which the release occurred (e.g., manhole, constructed overflow pipe, crack in pipe); and
e) The estimated date and time when the overflow began and stopped or will be stopped.

ii. The following information must be reported to the Department's Regional office within 24 hours, or during normal business hours, whichever is first:

a) The OERS incident number (if applicable) along with a brief description of the event.

(2) Written reporting within 5 days.

The following information must be provided in writing to the Department's Regional office within 5 days of the time the permittee becomes aware of the overflow:

a) The OERS incident number (if applicable);
b) The cause or suspected cause of the overflow;
c) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;
d) Steps taken or planned to mitigate the impact(s) of the overflow and a schedule of major milestones for those steps; and
e) (for storm-related overflows) The rainfall intensity (inches/hour) and duration of the storm associated with the overflow.

The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

b. Other instances of noncompliance.

(1) The following instances of noncompliance must be reported:

i. Any unanticipated bypass that exceeds any effluent limitation in this permit;
ii. Any upset that exceeds any effluent limitation in this permit;
iii. Violation of maximum daily discharge limitation for any of the pollutants listed by the Department in this permit; and
iv. Any noncompliance that may endanger human health or the environment.

(2) During normal business hours, the Department's Regional office must be called. Outside of normal business hours, the Department must be contacted at 1-800-452-0311 (Oregon Emergency Response System).

(3) A written submission must be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission must contain:

i. A description of the noncompliance and its cause;
ii. The period of noncompliance, including exact dates and times;
iii. The estimated time noncompliance is expected to continue if it has not been corrected;
iv. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and
v. Public notification steps taken, pursuant to General Condition B.6.

(4) The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

SECTION E. DEFINITIONS

1. *BOD_5* means five-day biochemical oxygen demand.
2. *TSS* means total suspended solids.
3. *FC* means fecal coliform bacteria.
4. *NH_3-N* means Ammonia Nitrogen.
5. *NO_3-N* means Nitrate Nitrogen.
6. *NO_2-N* means Nitrite Nitrogen.
7. *TKN* means Total Kjeldahl Nitrogen.
8. *Cl* means Chloride.
9. *TN* means Total Nitrogen.
10. "*Bacteria*" includes but is not limited to fecal coliform bacteria, total coliform bacteria, and E. coli bacteria.
11. *Total residual chlorine* means combined chlorine forms plus free residual chlorine.
12. *mg/l* means milligrams per liter.
13. *ug/l* means micrograms per liter.
14. *kg* means kilograms.
15. *GPD* means gallons per day.
16. *MGD* means million gallons per day.
17. *Grab sample* means an individual discrete sample collected over a period of time not to exceed 15 minutes.
18. *Composite sample* means a combination of samples collected, generally at equal intervals over a 24-hour period, and based on either time or flow.
19. *Week* means a calendar week of Sunday through Saturday.
20. *Month* means a calendar month.
21. *Quarter* means January through March, April through June, July through September, or October through December.

RECEIVED

APR 0 5 2016

WATER RESOURCES DEPT
SALEM, OREGON

[1] The rules don't specify what "oxidized" means. The term is not intended to prescribe a form of treatment, instead it is intended to ensure recycled water is treated to the point that it is not putrid.

[2] In the event that a permit holder collects multiple samples on a single day, the accepted practice is that the permittee should report the median of all the samples collected on that day. This median value is then one of the required 7 values. See OAR 340-055-0012(5)(c) and (d) for Class C recycled water.

[3] The rules don't specify what "oxidized" means. The term is not intended to prescribe a form of treatment. Rather the term is intended to ensure recycled water is treated to the point that it is not putrid.

City of Donald, Oregon

RECYCLED WATER USE PLAN

WINTERTIME HOLDING - SUMMERTIME IRRIGATION

OPERATION PLAN

July 2010

PURPOSE:

This management plan is to define and explain the plan for the disposition of the effluent from the City of Donald's Waste Water Treatment Plant. Irrigation in a manner whereby the vegetation, or crop, fully utilizes the nutrients and prevents effluent runoff from entering the waters of the State of Oregon, is the proposed plan.

In 2009, the City of Donald was notified that an updated Recycled Water Use Plan (RWUP) and Lagoon Operations Plan for File No. 24600, and Water Pollution Control Facility Permit No. 101978 is required for the Sanitary Sewer Effluent Lagoons. The 1999 plan permit expired Sept. 30, 2009. An update to the approved 1999 Operations Plan was submitted that same year (2009), but the Oregon Department of Environmental Quality (DEQ) requested that an entire integrated document be submitted. Donald has not been permitted to irrigate without the renewal of this permit during this spring of 2010. It has been a wet spring, eliminating the need for irrigation, and the lagoons have been storing all effluent received.

WATER BALANCE:

Because Donald has not been permitted to irrigate this spring, the lagoons have been storing all effluent received and are reaching capacity. A separate supplemental water balance spreadsheet (See Appendix A, Table A) has been created which assumes irrigation will begin this July and determines the amount of effluent that may be irrigated this year.

A basic annual water spreadsheet balance, similar to the one in the original 1982 Operation Plan, is included Appendix A to determine the anticipated volume of effluent stored and the effluent used based on predicted crop consumption for grass seed per the 1992 Oregon State University study "Oregon Crop Water Use and Irrigation Requirement), (See Appendix D).

Based on the OSU study, the irrigation rate will require less water volume than the capacity of the lagoons. This means that a crop requiring higher irrigation rates could be planted on this land, and/or there is enough effluent to irrigate additional acreage can be irrigated. A water balance calculation has been included which assumes higher monthly irrigation rates in order to illustrate what rate may be required to keep the ponds from exceeding capacity.

