

**PORT OF MORROW
REGULAR COMMISSION MEETING**

**Riverfront Center, #2 Marine Drive Boardman,
Oregon**



March 11, 2026

1:30 p.m.

AGENDA

Zoom meeting information is available on our website.



Commission Tour
March 11, 2026, 8:30am
2 Marine Dr., Boardman, OR 97818

- I. Tour of Port Projects – Informational only – No Decisions or Actions will be Taken.**

Regular Commission Meeting
March 11, 2026, 1:30pm
2 Marine Dr., Boardman, OR 97818

I. CALL TO ORDER AND INTRODUCTIONS

CONFLICTS OF INTEREST DECLARATIONS

II. PUBLIC COMMENT PERIOD

III. CONSENT AGENDA

- A. February 11, 2026 Commission Workshop Minutes**
- B. February 11, 2026 Special Commission Meeting Minutes**
- C. February 11, 2026 Regular Commission Meeting Minutes**
- D. March 6, 2026 Joint Commission Workshop Minutes**

IV. LEGISLATIVE UPDATES

V. OLD BUSINESS

- A. CDA Update**
- B. WIFIA Update**
- C. CWSRF Update**
- D. Morrow County Clean Water Consortium Update**
- E. SIP IGA with County**
- F. Secondary Treatment Update – Aqua**
- G. Secondary Treatment Update - Parametrix**
- H. Other**

VI. NEW BUSINESS

- A. Resolution 2026-02 – Updating Banking Signatory**
- B. ODOT IGA**
- C. Airport Discussion**
- D. Other**

VII. STAFF REPORTS

- A. Projects Update**
- B. Maintenance Update**

AGENDA

Zoom meeting information is available on our website.



- C. Financial Update
- D. Usage Reports
- E. Other

VIII. OTHER REPORTS

- A. Willow Creek Valley Economic Development Group
- B. BCDA
- C. ICABO
- D. Other

IX. FOR THE GOOD OF THE ORDER

X. UPCOMING EVENTS:

April 8th	1:30pm	POM Regular Commission Meeting
April 14-15		SDAO Regional Training in Pendleton
April 20-23		PNWA – Mission to Washington

XI. EXECUTIVE SESSION

The Port will hold an executive session meeting for the permissible reason(s) stated below under ORS 192.660(2). Representatives of the news media and designated staff and other persons shall be allowed to attend the executive session. The public virtual Zoom Meeting link will be paused during the executive session as permissible executive session meetings are not subject to HB2560. Representatives of the news media are specifically directed not to report on any of the deliberations during the executive session, except to state the general subject of the session as previously announced. No decision will be made in this executive session. At the end of the executive session, we will return to the room, start the public virtual Zoom Meeting link again open the regular session meeting.

- A. For the Purpose of Consideration of Deliberations with the Port's Executive Director and Other Staff Members Who Have Been Designated by the Port to Negotiate Real Property Transactions – ORS 192.660 (2)(e)**
- B. For the Purpose of Consultation with Counsel Concerning the Legal Rights and Duties of a Public Body with Regard to Current Litigation or Litigation Likely to be Filed – ORS 192.660 (2)(h)**

Next Resolution 2026-03

The meeting location is accessible to persons with disabilities. A request for an interpreter for the hearing impaired or for other accommodations for persons with disabilities should be made at least 48 hours before the meeting to Brandy Warburton @ (541) 481-7678.

Port of Morrow provides the option for Zoom Translated Captions.

Instructions: <https://support.zoom.us/hc/en-us/articles/6643133682957-Enabling-and-configuring-translated-captions>

Commission Workshop
February 11, 2025 – 9:00 AM
2 Marine Drive, Boardman, Oregon 97818

I. CALL TO ORDER AND INTRODUCTIONS

John called the workshop to order at 9:00 AM.

Commissioners Present: Rick Stokoe, John Murray, Kelly Doherty, Joel Peterson was present on Zoom

Staff Present: Lisa Mittelsdorf, Eileen Hendricks, Mark Patton, and Brandy Warburton

Visitors Present: None

By Zoom Meeting: (Staff) Erika Morton
(Guests) Mike Gorman

II. COMMISSIONER APPOINTMENT – Review and Finalize Interview Questions

The commission reviewed/discussed the list of questions and decided what procedure to use.

The following questions were selected:

1. Do you foresee having any conflicts of interest issues?
2. What do you believe is the single most important responsibility of a Port Commissioner, and how do you understand the overall role of the position?
3. How do you distinguish the role of a commissioner from day-to-day port management?
4. Can you describe a time you had to make an unpopular decision in the public interest?
5. How should the Commission balance debt, reserves, and long-term infrastructure needs?
6. Of the qualities you have, which two would most benefit the success of the port?
7. What are the top three priorities you feel the port should focus on, in order of priority?
8. In terms of working effectively on a board, how do you foresee balancing working together versus speaking up on issues you feel strongly about? How do you plan to communicate in these instances?

There was discussion regarding the process and order for asking questions and the process for making the appointment.

III. FOR THE GOOD OF THE ORDER

John adjourned the workshop at 9:25 AM.

Submitted by:

John Murray, Commission President

Lisa Mittelsdorf, Executive Director

Special Commission Meeting Minutes
February 11, 2026 – 10:00 AM
2 Marine Drive, Boardman, Oregon 97818

I. CALL TO ORDER AND INTRODUCTIONS

John called the meeting to order at 10:00 AM.

Commissioners Present: Rick Stokoe, John Murray, Kelly Doherty, Joel Peterson was present via Zoom

Staff Present: Lisa Mittelsdorf, Eileen Hendricks, Mark Patton, and Brandy Warburton

Visitors Present: Raymond Akers, Jerry Rietmann, Ken Browne, Luis Campos, and Evan Purves arrived late.

By Zoom Meeting: (Staff) Erika Morton
(Guests) Oregon Offices, Mike Gorman, Karen Pettigrew, City of Boardman

II. COMMISSIONER APPOINTMENT

A. Interview Candidates – John thanked each candidate for being present and willing to serve. Candidates Jerry Rietmann, Ken Browne, Luis Campos, and Raymond Akers introduced themselves. Evan Purves arrived late.

After introductions, John explained the process being panel style and each candidate was asked the following questions.

1. Do you foresee having any conflicts of interest issues?
2. What do you believe is the single most important responsibility of a Port Commissioner, and how do you understand the overall role of the position?
3. How do you distinguish the role of a commissioner from day-to-day port management?
4. Can you describe a time you had to make an unpopular decision in the public interest?
5. How should the Commission balance debt, reserves, and long-term infrastructure needs?
6. Of the qualities you have, which two would most benefit the success of the port?
7. What are the top three priorities you feel the port should focus on, in order of priority?
8. In terms of working effectively on a board, how do you foresee balancing working together versus speaking up on issues you feel strongly about? How do you plan to communicate in these instances?

B. Discussion of Candidates

John opened the discussion. The commission thanked each candidate for their willingness to serve and expressed the things they were considering in making their decision. John replied that a motion can be made to appoint a new commissioner, or further discussion by the board can be had.

C. Finalize Appointment – Motion to Appoint

Joel made the motion to appoint Jerry Reitmann to the Port commission. Rick seconded the motion. No further discussion was had. The motion passed unanimously.

Joel Peterson – Aye

John Murray - Aye

Rick Stokoe - Aye

Kelly Doherty – Aye

Jerry expressed his gratitude to the commission and thanked the other candidates for being there,

III. FOR THE GOOD OF THE ORDER

Kelly asked if we had any openings on the budget committee and suggested the candidates may be interested in sitting on that. Eileen responded that there aren't any current openings.

John closed the special meeting at 10:57 AM.

Submitted by:

John Murray, Commission President

Lisa Mittelsdorf, Executive Director

Regular Commission Meeting Minutes
February 11, 2026 – 1:30 pm
2 Marine Drive, Boardman, Oregon 97818

I. CALL TO ORDER AND INTRODUCTIONS

John Murray called the meeting to order at 1:30 p.m. and gave a special welcome to the newly elected commissioner, Jerry Rietmann.

Commissioners Present: Rick Stokoe, John Murray, Kelly Doherty, Jerry Rietmann, and Joel Peterson attended via Zoom.

Staff Present: Lisa Mittelsdorf, Eileen Hendricks, Mark Patton, Brandy Warburton, Jason Hendricks, Marcine Brangham, Anna Browne, Angel Aguilar, Tim Patton, Donnie Griggs, Chad Snyder, Jacob Cain, Jeff Wilson, and Erika Morton

Visitors Present: Mike Hughes, Karen Pettigrew, Jered Tesch, Gordon MacKenzie, Torrie Griggs

By Zoom Meeting: (Staff) Jessica Esparza
(Guests) John Doherty, Kyla Baumgartner, Marty Broadbent & Sam Irons, Isabel Gonzalez, 15047171180, Kirby Garrett, Sam Tucker, Steven Eliscu, Jackie E., Brandon Hammond

John requested adding two items to the agenda – Strategic business plan under old business and also under new business a discussion for a possible tour plan for the commissioners in the near future.

II. SWEARING IN OF NEWLY APPOINTED OFFICIAL

John swore in Jerry Rietmann to the Port Commission.

Lisa introduced Donnie Griggs, who started a new role as assistant project manager at the Port of Morrow this week. She also introduced Jered Tesch, who was just hired as the Managing Director of the Clean Water Consortium. She also announced that Angel was recently promoted as the interim director of the SAGE Center/Event Center.

There were no declarations of conflicts of interest.

III. PUBLIC COMMENT PERIOD - none

IV. CONSENT AGENDA

A. January 20, 2026, Regular Commission Meeting Minutes

B. January 30, 2026, Special Commission Meeting Minutes

Rick made the motion to approve the consent agenda items. Kelly seconded the motion. No further discussion was had. The motion passed unanimously.

Joel Peterson – Yes

John Murray - Yes

Rick Stokoe - Yes

Kelly Doherty – Yes

Jerry Rietmann - Yes

V. LEGISLATIVE UPDATES

- A. Federal** - Kirby gave an update on federal legislative matters. There was a brief federal shutdown last week. Congressionally Directed Spending has passed for the full year. We have two asks for the next cycle. It's a quick turnaround due at the end of February. We are requesting \$1.8 million for the Terminal 3 Face Dock updates. We are also partnering with the City of Ione for \$1.8 million to renovate the American Legion building into a business incubator space. Ryann is not able to attend due to the Oregon short session in progress. John expressed concern over bills that may impact the port. Lisa said she could get a list for the commission.

VI. OLD BUSINESS

- A. CDA Update** – Joel announced that a settlement agreement has been reached with Umatilla County. The other announcement is that Greg Smith resigned. Emily Collins has been selected as interim director. There should be a BIN number soon so they can start paying employee salaries. John asked about the Tapani bill that was previously discussed. Lisa said we have received an agreement and as soon as it is completed and signed, it will be executed. Joel said he has a goal for the CDA to get financing apart from the Port of Morrow to cover that bill. John also asked about the status of the 5 million grant from UEC, but nothing new is known.

Chief Mike Hughes reported that a judge has moved to go to trial for the lawsuit between Boardman and Irrigon Fire departments.

Lisa asked for a formal motion to have the Port formalize paying Morrow County's portion of the bills for CDA. We received the property and Morrow County doesn't have direct assets at the CDA. There was a lengthy discussion about the IGA and how costs are divided between the partners. Rick made and withdrew his first motion.

After additional discussion, Rick made the motion to cover Morrow County's percentage, including legal and operational costs, up to \$100,000 in addition to our 20%. Jerry

seconded the motion. There was discussion regarding specifics. The motion passed unanimously.

Joel Peterson – Yes

John Murray - Yes

Rick Stokoe - Yes

Kelly Doherty – Yes

Jerry Rietmann – Yes

Lisa said she would follow up regarding updating the IGA.

- B. WIFIA Update** – Lisa said we are trying to set up a meeting in person in March. We are conditionally approved and can move forward with funding. We are still pursuing private funding. Eileen gave an update regarding the private funding options.
- C. CWSRF Update** – Eileen stated we were awarded a small amount up front because they won't award the full amount until plans are in place. We will borrow \$50 million in total from the state for secondary treatment.
- D. Morrow County Clean Water Consortium Update** – Kelly gave the update, saying they had a meeting was earlier this week and they hired a manager. Irrigon is moving forward with test wells. Kelly also said that we received funding from CREZ - \$400,000 with up to 20% of that for operational expenses.
- E. SIP IGA with County** – John said he told Commissioner Sykes that we wished to have a joint meeting. Lisa said a poll was sent with dates for scheduling. There was a question whether or not they received the redline version. Lisa will resend it.
- F. South Morrow County Water and Transportation Infrastructure Development Amendment Number 1 with Oregon Business Development Department** – Eileen said this is the funding for Ione and Heppner. The Amendment makes two changes, a half sentence to the description and a firm date for the project completion.

Joel made the motion to approve the amendment. Kelly seconded the motion. No further discussion was had. The motion passed unanimously.
Joel Peterson – Yes
John Murray - Yes
Rick Stokoe - Yes
Kelly Doherty – Yes
Jerry Rietmann - Yes
- G. Board Appointments** – The commission referred to the list in the packet.

Rick made the motion to keep the existing assignments as presented, replacing Danny with Jerry. John seconded the motion. No further discussion was had. The motion passed

unanimously.

Joel Peterson – Yes

John Murray - Yes

Rick Stokoe - Yes

Kelly Doherty – Yes

Jerry Rietmann -Yes

H. Other

John asked for an update on the strategic plan. Lisa reported that we will be moving forward with an RFP for the planning process. It will be at least April before a decision from Business Oregon is made.

Rick made a motion to move forward with the strategic plan and economic impact analysis. Kelly seconded the motion. The motion passed unanimously.

Joel Peterson – Yes

John Murray - Yes

Rick Stokoe - Yes

Kelly Doherty – Yes

Jerry Rietmann -Yes

VII. NEW BUSINESS

- A. SDAO Annual Conference** – Rick, Kelly, Brandy, Marcine, Tim, Lisa, and Eileen attended. They all felt it was a good conference overall. Kelly feels we need to provide some help - there could be a better variety of topics. Rick added comments regarding the repetition of sessions. John asked if Jerry needs to take the meeting law, and Brandy responded yes. It's already being scheduled.

- B. BPA Lease Purchase Program** – Eileen provided background about the program, outlined the new agreement, and referred to the letter in the packet. The authorized signors will need to be updated, and a resolution will need to be passed, however, a consensus will be suitable for now. The commissioners provided the consensus.

- C. Appoint Budget Officer / Approve Budget Calendar** – Eileen gave an overview and answered questions.

Rick made the motion to appoint Eileen Hendricks as budget officer and approve the budget calendar as presented with the ability to modify if necessary. Joel seconded the motion. No further discussion was had. The motion passed unanimously.

Joel Peterson – Yes

John Murray - Yes

Rick Stokoe - Yes

Kelly Doherty – Yes

Jerry Rietmann -Yes

There was a discussion regarding the committee members.

- D. Other** – John would like to plan a tour because of all the changes and a new commissioner. Lisa and Mark will provide several date options in March.

VIII. STAFF REPORTS

- A. Project Updates** – Erika showed photos of projects while Tim, Jacob, Jeff, and Chad provided information and answered questions. Aqua Engineering will be here next month with an update for secondary treatment.
- B. Maintenance Update** – Tim and Mark provided the maintenance update.
- C. Financial Update** – Eileen gave the financial update and answered questions.
- D. Usage Reports** – The commission reviewed the usage reports in the packet.
- E. Other**
No other staff reports were discussed at the time.

IX. OTHER REPORTS

- A. WCVEDG** – None given.
- B. BCDA** – Torrie gave an update for BCDA. They submitted the annual report to the CREZ board. She expressed appreciation for the funds. The new incubator space is in the design phase. John asked if Torrie could provide an update for the Morrow County Broadband Consortium. Torrie spoke that most of the county has or will be covered soon. Starlink will be an option for the south county due to cost. The Consortium will be dissolving soon.
- C. ICABO** – None given.
- D. Other** – None given.

X. FOR THE GOOD OF THE ORDER

XI. UPCOMING EVENTS:

March 11	1:30 PM	POM Regular Commission Meeting
March 15		SEI Filing Window Opens
April 15		SEI Filing Deadline
April 20-23		PNWA Mission to Washington

Mark said there is one thing we need to add to other new business. We have been asked to give an intent to deliver water to old city property out on Tower Road. There are 306 acres

of space age industrial property that transferred hands. They need a non-binding letter of intent to provide water to get through zoning. He said everything is preliminary and non-binding.

Rick made the motion to authorize our staff to negotiate a non-binding agreement with NexGenerations, LLC. Jerry seconded the motion. There was no further discussion. The motion passed unanimously.

Joel Peterson – Yes

John Murray - Yes

Rick Stokoe - Yes

Kelly Doherty – Yes

Jerry Rietmann -Yes

XII. EXECUTIVE SESSION

John recessed the regular session at 3:36 PM and read the following statement.

The Port will hold an executive session meeting for the permissible reason(s) stated below under ORS 192.660(2). Representatives of the news media and designated staff and other persons shall be allowed to attend the executive session. All other members of the audience will be asked to leave the room. The public virtual Zoom Meeting link will be closed during the executive session as permissible executive session meetings are not subject to HB2560. Representatives of the news media are specifically directed not to report on any of the deliberations during the executive session, except to state the general subject of the session as previously announced. No decision will be made in this executive session. At the end of the executive session, we will return to open session and welcome the audience back into the room in-person and open the public virtual Zoom Meeting link again.

A. For the Purpose of Consideration of Deliberations with the Port's Executive Director and Other Staff Members Who Have Been Designated by the Port to Negotiate Real Property Transactions – ORS 192.660 (2)(e)

B. For the Purpose of Consultation with Counsel Concerning the Legal Rights and Duties of a Public Body with Regard to Current Litigation or Litigation Likely to be Filed – ORS 192.660 (2)(h)

John reopened the regular session at 4:45 PM. He called for any further business. Hearing none, the meeting was adjourned.

Submitted by:

John Murray, Commission President

Lisa Mittelsdorf, Executive Director

**Port of Morrow and Morrow County
Joint Commission Work Session
March 6, 2026 – 3:00 pm
2 Marine Drive, Boardman, Oregon 97818**

I. CALL TO ORDER AND INTRODUCTIONS

The meeting was called to order at 3:00 PM. No introductions were made.

Present: John Murray, Jerry Reitmann, Gus Peterson, Kelly Doherty, Mike Gorman, Justin Nelson, Joel Peterson, Valerie Ballard, Brandy Warburton, Jeff Wenzholz, David Sykes, Lisa Mittelsdorf, Rick Stokoe, Matt Jensen, Mark Patton, Eileen Hendricks

By Zoom Meeting: Erika Morton, Carla McLane, Kayla Boylan, Ryan DeGroff, Alex Albertine, Aaron Palmquist, Karen Pettigrew

- II. Explanation of SIP Legislation – Justin Nelson, County Counsel**
- III. Current SIP Process – Mike Gorman, Morrow County Assessor**
- IV. Business Oregon’s Role in the SIP – Alex Albertine, Business Oregon, Head of Business Incentive Programs – SIP and Enterprise Zones**
- V. Discussion** – David opened the floor to discussion.
- VI. Adjourn** – The meeting was adjourned at 5:06 PM.

Submitted by:

John Murray, Commission President

Lisa Mittelsdorf, Executive Director

DATE: December 15, 2025
TO: Port of Morrow; AQUA Engineering
FROM: Parametrix
SUBJECT: Land Application Capacity with Secondary Treatment
PROJECT NUMBER: 233-7464-004

Summary of Capacity Assessment

The Port of Morrow (Port) operates a land application system for recycled industrial wastewater (reuse water) under Water Pollution Control Facilities (WPCF) Permit 102325 (Permit). Schedule C(4) of the Permit requires the Port to design and construct a secondary treatment system for its reuse water by July of 2029. The purpose of this memorandum is to provide a nitrogen and hydraulic balance to document the land application system capacity upon completion of the secondary treatment project.

Per Schedule A(8) of the Permit, during the growing season (March 1 through October 31) the Port's discharge is regulated through DEQ-approved, crop-specific 'agronomic rates', which establish nitrogen mass-loading limits for approved land application sites. The list of currently approved agronomic rates is available in the Port's Operations, Monitoring, and Management (OM&M) Plan, and is included as Appendix A to this memorandum. Because agronomic rates are mass-loading rates for specific crops and crop rotations vary from year to year, the instantaneous effluent nitrogen concentration from secondary treatment is less important than the average concentration and loading that is expected after storage in the Port's ~2 billion gallon storage system. Therefore, the proposed secondary treatment effluent concentrations are intended to be operational targets that support compliance with agronomic rates, rather than fixed concentration limits. Within this context, Parametrix evaluated the Port's system capacity under a range of achievable treatment concentrations for total nitrogen (TN) to demonstrate that the reuse system maintains compliance and adequate operational buffer across varying conditions.

Components of the capacity assessment include:

- **Buildout flow conditions:** Used annual average buildout flows of 9.63 million gallons per day (MGD). The annual average buildout flows are approximately 1.6 times greater than current annual average flows of 6.19 MGD.
- **Representative crop plan:** Assessed nitrogen and hydraulic loading on Farms 1, 3¹, 4, 5, and 6 based on the 2025 crop plan. Although rotations in future crop plans will vary, the 2025 crop plan provides a reasonable and representative estimate for future land application capacity.
- **Crop irrigation demand:** Total irrigation demand for each field on each farm was estimated based on the 2025 crop rotation schedule and average historic, crop-specific evapotranspiration data obtained from the Hermiston, OR (HERO), Agrimet station (2000–

¹ Reuse irrigation for Farm 3 is conservatively limited to 750,000,000 gallons for this analysis.



2024). Estimated evapotranspiration and corresponding total irrigation demand for each farm is tabulated in Appendix B along with monthly HERO station evapotranspiration data.

- **Allowed nitrogen loading:** Total allowed nitrogen loading for each field on each farm was calculated based on the 2025 crop rotation schedule and the corresponding DEQ-approved agronomic rate. Allowed loading rates for each farm are included in Appendix C.
- **Starting soil nitrogen:** Starting soil nitrogen samples have been collected for the first and second crops of the 2025 rotation for each field on each farm. All nitrate and all ammonium in the crop-specific root zone of the soil were applied toward the total nitrogen loading allowance of each crop. Although the current Permit **does not require the Port to count ammonium below the first foot of the soil profile toward nitrogen loading, it has been conservatively accounted for in this capacity assessment.** A summary of starting soil nitrogen loading for each farm is also included in Appendix C.
- **Reuse irrigation allowance (with buffer):** Allowable reuse irrigation volumes were calculated under TN concentrations of 40, 50, 60, and 70 mg/L, and are provided in Appendix D. Specifically, the total allowable nitrogen loading for each farm was summed from the field-specific loading rates. The estimated starting soil nitrogen was subtracted from the total allowable nitrogen loading rates to determine remaining nitrogen capacity for each farm. Average target TN concentrations of 40 to 70 mg/L in the reuse water were then used to calculate the volume of reuse irrigation needed to reach 70% of the remaining nitrogen loading allowance. The additional 30% of remaining nitrogen capacity was reserved for other nitrogen sources that may be applied to a field and that must be counted against the allowed nitrogen loading rate under the Permit, such as nitrogen in freshwater irrigation, commercial fertilizer, manure, or crop residues. The assumed 30% reserve also provides adequate buffer to prevent overapplications.
- **System water balance:** To assess steady state storage capacity conditions, a multi-year water balance was calculated using buildout inflows, reuse irrigation allowances, and storage capacities of Pond 41, Sand Dune Storage Pond, Farm 3 Pond, and Farm 4 Pond (equivalent to approximately 2-billion gallons). Water balance calculations for a steady state year under each TN concentration scenario are included in Appendix E.

Table 1 summarizes the monthly reuse irrigation allowance, nitrogen loading, percentage of irrigation demand met, and pond storage utilization under a steady state operating year for TN concentrations ranging from 40 to 70 mg/L. Across all scenarios, results demonstrate that:

- Nitrogen loading remains within crop-specific agronomic limits with adequate buffer to prevent overapplication.
- Reuse irrigation meets 27–42% of total crop irrigation demand, indicating that farm hydraulic capacity will not be exceeded with applied reuse water.
- Storage pond use peaks at 78% (40 mg/L) to 96% (70 mg/L) of total pond capacity following the non-growing season, during which all reuse water must be stored. In all cases, pond capacity remains below the 2-billion-gallon storage limit.
- Storage volumes reliably return to zero or near zero each year, demonstrating sufficient capacity in the Port's reuse system to accommodate secondary treatment concentration targets up to 70mg/L.

