

# **CUP 2025-10/ SEPA 2025-18**

**Applicant:** White Bluffs Dairy LLC  
ATTN: Fransisca VanderMuelen  
650 Hornby Rd.,  
Grandview, WA 98930-9202

**Owner:** GME Land LLC  
7090 N Wahluke Rd.,  
Othello, WA 99344-9388

**CUP 2025-10/  
SEPA 2025-18**

PC Staff Report

**FACT SHEET/STAFF REVIEW**

**For a Proposed Conditional Use Permit  
Franklin County Planning Commission  
February 3, 2026**

**NOTE TO PLANNING COMMISSIONERS:  
THIS IS A QUASI-JUDICIAL PUBLIC HEARING  
PLEASE AVOID, AND DISCLOSE, ANY EX-PARTE COMMUNICATIONS (CH 42.36 RCW)**

**Case File:** CUP 2025-10/SEPA 2025-18

**Hearing Date:** February 3, 2026

**Applicant:** White Bluffs Dairy LLC  
ATTN: Fransisca Vander Meulen  
650 Hornby Rd.  
Grandview, WA, 98930-9202  
[fransisca@windmillestates.net](mailto:fransisca@windmillestates.net)

**Property Owner:** GME Land LLC  
7090 N Wahluke Rd.,  
Othello, WA 99344-9388

**Location:** 6201 N Wahluke Rd., Mesa, WA 99343

**Parcel Number(s):** Parcels 121-060-012, 121-060-013, 121-060-075

**Legal Descriptions:** Parcel No.: 121-060-012  
FARM UNIT 16, IRRIGATION BLOCK 201, RECORDS OF FRANKLIN COUNTY, WASHINGTON, EXCEPT THAT PORTION DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHWEST CORNER OF SAID FARM UNIT THENCE NORTH 88°55'24" EAST 1999.66 FEET TO THE TRUE POINT OF BEGINNING. THENCE NORTH 55°20'35" WEST 117.12 FEET; THENCE NORTH 46°01'32" EAST 440.13 FEET; THENCE NORTH 28°59'50" EAST 133.63 FEET; THENCE NORTH 10°57'49" WEST 338.31 FEET; THENCE NORTH 78°50'50" EAST 51.78 FEET; THENCE NORTH 11°24'39" WEST 320.23 FEET; THENCE NORTH 78°26'09" EAST 75.02 FEET; THENCE NORTH 05°40'15" WEST 956.63 FEET; THENCE SOUTH 88°31'25" WEST 64.60 FEET TO THE BEGINNING OF A NON-TANGENT CURVE TO THE LEFT THE RADIUS POINT OF WHICH BEARS SOUTH 49°25'15" WEST 625.00 FEET; THENCE NORTHWESTERLY ALONG SAID CURVE 355.12 FEET THROUGH A DELTA ANGLE OF 32°33'20"; THENCE NORTH 00°28'07" WEST 23.77 FEET; THENCE NORTH 88°31'25" EAST 613.08 FEET TO THE EASTERLY LINE OF SAID FARM UNIT; THENCE SOUTH 00°28'07" EAST ALONG SAID LINE 276.12 FEET TO THE BEGINNING OF A CURVE TO THE LEFT THE RADIUS POINT OF WHICH BEARS NORTH 89°31'53" EAST 1432.50 FEET; THENCE SOUTHEASTERLY ALONG SAID CURVE AND SAID LINE 267.12 FEET THROUGH A DELTA ANGLE OF 10°41'02"; THENCE SOUTH 11°09'09" EAST ALONG SAID LINE 1632.10 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT THE RADIUS POINT OF WHICH BEARS SOUTH 78°50'51" WEST 954.90 FEET; THENCE SOUTHERLY ALONG SAID CURVE 181.25 FEET THROUGH A DELTA ANGLE OF 10°52'30" TO THE SOUTHEAST CORNER OF SAID FARM UNIT; THENCE SOUTH 88°55'25" WEST ALONG THE SOUTHERLY LINE OF SAID UNIT 997.81 FEET TO THE SAID TRUE POINT OF BEGINNING. PARCEL 1 OF RS-1993547

Parcel No.: 121-060-013  
THAT PORTION OF FARM UNIT 16, IRRIGATION BLOCK 201, RECORDS OF FRANKLIN COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHWEST CORNER OF SAID FARM UNIT THENCE NORTH 88°55'24" EAST 1999.66 FEET TO THE TRUE POINT OF BEGINNING. THENCE NORTH 55°20'35" WEST 117.12 FEET; THENCE NORTH 46°01'32" EAST 440.13 FEET; THENCE NORTH 28°59'50" EAST 133.63 FEET; THENCE NORTH 10°57'49" WEST 338.31 FEET;

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THENCE NORTH 78°50'50" EAST 51.78 FEET; THENCE NORTH 11°24'39" WEST 320.23 FEET; THENCE NORTH 78°26'09" EAST 75.02 FEET; THENCE NORTH 05°40'15" WEST 956.63 FEET; THENCE SOUTH 88°31'25" WEST 64.60 FEET TO THE BEGINNING OF A NON-TANGENT CURVE TO THE LEFT THE RADIUS POINT OF WHICH BEARS SOUTH 49°25'15" WEST 625.00 FEET; THENCE NORTHWESTERLY ALONG SAID CURVE 355.12 FEET THROUGH A DELTA ANGLE OF 32°33'20"; THENCE NORTH 00°28'07" WEST 23.77 FEET; THENCE NORTH 88°31'25" EAST 613.08 FEET TO THE EASTERLY LINE OF SAID FARM UNIT; THENCE SOUTH 00°28'07" EAST ALONG SAID LINE 276.12 FEET TO THE BEGINNING OF A CURVE TO THE LEFT THE RADIUS POINT OF WHICH BEARS NORTH 89°31'53" EAST 1432.50 FEET; THENCE SOUTHEASTERLY ALONG SAID CURVE AND SAID LINE 267.12 FEET THROUGH A DELTA ANGLE OF 10°41'02"; THENCE SOUTH 11°09'09" EAST ALONG SAID LINE 1632.10 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT THE RADIUS POINT OF WHICH BEARS SOUTH 78°50'51" WEST 954.90 FEET; THENCE SOUTHERLY ALONG SAID CURVE 181.25 FEET THROUGH A DELTA ANGLE OF 10°52'30" TO THE SOUTHEAST CORNER OF SAID FARM UNIT; THENCE SOUTH 88°55'25" WEST ALONG THE SOUTHERLY LINE OF SAID UNIT 997.81 FEET TO THE SAID TRUE POINT OF BEGINNING. PARCEL 2 OF RS-1993547

Parcel No.: 108-060-042

PTN SHORT PLAT 99-08 LOT 2 LY NLY & ELY OF FDL: COMM AT NW COR SD LOT 2; TH N89D55'E ALG N LN SD LOT 2, 1552.71' TO TPOB SD LN; TH S00D04'E, 100.93' TO BEG OF CUR TO RT, RAD PT BEARS S19D41'W, 1553.97'; TH SELY THRU CTRL ANG 37D43' ALG SD CUR, 759.93'; TH S00D04'E, 690.36'; TH N89D55'E, 373.88' TO WLY R/W LN OF N WAHLUKE RD & END OF SD LN.

**Comp. Plan Use:** The Comprehensive Plan designation is Agricultural.

**Zoning:** The County Zoning is Agricultural Production 20 acres (AP-20).

**SEPA Determination:** The applicant provided a SEPA checklist. Staff verified the information in the checklist. The County has issued an Optional Mitigated Determination of Non-Significant (ODNS/NOA-M) under WAC 197-11-355. A SEPA threshold determination was issued on November 12, 2025, by the Franklin County responsible official.

**Project Description:** The proposed development is for the expansion and reconfiguration of the existing 700-cow milk dairy to accommodate a 9,500-cow herd size. Demolition of the current milking parlor, animal corrals, cow shade and other miscellaneous outbuildings will be part of this project. Approximately 113 acres of feed crop production ground will be converted to dairy-production ground.

The following structures are also proposed in this project: approximately 57,000 sq. ft. milk parlor building, twelve (12) open-lot corrals, six (6) 1,100 ft. long concrete lanes for each corral's feed alley, expansion of five (5) existing 6,000 sq. ft. free stall barns, a 12,800 sq. ft. commodity barn with maintenance shop facilities, two (2) 10,000-gal diesel fuel above ground storage tanks, a paved driveway/parking area with approximately 20 parking spaces, a liquid manure processing and storage system, and a manure solids and compost storage area.

**Suggested**

**Recommendation:** **POSITIVE** recommendation with **six (6) suggested findings of fact and thirty (30) conditions of approval**

**Suggested Motion:** "I move to forward CUP 2025-10 / SEPA 2025-18 to the Board of County Commissioners with a **POSITIVE** recommendation based on the six (6) suggested findings of fact and thirty (30) conditions of approval."

Vicinity Map – **SUBJECT PROPERTY:**



**Image 1: Proposed Project Location**

**PUBLIC NOTICE:**

- The Planning staff emailed review requests to agencies for the SEPA ODNs/NOA-M on **November 13, 2025.**
- The Planning staff mailed notices to Property Owners within a one-mile (1 mi) radius for the SEPA ODNs/NOA-M on **November 13, 2025.**
- The Public Notice was published in the *Franklin County Graphic* for the SEPA ODNs/NOA-M on **November 13, 2025.**

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- The Planning staff mailed notices to Property Owners within a one-mile (1 mi) radius for the CUP Public Record Hearing on **January 15, 2026.**
- The Public Notice was published in the *Franklin County Graphic* for the CUP Public Record Hearing on **January 15, 2026.**

**APPLICABLE STANDARDS/CODES:**

- 1) Title 14 – Development Code Administration
- 2) Title 17 – Zoning:
  - a. Chapter 17.10 – Agricultural Production 20-acres, AP-20
  - b. Chapter 17.82 – Special Use Permits
- 3) Title 18 – Environment:
  - a. Chapter 18.04 – State Environmental Policy Act Guidelines
- 4) 2018-2038 Franklin County Comprehensive Plan
- 5) Franklin County Ordinance 8-2008 “Right to Farm”
- 6) Franklin County Resolution 2001-238, Odor and Fly Control Guidelines

**STAFF ANALYSIS:**

The Planning & Economic Development Department received a Conditional Use Permit (CUP) application from the White Bluffs Dairy LLC for the expansion and reconfiguration of the existing 700-cow milk dairy to accommodate a 9,500-cow herd size. The application includes the demolition of some existing structures and construction of other structures and amenities to support the dairy expansion.

**Existing Site Operations**

The current site operates as a 700-cowhead dairy farm and produces feed crops from the agricultural ground. Existing infrastructures include the following:

- One 5,300 sf herringbone milking parlor
- Five 6,000 sf free-stall barns
- Nine animal pens
  - Four with shades
  - Five without shades
- One 4,000 sf commodity barn
- One 2.5-million-gallon waste storage pond (WSP)
- One 1,500 sf office building
- One 1,200 sf manager’s residence

The adjacent 132-acre agricultural field to the west of the existing dairy is used to produce feed crops.

**Proposed Project: Demolition**

The current milking parlor, animal corrals, cow shades, and some miscellaneous outbuildings will be demolished as part of the proposed project. The existing freestall barns, commodity barn, office building, and manager’s residence will be kept.

**Proposed Project: Grading & Ground Preparation**

Approximately 113 acres of farmland located on Parcel 121-060-012 will be converted to dairy-production ground. The ground will be cleared, grubbed, graded, and compacted prior to construction. Excavation will be performed to accommodate underground piping, utilities, footing excavation, collection sumps, waste storage ponds, and portions of site grading.

Maximum earth movement is approximately 200,000 to 300,000 cubic yards. Fill material will be determined by a WA licensed professional geotechnical engineer. Fill sources are not yet determined at this time, however, all imported fill materials will come from a county-approved material source.

**Proposed Project: Construction**

The following structures will be constructed:

- An approximately 57,000 sf milk parlor building containing:
  - An 86-stall rotary milking parlor capable of milking 8,000 cows per day
  - Milk cooling and holding area with three 30,000-gal milk storage tanks
  - A special needs “hospital” facility
- Twelve (12) open-lot corrals (pens) holding 700 cows each
- Twenty (20) cow shades
- Six (6) 1,100-foot-long concrete lanes serving each corral’s feed alley
- Expansions of the five existing 6,000 square foot freestall barns ranging from 3,680 to 4,480 sf in size. The expansion will bring the total size range of the freestall barns to around 10,180 to 10,980 sf. The barns will be configured to use scrape and vacuum methods for manure collection.
- A 12,800 sf square foot commodity barn with maintenance shop facilities and two 10,000-gal diesel fuel aboveground storage tanks
- A paved driveway/parking area from Wahluke Road with parking space for approximately 20 vehicles.
- A liquid manure processing and storage system consisting of:
  - A manure reception/collection pit
  - A manure solids separation system consisting of four (4) screw press separators
  - Two settling basins for additional solids precipitation from the separated liquid
  - Two synthetically lined 15-million-gal waste storage ponds meeting the WA Department of Ecology CAFO permit requirement
  - A manure solids and compost storage area consisting of a graded and compacted soil pad

A complete summary of proposed buildings is below:

ITEM	DESCRIPTION	DIMMENSIONS (ft × ft)	TOTAL AREA (sf)
1	WASTE WATER STORAGE POND A	300 × 600	180,000
2	WASTE WATER STORAGE POND A	300 × 600	180,000
3	COMPOST STORAGE AREA	300 × 1,250	375,000
4	SEPARATOR BUILDING	40 × 50	2,000
5	COW SHADE	50 × 340	17,000
6	COW SHADE	50 × 340	17,000
7	COW SHADE	50 × 340	17,000
8	COW SHADE	50 × 340	17,000
9	COW SHADE	50 × 340	17,000
10	COW SHADE	50 × 500	17,000

11	COW SHADE	50 × 340	17,000
12	COW SHADE	50 × 340	17,000
13	COW SHADE	50 × 340	17,000
14	COW SHADE	50 × 340	17,000
15	COW SHADE	50 × 240	12,000
16	COW SHADE	50 × 240	12,000
17	COW SHADE	50 × 240	12,000
18	COW SHADE	50 × 150	7,500
19	COW SHADE	50 × 175	8,750
20	COW SHADE	50 × 375	18,500
21	COW SHADE	50 × 375	18,500
22	COW SHADE	50 × 375	18,500
23	COW SHADE	50 × 375	18,500
24	COW SHADE	50 × 375	18,500
25	MILKING BARN	154 × 368	56,672
26	FREESTALL BARN ADDITION <sup>1</sup>	20 × 184	3,680
27	FREESTALL BARN ADDITION <sup>1</sup>	20 × 192	3,840
28	FREESTALL BARN ADDITION <sup>1</sup>	20 × 200	4,000
29	FREESTALL BARN ADDITION <sup>1</sup>	20 × 208	4,160
30	FREESTALL BARN ADDITION <sup>1</sup>	20 × 224	4,480
31	COMMODITY BARN	40 × 320	12,800

<sup>1</sup> – Total freestall barn size is the indicated addition length and square footage plus the existing barn length (300 feet) and square footage (6,000 sf)

**Table 1: Proposed Buildings for the Dairy Expansion**

**Proposed Project: Water**

Currently two wells supply water to the operating facility:

- A 6-inch well located west of the milking parlor
- A 6-inch well located near the manager’s residence

Water for the project will be withdrawn from wells for: (1) domestic water use; (2) industrial uses including non-transient, non-community (NTNC) public water system used; and (3) stockwater purposes. Domestic and industrial uses will not exceed 5,000 gal per day. The applicant estimates that stockwater withdrawals, based on the rough assumption of 25 gal per day per cow of water consumption, will be approximately 0.75 acre-feet per day.

**Proposed Project: Sewage and Septic**

Two septic systems will be present at the project site:

- The milking parlor system
- The manager’s residence system

Only human-generated domestic sewage (blackwater) will be discharged into the parlor system septic tank. “Industrial” wastes and greywaters from milking operations are discharged to the waste storage ponds. The size of the parlor system tank is expected to be 1,500 gallons. The manager’s residence system is expected to be 1,000 gal in size.

**Proposed Project: Traffic**

A Traffic Impact Analysis (TIA) was requested by the Franklin County Public Works Department as part of the CUP/SEPA review process. Public Works indicated in their comment per review of the TIA that the dairy expansion will have a significant impact on the County Roads and are requiring conditions to be met in order to mitigate for the dairy's impacts to the County Road system.

**Franklin County Right to Farm Ordinance**

Per FCC 5.12, "Franklin County finds that agricultural activities conducted on farmland ... are often subjected to nuisance lawsuits ... It is therefore the purpose of this chapter to provide that agricultural activities conducted on farmland ... be protected from nuisance lawsuits.

"Agricultural activities conducted on farmland, if consistent with good agricultural ... practices, are presumed to be reasonable and shall not be found to constitute a nuisance unless the activity or practice has a substantial adverse effect on public health and safety. An agricultural activity that is in conformity with such laws and rules shall not be restricted as to the hours of the day or day or days of the week during which it may be conducted."

FCC 5.12.040 defines "agricultural activity" as "a condition or activity which occurs on a farm in connection with the commercial production of farm products" and "includes, but is not limited to ... noise; odors; dust; fumes; operation of machinery ... roadway movement of equipment and livestock ... and construction and maintenance of buildings, fences, roads ... and similar features ... The term includes use of new practices and equipment consistent with technological development within the agricultural industry."

As applicable here, the proposed dairy expansion to approximately 9,500 head would involve "noise," "odors," "dust," "fumes," "operation of machinery," "roadway movement of equipment and livestock," and "construction and maintenance of buildings ... roads ... and similar features," and these activities are "presumed to be reasonable" if "consistent with good agricultural ... practices," and "shall not be found to constitute a nuisance unless the activity or practice has a substantial adverse effect on public health and safety."

**Franklin County Odor & Fly Control Guidelines**

Odor and Fly Control Guidelines adopted by the Board of County Commissioners (County Resolution 2001-238) are applicable to this dairy expansion. The following are important guidelines that were followed in reviewing this application:

- i. County Resolution 2001-238 identified as the Franklin County Odor and Fly Control Guidelines for Livestock and Poultry Operations states: "Franklin County understands the importance of managing odor and nuisance issues to a reasonable extent as they relate to Livestock and Poultry Operations" (County Resolution 2001-238);
- ii. A Conditional Use Permit is required for dairy operations greater in size than 500 (headcount).
- iii. General Philosophy: "No Livestock operation can be 100% odor free." "Zoning should be used to avoid conflict where possible";
- iv. Introduction: "Elimination of odor from livestock and associated facilities is not realistic. Odors of some sort will always be produced and are usually released to the environment"; "What can be evaluated and possibly changed is the frequency of odor occurrences, the duration of the odor, the intensity of the odor and negative perceptions by some neighbors";

- v. Selection of a Site: “Many operations are already situated close to neighbors and major roads. Such farms should be examined to identify potential problems and ways to avoid them by modifying the collection, processing, storage, and disposal of manure. This is especially important when considering the upgrading or expansion of an existing site.”

**Nutrient Management Plans**

Nutrient Management Plans (NMP) are designed to satisfy the requirements of Washington State's Dairy Nutrient Management Act. The Department of Agriculture approves the plans, has the following objectives as it relates to Nutrient Management Plans: “Preventing discharge of contaminated waste water to streams, drainage ditches, or other surface waters from the facility; Preventing migration of contaminants from the facility to the underlying aquifer; Using facility nutrients to supply crop nutrient needs at rates and times tailored to reach realistic yield goals; Meeting the requirements of the Dairy Nutrient Management Act of 1998, the Clean Water Act and compliance with Federal, State And local laws regarding water quality standards” (Dept. of Agriculture-Livestock Nutrient Management Program Website).

- i. Nutrient management plans focus on water quality-related issues as described above. Enforcement of approved Nutrient Management Plans is the responsibility of the Washington State Department of Agriculture.
- ii. Requirements of a Dairy Nutrient Management Plan will help address the potential for buildup of nitrates and nutrients in the soil.
- iii. The applicant will submit an NMP to the Franklin Conservation District for review as required by the Revised Code of Washington RCW Chapter 90.64. A copy will be submitted to the Franklin County Planning Department.

**General Discharge Permit / Concentrated Animal Feeding Operation (CAFO) Permit**

The Federal Clean Water Act created a National Pollutant Discharge Elimination System (NPDES) Program to protect and improve water quality by regulating point source dischargers. Point source dischargers are operations that discharge pollutants from discrete conveyances directly into waters of the United States. Point source dischargers are regulated by NPDES permits.

The NPDES permit for livestock operations is called the Concentrated Animal Feeding Operation (CAFO) permit. An NPDES CAFO is a no discharge permit. The permit:

- prohibits discharges except under certain limited conditions
- sets requirements designed to protect water quality such as management practices and recordkeeping requirements

The applicant will prepare and submit to Ecology a Manure Pollution Prevention Plan (MPPP) as required by Special Condition of the CAFO permit. The MPPP provides framework of actions, practices, and guidance to limit potential for discharge of manure, litter, process wastewater, organic by-products, and other possible sources of pollution from a CAFO to waters of the United States and Washington State for purposes of complying with federal and state water quality standards.

A copy of the CAFO permit and the MPPP shall be submitted to the Franklin County Planning Department.



Image 2: Proposed Expansion Layout

## SEPA ENVIRONMENTAL REVIEW

On November 11, 2025, a SEPA Notice of Application Optional Determination of Mitigated Non-Significance was issued by the Lead Agency. Comments were due on November 28, 2025. The Washington State Department of Ecology filed the Notice of ODN/NOA-M under SEPA #202504758 on the SEPA Register.

### PUBLIC COMMENTS:

The Planning & Economic Development Department received eight (8) comments from surrounding property owners and residents within the county.

- 1) **Jeffrey & Angie Hawkins:** *Comment received on November 28, 2025.*
  - a. Negative impacts on my sweet cherry orchard:
    - i. Birds: dairies bring increased bird populations which hurt fruit production. Starlings and Robins currently cause thousands of dollars of damage in my orchard each year despite efforts to keep them away. Increased bird damage could be catastrophic. The Washington State Fish & Wildlife recommends removing sources of food for birds, but dairies are a 24/7/365 “all you can eat buffet” which will bring more birds.
    - ii. Flies: Dairies bring increased flies/insects which are a nuisance and can damage fruit.
    - iii. Smell: Hydrogen Sulfide and Ammonia in high amounts inhibit tree growth and stress otherwise healthy trees.
  - b. Negative Impacts on my neighborhood:
    - i. Smell: Foul odors limit outdoor enjoyment and can even penetrate inside my home if the wind blows from the north. We purchased our home long after the existing dairy was in place, so we knew we would occasionally experience unpleasant odors. We did not anticipate the dairy growing 13.5 times larger and moving to within .6 miles of us.
    - ii. Noise: Currently this is not a problem, but I’ve never lived next to 9,500 cows so I am concerned of what this may become from, cows, machinery and equipment operating 24/7/365.
    - iii. Flies: We currently have a very undesirable amount of flies and the idea of 13.5x more cows and manure could make this exponentially worse.
    - iv. Manure spread on fields and roads: I want to be able to traverse the public roads without bringing manure back into my garage.
    - v. Light pollution: not currently a problem but could be with expansion.
    - vi. Decreases value of home and land: Having a large dairy makes all the land around it less desirable for habitation and fruit production.
  - c. I have outlined my very real concerns, so White Bluffs Dairy and Franklin County ensure available remedies are implemented to mitigate the negative impacts of this massive proposed expansion. If the negative effects cannot be mitigated and the current status quo maintained, I would ask that White Bluff Dairy find a different location to expand.

2) **Roberto & Hilda Garcilazo:** *Comment received on November 28, 2025.*

- a. We have serious concerns that this particular proposal will have a major impact on our existing property and our quality of life. Not only for us but for the residents around the area as well.
- b. These are the concerns Mr. & Mrs. Garcilazo laid out regarding environmental impacts of the dairy:
  - i. Air Quality Impacts
    - Odors: Decomposing manure releases strong, persistent odors that can travel long distances and affect daily living.
    - Ammonia emissions: Ammonia from manure and urine can irritate eyes, throat, and lungs.
    - Particulate matter (dust): Dry manure, feed, bedding, and dirt can become airborne and reduce air quality.
  - ii. Water Contamination Risks
    - Groundwater pollution: Nitrates from manure can seep into groundwater, potentially affecting drinking water wells.
    - Surface water runoff: Rain can wash manure, urine, and silage leachate into nearby canals, irrigation systems, and waterways.
    - Nutrient loading: Excess nutrients (nitrogen and phosphorus) can contribute to algae growth and lower water quality.
  - iii. Soil Degradation
    - Manure overload: Too much manure applied to land can lead to soil imbalance and nutrient saturation.
    - Chemical runoff: Dairy operations often use disinfectants, pesticides, and cleaning agents that can accumulate in soil.
  - iv. Increased Pest Attraction
    - Flies: Manure and feed attract large populations of flies, which become a nuisance and can carry pathogens.
    - Rodents: Feed storage areas often draw rodents, posing additional sanitation issues.
  - v. Noise Pollution
    - Heavy machinery: Tractors, loaders, generators, and equipment run daily and often early in the morning or late at night.
    - Truck traffic: Feed deliveries, milk trucks, and manure hauling create consistent noise.
  - vi. Light Pollution
    - Bright facility lights: Outdoor dairy lights, especially if operating 24/7, can brighten surrounding residential areas at night.
  - vii. Increased Traffic & Road Impacts
    - Semis, tractors, and farm equipment: Frequent heavy vehicles increase road wear, damage pavement, and create safety hazards.

- Dust from traffic: Dirt roads or busy driveways generate large amounts of fine dust that drift onto nearby properties.
- viii. Public Health Concerns
- Bioaerosols: Microorganisms from manure, dust, and animal dander can become airborne and cause respiratory irritation.
  - Pathogen transmission: In rare cases, bacteria like E. coli or Salmonella can travel through water or dust.
- ix. Visual Impacts
- Unsightly views: Manure piles, feed bins, lagoon ponds, and animal pens can drastically alter the scenery around a home.
- x. Property Value Decline
- Perceived risk: Homes near dairies often see lower resale value due to odor, noise, and environmental concerns.
  - Reduced desirability: Buyers may avoid homes close to agricultural operations with high environmental impact.

3) **April Alexander:** *Comments received November 28, 2025 & January 26, 2026*

- a. Have studies been done about the impact on:
- i. Traffic – more construction, moving of cattle, more employees, more milk trucks day and night.
  - ii. Groundwater – pollution of our wells, scarcity of water. Dairies use a very large amount of water. Their requirements can stress or deplete groundwater tables, shared by neighboring residents. A 9,000 cow dairy can have 5 wells.
  - iii. Drainage – poor draining soil. One of the current dairy houses kept flooding and a sump pump was installed. Houses and dairy has had problems.
  - iv. Noise pollution – mooing cows at 2 in the morning, heavy equipment, dump trucks, loaders, feeding equipment. Loud four wheelers for employees to use.
  - v. Light pollution – many large heavy duty lights, day and night.
  - vi. Fly control – where there’s manure and urine, there’s flies. It’s a fact of life. They are always around even with fly control measures. Biting flies transmit diseases as well as landing on food with their dirty feet.
  - vii. Honeybee impact for pollinating other crops.
  - viii. Air quality – for honeybees as well as people and other animals. Odors can cause serious adverse health effects. People are more sensitive than ever in today’s world without deliberately adding more complications. Even with new and improved dairy technology, there are some odors.

- ix. Labor- employees. Availability, as well as more housing and traffic. A 9,500 cow dairy requires approximately 100 employees. It will currently create jobs here, but the overall impact is too high for sustainability. And as the dairy market declines further, they'll try adding more cows. But the company won't be able to afford more workers. This will impact the day to day operations as the staff falls further and further behind and the overall cleanliness and quality goes downhill.
- x. Property values usually go down. Nobody wants to live near a dairy.
- xi. Dairy worker habits – depends upon the owners and how they manage their employees. Trash blows onto my property and others around me. Everything from silage plastic storage tunnels to soda cans, water bottles, chips and snack wrappers, beer cans, and assorted trash. Recently, this summer of 2025, it built up in my drainage pond line and created a gate. It required a full day of cleanout and approximately a \$10,000 bill. It greatly impacted our day to day farming operation through no fault of our own. And produced a substantial bill that the clean out companies (more than one) gave to us.
- xii. Where are they proposing to build it? By the road again or further out in the field?

4) **Tyler Hawkins:** *Comments received November 28, 2025 & January 26, 2026.*

- a. I believe that a dairy of this size/scope is akin to a massive industrial complex. I'd prefer not to live next to a massive industrial complex with 24-hour a day semi-truck traffic, noise from pumps, heavy equipment, and 9,500 cows. I assume that this dairy will also have a massive amount of lighting for operations during the night. I currently quite enjoy living where I live with it getting dark at night and being able to see the stars. I know that I would still be able to see the stars, but probably not as well with the amount of lights this dairy will likely have.
- b. A dairy of this size will bring with it an increased amount of unpleasant smell and increased pests like flies, starling birds, and other rodents. This property borders an orchard that I'm sure will see negative effects of being next to a dairy. There are several other orchards in the neighborhood that could also be negatively affected.
- c. I am not a water expert, but I am concerned about the potential for contamination of groundwater and the domestic wells that are currently in the surrounding area. Also the potential for some of these wells to become depleted when large wells are drilled for this dairy. Has that been taken into consideration?
- d. How will the manure be managed? I am not an expert about manure, but I have observed that how a dairy manages the manure produced can make a big difference in smell and how much of it ends up on N. Wahluke and Filbert rd.

5) **Alan & Cheryl Hawkins:** *Comments received November 28, 2025.*

- a. On a personal basis, my concerns are the smell, house flies, noise and light at night. I don't mind smelling a dairy on an occasion. I have come to expect it. Currently on a normal day I do not smell the "dairy smell" and I do not want my house to smell like I'm living in/on a dairy on a daily basis. In our neighborhood, we already have a very large house fly

population. I can only assume that with 13 times the cows there will be 13 times the population, but I may be ignorant, and would love to be educated on what steps are taken to manage flies and the smell. Currently, there is already noise from the dairies that I live next to. I do not find it overly obnoxious and most of the time it's just background noise. I am concerned with this larger operation that the noise level will be much greater and noticeable. We currently also get to enjoy a mostly dark sky, and I am concerned that with this larger facility there will always be a halo of light on the horizon.

- b. For my livelihood, I own and operate a fruit farm. Some or all (I don't know for sure) of the field drains that run into one of my irrigation ponds begin at the location of this proposed dairy, and I am deeply concerned about water quality. I admit, I am ignorant, and would love to be educated on how steps are being taken or will be taken to make sure the drain water stays clean if this extremely large dairy does go in.
  - c. Another major concern I have for my business is an increased of bird pest. I already sustained an abundant amount of damage due to birds. I am concerned that with a larger amount of feed the already large and in my opinion out of control bird population will only get worse. I already sustain significant damage due to birds on many of my fruit crops. If this proposed dairy truly does bring in a larger bird population, I will have a larger loss to my crop every year. In addition to the crop damage the birds make a huge mess in and on all of my buildings. I already feel like I'm at war with them trying to keep my facilities, food safe. As bird populations rise they become more desperate for places to nest and more persistent.
- 6) **Brian Hawkins:** *Comments received November 28, 2025.*
- a. Increased population of birds, flies and other pests. These species cause harm and bring disease to orchards. This will negatively affect the quality and quantity of fruit produced, and therefore impact the sales and livelihood of only family's business.
  - b. Ground water contamination. Our farm irrigates from a field drain that begins in the same location as the proposed expansion. This puts our water source at risk of contamination.
  - c. Increase in lights, smells, and noise.
  - d. Increase in truck traffic.
- 7) **Landon Rowley:** *Comments received December 2, 2025.*
- a. The irrigation drains that run through that parcel come feed into our lot. The drain water availability has already been restricted by our neighbors with this additional expansion that usage may be reduced again making it harder to water our own orchards.
  - b. In addition, there is a lot of (13.5x times more) waste from a project like this. where is that going to go... I'm concerned that it would contaminate that water source. What do they do with all the manure and or dead carcasses.
  - c. We have some of our current orchards neighboring other dairies and due to the smell, increased pests, and flies directly next to the dairy have always struggled to produce stronger healthier trees... a larger dairy concerns me that those effects might become more widespread and harder to control.

- d. 4. Birds! Dairies and feedlots are notorious for having tons of starlings, black birds and other birds. With a larger dairy next to us these pressures will only increase making it more difficult to keep the birds out of our orchards and away from the cherries, apples, and peaches.
  - e. Labor! There is a fairly evenly balanced labor force in this area. A large dairy will monopolize that force potentially pulling them away from the current businesses. Up until now we have been able to meet our needs by hiring and providing jobs to over 500 people throughout the harvesting season as they rotate from asparagus to sweet cherries, tarts, then apples and peaches. I believe that has been a great blessing to many of the local families over the last 30 years... We have not needed to hire any H2A workers to fill our needs and if this dairy comes to fruition I'm concerned we would need to seriously look at that as labor will not be as readily available. Not to mention the changes to the schools and surrounding areas.
- 8) **Erika Romjue:** *Comments received December 5, 2025.*
- a. Water Availability and Usage
    - Basin City and surrounding areas already face limited water resources.
    - A large-scale dairy would require significant water for livestock, cleaning, and waste management, potentially straining existing supplies.
    - Overuse of groundwater could impact local residents, farms, and long-term sustainability.
  - b. Odor and Air Quality
    - Dairy operations produce strong odors from manure storage and handling.
    - Prevailing winds could carry these smells into nearby neighborhoods, reducing residents' quality of life.
    - Airborne emissions, including ammonia and methane, may also contribute to environmental and health concerns.
  - c. Waste Management and Environmental Impact
    - Large dairies generate substantial manure and wastewater.
    - Improper handling could lead to runoff into canals, rivers, or groundwater, contaminating drinking water and harming ecosystems.
    - The risk of spills or leaks from lagoons poses a long-term hazard to soil and water quality.
  - d. Traffic and Infrastructure
    - Increased truck traffic for feed delivery, milk transport, and waste hauling could strain local roads.
    - Noise, dust, and safety concerns for residents and schoolchildren should be carefully considered.
  - e. Community Livability
    - The combination of odor, water strain, and traffic may reduce property values and discourage future growth in Basin City.

- Residents deserve assurance that their health, safety, and environment will not be compromised.

**AGENCY COMMENTS/CRITERIA FOR FINDINGS OF FACT:**

1) **Washington Department of Ecology:** *Comment received on November 26, 2025*

a. Air Quality Program

Depending on the potential emissions from the diesel fuel storage tanks and the composting operations, a Notice of Construction (NOC) application may need to be submitted. Emission permitting thresholds can be found in Washington Administrative Code (WAC) 173-400-110 and 173-460-150. The NOC application form can be found at Ecology's website.

b. Solid Waste Management Program

The applicant proposes to demolish existing structures. Item B.7.a of the checklist asks if there are any environmental health hazards that could occur as a result of the proposal. Improper disposal of solid waste, including demolition waste, can result in environmental health hazards. We encourage the applicant to salvage, reuse, and recycle as much of the waste as possible. Recycling demolition debris is typically less expensive than disposal. Otherwise, the demolition waste must be disposed of at a permitted solid waste facility.

c. Water Quality Program

Operators of construction sites that disturb one acre or more total area and has, or will have a discharge of stormwater to a surface water or to a storm sewer, must apply for coverage under Department of Ecology's Construction Stormwater General Permit.'

If soil or ground water contamination is known at the site, additional information will be required. The applicant will be required to submit additional studies and reports including, but not limited to, temporary erosion and sediment control plans, a stormwater pollution prevention plan, a site map depicting sample locations, a list of known contaminants with concentrations and depths found and other information about the contaminants.

Application should be made at least 60 days prior to commencement of construction activities. A permit application and related documents are available online.

d. Water Resources Program

The Ground Water Permit exemption under RCW 90.44.100 does not apply if one of the below definitions applies to the proposed project.