Additionally, a large volume of water is evaporated from the lagoons over the course of the summer. Pan evaporation rates from the Oregon Climate Service were obtained for the Portland area and are used in the water balance calculations.

WASTEWATER TREATMENT PLANT BACKGROUND:

The water balance prepared under the original design, approved by DEQ in 1982 (See Appendix C), identifies the annual wastewater for disposal at design capacity to be 57.8 acre feet. The initial design concept was to dispose of this volume of wastewater onsite on lands owned by the City of Donald. The land would be planted to produce silage, hay, etc. The maximum application rate would be 5" of wastewater per acre, every three weeks.

The original sewage treatment plant consisted of three lagoons with bentonite liners (See Appendix B). The capacity of the original three lagoons is 47.0 acre feet of useable storage. A maximum surface area of 10 acres, at a depth of 8.5 feet of water, is recorded on the as-built plans.

A fourth lagoon (See Appendix B) was completed in the summer of 2008 which holds sewer from Fargo Sewer District. This lagoon was constructed with a 60 mil HDPE liner and is capable of 37.1 acre feet of useable storage with a maximum surface area of 4.7 acres and a depth of 11.3 feet. The combined holding capacity, when all four lagoons are full, is 84.1 acre feet with a maximum total surface area of 14.7 acres.

The placement of Lagoon 4 removed 7.8 acres of land that would have been irrigated with effluent. There were farm tiles in this area that were also removed. The amount of land the City of Donald owns that could be used for disposal around the lagoon is 56.0 acres, being: 8.3 acres north of the creek, 6.4 acres west of Lagoon 3 and 41.3 acres north and east of Lagoon 4. However, the 8.3 acres north of the creek has not been farmed and there is no transmission line across the creek to supply the effluent to this field. An additional 2.0 acres has been leased and does not receive irrigation. This results in a total of 45.7 acres that is capable of accepting effluent disposal.

Farm tile was originally installed on 37.9 acres. However, with construction of the fourth lagoon, farm tile was removed from 7.8 acres, resulting in 30.1 acres of remaining tiled area on the treatment plant site. The southeastern quadrant of the site is tiled with 4" perforated pipes that are spaced 60' apart. They run east and west in a pattern that best fits the site natural topography. The perforated pipes drain to collector drains that run north, to the natural drainage way that contributes to Ryan Creek.

IRRIGATION PLAN:

At the request of DEQ, the City installs plugs on the north ends of the north-south collector drains during the irrigation season to insure no effluent irrigation waters would discharge to waters of the State of Oregon. Each year these plugs are installed in the manholes at the top of the bank in April and are removed at the termination of irrigation on October 31st.

Since the DEQ permit was issued in 1982, the crops grown on site have varied from permanent grass forage production to the growth of trees and ornamental shrubs by a nursery company that leases the land from the City of Donald. The current nursery company, Advanced Ornamental (owned by McKay), intends to plant fescue on the available 45.7 acres for the next five years. During the irrigation season, McKay is anticipating applying 1" of water per week so as to not produce surface ponding or runoff.

The City of Donald and McKay continue to discuss the parameters of the lease on this site. Farmland that receives human wastewater effluent cannot be used to produce crops for human consumption. This limits the crops to forage, nursery stock, Christmas trees, etc.

The City of Donald will be responsible to release the wastewater effluent from storage, chlorinate to produce the required chlorine residual of 1 to 1.5 mg/l after 30 minutes of contact time, and provide the irrigation pump and permanent piping on the site. McKay will operate the irrigation pump and provide the irrigation piping and sprinklers to apply wastewater at 1" per week with 7 gpm heads. Donald will pay for all electrical power required to irrigate the wastewater. Oregon Administrative Rules, Chapter 340, Division 55 (as enclosed) governs the disposal of treatment plant effluent and requires a contract between the City and McKay spelling out the responsibility of each party.

The irrigation pump on site at the Donald Treatment Plant has a capacity of 200 gpm at 140 feet of TDH (60 psi). McKay has been given access to the treatment plant site and irrigation pump house. A schedule should be provided by McKay detailing when they propose to irrigate, weather permitting, so that the City of Donald can manage the release and chlorination of wastewater at 200 gpm.

Using the 1992 OSU study "Oregon Crop Water Use and Irrigation Requirements", grass grown in the Willamette Valley requires a total of 27.43 inches water annually (See Appendix D with irrigation table, column: '19 out of 20 years'), or 104.46 AF on the 45.7 acre site. The majority of this requirement occurs from April to October, being 27.35 inches or 104.16 AF. A number of farmers in the local area apply irrigation in the fall to give the plants a growth spurt prior to the winter. This would increase the volume of effluent applied to the fields.

When Lagoon 4 was installed by the City, in conjunction with Marion County and DEQ, a 6" pipeline was installed to the south, across Donald Road, for future irrigation on a private farm. Discharge effluent was available for 300+ acres of land owned by A&R Spada Farms, another local nursery company. Although there is an interest in using the additional water on their land, the details need to be worked out. Once a system can be designed to move the effluent to the existing irrigation system, a revised operation plan will be submitted to DEQ for approval prior to any contract being executed with Spada Farms.

Spada uses several wells that will need to be protected from the effluent. One option is to run a separate system to the field with a reduced pressure double check valve and backflow preventer system to prohibit wastewater from contaminating the existing irrigation system.

The existing chlorine chamber consists of 370' of 36" diameter concrete pipe, possessing a volume of 19,563 gallons. This represents a chlorine contact time of 97.8 minutes at 200 gpm, or 49 minutes at 400 gpm, where a minimum of 30 minutes is required.