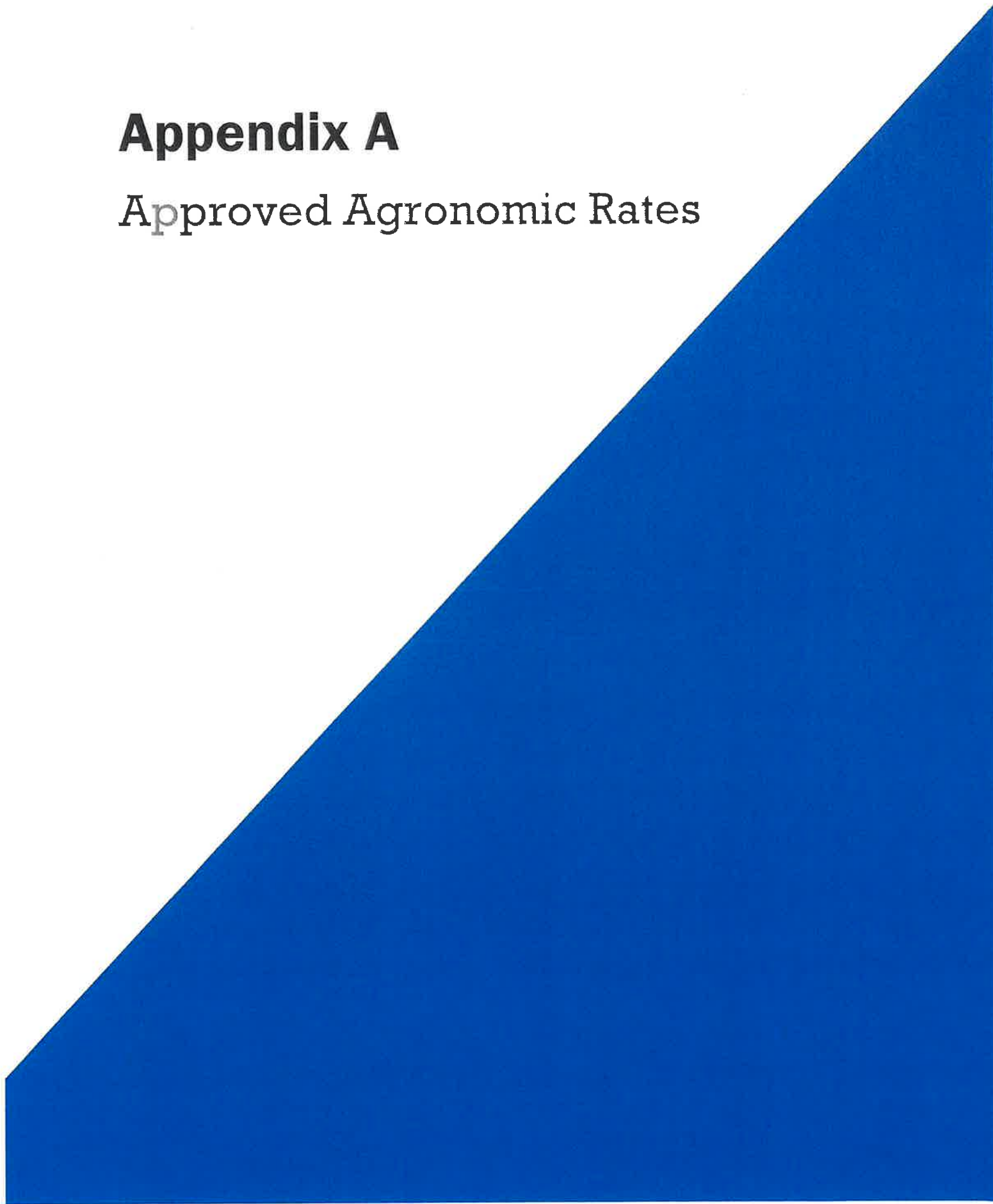
Table 1. System Capacity Assessment Summary for Secondary Treatment Total Nitrogen Concentrations of 40 mg/L to 70 mg/L

Annual Nitrogen Limit (lbs)	5,005,054
Annual Starting Soil Nitrogen (lbs)	1,756,132
Remaining Nitrogen Allowance (lbs)	3,248,922

Month	Projected Annual Average Inflow (gal)	TN = 40 mg/L				TN = 50 mg/L				TN = 60 mg/L				TN = 70 mg/L			
		Reuse Irrigation (gal)	Reuse Nitrogen Loading (lbs)	Reuse % of Irrigation Demand	Total Pond Storage Used (%)	Reuse Irrigation (gal)	Reuse Nitrogen Loading (lbs)	Reuse % of Irrigation Demand	Total Pond Storage Used (%)	Reuse Irrigation (gal)	Reuse Nitrogen Loading (lbs)	Reuse % of Irrigation Demand	Total Pond Storage Used (%)	Reuse Irrigation (gal)	Reuse Nitrogen Loading (lbs)	Reuse % of Irrigation Demand	Total Pond Storage Used (%)
Jan	298,530,000	0	0	-	51%	0	0	-	63%	0	0	-	65%	0	0	-	75%
Feb	269,540,000	0	0	-	75%	0	0	-	77%	0	0	-	79%	0	0	-	89%
Mar	295,530,000	235,565,484	79,527	48%	76%	192,117,939	80,156	39%	82%	153,152,755	81,686	33%	85%	142,463,410	83,215	29%	96%
Apr	289,900,000	699,242,566	233,393	46%	56%	573,021,140	239,079	38%	67%	489,873,523	244,764	32%	74%	428,769,082	250,450	28%	89%
May	295,530,000	945,639,869	315,636	44%	22%	780,375,476	325,676	36%	41%	670,532,480	335,716	31%	54%	581,930,340	345,756	27%	73%
Jun	288,900,000	1,214,359,226	405,329	42%	0%	1,006,989,566	420,141	35%	3%	868,743,159	434,954	30%	23%	769,995,712	449,766	27%	17%
Jul	295,530,000	1,192,421,277	398,007	40%	0%	995,150,905	415,202	33%	0%	863,637,324	432,397	29%	0%	769,699,052	449,593	26%	21%
Aug	298,530,000	863,250,979	288,136	41%	0%	714,820,515	298,241	34%	0%	615,866,872	308,346	29%	0%	545,185,598	318,451	26%	6%
Sep	289,900,000	216,590,832	72,294	40%	3%	179,484,417	74,855	33%	4%	154,746,807	77,477	29%	6%	137,077,086	80,069	25%	13%
Oct	288,530,000	43,609,286	14,556	38%	15%	36,383,801	15,180	32%	17%	31,586,811	15,805	27%	19%	28,126,104	16,429	24%	26%
Nov	288,900,000	0	0	-	30%	0	0	-	32%	0	0	-	34%	0	0	-	41%
Dec	288,530,000	0	0	-	46%	0	0	-	48%	0	0	-	49%	0	0	-	57%
Total	3,514,950,000	5,410,679,538	1,835,977	-	-	4,478,343,678	1,868,661	-	-	3,857,119,732	1,931,145	-	-	3,413,245,484	1,999,729	-	-

Appendix A

Approved Agronomic Rates



Appendix A - Crop List and Agronomic Loading Rates

Crop	Rooting Depth	DEQ Approved Agronomic Rate (lb N/ac)	Growing Season	Target Yield	Animal Feed, Human Consumption, or Other	Sources
Alfalfa, Hay	5	250 for < 6 tons/ac 450 for 6-8 tons/ac	Oct-31 to Oct-01 (Year Round)	6-10 tons/ac	Animal Feed	USDA 2010; Koenig et al. 2009;
Alfalfa, Mix	5	300	Oct-31 to Oct-01 (Year Round)	7 tons/ac	Animal Feed	USDA 2010 ; USDA NRCS 2022
Alfalfa, Seed	5	200	Feb-01 to Aug-31	720 lb/ac	Seed	Koenig et al. 2009; OSU 2022b
Arugula	3	125	Apr-01 to May-31	800-1000 cartons/ac	Human Consumption	OSU 2010a
Barley, Spring	5	100	Mar-30 to Sep-1	160 bu/ac	Animal Feed	USDA 2010; Robertson and Stark 2003
Barley, Fall	5	300	Oct-01 to Jul-31	160 bu/ac	Animal Feed	Verhoeven et al. 2019; Brown 1997
Barley/Pea	5	240			Human Consumption	
Beans, Dry	2	150 for 20 cwt/ac	May-01 to Oct-31	20-50 cwt/acre	Human Consumption	Moore et al. 2012
Beans, Green	4	150	May-01 to Sep-30	100 cwt/ac	Human Consumption	USDA 2010; Heinrich et al. 2016 ; OSU 2010c
Beans, Lima	4	150	May-15 to Sep-30	3000 lb/ac	Human Consumption	OSU 2010b; Moore et al. 2012
Perennial Bluegrass, seed	3	170	Feb-01 to Sep-01	2400 lb/ac	Seed	Affeldt et al. 2011
Annual Bluegrass, Seed	2	170	Aug-15 to July-01	2400 lb/ac	Seed	
Buckwheat	3	160	Jul-01 to Oct-31	1900 lb/ac	Seed	Pavek 2016; Gardner, Jackson, et al. 2000a
Canola, Winter	5	250	Aug-01 to July-31	4000 lb/ac	Seed	Wysocki et al. 2007; Ehrensing 2008
Carrot, Seed	4	200	Mar-15 to Sep-30	500 lb/ac	Seed	Hart and Butler 2004
Corn, Grain	5	350	Apr-01 to Dec-31	280 bu/ac	Animal Feed	Brown et al. 2010; Gardner, Hall, et al. 2000; USDA 2010
Corn, Sweet	5	290	Jul-15 to Nov-30	11 tons/ac	Human Consumption	OSU 2010d; Gardner, Mansour, et al. 2000
Corn/Sorghum	5	340	Apr-01 to Dec-15	40 tons/ac	Animal Feed	Brown et al. 2010; USDA 2010
Forage Mix	5	200	Feb-01 to Oct-31	6-8 tons/ac	Animal Feed	Hart et al. 2000; Shewmaker et al. 2009
Garlic	1	250	Oct-01 to Jul-31	5000-17000 lb/ac	Human Consumption	OSU 2010e
Grass Forage (Pasture)	3	300 ¹	Oct-31 to Oct-01 (Year Round)	6-8 tons/ac	Animal Feed	Moore, Wysocki, et al. 2019; Moore, Pirelli, et al. 2019; Shewmaker et al. 2009, Hendrix n.d ; Barnhart et al. 2013
Grass Sudan	4	160	Mar-31 to May-15	3-6 tons/ac	Animal Feed	Armah-Agyeman 2002
Mustard	3	100	Aug-01 to Apr-01	1500 lb/ac	Other	Wysocki and Corp 2002
Onions, dehydrated	1	280	Apr-01 to Oct-31	15-25 tons/ac	Human Consumption	Sullivan et al. 2001; OSU 2010g
Onions, fresh	1	320	Mar-15 to Nov-30	40-45 tons/ac	Human Consumption	Sullivan et al. 2001; OSU 2010f
Orchard Grass, Hay	3	300	Oct-31 to Oct-01 (Year Round)	6-7 dry tons/ac	Animal Feed	Kugler 2006; Hart et al. 2000; Hannaway 1999
Peas, Green	2	150	Feb-01 to Sep-30	2 dry tons/ac	Human Consumption	Kaiser et al. 2016; USDA NRCS 2022; Cascade Earth Sciences 2016
Peas, Seed	2	150	Feb-01 to Sep-30	2 dry tons/ac	Human Consumption	Kaiser et al. 2016; USDA NRCS 2022; Cascade Earth Sciences 2016
Peas, Sugar Snap	2	150	Feb-01 to Sep-30	2 dry tons/ac	Human Consumption	Kaiser et al. 2016; USDA NRCS 2022; Cascade Earth Sciences 2016

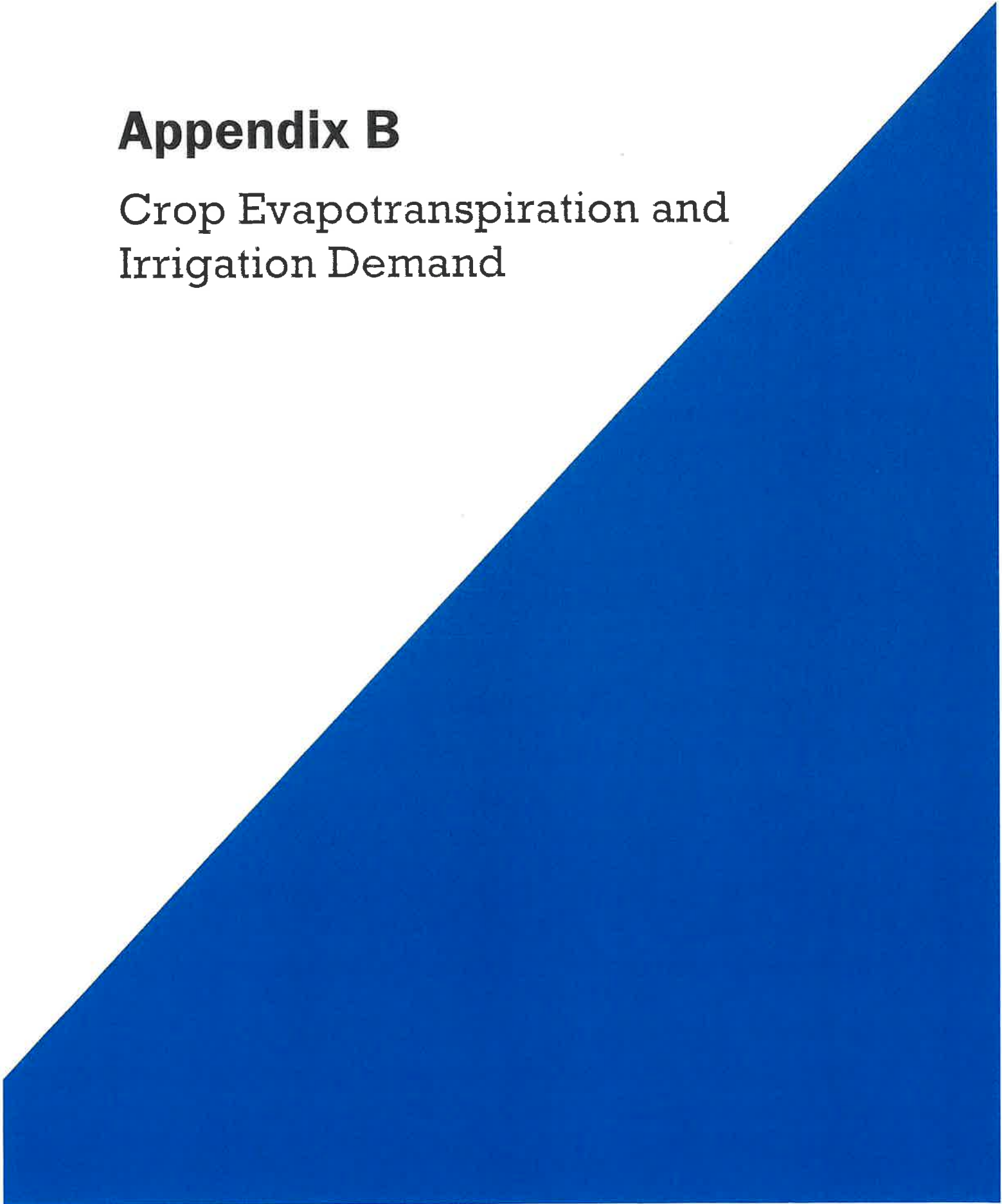
Appendix A - Crop List and Agronomic Loading Rates

Crop	Rooting Depth	DEQ Approved Agronomic Rate (lb N/ac)	Growing Season	Target Yield	Animal Feed, Human Consumption, or Other	Sources
Potatoes	2	340	Mar-15 to Nov-15	37.5 tons/ac	Human Consumption	Lang et al. 1999; Stark et al. 2004
Potatoes, Early	2	240	Mar-15 to Jul 01	24 tons/ac	Human Consumption	Lang et al. 1999; Gardner et al. 1985
Potatoes, Sweet	2	100	May-01 to Oct-31	125-250 cwt/ac	Human Consumption	OSU 2010i
Perennial Ryegrass, Seed	5	225	Feb-01 to Oct-31	2800 lb/ac	Seed	Hart et al. 2013; Hart, Mellbye, et al. 2011
Annual Ryegrass, Seed	3	225	Sep-15 to Aug-01	2800 lb/ac	Seed	
Sunflower	2	130	May-01 to Sep-30	2400 lbs/ac	Animal Feed	Murphy 1978; Mortvedt et al. 2003
Tall Fescue, Seed	3	225	Oct-31 to Oct-01 (Year Round)	2000 lbs/ac	Seed	Gingrich 2003; Ralston 2009
Tillage Radish, seed	1	150	Mar-15 to Oct-31	15-20 tons/ac	Seed	OSU 2010h; Navazio 2007; Jacobs 2012
Perennial Timothy	3	190	Oct-31 to Oct-01 (Year Round)	5 tons/ac	Animal Feed	Norberg 2016; USDA 2010; Esser 1993; McKenzie et al. 2009
Annual Timothy	2	190	Sep-01 to May-15	3-4 tons/ac	Animal Feed	
Triticale	5	310	Aug-15 to May-01	5 dry tons/ac	Animal Feed	Marsalis 2018; Sattell et al. 1998
Turnips	1	75	Apr-01 to Jun-30	150 cwt/ac	Animal Feed	OSU 2010j
Wheat, DNS	5	310	Aug-31 to Jul-01	130 bu/ac	Human Consumption	Flowers et al. 2007; James and Johnson 1980
Wheat, Hard Red Winter	5	365	Sep-31 to Sep-01	170 bu/ac	Human Consumption	Flowers et al. 2007
Wheat, Soft White Spring	5	200	Feb-01 to Aug-31	120 bu/acre	Human Consumption	James and Johnson 1980; Horneck et al. 2010
Wheat, Soft White Winter	5	300	Sep-30 to Sep-01	160 bu/ac	Human Consumption	Horneck et al. 2010; Gardner, Jackson, et al. 2000b

1. See *Nitrogen Accounting Method for Grazing of Land Application Sites* (LPI 2023) for livestock-based agronomic rates.

Appendix B

Crop Evapotranspiration and Irrigation Demand



Appendix B - Crop Evapotranspiration and Irrigation Demand

Average Monthly Evapotranspiration - Hermiston, OR (HERO) Agrimet Station, 2000-2024

Month	ETr	ALFP	ALFM	PAST	LAWN	WGRN	SGRN	ONYN	ONYN 2	POTA	POTA 2	POTA 3	BEAN	FCRN	SCRN	SCRN 2	PEAS	PEAS 2	PPMT	APPL	RAPE	WGRP	MELN	POP3
1	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.93	0.04	0.04	0.13	0.10	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00
3	3.48	1.59	1.57	1.60	2.05	2.48	0.96	0.94	0.51	0.31	0.00	0.00	0.00	0.04	0.02	0.00	0.16	0.03	0.34	0.53	0.74	0.02	0.00	0.00
4	6.00	5.64	4.98	4.00	4.80	5.92	5.20	3.06	2.85	2.35	1.33	0.43	0.29	1.12	1.33	0.37	1.84	0.92	2.54	3.61	5.33	1.45	0.00	1.30
5	8.33	8.33	7.09	5.67	6.67	8.33	8.32	5.81	5.26	6.09	4.89	3.38	3.29	3.31	3.67	2.20	6.60	5.16	6.76	7.72	8.33	4.88	1.44	5.88
6	10.12	10.12	8.60	6.87	8.10	8.35	9.74	9.85	9.54	9.29	8.96	8.09	8.84	7.32	7.79	5.63	5.14	6.84	9.57	9.81	7.12	6.57	5.77	8.44
7	12.22	12.22	10.39	8.30	9.77	1.71	4.35	11.95	12.15	10.50	10.88	11.17	10.86	11.80	11.80	10.80	0.52	1.03	8.86	12.20	0.06	7.94	7.94	10.25
8	10.59	10.59	9.01	7.18	8.48	0.00	0.00	3.50	5.25	4.03	5.34	6.85	4.12	9.45	3.63	6.78	0.13	0.13	0.00	10.37	0.00	6.90	3.07	8.81
9	6.73	6.73	5.73	4.29	5.38	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	1.36	0.05	0.09	0.00	0.00	0.00	4.52	0.00	3.03	0.00	5.56
10	2.43	2.04	1.74	1.02	1.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	1.58
11	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	61.20	57.30	49.17	39.06	46.98	27.03	28.57	35.11	35.56	32.59	31.39	30.02	27.40	34.41	28.29	25.86	14.40	14.11	28.07	49.01	21.59	30.78	18.22	41.81

Appendix B - Crop Evapotranspiration and Irrigation Demand

Farm 1 Monthly Evapotranspiration - 2025 Crop Schedule

Field	Acres	2025 Crop 1	ET Code Crop 1	2025 Crop 2	ET Code Crop 2	2025 Evapotranspiration (in)												Total
						Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
138	85	Alfalfa	ALFP	--	--	0.0	0.0	1.6	5.6	8.3	10.1	12.2	10.6	6.7	2.0	0.0	0.0	57.3
139	23	Soft White Winter Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
144	24	Soft White Winter Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
145	48	Soft White Winter Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
146	17	Soft White Winter Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
147	55	Alfalfa	ALFP	--	--	0.0	0.0	1.6	5.6	8.3	10.1	12.2	10.6	6.7	2.0	0.0	0.0	57.3
148	26	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
149	24.1	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
150	34	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
154	50	Alfalfa	ALFP	--	--	0.0	0.0	1.6	5.6	8.3	10.1	12.2	10.6	6.7	2.0	0.0	0.0	57.3
155	47	Alfalfa	ALFP	--	--	0.0	0.0	1.6	5.6	8.3	10.1	12.2	10.6	6.7	2.0	0.0	0.0	57.3
156	38	Alfalfa	ALFP	--	--	0.0	0.0	1.6	5.6	8.3	10.1	12.2	10.6	6.7	2.0	0.0	0.0	57.3
157	12	Alfalfa	ALFP	--	--	0.0	0.0	1.6	5.6	8.3	10.1	12.2	10.6	6.7	2.0	0.0	0.0	57.3
Total	483.1	--	--	--	--	0.0	1.2	19.6	60.9	93.3	116.1	115.5	91.9	44.5	12.2	0.0	0.0	555.1

Appendix B - Crop Evapotranspiration and Irrigation Demand

Farm 1 Monthly Irrigation Demand - 2025 Crop Schedule (80% Irrigation Efficiency)

Field	Acres	2025 Crop 1	ET Code Crop 1	2025 Crop 2	ET Code Crop 2	2025 Irrigation Demand (gal)												Total
						Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
138	85	Alfalfa	ALFP	--	--	0	0	4,082,755	14,465,313	21,369,067	25,944,214	31,328,475	27,166,219	17,255,537	5,235,517	0	0	146,847,097
139	23	Soft White Winter Wheat	WGRN	--	--	0	0	1,721,656	4,110,874	5,781,524	5,792,627	1,184,895	0	0	0	0	0	18,591,577
144	24	Soft White Winter Wheat	WGRN	--	--	0	0	1,796,511	4,289,608	6,032,895	6,044,480	1,236,412	0	0	0	0	0	19,399,906
145	48	Soft White Winter Wheat	WGRN	--	--	0	0	3,593,022	8,579,216	12,065,789	12,088,961	2,472,824	0	0	0	0	0	38,799,812
146	17	Soft White Winter Wheat	WGRN	--	--	0	0	1,272,529	3,038,472	4,273,300	4,281,507	875,792	0	0	0	0	0	13,741,600
147	55	Alfalfa	ALFP	--	--	0	0	2,641,782	9,359,908	13,827,043	16,787,433	20,271,366	17,578,142	11,165,348	3,387,688	0	0	95,018,710
148	26	Corn	FCRN	--	--	0	0	30,201	881,721	2,396,918	5,744,911	9,259,635	7,411,865	1,067,635	0	0	0	26,992,886
149	24.1	Corn	FCRN	--	--	0	0	27,994	817,287	2,407,143	5,325,091	8,582,969	6,870,229	989,615	0	0	0	25,020,329
150	34	Corn	FCRN	--	--	0	0	39,494	1,153,019	3,395,970	7,512,576	12,108,753	9,692,439	1,398,138	0	0	0	35,298,390
154	50	Alfalfa	ALFP	--	--	0	0	2,401,620	8,509,009	12,576,039	15,261,302	18,428,515	15,980,129	10,150,316	3,078,716	0	0	86,350,645
155	47	Alfalfa	ALFP	--	--	0	0	2,257,523	7,998,467	11,815,837	14,345,624	17,322,804	15,021,321	9,541,297	2,894,933	0	0	81,197,807
156	38	Alfalfa	ALFP	--	--	0	0	1,825,232	6,466,846	9,553,230	11,598,590	14,005,671	12,144,896	7,714,240	2,340,584	0	0	65,648,290
157	12	Alfalfa	ALFP	--	--	0	0	576,389	2,042,162	3,016,809	3,662,713	4,422,844	3,835,231	2,436,076	739,132	0	0	20,731,355
Total	483.1	--	--	--	--	0	0	22,266,709	71,711,901	108,705,564	134,390,029	141,500,954	115,700,474	61,716,203	17,677,571	0	0	673,669,406

Appendix B - Crop Evapotranspiration and Irrigation Demand

Farm 3 Monthly Evapotranspiration - 2025 Crop Schedule

Field#	Acres	2025 Crop 1	ET Code Crop 1	2025 Crop 2	ET Code Crop 2	2025 Evapotranspiration (in)												Total
						Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
312	125.2	Soft White Winter Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
m312	17.8	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
314	64.2	Potato	POTA	--	--	0.0	0.0	0.3	2.4	6.1	9.3	10.5	4.0	0.0	0.0	0.0	0.0	32.6
315	121.1	Potato	POTA	--	--	0.0	0.0	0.3	2.4	6.1	9.3	10.5	4.0	0.0	0.0	0.0	0.0	32.6
316	106.6	Potato	POTA	--	--	0.0	0.0	0.3	2.4	6.1	9.3	10.5	4.0	0.0	0.0	0.0	0.0	32.6
m316	41.6	Potato	POTA	--	--	0.0	0.0	0.3	2.4	6.1	9.3	10.5	4.0	0.0	0.0	0.0	0.0	32.6
317	61.8	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
318	120.5	Soft White Winter Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
m318	20	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
319	123.6	Alfalfa	ALFP	--	--	0.0	0.0	1.6	5.6	8.3	10.1	12.2	10.6	6.7	2.0	0.0	0.0	57.3
m319	14.1	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
320	75.7	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
m320	12.8	Soft White Winter Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
321	56	Onion	QNYN	--	--	0.0	0.0	0.9	3.1	5.8	9.8	11.9	3.5	0.0	0.0	0.0	0.0	35.1
322	125.8	Triticale	WGRN	Corn	FCRN	0.0	0.2	2.5	5.9	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	41.9
m322	29.3	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
323	125.5	Alfalfa	ALFP	--	--	0.0	0.0	1.6	5.6	8.3	10.1	12.2	10.6	6.7	2.0	0.0	0.0	57.3
324	73	Onion	QNYN	--	--	0.0	0.0	0.9	3.1	5.8	9.8	11.9	3.5	0.0	0.0	0.0	0.0	35.1
m324	24	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
325	130.8	Triticale	WGRN	Corn	FCRN	0.0	0.2	2.5	5.9	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	41.9
326	125.1	Alfalfa	ALFP	--	--	0.0	0.0	1.6	5.6	8.3	10.1	12.2	10.6	6.7	2.0	0.0	0.0	57.3
326A	39.3	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
326B	22.2	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
327	146.3	Potato	POTA	--	--	0.0	0.0	0.3	2.4	6.1	9.3	10.5	4.0	0.0	0.0	0.0	0.0	32.6
m327	24.1	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
328	149.8	Potato	POTA	--	--	0.0	0.0	0.3	2.4	6.1	9.3	10.5	4.0	0.0	0.0	0.0	0.0	32.6
329	151.9	Potato	POTA	--	--	0.0	0.0	0.3	2.4	6.1	9.3	10.5	4.0	0.0	0.0	0.0	0.0	32.6
329a	25.9	Potato	POTA	--	--	0.0	0.0	0.3	2.4	6.1	9.3	10.5	4.0	0.0	0.0	0.0	0.0	32.6
329b	19.4	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
329c	24.2	Potato	POTA	--	--	0.0	0.0	0.3	2.4	6.1	9.3	10.5	4.0	0.0	0.0	0.0	0.0	32.6
330	64.8	Onion	QNYN	--	--	0.0	0.0	0.9	3.1	5.8	9.8	11.9	3.5	0.0	0.0	0.0	0.0	35.1
331	81.4	Potato	POTA	--	--	0.0	0.0	0.3	2.4	6.1	9.3	10.5	4.0	0.0	0.0	0.0	0.0	32.6
332	49.5	Potato	POTA	--	--	0.0	0.0	0.3	2.4	6.1	9.3	10.5	4.0	0.0	0.0	0.0	0.0	32.6
333	129.7	Alfalfa	ALFP	--	--	0.0	0.0	1.6	5.6	8.3	10.1	12.2	10.6	6.7	2.0	0.0	0.0	57.3
333A	45.2	Onion	QNYN	--	--	0.0	0.0	0.9	3.1	5.8	9.8	11.9	3.5	0.0	0.0	0.0	0.0	35.1
333B	11.2	Soft White Winter Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
333C	31.3	Soft White Winter Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
333D	16.3	Soft White Winter Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
334	124.7	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
m334	17.6	Potato	POTA	--	--	0.0	0.0	0.3	2.4	6.1	9.3	10.5	4.0	0.0	0.0	0.0	0.0	32.6
335	32.9	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
336	139.1	Alfalfa	ALFP	--	--	0.0	0.0	1.6	5.6	8.3	10.1	12.2	10.6	6.7	2.0	0.0	0.0	57.3
337	16.6	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
338	21.7	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
340	126	Potato	POTA	--	--	0.0	0.0	0.3	2.4	6.1	9.3	10.5	4.0	0.0	0.0	0.0	0.0	32.6
m340	24.9	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
341	13.9	Soft White Winter Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
353	121.5	Potato	POTA	--	--	0.0	0.0	0.3	2.4	6.1	9.3	10.5	4.0	0.0	0.0	0.0	0.0	32.6
m353	36.6	Potato	POTA	--	--	0.0	0.0	0.3	2.4	6.1	9.3	10.5	4.0	0.0	0.0	0.0	0.0	32.6
354	35.5	Potato	POTA	--	--	0.0	0.0	0.3	2.4	6.1	9.3	10.5	4.0	0.0	0.0	0.0	0.0	32.6
355	121	Potato	POTA	--	--	0.0	0.0	0.3	2.4	6.1	9.3	10.5	4.0	0.0	0.0	0.0	0.0	32.6
Total	3451.9	--	--	--	--	0.0	2.3	39.9	151.7	286.4	438.2	511.9	305.6	58.1	10.2	0.0	0.0	1,804.4