RCW 90.03.015

The definitions in this section apply throughout this chapter unless the context clearly requires otherwise.

(1) "Department" means the department of ecology.

(2) "Director" means the director of ecology.

(3) "Municipal water supplier" means an entity that supplies water for municipal water supply purposes.

(4) "Municipal water supply purposes" means a beneficial use of water: (a) For residential purposes through fifteen or more residential service connections or for providing residential use of water for a nonresidential population that is, on average, at least twenty-five people for at least sixty days a year; (b) for governmental or governmental proprietary purposes by a city, town, public utility district, county, sewer district, or water district; or (c) indirectly for the purposes in (a) or (b) of this subsection through the delivery of treated or raw water to a public water system for such use. If water is beneficially used under a water right for the purposes listed in (a), (b), or (c) of this subsection, any other beneficial use of water under the right generally associated with the use of water within a municipality is also for "municipal water supply purposes," including, but not limited to, beneficial use for commercial, industrial, irrigation of parks and open spaces, institutional, landscaping, fire flow, water system maintenance and repair, or related purposes. If a governmental entity holds a water right that is for the purposes listed in (a), (b), or (c) of this subsection, its use of water or its delivery of water for any other beneficial use generally associated with the use of water within a municipality is also for "municipal water supply purposes," including, but not limited to, beneficial use for commercial, industrial, irrigation of parks and open spaces, institutional, landscaping, fire flow, water system maintenance and repair, or related purposes.

(5) "Person" means any firm, association, water users' association, corporation, irrigation district, or municipal corporation, as well as an individual.

**2) Washington Dept. of Transportation – South Central Region:**

a. No comments received.

**3) Washington State Dept. of Archaeology and Historic Preservation (DAHP):**

a. No comments received.

**4) Washington State Dept. of Fish and Wildlife (WDFW):**

a. No comments received.

**5) Washington State Dept. of Natural Resources**

a. No comments received.

**6) Confederated Tribes and Bands of the Yakama Nation**

a. No comments received.

**7) Confederated Tribes of the Umatilla Indian Reservation**

a. No comments received.

**8) Confederated Tribes of the Colville Reservation**

- a. No comments received.

**9) Confederated Tribes of the Warm Springs**

- a. No comments received.

**10) Nez Perce Tribe**

- a. No comments received.

**11) Benton-Franklin Health District**

- a. No comments received.

**12) Big Bend Electric**

- a. No comments received.

**13) South Columbia Basin Irrigation District:** *Comments received November 26, 2025.*

- a. There currently exist multiple exposed manholes for the buried drain systems across the project site. These manholes must be protected from impact by equipment or livestock and the also need to be protected from the potential intrusion of waste materials from the dairy operation. These buried drains are not for waste disposal, intentional or unintentional and must be protected.
- b. Please include the South Columbia Basin Irrigation District WB10A lateral in the SEPA section 3.a.1. This canal serves over 800 acres downstream of this site and any operational waste water from this canal system proceeds into the WB10A WW which discharges into the Wahluke Ponds and eventually into the Columbia River to the west.
- c. Given the size of the waste ponds and the compost pile and their proximity to the WB10A lateral, SCBID is very concerned about the potential release of effluent and the blowing of the composted material which could enter the canal. Mitigation measures must be taken to prevent any effluent or solid waste from entering that lateral. SCBID needs to understand how the site will be graded and what the plan for a potential overtopping event of the waste ponds is. Will that effluent be directed into an undeveloped portion of the site or another area and what measures will be in place to confirm such action. One action that would reduce our concerns would be for the applicant to pipe the WB10A lateral near the pond and compost pile location to provide mitigation of such concerns.
- d. Section 3.a.1 of the SEPA indicates that the WB5WW1 drains into the WB5 and ultimately into the Wahluke Branch Canal (WBC). This is backwards from how things work in the field. The WBC flows into the WB5 which then flows into the WB5WW1, and the reservoir noted in the SEPA. The water in the reservoir is released past the dike near Wahluke Road and flows in a general southernly and westerly direction until it discharges into the Columbia River near Savage Island.

- e. SCBID believes that if industry standards and typical mitigating measures are employed in relation to this expansion, the risk of impact should be minimal. There is, however, a real risk of detrimental impact to adjacent parcels and the environment if those measures fail and effluent or solid waste is released impacting buried drains or the canal system in the area.

**14) Franklin County Public Works Department:** *Comments received on November 20, 2025 and January 27, 2026.*

- a. An Public Works has concluded that the proposed use will increase the impact on the County Road System. Public Works has the following general comments:
  - i. A head count increase will require a Traffic Impact Analysis (TIA) to be completed together with upgrades and/or mitigation fees for the County Road System. The TIA shall include County Roads impacted by this increase and at a minimum include N Wahluke Road, adjacent to the site, to the State Route.
  - ii. Approach permits are required for all access to Franklin County roads per the County Road Approach Policy (Resolution No. 2014-123) and any existing approaches must be brought up to current design standards. Requirements include required permits, approach construction, minimum design standards, etc. per Franklin County Design Standards for the Construction of Roads and Bridges (Resolution 2002-270).
  - iii. Any utility extension crossing Franklin County roads will be addressed at the time of application. See Accommodation of Utilities on County Road Right-of-Way for more information (Resolution #2000-330).
- b. Public Works has reviewed the Traffic Impact Analysis for SEPA 2025-18 and concluded the proposed expansion will have a significant impact and shall be required to abide by all road restrictions in place during freeze / thaw conditions on county roads not meeting an all-weather standard. All truck traffic shall be restricted to all-weather roads for the conditional use permit.
  - i. The developer is required to upgrade the approximately 0.6-mile section of N. Wahluke Road adjacent to the facility that is categorized as a Rural Local Access Road and not constructed to an all-weather standard unless another route is proposed for truck traffic. For a general estimation, the approximate cost is \$1 Million per mile.
  - ii. For that section of N Wahluke Road, categorized as Rural Minor Collector, the developer has the following options, unless another route is proposed for truck traffic:
    - (a) Upgrade the approximately 3.1-mile section of N. Wahluke Road from Filbert Road to Sagehill Road to an all-weather standard. Upon

completion, this would allow continued movement during any road restrictions that would be in place for non-all-weather roads.

- (b) Abide by all road restrictions in place during freeze / thaw conditions on county roads not meeting an all-weather standard and pay a one-time mitigation fee equal to 50% of an engineer's estimate to upgrade to an all-weather standard. In lieu of actually completing all improvements, the developer may provide the county with a bond, cash or irrevocable line of credit in an amount equal to one hundred twenty-five (125) percent of an engineer's estimate.

Public Works can apply for grant funding for roads categorized as Rural Minor Collector that are on the Six-year Transportation Improvement Program (TIP). Public Works can request that the Board of County Commissioners add N Wahluke Road from Filbert Road to Sagehill Road to the TIP. Once added, Public Works can begin seeking funding for that section categorized as a Rural Minor Collector.

**15) Franklin County Assessor**

- a. No comments received.

**16) Franklin County GIS/E-911 Addressing**

- a. No comments received.

**17) Franklin County Fire District #4**

- a. No comments received.

**RECOMMENDATION:**

According to the Franklin County Code Chapter 17.82 Special Permits, the Planning Commission shall:

- 1) Make and enter findings of fact from the record and conclusions thereof;
- 2) Shall render a recommendation to the Board of County Commissioners as to whether the proposal shall be denied, approved, or approved with modification and/or conditions.

Findings of Fact Criteria by Planning Commission: The Planning Commission shall make and enter findings from the record and conclusions thereof as to whether or not:

- 1) The proposal is in accordance with the goals, policies, objective, maps, and or narrative text of the comprehensive plan;
- 2) The proposal will adversely affect public infrastructure;
- 3) The proposal will be constructed, maintained and operated to be in harmony with the existing or intended character of the general vicinity;

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- 4) The location and height of the proposed structures and the site design will discourage the development of permitted uses on the property in the general vicinity or impair the value thereof;
- 5) The operation in connection with the proposal will be more objectionable to nearby properties by reason of noise, fumes, vibrations, dust, traffic, or flashing lights than would be the operation of any permitted uses within the district,;
- 6) The proposal will endanger the public health or safety if located and developed where proposed, or in any way will become a nuisance to uses permitted in the district.

Planning and Economic Development Department Staff Assistance: Planning Staff will assist the Planning Commission with the determination of finding and conditions of CUP 2025-10/SEPA 2025-18.

Recommendation: The Franklin County Planning Department recommends that the Planning Commission forward a **POSITIVE** recommendation to the Franklin County Board of County Commissioners for Application CUP 2025-10/SEPA 2025-18, with the following suggested findings of fact:

**Suggested Findings of Fact:**

- 1) The proposal **IS** in accordance with the goals, policies, objective, maps, and or narrative text of the comprehensive plan;
  - a. The Franklin County Comprehensive Land Use Designation is Agricultural.
  - b. The County Zoning Code is Agricultural Production 20-acres (AP-20).
  - c. Pursuant to FCC 17.10.020(b)(5) the approval of a Conditional Use Permit is required for large scale confined animal feeding operations. The codes further set out a Dairy Separation Standard, stating that no more than two operations that are greater in size than one thousand three hundred (1,300) (milking cow head count) shall be located within an operations two-mile buffer. The buffer area shall be a two-mile radius from each operation's center of primary animal confinement as defined by the Franklin Conservation District. The project complies with this standard.
  - d. A dairy operation greater in size than 500 head count requires approval of a conditional use permit.
  - e. A feedlot operation greater in size than 1,000 requires the approval of a conditional use permit.
  - f. The comprehensive plan says that the county will encourage agricultural industries in agricultural areas (Comprehensive Plan, Pg. 94-98).
- 2) The proposal **WILL NOT** adversely affect public infrastructure, **IF MITIGATED**;
  - a. Access to the proposed site will be from N Wahluke Road.

- b. **Mitigation Required:** The Franklin County Public Works Department has determined that the proposed use will have a significant impact and shall be required to abide by all road restrictions in place during freeze / thaw conditions on county roads not meeting an all-weather standard. All truck traffic shall be restricted to all-weather roads for the conditional use permit. Further conditions are being imposed based on the Traffic Impact Analysis to upgrade roads surrounding the project site into all-weather standards.
- 3) The proposal **WILL BE** constructed, maintained and operated to be in harmony with the existing or intended character of the general vicinity;
  - a. The site location for the animal operation expansion is in an area zoned Agricultural Production 20 (AP-20);
  - b. The general area consists of farms and animal operations.
  - c. The animal operation expansion is in harmony with and is compatible with the surrounding lands, including the existing and intended character of the agricultural area:
    - i. The animal operation and its expansion at this site is a compatible use with the County Comprehensive Plan because the land is classified as Agricultural, with the Agricultural Production 20 (AP-20) Zoning District, and the surrounding areas.
    - ii. The farm site is not located near a Rural Settlement Area or a designated Urban Growth Boundary.
    - iii. Active farms are located near the proposed dairy expansion site.
- 4) The location and height of the proposed structures and the site design **WILL NOT** discourage the development of permitted uses on the property in the general vicinity or impair the value thereof;
  - a. The dairy site is located in an agricultural area that is not densely populated and the dairy site is not located near a Rural Settlement Area or a designated Urban Growth Boundary.
  - b. Agricultural industry and animal operations are consistent with the uses allowed in agricultural areas.
  - c. The area is zoned Agricultural Production 20 (AP-20).
  - d. The height of future proposed structures and site design (as submitted) is in compliance with the AP-20 development standards. The dairy expansion will not discourage the development of permitted uses in the area.
  - e. The implementation of a dairy Nutrient Management Plan will help address the potential for buildup of nitrates and nutrients in the soil.
- 5) The operation in connection with the proposal **WILL NOT** be more objectionable to nearby properties by reason of noise, fumes, vibrations, dust, traffic, or flashing lights than would be the operation of any permitted uses within the district, **IF MITIGATED**;

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- a. The area is zoned Agricultural Production 20 (AP-20) which allows for a wide range of agricultural activities and animal agricultural operations to occur.
  - b. The dairy expansion is in harmony with and is compatible with the surrounding lands, including the existing and intended character of the agricultural area.
  - c. To further ensure its compatibility with the surrounding agricultural area and reduce potential impacts to neighbors, the dairy operation can implement mitigation measures and comply with a State of Washington Dairy Nutrient Management Plan as enforced by the State of Washington, a State of Washington Concentrated Animal Feeding Operation (CAFO) General Permit, comply with an Odor and Fly Control Plan, develop a Manure Pollution Prevention Plan (MPPP) and shield all lights on the property.
- 6) The proposal **WILL NOT** endanger the public health or safety if located and developed where proposed, or in any way will become a nuisance to uses permitted in the district, **IF MITIGATED**.
- a. To protect water quality and health related issues, the applicant is required to comply with a State of Washington Dairy Nutrient Management Plan. The Nutrient Management Plan, as enforced by the Washington State Department of Agriculture has the following water quality objectives: “Preventing discharge of contaminated waste water to streams, drainage ditches, or other surface waters from the facility; Preventing migration of contaminants from the facility to the underlying aquifer; Using facility nutrients to supply crop nutrient needs at rates and times tailored to reach realistic yield goals; Meeting the requirements of the Dairy Nutrient Management Act of 1998, the Clean Water Act”.
  - b. Completion of an Odor and Fly Control Plan for the operation. This Plan will discuss numerous items including potential sources of odors and flies on the farm including methods to control and reduce odors and flies at the dairy site.
  - c. A Manure Pollution Prevention Plan (MPPP) shall be developed for the dairy operations.
  - d. Toxic or hazardous chemicals shall be managed, handled, used, and stored in accordance with applicable Federal and State laws. A Chemical Hazard Communication Plan shall be developed.
  - e. A Concentrated Animal Feeding Operation (CAFO) General Permit must be submitted to the Washington Department of Ecology.
  - f. A Spill Prevention, Control, and Countermeasure (SPCC) shall be developed for the dairy operations.
  - g. An Inadvertent Discover Plan shall be prepared and implemented for the project through all phases.
  - h. Franklin County’s Right to Farm Ordinance states that an agricultural activity if consistent with good agricultural practices is presumed to be reasonable and shall not be found to constitute a nuisance. This proposed operation is being conditioned to develop and comply

with multiple plans, permits, and standards consistent with these types of large-scale operations per Federal, State and local laws and ordinances.

**Suggested Conditions of Approval:**

**SEPA ODNs/NOA-M & MDNS Conditions:**

- 1) Best Management Practices (BMP) to minimize dust during construction shall be used, such as watering the site in accordance with Franklin County's Clean Air and Dust control ordinances.
- 2) The applicant shall meet and comply with all necessary Air and Water Quality standards required by the Department of Ecology. Compliance with these standards shall occur at all times. Stormwater shall be retained on site during and after construction.
- 3) The project shall implement a **Stormwater Pollution Prevention Plan (SWPP)** in accordance with the Washington State Department of Ecology stormwater management guidelines.
- 4) Toxic or hazardous chemicals shall be managed, handled, used, and stored in accordance with applicable Federal and State laws. A **Chemical Hazard Communication Plan** shall be developed and submitted to the Franklin County Planning Department.
- 5) A head count increase will require a **Traffic Impact Analysis (TIA)** to be completed together with upgrades and/or mitigation fees for the County Road System. The TIA shall include County Roads impacted by this increase.
- 6) Any infrastructure that will cross those buried drain rights of way, such as piping, electrical wiring, etc., must be permitted by SCBID prior to construction. All applications must be approved by the SCBID Board of Directors prior to that work taking place. SCBID will not require a permit for grading purposes or other operations over the buried drains but will need to be included in the planning to ensure that we maintain cover over our drains.
- 7) There are exposed manholes for the buried drain systems present around the project site. These manholes need to be protected from impact by equipment or livestock and the also need to be protected from the potential intrusion of waste materials from the dairy operation. These buried drains are not for waste disposal, intentional or unintentional and must be protected. Efforts must be taken so ensure that the waste from the dairy doesn't impact that drain system.
- 8) The applicant shall work with SCBID to determine measures to prevent any effluent or solid waste from entering the WB10A lateral. SCBID recommends piping the lateral near the effluent pond and compost pile location to address potential impacts.
- 9) The applicant shall comply with the State of Washington's requirements for Dairy operations including the implementation of the approved **Nutrient Management Plan (NMP)** for the operation. Nutrient management plans focus on water quality related issues. A copy of this plan must be submitted to the Franklin County Planning Department.
- 10) A **Concentrated Animal Feeding Operation (CAFO) General Permit** must be submitted to the Washington Department of Ecology. A copy of the permit must be submitted to the Franklin County Planning Department.

- 11) A **Manure Pollution Prevention Plan** shall be developed and submitted to the Franklin County Planning Department.
- 12) A **Spill Prevention, Control, and Countermeasure (SPCC)** shall be developed and submitted to the Franklin County Planning Department.
- 13) The applicant shall submit an **Odor and Fly Control Plan** consistent with Franklin County Resolution 2001-238, to be approved by the Franklin Conservation District.
- 14) An **Inadvertent Discover Plan** shall be prepared and implemented for the project through all phases.
- 15) A Franklin County Grading Permit must be submitted before any grading, filling, or movement of earth greater than 50 cubic yards.

**Conditional Use Permit:**

- 16) Comply with the Requirements of the **Washington Department of Ecology:**
  - a. Depending on the potential emissions from the diesel fuel storage tanks and the composting operations, a Notice of Construction (NOC) application may need to be submitted.
  - b. The applicant is encouraged to salvage, reuse, and recycle as much of the waste as possible. Recycling demolition debris is typically less expensive than disposal. Otherwise, the demolition waste must be disposed of at a permitted solid waste facility.
  - c. Operators of construction sites that disturb one acre or more total area and has or will have a discharge of stormwater to a surface water or to a storm sewer, must apply for coverage under Department of Ecology's Construction Stormwater General Permit.

If soil or ground water contamination is known at the site, additional information will be required. The applicant will be required to submit additional studies and reports including, but not limited to, temporary erosion and sediment control plans, a stormwater pollution prevention plan, a site map depicting sample locations, a list of known contaminants with concentrations and depths found and other information about the contaminants.

Application should be made at least 60 days prior to commencement of construction activities.

- 17) Comply with the requirements of **South Columbia Basin Irrigation District:**
  - a. There currently exist multiple exposed manholes for the buried drain systems across the project site. These manholes must be protected from impact by equipment or livestock and the also need to be protected from the potential intrusion of waste materials from the dairy operation. These buried drains are not for waste disposal, intentional or unintentional and must be protected.
  - b. SCBID needs to understand how the site will be graded and what the plan for a potential overtopping event of the waste ponds is. Will that effluent be directed into an undeveloped

portion of the site or another area and what measures will be in place to confirm such action. One action that would reduce our concerns would be for the applicant to pipe the WB10A lateral near the pond and compost pile location to provide mitigation of such concerns.

18) Comply with the requirements of the **Franklin County Public Works Department:**

- a. An approach permit is required for access to Franklin County roads per the County Road Approach Policy (Resolution No. 2014-123). Requirements include required permits, approach construction, minimum design standards, etc. per Franklin County Design Standards for the Construction of Roads and Bridges (Resolution 2002-270).
- b. Any utility extension crossing Franklin County roads will be addressed at the time of application. See Accommodation of Utilities on County Road Right-of-Way for more information (Resolution #2000-330).
- c. The developer is required to upgrade the approximately 0.6-mile section of N. Wahluke Road adjacent to the facility that is categorized as a Rural Local Access Road and not constructed to an all-weather standard unless another route is proposed for truck traffic. For a general estimation, the approximate cost is \$1 Million per mile.
- d. For that section of N Wahluke Road, categorized as Rural Minor Collector, the developer has the following options, unless another route is proposed for truck traffic:
  - i. Upgrade the approximately 3.1-mile section of N. Wahluke Road from Filbert Road to Sagehill Road to an all-weather standard. Upon completion, this would allow continued movement during any road restrictions that would be in place for non-all-weather roads.
  - ii. Abide by all road restrictions in place during freeze / thaw conditions on county roads not meeting an all-weather standard and pay a one-time mitigation fee equal to 50% of an engineer's estimate to upgrade to an all-weather standard. In lieu of actually completing all improvements, the developer may provide the county with a bond, cash or irrevocable line of credit in an amount equal to one hundred twenty-five (125) percent of an engineer's estimate.

19) Comply with the requirements of **Franklin County Planning and Economic Development Department:**

- a. Parcels #121-060-012 and 121-060-013 must be consolidated into a single parcel prior to Building Permit submissions to avoid construction of any structure on property lines.
- b. **Outdoor lighting at the facility shall be shielded down.** This will assist in ensuring the outdoor lighting will not become a nuisance to neighboring properties and will limit light pollution in the rural area.

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- c. Before construction of any structures, a Franklin County Building Permit Application shall be submitted to the Franklin County Planning and Economic Development Department.
  - d. Per Franklin County Ordinance Number 5-2007, as amended, **prohibits the accumulation of irrigation water on County Roads in Franklin County**. Compliance with this Ordinance is required for this operation, if applicable.
  - e. All structures shall comply with the standards of the **currently adopted International Building Codes**.
  - f. Any deviations from the submitted plans shall be submitted to the Franklin County Planning and Economic Development Department for review.
- 20) Any **discontinuance or abandonment** of the approved use for a period of one (1) year shall make this Conditional Use Permit approval null and void.
- 21) Any use of the proposed development for purposes other than the approved use shall deem this Conditional Use Permit approval null and void.
- 22) The site shall be maintained at all times as to not let the land become a fire hazard or accumulate with debris and weeds.
- 23) Shall comply with the **Franklin County Fire Code** as expressed in FCC Chapter 8.40.
- 24) **RIGHT TO FARM:** Applicant shall be aware that this facility is located in an area where farming and farm operations exist. Further, to assist in preserving the right of farmers to operate utilizing accepted and appropriate practices, the County has adopted a Franklin County Right to Farm Ordinance, as amended. At no time shall a farm operation or accessory farm related enterprise, such as crop-dusting operation or airstrip use, be deemed to be a public or private nuisance as it relates to the activities associated with this land use approval.
- 25) Should archaeological materials (e.g., bones, shell, beads, ceramics, old bottles, hearths, etc.) or human remains be observed during project activities, all work in the immediate vicinity shall stop. The State Department of Archaeology and Historic Preservation (360-586-3065), the Franklin County Planning and Building Department, the affected Tribe(s) and the County Coroner (if applicable) shall be contacted immediately in order to assess the situation and determine how to preserve the resource(s). Compliance with all applicable laws pertaining to archaeological resources (RCW 27.53, 27.44 and WAC 25-48) is required.
- 26) Future expansions and improvements at the site shall comply with the submitted and approved plans. To allow for future flexibility, changes to the plans which are determined to be minor, or incidental may be administratively approved by the Planning Director. Major changes, which do not meet with the intent of, or seriously re-align, the approved plans, shall be reviewed per the current code and a new Conditional Use Permit shall be obtained prior to that change occurring.

**CUP 2025-10/SEPA 2025-18 Staff Report**  
*Franklin County Planning Commission*

- 27) Nothing in this Conditional Use Permit approval shall be construed as excusing the applicant from compliance with any federal, state, or local statutes, ordinances, or regulations applicable to this project.
- 28) In accordance with the County's Zoning Code, any special permit may be revoked by the Board of County Commissioners if, after a public hearing, it is found that the conditions upon which the special permit was authorized have not been fulfilled or if the use authorized has changed in size, scope, nature, or intensity so as to become a detriment to the surrounding area. The decision of the Board is final.
- 29) This permit applies to the lands described and shall be for the above-mentioned individual and/or his heirs and/or assigns. Any transfer of this permit will require that notice be granted to the Franklin County Planning and Economic Development Department, or the permit will be cancelled. Once granted, the permit cannot be transferred to another site.
- 30) By accepting the issuance of this permit, the Permit Holder(s) agree(s) to accept full responsibility for any and all operations conducted or negligence occurring at this location and any incidents that occur on surrounding properties caused by operations or negligence at this location; Permit Holder(s) further agree(s) to indemnify and hold the County harmless and agree that the County is in no way negligent in relation to granting this permit, or operations or negligence on this property; Permit Holder(s) further agree(s) to accept full responsibility for any future cleanup needed due to activities conducted at this location that impact the surrounding properties, and obtaining and retaining appropriate insurance coverage.

**CUP 2025-10/  
SEPA 2025-18**

Public and Agency Notice  
& Comments

# Memo



## Public Works Department

**To:** Wesley McCart, Planning & Building Director  
**From:** John Christensen  
**cc:** Craig Erdman, PE, Director / County Engineer  
**Date:** January 27, 2026  
**Re:** SEPA 2025-18 / CUP 2025-10 - White Bluffs Dairy Expansion

Wesley,

Public Works has reviewed the Traffic Impact Analysis for SEPA 2025-18 and concluded the proposed expansion will have a significant impact and shall be required to abide by all road restrictions in place during freeze / thaw conditions on county roads not meeting an all-weather standard. All truck traffic shall be restricted to all-weather roads for the conditional use permit.

1. The developer is required to upgrade the approximately 0.6-mile section of N. Wahluke Road adjacent to the facility that is categorized as a Rural Local Access Road and not constructed to an all-weather standard unless another route is proposed for truck traffic. For a general estimation, the approximate cost is \$1 Million per mile.
2. For that section of N Wahluke Road, categorized as Rural Minor Collector, the developer has the following options, unless another route is proposed for truck traffic:
  - A. Upgrade the approximately 3.1-mile section of N. Wahluke Road from Filbert Road to Sagehill Road to an all-weather standard. Upon completion, this would allow continued movement during any road restrictions that would be in place for non-all-weather roads.
  - B. Abide by all road restrictions in place during freeze / thaw conditions on county roads not meeting an all-weather standard and pay a one-time mitigation fee equal to 50% of an engineer's estimate to upgrade to an all-weather standard. In lieu of actually completing all improvements, the developer may provide the county with a bond, cash or irrevocable line of credit in an amount equal to one hundred twenty-five (125) percent of an engineer's estimate.

Public Works can apply for grant funding for roads categorized as Rural Minor Collector that are on the Six-year Transportation Improvement Program (TIP). Public Works can request that the Board of County Commissioners add N Wahluke Road from Filbert Road to Sagehill Road to the TIP. Once added, Public Works can begin seeking funding for that section categorized as a Rural Minor Collector.

Please let me know if you have any questions.

---

**[EXTERNAL] White Bluffs Dairy Proposal**

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**From** aprilz159@olyphen.com <aprilz159@olyphen.com>  
**Date** Mon 1/26/2026 4:14 PM  
**To** planninginquiry <planninginquiry@franklincountywa.gov>  
**Cc** tylerjameshawkins@gmail.com <tylerjameshawkins@gmail.com>

Some people who received this message don't often get email from aprilz159@olyphen.com. [Learn why this is important](#)

**CAUTION:** This email originated from outside of Franklin County. Be careful when following links or opening attachments.

Good afternoon,

Thank you for the opportunity to address this situation.

While I agree Michael Corrales has the right to sell his current dairy (and wish he would), it's the how that I'm questioning.

Everything in my first email still stands, but I would like to add a few more things.

We usually work well as a community, and I would like us to put our heads together to find a good solution for all concerned on this proposed sale.

There's a reason new "rules" were written for dairies to be 5 miles apart. Just because this one can be grandfathered in doesn't mean it should be. This is a heavily populated area with farms. Families that live and work on these farms. As I stated earlier in my first email, there were 2 houses on this road when my family moved here. Now, there are houses and families every 1/4 of a mile, or less around this dairy. Rebuilding in the current position would greatly impact a large amount of people.

Laws, ordinances, rules, and proposals can be changed to benefit all involved. This is a rural area and cows are part of that. But we're not talking about a couple of milk cows on the family farm. Or running a heard for sale on some wintertime pasture before planting in the spring.

This proposal is a bigger dairy and more industrial than what is already there. New rules should apply. It's an industrial business. Not a rural farm. This completely takes it out of the farm category. There's cows there, sure. But other than that, Mother Nature wouldn't recognize it. I'm not against new and improved methods. The dairy I toured is impressive. I just don't want more cows, more traffic, more smells, more flies, more mosquitoes, more machinery spraying for those things, more of everything and a small city to be built there. I want to keep my rural landscape. What would normally be considered...the countryside. I want clean air, clean ground water, clean food for humans, and a peaceful landscape for crops and people. Not only smells come on the wind, so do noises - at 3 in the morning. What we surround ourselves with is important. In beekeeping, the hives die if they are surrounded by corn. We should be aware of what we surround ourselves with.

I personally would like to see this dairy torn down and rebuilt in a more appropriate place. Sell it to White Bluffs, that's fine. I'm the most impacted by this property and want to get rid of the current dairy. But don't build another one there.

Businesswise, it would be better for them too if they didn't have to constantly wonder what was coming next from their neighbors. Not only regular daily complaints. but bigger ones too. If their workers interfere with my property and plug up my drain, on my property, again, they will be presented with a \$10,000- \$15,000 invoice. I won't go down quietly.

Thank you for your consideration,

April Alexander

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**Re: [EXTERNAL] Fwd: White Bluffs Dairy Expansion- Concerns.docx**

---

**From** Jeffrey Hawkins <jeffrey.edward.hawkins@gmail.com>

**Date** Mon 1/26/2026 4:12 PM

**To** PermitSubmittal <permitsubmittal@franklincountywa.gov>; planninginquiry <planninginquiry@franklincountywa.gov>

**Cc** Angie Hawkins <angpermann@gmail.com>

Some people who received this message don't often get email from jeffrey.edward.hawkins@gmail.com. [Learn why this is important](#)

Good afternoon,

I am submitting these comments again to ensure they're included on the public record for the hearing on February 3.

These are the same concerns I had previously as there has been no forum to address any of them. I look forward to attending the meeting on February 3 in person.

am writing to express my concerns regarding the new "White Bluffs Dairy Expansion SEPA 2025-18."

I'd rather have open farmland as a neighbor than 9,000 additional cows and their manure as open farmland does not negatively affect my ability to grow and harvest fruit or my family's quality of life. I recognize that all people should be able to pursue a livelihood with the land that they own. I do not want to be a contentious neighbor. I know most dairymen are fine people and I like consuming dairy products, but large dairies are objectively undesirable in any neighborhood.

I do not believe I should be able to completely control what someone else does with land that they own, but I have concerns that need to be addressed so the current status quo is preserved:

Negative impacts on my sweet cherry orchard:

A. Birds- dairies bring increased bird populations which hurt fruit production. Starlings and Robins currently cause thousands of dollars of damage in my orchard each year despite efforts to keep them away. Increased bird damage could be catastrophic. The Washington State Fish & Wildlife recommends removing sources of food for birds, but dairies are a 24/7/365 "all you can eat buffet" which will bring more birds.

B. Flies- Dairies bring increased flies/insects which are a nuisance and can damage fruit.

C. Smell- Hydrogen Sulfide and Ammonia in high amounts inhibit tree growth and stress otherwise healthy trees.

Negative Impacts on my neighborhood:

A. Smell- Foul odors limit outdoor enjoyment and can even penetrate inside my home if the wind blows from the north. We purchased our home long after the existing dairy was in place, so we knew we would occasionally experience unpleasant odors. We did not anticipate the dairy growing 13.5 times larger and moving to within .6 miles of us.

B. Noise- Currently this is not a problem, but I've never lived next to 9,500 cows so I am concerned of what this may become from, cows, machinery and equipment operating 24/7/365.

C. Flies- We currently have a very undesirable amount of flies and the idea of 13.5x more cows and manure could make this exponentially worse.

D. Manure spread on fields and roads- I want to be able to traverse the public roads without bringing manure back into my garage.

F. Light pollution- not currently a problem but could be with expansion.

E. Decreases value of home and land- Having a large dairy makes all the land around it less desirable for habitation and fruit production.

I have outlined my very real concerns, so White Bluffs Dairy and Franklin County ensure available remedies are implemented to mitigate the negative impacts of this massive proposed expansion. If the negative effects cannot be mitigated and the current status quo maintained, I would ask that White Bluff Dairy find a different location to expand.

We love where we live and farm and want to stay here for the rest of our lives. If the negative effects of this expansion made it unviable to live here, we would not be able to sell our home and land and replicate our livelihood and lifestyle anywhere else.

I look forward to discussing and receiving more details on this proposed expansion.

Thank you!

Jeff & Angie Hawkins

509-430-0862

2531 Buffalo Road

Othello, WA 99344

Thank you!

-Jeff Hawkins

On Dec 3, 2025, at 4:01 PM, PermitSubmittal <permitsubmittal@franklincountywa.gov> wrote:

Good afternoon,

Yes, you will receive another notice in the mail with additional opportunities to comment and when the next meeting will be held.

Let me know if you have any questions,



**Shalie Minielly**

*Permit Technician*

Franklin County Planning & Building Department

502 W. Boeing St.

Pasco, WA 99301

(509) 545-3521

---

**From:** Jeffrey Hawkins <jeffrey.edward.hawkins@gmail.com>

**Sent:** Tuesday, December 2, 2025 9:25 AM

**To:** PermitSubmittal <permitsubmittal@franklincountywa.gov>

**Cc:** Angie Hawkins <angpermann@gmail.com>

**Subject:** Re: [EXTERNAL] Fwd: White Bluffs Dairy Expansion- Concerns.docx

You don't often get email from [jeffrey.edward.hawkins@gmail.com](mailto:jeffrey.edward.hawkins@gmail.com). [Learn why this is important](#)

Thank you Shalie! Will we be notified of any next steps or upcoming meetings?

Jeff & Angie

On Mon, Dec 1, 2025 at 11:48 AM PermitSubmittal <[permitsubmittal@franklincountywa.gov](mailto:permitsubmittal@franklincountywa.gov)> wrote:

Good morning,

This has been received and saved to the public comments file.

Have a great day,



**Shalie Minielly**

*Permit Technician*

Franklin County Planning & Building Department

502 W. Boeing St.

Pasco, WA 99301

(509) 545-3521

**From:** Jeffrey Hawkins <[jeffrey.edward.hawkins@gmail.com](mailto:jeffrey.edward.hawkins@gmail.com)>  
**Sent:** Friday, November 28, 2025 6:04 AM  
**To:** PermitSubmittal <[permitsubmittal@franklincountywa.gov](mailto:permitsubmittal@franklincountywa.gov)>; planninginquiry <[planninginquiry@franklincountywa.gov](mailto:planninginquiry@franklincountywa.gov)>  
**Cc:** Angie Hawkins <[angpermann@gmail.com](mailto:angpermann@gmail.com)>  
**Subject:** [EXTERNAL] Fwd: White Bluffs Dairy Expansion- Concerns.docx

You don't often get email from [jeffrey.edward.hawkins@gmail.com](mailto:jeffrey.edward.hawkins@gmail.com). [Learn why this is important](#)  
**CAUTION:** This email originated from outside of Franklin County. Be careful when following links or opening attachments.

Good morning,

I am writing to express my concerns regarding the new “White Bluffs Dairy Expansion SEPA 2025-18.”

I'd rather have open farmland as a neighbor than 9,000 additional cows and their manure as open farmland does not negatively affect my ability to grow and harvest fruit or my family's quality of life. I recognize that all people should be able to pursue a livelihood with the land that they own. I do not want to be a contentious neighbor. I know most dairymen are fine people and I like consuming dairy products, but large dairies are objectively undesirable in any neighborhood.

I do not believe I should be able to completely control what someone else does with land that they own, but I have concerns that need to be addressed so the current status quo is preserved:

Negative impacts on my sweet cherry orchard:

A. Birds- dairies bring increased bird populations which hurt fruit production. Starlings and Robins currently cause thousands of dollars of damage in my orchard each year despite efforts to keep them away. Increased bird damage could be catastrophic. The Washington State Fish & Wildlife recommends removing sources of food for birds, but dairies are a 24/7/365 “all you can eat buffet” which will bring more birds.

B. Flies- Dairies bring increased flies/insects which are a nuisance and can damage fruit.

C. Smell- Hydrogen Sulfide and Ammonia in high amounts inhibit tree growth and stress otherwise healthy trees.

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A. Smell- Foul odors limit outdoor enjoyment and can even penetrate inside my home if the wind blows from the north. We purchased our home long after the existing dairy was in place, so we knew we would occasionally experience unpleasant odors. We did not anticipate the dairy growing 13.5 times larger and moving to within .6 miles of us.