GROUNDWATER/SUBSURFACE FIELD TILE:

The City shall monitor the discharge from both of the developed collector lines on site to determine if and when direct discharge is occurring to waters of the State. Records shall be kept by the City to

identify that no discharge of ground water occurs during that period of the year when wastewater effluent is being irrigated on to farm lands.

CONTACT PERSONNEL:

City of Donald
PO Box 388
Donald, OR 97020
Mr. Tom McWhirt - Public Works Director
Phone: (503) 678-5543

Advanced Ornamental
19172 French Prairie Road
St. Paul, OR 97137
Dean McKay
Phone: (503) 633-2833

A & R Spada Farms
7251 St Paul Hwy NE
St. Paul, OR 97137
Angelo Spada
Phone: (503) 633-2941

TESTING AND RECORD KEEPING:

Due to the time delay in the chlorine contact chamber, chlorine residual testing shall start after the irrigation system has operated at least 4 hours

The chlorination residual shall be tested and recorded at least daily for the first week, weekly for the first month, and thereafter, once every two weeks during operating time.

The City of Donald shall keep record identifying the date each spring when the farm tiles cease to discharge groundwater.

The chlorine dosage should start at 0.5 mg/l and be adjusted, as necessary, to achieve 1 to 1.5 mg/l.

Boatwright Engineering Inc.
2613 12th ST SE, SALEM, OREGON 97302
civil engineers • land surveyors
503 363-9225 FAX 363-1051

REGISTERED PROFESSIONAL ENGINEER
58978PE
OREGON
JANUARY 12, 1999
JANELLE D. POE
Expires 12/31/16

CITY OF DONALD, OREGON
August 24, 2015

WASTEWATER LAGOONS STORAGE & CAPACITY ANALYSIS

The City of Donald wastewater lagoons receive effluent form the City of Donald's STEP sewer system and wastewater from the Fargo Service District sewer system at the Aurora Interchange of Interstate-5.

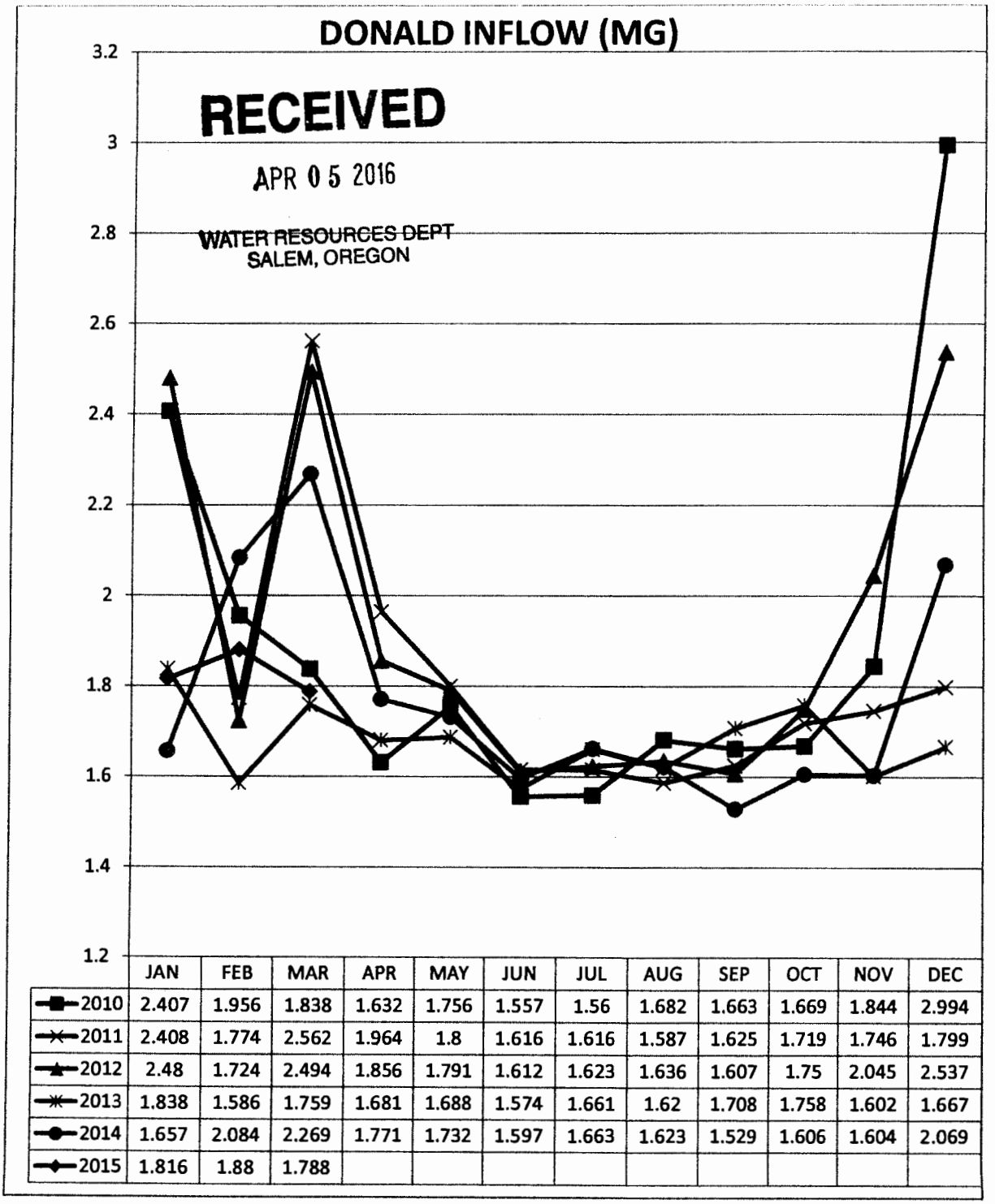
The City of Donald is concerned with the level of effluent and wastewater the City of Donald Wastewater Lagoons have been receiving and storing in the winter prior to being able to discharge as summertime irrigation on local farmlands. The lagoons are reaching capacity and the City has asked what measures that can be taken to balance the recycled water use.