Appendix B - Crop Evapotranspiration and Irrigation Demand

Farm 3 Monthly Irrigation Demand - 2025 Crop Schedule (90% Irrigation Efficiency)

Field	Acres	2025 Crop 1	ET Code Crop 1	2025 Crop 2	ET Code Crop 2	2025 Irrigation Demand (gal)												Total
						Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
312	125.2	Soft White Winter Wheat	WGRN	--	--	0	0	9,371,799	22,377,455	31,471,601	31,532,039	6,449,950	0	0	0	0	0	101,202,844
m312	17.8	Corn	FCRN	--	--	0	0	20,676	603,639	1,777,890	3,933,055	6,399,288	5,074,277	730,919	0	0	0	18,479,745
314	64.2	Potato	POTA	--	--	0	0	600,465	4,556,758	11,803,020	17,998,468	20,346,094	7,813,799	0	0	0	0	63,118,604
315	121.1	Potato	POTA	--	--	0	0	1,132,654	8,595,380	22,262,952	33,950,381	38,378,691	14,738,113	0	0	0	0	119,060,171
316	106.6	Potato	POTA	--	--	0	0	997,035	7,566,206	19,598,161	29,881,306	33,782,390	12,974,314	0	0	0	0	104,804,411
m316	41.6	Potato	POTA	--	--	0	0	381,087	2,952,666	7,648,063	11,662,559	13,183,762	5,053,147	0	0	0	0	40,899,282
317	61.8	Corn	FCRN	--	--	0	0	71,786	2,095,782	6,172,674	13,655,213	22,009,439	17,517,434	2,337,686	0	0	0	64,160,014
318	129.5	Soft White Winter Wheat	WGRN	--	--	0	0	8,693,674	23,146,009	32,552,494	32,615,009	6,671,474	0	0	0	0	0	104,678,660
m318	20	Corn	FCRN	--	--	0	0	23,232	678,247	1,997,629	4,419,163	7,122,786	5,701,435	871,258	0	0	0	20,763,759
319	123.6	Alfalfa	ALFP	--	--	0	0	5,936,806	21,034,267	31,073,137	37,725,939	45,555,288	39,502,879	28,091,581	7,613,058	0	0	213,532,055
m319	14.1	Corn	FCRN	--	--	0	0	16,378	478,164	1,408,328	3,115,510	5,021,571	4,019,512	378,987	0	0	0	14,638,450
320	75.7	Corn	FCRN	--	--	0	0	87,937	2,567,163	7,561,027	16,726,531	26,958,783	21,579,931	3,108,460	0	0	0	78,990,827
m320	12.8	Soft White Winter Wheat	WGRN	--	--	0	0	958,139	2,287,791	3,217,544	3,223,723	659,420	0	0	0	0	0	10,346,617
321	56	Onion	QNYN	--	--	0	0	1,593,276	5,163,363	9,808,870	16,641,540	20,187,973	5,917,762	0	0	0	0	58,312,784
322	125.8	Triscale	WGRN	Corn	FCRN	0	0	9,416,712	22,484,695	12,565,086	27,796,533	44,802,386	35,862,025	5,165,711	0	0	0	158,093,150
m322	29.3	Corn	FCRN	--	--	0	0	23,580	695,420	2,027,394	4,485,450	7,229,638	5,786,956	833,577	0	0	0	21,075,215
323	128.5	Alfalfa	ALFP	--	--	0	0	6,172,165	21,868,150	32,305,001	39,221,547	47,351,283	41,068,932	26,086,312	7,914,871	0	0	221,898,259
324	73	Onion	QNYN	--	--	0	0	2,076,949	6,730,813	12,786,562	21,693,426	26,316,465	7,714,225	0	0	0	0	77,316,450
m324	24	Corn	FCRN	--	--	0	0	27,878	813,896	2,397,155	5,302,985	8,547,355	6,841,722	985,509	0	0	0	24,910,510
325	130.8	Triscale	WGRN	Corn	FCRN	0	0	9,790,983	23,378,363	13,064,495	28,901,324	46,583,085	37,287,384	5,371,025	0	0	0	164,376,661
326	125.1	Alfalfa	ALFP	--	--	0	0	6,008,854	21,289,537	31,450,238	38,183,778	46,108,144	39,982,283	25,396,091	7,705,450	0	0	216,114,373
326A	39.3	Corn	FCRN	--	--	0	0	45,650	1,332,755	3,925,342	8,683,655	13,996,294	11,203,320	1,613,771	0	0	0	40,800,786
326B	22.2	Corn	FCRN	--	--	0	0	25,787	752,854	2,217,368	4,905,271	7,908,303	6,328,593	911,596	0	0	0	23,047,772
327	146.3	Potato	POTA	--	--	0	0	1,368,350	10,384,014	26,896,913	41,015,200	46,363,008	17,806,211	0	0	0	0	143,835,697
m327	24.1	Corn	FCRN	--	--	0	0	27,994	817,287	2,407,143	5,325,091	8,582,969	6,870,229	989,615	0	0	0	25,026,329
328	149.8	Potato	POTA	--	--	0	0	1,401,086	10,632,435	27,540,380	41,996,425	47,474,219	18,232,197	0	0	0	0	147,276,743
329	151.9	Potato	POTA	--	--	0	0	1,420,727	10,781,488	27,926,460	42,585,160	48,139,746	18,487,789	0	0	0	0	149,341,379
329a	25.9	Potato	POTA	--	--	0	0	242,244	1,838,316	4,761,655	7,261,064	8,208,159	3,152,295	0	0	0	0	25,463,736
329b	19.4	Corn	FCRN	--	--	0	0	22,535	657,899	1,937,700	4,286,588	6,909,112	5,530,392	796,620	0	0	0	20,140,846
329c	24.2	Potato	POTA	--	--	0	0	226,344	1,717,636	4,449,114	6,784,469	7,669,400	2,945,388	0	0	0	0	23,792,371
330	64.8	Onion	QNYN	--	--	0	0	1,843,648	5,974,749	11,350,263	19,256,639	23,360,369	6,847,696	0	0	0	0	68,633,064
331	81.4	Potato	POTA	--	--	0	0	761,338	5,777,572	14,965,200	22,820,487	25,797,072	9,907,215	0	0	0	0	80,028,884
332	49.5	Potato	POTA	--	--	0	0	462,976	3,513,388	9,100,459	13,877,323	15,687,409	6,024,658	0	0	0	0	48,666,213
333	129.7	Alfalfa	ALFP	--	--	0	0	6,229,803	22,072,366	32,606,682	39,587,818	47,803,567	41,452,455	26,329,920	7,988,784	0	0	224,071,394
333A	45.2	Onion	QNYN	--	--	0	0	1,286,001	4,167,572	7,917,159	13,432,100	16,794,578	4,776,478	0	0	0	0	47,873,890
333B	11.2	Soft White Winter Wheat	WGRN	--	--	0	0	838,372	2,001,817	2,815,351	2,820,758	576,992	0	0	0	0	0	9,050,790
333C	31.3	Soft White Winter Wheat	WGRN	--	--	0	0	2,342,950	5,594,364	7,867,090	7,883,010	1,612,487	0	0	0	0	0	25,300,711
333D	16.3	Soft White Winter Wheat	WGRN	--	--	0	0	1,220,130	2,913,359	4,097,341	4,105,210	839,730	0	0	0	0	0	13,175,770
334	124.7	Corn	FCRN	--	--	0	0	144,850	4,228,867	12,455,218	27,553,479	44,410,633	35,548,448	5,120,541	0	0	0	129,462,035
m334	17.6	Potato	POTA	--	--	0	0	164,814	1,249,205	3,235,719	4,934,159	5,577,745	2,142,101	0	0	0	0	17,303,543
335	32.8	Corn	FCRN	--	--	0	0	38,100	1,112,324	3,276,112	7,247,427	11,681,385	8,330,353	1,346,863	0	0	0	34,052,564
336	129.1	Alfalfa	ALFP	--	--	0	0	6,250,984	21,970,258	32,455,841	39,404,682	47,582,425	41,260,693	26,208,116	7,951,827	0	0	223,034,829
337	16.6	Corn	FCRN	--	--	0	0	19,262	562,945	1,658,032	3,667,905	5,911,021	4,732,191	681,844	0	0	0	17,233,920
338	21.7	Corn	FCRN	--	--	0	0	25,206	735,898	2,167,426	4,794,791	7,728,234	6,186,057	891,065	0	0	0	22,528,678
340	126	Potato	POTA	--	--	0	0	1,178,484	8,943,170	23,164,806	35,324,096	39,931,586	15,335,493	0	0	0	0	123,877,634
m340	24.9	Corn	FCRN	--	--	0	0	28,924	844,417	2,487,048	5,501,657	8,967,081	7,099,286	1,022,466	0	0	0	25,850,880
341	13.9	Soft White Winter Wheat	WGRN	--	--	0	0	1,040,479	2,484,398	3,494,052	3,500,762	716,089	0	0	0	0	0	11,235,779
353	121.5	Potato	POTA	--	--	0	0	1,136,395	8,623,771	22,337,491	34,062,521	38,505,458	14,787,797	0	0	0	0	119,453,433
m353	36.6	Potato	POTA	--	--	0	0	342,321	2,597,778	6,728,825	10,260,809	11,599,175	4,454,596	0	0	0	0	35,363,503
354	35.5	Potato	POTA	--	--	0	0	332,033	2,519,703	6,526,592	9,952,424	11,250,566	4,320,714	0	0	0	0	34,902,032
355	121	Potato	POTA	--	--	0	0	1,131,718	8,585,282	22,745,568	33,922,346	38,346,999	14,726,942	0	0	0	0	118,961,855
Total	3451.9	--	--	--	--	0	0	95,939,389	356,747,670	629,965,687	929,423,021	1,078,950,788	634,655,715	162,619,332	79,173,990	0	0	3,926,895,591

Appendix B - Crop Evapotranspiration and Irrigation Demand

Farm 4 Monthly Evapotranspiration - 2025 Crop Schedule

Field	Acres	2025 Crop 1	ET Code Crop 1	2025 Crop 2	ET Code Crop 2	2025 Evapotranspiration (In)												Total
						Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	122	Triticale	WGRN	Corn	FCRN	0.0	0.2	2.5	5.9	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	41.9
2	123	Triticale	WGRN	Corn	FCRN	0.0	0.2	2.5	5.9	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	41.9
3	123.7	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
49	117.5	Alfalfa	ALFP	--	--	0.0	0.0	1.6	5.6	8.3	10.1	12.2	10.6	6.7	2.0	0.0	0.0	57.3
50	153.7	Hard Red Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
98	126	Hard Red Wheat	WGRN	Buckwheat	BEAN	0.0	0.2	2.5	5.9	8.3	8.3	1.7	4.1	0.0	0.0	0.0	0.0	31.1
99	126	Hard Red Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
100	126	Alfalfa	ALFP	--	--	0.0	0.0	1.6	5.6	8.3	10.1	12.2	10.6	6.7	2.0	0.0	0.0	57.3
101	125	Triticale	WGRN	Corn	FCRN	0.0	0.2	2.5	5.9	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	41.9
102	125	Peas	PEAS	Sweet Corn	SCRN 2	0.0	0.0	0.2	1.8	6.6	5.1	10.8	6.8	0.1	0.0	0.0	0.0	31.4
103	113	Triticale	WGRN	Sweet Corn	SCRN 2	0.0	0.2	2.5	5.9	8.3	8.3	10.8	6.8	0.1	0.0	0.0	0.0	43.0
104	75	Peas	PEAS	Sweet Corn	SCRN 2	0.0	0.0	0.2	1.8	6.6	5.1	10.8	6.8	0.1	0.0	0.0	0.0	31.4
105	125	Peas	PEAS	Sweet Corn	SCRN 2	0.0	0.0	0.2	1.8	6.6	5.1	10.8	6.8	0.1	0.0	0.0	0.0	31.4
106	125	Triticale	WGRN	Sweet Corn	SCRN 2	0.0	0.2	2.5	5.9	8.3	8.3	10.8	6.8	0.1	0.0	0.0	0.0	43.0
108	125	Alfalfa	ALFP	Sweet Corn	SCRN 2	0.0	0.0	1.6	5.6	8.3	10.1	10.8	6.8	0.1	0.0	0.0	0.0	43.4
109	65	Alfalfa	ALFP	Sweet Corn	SCRN 2	0.0	0.0	1.6	5.6	8.3	10.1	10.8	6.8	0.1	0.0	0.0	0.0	43.4
110	125	Alfalfa	ALFP	Sweet Corn	SCRN 2	0.0	0.0	1.6	5.6	8.3	10.1	10.8	6.8	0.1	0.0	0.0	0.0	43.4
111	125	Triticale	WGRN	Corn	FCRN	0.0	0.2	2.5	5.9	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	41.9
114	115	Alfalfa	ALFP	--	--	0.0	0.0	1.6	5.6	8.3	10.1	12.2	10.6	6.7	2.0	0.0	0.0	57.3
115	126	Hard Red Wheat	WGRN	Buckwheat	BEAN	0.0	0.2	2.5	5.9	8.3	8.3	1.7	4.1	0.0	0.0	0.0	0.0	31.1
116	74	Alfalfa	ALFP	--	--	0.0	0.0	1.6	5.6	8.3	10.1	12.2	10.6	6.7	2.0	0.0	0.0	57.3
117	125	Alfalfa	ALFP	--	--	0.0	0.0	1.6	5.6	8.3	10.1	12.2	10.6	6.7	2.0	0.0	0.0	57.3
118	124	Alfalfa	ALFP	--	--	0.0	0.0	1.6	5.6	8.3	10.1	12.2	10.6	6.7	2.0	0.0	0.0	57.3
119	125	Alfalfa	ALFP	--	--	0.0	0.0	1.6	5.6	8.3	10.1	12.2	10.6	6.7	2.0	0.0	0.0	57.3
120	30.5	Triticale	WGRN	Corn	FCRN	0.0	0.2	2.5	5.9	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	41.9
121	41	Triticale	WGRN	Corn	FCRN	0.0	0.2	2.5	5.9	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	41.9
122	22.78	Triticale	WGRN	Corn	FCRN	0.0	0.2	2.5	5.9	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	41.9
123	42.07	Alfalfa	ALFP	--	--	0.0	0.0	1.6	5.6	8.3	10.1	12.2	10.6	6.7	2.0	0.0	0.0	57.3
124	29.33	Alfalfa	ALFP	--	--	0.0	0.0	1.6	5.6	8.3	10.1	12.2	10.6	6.7	2.0	0.0	0.0	57.3
125	111	Hard Red Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
126	40	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
127	38	Alfalfa	ALFP	--	--	0.0	0.0	1.6	5.6	8.3	10.1	12.2	10.6	6.7	2.0	0.0	0.0	57.3
128	69	Triticale	WGRN	Corn	FCRN	0.0	0.2	2.5	5.9	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	41.9
129	75	Hard Red Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
133	89	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
134	65	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
135	36	Triticale	WGRN	Corn	FCRN	0.0	0.2	2.5	5.9	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	41.9
136	127	Hard Red Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
137	54	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
140	27	Alfalfa	ALFP	--	--	0.0	0.0	1.6	5.6	8.3	10.1	12.2	10.6	6.7	2.0	0.0	0.0	57.3
141	64	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
142	60	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
Total	3855.6	--	--	--	--	0.0	4.8	67.7	199.0	264.4	349.4	421.6	330.2	96.5	22.5	0.0	0.0	1755.9

Crop Rotation Notes:

Triticale harvested in April, corn planted in May.

Hard red wheat harvested in July, buckwheat planted in August.

Peas and alfalfa harvested in June, sweet corn planted in July.

Appendix B - Crop Evapotranspiration and Irrigation Demand

Farm 4 Monthly Irrigation Demand - 2025 Crop Schedule (99% Irrigation Efficiency)

Field	Acres	2025 Crop 1	ET Code Crop 1	2025 Crop 2	ET Code Crop 2	2025 Irrigation Demand (gal)												Total
						Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	122	Triticale	WGRN	Corn	FCRN	0	0	8,132,264	21,805,507	12,185,539	26,956,892	43,449,055	34,778,753	5,009,672	0	0	0	153,317,681
2	123	Triticale	WGRN	Corn	FCRN	0	0	9,207,119	21,984,240	12,285,420	27,177,850	43,805,195	35,063,824	5,050,735	0	0	0	154,574,363
3	123.7	Corn	FCRN	--	--	0	0	143,688	4,194,955	12,355,337	27,332,521	44,054,493	35,263,375	5,079,478	0	0	0	128,423,847
49	117.5	Alfalfa	ALFP	--	--	0	0	5,643,808	19,996,168	29,539,592	35,864,060	43,307,009	37,553,303	23,853,243	7,237,333	0	0	202,994,517
50	153.7	Hard Red Wheat	WGRN	--	--	0	0	11,505,156	27,471,364	38,635,663	38,709,860	7,918,189	0	0	0	0	0	124,240,232
98	126	Hard Red Wheat	WGRN	Buckwheat	BEAN	0	0	9,431,683	22,520,441	31,672,697	31,733,522	6,491,164	15,658,626	0	0	0	0	117,508,133
99	126	Hard Red Wheat	WGRN	--	--	0	0	9,431,683	22,520,441	31,672,697	31,733,522	6,491,164	0	0	0	0	0	101,849,507
100	126	Alfalfa	ALFP	--	--	0	0	6,052,084	21,442,699	31,676,499	38,458,482	46,439,857	40,269,925	25,578,796	7,760,865	0	0	217,679,226
101	125	Triticale	WGRN	Corn	FCRN	0	0	8,356,828	22,341,708	12,485,183	27,619,767	44,517,474	35,633,968	5,132,860	0	0	0	157,087,788
102	125	Peas	PEAS	Sweet Corn	SCRN 2	0	0	616,622	6,948,784	24,881,738	19,388,710	40,714,029	25,562,474	328,111	0	0	0	118,440,468
103	113	Triticale	WGRN	Sweet Corn	SCRN 2	0	0	8,458,573	20,196,904	28,404,879	28,459,429	36,805,482	23,108,476	296,612	0	0	0	145,730,355
104	75	Peas	PEAS	Sweet Corn	SCRN 2	0	0	369,973	4,169,270	14,929,043	11,633,226	24,428,417	15,337,484	198,867	0	0	0	71,064,281
105	125	Peas	PEAS	Sweet Corn	SCRN 2	0	0	616,622	6,948,784	24,881,738	19,388,710	40,714,029	25,562,474	328,111	0	0	0	118,440,468
106	125	Triticale	WGRN	Sweet Corn	SCRN 2	0	0	9,356,828	22,341,708	12,485,183	27,619,767	44,517,474	35,633,968	5,132,860	0	0	0	161,205,145
108	125	Alfalfa	ALFP	Sweet Corn	SCRN 2	0	0	6,004,051	21,272,519	31,425,098	38,153,256	40,714,029	25,562,474	328,111	0	0	0	163,459,537
109	65	Alfalfa	ALFP	Sweet Corn	SCRN 2	0	0	3,122,107	11,061,710	16,341,051	19,839,693	21,171,295	13,292,486	170,618	0	0	0	84,998,959
110	125	Alfalfa	ALFP	Sweet Corn	SCRN 2	0	0	6,004,051	21,272,519	31,425,098	38,153,256	40,714,029	25,562,474	328,111	0	0	0	163,459,537
111	125	Triticale	WGRN	Corn	FCRN	0	0	8,356,828	22,341,708	12,485,183	27,619,767	44,517,474	35,633,968	5,132,860	0	0	0	157,087,788
114	115	Alfalfa	ALFP	--	--	0	0	5,523,727	19,570,718	28,911,090	35,100,995	42,385,584	36,754,297	23,345,727	7,083,347	0	0	198,675,484
115	126	Hard Red Wheat	WGRN	Buckwheat	BEAN	0	0	9,431,683	22,520,441	31,672,697	31,733,522	6,491,164	15,658,626	0	0	0	0	117,508,133
116	74	Alfalfa	ALFP	--	--	0	0	3,554,398	12,593,331	18,603,658	22,586,727	27,274,202	23,650,591	15,022,468	4,557,980	0	0	127,843,355
117	125	Alfalfa	ALFP	--	--	0	0	6,004,051	21,272,519	31,425,098	38,153,256	46,071,287	39,950,323	25,375,790	7,699,290	0	0	215,951,613
118	124	Alfalfa	ALFP	--	--	0	0	5,956,019	21,102,339	31,173,697	37,848,030	45,702,716	39,630,720	25,172,784	7,637,696	0	0	214,224,001
119	125	Alfalfa	ALFP	--	--	0	0	6,004,051	21,272,519	31,425,098	38,153,256	46,071,287	39,950,323	25,375,790	7,699,290	0	0	215,951,613
120	30.5	Triticale	WGRN	Corn	FCRN	0	0	2,283,066	5,451,377	3,046,385	6,739,223	10,862,264	8,694,688	1,252,418	0	0	0	38,329,420
121	41	Triticale	WGRN	Corn	FCRN	0	0	3,069,040	7,328,080	4,095,140	9,059,283	14,601,732	11,687,941	1,683,578	0	0	0	51,524,794
122	22.78	Triticale	WGRN	Corn	FCRN	0	0	1,705,188	4,071,553	2,275,360	5,033,426	8,112,865	6,493,934	935,412	0	0	0	28,627,678
123	42.07	Alfalfa	ALFP	--	--	0	0	2,020,723	7,159,479	10,576,431	12,840,860	15,505,752	13,445,681	8,540,476	2,591,273	0	0	72,680,675
124	29.33	Alfalfa	ALFP	--	--	0	0	1,408,791	4,991,384	7,737,585	8,952,280	10,810,167	9,373,944	5,954,175	1,806,562	0	0	50,570,887
125	111	Hard Red Wheat	WGRN	--	--	0	0	8,308,863	19,839,437	27,902,138	27,955,722	5,718,406	0	0	0	0	0	89,724,566
126	40	Corn	FCRN	--	--	0	0	46,464	1,356,493	3,995,269	8,838,325	14,245,592	11,402,870	1,642,515	0	0	0	41,527,517
127	38	Alfalfa	ALFP	--	--	0	0	1,825,232	6,466,846	9,553,230	11,598,590	14,005,671	12,144,898	7,714,240	2,340,584	0	0	65,649,290
128	69	Triticale	WGRN	Corn	FCRN	0	0	5,164,969	12,332,623	6,891,821	15,246,111	24,573,649	19,669,950	2,833,339	0	0	0	86,712,459
129	75	Hard Red Wheat	WGRN	--	--	0	0	5,614,097	13,405,025	18,852,796	18,889,001	3,863,706	0	0	0	0	0	60,624,707
133	89	Corn	FCRN	--	--	0	0	103,381	3,018,197	8,889,450	19,665,274	31,686,442	25,371,385	3,654,597	0	0	0	92,398,725
134	65	Corn	FCRN	--	--	0	0	75,503	2,204,301	6,492,285	14,362,279	23,149,087	18,529,663	2,669,087	0	0	0	67,462,216
135	36	Triticale	WGRN	Corn	FCRN	0	0	2,694,766	6,434,412	3,595,733	7,954,493	12,821,033	10,262,583	1,478,264	0	0	0	45,241,283
136	127	Hard Red Wheat	WGRN	--	--	0	0	6,506,537	22,699,175	31,924,068	31,985,375	6,542,681	0	0	0	0	0	102,657,836
137	54	Corn	FCRN	--	--	0	0	62,726	1,831,266	5,393,999	11,931,739	19,231,549	15,393,874	2,217,396	0	0	0	56,062,148
140	27	Alfalfa	ALFP	--	--	0	0	1,296,875	4,594,864	6,787,821	8,241,103	9,951,398	8,628,270	5,481,171	1,663,047	0	0	46,645,549
141	64	Corn	FCRN	--	--	0	0	74,342	2,170,389	6,392,414	14,141,320	22,792,947	18,244,592	2,628,024	0	0	0	66,444,028
142	60	Corn	FCRN	--	--	0	0	69,685	2,034,740	5,992,888	13,257,488	21,368,388	17,104,305	2,463,773	0	0	0	62,291,276
Total	3855.58	--	--	--	--	0	0	195,614,154	566,552,936	771,945,470	989,971,870	1,100,816,057	851,451,014	242,583,319	58,077,287	0	0	4,757,012,108

Appendix B - Crop Evapotranspiration and Irrigation Demand

Farm 5 Monthly Evapotranspiration - 2025 Crop Schedule

Farm's Monthly Evapotranspiration - 2025 Crop Schedule						2025 Evapotranspiration (in)												
Field	Acres	2025 Crop 1	ET Code Crop 1	2025 Crop 2	ET Code Crop 2	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
10	158.65	Hard Red Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
11	167.6	Hard Red Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
12	162.76	Canola	RAPE	--	--	0.0	0.0	0.7	5.3	8.3	7.1	0.1	0.0	0.0	0.0	0.0	0.0	21.6
16	146.2	Canola	RAPE	--	--	0.0	0.0	0.7	5.3	8.3	7.1	0.1	0.0	0.0	0.0	0.0	0.0	21.6
17	170.84	Triticale	WGRN	Corn	FCRN	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
18	152.1	Canola	RAPE	--	--	0.0	0.0	0.7	5.3	8.3	7.1	0.1	0.0	0.0	0.0	0.0	0.0	21.6
21	142.5	Hard Red Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
22	164.38	Triticale	WGRN	Corn	FCRN	0.0	0.2	2.5	5.9	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	41.9
23	176.47	Hard Red Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
26	156	Canola	RAPE	--	--	0.0	0.0	0.7	5.3	8.3	7.1	0.1	0.0	0.0	0.0	0.0	0.0	21.6
143	150	Triticale	WGRN	Corn	FCRN	0.0	0.2	2.5	5.9	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	41.9
144	127.3	Triticale	WGRN	Corn	FCRN	0.0	0.2	2.5	5.9	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	41.9
145	127.3	Hard Red Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
146	127.3	Hard Red Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
147	84.5	Hard Red Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
148	58.1	Hard Red Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
149	46.2	Hard Red Wheat	WGRN	--	--	0.0	0.2	2.5	5.9	8.3	8.3	1.7	0.0	0.0	0.0	0.0	0.0	27.0
Total	2318.2	--	--	--	--	0.0	3.1	35.2	98.3	126.6	133.9	52.7	28.3	4.1	0.0	0.0	0.0	482.3

Crop Rotation Notes:

Triticale harvested in April, corn Planted in May.