B. Noise- Currently this is not a problem, but I've never lived next to 9,500 cows so I am concerned of what this may become from, cows, machinery and equipment operating 24/7/365.

C. Flies- We currently have a very undesirable amount of flies and the idea of 13.5x more cows and manure could make this exponentially worse.

D. Manure spread on fields and roads- I want to be able to traverse the public roads without bringing manure back into my garage.

F. Light pollution- not currently a problem but could be with expansion.

E. Decreases value of home and land- Having a large dairy makes all the land around it less desirable for habitation and fruit production.

I have outlined my very real concerns, so White Bluffs Dairy and Franklin County ensure available remedies are implemented to mitigate the negative impacts of this massive proposed expansion. If the negative effects cannot be mitigated and the current status quo maintained, I would ask that White Bluff Dairy find a different location to expand.

We love where we live and farm and want to stay here for the rest of our lives. If the negative effects of this expansion made it unviable to live here, we would not be able to sell our home and land and replicate our livelihood and lifestyle anywhere else.

I look forward to discussing and receiving more details on this proposed expansion.

Thank you!

Jeff & Angie Hawkins

509-430-0862

2531 Buffalo Road

Othello, WA 99344

--

Make it a great day!

Jeff Hawkins

---

[EXTERNAL] Re: SEPA 2025-18 White Bluffs Dairy LLC

---

**From** Tyler Hawkins <tylerjameshawkins@gmail.com>  
**Date** Mon 1/26/2026 4:39 PM  
**To** planninginquiry <planninginquiry@franklincountywa.gov>

Some people who received this message don't often get email from tylerjameshawkins@gmail.com. [Learn why this is important](#)

**CAUTION:** This email originated from outside of Franklin County. Be careful when following links or opening attachments.

Good afternoon. I received another notice about this proposed project and another public comment period.

Everything I stated previously still concerns me and I want to make sure it is reviewed by the committee.

Thank you

**Tyler Hawkins**

**Cell: [\(509\) 439-0244](tel:5094390244)**

On Nov 28, 2025, at 16:14, Tyler Hawkins <tylerjameshawkins@gmail.com> wrote:

Hello,

My name is Tyler Hawkins. I live at 5081 N Wahluke Rd, Mesa, WA 99343, which is approximately 1 mile south of this proposed new dairy.

I would like to comment on the negative environmental impacts of this proposed project. They are as follows:

I believe that a dairy of this size/scope is akin to a massive industrial complex. I'd prefer not to live next to a massive industrial complex with 24-hour a day semi-truck traffic, noise from pumps, heavy equipment, and 9,500 cows. I assume that this dairy will also have a massive amount of lighting for operations during the night. I currently quite enjoy living where I live with it getting dark at night and being able to see the stars. I know that I would still be able to see the stars, but probably not as well with the amount of lights this dairy will likely have.

A dairy of this size will bring with it an increased amount of unpleasant smell and increased pests like flies, starling birds, and other rodents. This property borders an orchard that I'm sure will see negative effects of being next to a dairy. There are several other orchards in the neighborhood that could also be negatively affected.

I am not a water expert, but I am concerned about the potential for contamination of groundwater and the domestic wells that are currently in the surrounding area. Also the potential for some of these wells to become depleted when large wells are drilled for this dairy. Has that been taken into consideration?

How will the manure be managed? I am not an expert about manure, but I have observed that how a dairy manages the manure produced can make a big difference in smell and how much of it ends up on N. Wahluke and Filbert rd.

Thank you for taking my comments into consideration about this proposed project.

--

Tyler Hawkins  
509-439-0244



# FRANKLIN COUNTY

## DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

**NOTICE OF OPEN RECORD PUBLIC HEARING  
BEFORE THE PLANNING COMMISSION ON THE  
T. FREEMAN/WHITE BLUFFS DAIRY EXPANSION  
CUP2025-10/SEPA 2025-18**

**NOTICE IS HEREBY GIVEN** that there has been proposed to the Franklin County Planning Commission an application by **White Bluffs Dairy LLC**, Fransisca Vander Meulen, 650 Horby Rd., Grandview, WA, 98930-9202, is seeking approval of a Conditional Use Permit (CUP), file #**CUP 2025-10/SEPA 2025-18**.

**Proposal:** The proposed development is for the expansion and reconfiguration of the existing 700-cow milk dairy to accommodate a 9,500-cow herd size. Demolition of the current milking parlor, animal corrals, cow shade and other miscellaneous outbuildings will be part of this project. Approximately 113 acres of feed crop production ground will be converted to dairy-production ground. The following structures are also proposed in this project: approximately 57,000 sq. ft. milk parlor building, twelve (12) open-lot corrals, six (6) 1,100 ft. long concrete lanes for each corral's feed alley, expansion of five (5) existing 6,000 sq. ft. free stall barns, a 12,800 sq. ft. commodity barn with maintenance shop facilities, two (2) 10,000-gal diesel fuel above ground storage tanks, a paved driveway/parking area with approximately 20 parking spaces, a liquid manure processing and storage system, and a manure solids and compost storage area.

**Public Comment Period:** Written project comments must be submitted by **5:00 PM** on **January 26, 2026**, to be included in the Planning Commission Packet. If there are any questions on the proposal, contact the Franklin County Planning Department via email at [planninginquiry@franklincountywa.gov](mailto:planninginquiry@franklincountywa.gov).

**Public Meeting:** An open record public meeting will be held to discuss the project, solicit input from interested citizens, and respond to project questions at the **Planning Commission Meeting**, scheduled for **6:00PM, February 3, 2026**, in the Commissioner's Room at the Franklin County Courthouse at 1016 N. 4th Ave., Pasco, WA 99301.

**Environmental Documents and/or Studies Applicable to this Application:** Environmental Determination No. **SEPA 2025-28** has been assigned to this proposal.

**PROJECT LOCATION:**



**AFFIDAVIT OF PUBLICATION**

STATE OF WASHINGTON

SS:

COUNTY OF FRANKLIN

Katherine Trowbridge being first duly sworn on oath deposes and says that she is the manager of the FRANKLIN COUNTY GRAPHIC, a weekly newspaper. That said newspaper is a legal newspaper approved by the Superior Court of the State of Washington, in and for Franklin County, under order made and entered on the 11th day of January, 1955, and it is now and has been for more than six months prior to the date of the publication hereinafter referred to, published in the English language continually as a weekly newspaper, in Connell, Franklin County, Washington, and that the annexed is a true copy of

FRANKLIN COUNTY PLANNING

CUP 2025-10

HEARING

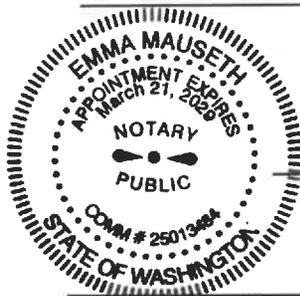
as it was published in regular issue (and not in supplemental form) of said newspaper, once each week for a period of one week to-wit, commencing on the 15th day of Jan, 2026, and that such newspaper was regularly distributed to its subscribers during all of said period, that the full amount of \$74.40 has not been paid in full at the legal rate.

*Katherine Trowbridge*

Manager

Subscribed and sworn to before me this 15th day of

January, 2026



*Emma Mauseth*

Notary Public in and for the State of Washington, residing in Connell.

**NOTICE OF OPEN RECORD PUBLIC HEARING BEFORE THE PLANNING COMMISSION ON THE T. FREEMAN/WHITE BLUFFS DAIRY EXPANSION CUP2025-10/SEPA 2025-18**

**NOTICE IS HEREBY GIVEN** that there has been proposed to the Franklin County Planning Commission an application by **White Bluffs Dairy LLC**, Fransisca Vander Meulen, 650 Horby Rd., Grandview, WA, 98930-9202, is seeking approval of a Conditional Use Permit (CUP), file #**CUP 2025-10/SEPA 2025-18**.

**Proposal:** The proposed development is for the expansion and reconfiguration of the existing 700-cow milk dairy to accommodate a 9,500-cow herd size. Demolition of the current milking parlor, animal corrals, cow shade and other miscellaneous outbuildings will be part of this project. Approximately 113 acres of feed crop production ground will be converted to dairy-production ground. The following structures are also proposed in this project: approximately 57,000 sq. ft. milk parlor building, twelve (12) open-lot corrals, six (6) 1,100 ft. long concrete lanes for each corral's feed alley, expansion of five (5) existing 6,000 sq. ft. free stall barns, a 12,800 sq. ft. commodity barn with maintenance shop facilities, two (2) 10,000-gal diesel fuel above ground storage tanks, a paved driveway/parking area with approximately 20 parking spaces, a liquid manure processing and storage system, and a manure solids and compost storage area.

A SEPA ODN/NOA-M was issued for this proposal on November 12, 2025. A SEPA ODN-M was issued on January 14, 2026.

**Public Comment Period:** Written project comments must be submitted by **5:00 PM** on **January 26, 2026**, to be included in the Planning Commission Packet. If there are any questions on the proposal, contact the Franklin County Planning Department via email at [planninginquiry@franklincountywa.gov](mailto:planninginquiry@franklincountywa.gov).

**Public Meeting:** An open record public meeting will be held to discuss the project, solicit input from interested citizens, and respond to project questions at the **Planning Commission Meeting**, scheduled for **6:00PM, February 3, 2026**, in the Commissioner's Room at the Franklin County Courthouse at 1016 N. 4th Ave., Pasco, WA 99301.

**Environmental Documents and/or Studies Applicable to this Application:** Environmental Determination No. **SEPA 2025-28** has been assigned to this proposal.

**DATED AT PASCO, WASHINGTON ON THIS 15th DAY OF JANUARY 2026.**

(Published January 15, 2026 in the Franklin County Graphic).

---

**[EXTERNAL] [CUP2025-10 / SEPA2025-18] White Bluffs Dairy - ODNs Mitigation Measures**

---

**From** Kevin Freeman <kfreeman@inlandearth.com>

**Date** Wed 1/7/2026 12:35 PM

**To** Gem Belamour <gbelamour@franklincountywa.gov>

**Cc** Ruurd Veldhuis (rfveld@gmail.com) <rfveld@gmail.com>; Fransisca Vander Meulen <fransisca@windmillestates.net>

**CAUTION:** This email originated from outside of Franklin County. Be careful when following links or opening attachments.

Ms. Belamour –

Per our conversation on Monday, January 5, 2026, Inland Earth Sciences (IES) on behalf of White Bluffs Dairy LLC is requesting that the following Mitigation Measures required by the November 12, 2025 Optional Determination of Nonsignificance (ODNS) issued for the White Bluffs Dairy expansion be made conditions of receiving the Certificate of Occupancy (CO) and not conditions required for issuance of the Conditional Use Permit (CUP):

3. The project shall implement a Stormwater Pollution Prevention Plan (SWPP) in accordance with the Washington State Department of Ecology stormwater management guidelines.
4. Toxic or hazardous chemicals shall be managed, handled, used, and stored in accordance with applicable Federal and State laws. A Chemical Hazard Communication plan shall be developed and submitted to the Franklin County Planning Department.
9. The applicant shall comply with the State of Washington's requirements for Dairy operations including the implementation of the approved Nutrient Management Plan (NMP) for the operation. Nutrient management plans focus on water quality related issues. A copy of this plan must be submitted to the Franklin County Planning Department.
10. A Concentrated Animal Feeding Operation (CAFO) General Permit must be submitted to the Washington Department of Ecology. A copy of the permit must be submitted to the Franklin County Planning Department.
11. A Manure Pollution Prevention Plan shall be developed and submitted to the Franklin County Planning Department.
12. A Spill Prevention, Control, and Countermeasure (SPCC) shall be developed and submitted to the Franklin County Planning Department.
13. The applicant shall submit an Odor and Fly Control Plan consistent with Franklin County Resolution 2001-238, to be approved by the Franklin Conservation District.
14. An Inadvertent Discover Plan shall be prepared and implemented for the project through all phases.

These conditions typically rely on having an approved permit to construct from the County and/or final design plans allowing the plans to address the actual Site configuration. Once approval of the CUP is received from Franklin County, IES and White Bluffs Dairy will move to prepare and submit all documents, plans, and permits required by these conditions.

I appreciate your consideration of this request. Please contact me at this email address or at 509-981-4747 should you have any questions or require additional information regarding this request.

Regards,

**Kevin M. Freeman, PG** | *Principal Geologist*

**Inland Earth Sciences Corporation**

8704 E. Dalton Avenue | Spokane, Washington 99212

O: (509) 563-5242 x700 | M: (509) 981-4747

[kfreeman@inlandearth.com](mailto:kfreeman@inlandearth.com)

**ATTENTION:** This message (including any attachments) may contain confidential, proprietary, privileged and/or private information. The information is only for the use of the recipient(s) designated above or within this message. If you are not an intended recipient of this message, please notify the sender immediately, and delete the message and any attachments. Any disclosure, reproduction, distribution or other use of this message or any attachments by an individual or entity other than the intended recipient(s) is prohibited.

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**[EXTERNAL] Subject: Concerns Regarding Proposed Dairy Facility Near Basin City/Radar hill**

---

**From** Erika Rattray <erattray@gmail.com>

**Date** Fri 12/5/2025 10:01 AM

**To** planninginquiry <planninginquiry@franklincountywa.gov>

Some people who received this message don't often get email from erattray@gmail.com. [Learn why this is important](#)

**CAUTION:** This email originated from outside of Franklin County. Be careful when following links or opening attachments.

Franklin County Building and Planning Department

1016 N. 4th Avenue

Pasco, WA 99301

**Subject: Concerns Regarding Proposed Dairy Facility Near Basin City**

Dear Franklin County Building and Planning Department,

I am writing to express my concerns regarding the proposed dairy operation near Basin City. While I understand the importance of supporting agricultural development in our region, I believe this project raises several serious issues that could negatively affect our community's health, environment, and quality of life.

## **1. Water Availability and Usage**

- Basin City and surrounding areas already face limited water resources.
- A large-scale dairy would require significant water for livestock, cleaning, and waste management, potentially straining existing supplies.
- Overuse of groundwater could impact local residents, farms, and long-term sustainability.

## **2. Odor and Air Quality**

- Dairy operations produce strong odors from manure storage and handling.
- Prevailing winds could carry these smells into nearby neighborhoods, reducing residents' quality of life.
- Airborne emissions, including ammonia and methane, may also contribute to environmental and health concerns.

### **3. Waste Management and Environmental Impact**

- Large dairies generate substantial manure and wastewater.
- Improper handling could lead to runoff into canals, rivers, or groundwater, contaminating drinking water and harming ecosystems.
- The risk of spills or leaks from lagoons poses a long-term hazard to soil and water quality.

### **4. Traffic and Infrastructure**

- Increased truck traffic for feed delivery, milk transport, and waste hauling could strain local roads.
- Noise, dust, and safety concerns for residents and schoolchildren should be carefully considered.

### **5. Community Livability**

- The combination of odor, water strain, and traffic may reduce property values and discourage future growth in Basin City.
- Residents deserve assurance that their health, safety, and environment will not be compromised.

### **Request**

I respectfully urge the Franklin County Building and Planning Department to conduct a thorough environmental and community impact review before approving this project. Public hearings and transparent communication with residents should be prioritized to ensure all voices are heard.

Thank you for your attention to these concerns. I appreciate your commitment to protecting the well-being of Franklin County residents and our shared environment.

Sincerely,  
Erika Romjue  
Basin Farmworks LLC

--

Check Out [Ironworks Cafe and Market](#)

Check Out [Basin Farmworks](#)

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**[EXTERNAL] Comments for the SEPA ODNs/NOAA-M White Bluffs Dairy Expansion SEPA 2025-18**

---

From Rowley and Hawkins Fruit Farms <rhfruitfarms@gmail.com>

Date Tue 12/2/2025 2:20 PM

To planninginquiry <planninginquiry@franklincountywa.gov>

Some people who received this message don't often get email from rhfruitfarms@gmail.com. [Learn why this is important](#)

**CAUTION:** This email originated from outside of Franklin County. Be careful when following links or opening attachments.

To the Franklin County Planning and Economic Development Committee,

This project involves the expansion of the current 700 head cattle dairy/feedlot on parcel 121060075 off of Wahluke Rd in Basin City, WA. The project to take this lot and absorb the field behind it and turn it into a 9500 head dairy is concerning to us as residents of the area, and neighboring landowners and farmers.

1. The irrigation drains that run through that parcel come feed into our lot. The drain water availability has already been restricted by our neighbors with this additional expansion that usage may be reduced again making it harder to water our own orchards...
2. In addition, there is a lot of (13.5x times more) waste from a project like this. where is that going to go... I'm concerned that it would contaminate that water source. What do they do with all the manure and or dead carcasses...
3. We have some of our current orchards neighboring other dairies and due to the smell, increased pests, and flies directly next to the dairy have always struggled to produce stronger healthier trees... a larger dairy concerns me that those effects might become more widespread and harder to control.
4. Birds! Dairies and feedlots are notorious for having tons of starlings, black birds and other birds. With a larger dairy next to us these pressures will only increase making it more difficult to keep the birds out of our orchards and away from the cherries, apples, and peaches...
5. Labor! There is a fairly evenly balanced labor force in this area. A large dairy will monopolize that force potentially pulling them away from the current businesses. Up until now we have been able to meet our needs by hiring and providing jobs to over 500 people throughout the harvesting season as they rotate from asparagus to sweet cherries, tarts, then apples and peaches. I believe that has been a great blessing to many of the local families over the last 30 years... We have not needed to hire any H2A workers to fill our needs and if this dairy comes to fruition I'm concerned we would need to seriously look at that as labor will not be as readily available. Not to mention the changes to the schools and surrounding areas...

As you consider this project please consider these issues

Thanks  
Landon Rowley

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**[EXTERNAL] Concerns about WHITE BLUFFS DAIRY EXPANSION SEPA 2025-18**

---

From Alan Hawkins <alan.n.hawkins@gmail.com>

Date Fri 11/28/2025 4:29 PM

To planninginquiry <planninginquiry@franklincountywa.gov>

Some people who received this message don't often get email from alan.n.hawkins@gmail.com. [Learn why this is important](#)

**CAUTION:** This email originated from outside of Franklin County. Be careful when following links or opening attachments.

Dear Planning Committee and County Commissioners,

I have major concerns over the WHITE BLUFFS DAIRY EXPANSION SEPA 2025-18. I want to be a good neighbor and in general, I have no opposition to living next to a dairy/ cattle feed lot. Within a mile and a half of my house, currently there are three such operations. This proposal is increasing the number of cows by 13 times at the location of one of those three operations.

On a personal basis, my concerns are the smell, house flies, noise and light at night. I don't mind smelling a dairy on an occasion. I have come to expect it. Currently on a normal day I do not smell the "dairy smell" and I do not want my house to smell like I'm living in/on a dairy on a daily basis. In our neighborhood, we already have a very large house fly population. I can only assume that with 13 times the cows there will be 13 times the population, but I may be ignorant, and would love to be educated on what steps are taken to manage flies and the smell. Currently, there is already noise from the dairies that I live next to. I do not find it overly obnoxious and most of the time it's just background noise. I am concerned with this larger operation that the noise level will be much greater and noticeable. We currently also get to enjoy a mostly dark sky, and I am concerned that with this larger facility there will always be a halo of light on the horizon.

For my livelihood, I own and operate a fruit farm. Some or all (I don't know for sure) of the field drains that run into one of my irrigation ponds begin at the location of this proposed dairy, and I am deeply concerned about water quality. I admit, I am ignorant, and would love to be educated on how steps are being taken or will be taken to make sure the drain water stays clean if this extremely large dairy does go in.

Another major concern I have for my business is an increased amount of bird pest. I already sustained an abundant amount of damage due to birds. I am concerned that with a larger amount of feed the already large and in my opinion out of control bird population will only get worse. I already sustain significant damage due to birds on many of my fruit crops. If this proposed dairy truly does bring in a larger bird population, I will have a larger loss to my crop every year. In addition to the crop damage the birds make a huge mess in and on all of my buildings. I already feel like I'm at war with them trying to keep my facilities, food safe. As bird populations rise they become more desperate for places to nest and more persistent.

Thank you for your time and service to our greater community as you consider these concerns.

Sincerely  
Alan & Cherilyn Hawkins



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**[EXTERNAL] White Bluffs Dairy Expansion**

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**From** aprilz159@olypen.com <aprilz159@olypen.com>

**Date** Fri 11/28/2025 3:39 PM

**To** planninginquiry <planninginquiry@franklincountywa.gov>

 1 attachment (24 KB)

Planning Commission Letter.docx;

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Hello,

Please read my attached letter.

Thank you,

April Jo Alexander

11-25-25

NOTICE OF SEPA ODN/NOA-M

WHITE BLUFFS DAIRY EXPANSION

SEPA 2025-18

Hello and thank you for this opportunity to address this proposal.

For those of you that don't know me, my name is April Jo Alexander. I'm giving you my middle name because there's another April Alexander in the area that our family isn't related to. Quite the coincidence, I've never met her, but evidently, it's true.

I live at 6540 N. Wahluke Rd. My family broke this farm out when I was a 7-year-old girl. When we came here there was only 2 houses on N. Wahluke Rd. And No trees! We were the 3<sup>rd</sup> house to be built. My land is directly across the road from the proposed new development. My family came here in the summer of 1963. As the only original settler left on N. Wahluke Rd, I feel I'm the "senior of seniors" on what should or should not be grandfathered in.

Not only has my family lived on this road the longest, but I am the closest and most impacted by this new proposal. My house is approximately ¼ mile from the current dairy, AND I'm downwind too. The wind usually comes from the Southwest, sometimes the south. This puts my house directly "in the line of fire".

I believe the new dairy as proposed wouldn't fit the community. I live here for the fresh air, the peace and quiet, the sunrises and sunsets, the mountain view, the wildlife, the atmosphere of a "rural" lifestyle. I like living with Nature and following the seasons. I like the good quality of the well-water. While I understand this is a working farming community and it's not just here for it's good looks (!), this new proposal is an industrial complex. I can handle the tractors and planting season, the fertilizing and watering, the harvest busyness, the bailing hay at 3 in the morning, the Harobeds... you get the picture.

What I can't handle is an industrial park. This new dairy will be a big factory. A complex that's open 24 hours a day, every single day of the year. And every single night. There's not ever a day off taking care of livestock, but an artificial day has been created with lights and more cows to milk with another working shift and traffic with employees going to work, with big milk trucks arriving and loading and leaving. Even more traffic as cows will be moved around with pickup trucks and cattle trailers. Lots of cows being

born (30-40) a day, to be moved out. There's a reason cities have their designated areas for industrial businesses. They aren't sprinkled among the residential homes and houses.

The cows don't get to rest at night either. I hear moos all night long with the current smaller dairy, along with loud clanks of the feeding stalls and loud heavy equipment machinery. The current dairymen want to move out of Grandview because of problems with the community. Do we want to accept them? Why would we? What benefit would we receive? My guess is none since the Grandview community doesn't want them. All we would get is bigger, louder and additional problems than are already here.

The new dairy shouldn't be grandfathered in at its current location. As I used to tell my kids when they were growing up, "Just because you can, doesn't mean you should". People need to learn responsibility, to think about consequences and to consider other people.

Let's think about the future, statistics say the dairy business is in decline. So what will the owners do? They'll want to expand and add more cows at some point. They'll try to not lose money. I don't blame them, but that's really going to strain the land's resources. More cows, more employees, more traffic, more groundwater, more wells dug, more lights, more above ground holding ponds. More houses added for more dairy employees and their traffic.

This area was opened up, developed and meant to be family farms by the Bureau of Reclamation. Are we going to have a divided highway here on N. Wahluke Rd?

Michael Corrales wants to sell the dairy. I understand that. And he should have the right to do that, but not at the expense of all the people that have their homes and livelihood here. This dairy is surrounded by residential homes and family farms.

When I had a real estate investing company I bought and sold single family homes and apartment buildings. This was long before it was popular and the TV shows came along. I don't know the zoning laws here in this county, but this isn't just agriculture, this proposal is Big Business and Industrial. It should be considered carefully. When I first began my business, I had to decide how to run it. I knew I didn't want to be a "used car salesman", or a ruthless businessman. I decided I would like to be a decent member of the community and create a "win-win" situation for everyone involved. I stand by that in this situation too. Currently as it stands, I don't think this proposal fits in that category. It needs some work.

And now a little background for clarity, when we came here, McClain's owned that property. Bill had a bad back and couldn't do the manual labor required for farming. So when I was in high school-ish he put in a little gravel road off to the side of the main road, a little shed with a scale, and started a fertilizer business. Minimal impact. It didn't go well. There was a Sheriff's sale in 1973 and Glenn Warr put a small dairy there. Then it changed hands to Shinstra's. They made it bigger with more cows and more land involved. It was nasty. We had to give up back yard BBQ's, swimming in the pool, sitting and playing in the back yard, drinking iced tea in the shade b/c we didn't have air conditioning. We enjoyed our back yard. We lived there in the summer. We grilled and had other farm family guests ask us if they could go inside because of the smell. They couldn't eat outside without wanting to throw up. The flocks of flies on the food were an added bonus. Thank God Michael bought it. Progress was made. Quality of life was better.

This property doesn't drain well. It shouldn't be a dairy. When Shinstra's had this dairy and even they couldn't stand it anymore, they used to come to my Dad and ask him to cut a ditch to drain all of the waste water runoff. The lagoons were overflowing and flooding the whole dairy. I believe Michael did put in a nicer drain, but a bigger dairy will mean more drains, more construction, more traffic. I'm not sure White Bluffs Dairy understands the drainage issue.

Progress has arrived to farming and things have definitely changed. Progress is good. But it's our responsibility to use it well. We are stewards of the land, and progress has also been made in healthcare too. We as people learned not to throw the slop bucket contents out the window into the city gutter. Not only can we not rape and pillage the land and water any more like the wild, wild, west, but we have a responsibility to care for it as we feed the world and care for the crops and animals that provide for us.

We have learned a lot. From Nuclear impacts at Hanford to land, water, animal impacts and health consequences for all involved. Including humans. It's not just about making the most money now and making a living. This area has been settled and we're not scrambling to hold on. It's about sustainability. Not making ourselves sick while we make a good living. We can't airhead our way through this. There's always consequences, - good or bad. Let's make good ones. Work smarter, not harder.

I recently toured a 9,000 cow- dairy farm. It's impressive. I was really impressed. From robots, to computer monitoring, to happy cows. Progress is good. However they are in the middle of nowhere (basically) and there's not any houses close by. There's neighbors around me that will be impacted at  $\frac{1}{4}$  of a mile or less,  $\frac{1}{2}$  mile, and a mile. The toured dairy's nearest house for living that's not on dairy ground is a mile away. I was

told they don't usually smell it, but occasionally they do. That should be tolerable, because that's the cleanest, least smelly dairy that I've ever seen! But many of us aren't that far away here. Even if we discount the smell, there are other concerns.

Have studies been done about the impact on:

1. Traffic – more construction, moving of cattle, more employees, more milk trucks day and night.
2. Groundwater – pollution of our wells, scarcity of water. Dairies use a very large amount of water. Their requirements can stress or deplete groundwater tables, shared by neighboring residents. A 9,000 cow dairy can have 5 wells.
3. Drainage – poor draining soil. One of the current dairy houses kept flooding and a sump pump was installed. Houses and dairy has had problems.
4. Noise pollution – mooing cows at 2 in the morning, heavy equipment, dump trucks, loaders, feeding equipment. Loud four wheelers for employees to use.
5. Light pollution – many large heavy duty lights, day and night.
6. Fly control – where there's manure and urine, there's flies. It's a fact of life. They are always around even with fly control measures. Biting flies transmit diseases as well as landing on food with their dirty feet.
7. Honeybee impact for pollinating other crops.
8. Air quality – for honeybees as well as people and other animals. Odors can cause serious adverse health effects. People are more sensitive than ever in today's world without deliberately adding more complications. Even with new and improved dairy technology, there are some odors.
9. Labor- employees. Availability, as well as more housing and traffic. A 9,500 cow dairy requires approximately 100 employees. It will currently create jobs here, but the overall impact is too high for sustainability. And as the dairy market declines further, they'll try adding more cows. But the company won't be able to afford more workers. This will impact the day to day operations as the staff falls further and further behind and the overall cleanliness and quality goes downhill.
10. Property values usually go down. Nobody wants to live near a dairy.
11. Dairy worker habits – depends upon the owners and how they manage their employees. Trash blows onto my property and others around me. Everything from silage plastic storage tunnels to soda cans, water bottles, chips and snack wrappers, beer cans, and assorted trash. Recently, this summer of 2025, it built up in my drainage pond line and created a gate. It required a full day of cleanout and approximately a \$10,000 bill. It greatly impacted our day to day farming

operation through no fault of our own. And produced a substantial bill that the clean out companies (more than one) gave to us.

12. Where are they proposing to build it? By the road again or further out in the field?

For a Win-win I suggest building on the North side of another unit that is owned by Michael straight up the road, instead of where it currently is. There aren't any houses in that direction for quite a ways. It's Bureau land around his tract of land, and the air flow and quality wouldn't have such an impact on residential houses or crop farming.

Yes I want out of the south-southwest air flow pattern. Not only does it bring raw sewage smells of manure and urine, compost, smoke from burning dead cows but noise as well. Flies and insects ride air currents.

Yes, as usual, it's about location, location, location in real estate! I prefer to not have a dairy anywhere near me. But Michael does have a right to sell his dairy business. He's keeping his farming business, and make no mistake, they are different. This dairy is turning into a big industrial business and will only continue to grow. This isn't crops outside our window.

I propose the current dairy will be torn down as suggested in the original proposal, and Michael can farm that land instead. It'll be swapped out with the land to the North that he is currently farming. Or one of his other farms where there's more room and less people. The new owners can build there.

Minimal impact. Happy cows, happy people.

Thank you.

**[EXTERNAL] Proposed new dairy**

---

**From** Brian Hawkins <brianhawk32@gmail.com>

**Date** Fri 11/28/2025 4:58 PM

**To** planninginquiry <planninginquiry@franklincountywa.gov>

[Some people who received this message don't often get email from brianhawk32@gmail.com. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification> ]

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To whom it may concern,

My name is Brian Hawkins and I'm a neighbor and third generation farmer on my families fruit farm. Thank you for the opportunity to share my thoughts on the proposed expansion of the dairy. After reviewing the proposed plan, I am opposed to the expansion of this dairy due to the environmental risk factors that would accompany it, including:

Increased population of birds, flies and other pests. These species cause harm and bring disease to orchards. This will negatively affect the quality and quantity of fruit produced, and therefore impact the sales and livelihood of only family's business.

Ground water contamination. Our farm irrigates from a field drain that begins in the same location as the proposed expansion. This puts our water source at risk of contamination.

Increase in lights, smells, and noise.

Increase in truck traffic.

These are just a few of the reasons I feel the need to oppose the proposed expansion to the dairy. This is an important matter of great consequence to my family. Thanks you for considering my comments.

Best,

Brian Hawkins

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[EXTERNAL] Fwd: White Bluffs Dairy Expansion- Concerns.docx

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From Jeffrey Hawkins <jeffrey.edward.hawkins@gmail.com>

Date Fri 11/28/2025 6:04 AM

To PermitSubmittal <permitsubmittal@franklincountywa.gov>; planninginquiry  
<planninginquiry@franklincountywa.gov>

Cc Angie Hawkins <angpermann@gmail.com>

 1 attachment (18 KB)

White Bluffs Dairy Expansion- Concerns.docx;

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**CAUTION:** This email originated from outside of Franklin County. Be careful when following links or opening attachments.

Good morning,

I am writing to express my concerns regarding the new “White Bluffs Dairy Expansion SEPA 2025-18.”

I'd rather have open farmland as a neighbor than 9,000 additional cows and their manure as open farmland does not negatively affect my ability to grow and harvest fruit or my family's quality of life. I recognize that all people should be able to pursue a livelihood with the land that they own. I do not want to be a contentious neighbor. I know most dairymen are fine people and I like consuming dairy products, but large dairies are objectively undesirable in any neighborhood.

I do not believe I should be able to completely control what someone else does with land that they own, but I have concerns that need to be addressed so the current status quo is preserved:

Negative impacts on my sweet cherry orchard:

A. Birds- dairies bring increased bird populations which hurt fruit production. Starlings and Robins currently cause thousands of dollars of damage in my orchard each year despite efforts to keep them away. Increased bird damage could be catastrophic. The Washington State Fish & Wildlife recommends removing sources of food for birds, but dairies are a 24/7/365 “all you can eat buffet” which will bring more birds.

B. Flies- Dairies bring increased flies/insects which are a nuisance and can damage fruit.

C. Smell- Hydrogen Sulfide and Ammonia in high amounts inhibit tree growth and stress otherwise healthy trees.

Negative Impacts on my neighborhood:

A. Smell- Foul odors limit outdoor enjoyment and can even penetrate inside my home if the wind blows from the north. We purchased our home long after the existing dairy was in place, so we knew we would occasionally experience unpleasant odors. We did not anticipate the dairy growing 13.5 times larger and moving to within .6 miles of us.

B. Noise- Currently this is not a problem, but I've never lived next to 9,500 cows so I am concerned of what this may become from, cows, machinery and equipment operating 24/7/365.

C. Flies- We currently have a very undesirable amount of flies and the idea of 13.5x more cows and manure could make this exponentially worse.

D. Manure spread on fields and roads- I want to be able to traverse the public roads without bringing manure back into my garage.

F. Light pollution- not currently a problem but could be with expansion.

E. Decreases value of home and land- Having a large dairy makes all the land around it less desirable for habitation and fruit production.

I have outlined my very real concerns, so White Bluffs Dairy and Franklin County ensure available remedies are implemented to mitigate the negative impacts of this massive proposed expansion. If the negative effects cannot be mitigated and the current status quo maintained, I would ask that White Bluff Dairy find a different location to expand.

We love where we live and farm and want to stay here for the rest of our lives. If the negative effects of this expansion made it unviable to live here, we would not be able to sell our home and land and replicate our livelihood and lifestyle anywhere else.

I look forward to discussing and receiving more details on this proposed expansion.

Thank you!

Jeff & Angie Hawkins

509-430-0862

2531 Buffalo Road

Othello, WA 99344

Good morning,

I am writing to express my concerns regarding the new “White Bluffs Dairy Expansion SEPA 2025-18.”

I’d rather have open farmland as a neighbor than 9,000 additional cows and their manure as open farmland does not negatively affect my ability to grow and harvest fruit or my family’s quality of life. I recognize that all people should be able to pursue a livelihood with the land that they own. I do not want to be a contentious neighbor. I know most dairymen are fine people and I like consuming dairy products, but large dairies are objectively undesirable in any neighborhood.

I do not believe I should be able to completely control what someone else does with land that they own, but I have concerns that need to be addressed so the current status quo is preserved:

Negative impacts on my sweet cherry orchard:

A. Birds- dairies bring increased bird populations which hurt fruit production. Starlings and Robins currently cause thousands of dollars of damage in my orchard each year despite efforts to keep them away. Increased bird damage could be catastrophic. The Washington State Fish & Wildlife recommends removing sources of food for birds, but dairies are a 24/7/365 “all you can eat buffet” which will bring more birds.

B. Flies- Dairies bring increased flies/insects which are a nuisance and can damage fruit.

C. Smell- Hydrogen Sulfide and Ammonia in high amounts inhibit tree growth and stress otherwise healthy trees.

Negative Impacts on my neighborhood:

A. Smell- Foul odors limit outdoor enjoyment and can even penetrate inside my home if the wind blows from the north. We purchased our home long after the existing dairy was in place, so we knew we would occasionally experience unpleasant odors. We did not anticipate the dairy growing 13.5 times larger and moving to within .6 miles of us.

B. Noise- Currently this is not a problem, but I’ve never lived next to 9,500 cows so I am concerned of what this may become from, cows, machinery and equipment operating 24/7/365.