INFLOW

The amount of effluent entering the lagoons is recorded daily by the City of Donald, and the data from the last few years has been graphed to illustrate the annual trend of inflow. Figure 1 is of the sewage inflow from the City of Donald's STEP system. This is effluent only as the sewage solids are collected at the source in a septic tank and only the effluent/waste water is pumped to the lagoons. Figure 2 is a graph of the sewage inflow from the Fargo District. The Fargo District pumps their total sewage, wastewater effluent AND solids, to one of the Donald lagoons where the solids settle.

The months between November and March have a much higher inflow than the rest of the year. Both Donald and the Fargo District pump their wastewater to the lagoons in a pressurized system, so I & I should not be a factor. But, based on the spikes during the wet months, it is likely that some stormwater is entering the wastewater system.

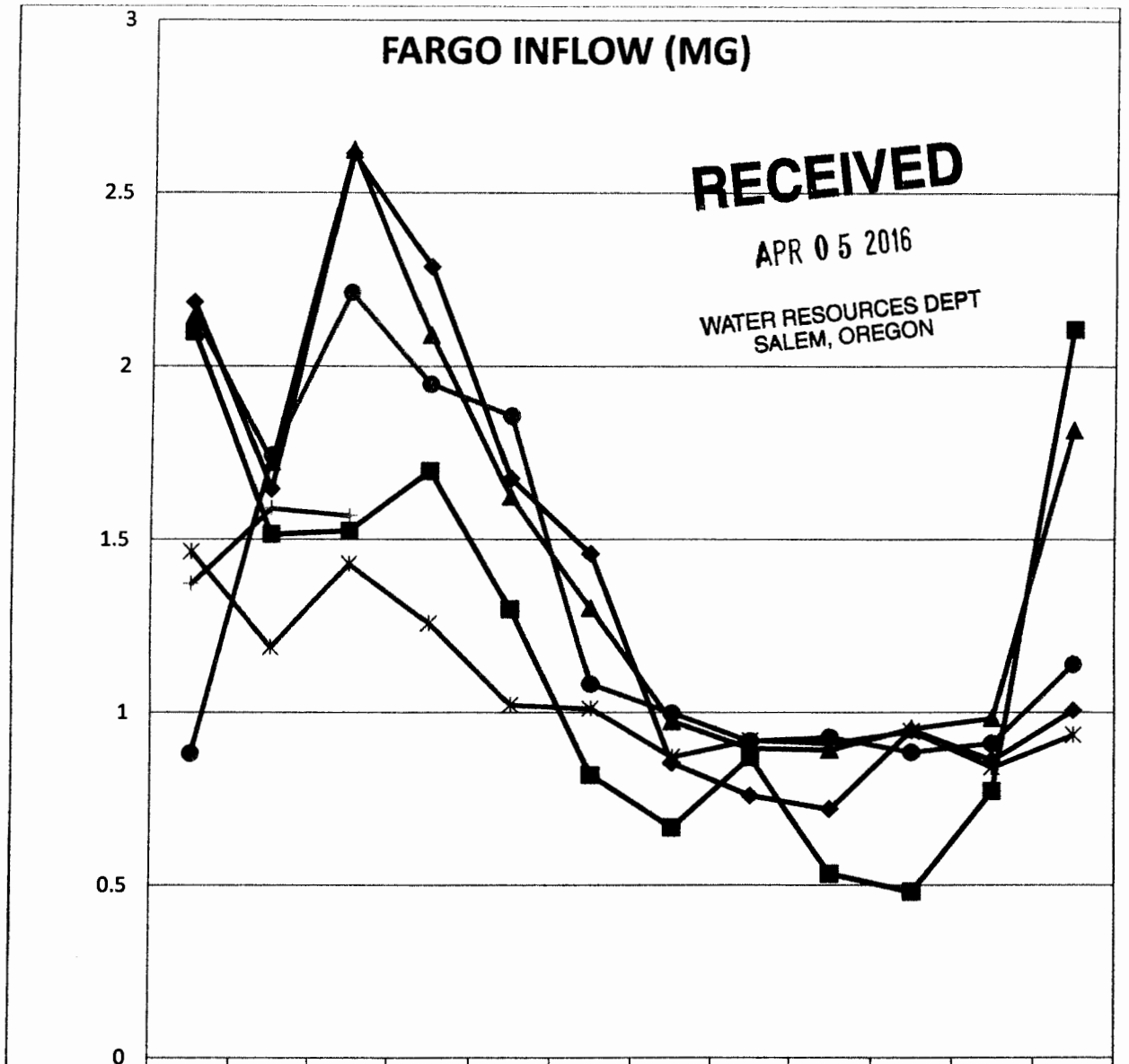
Figure 1: Sewage Inflow from City of Donald



	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2010	2.407	1.956	1.838	1.632	1.756	1.557	1.56	1.682	1.663	1.669	1.844	2.994
2011	2.408	1.774	2.562	1.964	1.8	1.616	1.616	1.587	1.625	1.719	1.746	1.799
2012	2.48	1.724	2.494	1.856	1.791	1.612	1.623	1.636	1.607	1.75	2.045	2.537
2013	1.838	1.586	1.759	1.681	1.688	1.574	1.661	1.62	1.708	1.758	1.602	1.667
2014	1.657	2.084	2.269	1.771	1.732	1.597	1.663	1.623	1.529	1.606	1.604	2.069
2015	1.816	1.88	1.788									