Appendix B - Crop Evapotranspiration and Irrigation Demand

Farm 5 Monthly Irrigation Demand - 2025 Crop Schedule (90% Irrigation Efficiency)

Field	Acres	2025 Crop 1	ET Code Crop 1	2025 Crop 2	ET Code Crop 2	2025 Irrigation Demand (gal)												Total
						Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
10	158.65	Hard Red Wheat	WGRN	--	--	0	0	11,875,886	28,356,098	39,879,948	39,956,534	8,173,199	0	0	0	0	0	128,241,463
11	167.6	Hard Red Wheat	WGRN	--	--	0	0	12,545,635	29,955,762	42,129,715	42,210,621	8,634,278	0	0	0	0	0	135,476,011
12	162.76	Canola	RAPE	--	--	0	0	3,632,374	26,173,765	40,917,991	34,946,641	284,818	0	0	0	0	0	105,955,589
16	146.2	Canola	RAPE	--	--	0	0	3,262,798	23,510,718	36,754,795	31,390,999	255,839	0	0	0	0	0	95,175,148
17	170.64	Triticale	WGRN	Corn	FCRN	0	0	12,788,164	30,534,859	42,944,155	43,026,626	8,801,194	0	0	0	0	0	138,094,998
18	152.1	Canola	RAPE	--	--	0	0	3,394,471	24,459,509	38,238,059	32,657,804	266,164	0	0	0	0	0	99,016,005
21	142.5	Hard Red Wheat	WGRN	--	--	0	0	10,666,784	25,469,547	35,820,312	35,889,102	7,341,197	0	0	0	0	0	115,186,942
22	164.38	Triticale	WGRN	Corn	FCRN	0	0	12,304,603	29,380,238	16,418,515	36,321,098	58,542,260	46,860,093	6,749,917	0	0	0	206,576,725
23	176.47	Hard Red Wheat	WGRN	--	--	0	0	13,209,596	31,541,129	44,359,372	44,444,561	9,091,235	0	0	0	0	0	142,645,893
26	156	Canola	RAPE	--	--	0	0	3,481,508	25,086,675	39,218,522	33,495,183	272,988	0	0	0	0	0	101,554,877
143	150	Triticale	WGRN	Corn	FCRN	0	0	11,228,194	26,810,049	14,982,220	33,143,720	53,420,969	42,760,762	6,159,432	0	0	0	188,505,345
144	127.3	Triticale	WGRN	Corn	FCRN	0	0	9,528,994	22,752,795	12,714,910	28,127,970	45,336,596	36,289,633	5,227,305	0	0	0	158,978,203
145	127.3	Hard Red Wheat	WGRN	--	--	0	0	9,528,994	22,752,795	31,999,479	32,060,931	6,558,136	0	0	0	0	0	102,900,335
146	127.3	Hard Red Wheat	WGRN	--	--	0	0	9,528,994	22,752,795	31,999,479	32,060,931	6,558,136	0	0	0	0	0	102,900,335
147	84.5	Hard Red Wheat	WGRN	--	--	0	0	6,325,216	15,102,994	21,240,817	21,281,608	4,353,201	0	0	0	0	0	68,303,836
148	58.1	Hard Red Wheat	WGRN	--	--	0	0	4,349,054	10,384,426	14,604,633	14,632,680	2,993,148	0	0	0	0	0	46,963,939
149	46.2	Hard Red Wheat	WGRN	--	--	0	0	3,458,284	8,257,495	11,613,322	11,635,625	2,380,093	0	0	0	0	0	37,344,819
Total	2318.2	--	--	--	--	0	0	141,109,347	403,281,649	515,836,243	547,282,634	223,263,451	125,910,488	18,136,654	0	0	0	1,974,820,463

Appendix B - Crop Evapotranspiration and Irrigation Demand

Farm 6 Monthly Evapotranspiration - 2025 Crop Schedule

Field	Acres	2025 Crop 1	ET Code Crop 1	2025 Crop 2	ET Code Crop 2	2025 Evapotranspiration (in)												Total
						Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
412	52	Triticale	WGRN	Corn	FCRN	0.0	0.2	2.5	5.9	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	41.9
506	118	Triticale	WGRN	Corn	FCRN	0.0	0.2	2.5	5.9	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	41.9
503	110	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
510	126	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
507	119	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
406	116	Triticale	WGRN	Corn	FCRN	0.0	0.2	2.5	5.9	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	41.9
414	112	Triticale	WGRN	Corn	FCRN	0.0	0.2	2.5	5.9	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	41.9
407	114	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
103	112	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
610	128	Triticale	WGRN	Corn	FCRN	0.0	0.2	2.5	5.9	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	41.9
102	112	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
620	89	Corn	FCRN	--	--	0.0	0.0	0.0	1.1	3.3	7.3	11.8	9.4	1.4	0.0	0.0	0.0	34.4
Total	1307	--	--	--	--	0.0	1.2	12.7	37.5	39.7	87.9	141.6	113.4	16.3	0.0	0.0	0.0	450.3

Crop Rotation Notes:

Triticale harvested in April, corn Planted In May

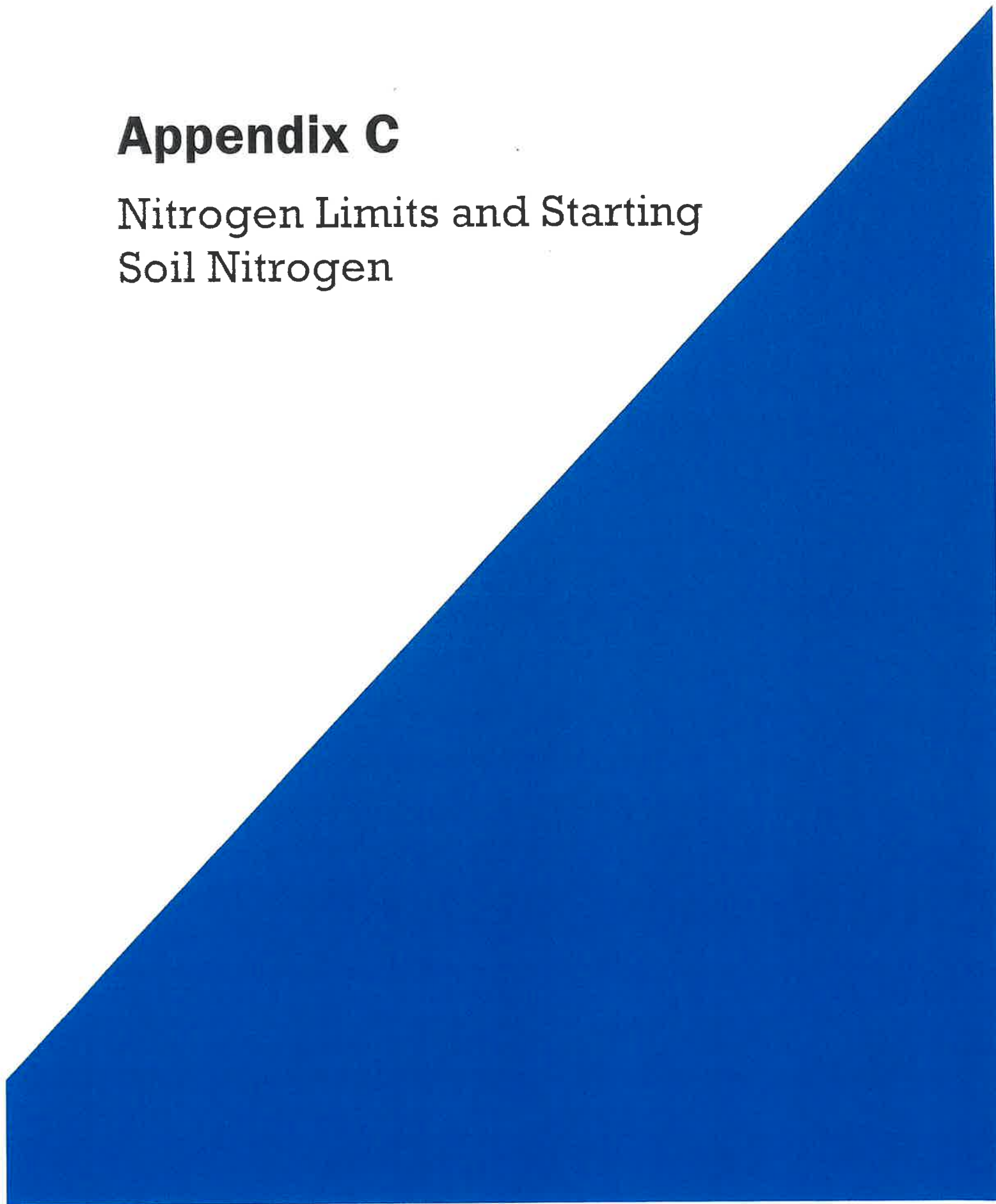
Appendix B - Crop Evapotranspiration and Irrigation Demand

Farm 6 Monthly Irrigation Demand - 2025 Crop Schedule (90% Irrigation Efficiency)

Field	Acres	2025 Crop 1	ET Code Crop 1	2025 Crop 2	ET Code Crop 2	2025 Irrigation Demand (gal)												
						Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
412	52	Triticale	WGRN	Corn	FCRN	0	0	3,892,440	9,294,150	5,193,836	11,489,823	18,519,269	14,823,731	2,135,270	0	0	0	65,348,520
506	118	Triticale	WGRN	Corn	FCRN	0	0	8,832,846	21,090,572	11,786,013	26,073,060	42,024,496	33,638,466	4,845,420	0	0	0	148,290,872
503	110	Corn	FCRN	--	--	0	0	127,775	3,730,356	10,966,961	24,305,395	39,175,378	31,357,892	4,516,917	0	0	0	114,290,673
510	126	Corn	FCRN	--	--	0	0	146,360	4,272,953	12,585,064	27,840,725	44,873,614	35,919,040	5,173,923	0	0	0	130,811,680
507	118	Corn	FCRN	--	--	0	0	137,067	4,001,655	11,786,013	26,073,060	42,024,496	33,638,466	4,845,420	0	0	0	122,506,176
406	116	Triticale	WGRN	Corn	FCRN	0	0	8,683,136	20,733,105	11,596,250	25,631,143	41,312,216	33,068,322	4,763,294	0	0	0	145,777,467
414	112	Triticale	WGRN	Corn	FCRN	0	0	8,383,718	20,018,170	11,186,724	24,747,311	39,887,657	31,928,035	4,599,043	0	0	0	140,750,658
407	114	Corn	FCRN	--	--	0	0	132,421	3,866,005	11,386,487	25,189,227	40,599,937	32,498,179	4,681,169	0	0	0	118,353,424
103	112	Corn	FCRN	--	--	0	0	130,098	3,798,181	11,186,724	24,747,311	39,887,657	31,928,035	4,599,043	0	0	0	116,277,049
610	128	Triticale	WGRN	Corn	FCRN	0	0	9,581,392	22,877,909	12,784,827	28,282,641	45,585,894	36,489,183	5,256,049	0	0	0	160,857,895
102	112	Corn	FCRN	--	--	0	0	130,098	3,798,181	11,186,724	24,747,311	39,887,657	31,928,035	4,599,043	0	0	0	116,277,049
620	89	Corn	FCRN	--	--	0	0	103,381	3,018,197	8,899,450	19,665,274	31,696,442	25,371,383	3,654,597	0	0	0	92,398,726
Total	1307	--	--	--	--	0	0	40,280,732	120,499,435	130,545,073	288,792,279	465,474,713	372,589,769	53,669,187	0	0	0	1,471,850,187

Appendix C

Nitrogen Limits and Starting
Soil Nitrogen



Appendix C - Nitrogen Loading Limits and Starting Soil Nitrogen

Farm 1 Allowed Nitrogen Loading Rates - 2025 Crop Schedule

Field	Acres	2025 Crop 1	Crop 1 Allowed Loading Rate (lbs/ac)	2025 Crop 2	Crop 2 Allowed Loading Rate (lbs/ac)	Total Allowed Loading Rate (lbs)
138	85	Alfalfa	450	--	--	38,250
139	23	Soft White Winter Wheat	300	--	--	6,900
144	24	Soft White Winter Wheat	300	--	--	7,200
145	48	Soft White Winter Wheat	300	--	--	14,400
146	17	Soft White Winter Wheat	300	--	--	5,100
147	55	Alfalfa	450	--	--	24,750
148	26	Corn	350	--	--	9,100
149	24.1	Corn	350	--	--	8,435
150	34	Corn	350	--	--	11,900
154	50	Alfalfa	450	--	--	22,500
155	47	Alfalfa	450	--	--	21,150
156	38	Alfalfa	450	--	--	17,100
157	12	Alfalfa	450	--	--	5,400
Total	483.1	--	4,950	--	--	192,185

Appendix C - Nitrogen Loading Limits and Starting Soil Nitrogen

Farm 1 Starting Soil Nitrogen - 2025 Crop Schedule

Field	Acres	2025 Crop 1	2025 Crop 1 Root Depth (ft)	2025 Crop 1 Starting Soil N (lb/ac)	2025 Crop 2	2025 Crop 2 Root Depth (ft)	2025 Crop 2 Starting Soil N (lb/ac)	Total Starting Soil N (lbs)
138	85	Alfalfa	5	50	--	--	--	4,250
139	23	Soft White Winter Wheat	5	72	--	--	--	1,647
144	24	Soft White Winter Wheat	5	126	--	--	--	3,034
145	48	Soft White Winter Wheat	5	108	--	--	--	5,203
146	17	Soft White Winter Wheat	5	63	--	--	--	1,074
147	55	Alfalfa	5	74	--	--	--	4,070
148	26	Corn	5	78	--	--	--	2,018
149	24.1	Corn	5	70	--	--	--	1,697
150	34	Corn	5	58	--	--	--	1,958
154	50	Alfalfa	5	92	--	--	--	4,580
155	47	Alfalfa	5	148	--	--	--	6,956
156	38	Alfalfa	5	104	--	--	--	3,952
157	12	Alfalfa	5	45	--	--	--	538
Total	483.1	--	--	1,088	--	--	--	40,976

Appendix C - Nitrogen Loading Limits and Starting Soil Nitrogen

Farm 3 Allowed Nitrogen Loading Rates - 2025 Crop Schedule

Field	Acres	2025 Crop 1	Crop 1 Allowed Loading Rate (lbs/ac)	2025 Crop 2	Crop 2 Allowed Loading Rate (lbs/ac)	Total Allowed Loading Rate (lbs)
312	125.2	Soft White Winter Wheat	300	--	--	37,560
m312	17.8	Corn	350	--	--	6,230
314	64.2	Potato	340	--	--	21,828
315	121.1	Potato	340	--	--	41,174
316	106.6	Potato	340	--	--	36,244
m316	41.6	Potato	340	--	--	14,144
317	61.8	Corn	350	--	--	21,630
318	129.5	Soft White Winter Wheat	300	--	--	38,850
m318	20	Corn	350	--	--	7,000
319	123.6	Alfalfa	450	--	--	55,620
m319	14.1	Corn	350	--	--	4,935
320	75.7	Corn	350	--	--	26,495
m320	12.8	Soft White Winter Wheat	300	--	--	3,840
321	56	Onion	320	--	--	17,920
322	125.8	Triticale	310	Corn	350	83,028
m322	20.3	Corn	350	--	--	7,105
323	128.5	Alfalfa	450	--	--	57,825
324	73	Onion	320	--	--	23,360
m324	24	Corn	350	--	--	8,400
325	130.8	Triticale	310	Corn	350	86,328
326	125.1	Alfalfa	450	--	--	56,295
326A	39.3	Corn	350	--	--	13,755
326B	22.2	Corn	350	--	--	7,770
327	146.3	Potato	340	--	--	49,742
m327	24.1	Corn	350	--	--	8,435
328	149.8	Potato	340	--	--	50,932
329	151.9	Potato	340	--	--	51,646
329a	25.9	Potato	340	--	--	8,806
329b	19.4	Corn	350	--	--	6,790
329c	24.2	Potato	340	--	--	8,228
330	64.8	Onion	320	--	--	20,736
331	81.4	Potato	340	--	--	27,676
332	49.5	Potato	340	--	--	16,830
333	129.7	Alfalfa	450	--	--	58,365
333A	45.2	Onion	320	--	--	14,464

Appendix C - Nitrogen Loading Limits and Starting Soil Nitrogen

Farm 3 Allowed Nitrogen Loading Rates - 2025 Crop Schedule

Field	Acres	2025 Crop 1	Crop 1 Allowed Loading Rate (lbs/ac)	2025 Crop 2	Crop 2 Allowed Loading Rate (lbs/ac)	Total Allowed Loading Rate (lbs)
333B	11.2	Soft White Winter Wheat	300	--	--	3,360
333C	31.3	Soft White Winter Wheat	300	--	--	9,390
333D	16.3	Soft White Winter Wheat	300	--	--	4,890
334	124.7	Corn	350	--	--	43,645
m334	17.6	Potato	340	--	--	5,984
335	32.8	Corn	350	--	--	11,480
336	129.1	Alfalfa	450	--	--	58,095
337	16.6	Corn	350	--	--	5,810
338	21.7	Corn	350	--	--	7,595
340	126	Potato	340	--	--	42,840
m340	24.9	Corn	350	--	--	8,715
341	13.9	Soft White Winter Wheat	300	--	--	4,170
353	121.5	Potato	340	--	--	41,310
m353	36.6	Potato	340	--	--	12,444
354	35.5	Potato	340	--	--	12,070
355	121	Potato	340	--	--	41,140
Total	3451.9	--	17,630	--	700	1,312,924

Appendix C - Nitrogen Loading Limits and Starting Soil Nitrogen

Farm 3 Starting Soil Nitrogen - 2025 Crop Schedule

Field	Acres	2025 Crop 1	2025 Crop 1 Root Depth (ft)	2025 Crop 1 Starting Soil N (lb/ac)	2025 Crop 2	2025 Crop 2 Root Depth (ft)	2025 Crop 2 Starting Soil N (lb/ac)	Total Starting Soil N (lbs)
312	125.2	Soft White Winter Wheat	5	132	--	--	--	16,526
m312	17.8	Corn	5	112	--	--	--	2,001
314	64.2	Potato	2	46	--	--	--	2,928
315	121.1	Potato	2	36	--	--	--	4,408
316	106.6	Potato	2	30	--	--	--	3,198
m316	41.6	Potato	2	23	--	--	--	965
317	61.8	Corn	5	64	--	--	--	3,955
318	129.5	Soft White Winter Wheat	5	178	--	--	--	23,051
m318	20	Corn	5	66	--	--	--	1,328
319	123.6	Alfalfa	5	103	--	--	--	12,706
m319	14.1	Corn	5	66	--	--	--	925
320	75.7	Corn	5	60	--	--	--	4,542
m320	12.8	Soft White Winter Wheat	5	61	--	--	--	783
321	56	Onion	1	17	--	--	--	941
322	125.8	Triticale	5	152	Corn	5	118	33,986
m322	20.3	Corn	5	63	--	--	--	1,283
323	128.5	Alfalfa	5	98	--	--	--	12,644
324	73	Onion	1	13	--	--	--	934
m324	24	Corn	5	65	--	--	--	1,565
325	130.8	Triticale	5	136	Corn	5	66	26,422
326	125.1	Alfalfa	5	113	--	--	--	14,161
326A	39.3	Corn	5	67	--	--	--	2,625
326B	22.2	Corn	5	78	--	--	--	1,740
327	146.3	Potato	2	32	--	--	--	4,740
m327	24.1	Corn	5	66	--	--	--	1,591
328	149.8	Potato	2	31	--	--	--	4,614
329	151.9	Potato	2	53	--	--	--	8,020
329a	25.9	Potato	2	25	--	--	--	642
329b	19.4	Corn	5	66	--	--	--	1,273
329c	24.2	Potato	2	31	--	--	--	755
330	64.8	Onion	1	20	--	--	--	1,322
331	81.4	Potato	2	50	--	--	--	4,037
332	49.5	Potato	2	37	--	--	--	1,822
333	129.7	Alfalfa	5	146	--	--	--	18,936
333A	45.2	Onion	1	14	--	--	--	633

Appendix C - Nitrogen Loading Limits and Starting Soil Nitrogen

Farm 3 Starting Soil Nitrogen - 2025 Crop Schedule

Field	Acres	2025 Crop 1	2025 Crop 1 Root Depth (ft)	2025 Crop 1 Starting Soil N (lb/ac)	2025 Crop 2	2025 Crop 2 Root Depth (ft)	2025 Crop 2 Starting Soil N (lb/ac)	Total Starting Soil N (lbs)
333B	11.2	Soft White Winter Wheat	5	200	--	--	--	2,240
333C	31.3	Soft White Winter Wheat	5	158	--	--	--	4,958
333D	16.3	Soft White Winter Wheat	5	140	--	--	--	2,275
334	124.7	Corn	5	75	--	--	--	9,328
m334	17.6	Potato	2	22	--	--	--	394
335	32.8	Corn	5	58	--	--	--	1,916
336	129.1	Alfalfa	5	139	--	--	--	17,919
337	16.6	Corn	5	116	--	--	--	1,932
338	21.7	Corn	5	68	--	--	--	1,476
340	126	Potato	2	40	--	--	--	5,090
m340	24.9	Corn	5	66	--	--	--	1,653
341	13.9	Soft White Winter Wheat	5	139	--	--	--	1,929
353	121.5	Potato	2	53	--	--	--	6,464
m353	36.6	Potato	2	46	--	--	--	1,669
354	35.5	Potato	2	40	--	--	--	1,420
355	121	Potato	2	37	--	--	--	4,501
Total	3451.9	--	--	3,749	--	--	184	287,148

Appendix C - Nitrogen Loading Limits and Starting Soil Nitrogen

Farm 4 Allowed Nitrogen Loading Rates - 2025 Crop Schedule

Field	Acres	2025 Crop 1	Crop 1 Allowed Loading Rate (lbs/ac)	2025 Crop 2	Crop 2 Allowed Loading Rate (lbs/ac)	Total Allowed Loading Rate (lbs)
1	122	Triticale	310	Corn	350	80,520
2	123	Triticale	310	Corn	350	81,180
3	123.7	Corn	350	--	--	43,295
49	117.5	Alfalfa	450	--	--	52,875
50	153.7	Hard Red Wheat	365	--	--	56,101
98	126	Hard Red Wheat	365	Buckwheat	160	66,150
99	126	Hard Red Wheat	365	--	--	45,990
100	126	Alfalfa	450	--	--	56,700
101	125	Triticale	310	Corn	350	82,500
102	125	Peas	150	Sweet Corn	290	55,000
103	113	Triticale	310	Sweet Corn	290	67,800
104	75	Peas	150	Sweet Corn	290	33,000
105	125	Peas	150	Sweet Corn	290	55,000
106	125	Triticale	310	Sweet Corn	290	75,000
108	125	Alfalfa	450	Sweet Corn	290	92,500
109	65	Alfalfa	450	Sweet Corn	290	48,100
110	125	Alfalfa	450	Sweet Corn	290	92,500
111	125	Triticale	310	Corn	350	82,500
114	115	Alfalfa	450	--	--	51,750
115	126	Hard Red Wheat	365	Buckwheat	160	66,150
116	74	Alfalfa	450	--	--	33,300
117	125	Alfalfa	450	--	--	56,250
118	124	Alfalfa	450	--	--	55,800
119	125	Alfalfa	450	--	--	56,250
120	30.5	Triticale	310	Corn	350	20,130
121	41	Triticale	310	Corn	350	27,060
122	22.78	Triticale	310	Corn	350	15,035
123	42.07	Alfalfa	450	--	--	18,932
124	29.33	Alfalfa	450	--	--	13,199
125	111	Hard Red Wheat	365	--	--	40,515
126	40	Corn	350	--	--	14,000
127	38	Alfalfa	450	--	--	17,100
128	69	Triticale	310	Corn	350	45,540
129	75	Hard Red Wheat	365	--	--	27,375
133	89	Corn	350	--	--	31,150

Appendix C - Nitrogen Loading Limits and Starting Soil Nitrogen

Farm 4 Allowed Nitrogen Loading Rates - 2025 Crop Schedule

Field	Acres	2025 Crop 1	Crop 1 Allowed Loading Rate (lbs/ac)	2025 Crop 2	Crop 2 Allowed Loading Rate (lbs/ac)	Total Allowed Loading Rate (lbs)
134	65	Corn	350	--	--	22,750
135	36	Triticale	310	Corn	350	23,760
136	127	Hard Red Wheat	365	--	--	46,355
137	54	Corn	350	--	--	18,900
140	27	Alfalfa	450	--	--	12,150
141	64	Corn	350	--	--	22,400
142	60	Corn	350	--	--	21,000
Total	3855.58	--	15,165	--	5,790	1,923,560

Appendix C - Nitrogen Loading Limits and Starting Soil Nitrogen

Farm 4 Starting Soil Nitrogen - 2025 Crop Schedule

Field	Acres	2025 Crop 1	2025 Crop 1 Root Depth (ft)	2025 Crop 1 Starting Soil N (lb/ac)	2025 Crop 2	2025 Crop 2 Root Depth (ft)	2025 Crop 2 Starting Soil N (lb/ac)	Total Starting Soil N (lbs)
1	122	Triticale	5	84	Corn	5	42	15,372
2	123	Triticale	5	137	Corn	5	111	30,504
3	123.7	Corn	5	130	--	--	--	16,081
49	117.5	Alfalfa	5	151	--	--	--	17,766
50	153.7	Hard Red Wheat	5	143	--	--	--	21,948
98	126	Hard Red Wheat	5	178	Buckwheat	3	47	28,325
99	126	Hard Red Wheat	5	70	--	--	--	8,870
100	126	Alfalfa	5	117	--	--	--	14,767
101	125	Triticale	5	88	Corn	5	248	41,900
102	125	Peas	2	94	Sweet Corn	5	240	41,750
103	113	Triticale	5	180	Sweet Corn	5	154	37,742
104	75	Peas	2	37	Sweet Corn	5	263	22,470
105	125	Peas	2	108	Sweet Corn	5	302	51,200
106	125	Triticale	5	278	Sweet Corn	5	162	54,900
108	125	Alfalfa	5	120	Sweet Corn	5	204	40,550
109	65	Alfalfa	5	121	Sweet Corn	5	178	19,448
110	125	Alfalfa	5	121	Sweet Corn	5	149	33,750
111	125	Triticale	5	203	Corn	5	154	44,600
114	115	Alfalfa	5	135	--	--	--	15,548
115	126	Hard Red Wheat	5	151	Buckwheat	3	52	25,553
116	74	Alfalfa	5	88	--	--	--	6,512
117	125	Alfalfa	5	40	--	--	--	4,950
118	124	Alfalfa	5	121	--	--	--	14,979
119	125	Alfalfa	5	94	--	--	--	11,800
120	30.5	Triticale	5	128	Corn	5	140	8,198
121	41	Triticale	5	71	Corn	5	297	15,088
122	22.78	Triticale	5	90	Corn	5	122	4,829
123	42.07	Alfalfa	5	165	--	--	--	6,933
124	29.33	Alfalfa	5	102	--	--	--	2,992
125	111	Hard Red Wheat	5	122	--	--	--	13,586
126	40	Corn	5	266	--	--	--	10,656
127	38	Alfalfa	5	214	--	--	--	8,132
128	69	Triticale	5	232	Corn	5	170	27,738
129	75	Hard Red Wheat	5	246	--	--	--	18,420
133	89	Corn	5	155	--	--	--	13,813