C. Flies- We currently have a very undesirable amount of flies and the idea of 13.5x more cows and manure could make this exponentially worse.

D. Manure spread on fields and roads- I want to be able to traverse the public roads without bringing manure back into my garage.

F. Light pollution- not currently a problem but could be with expansion.

E. Decreases value of home and land- Having a large dairy makes all the land around it less desirable for habitation and fruit production.

I have outlined my very real concerns, so White Bluffs Dairy and Franklin County ensure available remedies are implemented to mitigate the negative impacts of this massive proposed expansion. If the negative effects cannot be mitigated and the current status quo maintained, I would ask that White Bluff Dairy find a different location to expand.

We love where we live and farm and want to stay here for the rest of our lives. If the negative effects of this expansion made it unviable to live here, we would not be able to sell our home and land and replicate our livelihood and lifestyle anywhere else.

I look forward to discussing and receiving more details on this proposed expansion.

Thank you!

Jeff & Angie Hawkins

2531 Buffalo Road

Othello, WA 99344

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**[EXTERNAL] SEPA 2025-18 White Bluffs Dairy LLC**

---

**From** Tyler Hawkins <tylerjameshawkins@gmail.com>  
**Date** Fri 11/28/2025 4:14 PM  
**To** planninginquiry <planninginquiry@franklincountywa.gov>

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**CAUTION:** This email originated from outside of Franklin County. Be careful when following links or opening attachments.

Hello,

My name is Tyler Hawkins. I live at 5081 N Wahluke Rd, Mesa, WA 99343, which is approximately 1 mile south of this proposed new dairy.

I would like to comment on the negative environmental impacts of this proposed project. They are as follows:

I believe that a dairy of this size/scope is akin to a massive industrial complex. I'd prefer not to live next to a massive industrial complex with 24-hour a day semi-truck traffic, noise from pumps, heavy equipment, and 9,500 cows. I assume that this dairy will also have a massive amount of lighting for operations during the night. I currently quite enjoy living where I live with it getting dark at night and being able to see the stars. I know that I would still be able to see the starts, but probably not as well with the amount of lights this dairy will likely have.

A dairy of this size will bring with it an increased amount of unpleasant smell and increased pests like flies, starling birds, and other rodents. This property borders an orchard that I'm sure will see negative effects of being next to a dairy. There are several other orchards in the neighborhood that could also be negative affected.

I am not a water expert, but I am concerned about the potential for contamination of groundwater and the domestic wells that are currently in the surrounding area. Also the potential for some of these wells to become depleted when large wells are drilled for this dairy. Has that been taken into consideration?

How will the manure be managed? I am not an expert about manure, but I have observed that how a dairy manages the manure produced can make a big difference in smell and how much of it ends up on N. Wahluke and Filbert rd.

Thank you for taking my comments into consideration about this proposed project.

--

Tyler Hawkins

509-439-0244

## [EXTERNAL] Objection to Proposed Development

---

**From** Roberto Garcilazo <robert.garcilazo22@gmail.com>

**Date** Fri 11/28/2025 11:45 AM

**To** planninginquiry <planninginquiry@franklincountywa.gov>; Comprehensive Plan 2026  
<plan2026@franklincountywa.gov>

 2 attachments (145 KB)

Appeal Letter. Objection to Dairy Expansion Proposal .pdf; Environmental Impacts Associated with Homes Near Dairy.pdf;

Some people who received this message don't often get email from robert.garcilazo22@gmail.com. [Learn why this is important](#)

**CAUTION:** This email originated from outside of Franklin County. Be careful when following links or opening attachments.

Good morning,

Attached is our objection to the proposed development for the expansion and reconfiguration of the existing dairy in Mesa, WA near Othello. We would like to take this opportunity to provide comments regarding the environmental impacts and our personal concerns about the proposed project. Thank you for your time and consideration.

We appreciate your attention to this matter,  
Roberto & Hilda Garcilazo

ROBERTO & HILDA GARCILAZO

5841 N. Wahluke Rd.  
Mesa, WA, 99343  
T: 509-378-4235  
E: rob22lazo@gmail.com

Dear Franklin County Planning and Economic Development Department,

We are writing to formally object to the proposed development for the expansion and reconfiguration of the existing dairy at Parcels 121-060-012, 121-060-013, & 121-060-075, which is located directly adjacent to my property at 5841 N. Wahluke Rd, Mesa, WA.

We have serious concerns that this particular proposal will have a major impact on our existing property and our quality of life. Not only for us but for the residents around the area as well.

Living next to a dairy farm can expose residents to several significant health and environmental risks. Air quality is a primary concern, as dairy operations—particularly those with large numbers of cattle—release methane and other pollutants that may contribute to respiratory issues and related health problems. In addition, dust generated from manure, animal feed, and daily farm activity can be easily inhaled, further increasing respiratory concerns. The waste produced by dairy operations, including manure and runoff, can also have serious environmental impacts, such as water contamination, soil degradation, and broader ecosystem harm. Collectively, these factors pose substantial potential risks to individuals living near dairy facilities. Our home is the only lot that would be completely surrounded, and the close proximity of feed, animals, and feedlot operations raises additional concerns about odors. The odor from the existing operation is already extremely strong—at times worse than sewer water—and any expansion would intensify these impacts, particularly from cow manure, cattle urine, dust, and other contaminants. These effects are especially significant during windy conditions, when fecal matter already travels easily and affects air quality.

In addition to these concerns, the noise from the large amount of cattle, semis, diesel vehicles, and tractors are already significant, and any expansion would increase traffic and noise pollution dramatically, especially if truck and equipment activity multiplies. A new driveway or entrance should not be placed next to our lot, as trucks frequently get stuck and create potholes that are never repaired, and the current commodity tarps have caused runoff that washes away our driveway.

Along with noise pollution, the increased traffic raises serious concern. The scale of the development is likely to generate additional traffic on Wahluke Rd and on our driveway. Our driveway is directly connected to the adjacent property of the existing dairy. The number of trucks already passing through makes the road quite busy. This raises safety

concerns, particularly for our younger children and others in the area. This year alone, we were forced to close part of our driveway due to numerous truck drivers and workers engaging in inappropriate and unsafe behavior, including speeding, littering, urinating on our property, conducting suspicious meetings after dark, and running excessively loud mufflers purposely revving the engine in front of our home. We are concerned that the proposed expansion will only increase this activity.

The proposed expansion of the dairy would likely lower our property value, reducing privacy, obstructing and diminishing the aesthetic quality of our surroundings. When we first considered purchasing the property, we paid full asking price, and at that time it was surrounded by an orchard. We purchased the property with the understanding that the feedlot would not be expanded. If there's a possibility of the cherry trees being removed, we are deeply concerned that the feedlot and animal pens will extend up to our property line on all three sides. If the expansion of the new dairy proceeds and the new owner does not address our concerns, we risk being completely surrounded by pens, losing property value, and facing major challenges when selling our home at market rate.

We respectfully request that the planning department take these concerns into account and reject the current proposal. We believe that any development on this site should take into consideration all environmental impacts.

Thank you for your time and consideration. We would appreciate confirmation that my objection has been recorded and that we will be kept informed of any updates regarding this appeal.

Kind regards,  
Roberto & Hilda Garcilazo  
5841 N. Wahluke Rd  
Mesa, WA 99343  
(509) 378-4235

# Environmental Impacts Associated with Homes Near Dairy

Here are some well-known environmental impacts found online that are associated with having a dairy operation located close to residential homes. These points are based on established environmental science and common regulatory concerns:

## 1. Air Quality Impacts

- **Odors:** Decomposing manure releases strong, persistent odors that can travel long distances and affect daily living.
- **Ammonia emissions:** Ammonia from manure and urine can irritate eyes, throat, and lungs.
- **Particulate matter (dust):** Dry manure, feed, bedding, and dirt can become airborne and reduce air quality.

## 2. Water Contamination Risks

- **Groundwater pollution:** Nitrates from manure can seep into groundwater, potentially affecting drinking water wells.
- **Surface water runoff:** Rain can wash manure, urine, and silage leachate into nearby canals, irrigation systems, and waterways.
- **Nutrient loading:** Excess nutrients (nitrogen and phosphorus) can contribute to algae growth and lower water quality.

## 3. Soil Degradation

- **Manure overload:** Too much manure applied to land can lead to soil imbalance and nutrient saturation.
- **Chemical runoff:** Dairy operations often use disinfectants, pesticides, and cleaning agents that can accumulate in soil.

## 4. Increased Pest Attraction

- **Flies:** Manure and feed attract large populations of flies, which become a nuisance and can carry pathogens.
- **Rodents:** Feed storage areas often draw rodents, posing additional sanitation issues.

## 5. Noise Pollution

- **Heavy machinery:** Tractors, loaders, generators, and equipment run daily and often early in the morning or late at night.
- **Truck traffic:** Feed deliveries, milk trucks, and manure hauling create consistent noise.

## 6. Light Pollution

- **Bright facility lights:** Outdoor dairy lights, especially if operating 24/7, can brighten surrounding residential areas at night.

## 7. Increased Traffic & Road Impacts

- **Semis, tractors, and farm equipment:** Frequent heavy vehicles increase road wear, damage pavement, and create safety hazards.
- **Dust from traffic:** Dirt roads or busy driveways generate large amounts of fine dust that drift onto nearby properties.

## 8. Public Health Concerns

- **Bioaerosols:** Microorganisms from manure, dust, and animal dander can become airborne and cause respiratory irritation.
- **Pathogen transmission:** In rare cases, bacteria like E. coli or Salmonella can travel through water or dust.

## 9. Visual Impacts

- **Unsightly views:** Manure piles, feed bins, lagoon ponds, and animal pens can drastically alter the scenery around a home.

## 10. Property Value Decline

- **Perceived risk:** Homes near dairies often see lower resale value due to odor, noise, and environmental concerns.
- **Reduced desirability:** Buyers may avoid homes close to agricultural operations with high environmental impact.



STATE OF WASHINGTON  
**DEPARTMENT OF ECOLOGY**

Eastern Region Office

4601 North Monroe St., Spokane, WA 99205-1295 • 509-329-3400

November 26, 2025

Wes McCart  
Franklin County Planning and Building Department  
502 W Boeing Street  
Pasco, WA 99301

**Re: White Bluffs Dairy Expansion**  
**File# CUP 2025-10, SEPA 2025-18, Ecology SEPA# 202504758**

Dear Wes McCart:

Thank you for the opportunity to provide comments on the State Environmental Policy Act (SEPA) Mitigated Notice of Application for the **White Bluffs Dairy Expansion** proposal. Based on review of the checklist associated with this project, the Department of Ecology (Ecology) has the following comments:

**Air Quality Program**

**David Finley, (509) 342-5917, david.finley@ecy.wa.gov**

Depending on the potential emissions from the diesel fuel storage tanks and the composting operations, a Notice of Construction (NOC) application may need to be submitted. Emission permitting thresholds can be found in Washington Administrative Code (WAC) 173-400-110 and 173-460-150. The NOC application form can be found at Ecology's website here: [Notice of construction permit](#).

**Solid Waste Management Program**

**Martyn Quinn, (509) 904-9857, martyn.quinn@ecy.wa.gov**

The applicant proposes to demolish existing structures. Item B.7.a of the checklist asks if there are any environmental health hazards that could occur as a result of the proposal. Improper disposal of solid waste, including demolition waste, can result in environmental health hazards. We encourage the applicant to salvage, reuse, and recycle as much of the waste as possible. Recycling demolition debris is typically less expensive than disposal. Otherwise, the demolition waste must be disposed of at a permitted solid waste facility.

**Water Quality Program**

**Chad Sauve, (509) 934-6202, chad.sauve@ecy.wa.gov**

Operators of construction sites that disturb one acre or more total area and has, or will have a discharge of stormwater to a surface water or to a storm sewer, must apply for coverage under Department of Ecology's [Construction Stormwater General Permit](#).

If soil or ground water contamination is known at the site, additional information will be required. The applicant will be required to submit additional studies and reports including, but not limited to, temporary erosion and sediment control plans, a stormwater pollution prevention plan, a site map depicting sample locations, a list of known contaminants with concentrations and depths found and other information about the contaminants.

Application should be made at least 60 days prior to commencement of construction activities. A permit application and related documents are available online.

**Water Resources Program**

**Herm Spangle, (509) 329-3610, [herm.spangle@ecy.wa.gov](mailto:herm.spangle@ecy.wa.gov)**

The Ground Water Permit exemption under RCW 90.44.100 does not apply if one of the below definitions applies to the proposed project.

RCW 90.03.015

The definitions in this section apply throughout this chapter unless the context clearly requires otherwise.

(1) "Department" means the department of ecology.

(2) "Director" means the director of ecology.

(3) "Municipal water supplier" means an entity that supplies water for municipal water supply purposes.

(4) "Municipal water supply purposes" means a beneficial use of water: (a) For residential purposes through fifteen or more residential service connections or for providing residential use of water for a nonresidential population that is, on average, at least twenty-five people for at least sixty days a year; (b) for governmental or governmental proprietary purposes by a city, town, public utility district, county, sewer district, or water district; or (c) indirectly for the purposes in (a) or (b) of this subsection through the delivery of treated or raw water to a public water system for such use. If water is beneficially used under a water right for the purposes listed in (a), (b), or (c) of this subsection, any other beneficial use of water under the right generally associated with the use of water within a municipality is also for "municipal water supply purposes," including, but not limited to, beneficial use for commercial, industrial, irrigation of parks and open spaces, institutional, landscaping, fire flow, water system maintenance and repair, or related purposes. If a governmental entity holds a water right that

Wes McCart  
November 26, 2025  
Page 3

is for the purposes listed in (a), (b), or (c) of this subsection, its use of water or its delivery of water for any other beneficial use generally associated with the use of water within a municipality is also for "municipal water supply purposes," including, but not limited to, beneficial use for commercial, industrial, irrigation of parks and open spaces, institutional, landscaping, fire flow, water system maintenance and repair, or related purposes.

(5) "Person" means any firm, association, water users' association, corporation, irrigation district, or municipal corporation, as well as an individual.

If you have any questions or would like to respond to these comments, please contact the appropriate program staff listed above. If you have questions about SEPA, please reach out to [sepahelp@ecy.wa.gov](mailto:sepahelp@ecy.wa.gov).

Sincerely,



Amanda Hiebert  
SEPA Coordinator  
Eastern Region Office



### AGENCY REVIEW NOTICE (SEPA ODNS/NOA-M)

**DATE:** November 13, 2025

**RE:** SEPA 2025-18

**TO:** County Engineer                      Irrigation District:    SCBID   X      FCID       
County Assessor/GIS                      Electric Utility:        BBEC   X      FPUD       
County E-911                                  Benton-Franklin Health District  
Fire District #   4                            Franklin County Conservation District  
U.S. Bureau of Reclamation  
Washington State Dept. of Ecology – SEPA Register  
Washington State Dept. of Transportation – South Central Region  
Washington State Dept. of Archaeology and Historic Preservation (DAHP)  
Washington State Dept. of Fish and Wildlife (WDFW)  
Washington State Dept. of Natural Resources  
Washington State Dept. of Health  
Confederated Tribes and Bands of the Yakama Nation  
Confederated Tribes of the Umatilla Indian Reservation  
Confederated Tribes of the Colville Reservation  
Confederated Tribes of the Warm Springs  
Nez Perce Tribe

**FROM:** Gem Belamour, Planner II

**CC:** Franklin County Planning Department

---

Agency Representative:

Enclosed is a copy of Planning file #SEPA 2025-18. This review and comment period shall focus solely on environmental impacts and mitigation measures of such impacts. A second notice will be sent out in the future associated with the Conditional Use Permit.

Franklin County has reviewed the proposed project for probable adverse environmental impacts and expects to issue a Mitigated Determination of Nonsignificance (MDNS). The optional MDNS process in WAC 197-11-355 is being used. This may be your only opportunity to comment on the environmental impacts of the proposed project.

The proposed development is for the expansion and reconfiguration of the existing 700-cow milk dairy to accommodate a 9,500-cow herd size. Demolition of the current milking parlor, animal corrals, cow shade and other miscellaneous outbuildings will be part of this project. Approximately 113 acres of feed crop production ground will be converted to dairy-production ground.

The following structures are also proposed in this project: approximately 57,000 sq. ft. milk parlor building, twelve (12) open-lot corrals, six (6) 1,100 ft. long concrete lanes for each corral's feed alley, expansion of five (5) existing 6,000 sq. ft. free stall barns, a 12,800 sq. ft. commodity barn with maintenance shop facilities, two (2) 10,000-gal diesel fuel above ground storage tanks, a paved driveway/parking area with approximately 20 parking spaces, a liquid manure processing and storage system, and a manure solids and compost storage area.

The property has a Zoning Designation of Agricultural Production 20-acres and a Comprehensive Plan Designation of Agricultural.

The proposed project is in portions of Sections 6, Township 13 North, Range 29 East, Franklin County, WA. The property is generally located South of Filbert Rd., West of N Wahluke Rd., East of Buffalo Rd., in unincorporated Franklin County. (Parcels #121-060-012, 121-060-013, 121-060-075).

We would appreciate your review and comments by **November 28, 2025 at 5:00PM.**

See attachments for additional information.

**REPLY:**

*NO comments*

**Signed:** 

**Title:** GIS

**Date:** 11/26/25

*"The Green Spot of the Columbia Basin"*



# South Columbia Basin Irrigation District

OFFICE: 1135 E. HILLSBORO, SUITE A

TELEPHONE 509/547-1735, FAX 509/547-8669 • P.O. BOX 1006 • PASCO, WASHINGTON 99301

26 November 2025

ATTN: Ms. Gem Belamour  
Planner II  
Franklin County, WA Planning & Economic Development  
502 W. Boeing St  
Pasco, WA 99301

Re: SEPA 2025-18, White Bluffs Dairy LLC Expansion Project.

Dear Ms. Belamour,

The District has reviewed SEPA 2025-18 for White Bluffs Dairy and has the following comment(s):

- There currently exist multiple exposed manholes for the buried drain systems across the project site. These manholes must be protected from impact by equipment or livestock and the also need to be protected from the potential intrusion of waste materials from the dairy operation. These buried drains are not for waste disposal, intentional or unintentional and must be protected.
- Please include the South Columbia Basin Irrigation District WB10A lateral in the SEPA section 3.a.1. This canal serves over 800 acres downstream of this site and any operational waste water from this canal system proceeds into the WB10A WW which discharges into the Wahluke Ponds and eventually into the Columbia River to the west.
- Given the size of the waste ponds and the compost pile and their proximity to the WB10A lateral, SCBID is very concerned about the potential release of effluent and the blowing of the composted material which could enter the canal. Mitigation measures must be taken to prevent any effluent or solid waste from entering that lateral. SCBID needs to understand how the site will be graded and what the plan for a potential overtopping event of the waste ponds is. Will that effluent be directed into an undeveloped portion of the site or another area and what measures will be in place to confirm such action. One action that would reduce our concerns would be for the applicant to pipe the WB10A lateral near the pond and compost pile location to provide mitigation of such concerns.
- Section 3.a.1 of the SEPA indicates that the WB5WW1 drains into the WB5 and ultimately into the Wahluke Branch Canal (WBC). This is backwards from how things work in the field. The WBC flows into the WB5 which then flows into the WB5WW1, and the reservoir noted in the SEPA. The water in the reservoir is released past the dike near Wahluke Road and flows in a general southerly and westerly direction until it discharges into the Columbia River near Savage Island.

- SCBID believes that if industry standards and typical mitigating measures are employed in relation to this expansion, the risk of impact should be minimal. There is, however, a real risk of detrimental impact to adjacent parcels and the environment if those measures fail and effluent or solid waste is released impacting buried drains or the canal system in the area.

If you have any questions, please do not hesitate to contact me at 509-547-1735 or by email at [bscott@scbid.org](mailto:bscott@scbid.org).

Thank you,

Brian Scott, P.E.  
Chief Engineer  
South Columbia Basin Irrigation District

File: Block 201 Farm Unit 16

# Memo



## Public Works Department

**To:** Wesley McCart, Planning & Building Director  
**From:** John Christensen  
**cc:** Craig Erdman, PE, Director / County Engineer  
**Date:** November 20, 2025  
**Re:** SEPA 2025-18 White Bluffs Dairy Expansion

---

Wesley,

We have reviewed the application for the proposed expansion and reconfiguration of the existing 700-cow milk dairy to accommodate a 9,500-cow herd size. Demolition of the current milking parlor, animal corrals, cow shade and other miscellaneous outbuildings will be part of this project. The parcels affected by this proposal are 121-060-012, 121-060-013, & 121-060-075 with an address of 6201 N Wahluke Rd, Mesa, WA 99343.

N Wahluke Road is an existing hard surface road, not built to an all-weather standard, with access to Sagehill Road and R-170 both built to an all-weather standard. N Wahluke Road was not designed to support heavy loads especially during freeze / thaw periods and is subject to road restrictions during these times to prevent damage to the roadway. N Wahluke Road could deteriorate at an accelerated rate with the proposed expansion. Public Works has concern for any increase on this stretch of roadway.

Public Works has concluded that the proposed use will increase the impact on the County Road System. Public Works has the following general comments:

1. A head count increase will require a Traffic Impact Analysis (TIA) to be completed together with upgrades and/or mitigation fees for the County Road System. The TIA shall include County Roads impacted by this increase and at a minimum include N Wahluke Road, adjacent to the site, to the State Route.
2. Approach permits are required for all access to Franklin County roads per the County Road Approach Policy (Resolution No. 2014-123) and any existing approaches must be brought up to current design standards. Requirements include required permits, approach construction, minimum design standards, etc. per Franklin County Design Standards for the Construction of Roads and Bridges (Resolution 2002-270).
3. Any utility extension crossing Franklin County roads will be addressed at the time of application. See Accommodation of Utilities on County Road Right-of-Way for more information (Resolution #2000-330).

Please let me know if you have any questions.



# FRANKLIN COUNTY

## PLANNING AND ECONOMIC DEVELOPMENT

### NOTICE OF SEPA ODN/NOA-M WHITE BLUFFS DAIRY EXPANSION SEPA 2025-18

**NOTICE IS HEREBY GIVEN** that the Franklin County Planning and Economic Development Department, determined to be the Lead Agency pursuant to the State Environmental Policy Act (SEPA) of 1971, as amended, and Washington Administrative Code (WAC) 197-11-355, has issued an Optional Determination of Non-Significance / Notice of Application with Mitigation Measures (ODNS/NOA-M) concerning the following proposed project:

**Proponent:** White Bluffs Dairy LLC, Fransisca Vander Meulen, 650 Horby Rd., Grandview, WA, 98930-9202

**Proposal:** The proposed development is for the expansion and reconfiguration of the existing 700-cow milk dairy to accommodate a 9,500-cow herd size. Demolition of the current milking parlor, animal corrals, cow shade and other miscellaneous outbuildings will be part of this project. Approximately 113 acres of feed crop production ground will be converted to dairy-production ground. The following structures are also proposed in this project: approximately 57,000 sq. ft. milk parlor building, twelve (12) open-lot corrals, six (6) 1,100 ft. long concrete lanes for each corral's feed alley, expansion of five (5) existing 6,000 sq. ft. free stall barns, a 12,800 sq. ft. commodity barn with maintenance shop facilities, two (2) 10,000-gal diesel fuel above ground storage tanks, a paved driveway/parking area with approximately 20 parking spaces, a liquid manure processing and storage system, and a manure solids and compost storage area.

**Project/Location:** Parcels 121-060-012, 121-060-013, 121-060-075

**NOTICE IS FURTHER GIVEN** that in accordance with the State Environmental Policy Act and WAC 197-11-355, the ODN/NOA-M, site plan, the Environmental Checklist, and other materials pertinent to the proposed project have been sent to agencies with jurisdiction, the Washington State Department of Ecology, and others having an interest in the proposal.

The ODN/NOA-M was issued on November 12, 2025, by the Franklin County Planning and Economic Development Department. The County may issue a Mitigated Determination of NonSignificance (MDNS) for this proposal under the optional DNS SEPA process, provided in WAC 197-11-355. This may be your only opportunity to comment on the environmental impacts of the proposed project. Comments regarding this determination must be received by 5:00 p.m., Friday, November 28, 2025, at which time the MDNS will become final. For more information, please contact Franklin County Planning and Economic Development at [planninginquiry@franklincountywa.gov](mailto:planninginquiry@franklincountywa.gov).

**DATED AT PASCO, WASHINGTON ON THIS 13th DAY OF NOVEMBER 2025.**

LAND USE – ZONING CODE – BUILDING CODE – FIRE CODE – CODE ENFORCEMENT – BUSINESS REGISTRATION

502 W. BOEING ST. - PASCO, WA 99301 - [509] 545-3521 - FAX [509] 546-3367 - BURN LINE [509] 545-3586 - BLDG. INSP. LINE [509] 545-3522

WWW.FRANKLINCOUNTYWA.GOV



# FRANKLIN COUNTY

## PLANNING AND ECONOMIC DEVELOPMENT

### SITE LOCATION:





# FRANKLIN COUNTY

## PLANNING AND ECONOMIC DEVELOPMENT

### AGENCY REVIEW NOTICE (SEPA ODNS/NOA-M)

**DATE:** November 13, 2025

**RE:** SEPA 2025-18

**TO:** County Engineer                      Irrigation District:    SCBID   X      FCID       
County Assessor/GIS                  Electric Utility:        BBEC   X      FPUD       
County E-911                              Benton-Franklin Health District  
Fire District #   4                        Franklin County Conservation District  
U.S. Bureau of Reclamation  
Washington State Dept. of Ecology – SEPA Register  
Washington State Dept. of Transportation – South Central Region  
Washington State Dept. of Archaeology and Historic Preservation (DAHP)  
Washington State Dept. of Fish and Wildlife (WDFW)  
Washington State Dept. of Natural Resources  
Washington State Dept. of Health  
Confederated Tribes and Bands of the Yakama Nation  
Confederated Tribes of the Umatilla Indian Reservation  
Confederated Tribes of the Colville Reservation  
Confederated Tribes of the Warm Springs  
Nez Perce Tribe

**FROM:** Gem Belamour, Planner II

**CC:** Franklin County Planning Department

---

Agency Representative:

Enclosed is a copy of Planning file #SEPA 2025-18. This review and comment period shall focus solely on environmental impacts and mitigation measures of such impacts. A second notice will be sent out in the future associated with the Conditional Use Permit.

Franklin County has reviewed the proposed project for probable adverse environmental impacts and expects to issue a Mitigated Determination of Nonsignificance (MDNS). The optional MDNS process in WAC 197-11-355 is being used. This may be your only opportunity to comment on the environmental impacts of the proposed project.

The proposed development is for the expansion and reconfiguration of the existing 700-cow milk dairy to accommodate a 9,500-cow herd size. Demolition of the current milking parlor, animal corrals, cow shade and other miscellaneous outbuildings will be part of this project. Approximately 113 acres of feed crop production ground will be converted to dairy-production ground.

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The property has a Zoning Designation of Agricultural Production 20-acres and a Comprehensive Plan Designation of Agricultural.

The proposed project is in portions of Sections 6, Township 13 North, Range 29 East, Franklin County, WA. The property is generally located South of Filbert Rd., West of N Wahluke Rd., East of Buffalo Rd., in unincorporated Franklin County. (Parcels #121-060-012, 121-060-013, 121-060-075).

We would appreciate your review and comments by **November 28, 2025 at 5:00PM.**

See attachments for additional information.

---

**REPLY:**

**Signed:** \_\_\_\_\_ **Title:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**CUP 2025-10/  
SEPA 2025-18**

**Traffic Impact Analysis**



CONSULTANTS IN THE ENVIRONMENTAL AND APPLIED EARTH SCIENCES

## **TRAFFIC IMPACT ANALYSIS**

**FRANKLIN COUNTY SEPA 2025-18  
Proposed T. Freeman Dairy Expansion  
White Bluffs Dairy  
6201 N Wahluke Road  
Mesa, Washington**

**January 9, 2026**

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---

Prepared For:

WHITE BLUFFS DAIRY LLC  
650 Hornby Road  
Grandview, WA 98930

**TRAFFIC IMPACT ANALYSIS  
FRANKLIN COUNTY SEPA 2025-18  
Proposed T. Freeman Dairy Expansion  
White Bluffs Dairy  
6201 N Wahluke Road  
Mesa, Washington**

Reference:

IES Project No. FRH-2510.002

Date:

January 9, 2026

Prepared By:



---

Steven L. Hicks  
Principal Engineer  
Washington State Professional Engineer (PE) No. 49749



**INLAND EARTH SCIENCES CORPORATION**  
8704 E. DALTON AVENUE  
SPOKANE, WASHINGTON 99212  
(509) 563-5242 | [www.inlandearth.com](http://www.inlandearth.com)



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A BFCOG 2024 TRAFFIC COUNT DATA



## ACRONYMS AND ABBREVIATIONS

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ac	acre
ac-ft	acre-feet
AMSL	Above Mean Sea Level
ASTM	American Society for Testing and Materials
BFCOG	Benton-Franklin Council of Governments
bgs	below ground surface
°C	degrees Celsius
CAFO	Concentrated Animal Feeding Operation
cf	cubic feet
cfs	cubic feet per second
cm	centimeter
cm/s	centimeters per second
CPS	Conservation Practice Standard
cy	cubic yard
DTW	depth to water
Ecology	Washington State Department of Ecology
eFOTG	electronic Field Office Technical Guide
EPA	United States Environmental Protection Agency
°F	degrees Fahrenheit
ft	feet
ft/d	feet per day
FSA	Farm Services Administration
gal	gallon
GCL	Geosynthetic Clay Liner
GP	General Permit
GVWR	Gross Vehicle Weight Rating
gpd	gallons per day
HDPE	High Density Polyethylene
HSP	Health and Safety Plan
IES	Inland Earth Sciences Corporation
in	inch
in/hr	inches per hour
kg	kilogram
L	liter
lb	pound
lbs/ac	pounds per acre



## ACRONYMS AND ABBREVIATIONS

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lbs/t	pounds per ton
IWMP	Irrigation Water Management Plan
MPPP	Manure Pollution Prevention Plan
m	meter
meq/L	milliequivalents per liter
mS/cm	millisiemens per centimeter
µg	microgram
µg/L	micrograms per liter
µm	micrometer
mph	miles per hour
mg	milligram
mg/L	milligrams per liter
mgd	million gallons per day
mil	thousandths of an inch (e.g., “60 mil” is equal to 60 thousandths of an inch, or 0.060-inch)
mL	milliliter
mm	millimeter
MPa	Megapascal
mV	millivolt
NAIP	National Agriculture Imagery Program
NAVD88	North American Vertical Datum 1988
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
MSDS	Material Safety Data Sheets
OHWM	Ordinary High Water Mark
pcf	pounds per cubic foot
PE	Polyethylene
PS	Polystyrene
psi	pounds per square inch
PVC	Polyvinyl Chloride
QCBID	Quincy Columbia Basin Irrigation District
RCW	Revised Code of Washington
RTPO	Regional Transportation Planning Organization
SCBID	South Columbia Basin Irrigation District
sf	square feet
SH	State Highway



## ACRONYMS AND ABBREVIATIONS

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SPCC	Spill Prevention, Control, and Countermeasures
SVID	Sunnyside Valley Irrigation District
SWD	State Waste Discharge
TIA	Traffic Impact Analysis
TIP	Traffic Improvement Plan
USAF	United States Air Force
USBR	United States Bureau of Reclamation
USDA	United States Department of Agriculture
USGS	United States Geological Survey
WA	Washington State
WAC	Washington Administrative Code
WBZ	Water-bearing zone
WGS84	World Geodetic System 1984
WWR	Water Well Report
WSDA	Washington State Department of Agriculture
WSDOT	Washington State Department of Transportation
WSP	Waste Storage Pond
yd	yard
yr	year



## 1 INTRODUCTION

Inland Earth Sciences Corporation (IES), on behalf of White Bluffs Dairy LLC, presents the following Traffic Impact Analysis (TIA) related to expansion of the current T. Freeman Dairy, located at 6201 N Wahluke Road in Mesa, Washington. This TIA is intended to address Mitigation Measure 5 of the Franklin County State Environmental Policy Act (SEPA) 2025-18 Notice of Application (NOA) Optional Determination of Nonsignificance (ODNS/NOA-M) dated November 12, 2025. This TIA is designed to analyze potential impacts to traffic volumes on the Franklin County road system segments between the Facility and Washington State Highway (SH) 17 that will be utilized by operation-related traffic. The following sections of this TIA present the existing traffic conditions along the operation-related travel route and an analysis of anticipated traffic conditions as a consequence of Facility expansion.

## 2 SITE LOCATION

The Facility is located at 6201 N Wahluke Road, Mesa, Washington, (**Figure 1**) approximately 1½ miles north of the intersection of N. Wahluke Road and Hollingsworth Road in northern Franklin County (**Figure 2**). The Facility is situated within the northeast quarter (NE¼) and the northeast quarter of the southeast quarter (NE¼, SE¼) of Section 6 (S. 6), Township 13 North, Range 29 East, Willamette Meridian (T. 13N, R 29E, W.M.), Franklin County. The approximate geographic coordinates of the Facility centroid are 46.645060°N, 119.222943°W (WGS84).

## 3 EXISTING TRAFFIC CONDITIONS

The intended primary access route between the Facility and SH 17 is depicted in **Figure 3**. An inventory of Franklin County Road System roads included in the access route is presented in **Table 1**. A discussion of current traffic conditions is provided below.

### 3.1 North Wahluke Road – Facility Frontage

The frontage of the Facility along N. Wahluke Road extends approximately 0.6 miles south from the intersection of Filbert Road and N. Wahluke Road. This section of N. Wahluke Road has a functional classification of a rural local access road and is not constructed to all-weather standards. There are currently three semi-defined gravel approaches from the Facility to N. Wahluke Road, one located near the milking parlor in the northern area and two located in the southern portion near the commodity staging area. In addition, several areas are present where access to N. Wahluke Road from the Facility occurs outside of the gravel approaches.

The section of N. Wahluke Road located along the Facility's frontage is a two-lane asphalt surfaced road, approximately 20 feet wide with no shoulders and a posted speed limit of 50 miles per hour (mph). The surface condition of the road is good and minimal cracks or other surface damage is visible. Spalling of the asphalt surface is visible along the east side of N. Wahluke Road adjacent to the Facility where agricultural fields are accessed from the road.

Manual turning movement traffic counts were collected for N. Wahluke Road from 7:00 AM to 5:00 PM on November 14, 2025. Traffic was observed and counted from a location on the east side of N. Wahluke



Road directly east of the Facility's current commodity storage area. All traffic entering and exiting the Facility and traffic on N. Wahluke Road could be observed from this location.

This observation time period was selected to provide a baseline of traffic volumes at the Facility and provide a baseline for the development of estimates of post-expansion traffic conditions. While additional traffic would be expected outside of the period selected for traffic counts, the time period selected represents the peak hours of operation of the current and expanded Facility. Outside of peak hours of operation, employee numbers and shipping and receiving are greatly reduced. The results of the manual traffic counts are presented in **Table 1**.

As presented in **Table 1**, the total number of vehicle trips counted was 267. Of the 267 trips, 35 trips were trucks (21 northbound and 14 southbound). Of the 35 truck trips, 18 were either entering or exiting the Facility. The total number of car trips counted was 229 (125 northbound and 104 southbound). Of the 229 car trips, 24 were either entering or exiting the Facility. Based on the manual traffic counts conducted on November 14, 2025, approximately 50 percent of the truck traffic and 10 percent of the car traffic on this section of N. Wahluke Road is associated with the Facility.

### 3.2 N. Wahluke Road – Filbert Road to Sagehill Road

The approximately 3.1-mile section of N. Wahluke Road located between its intersection with Filbert Road north of the Facility and its intersection with Sagehill Road is a two-lane asphalt surface road, approximately 20 feet wide with minimal shoulders and a posted speed limit of 50 mph. The surface condition of the road is good with minimal longitudinal or transverse cracking. In the sections of the road where sharp horizontal curves are present spalling of the asphalt road surface is present on the inside of the curves, likely from overtaking in these areas. Some surface spalling is also present in areas where field access occurs. This section of N. Wahluke Road has a functional classification of Rural Minor Collector and is not constructed as an all-weather road.