MG=Million Gallons

Figure 2: Sewage Inflow from Fargo District



	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2010	2.099	1.516	1.525	1.698	1.299	0.819	0.668	0.87	0.534	0.482	0.773	2.107
2011	2.185	1.646	2.614	2.288	1.676	1.459	0.854	0.76	0.721	0.949	0.862	1.006
2012	2.146	1.723	2.625	2.09	1.624	1.301	0.974	0.896	0.892	0.953	0.983	1.817
2013	1.465	1.189	1.43	1.258	1.022	1.011	0.871	0.919	0.911	0.945	0.841	0.935
2014	0.882	1.743	2.213	1.949	1.857	1.083	0.998	0.917	0.928	0.885	0.911	1.14
2015	1.372	1.59	1.569									

MG=Million Gallons

Table 1 summarizes a recent year of inflow, precipitation, and evaporation for the lagoons. The precipitation that the lagoons receive each year exceeds that which is lost to evaporation. This produces a net increase to the wastewater that needs to be discharged, regardless of the amount that is coming in from the City or the Fargo Service District. Taking into account sewage inflow, precipitation, and evaporation, during a one year time period, there is nearly 126 acre feet (AF) of net wastewater that needs to be disposed of.

Table 1: Donald/Fargo One Year of Inflow Data

	SEWAGE FLOW 1				PRECIPITATION 2			EVAPORATION -(average) 3		
	Donald		Fargo							
	MG	AF	MG	AF	IN	AF	MG	IN	AF	MG
NOV (13)	1.602	4.92	0.841	2.58	6.6	8.0	2.618	1.90	2.33	0.758
DEC (13)	1.667	5.12	0.935	2.87	7.1	8.7	2.826	0.62	0.76	0.247
JAN (14)	1.657	5.09	0.882	2.71	6.8	8.4	2.726	0.50	0.61	0.200
FEB	2.084	6.40	1.743	5.35	4.6	5.6	1.828	0.80	0.98	0.319
MAR	2.269	6.96	2.213	6.79	4.5	5.5	1.800	1.60	1.96	0.639
APR	1.771	5.44	1.949	5.98	2.9	3.6	1.174	2.40	2.94	0.958
MAY	1.732	5.32	1.857	5.70	2.3	2.9	0.934	3.00	3.68	1.197
JUN	1.597	4.90	1.083	3.32	1.7	2.0	0.667	4.10	5.02	1.637
JUL	1.663	5.10	0.998	3.06	0.5	0.6	0.200	5.00	6.13	1.996
AUG	1.623	4.98	0.917	2.81	0.8	1.0	0.331	5.20	6.37	2.076
SEP	1.529	4.69	0.928	2.85	1.7	2.0	0.659	3.50	4.29	1.397
OCT	1.606	4.93	0.885	2.72	3.6	4.3	1.417	1.90	2.33	0.758
ANNUAL	20.8	63.84	15.231	46.74	43.0	52.7	17.180	30.52	37.39	12.182

LAGOON	
inflow	110.58 AF
precip	52.7 AF
evap (-)	37.39 AF
Total yr net	125.92 AF

LAGOON STORAGE

The wastewater system at Donald originally consisted of three lagoons to receive the effluent from Donald's STEP sewage system that enables the solids to be collected in a septic tank at the source so that only the effluent is pumped to the wastewater lagoons. A fourth lagoon was added to enable the Fargo District sewage to also be collected. The Fargo District's total sewage is collected separately in the fourth lagoon so that the solids can settle out before it is pumped into the third (storage) lagoon of the Donald system prior to being pumped and used for irrigation.

Capacity

The volume of storage available in the lagoons is summarized below. The Design storage is the volume between the 2.5 foot depth and the designed water surface elevation, typically 3 feet from the top of the lagoon berm. For the past few years the lagoons are only being lowered to a 4 foot depth, leaving an additional 1.5 feet that is not being used as intended.

Table 2: Additional Lagoon Storage Not Utilized

LAGOON	DESIGN STORAGE AF	Storage Lost by not emptying to Design Level* AF
#1 (Donald)	11.25	2.56
#2 (Donald)	12.09	2.77
#3 (Donald)	27.05	6.37
Sub-Total	**50.39**	**11.7**
#4 (Fargo)	37.1	5.69
TOTAL	**87.49**	**17.39**

*Lagoons levels are only being lowered to a depth of 4 feet, instead of the **2.5** feet that is designed. This is the amount of storage that would be obtained if the levels were lowered an additional 1.5'.

The total designed capacity of the lagoons is 87.5 AF. However, currently only **70.1** AF is being utilized because the lagoons are being drawn down to a depth of 4 feet instead of the **2.5** feet that was designed. If the lagoons are emptied to the design depth, another **17.39** AF is available for additional storage each year

Storage Requirements

The amount of wastewater coming into the lagoons from the Donald and Fargo Sewer District does not appear to be more than the lagoons can hold, but when the precipitation and evaporation are calculated into the equation, the lagoon capacity is exceeded. While there is evaporation that also occurs, the average amount of precipitation exceeds the amount of evaporation. This was determined by calculating the quantity entering (sewage and precipitation), and exiting (evaporation) the lagoons during the months when irrigation does not take place. October is a month that typically can use irrigation as a disposal means, however, no irrigation occurred in October 2014. Looking at past records, there is typically a month when irrigation is permitted but it does not occur. Therefore, by leaving a month of irrigation out of these calculations, it provides a realistic aspect and a safety factor for the system.