Appendix C - Nitrogen Loading Limits and Starting Soil Nitrogen

Farm 4 Starting Soil Nitrogen - 2025 Crop Schedule

Field	Acres	2025 Crop 1	2025 Crop 1 Root Depth (ft)	2025 Crop 1 Starting Soil N (lb/ac)	2025 Crop 2	2025 Crop 2 Root Depth (ft)	2025 Crop 2 Starting Soil N (lb/ac)	Total Starting Soil N (lbs)
134	65	Corn	5	119	--	--	--	7,722
135	36	Triticale	5	160	Corn	5	177	12,139
136	127	Hard Red Wheat	5	210	--	--	--	26,619
137	54	Corn	5	193	--	--	--	10,411
140	27	Alfalfa	5	100	--	--	--	2,711
141	64	Corn	5	205	--	--	--	13,107
142	60	Corn	5	220	--	--	--	13,176
Total	3855.58	--	--	5,986	--	--	3,212	837,557

Appendix C - Nitrogen Loading Limits and Starting Soil Nitrogen

Farm 5 Allowed Nitrogen Loading Rates - 2025 Crop Schedule

Field	Acres	2025 Crop 1	Crop 1 Allowed Loading Rate (lbs/ac)	2025 Crop 2	Crop 2 Allowed Loading Rate (lbs/ac)	Total Allowed Loading Rate (lbs)
10	158.65	Hard Red Wheat	365	--	--	57,907
11	167.6	Hard Red Wheat	365	--	--	61,174
12	162.76	Canola	250	--	--	40,690
16	146.2	Canola	250	--	--	36,550
17	170.84	Triticale	310	Corn	350	112,754
18	152.1	Canola	250	--	--	38,025
21	142.5	Hard Red Wheat	365	--	--	52,013
22	164.38	Triticale	310	Corn	350	108,491
23	176.47	Hard Red Wheat	365	--	--	64,412
26	156	Canola	250	--	--	39,000
143	150	Triticale	310	Corn	350	99,000
144	127.3	Triticale	310	Corn	350	84,018
145	127.3	Hard Red Wheat	365	--	--	46,465
146	127.3	Hard Red Wheat	365	--	--	46,465
147	84.5	Hard Red Wheat	365	--	--	30,843
148	58.1	Hard Red Wheat	365	--	--	21,207
149	46.2	Hard Red Wheat	365	--	--	16,863
Total	2318.2	--	5,525	--	1,400	955,875

Appendix C - Nitrogen Loading Limits and Starting Soil Nitrogen

Farm 5 Starting Soil Nitrogen - 2025 Crop Schedule

Field	Acres	2025 Crop 1	2025 Crop 1 Root Depth (ft)	2025 Crop 1 Starting Soil N (lb/ac)	2025 Crop 2	2025 Crop 2 Root Depth (ft)	2025 Crop 2 Starting Soil N (lb/ac)	Total Starting Soil N (lbs)
10	158.65	Hard Red Wheat	5	85	--	--	--	13,517
11	167.6	Hard Red Wheat	5	152	--	--	--	25,408
12	162.76	Canola	5	132	--	--	--	21,419
16	146.2	Canola	5	217	--	--	--	31,696
17	170.84	Triticale	5	186	Corn	5	72	44,213
18	152.1	Canola	5	191	--	--	--	29,021
21	142.5	Hard Red Wheat	5	99	--	--	--	14,136
22	164.38	Triticale	5	140	Corn	5	168	50,563
23	176.47	Hard Red Wheat	5	86	--	--	--	15,176
26	156	Canola	5	102	--	--	--	15,912
143	150	Triticale	5	98	Corn	5	88	27,840
144	127.3	Triticale	5	98	Corn	5	92	24,289
145	127.3	Hard Red Wheat	5	91	--	--	--	11,610
146	127.3	Hard Red Wheat	5	83	--	--	--	10,591
147	84.5	Hard Red Wheat	5	39	--	--	--	3,312
148	58.1	Hard Red Wheat	5	26	--	--	--	1,487
149	46.2	Hard Red Wheat	5	86	--	--	--	3,955
Total	2318.2	--	--	1,910	--	--	420	344,147

Appendix C - Nitrogen Loading Limits and Starting Soil Nitrogen

Farm 6 Allowed Nitrogen Loading Rates - 2025 Crop Schedule

Field	Acres	2025 Crop 1	Crop 1 Allowed Loading Rate (lbs/ac)	2025 Crop 2	Crop 2 Allowed Loading Rate (lbs/ac)	Total Allowed Loading Rate (lbs)
412	52	Triticale	310	Corn	350	34,320
506	118	Triticale	310	Corn	350	77,880
503	110	Corn	350	--	--	38,500
510	126	Corn	350	--	--	44,100
507	118	Corn	350	--	--	41,300
406	116	Triticale	310	Corn	350	76,560
414	112	Triticale	310	Corn	350	73,920
407	114	Corn	350	--	--	39,900
103	112	Corn	350	--	--	39,200
610	128	Triticale	310	Corn	350	84,480
102	112	Corn	350	--	--	39,200
620	89	Corn	350	--	--	31,150
Total	1307	--	4,000	--	1,750	620,510

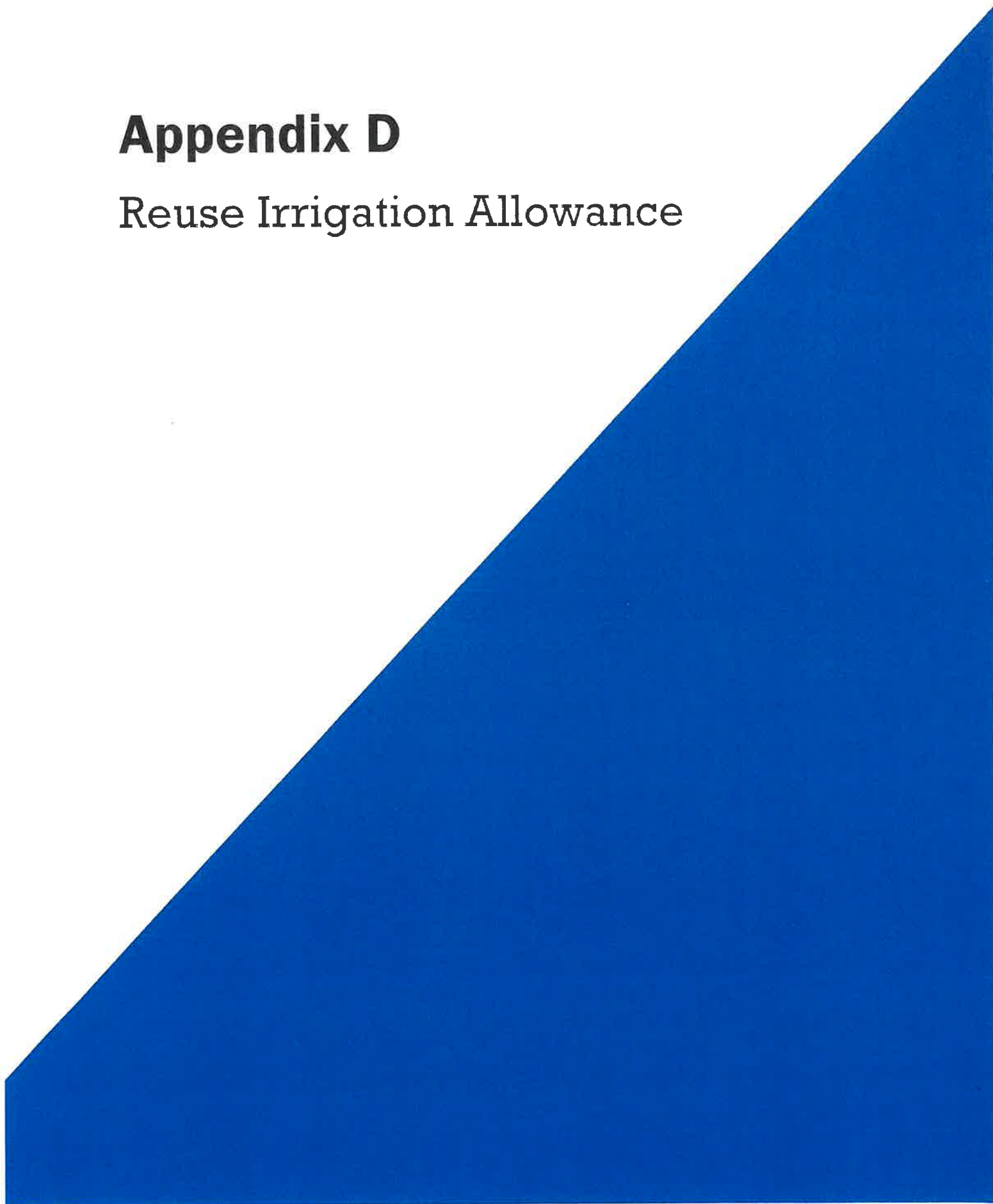
Appendix C - Nitrogen Loading Limits and Starting Soil Nitrogen

Farm 6 Starting Soil Nitrogen - 2025 Crop Schedule

Field	Acres	2025 Crop 1	2025 Crop 1 Root Depth (ft)	2025 Crop 1 Starting Soil N (lb/ac)	2025 Crop 2	2025 Crop 2 Root Depth (ft)	2025 Crop 2 Starting Soil N (lb/ac)	Total Starting Soil N (lbs)
412	52	Triticale	5	143	Corn	5	186	17,098
506	118	Triticale	5	138	Corn	5	138	32,662
503	110	Corn	5	115	--	--	--	12,672
510	126	Corn	5	41	--	--	--	5,191
507	118	Corn	5	86	--	--	--	10,148
406	116	Triticale	5	218	Corn	5	157	43,477
414	112	Triticale	5	152	Corn	5	176	36,736
407	114	Corn	5	178	--	--	--	20,246
103	112	Corn	5	113	--	--	--	12,678
610	128	Triticale	5	134	Corn	5	134	34,202
102	112	Corn	5	85	--	--	--	9,498
620	89	Corn	5	140	--	--	--	12,496
Total	1307	--	--	1,542	--	--	792	247,104

Appendix D

Reuse Irrigation Allowance



Appendix D.1 - Nitrogen Limited Reuse Irrigation Allowance (40 mg/L Reuse TN)

Reuse Water Nitrogen Concentration	
Average TKN	0 mg/L
Average NO3	40 mg/L
Average Total N	40 mg/L
Total N Concentration Reuse	3.34E-04 lb/gal
Total N Concentration Reuse	9.1 lb/acre-inch
Fraction of Allowed Loading Used	0.7

Appendix D.1 - Nitrogen Limited Reuse Irrigation Allowance (40 mg/L Reuse TN)

Nitrogen Limited Reuse Irrigation Allowance - Whole Farm, 40 mg/L Reuse TN						
Farm	Acres	Nitrogen Loading Limits ¹ (lbs)	Starting Soil Nitrogen ² (lbs)	Remaining Nitrogen Loading Allowance ³ (lbs)	Max Allowed Reuse ⁴ (gal)	Reuse to 70% Loading ⁵ (gal)
Farm 1	483	192,185	40,976	151,209	453,019,048	317,113,334
Farm 3	3,452	1,312,924	287,148	1,025,776	3,073,208,875	750,000,000
Farm 4	3,856	1,923,560	837,557	1,086,003	3,253,648,324	2,277,553,827
Farm 5	2,318	955,875	344,147	611,728	1,832,726,684	1,282,908,679
Farm 6	1,307	620,510	247,104	373,406	1,118,719,655	783,103,759
Total	11,416	5,005,054	1,756,932	3,248,122	9,731,322,586	5,410,679,598

¹ Total nitrogen loading limits computed from allowable agronomic rates for the system's 2025 crop plans.

² Total starting soil nitrogen computed from soil laboratory results for first and second crop rotations of 2025.

³ Remaining allowance = nitrogen loading limit - starting soil nitrogen.

⁴ Max allowed reuse [gal] = remaining nitrogen loading allowance [lbs] * reuse nitrogen concentration [lbs/gal]

⁵ Assumes reuse nitrogen + starting soil nitrogen will make up 70% of total allowed loading. The remaining 30% of capacity may be used from all other nitrogen sources (freshwater, fertilizer, manure, crop residue).

Appendix D.1 - Nitrogen Limited Reuse Irrigation Allowance (40 mg/L Reuse TN)

Monthly Reuse Irrigation Per Farm - 40 mg/L Reuse TN													
Month	Irrigation Demand ¹ (gal)						Estimated Reuse Allowance to 70% Nitrogen Loading Limit ² (gal)						Reuse % of Irrigation Demand
	Farm 1	Farm 3	Farm 4	Farm 5	Farm 6	Total	Farm 1	Farm 3	Farm 4	Farm 5	Farm 6	Total	Total
Jan	0	0	0	0	0	0	0	0	0	0	0	0	0%
Feb	0	0	0	0	0	0	0	0	0	0	0	0	0%
Mar	22,266,709	95,959,389	195,614,154	141,109,347	40,280,732	495,230,331	10,481,507	18,327,338	93,655,798	91,669,298	21,431,524	235,565,464	48%
Apr	71,711,901	356,747,670	566,552,936	403,281,649	120,499,435	1,518,793,590	33,756,617	68,135,438	271,253,211	261,985,095	64,112,205	699,242,566	46%
May	108,705,564	629,965,687	771,945,470	515,836,243	130,545,073	2,156,996,038	51,170,476	120,317,501	369,590,684	335,104,282	69,457,026	945,639,969	44%
Jun	134,390,029	929,423,021	969,871,870	547,282,634	288,792,279	2,869,859,833	63,260,807	177,511,026	464,401,413	355,532,897	153,653,083	1,214,359,226	42%
Jul	141,500,954	1,078,950,788	1,100,816,057	223,263,451	465,474,713	3,010,005,963	66,608,100	206,069,419	527,046,761	145,039,321	247,657,676	1,192,421,277	40%
Aug	115,700,474	634,055,715	851,451,014	125,910,488	372,588,769	2,099,706,459	54,463,158	121,098,658	407,656,207	81,795,616	198,237,339	863,250,979	41%
Sep	61,716,203	162,619,332	242,583,319	18,136,654	53,669,187	538,724,695	29,051,387	31,058,758	116,143,612	11,782,170	28,554,905	216,590,832	40%
Oct	17,677,571	39,173,990	58,077,287	0	0	114,928,848	8,321,282	7,481,862	27,806,141	0	0	43,609,286	38%
Nov	0	0	0	0	0	0	0	0	0	0	0	0	0%
Dec	0	0	0	0	0	0	0	0	0	0	0	0	0%
Total	673,669,405	3,926,895,591	4,757,012,108	1,974,820,465	1,471,850,187	12,804,247,756	317,113,334	750,000,000	2,277,553,827	1,282,908,679	783,103,759	5,410,679,598	42%

¹ Irrigation demand calculated from crop-specific evapotranspiration data from the HERO Agrimet station (2000-2024) based on 2025 crop plans

² Reuse allowance scaled by monthly irrigation demand.

Appendix D.2 - Nitrogen Limited Reuse Irrigation Allowance (50 mg/L Reuse TN)

Reuse Water Nitrogen Concentration	
Average TKN	0 mg/L
Average NO3	50 mg/L
Average Total N	50 mg/L
Total N Concentration Reuse	4.17E-04 lb/gal
Total N Concentration Reuse	11.3 lb/acre-inch
Fraction of Allowed Loading Used	0.7

Appendix D.2 - Nitrogen Limited Reuse Irrigation Allowance (50 mg/L Reuse TN)

Nitrogen Limited Reuse Irrigation Allowance - Whole Farm, 50 mg/L Reuse TN						
Farm	Acres	Nitrogen Loading Limits ¹ (lbs)	Starting Soil Nitrogen ² (lbs)	Remaining Nitrogen Loading Allowance ³ (lbs)	Max Allowed Reuse ⁴ (gal)	Reuse to 70% Loading ⁵ (gal)
Farm 1	483	192,185	40,976	151,209	362,415,238	253,690,667
Farm 3	3,452	1,312,924	287,148	1,025,776	2,458,567,100	750,000,000
Farm 4	3,856	1,923,560	837,557	1,086,003	2,602,918,659	1,822,043,061
Farm 5	2,318	955,875	344,147	611,728	1,466,181,347	1,026,326,943
Farm 6	1,307	620,510	247,104	373,406	894,975,724	626,483,007
Total	11,416	5,005,054	1,756,932	3,248,122	7,785,058,069	4,478,543,678

¹ Total nitrogen loading limits computed from allowable agronomic rates for the system's 2025 crop plans.

² Total starting soil nitrogen computed from soil laboratory results for first and second crop rotations of 2025.

³ Remaining allowance = nitrogen loading limit - starting soil nitrogen.

⁴ Max allowed reuse [gal] = remaining nitrogen loading allowance [lbs] * reuse nitrogen concentration [lbs/gal]

⁵ Assumes reuse nitrogen + starting soil nitrogen will make up 70% of total allowed loading. The remaining 30% of capacity may be used from all other nitrogen sources (freshwater, fertilizer, manure, crop residue).

Appendix D.2 - Nitrogen Limited Reuse Irrigation Allowance (50 mg/L Reuse TN)

Monthly Reuse Irrigation Per Farm - 50 mg/L Reuse TN													
Month	Irrigation Demand ¹ (gal)						Estimated Reuse Allowance to 70% Nitrogen Loading Limit ² (gal)						Reuse % of Irrigation Demand
	Farm 1	Farm 3	Farm 4	Farm 5	Farm 6	Total	Farm 1	Farm 3	Farm 4	Farm 5	Farm 6	Total	Total
Jan	0	0	0	0	0	0	0	0	0	0	0	0	0%
Feb	0	0	0	0	0	0	0	0	0	0	0	0	0%
Mar	22,266,709	95,959,389	195,614,154	141,109,347	40,280,732	495,230,331	8,385,205	18,327,338	74,924,638	73,335,438	17,145,219	192,117,839	39%
Apr	71,711,901	356,747,670	566,552,936	403,281,649	120,499,435	1,518,793,590	27,005,293	68,135,438	217,002,569	209,588,076	51,289,764	573,021,140	38%
May	108,705,564	629,965,687	771,945,470	515,836,243	130,545,073	2,156,998,038	40,936,381	120,317,501	295,672,547	268,083,425	55,565,621	780,575,476	36%
Jun	134,390,029	929,423,021	969,971,870	547,282,634	288,792,278	2,869,859,833	50,608,646	177,511,026	371,521,130	284,426,318	122,922,466	1,006,989,586	35%
Jul	141,500,954	1,078,950,788	1,100,816,057	223,263,451	465,474,713	3,010,005,963	53,286,480	206,069,419	421,637,409	116,031,457	198,126,141	995,150,905	33%
Aug	115,700,474	634,055,715	851,451,014	125,910,488	372,588,769	2,099,706,459	43,570,526	121,098,658	326,124,966	65,436,493	158,589,871	714,820,515	34%
Sep	61,716,203	162,619,332	242,583,319	18,136,654	53,669,187	538,724,695	23,241,110	31,058,758	92,914,889	9,425,736	22,843,924	179,484,417	33%
Oct	17,677,571	39,173,990	58,077,287	0	0	114,928,848	6,657,026	7,481,862	22,244,913	0	0	36,383,801	32%
Nov	0	0	0	0	0	0	0	0	0	0	0	0	0%
Dec	0	0	0	0	0	0	0	0	0	0	0	0	0%
Total	673,669,405	3,926,895,591	4,757,012,108	1,974,820,465	1,471,850,187	12,804,247,756	253,690,667	750,000,000	1,822,043,061	1,026,326,943	626,483,007	4,478,543,678	35%

¹ Irrigation demand calculated from crop-specific evapotranspiration data from the MERO Agrimet station (2000-2024) based on 2025 crop plans

² Reuse allowance scaled by monthly irrigation demand.

Appendix D.3 - Nitrogen Limited Reuse Irrigation Allowance (60 mg/L Reuse TN)

Reuse Water Nitrogen Concentration	
Average TKN	0 mg/L
Average NO3	60 mg/L
Average Total N	60 mg/L
Total N Concentration Reuse	5.01E-04 lb/gal
Total N Concentration Reuse	13.6 lb/acre-inch
Fraction of Allowed Loading Used	0.7

Appendix D.3 - Nitrogen Limited Reuse Irrigation Allowance (60 mg/L Reuse TN)

Nitrogen Limited Reuse Irrigation Allowance - Whole Farm, 60 mg/L Reuse TN						
Farm	Acres	Nitrogen Loading Limits ¹ (lbs)	Starting Soil Nitrogen ² (lbs)	Remaining Nitrogen Loading Allowance ³ (lbs)	Max Allowed Reuse ⁴ (gal)	Reuse to 70% Loading ⁵ (gal)
Farm 1	483	192,185	40,976	151,209	302,012,699	211,408,889
Farm 3	3,452	1,312,924	287,148	1,025,776	2,048,805,917	750,000,000
Farm 4	3,856	1,923,560	837,557	1,086,003	2,169,098,883	1,518,369,218
Farm 5	2,318	955,875	344,147	611,728	1,221,817,789	855,272,452
Farm 6	1,307	620,510	247,104	373,406	745,813,103	522,069,172
Total	11,416	5,005,054	1,756,932	3,248,122	6,487,548,391	3,857,119,732

¹ Total nitrogen loading limits computed from allowable agronomic rates for the system's 2025 crop plans.

² Total starting soil nitrogen computed from soil laboratory results for first and second crop rotations of 2025.

³ Remaining allowance = nitrogen loading limit - starting soil nitrogen.

⁴ Max allowed reuse [gal] = remaining nitrogen loading allowance [lbs] * reuse nitrogen concentration [lbs/gal]

⁵ Assumes reuse nitrogen + starting soil nitrogen will make up 70% of total allowed loading. The remaining 30% of capacity may be used from all other nitrogen sources (freshwater, fertilizer, manure, crop residue).

Appendix D.3 - Nitrogen Limited Reuse Irrigation Allowance (60 mg/L Reuse TN)

Monthly Reuse Irrigation Per Farm - 60 mg/L Reuse TN													
Month	Irrigation Demand ¹ (gal)						Estimated Reuse Allowance to 70% Nitrogen Loading Limit ² (gal)						Reuse % of
	Farm 1	Farm 3	Farm 4	Farm 5	Farm 6	Total	Farm 1	Farm 3	Farm 4	Farm 5	Farm 6	Total	Irrigation Demand
Jan	0	0	0	0	0	0	0	0	0	0	0	0	0%
Feb	0	0	0	0	0	0	0	0	0	0	0	0	0%
Mar	22,266,709	95,959,389	195,614,154	141,109,347	40,280,732	495,230,331	6,987,671	18,327,338	62,437,189	61,112,865	14,287,683	163,152,755	33%
Apr	71,711,901	356,747,670	566,552,936	403,281,649	120,499,435	1,518,793,590	22,504,411	68,135,438	180,835,474	174,656,730	42,741,470	488,873,523	32%
May	108,705,564	629,965,687	771,945,470	515,836,243	130,545,073	2,156,998,038	34,113,650	120,317,501	246,393,789	223,402,854	46,304,684	670,532,480	31%
Jun	134,390,029	929,423,021	969,971,870	547,282,634	288,792,279	2,869,858,833	42,173,871	177,511,026	309,600,942	237,021,931	102,435,389	868,743,159	30%
Jul	141,500,954	1,078,950,788	1,100,816,057	223,263,451	465,474,713	3,010,005,963	44,405,400	206,069,419	351,364,507	96,692,881	165,105,117	863,637,324	29%
Aug	115,700,474	634,055,715	851,451,014	125,910,488	372,588,769	2,099,706,459	36,308,772	121,098,658	271,770,805	54,530,411	132,158,226	615,866,872	29%
Sep	61,716,203	162,619,332	242,583,319	18,136,654	53,669,187	538,724,695	19,367,591	31,058,758	77,429,074	7,854,780	19,036,603	154,746,807	29%
Oct	17,677,571	39,173,990	58,077,267	0	0	114,928,848	5,547,522	7,481,862	18,537,427	0	0	31,566,811	27%
Nov	0	0	0	0	0	0	0	0	0	0	0	0	0%
Dec	0	0	0	0	0	0	0	0	0	0	0	0	0%
Total	673,669,405	3,926,895,591	4,757,012,108	1,974,820,465	1,471,850,187	12,804,247,756	211,408,889	750,000,000	1,518,369,218	855,272,452	522,069,172	3,857,119,732	30%

¹ Irrigation demand calculated from crop-specific evapotranspiration data from the HERO Agrimet station (2000-2024) based on 2025 crop plans

² Reuse allowance scaled by monthly irrigation demand.

Appendix D.4 - Nitrogen Limited Reuse Irrigation Allowance (70 mg/L Reuse TN)

Reuse Water Nitrogen Concentration	
Average TKN	0 mg/L
Average NO3	70 mg/L
Average Total N	70 mg/L
Total N Concentration Reuse	5.84E-04 lb/gal
Total N Concentration Reuse	15.9 lb/acre-inch
Fraction of Allowed Loading Used	0.7

Appendix D.4 - Nitrogen Limited Reuse Irrigation Allowance (70 mg/L Reuse TN)

Nitrogen Limited Reuse Irrigation Allowance - Whole Farm, 70 mg/L Reuse TN						
Farm	Acres	Nitrogen Loading Limits ¹ (lbs)	Starting Soil Nitrogen ² (lbs)	Remaining Nitrogen Loading Allowance ³ (lbs)	Max Allowed Reuse ⁴ (gal)	Reuse to 70% Loading ⁵ (gal)
Farm 1	483	192,185	40,976	151,209	258,868,027	181,207,619
Farm 3	3,452	1,312,924	287,148	1,025,776	1,756,119,357	750,000,000
Farm 4	3,856	1,923,560	837,557	1,086,003	1,859,227,614	1,301,459,330
Farm 5	2,318	955,875	344,147	611,728	1,047,272,391	733,090,674
Farm 6	1,307	620,510	247,104	373,406	639,268,374	447,487,862
Total	11,416	5,005,054	1,756,932	3,248,122	5,560,755,763	3,413,245,484

¹ Total nitrogen loading limits computed from allowable agronomic rates for the system's 2025 crop plans.

² Total starting soil nitrogen computed from soil laboratory results for first and second crop rotations of 2025.

³ Remaining allowance = nitrogen loading limit - starting soil nitrogen.

⁴ Max allowed reuse [gal] = remaining nitrogen loading allowance [lbs] * reuse nitrogen concentration [lbs/gal]

⁵ Assumes reuse nitrogen + starting soil nitrogen will make up 70% of total allowed loading. The remaining 30% of capacity may be used from all other nitrogen sources (freshwater, fertilizer, manure, crop residue).