No traffic count data for this section of N. Wahluke Road is available. It is assumed that traffic density on this section of N. Wahluke Road is greater than that along the section of North Wahluke Road adjacent to the Facility because of additional traffic moving between Filbert Road and Sagehill Road. However, traffic volumes were not verified as part of this analysis.

### 3.3 Sagehill Road – N. Wahluke Road to Road 170

The approximately 5.2 miles of Sagehill Road between its intersection with N. Wahluke Road and Road 170 is included in the primary truck travel route for the Facility. This section of Sagehill Road is a two-lane asphalt road constructed to all-weather standards and is classified as a Rural Major Collector.

Traffic counts collected in 2024 are available in ArcGIS format for Sagehill Road through the Benton-Franklin Council of Governments (BFCOG) Open Data Portal online at [https://bfcog-open-data-portal-bfcog.hub.arcgis.com/datasets/8c12ef4d458340d2a53cf68cc5a15a24\\_0/explore?location=46.334175%2C-119.207903%2C10.00](https://bfcog-open-data-portal-bfcog.hub.arcgis.com/datasets/8c12ef4d458340d2a53cf68cc5a15a24_0/explore?location=46.334175%2C-119.207903%2C10.00). The counts were collected during August 2024 at three locations: Sagehill Road north of Hollingsworth Road, Sagehill Road south of Hollingsworth Road, and Sagehill Road north of Road 170. At all three locations, traffic counts were collected over a three-day period. **Table 2** presents the single day average of the traffic counts and the percentage of heavy vehicles (Federal Highway Administration [FHWA] Schedule F Class 4-13) recorded at the three locations. A summary of the information provided by the BFCOG dataset for Sagehill Road is included in **Appendix A**. Using the traffic



counts and percentage of heavy vehicles, car and truck trips were calculated and are also presented in **Table 2**.

In general, the number of car and truck trips through this section of Sagehill Road remains consistent within a range of 428 to 493 car and 83 to 112 truck trips per day in the northbound direction and 398 to 434 car and 111 to 122 truck trips per day in the southbound direction.

### **3.4 Road 170 – Sagehill Road to State Highway 17**

The approximately 8.4 miles of Road 170 between Sagehill Road and its intersection with SH 17 is included in the primary truck travel route for the Facility. This section of Road 170 is a 2-lane asphalt road constructed to all weather standards and is classified as a Rural Major Collector.

Traffic counts collected in 2024 are available in ArcGIS format for Road 170 through the Benton-Franklin BFCOG Open Data Portal online at [https://bfcog-open-data-portal-bfcog.hub.arcgis.com/datasets/8c12ef4d458340d2a53cf68cc5a15a24\\_0/explore?location=46.334175%2C-119.207903%2C10.00](https://bfcog-open-data-portal-bfcog.hub.arcgis.com/datasets/8c12ef4d458340d2a53cf68cc5a15a24_0/explore?location=46.334175%2C-119.207903%2C10.00). The counts were collected at seven locations along Road 170 over a three-day period in August 2024. A summary of the information provided by the BFCOG dataset for Sagehill Road is included in **Appendix A**. **Table 2** presents the single day average of the traffic counts and the percentage of heavy vehicles (FHWA Schedule F Class 4 through 13) recorded at the seven locations. Using the traffic counts and percentage of heavy vehicles, car and truck trips were calculated and are also presented in **Table 2**.

Generally, car traffic counts on Road 170 range from 86 to 373 in the eastbound direction and from 88 to 378 in the westbound direction. Car traffic counts in both directions are greatest in the Basin City area and decrease east and west of Basin City, with the lowest car traffic counts near the intersection of Road 170 and SH 17. Truck traffic counts on Road 170 peak in the vicinity of Glade Road and are the least near the intersection of Road 170 and SH 17.

## **4 PROJECTED TRAFFIC ANALYSIS**

### **4.1 Facility Generated Traffic**

Expansion of the Facility is anticipated to result in increased traffic in the vicinity of the Facility and along the county roads identified on the primary truck travel route depicted in **Figure 3**. At this time, it is anticipated that the number of employees at the Facility will include two shifts of 25 employees. This will result in an additional 100 car trips per day (50 in each travel direction) at the Facility. The additional car trips have been included in the TIA for analysis of traffic impacts on the primary truck travel route. However, it should be noted that alternate car travel routes may be taken by employees that do not reside along the primary truck travel route. The expanded Facility is expected to have approximately 20 truck trips per day. These will consist of six to seven liquid milk transport trucks with the remaining truck trips associated with commodity and other delivery trucks. For the purposes of this TIA, it is assumed that 20 trucks will access the Facility per day resulting in an additional 40 truck trips (20 in each travel direction) along the primary travel route.



## 4.2 Post-Expansion Traffic Analysis

The addition of post-expansion Facility-generated traffic to available current traffic counts is presented in **Table 3** and discussed in the following subsections.

### 4.2.1 North Wahluke Road

For the section N. Wahluke Road that serves as Facility frontage, manual traffic counts conducted in November 2025 indicated a total of 115 car and 10 truck trips not associated with the existing Facility in the northbound direction. The addition of 50 car and 20 truck trips in the northbound direction increases the projected post-expansion traffic counts to 165 cars and 30 trucks in the northbound direction, an increase of 43 and 200 percent, respectively. In the southbound direction, November 2025 traffic counts showed 90 car and seven truck trips not associated with the existing Facility. The addition of 50 car and 20 truck trips in the southbound direction increases the projected post-expansion traffic counts to 140 cars and 27 trucks, an increase of 56 and 286 percent, respectively.

For the section of N. Wahluke Road between Filbert Road and Sagehill Road, no current traffic counts are available. The increase and car and truck trips associated with the Facility would be expected to increase traffic on this road at a smaller percentage of trips than those for the section of N. Wahluke Road fronting the Facility given additional traffic associated with Filbert Road and Sagehill Road.

### 4.2.2 Sagehill Road

Changes to projected traffic counts on the section of Sagehill Road between N. Wahluke Road and Road 170 are presented in **Table 3** for the three locations where traffic count data from August 2024 was available. Car traffic is expected to increase between 10 to 14 percent in both directions. Truck traffic is expected to increase between 18 and 24 percent in the northbound direction and 17 to 18 percent in the southbound direction.

### 4.2.3 Road 170

Changes to projected traffic counts on the section of Road 170 between Sagehill Road and SH 17 are presented in **Table 3** for the seven locations where traffic count data from August 2024 was available. In the section of Road 170 between Sagehill Road and N. Glade Road, car traffic is expected to increase between 13 and 17 percent. East of Glade Road, car traffic is expected to increase between 33 and 59 percent. As noted earlier, the August 2024 traffic count data showed a significant decrease in car traffic counts in this area of Road 170, likely due to most car trips terminating in the Basin City area. Truck traffic showed similarly lower numbers in the eastern portion of Road 170 between N. Glade Road and SH 17. This is likely due to the large number of trucks exiting Road 170 in the Glade Road area. Because the post-expansion truck traffic to and from the Facility will be routed through this section of Road 170, the greatest percent increases to occur in this section of Road 170. Between Sagehill Road and N. Glade Road, increases in truck trips after expansion of the Facility range between 26 and 40 percent. Between N. Glade Road and SH 17, increases in truck trips after expansion of the Facility range between 36 and 70 percent.

## 5 SUMMARY

Expansion of the T. Freeman Dairy from a 700-cow Facility to a 9,500 cow operation with 7,000 milking cows and 2,500 dry cows will increase the volume of traffic on county roads located in the Franklin County Road System along the primary truck travel route depicted in **Figure 3**. The increases in truck



traffic associated with the Facility expansion would be minimal (17 to 20 percent) on the section of Sagehill Road included in the primary truck travel route. Greater impacts would occur on Road 170, particularly in the section between N. Glade Road and SH 17. It should be noted that Road 170 is identified for pavement rehabilitation projects in the Franklin County Six-Year Transportation Improvement Plan (TIP), with the section of Road 170 between N. Glade Road and SH 17 slated for implementation in 2029 and the other sections following thereafter.

The greatest impact to the Franklin County Road System along the primary truck travel route is expected to occur on the section of N. Wahluke Road adjacent to the Facility and between the Filbert Road and Sagehill Road. The approximately 0.6-mile section of N. Wahluke Road that is adjacent to the Facility is currently categorized as a local rural access road and is not constructed to all weather standards. The approximately 3.1-mile section of N. Wahluke Road between Filbert Road and Sagehill Road is currently categorized as a Rural Minor Collector and is also not constructed to all weather standards. Both sections are currently observed to be in “good” condition and do not exhibit significant transverse, longitudinal, or alligator cracking or rutting. Spalling of the asphalt road edge is present in both sections of roadway in areas where unimproved approaches to fields are present and sharp curves result in truck over tracking. Because neither sections of road are constructed to all weather standards, increased truck traffic could prove detrimental to the road surface under freeze/thaw conditions. However, significant reductions in truck traffic associated with the Facility would be expected during these conditions, as most feed stocks and commodities for the Facility are sourced during warmer weather months and truck traffic would be limited to liquid milk bulk transport trucks and other equipment deliveries.

Current Facility operations enter and exit N. Wahluke Road from unimproved access points and Facility equipment uses N. Wahluke Road to transport Facility equipment and feed trucks. As part of the Facility expansion, two hardened approaches will be designed and permitted with Franklin County to service the Facility, one to access the milking parlor and the other to access the feed area. No other points of ingress or egress to the Facility from N. Wahluke Road would be permitted. Additionally, all Facility equipment and other vehicle traffic will be routed on internal Facility roadways and will not use N. Wahluke Road.

Given the current condition of N. Wahluke Road and that it was not designed to all-weather standards, increased truck traffic to and from the Facility will likely cause some impact to the existing pavement over time. However, the condition and construction of the underlying road base is unknown and could not be ascertained by visual inspection of the roadway. The existing roadway prism may be sufficient to support the anticipated increased truck traffic, as the current level of truck traffic does not appear to cause a significant impact on the road surface since any previous maintenance and preservation activities. As noted in Section 2, minimal pavement cracking (longitudinal, transverse, or alligator) was observed and overall the road surface appeared to be in good condition. Additional investigation of the road prism or review of the design and construction materials associated with the construction of N. Wahluke Road could provide information necessary to determine if additional pavement preservation actions are required.

One observed area of concern for N. Wahluke Road is the spalling of the asphalt surface along the interior radius of sharp curves due to truck over-tracking and in other limited areas along the road. Shoulder widening in the areas where spalling is observed could be used to prevent the spread of spalling and pavement deterioration further into the roadway.



## **TABLES**

**TABLE 1 - MANUAL TRAFFIC COUNTS  
 TRAFFIC IMPACT ANALYSIS  
 FRANKLIN COUNTY SEPA 2025-18  
 WHITE BLUFFS DAIRY LLC  
 MESA, WASHINGTON**

**A.M. COUNTS**

	7 to 8 a.m.		8 to 9 a.m.		9 to 10 a.m.		10 to 11 a.m.		11 a.m. to Noon	
	Cars	Trucks	Cars	Trucks	Cars	Trucks	Cars	Trucks	Cars	Trucks
Wahluke Southbound (thru-trip)	13	3	10	1	5	0	7	0	7	1
Wahluke Northbound (thru-trip)	16	1	16	1	4	0	12	3	8	1
Dairy Inbound (from North)	2	1	0	0	1	0	2	0	1	1
Dairy Inbound (from South)	0	1	1	1	1	1	0	1	0	0
Dairy Outbound North	1	4	0	0	0	1	1	0	0	0
Dairy Outbound South	0	0	0	0	2	1	0	1	2	1
<b>Total Trips</b>	<b>32</b>	<b>10</b>	<b>27</b>	<b>3</b>	<b>13</b>	<b>3</b>	<b>22</b>	<b>5</b>	<b>18</b>	<b>4</b>

**P.M. COUNTS**

	Noon to 1 p.m.		1 to 2 p.m.		2 to 3 p.m.		3 to 4 p.m.		4 to 5 p.m.	
	Cars	Trucks	Cars	Trucks	Cars	Trucks	Cars	Trucks	Cars	Trucks
Wahluke Southbound (thru-trip)	6	0	6	1	10	0	9	2	17	1
Wahluke Northbound (thru-trip)	10	2	10	0	11	2	17	0	11	0
Dairy Inbound (from North)	0	0	0	1	1	0	0	0	1	0
Dairy Inbound (from South)	0	0	0	1	0	0	1	0	0	0
Dairy Outbound North	1	0	0	0	0	1	1	0	3	0
Dairy Outbound South	0	0	1	1	1	0	0	1	0	0
<b>Total Trips</b>	<b>17</b>	<b>2</b>	<b>17</b>	<b>4</b>	<b>23</b>	<b>3</b>	<b>28</b>	<b>3</b>	<b>32</b>	<b>1</b>

**TOTALS**

	Total Cars	Total Trucks	Total Vehicles
Wahluke Southbound (thru-trip)	90	7	99
Wahluke Northbound (thru-trip)	115	10	125
Dairy Inbound (from North)	8	3	11
Dairy Inbound (from South)	3	5	8
Dairy Outbound North	7	6	13
Dairy Outbound South	6	4	11
<b>Total Trips</b>	<b>229</b>	<b>35</b>	<b>267</b>

**TABLE 2 - AUGUST 2024 TRAFFIC COUNTS  
 TRAFFIC IMPACT ANALYSIS  
 FRANKLIN COUNTY SEPA 2025-18  
 WHITE BLUFFS DAIRY LLC  
 MESA, WASHINGTON**

**SAGEHILL ROAD**

Station	Description	1-day Average Traffic Count <sup>1</sup>		Percent Heavy Vehicles <sup>2</sup>		Northbound <sup>3</sup>		Southbound <sup>3</sup>	
		Northbound	Southbound	Northbound	Southbound	Cars	Trucks	Cars	Trucks
626	Sagehill Rd N of Hollingsworth Rd	529	509	19.1	21.9	428	101	398	111
625	Sagehill Rd S of Hollingworth Rd	576	541	14.4	22.5	493	83	419	122
621	Sagehill Rd N of Road 170	576	547	19.4	20.7	464	112	434	113

**ROAD 170**

Station	Description	1-day Average Traffic Count		Percent Heavy Vehicles		Eastbound		Westbound	
		Eastbound	Westbound	Eastbound	Westbound	Cars	Trucks	Cars	Trucks
622	Rd 170 E of Fairway Ct	379	403	16.3	12.8	317	62	351	52
623	Rd 170 E of Price Rd	363	401	16.3	15.1	304	59	340	61
624	Rd 170 W of Loen Dr	423	442	11.8	14.6	373	50	378	65
640	Rd 170 W of N Glade Rd	400	417	19.2	18.9	323	77	338	79
642	Rd 170 E of N Glade Rd	199	203	22.4	27.9	155	45	146	57
643	Rd 170 W of Colonial Rd	175	181	23.3	26.2	134	41	134	48
665	Rd 170 W of WA Hwy 17	114	127	25.2	31.1	86	29	88	39

**NOTES**

- 1 - 1-day Average Traffic Count obtained from three day traffic study total
- 2 - Percent Heavy Vehicles: Vehicles within FHWA Scheme F Classes 4 through 13
- 3 - Car and truck counts derived from percent of truck trips and total trips reported

**TABLE 3 - POST-EXPANSION IMPACT ANALYSIS  
TRAFFIC IMPACT ANALYSIS  
FRANKLIN COUNTY SEPA 2025-18  
WHITE BLUFFS DAIRY LLC  
MESA, WASHINGTON**

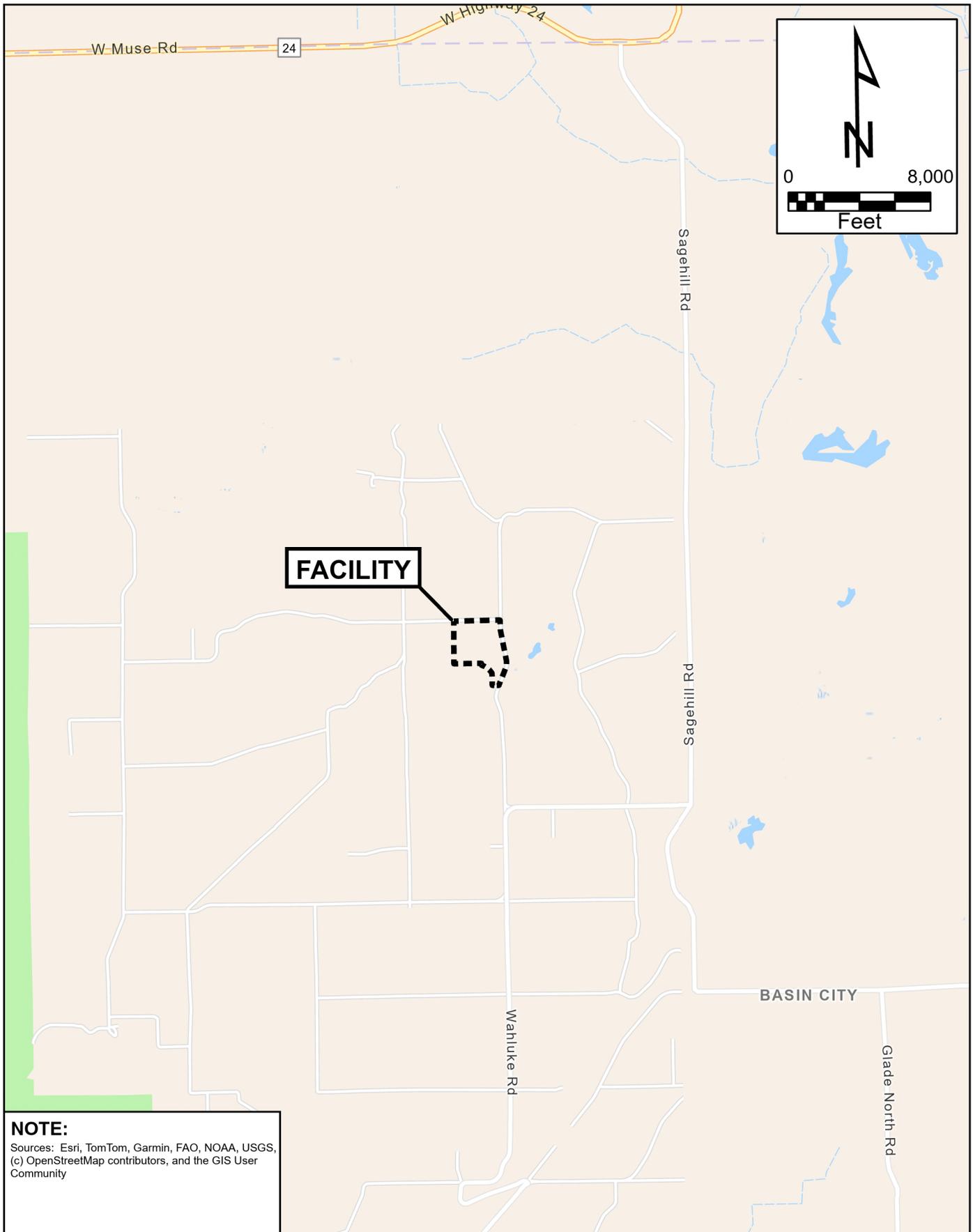
<u>N. WAHLUKE ROAD</u>	November 2025 Manual Traffic Counts				Post-Expansion Projected Counts				Post-Expansion Percent Change			
	Northbound		Southbound		Northbound		Southbound		Northbound		Southbound	
	Cars	Trucks	Cars	Trucks	Cars	Trucks	Cars	Trucks	Cars	Trucks	Cars	Trucks
Dairy Frontage	115	10	90	7	165	30	140	27	43%	200%	56%	286%

<u>SAGEHILL ROAD</u>	August 2024 Traffic Counts				Post-Expansion Projected Counts				Post-Expansion Percent Change			
	Northbound		Southbound		Northbound		Southbound		Northbound		Southbound	
	Cars	Trucks	Cars	Trucks	Cars	Trucks	Cars	Trucks	Cars	Trucks	Cars	Trucks
N of Hollingsworth Rd	428	101	398	111	478	121	448	131	12%	20%	13%	18%
S of Hollingsworth Rd	493	83	419	122	543	103	469	142	10%	24%	12%	17%
N of Road 170	464	112	434	113	514	132	494	133	11%	18%	14%	17%

<u>ROAD 170</u>	August 2024 Traffic Counts				Post-Expansion Projected Counts				Post-Expansion Percent Change			
	Eastbound		Westbound		Eastbound		Westbound		Eastbound		Westbound	
	Cars	Trucks	Cars	Trucks	Cars	Trucks	Cars	Trucks	Cars	Trucks	Cars	Trucks
E of Fairway Ct	317	62	351	52	367	82	401	72	16%	33%	14%	40%
E of Price Rd	304	59	340	61	354	79	390	81	17%	34%	15%	34%
W of Loen Dr	373	50	378	65	423	70	428	85	13%	40%	13%	32%
W of N Glade Rd	323	77	338	79	373	97	388	99	16%	26%	15%	26%
E of N Glade Rd	155	45	146	57	205	65	196	77	33%	46%	34%	36%
W of Colonial Rd	134	41	134	48	184	61	184	68	37%	50%	37%	43%
W of WA Hwy 17	86	29	88	39	136	49	138	59	59%	70%	58%	49%

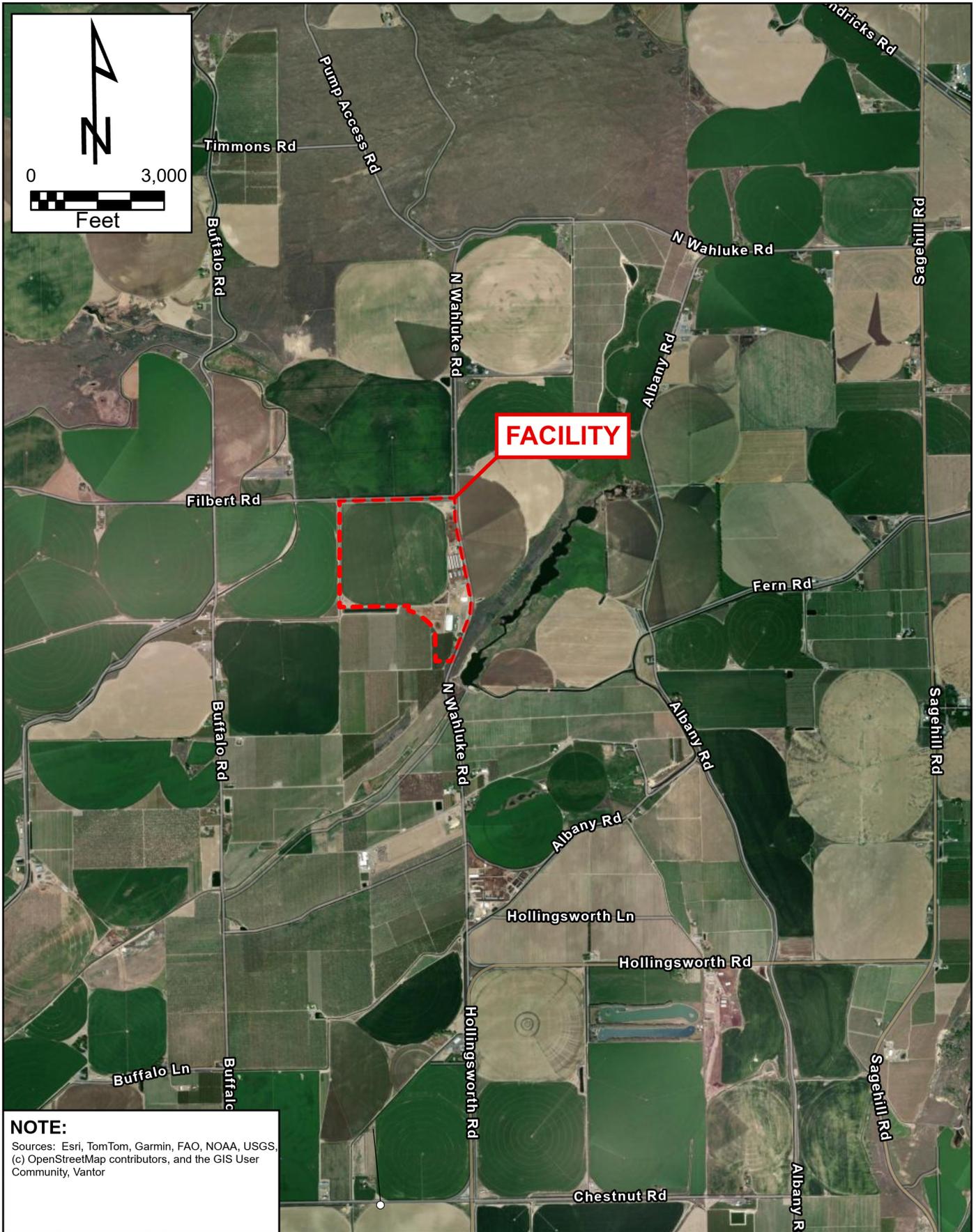


## FIGURES



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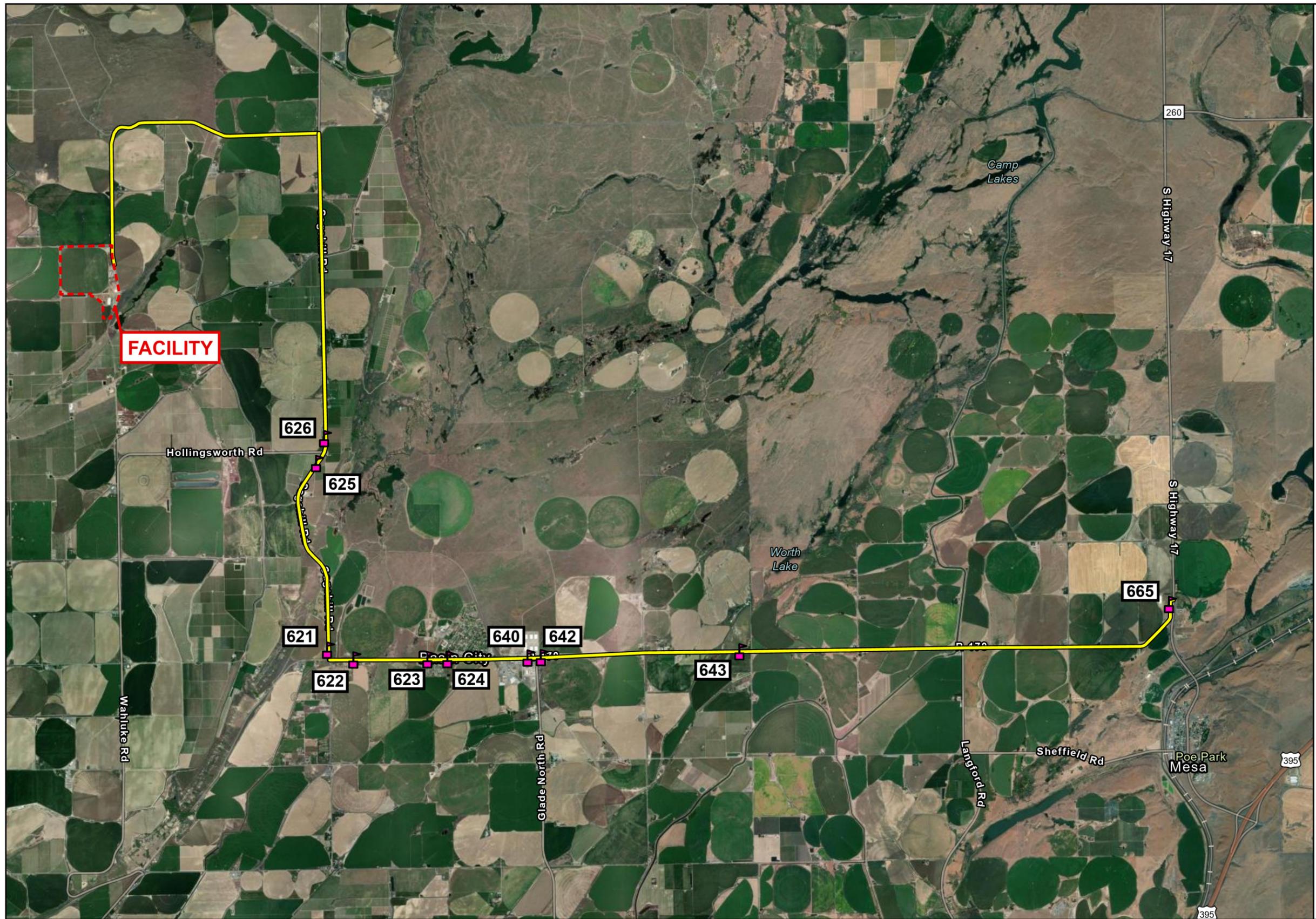


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**VICINITY MAP**  
 Traffic Impact Analysis  
 SEPA 2015-18, White Bluffs Expansion  
 3201 N Wahluke Road, Othello, WA

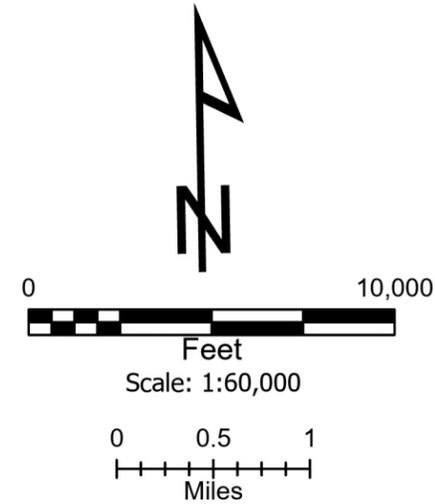
**FIGURE**  
**2**



**LEGEND:**

- FACILITY BOUNDARY
- TRAVEL ROUTE
- 📍 2024 BFCOG TRAFFIC COUNT DATA SITE

**NOTE:**  
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, Vantor



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## **APPENDIX A**

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### **BFCOG 2024 TRAFFIC COUNT DATA**

Site_ID	626	625	621	622	623	624	640	642	643	665
FID	215	214	210	211	212	213	229	231	232	254
Location	Sagehill Rd / N-O Hollingsworth Rd	Sagehill Rd / S-O Hollingsworth Rd	Sagehill Rd N-O Rd 170	Rd 170 / E-O Fairway Ct	Rd 170 / E-O Price Rd	Rd 170 / W-O Loen Dr	Rd 170 / W-O N Glade Rd	Rd 170 / E-O N Glade Rd	Rd 170 / W-O Colonial Rd	Rd 170 W-O SR 17
Direction	NB/SB	NB/SB	NB/SB	EB/WB	EB/WB	EB/WB	EB/WB	EB/WB	EB/WB	EB/WB
Count_Type	VOL,SPD,CLS	VOL,SPD,CLS	VOL,SPD,CLS	VOL,SPD,CLS	VOL,SPD,CLS	VOL,SPD,CLS	VOL,SPD,CLS	VOL,SPD,CLS	VOL,SPD,CLS	VOL,SPD,CLS
Count_Dur	72HR	72HR	72HR	72HR	72HR	72HR	72HR	72HR	72HR	72HR
Start_Date	8/6/2024	8/6/2024	8/6/2024	8/6/2024	8/6/2024	8/6/2024	8/6/2024	8/6/2024	8/6/2024	8/6/2024
Start_Time	0:00:00	0:00:00	0:00:00	0:00:00	0:00:00	0:00:00	0:00:00	0:00:00	0:00:00	0:00:00
Total_Volu	3115	3352	3369	2345	2292	2595	2451	1206	1069	724
Avg_Vol_1	1586	1729	1728	1136	1089	1269	1199	598	525	343
Avg_Vol_2	1528	1623	1641	1208	1203	1327	1252	608	544	381
AM_PkHr_1	7:00:00	5:00:00	5:00:00	11:00:00	11:00:00	11:00:00	5:00:00	9:00:00	11:00:00	6:00:00
AM_PkHr_2	5:00:00	10:00:00	10:00:00	5:00:00	5:00:00	11:00:00	11:00:00	9:00:00	11:00:00	11:00:00
AM_PkVoL_1	108	149	142	84	79	84	86	42	36	26
AM_PkVoL_2	102	110	109	101	82	77	82	44	38	26
AM_PHF_1	0.96	0.73	0.63	0.70	0.76	0.72	0.81	0.86	0.77	0.88
AM_PHF_2	0.74	0.80	0.85	0.54	0.62	0.88	0.78	0.82	0.72	0.64
PM_PkHr_1	14:00:00	14:00:00	14:00:00	14:00:00	12:00:00	12:00:00	12:00:00	12:00:00	13:00:00	14:00:00
PM_PkHr_2	12:00:00	13:00:00	12:00:00	14:00:00	14:00:00	14:00:00	14:00:00	14:00:00	14:00:00	14:00:00
PM_PkVoL_1	143	138	150	99	97	108	97	48	40	28
PM_PkVoL_2	131	144	148	101	110	135	117	50	46	35
PM_PHF_1	0.78	0.88	0.78	0.89	0.95	0.95	0.89	0.86	0.73	0.90
PM_PHF_2	0.94	0.90	0.94	0.88	0.83	0.85	0.85	0.80	0.70	0.83
Dir_Split_	0.51	0.52	0.51	0.48	0.48	0.49	0.49	0.50	0.49	0.47
Dir_Spli_1	0.49	0.48	0.49	0.52	0.52	0.51	0.51	0.50	0.51	0.53
pctSU_1	11.70%	8.60%	13.20%	12.70%	12.00%	8.10%	14.60%	15.10%	14.40%	14.80%
pctSU_2	13.90%	16.00%	13.90%	9.40%	11.40%	11.40%	14.40%	18.10%	13.40%	15.00%
pctCB_1	7.40%	5.90%	6.20%	3.60%	4.30%	3.80%	4.60%	7.30%	8.90%	10.40%
pctCB_2	8.00%	6.50%	6.70%	3.30%	3.70%	3.20%	4.40%	9.80%	12.70%	16.00%
pctHV_1	19.10%	14.40%	19.40%	16.30%	16.30%	11.80%	19.20%	22.40%	23.30%	25.20%
pctHV_2	21.90%	22.50%	20.70%	12.80%	15.10%	14.60%	18.90%	27.90%	26.20%	31.10%

**TABLE LEGEND**

Row	Abbreviation/Description
1	GIS_ID – Site ID
2	
3	Location – Count location
4	Direction – Orientation of corridor
5	Count_Type – Data Type Collected
6	Count_Dur – Duration of Count
7	Start_Date – Start date of collection
8	Start_Time – Start time of collection
9	Tot_Vol_1 - [Primary] Total Volume in the northbound or eastbound direction (Depending on roadway orientation)
10	Tot_Vol_2 - [Secondary] Total Volume in the southbound or westbound direction (Depending on roadway orientation)
11	Tot_Vol - Total Volume of [Primary] and [Secondary] Directions for entire length of study
12	Avg_Vol_1 - [Primary] – Average volume for the duration of the study in the northbound or eastbound direction (Depending on roadway orientation)
13	Avg_Vol_2 - [Secondary] – Average volume for the duration of the study in the southbound or westbound direction (Depending on roadway orientation)
14	AM_PkHr_1 - [Primary] – Morning Peak Hour in the northbound or eastbound direction (Depending on roadway orientation)
15	AM_PkHr_2 - [Secondary] – Morning Peak Hour in the southbound or westbound direction (Depending on roadway orientation)
16	AM_PkVol_1 - [Primary] – Morning Peak Hour Volumes in the northbound or eastbound direction (Depending on roadway orientation)
17	AM_PkVol_2 - [Secondary] – Morning Peak Hour Volumes in the southbound or westbound direction (Depending on roadway orientation)
18	AM_PHF_1 - [Primary] – Morning Peak Hour Factor (PHF) in the northbound or eastbound direction (Depending on roadway orientation)
19	AM_PHF_2 - [Secondary] – Morning Peak Hour Factor (PHF) in the southbound or westbound direction (Depending on roadway orientation)
20	PM_PkHr_1 - [Primary] – Afternoon Peak Hour in the northbound or eastbound direction (Depending on roadway orientation)
21	PM_PkHr_2 - [Secondary] – Afternoon Peak Hour in the southbound or westbound direction (Depending on roadway orientation)
22	PM_PkVol_1 - [Primary] – Afternoon Peak Hour Volumes in the northbound or eastbound direction (Depending on roadway orientation)
23	PM_PkVol_2 - [Secondary] – Afternoon Peak Hour Volumes in the southbound or westbound direction (Depending on roadway orientation)
24	PM_PHF_1 - [Primary] – Afternoon Peak Hour Factor (PHF) in the northbound or eastbound direction (Depending on roadway orientation)
25	PM_PHF_2 - [Secondary] – Afternoon Peak Hour Factor (PHF) in the southbound or westbound direction (Depending on roadway orientation)
26	Dir_Split_1 - [Primary] Percent of total volume in northbound or eastbound direction of travel (Depending on roadway orientation) compared to total volume in both directions
27	Dir_Split_2 - [Secondary] Percent of total volume in southbound or westbound direction of travel (Depending on roadway orientation) compared to total volume in both directions
28	pctSU_1 - [Primary] Percent of FHWA Scheme F – Classes 4-7 Single Unit (SU) Trucks in the northbound or eastbound direction (Depending on roadway orientation)
29	pctSU_2 - [Secondary] Percent of FHWA Scheme F – Classes 4-7 Single Unit (SU) Trucks in the southbound or westbound direction (Depending on roadway orientation)
30	pctCB_1 - [Primary] Percent of FHWA Scheme F – Classes 8-13 in the northbound or eastbound direction (Depending on roadway orientation)
31	pctCB_2 - [Secondary] Percent of FHWA Scheme F – Classes 8-13 in the southbound or westbound direction (Depending on roadway orientation)
32	pctHV_1 - [Primary] Percent of Heavy Vehicles (HV) [FHWA Scheme F – Classes 4-13] in the northbound or eastbound direction of travel when compared to total volumes in the northbound or eastbound direction
33	pctHV_2 - [Secondary] Percent of Heavy Vehicles (HV) [FHWA Scheme F – Classes 4-13] in the southbound or westbound direction of travel when compared to total volumes in the southbound or westbound direction

<b>Class 1</b> Motorcycles		<b>Class 7</b> Four or more axle, single unit		
<b>Class 2</b> Passenger cars				
				
			<b>Class 8</b> Four or less axle, single trailer	
				
<b>Class 3</b> Four tire, single unit				
		<b>Class 9</b> 5-Axle tractor semitrailer		
				
<b>Class 4</b> Buses		<b>Class 10</b> Six or more axle, single trailer		
				
			<b>Class 11</b> Five or less axle, multi trailer	
<b>Class 5</b> Two axle, six tire, single unit		<b>Class 12</b> Six axle, multi-trailer		
				
		<b>Class 13</b> Seven or more axle, multi-trailer		
<b>Class 6</b> Three axle, single unit				
				
				

**CUP 2025-10/  
SEPA 2025-18**

**SEPA ODNS-M,  
SEPA ODNS/NOA-M,  
Checklist**



# FRANKLIN COUNTY

DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

## STATE ENVIRONMENTAL POLICY ACT (SEPA)

### FINAL DECISION - MITIGATED DETERMINATION OF NON-SIGNIFICANCE (ODNS-M)

**Name of Proposal:** White Bluffs Dairy Expansion

**Description of Proposal:** The proposed development is for the expansion and reconfiguration of the existing 700-cow milk dairy to accommodate a 9,500-cow herd size. Demolition of the current milking parlor, animal corrals, cow shade and other miscellaneous outbuildings will be part of this project. Approximately 113 acres of feed crop production ground will be converted to dairy-production ground.