Although lowering the holding depth in the lagoons to 2.5 feet would help, there is not enough storage within the lagoons to hold the current amount of wastewater during the winter & spring months. The Active Storage listed in the Table 3 represents the total storage available at a lagoon depth of 2.5 feet.

Note that in the Table "Winter Month Storage Accumulation" it is not only Donald, or only Fargo, that is exceeding the storage of their respective lagoons, but each entity is surpassing its storage. Donald collects a total of 59.47 AF of wastewater within its three lagoons, and Fargo collects 39.28 AF of wastewater. Respectively, they have 50.39 AF (Lagoons #1, #2, #3 for Donald), and 37.1 AF of storage (Lagoon #4 for Fargo).

Table 3: Winter Month Storage Accumulation

MONTH 2013-14	SEWAGE		PRECIPITATION		EVAPORATION		ACTIVE STORAGE PER/MONTH AF	ACTIVE ACCUM. STORAGE AF	TOTAL CAPACITY REMAINING AF
	Donald AF	Fargo AF	Donald AF	Fargo AF	Donald AF	Fargo AF			
OCT ('13)	5.40	2.90	2.9	1.45	2.86	1.43	8.36	8.36	79.13
NOV	4.92	2.58	5.4	2.68	1.55	0.78	13.21	21.56	65.93
DEC	5.12	2.87	5.8	2.89	0.51	0.25	15.90	37.46	50.03
JAN ('14)	5.09	2.71	5.6	2.79	0.41	0.20	15.55	53.01	34.48
FEB	6.40	5.35	3.7	1.87	0.65	0.33	16.38	69.38	18.11
MAR	6.96	6.79	3.7	1.84	1.31	0.65	17.32	86.70	0.79
APR	5.44	5.98	2.4	1.20	1.96	0.98	12.08	**98.78***	-11.29
Total Oct-Apr	**39.31**	**29.18**	**29.4**	**14.72**	**9.24**	**4.62**	**98.78***	**Exceeds**	*

*Exceeds Lagoon Capacity of 87.49 acre-feet (39.31+29.4-9.24=59.47 AF for Donald) and (29.18+14.72-4.62= 39.28 AF for Fargo)

These numbers show that the ponds are not sized large enough for the amount of wastewater being collected today. The table above indicates that there is 98.78 AF of storage necessary in the lagoons during the winter and spring months until they are permitted to start irrigating in May to begin discharging the effluent. The table below summarizes that the lagoons have a total capacity of 87.49 AF. With a calculated accumulation of 98.78 AF during the winter months, that means there is a shortage of approximately 11.29 AF during the storage time period.

Table 4: Lagoon Capacity

DISTRICT/LAGOON	SURFACE AREA ACRES	TOTAL SURFACE ACRES		LAGOON VOL CAPACITY ACRE-FEET	TOTAL CAPACITY ACRE-FEET
DONALD/ PRIMARY (#2)	2.5	9.8	14.7	12.09	**87.49**
DONALD/SECONDARY (#1)	2.3			11.25	
DONALD/STORAGE (#3)	5			27.05	
FARGO (#4)	4.9	4.9		37.1	

The 11.29 AF that the lagoons are short in their holding capacity would require an additional top depth of approximately **0.75 feet** in each of the four lagoons, which is available and can be acquired by decreasing the amount of freeboard provided. The existing freeboard is 3 feet.

PROJECTED GROWTH

The Housing Needs Analysis that was conducted for Donald projects a population of 2,085 people by 2034. There is a deficit of 76.7 acres of residential zoned land needed to provide housing for that population increase. The sewer use rate of 70 gallons per capita per day (gpcd) for 2,085 people, plus 10% additional for industrial use, will create an additional 14.93 AF per year of wastewater inflow from the City of Donald by 2034.

The Fargo District is at buildout except for 25.3 acres that is at the northwest corner of Bents Road and Ehlen Road. Once developed that 25.3 acres is projected to create an additional 4.5 AF of wastewater each year.

These projected increases in sewer will require additional lagoons to be constructed.

IRRIGATION

Donald has a DEQ permit to irrigate from the lagoons during the crop season, typically from May 1 to October 31, however there are not exact date constraints on the permit. Irrigation could begin as early as March 1, if the soil and climate conditions allow additional early application.

Grass seed is the current crop that is irrigated by the wastewater from the Donald Lagoons. Based on an Oregon State University study[1] of irrigation rates, grass seed requires 5 inches of water. The City applies this irrigation on a 20 day cycle, allowing 1.5 and 1.55 cycles per month (based on 30 or 31 days). This amount of irrigation will empty the lagoons before the next winter storage cycle begins.

The land the City of Donald owns around the lagoon which could be used for disposal is 54.0 acres, being: 8.3 acres north of the creek, and 39.3 acres north and east of Lagoon 4. The 8.3 acres north of the creek is the subject of an application for a permit to discharge on that side of the creek. This results in a total of 39.4 acres that is currently permitted to receive effluent with a potential of 47.7 acres (39.4 + 8.3) once the additional permit is received. Therefore, 47.7 acres will be considered the amount of acres used for irrigation for calculations of this analysis.