Appendix D.4 - Nitrogen Limited Reuse Irrigation Allowance (70 mg/L Reuse TN)

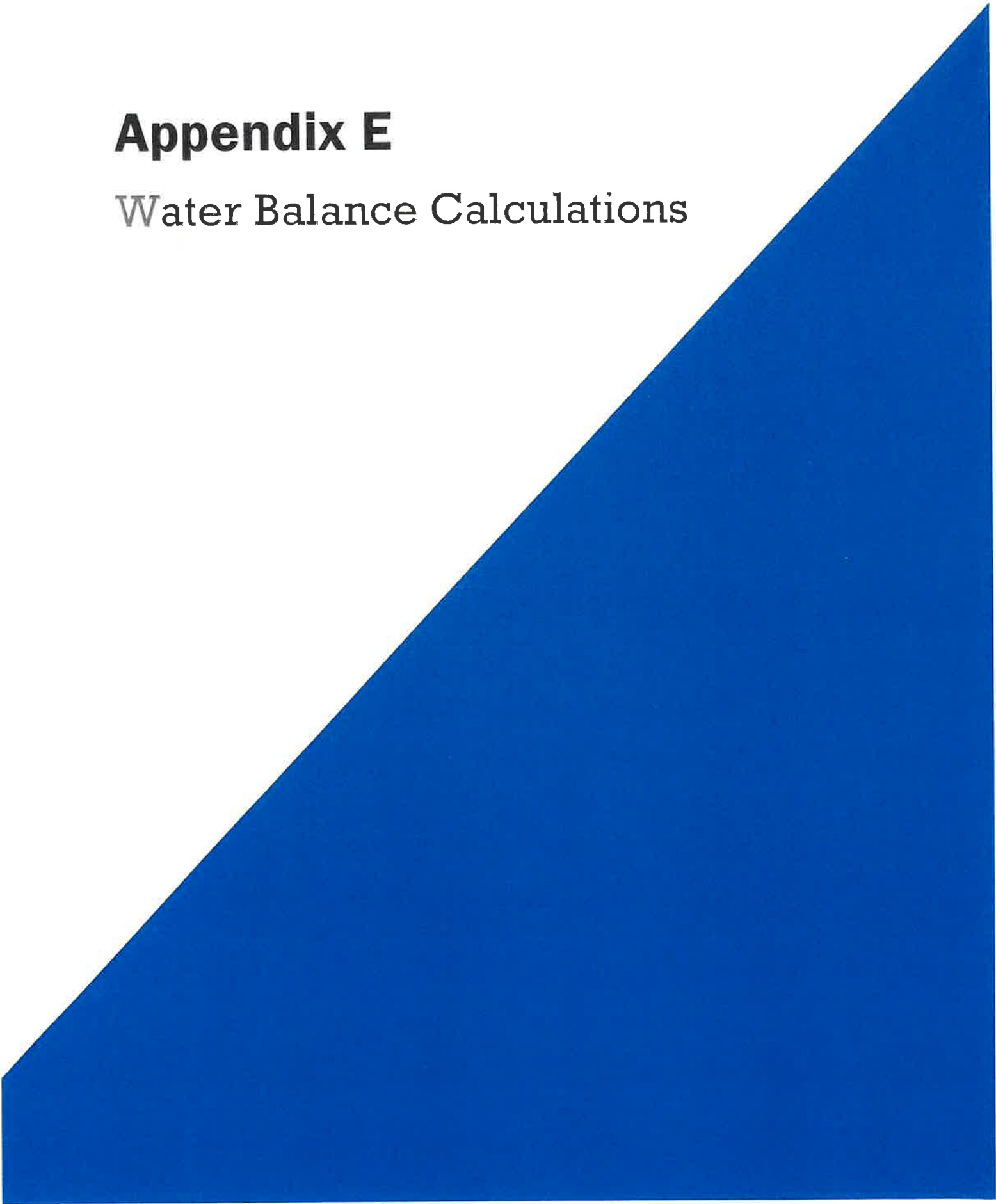
Month	Monthly Reuse Irrigation Per Farm - 70 mg/L Reuse TN												
	Irrigation Demand ¹ (gal)						Estimated Reuse Allowance to 70% Nitrogen Loading Limit ² (gal)						Reuse % of
	Farm 1	Farm 3	Farm 4	Farm 5	Farm 6	Total	Farm 1	Farm 3	Farm 4	Farm 5	Farm 6	Total	Irrigation Demand
Jan	0	0	0	0	0	0	0	0	0	0	0	0	Total
Feb	0	0	0	0	0	0	0	0	0	0	0	0	
Mar	22,266,709	95,959,389	195,614,154	141,109,347	40,280,732	495,230,331	5,989,432	18,327,338	53,517,599	52,382,456	12,246,585	142,463,410	0%
Apr	71,711,901	356,747,670	566,552,936	403,281,649	120,499,435	1,518,793,590	19,289,495	68,135,438	155,001,835	149,705,768	36,635,546	428,768,082	29%
May	108,705,564	629,965,687	771,945,470	515,836,243	130,545,073	2,156,998,038	29,240,272	120,317,501	211,194,677	191,488,161	39,689,729	591,930,340	26%
Jun	134,390,029	929,423,021	969,971,870	547,282,634	288,792,279	2,869,859,833	36,149,033	177,511,026	265,372,236	203,161,655	87,801,762	769,995,712	27%
Jul	141,500,954	1,078,950,788	1,100,816,057	223,263,451	465,474,713	3,010,005,963	38,061,772	206,069,419	301,169,578	82,879,612	141,518,672	769,699,052	26%
Aug	115,700,474	634,055,715	851,451,014	125,910,488	372,588,769	2,099,706,459	31,121,804	121,098,658	232,946,404	46,740,352	113,278,480	545,185,698	26%
Sep	61,716,203	162,619,332	242,583,319	18,136,654	53,669,187	538,724,695	16,600,793	31,058,758	66,367,778	6,732,669	16,317,089	137,077,086	25%
Oct	17,677,571	39,173,990	58,077,287	0	0	114,928,848	4,755,019	7,481,862	15,889,223	0	0	28,126,104	24%
Nov	0	0	0	0	0	0	0	0	0	0	0	0	0%
Dec	0	0	0	0	0	0	0	0	0	0	0	0	0%
Total	673,669,405	3,926,895,591	4,757,012,108	1,574,820,465	1,471,850,187	12,804,247,756	181,207,619	750,000,000	1,301,459,330	733,090,674	447,487,862	3,413,245,484	27%

¹ Irrigation demand calculated from crop-specific evapotranspiration data from the HERO AgriMet station (2000-2024) based on 2025 crop plans

² Reuse allowance scaled by monthly irrigation demand.

Appendix E

Water Balance Calculations



Appendix E - Water Balance Calculations

System Capacity Assessment - Steady State Year Water Balance, 40 mg/L Reuse TN										
Month	Projected Annual Average Inflow ¹ (gal)	Precipitation ² (in)	Precipitation ³ (gal)	Evaporation ⁴ (in)	Evaporation ⁵ (gal)	Total Reuse to Irrigation ⁶ (gal)	Change In Storage Volume (+/-) (gal)	Reuse Volume Stored ⁷ (gal)	Storage Capacity Exceeded?	Total Pond Storage Used (%)
Jan	298,530,000	1.09	5,267,540	0	0	0	303,797,540	1,197,120,111	No	61%
Feb	269,640,000	0.69	3,323,913	0	0	0	272,963,913	1,470,084,024	No	75%
Mar	298,530,000	0.64	3,095,478	2.39	11,552,387	235,565,464	54,507,627	1,524,591,651	No	78%
Apr	288,900,000	0.59	2,859,300	3.56	17,243,885	699,242,566	-424,727,150	1,099,864,501	No	56%
May	298,530,000	0.76	3,680,115	4.85	23,477,431	945,639,969	-666,907,285	432,957,216	No	22%
Jun	288,900,000	0.53	2,570,854	6.17	29,846,489	1,214,359,226	-952,734,861	0	No	0%
Jul	298,530,000	0.05	243,921	8.25	39,908,245	1,192,421,277	-933,555,600	0	No	0%
Aug	298,530,000	0.21	1,002,788	7.60	36,757,594	863,250,979	-600,475,785	0	No	0%
Sep	288,900,000	0.37	1,788,757	4.91	23,782,333	216,590,832	50,315,592	50,315,592	No	3%
Oct	298,530,000	0.66	3,209,695	2.66	12,873,627	43,609,286	245,256,782	295,572,375	No	15%
Nov	288,900,000	0.82	3,991,792	0.00	0	0	292,891,792	588,464,167	No	30%
Dec	298,530,000	1.31	6,328,404	0.00	0	0	304,858,404	893,322,571	No	46%

¹ Monthly projections based on annual average buildout flow of 9.63MGD.

² Average precipitation from the Agrimet HERO Station from 2000-2024.

³ Precipitation in gallons is calculated by multiplying total pond area by the monthly precipitation in inches.

⁴ Average pan evaporation from Western Regional Climate Center Pendleton Br Experimental Station, 1956-2005. Evaporation coefficient of 0.70 is used.

⁵ Evaporation in gallons is calculations by multiplying total pond surface area by the monthly evaporation in inches.

⁶ Estimated reuse irrigation to reach 70% of total nitrogen loading across Farms 1, 4, 5, and 6. Farm 3 reuse irrigation is capped at 750MG.

⁷ Pond 41, Sand Dune Pond, Farm 3 Pond, and Farm 4 Pond provide approximately 2 billion gallons of storage capacity to the system.

Appendix E - Water Balance Calculations

System Capacity Assessment - Steady State Year Water Balance, 50 mg/L Reuse TN										
Month	Projected Annual Average Inflow ¹ (gal)	Precipitation ² (in)	Precipitation ³ (gal)	Evaporation ⁴ (in)	Evaporation ⁵ (gal)	Total Reuse to Irrigation ⁶ (gal)	Change In Storage Volume (+/-) (gal)	Reuse Volume Stored ⁷ (gal)	Storage Capacity Exceeded?	Total Pond Storage Used (%)
Jan	298,530,000	1.09	5,267,540	0	0	0	303,797,540	1,241,452,011	No	63%
Feb	269,640,000	0.69	3,323,913	0	0	0	272,963,913	1,514,415,923	No	77%
Mar	298,530,000	0.64	3,095,478	2.39	11,552,387	192,117,839	97,955,253	1,612,371,176	No	82%
Apr	288,900,000	0.59	2,859,300	3.56	17,243,885	573,021,140	-298,505,725	1,313,865,451	No	67%
May	298,530,000	0.76	3,680,115	4.85	23,477,431	780,575,476	-501,842,791	812,022,660	No	41%
Jun	288,900,000	0.53	2,570,854	6.17	29,846,489	1,006,989,586	-745,365,221	66,657,439	No	3%
Jul	298,530,000	0.05	243,921	8.25	39,908,245	995,150,905	-736,285,229	0	No	0%
Aug	298,530,000	0.21	1,002,788	7.60	36,757,594	714,820,515	-452,045,321	0	No	0%
Sep	288,900,000	0.37	1,788,757	4.91	23,782,333	179,484,417	87,422,007	87,422,007	No	4%
Oct	298,530,000	0.66	3,209,695	2.66	12,873,627	36,383,801	252,482,267	339,904,274	No	17%
Nov	288,900,000	0.82	3,991,792	0.00	0	0	292,891,792	632,796,067	No	32%
Dec	298,530,000	1.31	6,328,404	0.00	0	0	304,858,404	937,654,471	No	48%

¹ Monthly projections based on annual average buildout flow of 9.63MGD.

² Average precipitation from the Agrimet HERO Station from 2000-2024.

³ Precipitation in gallons is calculated by multiplying total pond area in by the monthly precipitation in inches.

⁴ Average pan evaporation from Western Regional Climate Center Pendleton Br Experimental Station, 1956-2005. Evaporation coefficient of 0.70 is used.

⁵ Evaporation in gallons is calculations by multiplying total pond surface area by the monthly evaporation in inches.

⁶ Estimated reuse irrigation to reach 70% of total nitrogen loading across Farms 1, 4, 5, and 6. Farm 3 reuse irrigation is capped at 750MG.

⁷ Pond 41, Sand Dune Pond, Farm 3 Pond, and Farm 4 Pond provide approximately 2 billion gallons of storage capacity to the system.

Appendix E - Water Balance Calculations

System Capacity Assessment -Steady State Year Water Balance, 60 mg/L Reuse TN										
Month	Projected Annual Average Inflow ¹ (gal)	Precipitation ² (in)	Precipitation ³ (gal)	Evaporation ⁴ (in)	Evaporation ⁵ (gal)	Total Reuse to Irrigation ⁶ (gal)	Change In Storage Volume (+/-) (gal)	Reuse Volume Stored ⁷ (gal)	Storage Capacity Exceeded?	Total Pond Storage Used (%)
Jan	298,530,000	1.09	5,267,540	0	0	0	303,797,540	1,271,006,610	No	65%
Feb	269,640,000	0.69	3,323,913	0	0	0	272,963,913	1,543,970,523	No	79%
Mar	298,530,000	0.64	3,095,478	2.39	11,552,387	163,152,755	126,920,336	1,670,890,859	No	85%
Apr	288,900,000	0.59	2,859,300	3.56	17,243,885	488,873,523	-214,358,108	1,456,532,751	No	74%
May	298,530,000	0.76	3,680,115	4.85	23,477,431	670,532,480	-391,799,796	1,064,732,955	No	54%
Jun	288,900,000	0.53	2,570,854	6.17	29,846,489	868,743,159	-607,118,794	457,614,161	No	23%
Jul	298,530,000	0.05	243,921	8.25	39,908,245	863,637,324	-604,771,647	0	No	0%
Aug	298,530,000	0.21	1,002,788	7.60	36,757,594	615,866,872	-353,091,678	0	No	0%
Sep	288,900,000	0.37	1,788,757	4.91	23,782,333	154,746,807	112,159,617	112,159,617	No	6%
Oct	298,530,000	0.66	3,209,695	2.66	12,873,627	31,566,811	257,299,257	369,458,874	No	19%
Nov	288,900,000	0.82	3,991,792	0.00	0	0	292,891,792	662,350,666	No	34%
Dec	298,530,000	1.31	6,328,404	0.00	0	0	304,858,404	967,209,070	No	49%

¹ Monthly projections based on annual average buildout flow of 9.63MGD.

² Average precipitation from the Agrimet HERO Station from 2000-2024.

³ Precipitation in gallons is calculated by multiplying total pond area by the monthly precipitation in inches.

⁴ Average pan evaporation from Western Regional Climate Center Pendleton Br Experimental Station, 1956-2005. Evaporation coefficient of 0.70 is used.

⁵ Evaporation in gallons is calculations by multiplying total pond surface area by the monthly evaporation in inches.

⁶ Estimated reuse irrigation to reach 70% of total nitrogen loading across Farms 1, 4, 5, and 6. Farm 3 reuse irrigation is capped at 750MG.

⁷ Pond 41, Sand Dune Pond, Farm 3 Pond, and Farm 4 Pond provide approximately 2 billion gallons of storage capacity to the system.

Appendix E - Water Balance Calculations

System Capacity Assessment-Steady State Year Water Balance, 70 mg/L Reuse TN										
Month	Projected Annual Average Inflow ¹ (gal)	Precipitation ² (in)	Precipitation ³ (gal)	Evaporation ⁴ (in)	Evaporation ⁵ (gal)	Total Reuse to Irrigation ⁶ (gal)	Change In Storage Volume (+/-) (gal)	Reuse Volume Stored ⁷ (gal)	Storage Capacity Exceeded?	Total Pond Storage Used (%)
Jan	298,530,000	1.09	5,267,540	0	0	0	303,797,540	1,468,522,393	No	75%
Feb	269,640,000	0.69	3,323,913	0	0	0	272,963,913	1,741,486,306	No	89%
Mar	298,530,000	0.64	3,095,478	2.39	11,552,387	142,463,410	147,609,682	1,889,095,987	No	96%
Apr	288,900,000	0.59	2,859,300	3.56	17,243,885	428,768,082	-154,252,667	1,734,843,320	No	89%
May	298,530,000	0.76	3,680,115	4.85	23,477,431	591,930,340	-313,197,656	1,421,645,664	No	73%
Jun	288,900,000	0.53	2,570,854	6.17	29,846,489	769,995,712	-508,371,347	913,274,318	No	47%
Jul	298,530,000	0.05	243,921	8.25	39,908,245	769,699,052	-510,833,375	402,440,942	No	21%
Aug	298,530,000	0.21	1,002,788	7.60	36,757,594	545,185,698	-282,410,505	120,030,438	No	6%
Sep	288,900,000	0.37	1,788,757	4.91	23,782,333	137,077,086	129,829,338	249,859,776	No	13%
Oct	298,530,000	0.66	3,209,695	2.66	12,873,627	28,126,104	260,739,964	510,599,740	No	26%
Nov	288,900,000	0.82	3,991,792	0.00	0	0	292,891,792	803,491,532	No	41%
Dec	298,530,000	1.31	6,328,404	0.00	0	0	304,858,404	1,108,349,936	No	57%

¹ Monthly projections based on annual average buildout flow of 9.63MGD.

² Average precipitation from the Agrimet HERO Station from 2000-2024.

³ Precipitation in gallons is calculated by multiplying total pond area by the monthly precipitation in inches.

⁴ Average pan evaporation from Western Regional Climate Center Pendleton Br Experimental Station, 1956-2005. Evaporation coefficient of 0.70 is used.

⁵ Evaporation in gallons is calculations by multiplying total pond surface area by the monthly evaporation in inches.

⁶ Estimated reuse irrigation to reach 70% of total nitrogen loading across Farms 1, 4, 5, and 6. Farm 3 reuse irrigation is capped at 750MG.

⁷ Pond 41, Sand Dune Pond, Farm 3 Pond, and Farm 4 Pond provide approximately 2 billion gallons of storage capacity to the system.

RESOLUTION 2026-02

A RESOLUTION AUTHORIZING SIGNATURES AND ONLINE BANKING ON ALL ACCOUNTS AT THE BANK OF EASTERN OREGON, BOARDMAN BRANCH

WHEREAS, the Port of Morrow (Port) has an existing banking relationship with Bank of Eastern Oregon;

NOW, THEREFORE, BE IT RESOLVED by the Port of Morrow Commissioners, of the Port of Morrow that John Murray , Commissioner and Eileen Hendricks, Chief Financial Officer, or their designee, are hereby authorized to act as Administrator of Online banking, establish and open or close any necessary accounts at the Bank of Eastern Oregon for the purpose of purchasing time certificates of deposit or other banking account services as may be needed. They are also authorized to make transfers within the Port of Morrow accounts as necessary, approve temporary changes to the daily transaction limits, and obtain information regarding any of the Port's accounts, including loan or financing agreements. All checks, ach transactions or wires must be signed, authorized, initiated or transmitted by an authorized signer to the account. Authorized signers on the account shall be,

John Murray	Title: Commissioner
Rick Stokoe	Title: Commissioner
Kelly Doherty	Title: Commissioner
Joel Peterson	Title: Commissioner
Jerry Rietmann	Title: Commissioner
Lisa Mittelsdorf	Title: Executive Director

BE IT FURTHER RESOLVED that this resolution is effective immediately upon its passage.

DATED the 11th day of March, 2026.

PORT OF MORROW
BY:

John Murray, President

ATTEST:

Joel Peterson, Secretary

INTERGOVERNMENTAL AGREEMENT
Salt/ Equipment Storage
Port of Morrow

THIS AGREEMENT is made and entered into by and between the STATE OF OREGON, acting by and through its Department of Transportation, hereinafter referred to as "State;" and the PORT OF MORROW, acting by and through its elected officials, hereinafter referred to as "Agency," both herein referred to individually or collectively as "Party" or "Parties."

RECITALS

1. By the authority granted in Oregon Revised Statute (ORS) 190.110, state agencies may enter into agreements with units of local government for the performance of any or all functions and activities that a party to the agreement, its officers, or agents have the authority to perform.
2. In order for ODOT to have the materials and equipment readily available when performing necessary maintenance on state highways in Morrow County; ODOT wishes to have the capability to store some equipment and material on Agency right of way. Agency recognizes the value and is in favor of allowing ODOT to utilize its right of way for storage purposes.
3. This Agreement will be for the purpose of defining the obligations and expectations of ODOT and Agency.

NOW THEREFORE, the premises being in general as stated in the foregoing Recitals, it is agreed by and between the Parties hereto as follows:

TERMS OF AGREEMENT

1. Under such authority, ODOT and Agency agree to Agency allowing ODOT to store materials and equipment; as well as allow ODOT to leave in place a prefabricated membrane-covered storage structure that ODOT has built on Agency right of way. This storage shed shall hold materials and equipment necessary for ODOT to maintain the state highway for the traveling public. nafter referred to as "Project." The location of the Project is approximately as shown on the sketch map attached hereto, marked Exhibit A, and by this reference mase a part hereof.
2. ODOT shall be responsible for all costs associated with this Project.
3. This Agreement shall become effective on the date all required signatures are obtained and shall remain in effect for twenty (20) calendar years, unless extended by an amendment to this Agreement.
4. This Agreement shall supersede and replace Agreement No. 32141, and subsequent amendment(s), in its/their entirety. Agreement number 32141 will terminate upon execution of this Agreement.

AGENCY OBLIGATIONS

1. Agency has agreed to allowing ODOT the long-term use of its right of way as shown on Exhibit A, for use as storage for ODOT materials and equipment. Initial storage may include storage of salt for roadway use; as needed for ODOT Salt Pilot Program.
2. Agency has approved of the prefabricated, membrane-covered structure that ODOT has constructed, the concrete foundation that the structure is built on, and the additional meter bases that were installed to provide power, as shown in Exhibit B.
3. Agency grants ODOT access to Agency right of way via a driveway located at Wilson Lane SE where it intersects with Bombing Range Road, as shown in Exhibit A.
4. Should ODOT make a written request to extend the used of the property beyond the twenty (20) Years; Agency has the right to approve or reject such a request and shall give written notice of its decision at least sixty (60) days prior to Agreement expiration.
5. No right of way was needed for this Project.
6. Agency certifies and represents that the individual(s) signing this Agreement has been authorized to enter into and execute this Agreement on behalf of Agency, under the direction or approval of its governing body, commission, board, officers, members or representatives, and to legally bind Agency.
7. Agency's Project Manager for this Project is Port of Morrow Executive Director, Lisa Mittelsdorf, 2 East Marine Drive, Boardman, Oregon 97818. Phone (541) 481-7678 lisam@portofmorrow.com, or assigned designee upon individual's absence. Agency shall notify the other Party in writing of any contact information changes during the term of this Agreement.

STATE OBLIGATIONS

1. ODOT will utilize Agency right of way, as shown on Exhibit A, for the purpose of storage of ODOT materials and equipment. Initial use may include storage of salt for roadway use, as needed for ODOT's Salt Pilot Program.
2. ODOT did construct a prefabricated, membrane-covered structure for use as covered storage for ODOT materials and equipment on Agency right of way, as shown on Exhibit B. Dimensions are roughly 60' X 100 feet with a height of approximately 30 feet. The membrane structure has a concrete foundation with a sealed asphalt pad.
3. All costs associated with this Project shall be the sole responsibility of ODOT, including any power or utility costs.
4. ODOT shall use driveway via Wilson Road SE where it intersects with Bombing Range Road to access the property.

5. ODOT shall be responsible for monitoring of property soil, for signs of leaching or contamination from salt material within the property boundaries where ODOT is utilizing Agency right of way, as shown on Exhibit A. Should any leaching or contamination occur within the property boundaries; while ODOT is utilizing Agency right of way; ODOT shall remove all contamination on said Agency property boundaries at ODOT's expense.
6. ODOT shall use Agency's property, as shown on Exhibit A, for the purpose of storing materials and equipment, and agrees that Agency's property shall not be used for any other purpose than stated.
7. ODOT shall operate and maintain the Agency's property, as shown on Exhibit A, to protect against safety hazards or appearance. At all times, and at its own expense, ODOT shall keep and maintain Agency's property, free and clear of rubbish, debris and obstructions, and shall keep property in a clean and orderly condition. ODOT shall keep the driveway access to Agency's property reasonably clear of ice and snow. Use and maintenance of Agency's property shall not interfere with the Port of Morrow's access and use or the Morrow County Transfer Station.
8. Upon expiration or termination of this Agreement, ODOT shall remove from Agency's property, as shown on Exhibit A, the membrane structure, foundation blocks if used, electrical components downstream of the electrical meter, and items stored within the structure. The Asphalt pad, gravel, underlayment, and poured in-place foundation if used, shall remain and become the property of Agency. ODOT shall request that the local electrical utility decommission the meter and abandon the service. Electrical components upstream of the meter shall become the property of the Agency.
9. ODOT shall comply with all federal, state and local statutes, ordinances, and regulations that may concern, in any way, ODOT's use of Agency's property.
10. ODOT certifies, at the time this Agreement is executed, that sufficient funds are available and authorized for expenditure to finance costs of this Agreement within State's current appropriation or limitation of the current biennial budget.
11. State's Project Manager for this Project is Assistant District 12 Manager, Paul Howland, 1327 SE 3rd Street, Pendleton, Oregon 97801. Phone (541) 278-6044, Paul.L.HOWLAND@odot.oregon.gov, or assigned designee upon individual's absence. State shall notify the other Party in writing of any contact information changes during the term of this Agreement.

GENERAL PROVISIONS

1. This Agreement may be terminated by mutual written consent of both Parties.
2. ODOT may terminate this Agreement effective upon delivery of written notice to Agency, or at such later date as may be established by State, under any of the following conditions:

- a. If ODOT fails to receive funding, appropriations, limitations or other expenditure authority sufficient to allow State, in the exercise of its reasonable administrative discretion, to continue to make payments for performance of this Agreement.
 - b. If federal or state laws, regulations or guidelines are modified or interpreted in such a way that either the work under this Agreement is prohibited or State is prohibited from paying for such work from the planned funding source.
3. Any termination of this Agreement shall not prejudice any rights or obligations accrued to the Parties prior to termination.
4. If any third party makes any claim or brings any action, suit or proceeding alleging a tort as now or hereafter defined in ORS 30.260 ("Third Party Claim") against State or Agency with respect to which the other Party may have liability, the notified Party must promptly notify the other Party in writing of the Third Party Claim and deliver to the other Party a copy of the claim, process, and all legal pleadings with respect to the Third Party Claim. Each Party is entitled to participate in the defense of a Third Party Claim, and to defend a Third Party Claim with counsel of its own choosing. Receipt by a Party of the notice and copies required in this paragraph and meaningful opportunity for the Party to participate in the investigation, defense and settlement of the Third Party Claim with counsel of its own choosing are conditions precedent to that Party's liability with respect to the Third Party Claim.
5. With respect to a Third Party Claim for which State is jointly liable with Agency (or would be if joined in the Third Party Claim), State shall contribute to the amount of expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred and paid or payable by Agency in such proportion as is appropriate to reflect the relative fault of State on the one hand and of Agency on the other hand in connection with the events which resulted in such expenses, judgments, fines or settlement amounts, as well as any other relevant equitable considerations. The relative fault of State on the one hand and of Agency on the other hand shall be determined by reference to, among other things, the Parties' relative intent, knowledge, access to information and opportunity to correct or prevent the circumstances resulting in such expenses, judgments, fines or settlement amounts. State's contribution amount in any instance is capped to the same extent it would have been capped under Oregon law, including the Oregon Tort Claims Act, ORS 30.260 to 30.300, if State had sole liability in the proceeding.
6. With respect to a Third Party Claim for which Agency is jointly liable with State (or would be if joined in the Third Party Claim), Agency shall contribute to the amount of expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred and paid or payable by State in such proportion as is appropriate to reflect the relative fault of Agency on the one hand and of State on the other hand in connection with the events which resulted in such expenses, judgments, fines or settlement amounts, as well as any other relevant equitable

considerations. The relative fault of Agency on the one hand and of State on the other hand shall be determined by reference to, among other things, the Parties' relative intent, knowledge, access to information and opportunity to correct or prevent the circumstances resulting in such expenses, judgments, fines or settlement amounts. Agency's contribution amount in any instance is capped to the same extent it would have been capped under Oregon law, including the Oregon Tort Claims Act, ORS 30.260 to 30.300, if it had sole liability in the proceeding.