The following structures are also proposed in this project: approximately 57,000 sq. ft. milk parlor building, twelve (12) open-lot corrals, six (6) 1,100 ft. long concrete lanes for each corral's feed alley, expansion of five (5) existing 6,000 sq. ft. free stall barns, a 12,800 sq. ft. commodity barn with maintenance shop facilities, two (2) 10,000-gal diesel fuel above ground storage tanks, a paved driveway/parking area with approximately 20 parking spaces, a liquid manure processing and storage system, and a manure solids and compost storage area.

**Proponent:** White Bluffs Dairy LLC  
ATTN: Fransisca Vander Meulen  
650 Horby Rd.  
Grandview, WA, 98930-9202  
[fransisca@windmillestates.net](mailto:fransisca@windmillestates.net)

**File Number:** CUP 2025-10 / SEPA 2025-18

**Location of Proposal:** 6201 N Wahluke Rd., Mesa, WA 99343; Parcels 121-060-012, 121-060-013, 121-060-075

**Legal Descriptions:** Parcel No.: 121-060-012  
FARM UNIT 16, IRRIGATION BLOCK 201, RECORDS OF FRANKLIN COUNTY, WASHINGTON, EXCEPT THAT PORTION DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHWEST CORNER OF SAID FARM UNIT THENCE NORTH 88°55'24" EAST 1999.66 FEET TO THE TRUE POINT OF BEGINNING. THENCE NORTH 55°20'35" WEST 117.12 FEET; THENCE NORTH 46°01'32" EAST 440.13 FEET; THENCE NORTH 28°59'50" EAST 133.63 FEET; THENCE NORTH 10°57'49" WEST 338.31 FEET; THENCE NORTH 78°50'50" EAST 51.78 FEET; THENCE NORTH 11°24'39" WEST 320.23 FEET; THENCE NORTH 78°26'09" EAST 75.02 FEET; THENCE NORTH 05°40'15" WEST 956.63 FEET; THENCE SOUTH 88°31'25" WEST 64.60 FEET TO THE BEGINNING OF A NON-TANGENT CURVE TO THE LEFT THE RADIUS POINT OF WHICH BEARS SOUTH 49°25'15" WEST 625.00 FEET; THENCE NORTHWESTERLY ALONG SAID CURVE 355.12 FEET THROUGH A DELTA ANGLE OF 32°33'20";

THENCE NORTH 00°28'07" WEST 23.77 FEET; THENCE NORTH 88°31'25" EAST 613.08 FEET TO THE EASTERLY LINE OF SAID FARM UNIT; THENCE SOUTH 00°28'07" EAST ALONG SAID LINE 276.12 FEET TO THE BEGINNING OF A CURVE TO THE LEFT THE RADIUS POINT OF WHICH BEARS NORTH 89°31'53" EAST 1432.50 FEET; THENCE SOUTHEASTERLY ALONG SAID CURVE AND SAID LINE 267.12 FEET THROUGH A DELTA ANGLE OF 10°41'02"; THENCE SOUTH 11°09'09" EAST ALONG SAID LINE 1632.10 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT THE RADIUS POINT OF WHICH BEARS SOUTH 78°50'51" WEST 954.90 FEET; THENCE SOUTHERLY ALONG SAID CURVE 181.25 FEET THROUGH A DELTA ANGLE OF 10°52'30" TO THE SOUTHEAST CORNER OF SAID FARM UNIT; THENCE SOUTH 88°55'25" WEST ALONG THE SOUTHERLY LINE OF SAID UNIT 997.81 FEET TO THE SAID TRUE POINT OF BEGINNING. PARCEL 1 OF RS-1993547

Parcel No.: 121-060-013

THAT PORTION OF FARM UNIT 16, IRRIGATION BLOCK 201, RECORDS OF FRANKLIN COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHWEST CORNER OF SAID FARM UNIT THENCE NORTH 88°55'24" EAST 1999.66 FEET TO THE TRUE POINT OF BEGINNING. THENCE NORTH 55°20'35" WEST 117.12 FEET; THENCE NORTH 46°01'32" EAST 440.13 FEET; THENCE NORTH 28°59'50" EAST 133.63 FEET; THENCE NORTH 10°57'49" WEST 338.31 FEET; THENCE NORTH 78°50'50" EAST 51.78 FEET; THENCE NORTH 11°24'39" WEST 320.23 FEET; THENCE NORTH 78°26'09" EAST 75.02 FEET; THENCE NORTH 05°40'15" WEST 956.63 FEET; THENCE SOUTH 88°31'25" WEST 64.60 FEET TO THE BEGINNING OF A NON-TANGENT CURVE TO THE LEFT THE RADIUS POINT OF WHICH BEARS SOUTH 49°25'15" WEST 625.00 FEET; THENCE NORTHWESTERLY ALONG SAID CURVE 355.12 FEET THROUGH A DELTA ANGLE OF 32°33'20"; THENCE NORTH 00°28'07" WEST 23.77 FEET; THENCE NORTH 88°31'25" EAST 613.08 FEET TO THE EASTERLY LINE OF SAID FARM UNIT; THENCE SOUTH 00°28'07" EAST ALONG SAID LINE 276.12 FEET TO THE BEGINNING OF A CURVE TO THE LEFT THE RADIUS POINT OF WHICH BEARS NORTH 89°31'53" EAST 1432.50 FEET; THENCE SOUTHEASTERLY ALONG SAID CURVE AND SAID LINE 267.12 FEET THROUGH A DELTA ANGLE OF 10°41'02"; THENCE SOUTH 11°09'09" EAST ALONG SAID LINE 1632.10 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT THE RADIUS POINT OF WHICH BEARS SOUTH 78°50'51" WEST 954.90 FEET; THENCE SOUTHERLY ALONG SAID CURVE 181.25 FEET THROUGH A DELTA ANGLE OF 10°52'30" TO THE SOUTHEAST CORNER OF SAID FARM UNIT; THENCE SOUTH 88°55'25" WEST ALONG THE SOUTHERLY LINE OF SAID UNIT 997.81 FEET TO THE SAID TRUE POINT OF BEGINNING. PARCEL 2 OF RS-1993547

Parcel No.: 108-060-042

PTN SHORT PLAT 99-08 LOT 2 LY NLY & ELY OF FDL: COMM AT NW COR SD LOT 2; TH N89D55'E ALG N LN SD LOT 2, 1552.71' TO TPOB SD LN; TH S00D04'E, 100.93' TO BEG OF CUR TO RT, RAD PT BEARS S19D41'W, 1553.97'; TH SELY THRU CTRL ANG 37D43' ALG SD CUR, 759.93'; TH S00D04'E, 690.36'; TH N89D55'E, 373.88' TO WLY R/W LN OF N WAHLUKE RD & END OF SD LN.

**Lead Agency:**

Franklin County

## **FINDINGS:**

### **1. Earth:**

- a. This proposal area consists of flat terrain with the steepest slope being 5%.
- b. The site has the following soils: Hezel loamy fine sand and soils of the Quincy-Hezel complex.
- c. There is no surface indication of unstable soils.
- d. Approximately 103 acres of feed crop ground will be graded and mechanically compacted. Maximum earth movement of approximately 200,000 to 300,000 cubic yards is anticipated. Imported fill is anticipated for this project.
- e. Approximately 8% of the project site is currently designated to be covered by impervious surfaces.

### **2. Air:**

- a. Temporary increase in emissions will occur during grading, earthmoving activities and construction.
- b. Once in operation, the facility is estimated to have air emissions consistent with an operational cow milk dairy facility, primarily dust and odors.

### **3. Water:**

- a. Approximately 650 feet to the east of the project is the SCBID WB5WW1 Reservoir Canal.
- b. Multiple SCBID drainlines are present on-site.
- c. The closest wetland is approximately 620 ft to the east of the proposed site's property line. Water will be drawn from wells for domestic use, industrial use and stock water uses.
- d. Two septic systems will be present on the project site. Only human-generated domestic waste will be discharged into the parlor system septic tank and is expected to be 1,500 gallons. The manager's residence system will have human-generated domestic sewage from one residence and is expected to be 1,000 gallons in size.
- e. Industrial waste and greywater from milking operations will be discharged to the waste storage ponds.

### **4. Plants:**

- a. Approximately 113 acres of feed crop production ground will be converted to dairy-production ground.
- b. There are no known noxious weeds on-site.

### **5. Animals:**

- a. There are no threatened species on site per the WDFW PHS mapping.

### **6. Energy and Natural Resources:**

- a. Electricity for heating.

### **7. Environmental Health:**

- a. Potential hazardous chemicals may be stored or used on-site including diesel and gasoline motor fuels, detergents, teat disinfectants, dairy sanitizers, anti-parasitic, antibiotics, herbicides, pesticides, and fungicides.

- b. Toxic or hazardous chemicals will be managed, handled, used, and stored in accordance with applicable Federal and State laws. A Chemical Hazard Communication plan will be developed.
- c. Workers will receive training in Hazard Communication, Environmental Awareness, Spill Prevention and Spill Response.

**8. Land and Shoreline Use:**

- a. The parcels are zoned Agricultural Production 20-acres (AP-20).
- b. The proposal will not affect surrounding farms and agricultural practices.
- c. Increase in cattlehead count of over 500 requires a Franklin County Conditional Use Permit.
- d. A Dairy Separation Standard of no more than two operations that are greater in size than one thousand three hundred milking cow head count shall be located within an operations two-mile buffer. Davidson Brothers Dairy Inc. located approximately 1.45 miles south from the facility is the only facility with more than 1,300 cows located within two miles of the proposed development.
- e. Only one individual will reside in the manager's residence.
- f. Multiple structures are being proposed on-site (see project description).
- g. The current milking parlor, commodity barn, and cow shades will be demolished. The current WSP will be decommissioned.
- h. No one will be displaced by this project.

**9. Housing:**

- a. No new housing plans for this project. A manager's residence is already existing prior to the proposed expansion.

**10. Aesthetics:**

- a. Buildings are not expected to exceed 35 feet in height and are typically not taller than 20 feet.

**11. Light and Glare:**

- a. Light will be produced from site lighting operated from dusk to dawn.

**12. Recreation:**

- a. No recreation anticipated with this proposal.

**13. Historic and Cultural Preservation:**

- a. Two sites located near the project site are listed as "eligible" in the Washington DAHP WISAARD database: Wahluke Branch-10 Lateral, Filbert Road Canal Bridge. Both sites located approximately 3/4-mile west of Wahluke Road on Filbert Road. They are located 1,000 feet west of the northwest corner of the project site.
- b. The proposal will not directly affect these sites eligible for state preservation.

**14. Transportation:**

- a. Primary access to the proposed development will be from Wahluke Road, Hollingsworth Road, and Sagehill Road. Closest regional roads to the property are WA Highway 17 located 10 miles east and WA Highway 240 located six miles north.
- b. The proposed facility will have 20 to 25 workers per shift for two shifts per day, seven days a week. This predicts up to 100 total trips per day to and from the facility.

- c. The facility will likely receive a total of up to 20 trips by heavy truck (greater than 26,000 lbs. GVWR). Trips will be distributed throughout the day.

**15. Public Services:**

- a. The development would not result in an increased need for public services.

**16. Utilities:**

- a. Electricity, water, refuse service, and septic systems will be required for the development.

**MITIGATION MEASURES:**

1. Best Management Practices (BMP) to minimize dust during construction shall be used, such as watering the site in accordance with Franklin County's Clean Air and Dust control ordinances.
2. The applicant shall meet and comply with all necessary Air and Water Quality standards required by the Department of Ecology. Compliance with these standards shall occur at all times. Stormwater shall be retained on site during and after construction.
3. The project shall implement a Stormwater Pollution Prevention Plan (SWPP) in accordance with the Washington State Department of Ecology stormwater management guidelines.
4. Toxic or hazardous chemicals shall be managed, handled, used, and stored in accordance with applicable Federal and State laws. A Chemical Hazard Communication plan shall be developed and submitted to the Franklin County Planning Department.
5. A head count increase will require a Traffic Impact Analysis (TIA) to be completed together with upgrades and/or mitigation fees for the County Road System. The TIA shall include County Roads impacted by this increase.
6. Any infrastructure that will cross those buried drain rights of way, such as piping, electrical wiring, etc., must be permitted by SCBID prior to construction. All applications must be approved by the SCBID Board of Directors prior to that work taking place. SCBID will not require a permit for grading purposes or other operations over the buried drains but will need to be included in the planning to ensure that we maintain cover over our drains.
7. There are exposed manholes for the buried drain systems present around the project site. These manholes need to be protected from impact by equipment or livestock and the also need to be protected from the potential intrusion of waste materials from the dairy operation. These buried drains are not for waste disposal, intentional or unintentional and must be protected. Efforts must be taken so ensure that the waste from the dairy doesn't impact that drain system.
8. The applicant shall work with SCBID to determine measures to prevent any effluent or solid waste from entering the WB10A lateral. SCBID recommends piping the lateral near the effluent pond and compost pile location to address potential impacts.

9. The applicant shall comply with the State of Washington's requirements for Dairy operations including the implementation of the approved Nutrient Management Plan (NMP) for the operation. Nutrient management plans focus on water quality related issues. A copy of this plan must be submitted to the Franklin County Planning Department.
10. A Concentrated Animal Feeding Operation (CAFO) General Permit must be submitted to the Washington Department of Ecology. A copy of the permit must be submitted to the Franklin County Planning Department.
11. A Manure Pollution Prevention Plan shall be developed and submitted to the Franklin County Planning Department.
12. A Spill Prevention, Control, and Countermeasure (SPCC) shall be developed and submitted to the Franklin County Planning Department.
13. The applicant shall submit an Odor and Fly Control Plan consistent with Franklin County Resolution 2001-238, to be approved by the Franklin Conservation District.
14. An Inadvertent Discover Plan shall be prepared and implemented for the project through all phases.
15. A Franklin County Grading Permit must be submitted before any grading, filling, or movement of earth greater than 50 cubic yards.

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This MDNS is being issued as a final determination after the Optional Determination of Nonsignificance/Notice of Application process under WAC 197-11-355.

**There is no comment period for this MDNS.**

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**Responsible official:** *Wes McCart*

**Position/Phone:** *Franklin Planning and Economic Development Director – (509) 545-3521*

**Address:** *502 W Boeing St, Pasco, Washington 99301*

**Date/Signature:** *01/26/26 - *



# FRANKLIN COUNTY

DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

**STATE ENVIRONMENTAL POLICY ACT (SEPA)  
NOTICE OF APPLICATION  
OPTIONAL DETERMINATION OF NONSIGNIFICANCE (ODNS/NOA-M)**

*Franklin County has reviewed the proposed project for probable adverse environmental impacts and expects to issue a Mitigated Determination of Nonsignificance (MDNS). The optional MDNS process in WAC 197-11-355 is being used. This may be your only opportunity to comment on the environmental impacts of the proposed project.*

*The comment period for this ODNS/NOA-M is until November 28, 2025, at 5:00PM.*

**Name of Proposal:** White Bluffs Dairy Expansion

**Description of Proposal:** The proposed development is for the expansion and reconfiguration of the existing 700-cow milk dairy to accommodate a 9,500-cow herd size. Demolition of the current milking parlor, animal corrals, cow shade and other miscellaneous outbuildings will be part of this project. Approximately 113 acres of feed crop production ground will be converted to dairy-production ground.

The following structures are also proposed in this project: approximately 57,000 sq. ft. milk parlor building, twelve (12) open-lot corrals, six (6) 1,100 ft. long concrete lanes for each corral's feed alley, expansion of five (5) existing 6,000 sq. ft. free stall barns, a 12,800 sq. ft. commodity barn with maintenance shop facilities, two (2) 10,000-gal diesel fuel above ground storage tanks, a paved driveway/parking area with approximately 20 parking spaces, a liquid manure processing and storage system, and a manure solids and compost storage area.

**Proponent:** White Bluffs Dairy LLC  
ATTN: Fransisca Vander Meulen  
650 Horby Rd.  
Grandview, WA, 98930-9202  
[fransisca@windmillestates.net](mailto:fransisca@windmillestates.net)

**File Number:** CUP 2025-10 / SEPA 2025-18

**Location of Proposal:** 6201 N Wahluke Rd., Mesa, WA 99343; Parcels 121-060-012, 121-060-013, 121-060-075

**Legal Descriptions:**

Parcel No.: 121-060-012

FARM UNIT 16, IRRIGATION BLOCK 201, RECORDS OF FRANKLIN COUNTY, WASHINGTON, EXCEPT THAT PORTION DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHWEST CORNER OF SAID FARM UNIT THENCE NORTH 88°55'24" EAST 1999.66 FEET TO THE TRUE POINT OF BEGINNING. THENCE NORTH 55°20'35" WEST 117.12 FEET; THENCE NORTH 46°01'32" EAST 440.13 FEET; THENCE NORTH 28°59'50" EAST 133.63 FEET; THENCE NORTH 10°57'49" WEST 338.31 FEET; THENCE NORTH 78°50'50" EAST 51.78 FEET; THENCE NORTH 11°24'39" WEST 320.23 FEET; THENCE NORTH 78°26'09" EAST 75.02 FEET; THENCE NORTH 05°40'15" WEST 956.63 FEET; THENCE SOUTH 88°31'25" WEST 64.60 FEET TO THE BEGINNING OF A NON-TANGENT CURVE TO THE LEFT THE RADIUS POINT OF WHICH BEARS SOUTH 49°25'15" WEST 625.00 FEET; THENCE NORTHWESTERLY ALONG SAID CURVE 355.12 FEET THROUGH A DELTA ANGLE OF 32°33'20"; THENCE NORTH 00°28'07" WEST 23.77 FEET; THENCE NORTH 88°31'25" EAST 613.08 FEET TO THE EASTERLY LINE OF SAID FARM UNIT; THENCE SOUTH 00°28'07" EAST ALONG SAID LINE 276.12 FEET TO THE BEGINNING OF A CURVE TO THE LEFT THE RADIUS POINT OF WHICH BEARS NORTH 89°31'53" EAST 1432.50 FEET; THENCE SOUTHEASTERLY ALONG SAID CURVE AND SAID LINE 267.12 FEET THROUGH A DELTA ANGLE OF 10°41'02"; THENCE SOUTH 11°09'09" EAST ALONG SAID LINE 1632.10 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT THE RADIUS POINT OF WHICH BEARS SOUTH 78°50'51" WEST 954.90 FEET; THENCE SOUTHERLY ALONG SAID CURVE 181.25 FEET THROUGH A DELTA ANGLE OF 10°52'30" TO THE SOUTHEAST CORNER OF SAID FARM UNIT; THENCE SOUTH 88°55'25" WEST ALONG THE SOUTHERLY LINE OF SAID UNIT 997.81 FEET TO THE SAID TRUE POINT OF BEGINNING. PARCEL 1 OF RS-1993547

Parcel No.: 121-060-013

THAT PORTION OF FARM UNIT 16, IRRIGATION BLOCK 201, RECORDS OF FRANKLIN COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHWEST CORNER OF SAID FARM UNIT THENCE NORTH 88°55'24" EAST 1999.66 FEET TO THE TRUE POINT OF BEGINNING. THENCE NORTH 55°20'35" WEST 117.12 FEET; THENCE NORTH 46°01'32" EAST 440.13 FEET; THENCE NORTH 28°59'50" EAST 133.63 FEET; THENCE NORTH 10°57'49" WEST 338.31 FEET; THENCE NORTH 78°50'50" EAST 51.78 FEET; THENCE NORTH 11°24'39" WEST 320.23 FEET; THENCE NORTH 78°26'09" EAST 75.02 FEET; THENCE NORTH 05°40'15" WEST 956.63 FEET; THENCE SOUTH 88°31'25" WEST 64.60 FEET TO THE BEGINNING OF A NON-TANGENT CURVE TO THE LEFT THE RADIUS POINT OF WHICH BEARS SOUTH 49°25'15" WEST 625.00 FEET; THENCE NORTHWESTERLY ALONG SAID CURVE 355.12 FEET THROUGH A DELTA ANGLE OF 32°33'20"; THENCE NORTH 00°28'07" WEST 23.77 FEET; THENCE NORTH 88°31'25" EAST 613.08 FEET TO THE EASTERLY LINE OF SAID FARM UNIT; THENCE SOUTH 00°28'07" EAST ALONG SAID LINE 276.12 FEET TO THE BEGINNING OF A CURVE TO THE LEFT THE RADIUS POINT OF WHICH BEARS NORTH 89°31'53" EAST 1432.50 FEET; THENCE SOUTHEASTERLY ALONG SAID CURVE AND SAID LINE 267.12 FEET THROUGH A DELTA ANGLE OF 10°41'02"; THENCE SOUTH 11°09'09" EAST ALONG SAID LINE 1632.10 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT THE RADIUS POINT OF WHICH BEARS SOUTH 78°50'51" WEST 954.90 FEET; THENCE SOUTHERLY ALONG SAID CURVE 181.25 FEET THROUGH A DELTA ANGLE OF 10°52'30" TO THE SOUTHEAST CORNER OF SAID FARM UNIT; THENCE SOUTH 88°55'25" WEST ALONG THE SOUTHERLY LINE OF SAID UNIT 997.81 FEET TO THE SAID TRUE POINT OF BEGINNING. PARCEL 2 OF RS-1993547

Parcel No.: 108-060-042

PTN SHORT PLAT 99-08 LOT 2 LY NLY & ELY OF FDL: COMM AT NW COR SD LOT 2; TH N89D55'E ALG N LN SD LOT 2, 1552.71' TO TPOB SD LN; TH S00D04'E, 100.93' TO BEG OF CUR TO RT, RAD PT BEARS S19D41'W, 1553.97'; TH SELY THRU CTRL ANG 37D43' ALG SD CUR, 759.93'; TH S00D04'E, 690.36'; TH N89D55'E, 373.88' TO WLY R/W LN OF N WAHLUKE RD & END OF SD LN.

**Lead Agency:** Franklin County

## **FINDINGS:**

### **1. Earth:**

- a. This proposal area consists of flat terrain with the steepest slope being 5%.
- b. The site has the following soils: Hezel loamy fine sand and soils of the Quincy-Hezel complex.
- c. There is no surface indication of unstable soils.
- d. Approximately 103 acres of feed crop ground will be graded and mechanically compacted. Maximum earth movement of approximately 200,000 to 300,000 cubic yards is anticipated. Imported fill is anticipated for this project.
- e. Approximately 8% of the project site is currently designated to be covered by impervious surfaces.

### **2. Air:**

- a. Temporary increase in emissions will occur during grading, earthmoving activities and construction.
- b. Once in operation, the facility is estimated to have air emissions consistent with an operational cow milk dairy facility, primarily dust and odors.

### **3. Water:**

- a. Approximately 650 feet to the east of the project is the SCBID WB5WW1 Reservoir Canal.
- b. Multiple SCBID drainlines are present on-site.
- c. The closest wetland is approximately 620 ft to the east of the proposed site's property line. Water will be drawn from wells for domestic use, industrial use and stock water uses.
- d. Two septic systems will be present on the project site. Only human-generated domestic waste will be discharged into the parlor system septic tank and is expected to be 1,500 gallons. The manager's residence system will have human-generated domestic sewage from one residence and is expected to be 1,000 gallons in size.
- e. Industrial waste and greywater from milking operations will be discharged to the waste storage ponds.

### **4. Plants:**

- a. Approximately 113 acres of feed crop production ground will be converted to dairy-production ground.
- b. There are no known noxious weeds on-site.

### **5. Animals:**

- a. There are no threatened species on site per the WDFW PHS mapping.

**6. Energy and Natural Resources:**

- a. Electricity for heating.

**7. Environmental Health:**

- a. Potential hazardous chemicals may be stored or used on-site including diesel and gasoline motor fuels, detergents, teat disinfectants, dairy sanitizers, anti-parasitic, antibiotics, herbicides, pesticides, and fungicides.
- b. Toxic or hazardous chemicals will be managed, handled, used, and stored in accordance with applicable Federal and State laws. A Chemical Hazard Communication plan will be developed.
- c. Workers will receive training in Hazard Communication, Environmental Awareness, Spill Prevention and Spill Response.

**8. Land and Shoreline Use:**

- a. The parcels are zoned Agricultural Production 20-acres (AP-20).
- b. The proposal will not affect surrounding farms and agricultural practices.
- c. Increase in cattlehead count of over 500 requires a Franklin County Conditional Use Permit.
- d. A Dairy Separation Standard of no more than two operations that are greater in size than one thousand three hundred milking cow head count shall be located within an operations two-mile buffer. Davidson Brothers Dairy Inc. located approximately 1.45 miles south from the facility is the only facility with more than 1,300 cows located within two miles of the proposed development.
- e. Only one individual will reside in the manager's residence.
- f. Multiple structures are being proposed on-site (see project description).
- g. The current milking parlor, commodity barn, and cow shades will be demolished. The current WSP will be decommissioned.
- h. No one will be displaced by this project.

**9. Housing:**

- a. No new housing plans for this project. A manager's residence is already existing prior to the proposed expansion.

**10. Aesthetics:**

- a. Buildings are not expected to exceed 35 feet in height and are typically not taller than 20 feet.

**11. Light and Glare:**

- a. Light will be produced from site lighting operated from dusk to dawn.

**12. Recreation:**

- a. No recreation anticipated with this proposal.

**13. Historic and Cultural Preservation:**

- a. Two sites located near the project site are listed as "eligible" in the Washington DAHP WISAARD database: Wahluke Branch-10 Lateral, Filbert Road Canal Bridge. Both sites located approximately 3/4-mile west of Wahluke Road on Filbert Road. They are located 1,000 feet west of the northwest corner of the project site.

- b. The proposal will not directly affect these sites eligible for state preservation.

**14. Transportation:**

- a. Primary access to the proposed development will be from Wahluke Road, Hollingsworth Road, and Sagehill Road. Closest regional roads to the property are WA Highway 17 located 10 miles east and WA Highway 240 located six miles north.
- b. The proposed facility will have 20 to 25 workers per shift for two shifts per day, seven days a week. This predicts up to 100 total trips per day to and from the facility.
- c. The facility will likely receive a total of up to 20 trips by heavy truck (greater than 26,000 lbs. GVWR). Trips will be distributed throughout the day.

**15. Public Services:**

- a. The development would not result in an increased need for public services.

**16. Utilities:**

- a. Electricity, water, refuse service, and septic systems will be required for the development.

**MITIGATION MEASURES:**

1. Best Management Practices (BMP) to minimize dust during construction shall be used, such as watering the site in accordance with Franklin County's Clean Air and Dust control ordinances.
2. The applicant shall meet and comply with all necessary Air and Water Quality standards required by the Department of Ecology. Compliance with these standards shall occur at all times. Stormwater shall be retained on site during and after construction.
3. The project shall implement a Stormwater Pollution Prevention Plan (SWPP) in accordance with the Washington State Department of Ecology stormwater management guidelines.
4. Toxic or hazardous chemicals shall be managed, handled, used, and stored in accordance with applicable Federal and State laws. A Chemical Hazard Communication plan shall be developed and submitted to the Franklin County Planning Department.
5. A head count increase will require a Traffic Impact Analysis (TIA) to be completed together with upgrades and/or mitigation fees for the County Road System. The TIA shall include County Roads impacted by this increase.
6. Any infrastructure that will cross those buried drain rights of way, such as piping, electrical wiring, etc., must be permitted by SCBID prior to construction. All applications must be approved by the SCBID Board of Directors prior to that work taking place. SCBID will not require a permit for grading purposes or other operations over the buried drains but will need to be included in the planning to ensure that we maintain cover over our drains.
7. There are exposed manholes for the buried drain systems present around the project site. These manholes need to be protected from impact by equipment or livestock and the also need to be protected from the potential intrusion of waste materials from the dairy operation. These buried

drains are not for waste disposal, intentional or unintentional and must be protected. Efforts must be taken so ensure that the waste from the dairy doesn't impact that drain system.

8. The applicant shall work with SCBID to determine measures to prevent any effluent or solid waste from entering the WB10A lateral. SCBID recommends piping the lateral near the effluent pond and compost pile location to address potential impacts.
9. The applicant shall comply with the State of Washington's requirements for Dairy operations including the implementation of the approved Nutrient Management Plan (NMP) for the operation. Nutrient management plans focus on water quality related issues. A copy of this plan must be submitted to the Franklin County Planning Department.
10. A Concentrated Animal Feeding Operation (CAFO) General Permit must be submitted to the Washington Department of Ecology. A copy of the permit must be submitted to the Franklin County Planning Department.
11. A Manure Pollution Prevention Plan shall be developed and submitted to the Franklin County Planning Department.
12. A Spill Prevention, Control, and Countermeasure (SPCC) shall be developed and submitted to the Franklin County Planning Department.
13. The applicant shall submit an Odor and Fly Control Plan consistent with Franklin County Resolution 2001-238, to be approved by the Franklin Conservation District.
14. An Inadvertent Discover Plan shall be prepared and implemented for the project through all phases.
15. A Franklin County Grading Permit must be submitted before any grading, filling, or movement of earth greater than 50 cubic yards.

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Franklin County has reviewed the proposed project for probable adverse environmental impacts and expects to issue a Mitigated Determination of Nonsignificance (MDNS). The optional MDNS process in WAC 197-11-355 is being used. **This may be your only opportunity to comment on the environmental impacts of the proposed project.**

The comment period for this ODN/NOA-M is until November 28, 2025, at 5:00PM.

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**Responsible official:** *Wes McCart*

**Position/Phone:** *Franklin Planning and Economic Development Director – (509) 545-3521*

**Address:** *502 W Boeing St, Pasco, Washington 99301*

**Date/Signature:**

*11/12/2025 -*



## Purpose of checklist

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization, or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

## Instructions for applicants

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. **You may use “not applicable” or “does not apply” only when you can explain why it does not apply and not when the answer is unknown.** You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to **all parts of your proposal**, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

## Instructions for lead agencies

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

## Use of checklist for nonproject proposals

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B, plus the Supplemental Sheet for Nonproject Actions (Part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in “Part B: Environmental Elements” that do not contribute meaningfully to the analysis of the proposal.

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<sup>1</sup> <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/Checklist-guidance>

## A. Background

[Find help answering background questions<sup>2</sup>](https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-A-Background)

**1. Name of proposed project, if applicable:**

White Bluffs Dairy

**2. Name of applicant:**

White Bluffs Dairy LLC (WA UBI 605 975 172)

**3. Address and phone number of applicant and contact person:**

650 Hornby Rd, Grandview, WA, 98930-9202 | 509-837-3275 | Fransisca A. Vander Meulen

**4. Date checklist prepared:**

October 1, 2025

**5. Agency requesting checklist:**

Franklin County Planning and Building Department

**6. Proposed timing of schedule (including phasing, if applicable):**

Construction is planned to begin in Q2 2026, after the required project permits are received, and is expected to be completed in Q2 2027. Expansion of existing freestall barns and construction of one waste storage pond may occur in 2027-2028 based on economics.

**7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.**

No plans for expansion are currently envisioned. Additional commodity structures may be necessary based on feed storage requirements.

**8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.**

NONE

**9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.**

None known.

**10. List any government approvals or permits that will be needed for your proposal, if known.**

Franklin County Business Registration; Franklin County Permits – Grading & Excavation, Demolition, Commercial Building, Addition Building, Mechanical, Electrical, Plumbing, Fire System, Water Availability; Benton Franklin Health District – On-Site Sewage System (Application or Evaluation); Washington DOH - Public Water System.

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<sup>2</sup> <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-A-Background>

**11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)**

The Project proposes to expand the and reconfigure the existing 700 cow milk dairy to accommodate a 9,500-cow herd size.

The current milking parlor, animal corrals, cow shades, and some miscellaneous outbuildings will be demolished as part of the Project. The existing freestall barns, commodity barn, office building, and manager's residence will be preserved.