Discharge effluent could be made available to the 300+ acres of farmland to the south of Donald Road, which is owned by Arthur Spada, Mary Spada, and Donald Farm, LLC and managed by A&R Spada Farms, LLC. When Lagoon 4 was constructed by the City, in conjunction with Marion County and the Department of Environmental Quality (DEQ), a 6-inch

[1]*Consumptive Use and Net Irrigation Requirements for Oregon, Circular of Information 628, Watts, Dehlinger, Wolfe and Shearer, March 1968, Agricultural Experiment Station, Oregon State University, Corvallis.*

pipeline was installed to the south, across Donald Road, for future irrigation. Although, in the past, Spada's have considered using the additional water on this land, the details have never been worked out and there has never been an agreement. Because this farm is so close to the lagoons, and has such a large amount of land for irrigation, it would be an ideal location for the City to dispose of the effluent. However, the fact that this farm has existing permitted water rights from the Oregon Water Resources Department (WRD) complicates the situation. Irrigating with the City's effluent may compromise the validity of the water rights since they would not be used to their current extent. If there is sufficient acreage, either at this location or at a combination of locations, to allow rotating the application of the effluent, the concerns for the permitted water rights could be assuaged. Under Oregon law, the permitted water rights must be used at their authorized place of use at least once every five years to prevent the risk of forfeiture.

There will also be concerns about any potential for cross contamination between the effluent water and the groundwater sources authorized by the permits if Spada's system is used. At this time, portions of the acreage are in nursery stock and irrigated through a drip system, rather than impact sprinklers. The effluent has the potential to clog the drip application system and create real headaches for the farmer. If the City provides the piping and application system, the concerns with the drip application could be relieved.

An additional concern is the crops to which the effluent is applied. Historically, when Spada is not growing nursery stock, the rotations consist of food crops such as wheat, corn, beans, etc. The application of effluent is limited on consumable crops as it is *". . . prohibited for three days before harvesting."* [OAR 340-055-0012(5)(g)(C)] and must be a crop *". . .that undergoes thermoprocessing sufficient to kill spores of Clostridium botulinum."* [OAR 340-055-0010(12)] Once the crop is harvested the irrigation application would cease unless a second or alternate crop is planted. Effluent disposal on bare ground would not meet the definition of *"Beneficial Purpose" . . . where recycled water is utilized for a resource value, such as nutrient content or moisture, to increase productivity or to conserve other sources of water."* [OAR 340-055-0010(2)]. Application to crops such as sod, grass seed, Christmas trees, nursery stock, forage crops (timothy, alfalfa, orchard grass, etc.) do not face these restrictions, nor do applications to golf courses, cemeteries, highway medians or industrial or business campuses. *"When irrigating an orchard or vineyard, the edible portion of the crop must not contact the ground, and fruit and nuts may not be harvested off the ground."* [OAR 340-055-0012((5)(g)(D)]

Ideally, the disposal acreage would not have WRD permitted water rights that would compete with the proposed effluent needs. The attached map shows several other locations of farmland in the area which do not currently have water rights. The owners of these farms may be interested in obtaining effluent for the irrigation of crops.

Summary

The storage capacity of the Donald lagoons has been analyzed and the findings are summarized below. Some actions can be made immediately to increase the storage available without constructing new structures.

- The sewage lagoons are not being lowered to the designed depth for maximum storage. They should be lowered to a remaining depth of 2.5 feet.
- Currently more wastewater and precipitation is being collected during the winter months (October to April) than there is space for in the lagoons.
- Additional storage can be acquired by decreasing the amount of freeboard allowed in the lagoons.
- The effluent is being metered and recorded as it enters the lagoons, but the City must also implement a plan to record precipitation, evaporation, and effluent levels within the lagoons on a regular basis to provide additional data and more accurate records.
- At the projected buildout additional storage will be required and another lagoon should be constructed. A lagoon the size of the larger existing lagoon #3, approximately 6 acres, is estimated to be needed. The current amount of acreage used for disposal through irrigation, excluding the loss of the 6 acres of land to build the lagoon would still allow for complete disposal of the stored effluent. Therefore, the acquisition of additional land for disposal by irrigation does not appear to be necessary within this planning period.

Oregon
Kate Brown, Governor

Department of Environmental Quality
Western Region Eugene Office
165 East 7th Avenue, Suite 100
Eugene, OR 97401
(541) 686-7838
FAX (541) 686-7551
TTY 711

March 30, 2016

Mike McCord, Region Manager
Oregon Water Resource Department
725 Summer St NE, Suite A
Salem, Oregon 97301

Re: City of Donald, Recycled Water Use
DEQ File #24600
WQ – Marion County

Dear Mr. McCord:

Pursuant to ORS 537.132 that allows the exemption of reclaimed water from the provisions of ORS537.130, DEQ submits the following for City of Donald:

1. ORS 537.132(1)(a) The use of reclaimed water is authorized by the national pollutant discharge elimination system or water pollution control facilities permit issued pursuant to ORS 468B.050 or 468B.053.

   City of Donald is authorized by DEQ WPCF Permit # 101978 to use reclaimed water (currently referred to by DEQ regulations OAR 340-055 as recycled water).

2. ORS 537.132(1) (b) The Department of Environmental Quality, in reviewing an application for a permit pursuant to ORS 468B.050 or 468B.053, has consulted with the State Department of Fish and Wildlife on the impact to fish and wildlife to determine that the application of reclaimed water under ORS 537.130, 537.131, 537.132, 540.510 and 540.610 shall not have a significant negative impact on fish and wildlife.

   DEQ consulted with Ben Walczak, Asst. District Fisheries Biologist, ODFW Clackamas Office, 971-673-6013, and determined that the application of reclaimed water will not have a significant negative impact on fish and wildlife.

3. ORS 537.132(1) (c) The Department of Environmental Quality has determined the use of reclaimed water is intended to improve the water quality of the receiving stream.

   If treated wastewater water was discharged to receiving streams during summer months, the ammonia concentrations and temperatures of the wastewater would be too high to support healthy salmonid populations.