7. The Parties shall attempt in good faith to resolve any dispute arising out of this Agreement. In addition, the Parties may agree to utilize a jointly selected mediator or arbitrator (for non-binding arbitration) to resolve the dispute short of litigation.
8. With respect to a Third Party Claim for which the Parties are jointly liable, each Party shall contribute to the amount of expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred and paid or payable by the Party in such proportion as is appropriate to reflect the Parties' relative fault. The Parties' relative fault shall be determined by reference to, among other things, the Parties' relative intent, knowledge, access to information and opportunity to correct or prevent the circumstances resulting in such expenses, judgments, fines or settlement amounts. Each Party's contribution amount in any instance is capped to the same extent it would have been capped under Oregon law if that Party had sole liability in the proceeding.
9. This Agreement may be executed in several counterparts (facsimile or otherwise) all of which when taken together shall constitute one agreement binding on all Parties, notwithstanding that all Parties are not signatories to the same counterpart. Each copy of this Agreement so executed shall constitute an original.
10. This Agreement and attached exhibits constitute the entire agreement between the Parties on the subject matter hereof. There are no understandings, agreements, or representations, oral or written, not specified herein regarding this Agreement. No waiver, consent, modification or change of terms of this Agreement shall bind either Party unless in writing and signed by both Parties and all necessary approvals have been obtained. Such waiver, consent, modification or change, if made, shall be effective only in the specific instance and for the specific purpose given. The failure of State to enforce any provision of this Agreement shall not constitute a waiver by State of that or any other provision.
11. Electronic Signatures. The Parties agree that signatures showing on PDF documents, including but not limited to PDF copies of the Agreement and amendments, submitted or exchanged via email are "Electronic Signatures" under ORS Chapter 84 and bind the signing Party and are intended to be and can be relied upon by the Parties. State reserves the right at any time to require the submission of the hard copy originals of any documents.

Agency/ODOT
Agreement No. 73000-00017153

THE PARTIES, by execution of this Agreement, hereby acknowledge that their signing representatives have read this Agreement, understand it, and agree to be bound by its terms and conditions.

PORT OF MORROW, by and through its

By _____

Title _____
Executive Director

Date _____

**LEGAL REVIEW APPROVAL (If required
in Agency's process)**

By _____
Agency's Counsel

Date _____

Agency Contact:

Lisa Mittelsdorf, Executive Director
Port of Morrow
2 East Marine Drive
Boardman, Oregon 97818
(541) 481-7678
lisam@portofmorrow.com

State Contact:

Paul Howland, Assistant District 12
Manager
1327 SE 3rd Street
Pendleton, Oregon 97801
(541) 278-6044
Paul.L.HOWLAND@odot.oregon.gov

STATE OF OREGON, by and through
its Department of Transportation

By _____

Title _____
Region 5 Manager

Date _____

APPROVAL RECOMMENDED

By _____

Title _____
District 12 Manager

Date _____

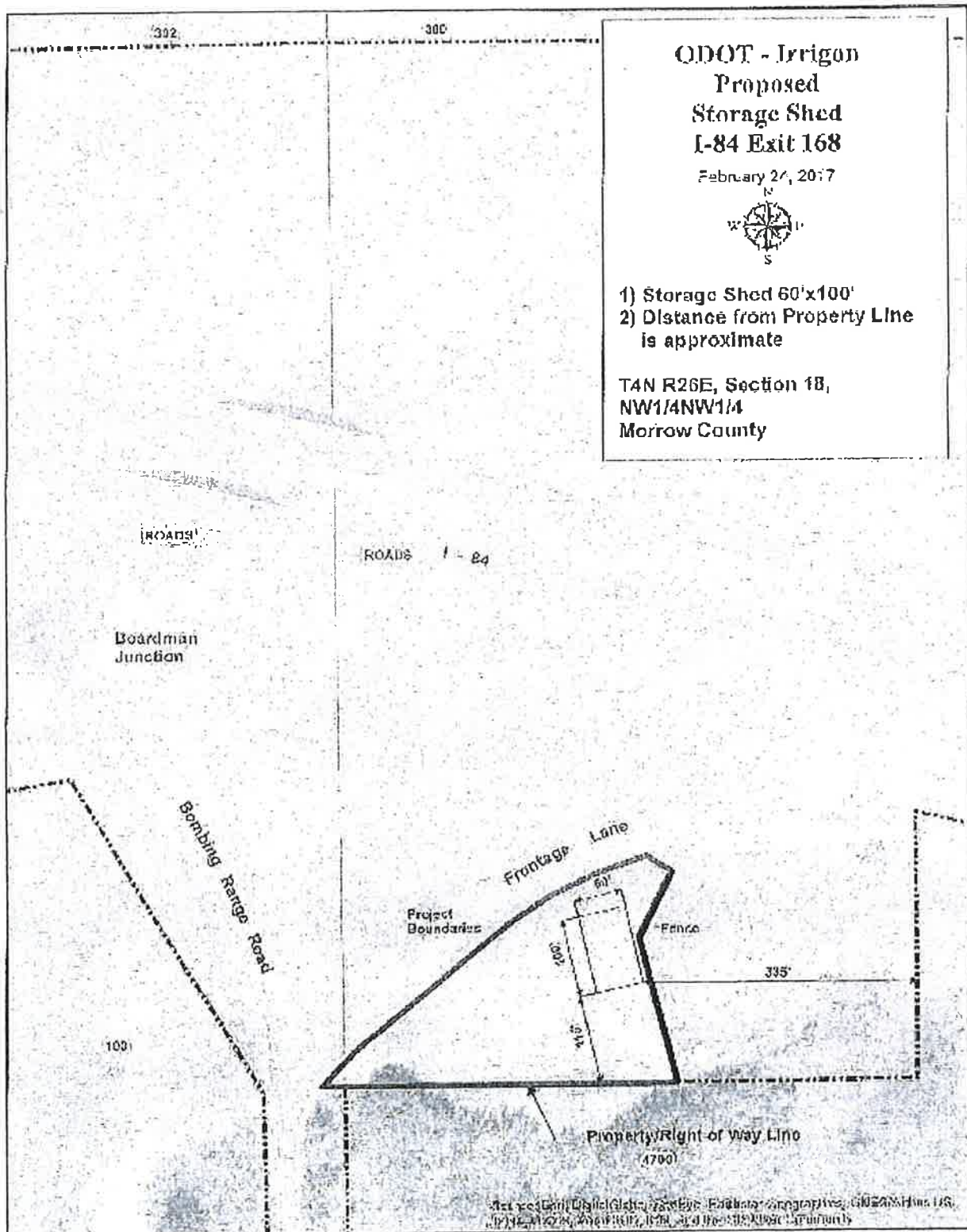


EXHIBIT B
Example of Storage Structure



Pre-fabricated, membrane-covered structure shall be similar to the existing ODOT structure shown above.



Commission Report for February 2026 - TOTAL Count: 1,935

February General Summary

The SAGE Center & Event Center welcomed 1,935 total guests this period, including 946 Event Center attendees, 378 museum visitors (248 SAGE tours and 130 Tesla/Welcome Center guests), 250 students and educators in the AWS Think Big Space classroom, 43 educational visit students, and 51 participants at SAGE Saturday. Marketing efforts remained strong through social media, intern-led TikTok content, email newsletters, radio ads, sponsored East Oregonian posts, and local cart advertising. Key exhibit and facility updates include progress on the POM Map Wall and Boardman Foods/OFI exhibit installations, exploration of a new Ag & Energy-themed soft play space in the Round Room, a refreshed photo op concept, discussions with Amazon to convert the Community Room into a second classroom, and evaluation of repairing or replacing the outdoor LED sign. Operationally, SAGE on the Go has secured grant funding and is moving into vehicle pricing, new on-site advertising opportunities are launching, a membership program is in development, exhibitor agreements are being reconciled and expanded, and Event Center growth continues with increased 2026 pricing, 18 year-to-date events, and approximately 1,892 attendees, reflecting strong demand and positive feedback. Additionally, the SAGE Center & Event Center was honored at the Oregon Festivals & Events Conference with two statewide recognitions: the Impact Award and the Fundraising Event of the Year Award, highlighting the continued success and community impact of our programs and events.

Facility Usage- 1,935

- **Event Center:** 946 guests
- **Educational Visits:** 43 students
- **Museum Visitors:** 378 Guest (248 SAGE tours | 130 Tesla/Welcome Center)
- **AWS TBS Classroom:** 250 students/educators
- **SAGE Events:** 51 (SAGE Saturday)

Marketing & Outreach-

- Scheduled posts on social media platforms such as Facebook, Instagram & LinkedIn
- Our interns continue to lead and develop our Tik Tok series
- Monthly email newsletter featuring upcoming events, recaps and news.
- Radio advertisements on 103.5 K Wheat
- Sponsored posts on the East Oregonian further branding the SAGE Center & Event Center
- Cart advertising at Harvest Town Foods

Exhibit/Facility Updates:

- **Round Room Exhibit** (formally known as the Hot Air Balloon)
 - We have decided to explore a potential temporary soft play area with this space focusing on Ag & Energy for younger children.
- **POM Map Wall**
 - We have not received a definite installation date but are working towards a tentative date of 3/30/2026.
- **Boardman Foods / OFI Exhibit**
 - We have a tentative installation date of 3/23-3/27/2026.
- **Photo Op**
 - We are receiving concepts for a refresh of our photo op design further branding the SAGE Center.
- **Community Room**
 - Discussions have begun with Amazon to renovate this space into a second classroom/workforce training space.
- **Outdoor LED Sign** (exterior of building)
 - We are in the decision-making process of repairing or replacing this sign due to unusable panels.

Operations Updates

- **SAGE On The Go** (outreach to schools)
 - We received grant funding for this project, so we are in the process of pricing out a vehicle for this.
- **Advertising at the SAGE**

- An advertising opportunity is now available for local business to advertise at the SAGE Center opening a new source of revenue.
- **Travel Oregon**
 - A new resident survey has just been released gathering information from local residents on Oregon Tourism.
- **Museum Memberships**
 - In an effort to further increase local participation and revenue streams we are developing a membership program.
- **Exhibitor Agreements**
 - Currently reconciling exhibitor past payments and looking to increase total agreements.
- **Event Center**
 - 2026 pricing increase has been in effect and positively impacted monthly facility rentals.
 - Interest and event conversion continue to grow.
 - We are showing consistent positive feedback and event ratings.
 - Year to Date: 18 events/meetings held, hosted approximately 1,892 people thus far.
- **Oregon Festival & Events Conference**
 - The SAGE Center was honored with the Impact Award for the Morrow County Harvest Festival. In addition, the SAGE Event Center received the Fundraising Event of the Year Award for the Rebuilding Hope Dinner & Auction benefiting the Boardman Food Pantry.

If you have any questions or concerns regarding this update, please feel free to contact **Angel Aguilar, Interim Manager (angel.aguilar@portofmorrow.com)**, at any time. I welcome your input and will be happy to provide additional information as needed.

Maintenance Shop Update

Current and upcoming Projects:

1. All PDX sites landscape improvements.
2. New South lift station wastewater hookups.
3. East Beach Electrical Electrical installation.
4. Farm 4 and 5 roads graveled and bladed and haystack pads
5. Well 6 rebuild and installation
6. Farm 6 automatic valve for circles installation. Done
7. Landscape around new Airport signs
8. Farm 4, 5 and 6 hay storage rock pads
9. Magox building and tank for Digester.Done
10. Install VFD at CID pumps for Surface water treatment plant.
11. Lambweston west plant new water line installation.Done
- 12.New water service airport
- 13.Lewis and Clark road repair and Landscape repair.
- 14.Install barge pumps Farm 6.
- 15.Sweep roads and path ways.

Communications Update – March 2026

- Social Media Posts
- Website Updates
 - Workforce Development
 - Projects page w/ Map
 - Parametrix Graphics (posting this week)
- Meeting minutes and videos
- Monitoring news sources
- Press Release for Water Consortium's new director
- Port Project Photos
- UAS Part 107 Certification (in progress)
- Monthly recurring/special ads
 - SAGE Center
 - Marker 40 Golf Club

February Facebook Analytics

Facebook

Last month: Feb 1, 2026 - Feb 28, 2026



Content overview

Breakdown: Organic/ads

All Reels Live Posts Stories

Views

88.9K ↓ 26%

3-second views

1.1K ↑ 14.1%

1-minute views

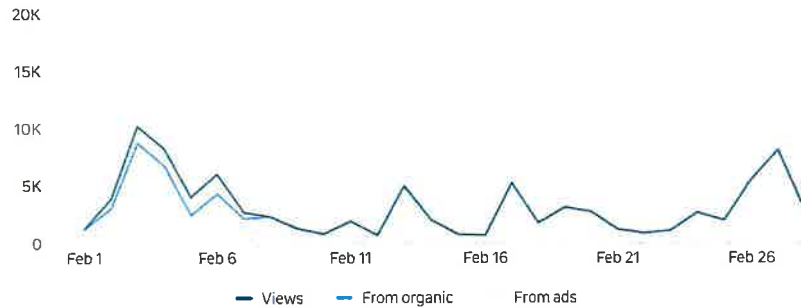
1 ↑ 100%

Content interactions

646 ↓ 22.7%

Watch time

5h 14m ↑ 53%



Views breakdown

Feb 1 - Feb 28

Total

88,929 ↓ 26%

From organic

81,312 ↓ 13.4%

From ads

7,617 ↓ 71.1%

Viewers

18,508 ↓ 24.8%

Top content by views

Boost content

See all content



Angel Aguilar, SAGE Center Interim...

Thu Feb 19, 4:01pm

4.8K 26 0



Do you enjoy helping people? Are you...

Tue Feb 17, 9:14am

3.8K 4 0



We are pleased to announce that Jerry...

Fri Feb 13, 8:18am

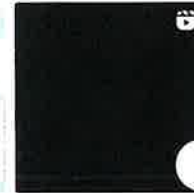
3.6K 20 3



What better way to celebrate the month ...

Tue Feb 3, 4:13pm

3.6K 7 0



Project update: Dredging at Terminal ...

Thu Feb 19, 1:48pm

2.1K 16 1

Performance

February 3, 2026 - March 2, 2026

Customize view: Business

Views

Views

88.6K ↓ 27%

From followers 21.4% ↑ 18.2%

From non-followers 78.6% ↓ 4%

Viewers 18,272 ↓ 25.9%

Interactions

Content interactions

647 ↓ 23.5%

From followers 357 ↓ 21%

From non-followers 290 ↓ 26.4%

Visits

Facebook visits

1.2K ↓ 1.4%

Follows

Follows

36 ↑ 28.6%

Unfollows 4 ↓ 50%

Net follows 32 ↑ 60%

Search for posts

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Filters

Columns

Last 28 days: Feb 3 - Mar 3

Export data

☐	Preview	Views	Viewers	Engagement	Net follows	Impressions
☐	 Angel Aguilar, SAGE Center In... Published • Feb 19 at 4:21 PM	4,775	2,767	483	3	3,099
☐	 the New Boardman community Published • Feb 5 at 1:19 PM	4,692	2,782	396	2	3,070
☐	 Published • Feb 17 at 9:14 AM	3,804	2,705	235	2	2,861
☐	 Published • Feb 13 at 2:10 AM	3,631	2,060	338	1	2,508
☐	 Published • Feb 7 at 4:13 PM	3,575	2,267	290	3	2,412
☐	 Hermiston Classified Published • Feb 3 at 1:14 PM	3,572	2,030	435	0	2,106
☐	 Boardman Oregon Community L... Published • Feb 26 at 11:18 AM	2,198	1,251	98	0	1,344
☐	 Published • Feb 19 at 1:16 PM	2,055	1,601	89	1	1,877
☐	 Boardman Oregon Community L... Published • Feb 6 at 11:26 PM	1,990	1,247	62	0	1,303

Facebook

Last month: Feb 1, 2026 - Feb 28, 2026



Audience

Demographics

Trends

Potential audience

Follows

38

↑ 46.2%

Returning viewers

0

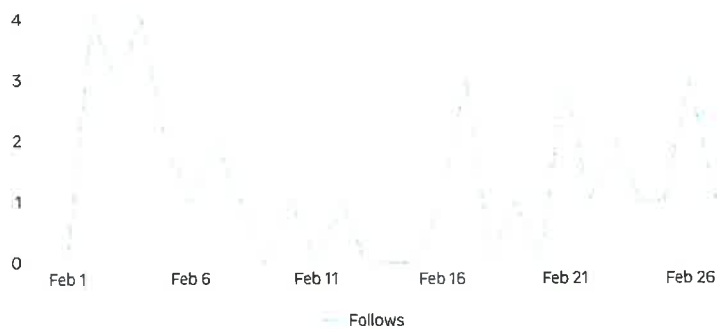
0%

Engaged followers

0

0%

Based on last 28 days



Followers breakdown

Feb 1, 2026 - Feb 28, 2026

Unfollows

4

↓ 50%

Net follows

34

↑ 88.9%

Followers

Lifetime

1,585

New Port Projects Page with Map

<https://www.portofmorrow.com/projects>

 info@portofmorrow.com



[Home](#)

About ▼

Sites/Services ▼

Public Information ▼

Find A Job ▼

[Contact Us](#) ▼

Projects

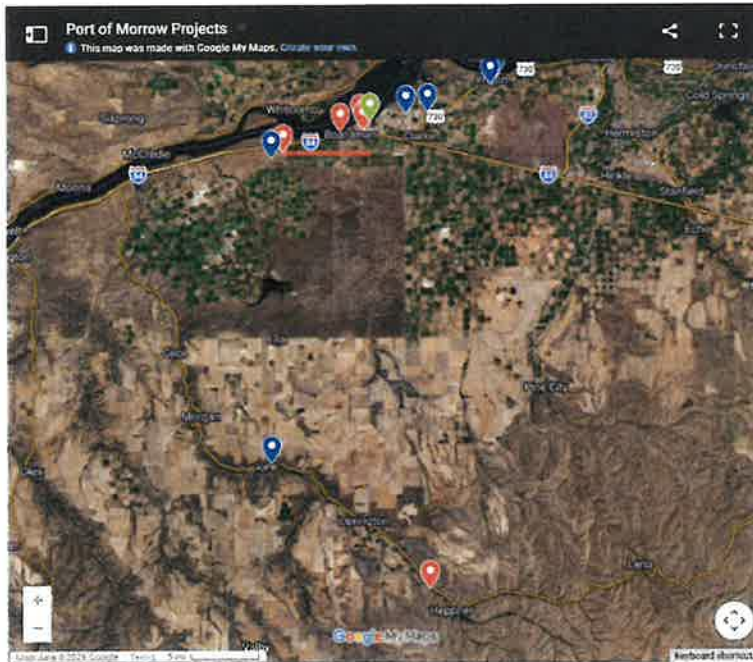
Welcome to our Projects page, where you can explore current and recently completed Port initiatives that support economic growth, infrastructure development, and community investment. The interactive map below highlights project locations, giving you a clear view of where work is underway. Click on individual markers to learn more (Red=Active, Blue=Complete, Green=Planned). We invite you to explore the map and stay informed about the projects helping move our region forward.

Active Projects

- **Projects Map**
- **Kunze Feedline**
- **Secondary Treatment**

Completed Projects

- Build Grant
- Neal Early Learning Center
- SAGE Center/Event Center





Port of Morrow Commission Meeting 3-11-26

Port of Morrow Warehousing Monthly Report: February 2026

# of Employees	62
Starting Tonnage	71,309,493
Ending Tonnage	68,314,517
# of Pallets in Storage	39,036
Inbound Trucks	587 Year to date: 1312
Outbound Trucks	687 Year to date: 1488
Outbound Rail	25 Year to date: 90
Shipment Accuracy	99.80%
# of OB Trucks Turned on Time	99.42%
# of IB Trucks Turned on Time	99.3%
# of Loss Time Injuries	0

Notes:

For February the warehouse handled 58.3mil lbs. Down 11.4 million lbs. YOY

EOM Tonnage 68.3 mil. up 5.8 million lbs. YOY

Cooler is at 18.5 mil. Lbs. - Capacity 75% 7,553 pallets filled.

Dry Storage 95% capacity. 2,552 pallet position filled.

April 15th -16th - Eastern Oregon Workforce Board- Jeff, Bobby, Bob, Jess and Marcine.

April 15th Regional HR Training - Marcine, Jess & Jeff

Attended the SDAO conference in February. Jessica, Jeff and Marcine

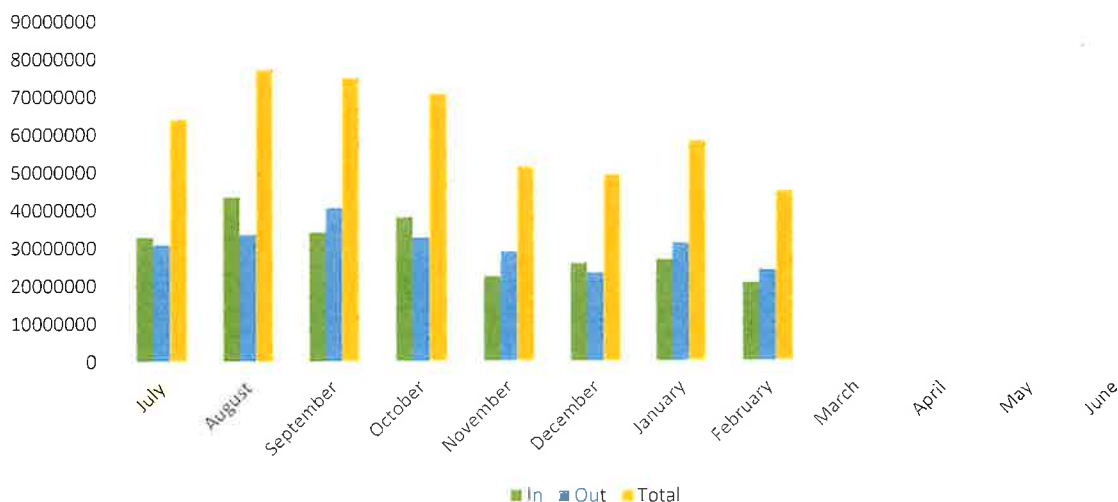
WFLO INSTITUTE -best practices in temperature-controlled logistics, sent two employees to this in March 2026. Bobby Barnes/Sergio Arevalo

Working on Productivity tool for the warehouse. Working with our Warehouse Management Systems IT on this project.

AIB audit for Dry Storage will be on Feb. 26th - Completed received a 980 out of 1,000.

Inbounds were down due to the West Plant being down. They will start back up on March 7th.

Tonnage Comparison FY26



Marker 40 Golf Club

2026	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Rounds of Golf	93	161											254
Members	83	109											192
POM Employee	15	38											53
Total Rounds	191	308											499
Cart Rental	46	91											137

	2025	2024	2023	2022	2021
Rounds of Golf	5336	4594	3348	3362	3501
Members	3445	2541	2582	2525	2387
POM Employee	738	399	369	408	462
Total Rounds	9519	7534	6299	6295	6589
Cart Rentals	3470	2908	2557	1808	2279

Total Memberships 2026

Memberships	Single	Couple/Family	Associate	Junior	Returning	POM Add on
2026		4	1		6	

Operations Overview: The course has remained in good condition. With a mild winter the turf is still very green for this time of year.

Course Usage: We finished the month of February with 308 total rounds of golf, including paid green fees, POM employees, and members. Weekends continue to be our busiest days.

Upcoming Events: Heppner High School Golf Team will host a high school golf tournament at M40 on April 3, 2026. RNI hosted by the Boardman Chamber of Commerce May 8-9.

Still renewing memberships for the 2026 golf season, with a total of 60 memberships renewing.

Notes: We are currently working on updated fees for the 2026–2027 golf season, using comparable local courses as benchmarks. Working on youth golf outreach with WRE

The team's efforts this month continue to contribute to a positive golfer experience and strong course presentation.



Port Commission Report for Workforce Development March Meeting 2026

Continuing Education Classes

Registration information posted on the website <https://www.portofmorrow.com/workforce-training/courses>

- Registration is open for LME/Electrician Continuing Education Hours
- Forklift Training
- Community Health Worker class

**ELECTRICIANS-CONTINUING
EDUCATION HOURS 2026**

CONTINUING EDUCATION HOURS FOR LME'S, JOURNEYMAN ELECTRICIANS, SUPERVISOR/MASTER ELECTRICIANS, PLANT SUPERVISORS. APPROVED HOURS FOR OR, WA, AND ID

CLASSES OFFERED

7:30-11:30 2023 ELECTRICAL CONDUCTOR AND CABLE REQUIREMENTS

CONDUCTOR ALLOWABLE CAPACITY
CORRECTION FACTORS FOR TEMPERATURES
CONDUCTOR TERMINATIONS
CABLES AND COADS

12:00-4:00 2023 GROUNDING AND BONDING

GDS CHANGE CLASS
DEFINITIONS
GROUNDING & UNGROUNDED SYSTEMS
OBJECT HONABLE CURRENT
GROUNDING ELECTRODE METHODS
SPARKING/SHORTS & BONDING

WEDNESDAY

📅 22 APRIL 2026

🕒 7:30 AM - 4:00 PM

🍽️ LUNCH PROVIDED

🕒 11:30-12:00

📞 541-945-2231

📍 AT THE SAGE EVENT CENTER
101 OLSON RD
BOARDMAN, OR

JAMES IMLAH
TRAINER

SPONSORED BY:

REGISTER NOW

[HTTPS://FORM.JOTFORM.COM/250415791574158](https://form.jotform.com/250415791574158)

QUESTIONS? EMAIL
ANNAB@PORTOFMORROW.COM
541-945-2231

Forklift Operator Training

Class Session Options:

April 23rd 8-4PM

April 30th 8-4PM

June 18th 8-4PM

(Spanish only class)

\$20 registration fee and lunch is provided

Workshop Includes classroom instruction, exam and skills test
Workforce Training Center Boardman
251 Olson Rd Boardman OR 97818

Register Now:

English
<https://www.jotform.com/form/2606064>
81569060

Espanol
<https://form.jotform.com/260605980148157>

One day Forklift Safety Program covers:

- Law and standards related to forklift operation
- Daily forklift and area inspection
- Stability, key components, load engagement, signaling
- Stacking and tiering, refueling/recharging, traveling
- Understanding load rating charts
- Dealing with jobsite and electrical hazards

For questions please contact Port of Morrow Workforce Development
at annab@portofmorrow.com or
541.945.2231



School Connections

- Meetings and presentations planned for 2026-2027 high school internships
- Presentations for next year's internship program complete at every school
- Completely full program for semester 2 with 75 interns county-wide, the largest cohort ever!!
- New online internship application created and tested

Partner/Business Connections

Meeting with a variety of workforce development partners to establish relationships and gain knowledge about combined activities and plans for future partnerships. Agencies include:

- Presented at Lone High School career fair
- Attended RHS Business Advisory Committee meeting
- Meetings with Eastern Oregon Workforce Board regarding upcoming training and funding opportunities
- Meetings with Familias en Acción regarding Community Health worker class
- Planning meetings with BMCC, upcoming computer classes

-FFA Travel day event planning for March



-Meetings, planning sessions and funding for Community Health Worker class this spring

-3-part forklift training class coming April, May, June, planning and coordination for that

-Website updates

-ODA Pesticide Certification course coming soon

Job Seekers/Student Engagements

-5 job seeker in-person meetings, 13 emails/messages, 6 phone calls.