Approximately 113 acres of feed crop production ground will be converted to dairy-production ground. The ground will be cleared, grubbed, graded, and compacted prior to construction

Following demolition and ground preparation, the following structures will be constructed:

- An approximately 57,000-square foot milk parlor building containing an 86-stall rotary milking parlor capable of milking 8,000 cows per day, a milk cooling and holding area with three 30,000-gallon milk storage tanks, and a special needs ("hospital") facility.
- Twelve (12) open-lot corrals ("pens") holding 700 cows each with 20 cow shades and six 1,100-foot long concrete lanes serving each corral's feed alley.
- Expansions of the five existing 6,000 square foot freestall barns ranging from 3,680 to 4,480 square feet in size. These expansions will bring the total size range of the freestall barns to between 10,180 and 10,980 square feet.
- A 12,800 square foot commodity barn with maintenance shop facilities and two 10,000-gallon diesel fuel aboveground storage tanks.
- A paved driveway/parking area from Wahluke Road to the milking parlor of sufficient area to allow for unrestricted movement of milk shipping trucks. The parking area will have parking space for approximately 20 vehicles.
- A liquid manure processing and storage system consisting of a manure reception/collection pit, a manure solids separation system consisting of four screw press separators, two settling basins for additional solids precipitation from the separated liquid, and two synthetically-lined 15-million gallon waste storage ponds.
- A manure solids and compost storage area consisting of a graded and compacted soil pad.

**12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.**

The project site is located at 6201 N Wahluke Road, Mesa, Washington, approximately 1½ miles north of the intersection of N. Wahluke Road and Hollingsworth Road in northern Franklin County. The project site’s legal description is “FARM UNIT 16, IRRIGATION BLOCK 201, FRANKLIN COUNTY, WAHSINGTON” and consists of Parcels 1210060012, 1210060013, and 1210060075. The project site is situated within the northeast quarter (NE¼) and the northeast quarter of the southeast quarter (NE¼, SE¼) of Section 6 (S. 6), Township 13 North, Range 29 East, Willamette Meridian (T. 13N, R 29E, W.M.). The approximate geographic coordinates of the Facility centroid are 46.645060°N, 119.222943°W (WGS84). The site is bounded to the north by Filbert Road and SCBID Waterway WB10A, to the west by SCBID Waterway WB10A, to the east by N. Wahluke Road, and to the south by adjoining agricultural properties.

## **B. Environmental Elements**

### **1. Earth**

[Find help answering earth questions](https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-earth)<sup>3</sup>

**a. General description of the site:**

The project site is agricultural and currently used for feed crop production and a 700-head milk cow dairy farm. Topographic relief of the project site trends from north to south, from Paradise Flats to the north toward the Othello Channels just south of the project site, at gradients ranging from nearly level to gently sloping. The project site elevation ranges from 1,035 feet AMSL in the north to 1,025 feet AMSL in the south. Land uses in the immediate vicinity are primarily agricultural crop production sporadically interspersed with single-family residential housing units.

**Circle or highlight one: Flat, rolling, hilly, steep slopes, mountainous, other:**

**b. What is the steepest slope on the site (approximate percent slope)?**

Five (5) percent.

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<sup>3</sup> <https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-earth>

- c. **What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them, and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.**

Project site soils are evenly divided between Hezel loamy fine sand and soils of the Quincy-Hezel complex consisting of 50 percent Quincy loamy fine sand, 25 percent Hezel loamy fine sand, with the remainder minor soil components.

- d. **Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.**

No surface indications or history of unstable soils on the project site or in the immediate vicinity.

- e. **Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.**

Approximately 103 acres of feed crop ground would be grubbed off, graded, and mechanically compacted. Excavation will be performed to accommodate underground piping, utilities, footing excavation, collection sumps, waste storage ponds, and portions of site grading. Maximum earth movement of approximately 200,000 to 300,000 cubic yards is anticipated. Fill material will be determined by a Washington licensed professional geotechnical engineer. Fill sources are not determined at this time, however all imported fill materials (common borrow, 5/8" gravel, 1 1/4" gravel, 2" minus) will come from a county-approved material source.

- f. **Could erosion occur because of clearing, construction, or use? If so, generally describe.**

Erosion is not anticipated at this site.

- g. **About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?**

Approximately eight percent of the project site is currently designed to be covered by impervious surfaces.

- h. **Proposed measures to reduce or control erosion, or other impacts to the earth, if any.**

Best management practices will be used to reduce and control erosion. Local and state laws will be followed. Silt fence, construction entrance, and inlet protection are planned during construction.

## 2. Air

[Find help answering air questions](#)<sup>4</sup>

- a. **What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.**

Soil-disturbing activities and use of diesel construction equipment may temporarily affect air quality in the immediate vicinity of the facility during construction. Once in operation, the facility is estimated to have air emissions consistent with an operational cow milk dairy facility primarily fugitive emissions (dust) and odors.

- b. **Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.**

NONE ARE KNOWN

- c. **Proposed measures to reduce or control emissions or other impacts to air, if any:**

Use Best Management Practices (BMPs) to control fugitive emissions and odor such as Natural Resources Conservation Service (NRCS) Conservation Practice Standard (CPS) 375 - *Dust Management for Pen Surfaces* and University of Idaho Extension Publication CIS 1148 - *Odor Control Practices for Northwest Dairies*.

## 3. Water

[Find help answering water questions](#)<sup>5</sup>

- a. **Surface:**

[Find help answering surface water questions](#)<sup>6</sup>

1. **Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.**

Approximately 650 feet to the east of the project site is the South Columbia Basin Irrigation District (SCBID) Waterway WB5 Wasteway 1 (WB5WW1) Reservoir Canal (the "Reservoir"). The Reservoir, situated within a coulee trending north-northeast to south-southwest, is approximately 1-mile long by 300 feet wide and 23 acres in size. An earthen dam is present at the Reservoir's southern terminus. The Reservoir is mapped by the U.S. Fish and Wildlife Service (USFWS) National Wetlands

**Multiple SCBID drainlines on-site. - FCP&ED**

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<sup>4</sup> <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-Air>

<sup>5</sup> <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water>

<sup>6</sup> <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water/Environmental-elements-Surface-water>

Inventory (NWI) as a lake (L2ABHh) with freshwater emergent wetlands (PEM1F) along most of its shoreline.

The Reservoir drains into Waterway WB5WW1. Waterway WB5WW1 drains into Waterway WB5, which ultimately drains into the SCBID Wahluke Branch Canal.

2. Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

NO

3. Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

NONE The closest wetland is approximately 620 ft to the east of the proposed site's property line. - FCP&ED

4. Will the proposal require surface water withdrawals or diversions? Give a general description, purpose, and approximate quantities if known.

NO

5. Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

NO

6. Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

NO

**b. Ground:**

[Find help answering ground water questions](https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water/Environmental-elements-Groundwater)<sup>7</sup>

1. Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give a general description, purpose, and approximate quantities if known.

Water will be withdrawn from wells for: (1) domestic use; (2) industrial uses including non-transient, non-community (NTNC) public water system uses; and (3) stockwater purposes. These uses are exempt from requiring a groundwater permit for the supplying well per RCW 90.44.050. Domestic and industrial uses will not exceed 5,000 gallons per day. Stockwater withdrawals are unlimited; based on a rough assumption of 25 gallons per day per cow of water consumption, at 9,500 cows the daily water consumption would be approximately 237,500 gallons or 0.75 acre-feet per day.

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<sup>7</sup> <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water/Environmental-elements-Groundwater>

2. **Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.**

Two systems will be present at the project site: (1) the milking parlor system and (2) the “manager’s residence” system. Only human-generated domestic sewage (blackwater) will be discharged into parlor system septic tank; “Industrial” wastes and greywaters from milking operations are discharged to the waste storage ponds. The size of the parlor system tank is expected to be 1,500 gallons. The “manager’s residence” system will human-generated domestic sewage (blackwater and greywater) from one residence and is expected to be 1,000 gallons in size.

**c. Water Runoff (including stormwater):**

1. **Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

The facility is designed to completely contain and store (“zero-discharge facility”) all stormwater, generated wastewater, and animal-generated liquids on premises for later agricultural use (land application as a crop nutrient source). Runoff and animal liquids from the pens and the compost storage area are collected and conveyed to the waste storage ponds. Roof runoff, milking parlor wastewater, and discard milk is collected and conveyed to the waste storage ponds. General stormwater runoff from parking areas, commodity storage, and other impervious areas is contained and conveyed to the waste storage ponds.

Currently, an analysis of water generation is not complete; this is typically performed during generation of the facility’s Manure Pollution Prevention Plan and/or Dairy Nutrient Management Plan. These documents have not yet been created for the facility.

2. **Could waste materials enter ground or surface waters? If so, generally describe.**

The facility is specifically designed to eliminate any surface water discharge. A possibility exists for meteoric water or surface liquids to infiltrate through pervious ground surfaces and percolate to groundwater; these waters could potentially transport facility-specific waste materials (i.e. nitrogen compounds) to groundwater. However, the proposed project will be designed with source control measures, such as synthetically lined waste storage ponds and a sloped and compacted compost storage pad, designed to reduce infiltration to *de minimus* amounts.

3. **Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.**

NO

**4. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:**

Facilities (buildings and impervious ground surfaces) are designed to drain water to collection structures (sumps or tanks) for conveyance to the waste storage ponds. Animal pens and the compost storage area are graded and groomed to route runoff and animal liquids to collection points for transport to the waste storage ponds.

## 4. Plants

[Find help answering plants questions](#)

**a. Check the types of vegetation found on the site:**

- deciduous tree: alder, maple, aspen, other
- evergreen tree: fir, cedar, pine, other
- shrubs
- grass
- pasture
- crop or grain
- orchards, vineyards, or other permanent crops.
- wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- water plants: water lily, eelgrass, milfoil, other
- other types of vegetation

**b. What kind and amount of vegetation will be removed or altered?**

Removal of feed crops totaling 133 acres.

**c. List threatened and endangered species known to be on or near the site.**

NONE per the Washington State Department of Fish & Wildlife (WDFW) Priority Habitats and Species (PHS) map (<https://geodataservices.wdfw.wa.gov/hp/phs/>).

**d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any.**

NONE PROPOSED

**e. List all noxious weeds and invasive species known to be on or near the site.**

NONE KNOWN

## 5. Animals

[Find help answering animal questions](#)<sup>8</sup>

- a. **List any birds and other animals that have been observed on or near the site or are known to be on or near the site.**

Examples include:

- **Birds:** hawk, heron, eagle, songbirds, other:
- **Mammals:** deer, bear, elk, beaver, other:
- **Fish:** bass, salmon, trout, herring, shellfish, other:

Hawks, game birds (geese, ducks), songbirds, deer, rodents.

- b. **List any threatened and endangered species known to be on or near the site.**
- c. **NONE** per the Washington State Department of Fish & Wildlife (WDFW) Priority Habitats and Species (PHS) map (<https://geodataservices.wdfw.wa.gov/hp/phs/>).
- d. **Is the site part of a migration route? If so, explain.**  
NO
- e. **Proposed measures to preserve or enhance wildlife, if any.**  
NONE PROPOSED
- f. **List any invasive animal species known to be on or near the site.**  
NONE KNOWN

## 6. Energy and natural resources

[Find help answering energy and natural resource questions](#)<sup>9</sup>

- a. **What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.**  
Electric (Big Bend Electric Coop)
- b. **Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.**  
NO

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<sup>8</sup> <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-5-Animals>

<sup>9</sup> <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-6-Energy-natural-resou>

- c. **What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.**

NONE PLANNED

## 7. Environmental health

[Health Find help with answering environmental health questions](#)<sup>10</sup>

- a. **Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur because of this proposal? If so, describe.**

- Animal contact
- Equipment with dangerous moving mechanical parts
- Confined spaces (e.g., feed bins, tanks)
- Fueling of equipment
- Hazardous chemicals used for cleaning or sanitizing facilities and animals
- Manure pits (e.g., low oxygen, toxic gases, drowning)
- Electrocutation (e.g., contact with energized power lines)
- Uneven or unstable ground that can cause farm vehicle roll-overs
- Lifting, awkward postures, repetitive motion, and other physical stressors
- Equipment noise

1. **Describe any known or possible contamination at the site from present or past uses.**

NONE KNOWN OR IDENTIFIED

2. **Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.**

NONE KNOWN OR OBSERVED

3. **Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.**

Diesel and gasoline motor fuels, detergents, teat disinfectants, dairy sanitizers, anti-parasitics, antibiotics, herbicides, pesticides and fungicides.

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<sup>10</sup> <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-7-Environmental-health>

**4. Describe special emergency services that might be required.**

NONE ENVISIONED

**5. Proposed measures to reduce or control environmental health hazards, if any.**

Toxic or hazardous chemicals will be managed, handled, used, and stored in accordance with applicable state and federal laws. **A Chemical Hazard Communication Plan will be developed for the facility in English and Spanish.**

**Workers will receive training in Hazard Communication, Environmental Awareness,**

**Spill Prevention, and Spill Response.**

**b. Noise**

**1. What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?**

Traffic, heavy equipment (farming-related).

**2. What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site)?**

Short-Term: Traffic (passenger and heavy truck) noise; demolition and construction noise (including heavy equipment) related to site development activities. During allowed daylight working hours.

Long-Term: Traffic (passenger and heavy truck) noise, heavy equipment noise related to facility maintenance and operation; animal noise. All hours all days.

**3. Proposed measures to reduce or control noise impacts, if any:**

Operational deliveries and milk pickup will be limited to daylight hours to reduce traffic noise at night for the surrounding area.

## **8. Land and shoreline use**

[Find help answering land and shoreline use questions](#)<sup>11</sup>

**a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.**

Site properties are currently used as a milk cow dairy (33 acres) and for crop (7 acres for food and 132 acres for feed) production. Surrounding properties are used for food and feed crop production. Proposal will not affect current or surrounding land uses.

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<sup>11</sup> <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-8-Land-shoreline-use>

- b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses because of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?**

Yes. Currently, approximately 33 acres of the site is utilized for dairy-related purposes and 150 acres is used for feed and food crop production purposes. As part of this project, approximately 113 acres of feed crop production ground will be converted to dairy-production ground. However, no ground will be converted to non-agricultural use.

- 1. Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how?**

NO

- c. Describe any structures on the site.**

One 5,300 ft<sup>2</sup> milking parlor; five 6,500 ft<sup>2</sup> free-stall barns; nine animal pens (four with shades); one 4,000 ft<sup>2</sup> commodity barn; one 2.5M gal waste storage pond (WSP), a 1,500 ft<sup>2</sup> office, and; a 1,200 ft<sup>2</sup> manager's residence.

- d. Will any structures be demolished? If so, what?**

Yes. The current milking parlor, commodity barn, and cow shades will be demolished. The current WSP will be decommissioned.

- e. What is the current zoning classification of the site?**

Franklin County AP-20

- f. What is the current comprehensive plan designation of the site?**

Agricultural (Franklin County Comprehensive Plan 2018 – 2038, June 2021)

- g. If applicable, what is the current shoreline master program designation of the site?**

NONE

- h. Has any part of the site been classified as a critical area by the city or county? If so, specify.**

NO

- i. Approximately how many people would reside or work in the completed project?**

One individual (with or without family) would live in the "manager's residence"

- j. Approximately how many people would the completed project displace?**

ZERO

- k. Proposed measures to avoid or reduce displacement impacts, if any.**

N/A

- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.**

Proposed project is innately compatible with the existing and projected land uses.

- m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:**

Project is agricultural in nature.

## 9. Housing

[Find help answering housing questions](#)<sup>12</sup>

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.**

NONE

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.**

NONE

- c. Proposed measures to reduce or control housing impacts, if any:**

N/A

## 10. Aesthetics

[Find help answering aesthetics questions](#)<sup>13</sup>

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?**

Buildings are not expected to exceed 35 feet in height and are typically not taller than 20 feet. Building materials consist of concrete floors with either concrete (cast-in-place or tilt-up) or steel siding walls (or a combination of steel and concrete) with steel roofs.

- b. What views in the immediate vicinity would be altered or obstructed?**

NONE

- c. Proposed measures to reduce or control aesthetic impacts, if any:**

NONE CONSIDERED

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<sup>12</sup> <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-9-Housing>

<sup>13</sup> <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-10-Aesthetics>

## 11. Light and glare

[Find help answering light and glare questions](#)<sup>14</sup>

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?**

Light will be produced from site lighting operated from dusk to dawn. Building materials are typically of a non- or low-glare type (not gloss or reflective surface coatings).

- b. Could light or glare from the finished project be a safety hazard or interfere with views?**

NO. Other facilities in the property vicinity currently operate with the lighting to be used as part of the project.

- c. What existing off-site sources of light or glare may affect your proposal?**

NONE

- d. Proposed measures to reduce or control light and glare impacts, if any:**

Facility lights will be focused to shine within the property and equipped with light shields and/or glare guards to reduce nighttime glare, light trespass, and skyglow.

## 12. Recreation

[Find help answering recreation questions](#)

- a. What designated and informal recreational opportunities are in the immediate vicinity?**

NONE

- b. Would the proposed project displace any existing recreational uses? If so, describe.**

NO

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:**

NONE CONSIDERED

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<sup>14</sup> <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-11-Light-glare>

### 13. Historic and cultural preservation

[Find help answering historic and cultural preservation questions](#)<sup>15</sup>

- a. **Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.**

Two sites located near the project site are listed as “eligible” in the Washington DAHP WISSARD database.

**Property ID: 586384**

Common Name: Lateral WB-10

Address: Filbert Rd, Basin City, WA

Historic Name: Wahluke Branch-10 Lateral

**Property ID: 395777**

Common Name: Filbert Road WB 10 Canal Bridge

Address: Filbert Rd, Basin City, WA

Historic Name: Filbert Road Canal Bridge

These sites are both located approximately ¾-mile west of Wahluke Road on Filbert Road. They are located 1,000 feet west of the northwest corner of the project site.

- b. **Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.**

NONE NOTED OR DISCOVERED. NO CULTURAL RESOURCE INVESTIGATIONS PERFORMED AT THE PROJECT SITE.

Review of the Washington DAHP’s Archeological Risk Assessment Model contained within the WISSARD repository (<https://wisaard.dahp.wa.gov/Map>) depicts the Risk Level as primarily “High” in the northern portion of the property and “Moderate” in the southern portion of the property.

Review of historic aerial photographs from the Central Washington Historical Aerial Photograph Project repository ([https://www.gis.cwu.edu/historical\\_airphotos/](https://www.gis.cwu.edu/historical_airphotos/)) shows that in 1961 USDA Farm Service Agency aerial photograph (AAU-4BB-028; 1:20,000) the majority of the property land surface was disturbed, possibly in conjunction with construction of the South Columbia Basin Irrigation Project.

- c. **Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.**

The Washington Department of Archeology and Historic Preservation (DAHP) Washington Information System for Architectural and Archaeological Records Data

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<sup>15</sup> <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-13-Historic-cultural-p>

(WISSARD) digital repository was searched for the project site and surrounding properties.

The Central Washington Historical Aerial Photograph Project digital repository was searched for the project site and surrounding properties.

- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.**

An Inadvertent Discovery Plan (IDP) conforming to Washington State Department of Ecology Publication 070-560 will be prepared for the project by a qualified archeologist prior to grading and construction activities. The archeologist will provide training and instruction to site workers prior to initiation of construction activities. The archeologist will be available for consultation during construction activities. Should a discovery occur, the archeologist will document the discovery site and materials.

## 14. Transportation

[Find help with answering transportation questions](#)<sup>16</sup>

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.**

Wahluk Road, Hollingsworth Road, and Sagehill Road. Closest regional roads to the property are WA Highway 17 located 10 miles east and WA Highway 24 located six miles north.

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?**

NO

- c. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle, or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).**

NO

- d. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

NO

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<sup>16</sup> <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-14-Transportation>

- e. **How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?**

The proposed facility will have 20 to 25 workers per shift for two shifts per day, seven days a week. This predicts up to 100 total trips per day to and from the facility by workers in passenger vehicles; however, many workers carpool, likely cutting the number of trips by 25 percent. Peak trip times are anticipated to be 5:30 to 6:30 a.m. and 5:30 to 6:30 p.m.

The facility will likely receive between five and eight deliveries of dry commodities (primarily feed but can be other bulk supplies) per day and transfer liquid milk twice per day for a total of up to 20 trips by heavy truck (greater than 26,000 lbs GVWR). Trips are distributed throughout the day.

The facility will also export solid and liquid manure via spreader and tanker truck (greater than 26,000 lbs GVWR), respectively. These shipments typically begin in the spring and continue through summer. Trips are during daylight hours.

These trip calculations are TOTAL trips for the proposed facility; the actual impact by the facility would be in ADDITION to the trips already related to the current facility's operations.

- f. **Will the proposal interfere with, affect, or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.**

NO

- g. **Proposed measures to reduce or control transportation impacts, if any:**

Stagger commodity deliveries throughout the day. Insure that manure exports are made at vehicle carrying capacity to limit the amount of trips from the facility to surrounding farms.

## 15. Public services

[Find help answering public service questions<sup>17</sup>](https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-15-public-services)

- a. **Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.**

NO

- b. **Proposed measures to reduce or control direct impacts on public services, if any.**

NONE CONSIDERED

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<sup>17</sup> <https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-15-public-services>

## 16. Utilities

[Find help answering utilities questions](#)<sup>18</sup>

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system other:
- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Electricity – Big Bend Electric; Water – On-site well; Refuse – Basin Disposal; Sewer – On-Site Septic System

## C. Signature

[Find help about who should sign](#)<sup>19</sup>

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

X 

Type name of signee: Kevin M. Freeman

Position and agency/organization: Agent, Inland Earth Sciences

Date submitted: 10/6/2025

<sup>18</sup> <https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-16-utilities>

<sup>19</sup> <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-C-Signature>

**CUP 2025-10/  
SEPA 2025-18**

**Application & Attachments**



# FRANKLIN COUNTY

## PLANNING AND BUILDING DEPARTMENT

### CONDITIONAL USE PERMIT (CUP) APPLICATION PACKET

#### FREQUENTLY ASKED QUESTIONS:

#### **What is a Conditional Use Permit?**

A Conditional Use Permit (also known as a special use permit) is a zoning exception, which allows the property owner use of his or her land in a way not otherwise approved within the particular zoning district.

The Conditional Use Permit process is designed to allow flexibility within the zoning laws. A zoning ordinance cannot account for every situation, and exceptions such as the conditional use permit gives the County discretion to allow uses otherwise prohibited in the specific district for the benefit of the neighborhood or area.

#### **Who can apply for a Conditional Use Permit?**

Anyone can apply for a Conditional Use Permit. However, a property owner should only apply for a Conditional Use Permit regarding to uses such as large-scale accessory buildings, accessory buildings in front yard areas, churches, schools, daycare centers, cell towers, large animal operations, and other non-permitted primary or accessory uses.

It is highly recommended that you call the Planning and Building Department at 509-545-3521, visit our office at 502 W. Boeing Street, Pasco, WA 99301 or view Title 17 (Zoning) of the Franklin County Code on our website ([https://library.municode.com/wa/franklin\\_county/codes/code](https://library.municode.com/wa/franklin_county/codes/code)) to determine if what you are proposing requires a CUP.

#### **How do I apply for a Conditional Use Permit?**

A pre-application meeting with the Planning and Building Department staff is encouraged for all Conditional Use Permit applications. Applications are submitted to the Planning and Building Department. The following minimum requirements shall be submitted:

- 1) Completed Conditional Use Permit Application Form;
- 2) Completed General Land Use Development Application;
- 3) Completed & Signed SEPA Checklist;
- 4) Site Plan;
- 5) Detailed Narrative, including the following:
  - a. Written description explaining the present use of the land/structures,
  - b. Detailed description of the proposed conditional use,
  - c. Description of any zoning violations, including home occupation violations, and
  - d. Other pertinent information as deemed necessary by Staff.
- 6) Any recorded Covenants, Conditions, or Restriction (CC&R) or latecomers agreements attached to the property;



# FRANKLIN COUNTY

## PLANNING AND BUILDING DEPARTMENT

- 7) If directed by Staff, the following will need to be submitted:
  - a. Written approval letter from the Benton-Franklin Health District.
  - b. Building plans detailing the proposed structure(s).

### **What happens after I apply?**

During the time prior to the public hearing, the Planning and Building Department staff will notify in writing (copy of public hearing notice) all the property owners of record within 500 feet of your property (if within an Urban Growth Boundary) or 1 mile of your property (if located outside an Urban Growth Boundary).

Additionally, the staff will conduct a review of your request and will do the following:

- 1) Establish a hearing date for the request;
- 2) Send notification of the hearing to local newspapers;
- 3) Send notification of the request to applicable local, state, and/or federal agencies, including affected Tribes for comments;
- 4) Send notification of the request to neighboring property owners for comments; and
- 5) Compile public and agency comments to help develop a Staff report for the hearing.

### **What happens at the public hearing?**

The applicant or representative is strongly encouraged to be present to discuss and answer any questions the Planning Commission or public may have. Anyone who wants to testify for, against, or is neutral about the request will be allowed to do so.

### **When do I find out if my permit was approved or denied?**

At conclusion of this public hearing, the Planning Commission will make a recommendation to the Board of County Commissioners to approve, approve with conditions, or deny the CUP request.

This recommendation can be appealed within ten (10) calendar days prior to the closed-record hearing before the Board of County Commissioners for a final decision.

For additional information regarding the timely filing of an appeal, closed record hearings, and Commissioner review and decision, please refer to Chapter 17.82 of the Franklin County Code or contact the Planning and Building Department for details and specifications.

*- Keep this section for your records -  
- Return the following completed pages with your application -*



# FRANKLIN COUNTY

## PLANNING AND BUILDING DEPARTMENT

### CONDITIONAL USE PERMIT (CUP) APPLICATION REQUIREMENTS

#### Submittal Checklist:

- Completed Conditional Use Permit Application Information Form**
- Completed General Land Use Development Application**
- Completed & Signed SEPA Checklist**  
Provided by the Planning Department or visit <https://www.franklincountywa.gov/263/Application-Forms> to download. *Part D does not need to be completed for this application.*
- Detailed Narrative of Proposed Conditional Use**  
Please provide the following on a separate sheet(s) of paper:
  - Written description explaining the present use of the land/structures.
  - Detailed description of the proposed use or request.
  - Description of any zoning violations, including violations of home occupations.
  - Other pertinent information as deemed necessary by Planning Staff.
- Site Plan**  
Shall be drawn neatly and to scale, that includes:
  - North arrow
  - Tax parcel number
  - Scale
  - Exterior property lines
  - Distance from existing and/or proposed use to the following:
    - Exterior property lines
    - Existing structures
    - Proposed structures
    - Existing or proposed septic system
  - Any adjacent public street or alley rights-of-way
  - Existing easements, including utility and/or access
  - Existing and/or proposed buildings and other structures
  - Existing and/or proposed retaining walls or fences, please indicate:
    - Location of fence or retaining wall
    - Type of material
    - The height of the fence, including any barbed wire
    - If the fencing provides visual screening
  - Existing and/or proposed points of ingress and egress, driveways, and circulation pattern.
  - The location of existing and/or proposed parking areas with each parking space shown and surface type indicated and lighting noted.
  - Existing and/or proposed open spaces and landscape areas.
  - Location of well or any public water systems within 100 feet of the subject property or within a 100-foot well protection zone.



# FRANKLIN COUNTY

## PLANNING AND BUILDING DEPARTMENT

- The distance from any existing and/or proposed structures within the well protection zone and sewerage facilities.
- Location of any existing and/or proposed drain field area, reserve area, and septic tank area and distances to structures and property lines
- Existing or proposed storm water drainage system
- Existing or proposed sidewalks and streetlights
- Existing or proposed fire protection devices, with sufficient water storage and flows.
- Facilities or improvements to address compatibility with adjacent dissimilar land uses.
- Location of structures on the adjoining lots, which may cause compatibility issues.
- All major man-made and natural physical features on or adjacent to the site, such as:
  - Streets
  - Railroads
  - Irrigation canals and/or ponds
  - Buried irrigation lines
  - Streams, creeks, drainage ditches
  - Hills, depressions, steep slopes
  - Lakes, floodplains, floodways, the 100-year base flood elevations
  - Shoreline area
- Any proposed grading, and the new contours as they affect lot layout, streets, and drainage ways

**Attach Property Information** (*i.e. recorded deed*)

If any recorded Covenants, Conditions and Restrictions (CC&R), latecomers agreements, or deed restrictions pertaining to or affecting the property.

*If Directed by Staff*

**Obtain a written approval letter from the Benton-Franklin Health District**

Located at 7102 W. Okanogan Place, Kennewick, WA – (509) 460-4200

*If Directed by Staff*

**One (1) set of building plans**

The construction/building plans can be a preliminary set and do not have to be official.

- Minor changes can be made to the plans after approval of the Conditional Use Permit.
- Major changes may require a new/amended Conditional Use Permit.

**Application Fee:** \$ 400.00

**SEPA Checklist Fee:** \$ 150.00

**Variance Report Fee:** \$ 80.00

**Total Fees:** \$ 630.00

All fees do not include a 3% processing fee if paying by debit or credit card.

Payment shall be made to the Franklin County Planning & Building Dept.

LAND USE – ZONING CODE – BUILDING CODE – FIRE CODE – CODE ENFORCEMENT – BUSINESS REGISTRATION

502 W. BOEING ST. - PASCO, WA 99301 - [509] 545-3521 - FAX [509] 546-3367 - BURN LINE [509] 545-3586 - BLDG. INSP. LINE [509] 545-3522

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# FRANKLIN COUNTY

## PLANNING AND BUILDING DEPARTMENT

**Will the project be conducted entirely within a structure?**       Yes       No

- 1) If no, describe the outdoor activities (i.e. outdoor eating, playground, park)
- 2) What is the approximate square footage, or seating capacity of your outdoor use area(s)?
- 3) What type of noises will the outdoor use generate? (i.e. music, machinery, vehicles)

**Proposed hours of operation/days of the week:** (indicate months, if seasonal)

**Proposed measures to ensure compatibility with permitted uses in the surrounding zone?**

(Ex. fences, landscape buffers, berms, etc.)

I, the undersigned, hereby authorize the filing of this application and certify under penalty of perjury that the information contained in this application is complete and correct to the best of my knowledge. Further, I hereby grant Franklin County staff or representatives to enter my property during the course of this review to inspect my property as needed.

- This authorizes the designated Applicant’s representative (if applicable) to act on behalf of the applicant for the processing of this request.**

\_\_\_\_\_  
Property Owner (Signature)

\_\_\_\_\_  
Applicant/Representative (Signature)

\_\_\_\_\_  
Property Owner (Print Name)

\_\_\_\_\_  
Applicant/Representative (Print Name)

\_\_\_\_\_  
Date signed

\_\_\_\_\_  
Date signed



# FRANKLIN COUNTY

## PLANNING AND BUILDING DEPARTMENT

### GENERAL LAND USE DEVELOPMENT APPLICATION

<b>FOR STAFF USE ONLY</b>	<b>FILE #:</b> _____	<i>S T A M P H E R E :</i>
	Total Fees: _____	Date deemed complete: _____
	Receipt #: _____	Pre-App Meeting Date: _____
	Reviewed By: _____	Hearing Date: _____

<b>CHECK ALL THAT APPLY AND ATTACH SUPPLEMENTAL FORM(S):</b>	<input type="checkbox"/> Appeal (File # of item appealed: _____)	<input type="checkbox"/> SEPA – Environmental Checklist
	<input type="checkbox"/> Binding Site Plan (BSP)	<input type="checkbox"/> Shoreline (SH) – Conditional Use Permit
	<input type="checkbox"/> Boundary Line Adjustment (BLA)	<input type="checkbox"/> Shoreline (SH) – Exemption
	<input type="checkbox"/> Comprehensive Plan Amendment (CPA)	<input type="checkbox"/> Shoreline (SH) – Non-Conforming
	<input type="checkbox"/> Conditional Use Permit (CUP)	<input type="checkbox"/> Shoreline (SH) – Substantial Development
	<input type="checkbox"/> Determination – Administrative	<input type="checkbox"/> Shoreline (SH) – Variance
	<input type="checkbox"/> Determination – Critical Areas	<input type="checkbox"/> Short Plat (SP)
	<input type="checkbox"/> Determination – Non-Conforming Use	<input type="checkbox"/> Subdivision/Preliminary Long Plat (SUB)
	<input type="checkbox"/> Determination – Reasonable Use	<input type="checkbox"/> Tax Parcel Separation (TPS)
	<input type="checkbox"/> Determination – Zoning Interpretation	<input type="checkbox"/> Temporary Use Permit
	<input type="checkbox"/> Home Occupation	<input type="checkbox"/> Vacation of Easement (VOE) / Alteration
	<input type="checkbox"/> H2A Farm Worker Housing (Zoning Review)	<input type="checkbox"/> Variance
	<input type="checkbox"/> Planned Unit Development (PUD)	<input type="checkbox"/> Zone Change/Rezone (ZC)
	<input type="checkbox"/> Other: _____	

#### CONTACT INFORMATION (Please provide all necessary information and checkmark the primary contact)

<input type="checkbox"/>	<b><u>Property Owner</u></b>	Mailing Address: _____
	Name: _____	_____
	Phone Number: _____	_____
	E-mail Address: _____	
<input type="checkbox"/>	<b><u>Applicant/Agent/Contractor</u></b> (if different)	Phone Number: _____
	Business Name: _____	Mailing Address: _____
	Contact Name: _____	_____
	E-mail Address: _____	
<input type="checkbox"/>	<b><u>Surveyor / Engineer</u></b>	Phone Number: _____
	Business Name: _____	Mailing Address: _____
	Contact Name: _____	_____
	E-mail Address: _____	



# FRANKLIN COUNTY

## PLANNING AND BUILDING DEPARTMENT

### PROPERTY INFORMATION

Parcel Number(s) (9-digit tax number):

Legal Description of Property:

Site Address: (describe location if no address is assigned)

### BRIEF DESCRIPTION OF PROJECT OR REQUEST

- All appropriate fees must accompany this application. Fees are non-refundable and subject to change. Please contact the Planning Department for current pricing of fees.
- This application, including attachments, must be completed in its entirety for all items applicable to your project.
- Supplemental information is generally required for land use approvals. Please ensure that all required information is submitted along with this application form.
- If the property is owned by a trust, corporation, or LLC, please attach documentation showing that the person signing as the “owner” has the authority to sign on behalf of the trust, corporation, or LLC. If there are multiple owners, provide an attachment in the same format and with the same declarations.

I, the undersigned, hereby authorize the filing of this application and certify under penalty of perjury that the information contained in this application is complete and correct to the best of my knowledge. Further, I hereby grant Franklin County staff or representatives to enter my property during the course of this review to inspect my property as needed.

I understand that any information submitted to the Franklin County Planning and Building Department is subject to public records disclosure laws for the State of Washington (RCW Chapter 42.17) and all other applicable laws that may require the release of the documents to the public.