If you have additional questions, I may be reached at 503-378-5081.

Sincerely,

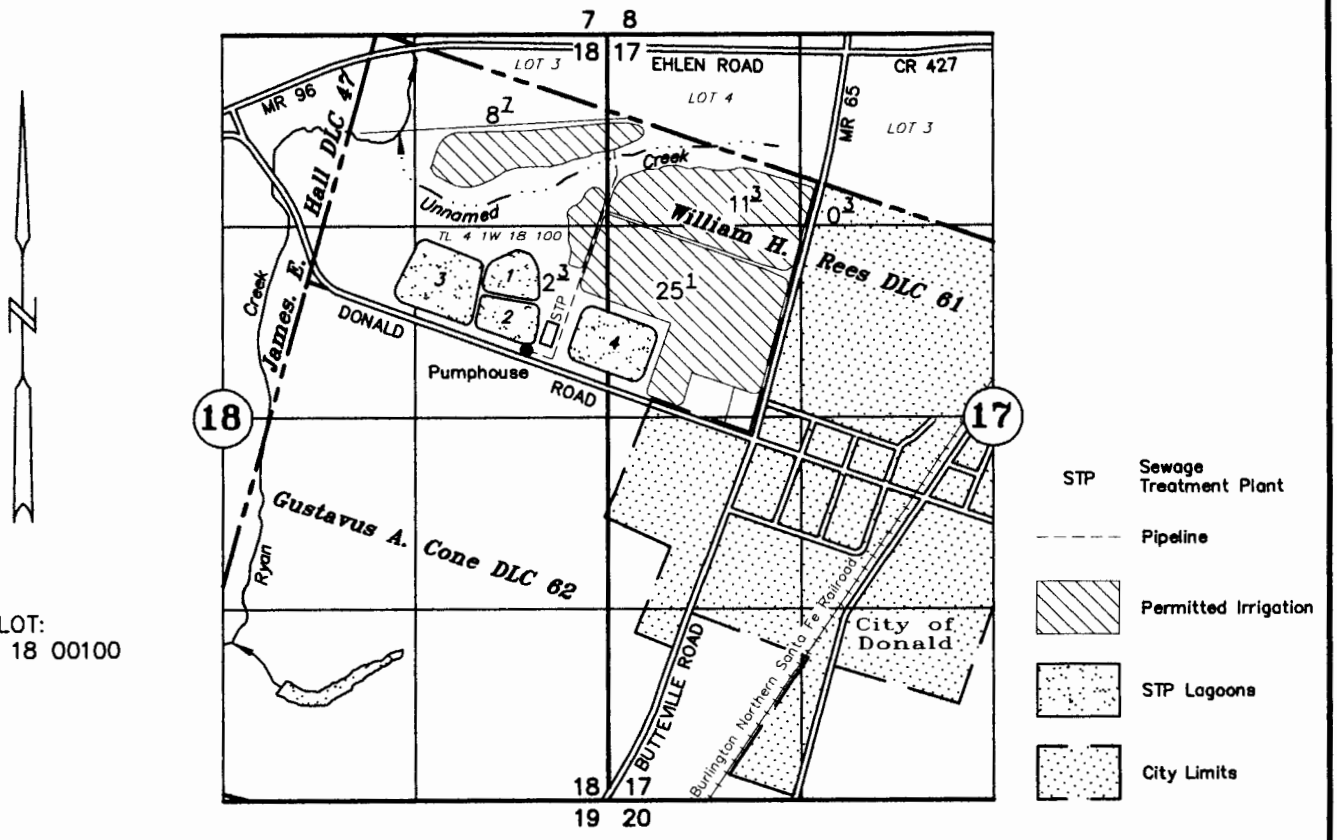
Ranei Nomura

Ranei Nomura,
Water Quality Manager
Western Region

cc: File
Ben Walczak, ODFW Clackamas Office, 17330 SE Evelyn St., Clackamas OR 97015
Heidi Bell, City Manager, City of Donald, PO Box 388, Donald OR 97020-0388
Jeanne Boatwright, Boatwright Engineering, Inc., 2613 12th St. SE, Salem, OR 97302
ec: David Cole, NWR WQ-DEQ

T4S, R1W, WM

MARION COUNTY



TAX LOT:
4 1W 18 00100

Registration of Reclaimed Municipal Water Use

Registration No. _____

RECEIVED

APR 05 2016

WATER RESOURCES DEPT
SALEM, OREGON

City of Donald

October 26, 2015
SCALE: 1" = 1320'

NOTE: This map is for the purpose of identifying the location of reclaimed water use and has no intent to dimension or locate property ownership lines.

BOATWRIGHT ENGINEERING, INC.
SALEM, OREGON

DONALD AREA WTR RT MAP

Printed: April 15, 2015

Oregon Water Resources Department
725 Summer St NE, Suite A, Salem, OR 97301
(503)986-0900

Water Rights by Type

Points of Diversion

Diversion

Places of Use

Storage Water

Surface Water

Groundwater

Water Rights by Use

Recreation
Fish
Wildlife
Instream
Misc.
Agriculture
Livestock
Irrigation
Mining
Power
Commercial
Domestic

By Primary/Supplemental

Primary
Supplemental

1:36,112

0 0.425 0.85 1.7 mi
0 0.5 1 2 km

Oregon Water Resources Department
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

1 Marie Haener TST 260 Ac
2 Beverly Giles LT 142 Ac (60±)
3 Fragrant Farm LLC 69 Ac
4 Chas & Louanna Eggert 666 Ac
5 Ditchen & Siems 117 Ac
6 Jeff& Doug Feller 334 Ac

OWRD