-Updated monthly job opportunities website and marketing

-social media updates

-Assisted communications with monthly social media and other articles

Professional Development

-HECC Manufacturing Industry Consortium state meeting

-Anna is serving on the BMCC Foundation Board of Directors, and as the scholarship committee chair

-BMCC Foundation quarterly board meeting

-Stephanie is attending the Proud River Leadership Academy (formerly Leadership Hermiston)

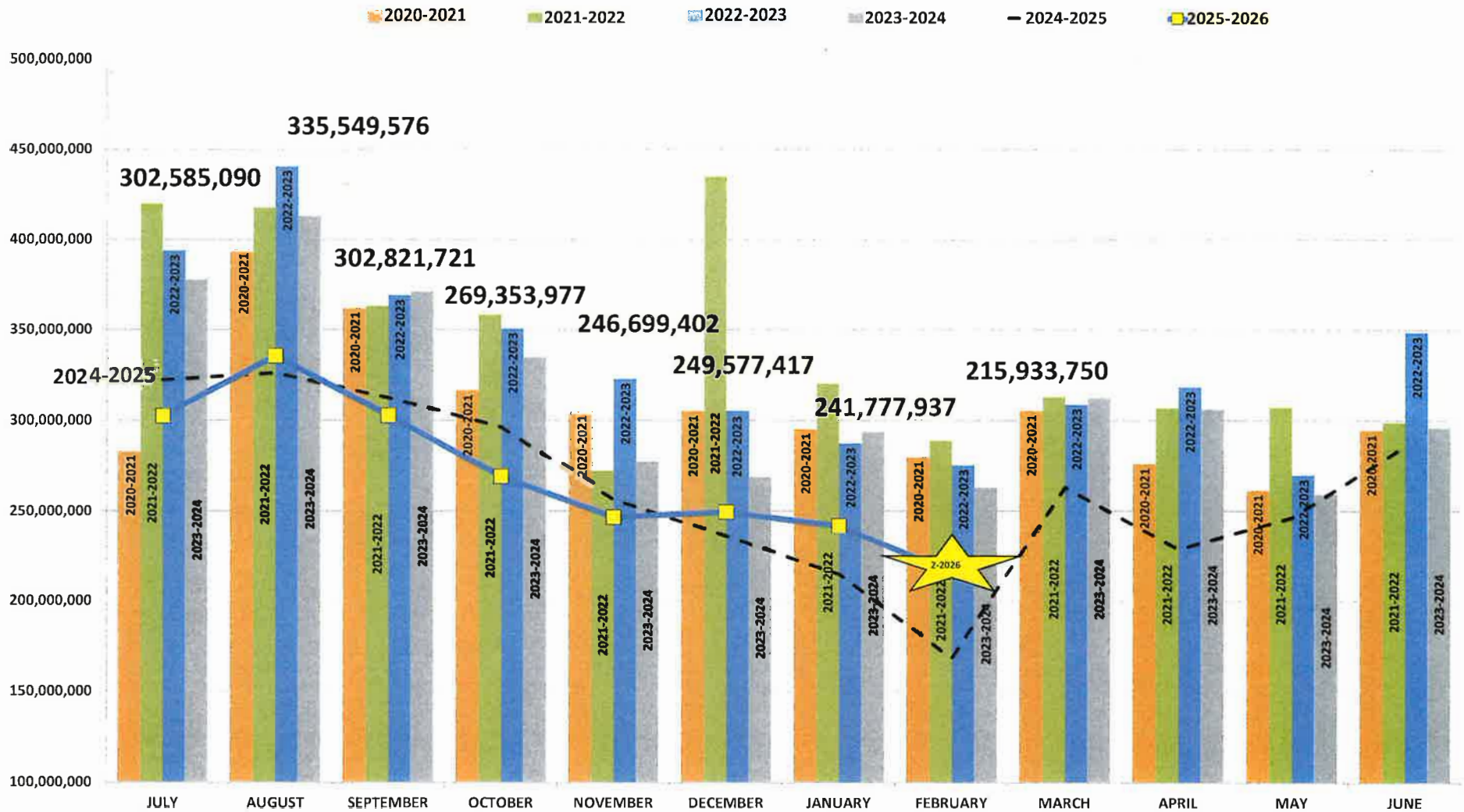
PORT OF MORROW

DISCHARGE | GALLONS

MONTH	2022-2023	% OF FRESHWATER	2023-2024	% OF FRESHWATER	2024-2025	% OF FRESHWATER	2025-2026	% OF FRESHWATER
JULY	320,257,298	81%	263,329,992	70%	227,572,720	71%	203,289,466	67%
AUGUST	338,128,584	77%	295,516,306	72%	239,290,170	73%	225,905,521	67%
SEPTEMBER	275,558,216	75%	272,338,346	73%	229,676,280	73%	206,611,075	68%
OCTOBER	271,400,534	77%	253,506,078	76%	233,118,110	79%	196,483,626	73%
NOVEMBER	262,215,440	81%	202,962,783	73%	191,010,520	75%	178,871,914	71%
DECEMBER	235,403,362	77%	192,324,105	71%	165,165,100	70%	167,227,950	67%
JANUARY	220,744,906	77%	217,266,150	74%	143,447,950	67%	172,252,439	71%
FEBRUARY	214,323,805	78%	191,415,330	73%	109,689,733	65%	150,340,524	70%
MARCH	241,883,699	78%	223,890,110	72%	188,474,904	72%		
APRIL	237,228,741	74%	228,491,570	75%	177,395,970	78%		
MAY	237,609,133	88%	210,109,950	81%	185,667,167	75%		
JUNE	252,799,588	73%	230,573,430	78%	203,241,012	71%		
TOTAL	3,107,553,306		2,781,724,150		2,293,749,637		1,500,982,515	
% Comparison to Prior Year			89.51%		82.46%		97.53%	

FRESH WATER USAGE

PORT OF MORROW



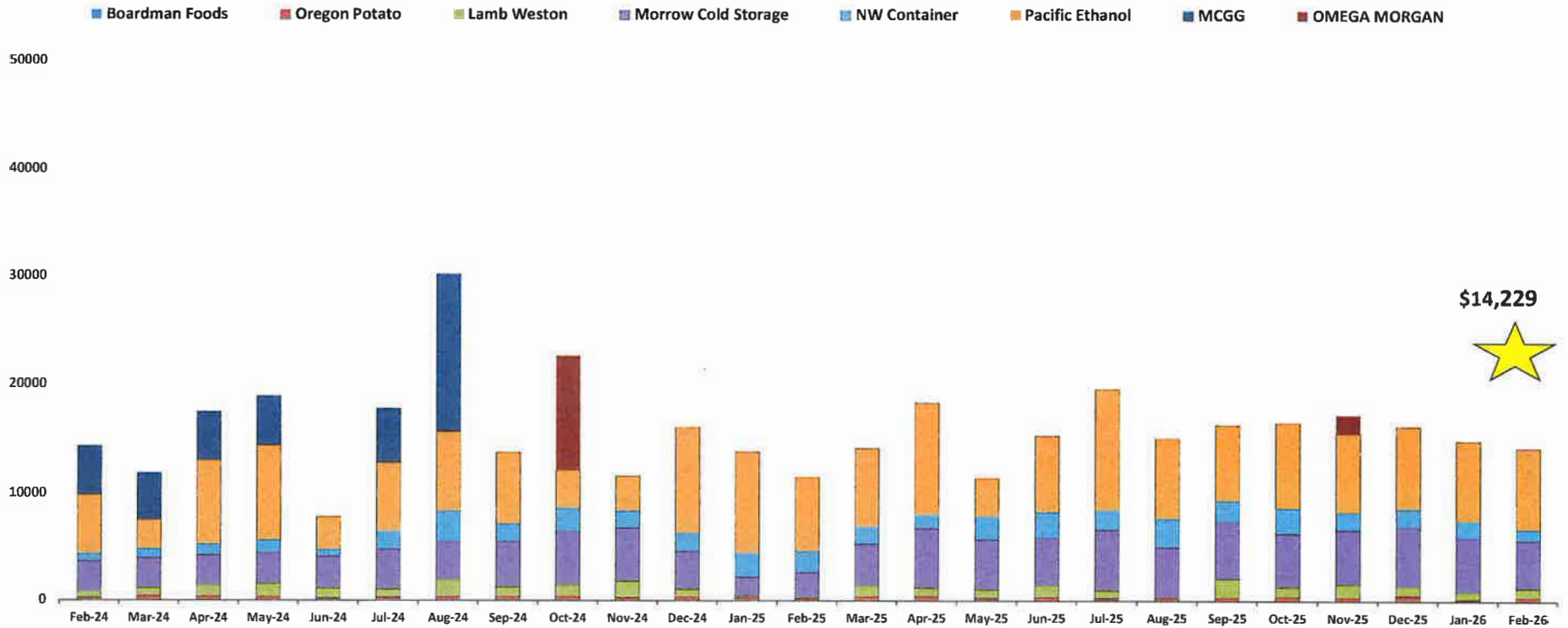
PORT OF MORROW

FRESHWATER USAGE | GALLONS

MONTH	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
JULY	377,176,782	364,996,361	282,798,613	420,156,033	394,099,327	378,296,544	322,458,735	302,585,090
AUGUST	408,700,950	394,447,003	393,308,568	418,092,877	440,610,549	413,250,789	326,234,493	335,549,576
SEPTEMBER	371,555,364	376,316,538	361,824,007	363,337,404	369,222,300	371,553,776	312,601,627	302,821,721
OCTOBER	322,276,471	329,412,865	316,338,088	358,621,863	350,597,015	335,008,670	296,490,913	269,353,977
NOVEMBER	328,108,354	340,867,947	303,106,812	272,661,760	322,925,308	277,795,184	256,372,887	246,699,402
DECEMBER	263,833,618	325,237,392	304,861,310	435,165,524	305,451,594	269,232,266	236,214,824	249,577,417
JANUARY	327,697,612	313,780,888	295,170,832	320,528,880	287,611,055	294,225,537	214,740,475	241,777,937
FEBRUARY	279,727,769	268,354,892	279,800,684	289,225,101	275,594,810	263,544,967	168,166,879	215,933,750
MARCH	343,631,014	340,085,377	305,167,862	313,115,041	308,887,380	312,744,328	263,196,106	
APRIL	292,554,567	284,196,934	276,225,507	307,025,023	318,554,548	306,512,421	228,653,211	
MAY	282,013,206	281,976,127	261,617,601	307,398,660	270,102,512	259,540,515	246,478,165	
JUNE	324,088,125	205,849,813	294,769,136	299,098,094	348,642,687	296,454,620	286,126,330	
TOTAL	3,921,363,832	3,825,522,137	3,674,989,020	4,104,426,260	3,992,299,085	3,778,159,617	3,157,734,644	2,164,298,869
% Comparison to Prior Year		97.56%	96.07%	111.69%	97.27%	94.64%	83.58%	101.45%

RAIL TARIFF REVENUE

PORT OF MORROW





March 2026 Report

Upcoming Events and Programs

Membership Renewals

As we move further into 2026, membership renewals continue to be a priority. Renewals allow the Chamber to fulfill our mission of promoting Boardman through Visibility, Voice, and Value across business, community, and tourism partnerships. Members receive renewal invoices by email or mail. Your continued investment ensures we can sustain our signature events, scholarship programs, and business advocacy efforts throughout the year.

2026 Signature Event Sponsorships

Sponsorship opportunities for 2026 remain available for businesses wishing to align with the Chamber's high-visibility community events. Sponsorship revenue directly supports youth scholarships, Chamber Champion programs, community celebrations, and small business engagement. Businesses are encouraged to secure sponsorship early to maximize promotional benefits throughout the year.

36th Annual Distinguished Citizens Awards Banquet – March 11, 2026

The Chamber will host the 36th Annual Distinguished Citizens Awards Banquet at the SAGE Event Center. This signature event honors individuals who have made significant contributions to our community. Planning and promotion are well underway, and we look forward to celebrating this year's outstanding honorees. To purchase tickets for this event can be found on our event calendar on the chamber's website. www.boardmanchamber.org

1st Quarter Luncheon – March 18, 2026

Our 1st Quarter Luncheon will serve as our Annual Membership Luncheon. We are proud to have Umatilla Electric Cooperative as our Title Sponsor. Attendees will hear a legislative update from Rep Greg Smith, presentation from FBLA President Abrianna Lomeli, and a Chamber recap

of 2025 accomplishments along with strategic priorities for 2026. This event offers excellent networking and engagement opportunities for members.

Ryan Neal Invitational Golf Tournament – May 8 & 9, 2026

The Ryan Neal Invitational (RNI) is a premier two-day charity golf tournament benefiting Riverside High School senior scholarships. Registration is open, and sponsorships are currently available. This regional event draws strong participation and generates scholarship funding for local students. Get your team entered today!

Boardman 4th of July Celebration – July 4, 2026

One of Boardman's largest annual community events, the 4th of July Celebration drives tourism, supports local vendors, and provides family-friendly activities culminating in fireworks over the Columbia River sponsored by MCURD. Vendor opportunities and parade participation links will be announced soon.

End of Summer Celebration – August 28, 2026

The End of Summer Celebration brings the community together to close out the season with live entertainment, ice cream, and free food for families to enjoy. This event also highlights and honors our local first responders, creating meaningful opportunities for community members to build stronger connections with those who serve and protect our region. The evening concludes with a beautiful fireworks show over the Columbia River. All event costs are fully covered through a sponsorship from the Morrow County Unified Recreation District (MCURD), allowing the celebration to remain free and accessible to the community.

Upcoming Chamber/BCDA Events

- 36th Annual Distinguished Citizens Awards Banquet – March 11, 2026
- 1st Quarter Luncheon – March 18, 2026
- RNI Golf Tournament – May 8 & 9, 2026
- 2nd Quarter Luncheon – June 17, 2026
- 4th of July Celebration – July 4, 2026
- End of Summer Celebration – August 28, 2026
- 3rd Quarter Luncheon – September 16, 2026
- 4th Quarter Luncheon – December 16, 2026

For more information, please contact **Torrie Griggs, CEO**, at **541-571-2394** or email torrie@boardmanchamber.org. Visit www.boardmanchamber.org or call our office at **541-481-3014** for further details.



BCDA 2026 Project Priorities & Strategic Investment Overview

The Boardman Community Development Association (BCDA) enters 2026 with a focused investment strategy designed to leverage partnerships, maximize outside funding, and strengthen long-term economic stability in Boardman. The 2026 Project Priority List reflects a balanced approach to housing, business development, recreation, education, and infrastructure—ensuring both immediate community needs and future growth are addressed.

Major Capital & Leveraged Investments

Business Opportunity Incubator

BCDA continues advancing the approximately \$6 million Business Incubator project, supported by a secured \$1.5 million U.S. Small Business Administration grant. This two-story facility will include retail space, executive offices, medical service opportunities, and incubator suites designed to support small businesses, particularly women-, minority-, and low-income-owned enterprises. Additional financing mechanisms are being explored to complete the capital stack.

Pickleball Court Development

Planning continues for the 8-court pickleball complex, a \$600,000 estimated project supported by \$300,000 from MCURD and \$50,000 from AWS. This regional recreational asset will promote active living and enhance Boardman's quality-of-life amenities.

Homebuyer Grant Program

BCDA has allocated \$250,000 in 2026 to continue the Homebuyer Incentive Program, providing \$5,000 grants per qualifying homeowner within the 97818 zip code. This investment directly supports workforce housing availability and community stability.

Annual Community Investments

BCDA maintains ongoing annual commitments that directly impact families and workforce development:

- \$90,000 to support youth recreation and programming partnerships
- \$30,000 annual contribution to Families First Child Care

- \$20,000 sponsorship to the Annual BAM Fishing Tournament held in conjunction with our End of Summer event.
- \$90,000 allocated for program administration through the Chamber partnership

Overall, BCDA's 2026 priorities are structured to leverage outside funding, strengthen housing and business growth, invest in youth and workforce stability, and enhance infrastructure that supports long-term economic vitality in Boardman.



This two-day event features governance, HR/legal, and risk management content you can use to build practical skills, while also connecting with special district peers from across the state. This event offers both high-value learning and meaningful networking opportunities.

Day One (Board Governance Focus)	Day Two (Human Resources, Legal & Risk Management Focus)
Responsibilities and Requirements of Special District Board Members Get a concise overview of the essential duties of special district board members, emphasizing the legal and ethical standards required for effective governance. Participants will gain clarity on their decision-making authority, statutory responsibilities, and accountability to the public. Key Topics • Ethics and conflicts of interest • Ordinances and resolutions (adoption & use) • Board powers and liability protections • Public meetings & public records requirements • Roles and responsibilities of board members • Budgeting and financial oversight • Core principles of public contracting	HR, Legal, and Risk Management Topics for Managers and Staff Day two of our summit will focus on human resources, legal, and risk management topics important to special districts. These include: • Sex Abuse in Special Districts • Handbooks: The Ongoing Task (Not a One and Done) • The Inspection Process • Driving District Vehicles • Employment ADA: Workplace Accommodations • Employee Leaves: Optional & Required (Oregon's "Leave Swamp")

Register Now!

Dates, Times and Locations

April 14-15: Pendleton - The Vert

June 24-25: Klamath Falls - Running Y*

August 18-19: Redmond - Eagle Crest*

October 13-14: Newport - Hallmark Inn*

9:00 AM – 4:00 PM Each Day

**Room block available*

Registration Information

One Day Only: \$75

Two Days: \$145

Cost includes continental breakfast, lunch, and coffee.

Cancelation Policy

To receive a full refund, cancel your registration at least five (5) business days in advance of your scheduled training date. No shows will be charged.

Register Now!

OWRD to receive \$2.6 million in federal funding for LUBGWMA

By Griffin Beach on Thursday, February 5th, 2026 in Columbia Basin News Columbia Basin Top Stories

SALEM – The Oregon Water Resources Department will receive \$2.6 million in federal funding to bolster well inspections and expand monitoring capabilities in the Lower Umatilla Basin Groundwater Management Area, officials announced this week.

According to the department, \$2 million is earmarked for the design and construction of eight new monitoring wells. These sites are intended to fill critical holes in the agency's existing network. The remaining \$600,000 will fund a comprehensive groundwater analysis, tracking consumptive water use in the basin from 1985 through 2023.

"We thank U.S. Senators Merkley and Wyden for their dedication and ongoing support to address groundwater data gaps in the Lower Umatilla Basin," said Ivan Gall, director of the Oregon Water Resources Department.

Gall noted that the federal investment, paired with ongoing state initiatives, is essential for making "meaningful progress for people who live and work in the region."

The announcement follows the release of the first Oregon Nitrate Reduction Plan annual report. That report highlighted recent state successes, including a backflow education and inspection program for irrigation systems. The department reported that 99% of inspected systems are now in compliance.

Oregon counties want help administering data centers' growing tax breaks

By Mike Rogoway | The Oregonian/OregonLive, Feb. 27, 2026

Oregon counties say they're opposed to Gov. Tina Kotek's economic development legislation because it doesn't provide them financial help to offset the rising costs of administering tax breaks.

Businesses receive hundreds of millions of dollars in Oregon property tax breaks every year through incentives authorized by the state but awarded by local governments. The cost of administering the tax breaks is rising, mostly because of the complexity associated with county assessors valuing one industry — data centers — and managing those incentives.

"The administrative and fiscal impacts of administering enterprise zones have increased with no associated funding from the state," said Kathryn Harrington, chair of the Washington County board of commissioners.

The county estimates it spends \$400,000 annually to manage the local tax break program for businesses in Hillsboro.

Those costs are small compared to the \$85 million in tax breaks Hillsboro gave away to data centers this year through Oregon's standard enterprise zone program. But the county says eight employees collectively devote thousands of hours to managing the incentives every year.

Washington County says it isn't opposed to the incentives in principle but wants the state Legislature to provide a mechanism to help cover the costs. It's not fair, Harrington argues, that the county must pick up the tab for implementing the city's incentives, especially as Washington County navigates a budget squeeze.

"The reality is that taxpayers are getting hit twice—first by the loss of property tax revenue and second by forcing counties across the state to use constrained general fund dollars to administer this statewide program," Harrington said.

Gov. Tina Kotek is pushing an economic development bill before the Legislature that, among other things, would extend property tax breaks in the standard enterprise zone program from five years to as many as 10 years. The governor says she hopes House Bill 4084 will help small businesses but the enterprise zone program primarily benefits data centers. Last year, two-thirds of the giveaways went to that one industry.

Oregon counties are backing an amendment that would require cities awarding tax breaks to negotiate an agreement with counties that would cover the "reasonable cost" of administering the incentives. The Association of Oregon Counties also wants the bill amended to give counties local control over extended property tax breaks.

Washington County says Kotek's office is blocking those proposals, so the counties are opposing HB 4084.

The governor's office didn't respond to a request for comment Thursday on the counties' concerns. But Kotek said earlier this week that she wants to revisit state incentives in 2027, after a panel she appointed to study data centers' impact has completed its work.

The value of Oregon tax breaks is soaring because of giveaways to large data centers. That industry will save more than \$450 million during the current tax year, \$126 million more than in 2025.

Mike Gorman is the assessor in Morrow County, which administers local tax breaks worth more than \$100 million a year for Amazon's local data centers as well as wind and solar farms. He says it's much harder to manage tax breaks for a large, high-value project like a data center than it is to simply levy local property taxes.

"I consider it about 10 times as much work, on average," Gorman said, a burden that is especially high in a small county like his.

Unlike Washington County, Morrow County is a sponsor of its enterprise zone incentives and could have negotiated payments from the companies to help administer the tax breaks. Gorman said the issue is that the state doesn't require such provisions, and it puts the burden on local governments to give up tax revenue and take on the administrative costs of economic development.

"It's overwhelming," he said. "The state, the Legislature, wants to give economic development incentives but they make the local governments and the local communities give all the concessions."

<https://hermistonherald.com/2026/03/02/sage-center-wins-impact-award-for-morrow-county-harvest-festival/>

SAGE Center wins award for Morrow County Harvest Festival

Published 8:30 pm Monday, March 2, 2026, By Hermiston Herald

BOARDMAN — The SAGE Center & Event Center in Boardman was recently honored for the annual Morrow County Harvest Festival during a conference in Seaside. The Sage Center received the Impact Award from the Oregon Festivals & Events Association.

Interim Manager Angel Aguilar and Facility and Event Coordinator Emilio Jaimez attended the conference on Feb. 26-28, joining event professionals and community leaders from across the state to celebrate excellence in festivals, events and community impact.

The Impact Award recognizes the event's influence on the community and its role in bringing families, businesses and organizations together each fall.

In addition, the SAGE Event Center received the Fundraising Event of the Year Award for the Rebuilding Hope Dinner & Auction, an event benefiting the Boardman Food Pantry. The award highlights the event's community support and contributions to local families in need.

Amazon named Sponsor of the Year

The SAGE team also celebrated Amazon as Sponsor of the Year, recognizing the company's financial contributions and continued partnership supporting the SAGE Center & Event Center, as well as the Boardman Food Pantry.

The SAGE Center acknowledged Benjamin Harvey, community engagement coordinator for Amazon, for his leadership, collaboration, and commitment to strengthening community impact through Amazon's partnership.

"This conference was not only a wonderful experience for our team, but also a powerful reminder of what can be accomplished through strong community partnerships and shared commitment," Aguilar said. "These awards truly belong to our sponsors, volunteers, partners, and community members who show up and make these events possible."

The SAGE Center & Event Center remains committed to creating high-quality educational programs, cultural events, and fundraising initiatives that strengthen the Boardman community and the greater Morrow County region.

<https://www.kgw.com/article/news/local/oregon-lawmakers-one-year-tax-break-moratorium-data-centers/283-d6721ffe-abf8-4213-8477-0365a6fea35e> [VIDEO at link]

Oregon lawmakers advance one-year moratorium on tax breaks for data centers

On Monday, an economic incentives bill advanced out of committee with an amendment that would pause tax breaks for new data centers.

by Alma McCarty (KGW), March 2, 2026 (updated March 3)

SALEM, Oregon — In the final week of Oregon’s legislative short session, lawmakers in Salem discussed regulating data centers — specifically, placing a one-year moratorium on certain tax breaks.

Governor Tina Kotek has been looking to expand the state’s enterprise zone program, which is intended to grow Oregon companies and attract new ones. Businesses that locate or expand within designated zones can qualify for property tax exemptions on new investments if they meet eligibility requirements.

However, some advocates argue that extending incentives to data centers may not be sustainable long term.

“Data centers have been around for a while,” said Kelly Campbell, policy director for Columbia Riverkeeper. “Data centers are getting bigger and bigger. Some of these new AI hyperscale data centers are exponentially bigger than those tiny ones. They’re really just using a lot of energy, a lot of water.”

Last week, Columbia Riverkeeper released a report examining data centers operating or planned along the Columbia River in Oregon and Washington.

“I think the question becomes, do we want to stick to our climate goals of getting to 100% renewable? Or do we want to have these big, mega data centers owned by big tech companies — some of the wealthiest corporations in the world — getting to use whatever energy they want? We would say, no, that’s not OK,” Campbell said.

On Monday, lawmakers amended an economic incentives bill to block new data centers from qualifying for certain tax breaks for one year.

“I think this moratorium is a pretty short pause to give the advisory council time and space to do their work,” said Rep. Nancy Nathanson, D-Eugene, during a subcommittee meeting Monday morning.

The Data Center Advisory Committee, convened by Kotek, held its first meeting Friday. The group’s goal is to develop policy recommendations addressing the rapid growth of data centers.

"There are some businesses that will need them, but freestanding data centers, the way we've been growing in the state, is not sustainable," the Governor told reporters during a press conference last week.

On Monday, her office sent KGW a statement regarding the moratorium:

"The moratorium will address immediate concerns and also allow for the Governor's Data Center Advisory Committee to develop recommendations to strategically pursue economic development opportunities while ensuring utility costs, infrastructure investments, and environmental impacts remain sustainable and equitable for all residents."

Supporters of data center growth, particularly in rural communities, also spoke during work sessions.

"This moratorium will have a disparate impact on communities east of the Cascades — communities like Prineville, Hermiston and Redmond that have leveraged enterprise zones and data centers to bring hundreds of living-wage jobs to their communities," said Alexandra Ring, a lobbyist for the League of Oregon Cities.

"While data centers may be seen as a nuisance or inconvenient in Washington County, they are not in Crook County. They are not in Morrow County, in Umatilla County," said Sen. Mark McLane, who represents several Eastern Oregon counties, including Baker, Crook, Grant and Harney.

Even if the House and Senate ultimately approve the moratorium, it would apply only to new data centers — not those that already receive tax breaks or projects currently underway.