**This authorizes the designated Applicant’s representative (if applicable) to act on behalf of the applicant for the processing of this request.**

\_\_\_\_\_  
Property Owner (Signature)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Applicant/Representative (Signature)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Property Owner (Print Name)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Applicant/Representative (Print Name)

\_\_\_\_\_  
Date

**CUP 2025-10/  
SEPA 2025-18**

Project Narrative



CONSULTANTS IN THE ENVIRONMENTAL AND APPLIED EARTH SCIENCES

## **PROJECT NARRATIVE**

**DAIRY AND HERD EXPANSION PROJECT  
White Bluffs Dairy LLC / GME Land LLC  
6201 N Wahluke Road  
Mesa, Washington**

**October 6, 2025**



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## ACRONYMS AND ABBREVIATIONS

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ac	acre
ac-ft	acre-feet
AMSL	Above Mean Sea Level
ASTM	American Society for Testing and Materials
bgs	below ground surface
°C	degrees Celsius
CAFO	Concentrated Animal Feeding Operation
cf	cubic feet
cfs	cubic feet per second
cm	centimeter
cm/s	centimeters per second
CPS	Conservation Practice Standard
cy	cubic yard
DTW	depth to water
Ecology	Washington State Department of Ecology
eFOTG	electronic Field Office Technical Guide
EPA	United States Environmental Protection Agency
°F	degrees Fahrenheit
ft	feet
ft/d	feet per day
FSA	Farm Services Administration
gal	gallon
GCL	Geosynthetic Clay Liner
GP	General Permit
GVWR	Gross Vehicle Weight Rating
gpd	gallons per day
HDPE	High Density Polyethylene
HSP	Health and Safety Plan
IES	Inland Earth Sciences Corporation
in	inch
in/hr	inches per hour
kg	kilogram
L	liter
lb	pound
lbs/ac	pounds per acre
lbs/t	pounds per ton



## ACRONYMS AND ABBREVIATIONS

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IWMP	Irrigation Water Management Plan
MPPP	Manure Pollution Prevention Plan
m	meter
meq/L	milliequivalents per liter
mS/cm	millisiemens per centimeter
µg	microgram
µg/L	micrograms per liter
µm	micrometer
mg	milligram
mg/L	milligrams per liter
mgd	million gallons per day
mil	thousandths of an inch (e.g., “60 mil” is equal to 60 thousandths of an inch, or 0.060-inch)
mL	milliliter
mm	millimeter
MPa	Megapascal
mV	millivolt
NAIP	National Agriculture Imagery Program
NAVD88	North American Vertical Datum 1988
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
MSDS	Material Safety Data Sheets
OHWM	Ordinary High Water Mark
pcf	pounds per cubic foot
PE	Polyethylene
PS	Polystyrene
PVC	Polyvinyl Chloride
psi	pounds per square inch
QCBID	Quincy Columbia Basin Irrigation District
RCW	Revised Code of Washington
SCBID	South Columbia Basin Irrigation District
sf	square feet
SPCC	Spill Prevention, Control, and Countermeasures
SVID	Sunnyside Valley Irrigation District
SWD	State Waste Discharge
USAF	United States Air Force



## ACRONYMS AND ABBREVIATIONS

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USBR	United States Bureau of Reclamation
USDA	United States Department of Agriculture
USGS	United States Geological Survey
WA	Washington State
WAC	Washington Administrative Code
WBZ	Water-bearing zone
WGS84	World Geodetic System 1984
WWR	Water Well Report
WSDA	Washington State Department of Agriculture
WSP	Waste Storage Pond
yd	yard
yr	year



## 1 INTRODUCTION

This project (the “Project”) proposes to convert the current T. Freeman Dairy, a 700-cow Washington Licensed Cow Milk Dairy Farm (WSDA AG ID 31148) operated by T. Freeman Dairy, LLC [UBI 605 279 429] to a 9,500 cow operation with 7,000 milking cows and 2,500 dry cows to be owned and operated by White Bluffs Dairy, LLC [UBI 605 975 172], 650 Hornby Road, Grandview, Washington.

## 2 SITE LOCATION

The Project site is located at 6201 N Wahluke Road, Mesa, Washington, approximately 1½ miles north of the intersection of N. Wahluke Road and Hollingsworth Road in northern Franklin County (**Figure 1**). The Project site is situated within the northeast quarter (NE¼) and the northeast quarter of the southeast quarter (NE¼, SE¼) of Section 6 (S. 6), Township 13 North, Range 29 East, Willamette Meridian (T. 13N, R 29E, W.M.), Franklin County (**Figure 2**). The approximate geographic coordinates of the Facility centroid are 46.645060°N, 119.222943°W (WGS84).

The site is bounded to the north by Filbert Road and South Columbia Basin Irrigation District (SCBID) Waterway WB10A, to the west by SCBID Waterway WB10A, to the east by N. Wahluke Road, and to the south by adjoining agricultural properties (**Figure 3**).

## 3 SITE SETTING

### 3.1 Legal Description and Zoning

The Project site consists of three parcels: Parcel Nos. 1210060012, 1210060013, and 1210060075. Parcel 1210060012 is approximately 132 acres in size, Parcel 1210060013 is approximately 20.4 acres in size, and 1210060075 is approximately 20.6 acres in size. The Project site’s legal description is “FARM UNIT 16, IRRIGATION BLOCK 201, FRANKLIN COUNTY, WAHSINGTON”. The parcels are currently owned by GME Land, LLC [UBI 603 196 466], 7090 N Wahluke Road, Othello, Washington.

The parcels are zoned “AP-20”, per Franklin County Municipal Code Chapter 17.10 “AP-20 Agricultural Zone.” The Agricultural Production 20 zone is designed to maintain the agricultural economy of the county by reserving the farmlands that are used for farming and that are suited to such use. Most of the land in this zoning district has access to irrigation water or is surrounded by lands with access to irrigation water. Parcels in the AP-20 zone are required to have a minimum lot size of no less than 20 acres. Dairies are allowed within the AP-20 zone. Dairies within the AP-20 zone must obtain a Conditional Use Permit for any herd size more than 500 cows. Dairies in the AP-20 zone cannot exceed 1,300 cows must obtain a Conditional Use Permit and meet the requirements of the Franklin County Dairy Separation Standard: *“No more than two operations that are greater in size than one thousand three hundred (1,300) (milking cow head count) shall be located within an operations two-mile buffer. The buffer area shall be a two-mile radius from each operation’s center of primary animal confinement as defined by the Franklin Conservation District.”*

Davidson Brothers Dairy Inc. (AG ID 9938), located approximately 1.45 miles south-by-east from the present facility at 4680 N Wahluke Rd, is the only dairy milking more than 1,300 cows located within two miles of the proposed development.



## **3.2 Topography**

Topographic relief of the Project site trends from north to south, from Paradise Flats to the north toward the Othello Channels just south of the Project site, at gradients ranging from nearly level to gently sloping. The Project site elevation ranges from 1,035 feet AMSL in the north to 1,025 feet AMSL in the south. Site slopes range from approximately zero to five (5) percent.

## **3.3 Climate**

The climate of Project area is characterized by cool, cloudy winters and hot, dry summers. The mean annual temperature is approximately 53°F, ranging from a low average temperature of 33°F in December to a high average temperature of 75°F in July. The low temperatures in December average 28°F with high temperatures in July averaging 92°F. The Cascade Range to the west causes a distinct rain shadow effect that results in the Pasco Basin occupying some of the driest portions of Washington state; total precipitation averages approximately seven (7) inches/year. Much of the precipitation occurs in December and January. However, large variations in annual precipitation, including drought, characterize the area. Hot and windy conditions in the Basin cause potential evapotranspiration to range from 58 to 65 inches/year. The dominant wind direction is from the west in spring, summer and fall and from the south in winter.

## **3.4 Geology and Soils**

### *3.4.1 Geology*

The Project site is situated within the Pasco Basin (the “Basin”) of the Columbia Plateau (the “Plateau”) geologic province. The Plateau lies within the Columbia intermontaine physiographic province and is bordered by the Cascade Range on the west, the Okanogan Highlands on the north, and the Rocky Mountains on the east. The southern edge of the Plateau is defined by the extent of the Columbia River Basalt Group (CRBG) more than by any physiographic feature. The Plateau is both a structural and topographic basin, with its low point situated near Pasco. The Plateau is underlain entirely by massive Cenozoic-era basalt flows with an estimated composite thickness of approximately 15,000 feet near the Pasco low point. Sedimentary deposits overlie the basalt over large areas of the plateau.

The Basin is a distinct subprovince of the Plateau; a synclinal trough contained within the tectonically formed ridges of the Saddle Mountains to the north and the Rattlesnake Hills to the south. The Missoula Floods, cataclysmic Pleistocene-epoch glacial floods derived from repeated outbursts of Glacial Lake Missoula, significantly shaped the Basin's surface with extensive glacial flood deposits, including Touchet Beds, and leaving behind dry flood channels, coulees, and cataraacts.

Three major stratigraphic units underlie Pasco Basin; in ascending (oldest to youngest) order the units are: (1) the Yakima Basalt Subgroup of the CRBG; (2) the Ringold Formation, and; (3) the informally-named Hanford formation. During the Tertiary, CRBG flood basalts flowed intermittently into the Pasco Basin, resulting in a total basalt thickness of more than 15,000 feet in the area. The Yakima Basalt Subgroup is composed of three distinct formations based on stratigraphy and chemistry, in ascending order the units are: the Grande Ronde Basalt, the Wanapum Basalt, and the Saddle Mountains Basalt. Each of these units is composed of multiple lava flows. Between eruptions, particularly those producing the younger flows, thin to thick soils layers (such as the Mabton and Vantage Members of the Ellensburg Formation) that formed during periods of eruption hiatus were interbedded with the basalt.



The surficial geology of the Project site (**Figure 4**) consists of Holocene- to Pleistocene-epoch eolian (wind-deposited) medium to fine sand and silt present in active and stabilized dune. Sand and silt grains are composed of quartz, basalt, or feldspar; volcanic ash common.

Underlying the surficial deposits is Pliocene-epoch Ringold Formation, a sedimentary deposit composed dominantly of coarse sands, gravels, and cobbles with significant amounts of clays, silts, and fine sands. Stratigraphically, the Ringold Formation is divided into four textural units, (1) the basal Ringold Formation composed of sand and gravel; (2) the lower Ringold Formation composed of silt and clay; (3) the middle Ringold Formation, composed of sand, gravel and silt; and (4) the upper Ringold Formation composed of silt and sand. The total Ringold Formation thickness in the Pasco area exceeds 600 feet in some places. These sediments formed from folding and subsidence in the Late Cenozoic that allowed for the deposition of fluvial sediments in the Pasco Basin by ancestral rivers flowing into and through the basin.

### 3.4.2 Soils

Soil types for the Facility are described using the Natural Resources Conservation Service (NRCS) Web Soil Survey), accessed at: <https://websoilsurvey.sc.egov.usda.gov/>. The information provided by the custom soils resource report (**Appendix A**) describes the Project site (**Figure 5**) as underlain by two types: (1) the Hezel loamy fine sand and (2) the soils of the Quincy-Hezel complex consisting of 50 percent Quincy loamy fine sand, 25 percent Hezel loamy fine sand, with the remainder minor soil components.

The Hezel loamy fine sand develops on terraces. The parent material consists of eolian deposits over lacustrine deposits. The soil is somewhat excessively drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. There is no zone of water saturation within a depth of 72 inches.

The Kennewick fine sandy loam develops on terraces. The parent material consists of lacustrine deposits. The soil is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. There is no zone of water saturation within a depth of 72 inches.

## 3.5 Surface Water

Approximately 650 feet to the east of the Project site (**Figure 6**) is the South Columbia Basin Irrigation District (SCBID) Waterway WB5 Wasteway 1 (WB5WW1) Reservoir Canal (the "Reservoir"). The Reservoir, situated within a coulee trending north-northeast to south-southwest, is approximately 1-mile long by 300 feet wide and 23 acres in size. An earthen dam is present at the Reservoir's southern terminus. The Reservoir is mapped by the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) as a lake (L2ABHh) with freshwater emergent wetlands (PEM1F) along most of its shoreline. The Reservoir drains into Waterway WB5WW1. Waterway WB5WW1 drains into Waterway WB5, which ultimately drains into the SCBID Wahluke Branch Canal. Associated with the Project site are several buried field drain lines and their corresponding right-of way easements (**Figure 7**). The field drains are operated and maintained by SCBID. The buried field drain lines associated with the Project site appear to discharge to the Reservoir.



### 3.6 Cultural Resources

The Washington Department of Archeology and Historic Preservation (DAHP) Washington Information System for Architectural and Archaeological Records Data (WISSARD) digital repository was searched for the Project site and surrounding properties. Review of the Washington DAHP's Archeological Risk Assessment Model contained within the WISSARD repository (<https://wisaard.dahp.wa.gov/Map>) depicts the Risk Level as primarily "High" in the northern portion of the property and "Moderate" in the southern portion of the property (**Figure 8**).

Two sites located near the Project site are listed as "eligible" in the Washington DAHP WISSARD database. These sites are both located approximately ¾-mile west of Wahluke Road on Filbert Road. They are located 1,000 feet west of the northwest corner of the Project site.

**Property ID: 586384**

Common Name: Lateral WB-10  
Address: Filbert Rd, Basin City, WA  
Historic Name: Wahluke Branch-10 Lateral

**Property ID: 395777**

Common Name: Filbert Road WB 10 Canal Bridge  
Address: Filbert Rd, Basin City, WA  
Historic Name: Filbert Road Canal Bridge

### 3.7 Habitats and Species

The Washington State Department of Fish & Wildlife (WDFW) Priority Habitats and Species (PHS) map (<https://geodataservices.wdfw.wa.gov/hp/phs/>) was searched for the Project site and surrounding properties (**Figure 9**). The search returned no animals or plants listed as "threatened or endangered" species.

Several polygons representing Shrub-steppe (or "Shrubsteppe") habitat are mapped on the Project site (**Figure 9**). Shrubsteppe is identified as a "Priority" habitat by WDFW. Shrubsteppe landscapes are dominated by rolling, grassy plains or "steppe," with an overstory of sagebrush and other woody shrubs. Microscopic organisms form a cryptobiotic crust that conserves moisture and aids in preventing erosion. Within a large shrubsteppe habitat, features such as streams, wetlands, rocky talus slopes, and canyons can support a variety of plants and animals unique to the shrubsteppe ecosystem.

Wyoming big sagebrush is the main shrub found in this ecosystem; other common shrubs include antelope bitterbrush, three-tip sagebrush, and stiff sagebrush. Common grasses include Idaho fescue, bluebunch wheatgrass, Sandberg bluegrass, Thurber's needlegrass, and needle-and-thread. Some shrubsteppe areas have a layer of algae, moss, or lichens which are part of the cryptobiotic crust. In areas with greater precipitation or on soils with higher moisture-holding capacity, shrubsteppe can also support a dense canopy of flowering plants. Common shrubsteppe plant groups include balsamroot, buckwheats, and lupines

Currently, the shrubsteppe habitat mapped on the Project site is identified as "Franklin County Presumptive Shrubsteppe" habitat. The identification notes state "*General location of Shrubsteppe. Confirm or refute with site-scale info. WDFW recommends using site-scale info to inform site-scale and use decisions. Expect that on-the-ground conditions (e.g., boundaries) will vary from the map.*" Given the



actual use of the underlying areas presumptively identified as shrubsteppe, it is likely that these polygons were mis-characterized and would be refuted identified during a site-scale habitat evaluation.

## **4 CURRENT PROJECT SITE OPERATIONS**

The Project site currently (**Figure 10**) operates as a dairy farm and producing feed crops from agricultural ground. The T. Freeman Dairy, a 700-cow Washington Licensed Cow Milk Dairy Farm (WSDA AG ID 31148) consisting of: one 5,300 sf herringbone milking parlor; five 6,000 sf free-stall barns; nine animal pens, four with shades; one 4,000 sf commodity barn; one 2.5 million gallon waste storage pond (WSP), a 1,500 sf office building located north of the milking parlor; and a 1,200 sf manager's residence located in the northeast corner of the Project site. The adjacent 132-acre agricultural field to the west of the dairy is used to produce feed crops.

## **5 PROPOSED PROJECT**

The Project proposes to expand the and reconfigure the existing dairy (**Figure 11**) to accommodate the proposed herd size.

### **5.1 Demolition**

The current milking parlor, animal corrals, cow shades, and some miscellaneous outbuildings will be demolished as part of the Project. The existing freestall barns, commodity barn, office building, and manager's residence will be preserved.

### **5.2 Ground Preparation**

Approximately 113 acres of feed crop production ground located on Parcel 1210060012 will be converted to dairy-production ground. The ground will be cleared, grubbed, graded, and compacted prior to construction. Excavation will be performed to accommodate underground piping, utilities, footing excavation, collection sumps, waste storage ponds, and portions of site grading. Maximum earth movement of approximately 200,000 to 300,000 cubic yards is anticipated. Fill material will be determined by a Washington licensed professional geotechnical engineer. Fill sources are not determined at this time, however all imported fill materials (common borrow, 5/8" gravel, 1¼" gravel, 2" minus) will come from a county-approved material source

### **5.3 Construction**

Following demolition and ground preparation, the following structures will be constructed:

- An approximately 57,000-square foot milk parlor building containing:
  - An 86-stall rotary milking parlor capable of milking 8,000 cows per day
  - Milk cooling and holding area with three 30,000-gallon milk storage tanks
  - A special needs ("hospital") facility
- Twelve (12) open-lot corrals ("pens") holding 700 cows each



- Twenty (20) cow shades
- Six (6) 1,100-foot long concrete lanes serving each corral's feed alley
- Expansions of the five existing 6,000 square foot freestall barns ranging from 3,680 to 4,480 square feet in size. These expansions will bring the total size range of the freestall barns to between 10,180 and 10,980 square feet. The barns will be configured to use scrape and vacuum methods for manure collection.
- A 12,800 square foot commodity barn with maintenance shop facilities and two 10,000-gallon diesel fuel aboveground storage tanks
- A paved driveway/parking area from Wahluke Road to the milking parlor of sufficient area to allow for unrestricted movement of milk shipping trucks. The parking area will have parking space for approximately 20 vehicles.
- A liquid manure processing and storage system consisting of:
  - A manure reception/collection pit
  - A manure solids separation system consisting of four (4) screw press separators
  - Two settling basins for additional solids precipitation from the separated liquid
  - Two synthetically-lined 15-million gallon waste storage ponds (WSPs) meeting the Washington State Department of Ecology (Ecology) Concentrated Animal Feeding Operation (CAFO) Combined General Discharge Permit (the "CAFO Permit") requirement for maximum specific discharge from a liquid waste storage structure. The WSPs will be designed and constructed in accordance with NRCS WA CPS 313 - *Waste Storage Facility*, NRCS WA CPS 521 - *Pond Sealing or Lining, Geomembrane or Geosynthetic Clay Liner*, and other standards as applicable and necessary.
- A manure solids and compost storage area consisting of a graded and compacted soil pad

A complete summary of proposed buildings is presented below.

ITEM	DESCRIPTION	DIMMENSIONS (ft x ft)	TOTAL AREA (sf)
1	WASTE WATER STORAGE POND A	300 x 600	180,000
2	WASTE WATER STORAGE POND A	300 x 600	180,000
3	COMPOST STORAGE AREA	300 x 1,250	375,000
4	SEPARATOR BUILDING	40 x 50	2,000
5	COW SHADE	50 x 340	17,000
6	COW SHADE	50 x 340	17,000
7	COW SHADE	50 x 340	17,000
8	COW SHADE	50 x 340	17,000
9	COW SHADE	50 x 340	17,000
10	COW SHADE	50 x 500	17,000



ITEM	DESCRIPTION	DIMMENSIONS (ft x ft)	TOTAL AREA (sf)
11	COW SHADE	50 x 340	17,000
12	COW SHADE	50 x 340	17,000
13	COW SHADE	50 x 340	17,000
14	COW SHADE	50 x 340	17,000
15	COW SHADE	50 x 240	12,000
16	COW SHADE	50 x 240	12,000
17	COW SHADE	50 x 240	12,000
18	COW SHADE	50 x 150	7,500
19	COW SHADE	50 x 175	8,750
20	COW SHADE	50 x 375	18,500
21	COW SHADE	50 x 375	18,500
22	COW SHADE	50 x 375	18,500
23	COW SHADE	50 x 375	18,500
24	COW SHADE	50 x 375	18,500
25	MILKING BARN	154 x 368	56,672
26	FREESTALL BARN ADDITION <sup>1</sup>	20 x 184	3,680
27	FREESTALL BARN ADDITION <sup>1</sup>	20 x 192	3,840
28	FREESTALL BARN ADDITION <sup>1</sup>	20 x 200	4,000
29	FREESTALL BARN ADDITION <sup>1</sup>	20 x 208	4,160
30	FREESTALL BARN ADDITION <sup>1</sup>	20 x 224	4,480
31	COMMODITY BARN	40 x 320	12,800

<sup>1</sup> – Total freestall barn size is the indicated addition length and square footage plus the existing barn length (300 feet) and square footage (6,000 sf)

The proposed Project design and site layout considers and avoids construction of “permanent” structures over the SCBID buried drain lines or within the SCBID buried drain lines rights-of-way. Corrals, fences, and feed lanes and alleys do extend over and across the drain lines and rights-of-way. The Project applicant assumes that construction of the existing freestall barns was approved by Franklin County and SCBID.

## 5.4 Utilities

Electric power is supplied to the Project site by Big Bend Electric Cooperative of Ritzville. Solid waste services are provided by Basin Disposal of Pasco.

### 5.4.1 Water

Currently two wells supply water to the operating facility: (1) a 6-inch well located west of the milking parlor and (2) a 6-inch well located near the Managers Residence. No Water Well Reports for either of these wells can be located in the Washington State Well Report Viewer (<https://apps.wa.gov/wellconstruction/map/WCLSWebMap/default.aspx>). Depth to groundwater at the Project site has not been measured in either of these wells.

Water for the Project will be withdrawn from wells for: (1) domestic use; (2) industrial uses including non-transient, non-community (NTNC) public water system uses; and (3) stockwater purposes. These uses are exempt from requiring a groundwater permit for the supplying well per RCW 90.44.050. Domestic and



industrial uses will not exceed 5,000 gallons per day. Stockwater withdrawals are unlimited; based on a rough assumption of 25 gallons per day per cow of water consumption, at 9,500 cows the daily water consumption would be approximately 237,500 gallons or 0.75 acre-feet per day.

#### 5.4.2 Sewage and Septic

Two septic systems will be present at the project site: (1) the milking parlor system and (2) the “manager’s residence” system. Only human-generated domestic sewage (blackwater) will be discharged into parlor system septic tank; “Industrial” wastes and greywaters from milking operations are discharged to the waste storage ponds. The size of the parlor system tank is expected to be 1,500 gallons. The “manager’s residence” system will human-generated domestic sewage (blackwater and greywater) from one residence and is expected to be 1,000 gallons in size.

### 5.5 Traffic

Vehicle traffic accesses the Project from Wahluke Road, via Hollingsworth Road and Sagehill Road. The closest regional roads to the Project site are Washington Highway 17 located 10 miles east and Washington Highway 24 located six miles north.

The Project will employ up to 25 workers per shift for two shifts per day, seven days a week. This predicts up to 100 total trips per day to and from the facility by workers in passenger vehicles; however, many workers carpool, likely cutting the number of trips by 25 percent. Peak trip times are anticipated to be 5:30 to 6:30 a.m. and 5:30 to 6:30 p.m.

The Project will likely receive between five and eight deliveries of dry commodities (primarily feed but can be other bulk supplies) per day and transfer liquid milk twice per day for a total of up to 20 trips by heavy truck (greater than 26,000 lbs GVWR). Trips are distributed throughout the day.

The Project will also export solid and liquid manure via spreader and tanker truck (greater than 26,000 lbs GVWR), respectively. These shipments typically begin in the spring and continue through summer. Trips are during daylight hours.

These trip calculations are for total trips to and from the Project; the actual impact by the Project would be in addition to the trips already related to the current facility’s operations.

### 5.6 Other Project Requirements

#### 5.6.1 Dairy Nutrient Management Plan

The Project will prepare, submit to the Franklin County Conservation District for review, and operate under a Dairy Nutrient Management Plan (DNMP) as required by Revised Code of Washington (RCW) Chapter 90.64, Dairy Nutrient Management. The DNMP provides the dairy CAFO manager with specific methodology for the production, collection, storage, transfer, treatment, and agronomic utilization of the solid and liquid manure nutrients in such a manner that will prevent the pollution or degradation of state surface and ground waters. Nutrient management practices for Washington State are described in United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Conservation Practice Standard (CPS) 590 – *Nutrient Management* as current. Current Washington NRCS CPS are available at the Washington NRCS electronic Field Office Technical Guide (eFOTG) at <https://efotg.sc.egov.usda.gov/#/state/WA/documents> under Section 4 - Practice Standards and Supporting Documents.



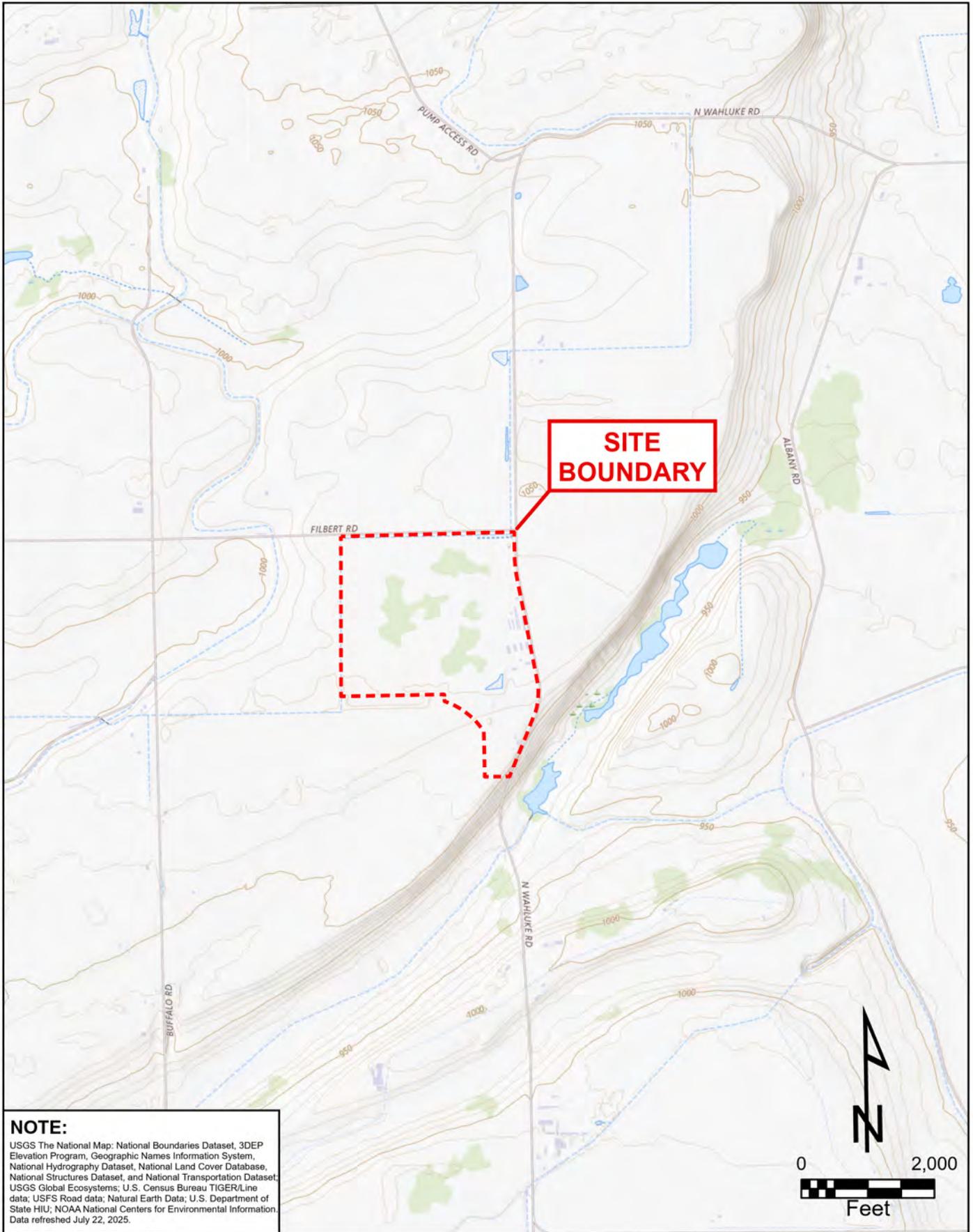
### 5.6.2 *General Discharge Permit*

The Project will obtain a Washington State Department of Ecology (Ecology) Concentrated Animal Feeding Operation (CAFO) National Pollutant Discharge Elimination System (NPDES) And State Waste Discharge (SWD) General Permit (the "Permit") for the facility. The Project will prepare and submit to Ecology a Manure Pollution Prevention Plan (MPPP) as required by Special Condition S4.A of the Permit. The MPPP provides a framework of actions, practices, and guidance to limit the potential for discharge of manure, litter, process wastewater, organic by-products, and other possible sources of pollution from a CAFO to waters of the United States and Washington State for purposes of complying with federal and state water quality standards. The facilities, practices, and procedures described in the MPPP must be sufficient to address Permit Special Conditions S4.B through S4.Q, S.5, S.6 and S.7.



## **FIGURES**



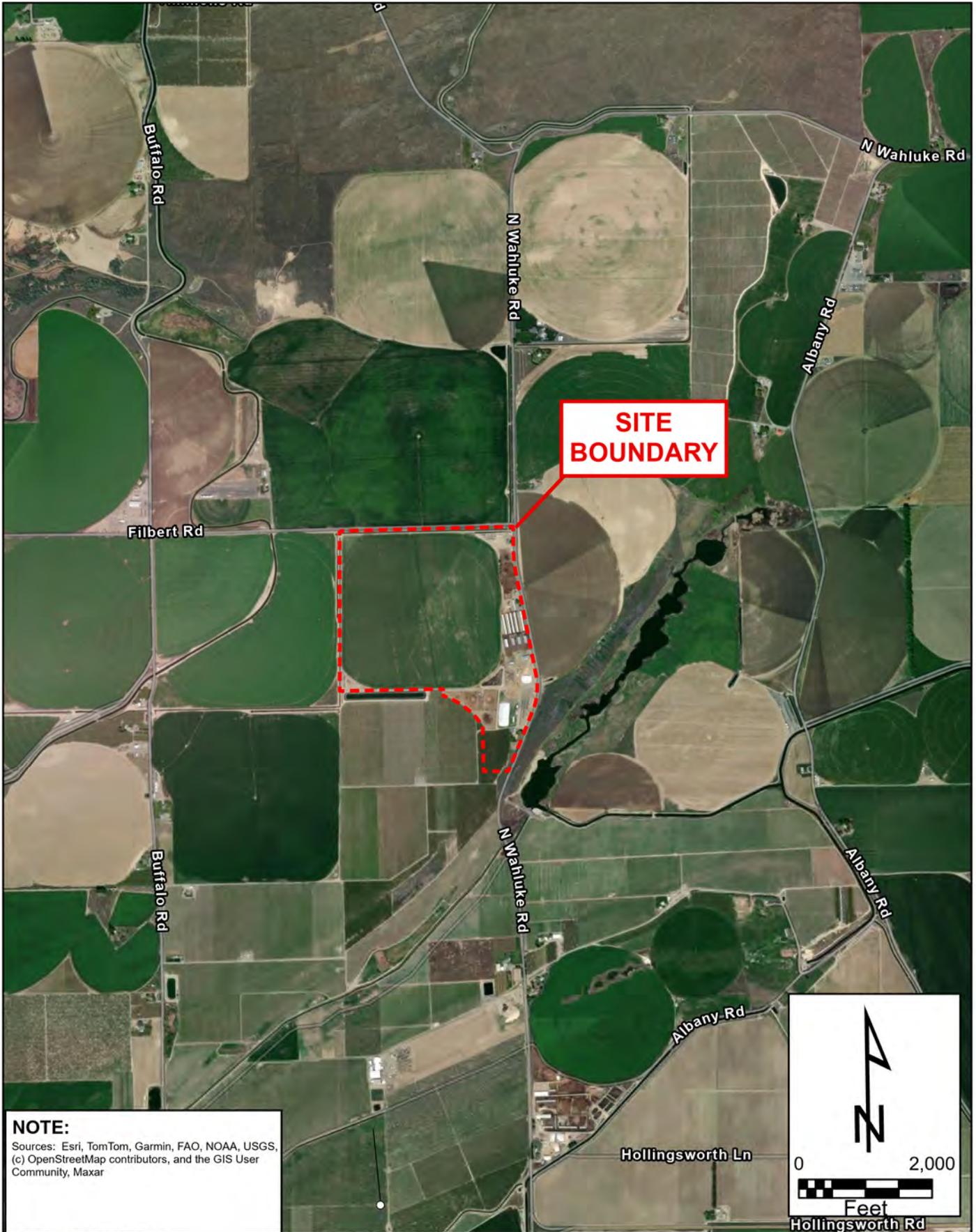


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**VICINITY MAP**  
 Conditional Use Permit Application  
 T. Freeman Dairy Expansion  
 3201 N Wahluke Road, Othello, WA

**FIGURE**  
**2**



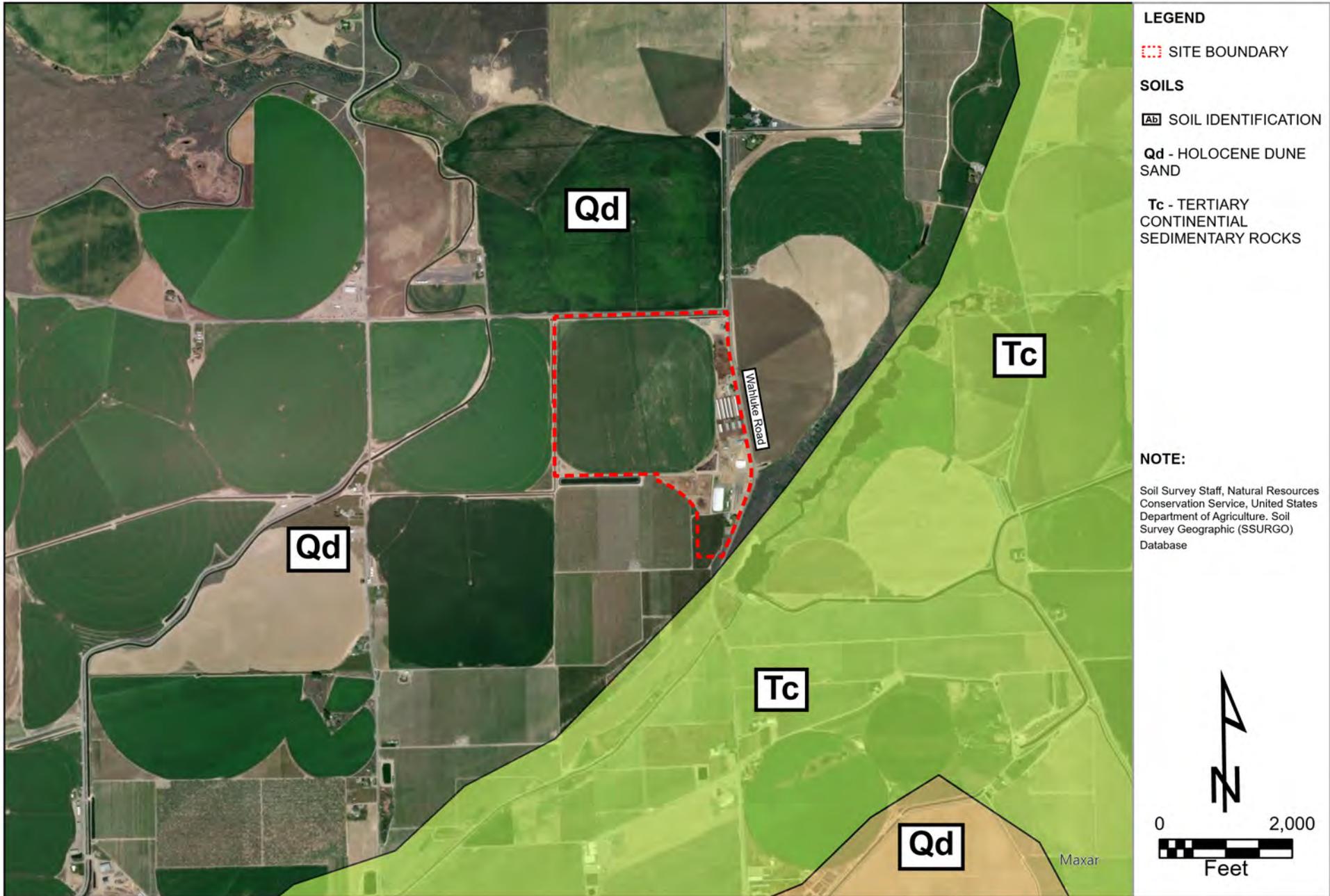
**NOTE:**  
 Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, Maxar

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**VICINITY AERIAL VIEW**  
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 3201 N Wahluke Road, Othello, WA

**FIGURE**  
**3**



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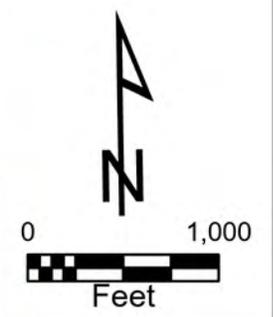
**VICINITY SURFICIAL GEOLOGY**  
 Conditional Use Permit Application  
 T. Freeman Dairy Expansion  
 6201 N Wahluke Road, Othello, WA

**FIGURE**  
**4**



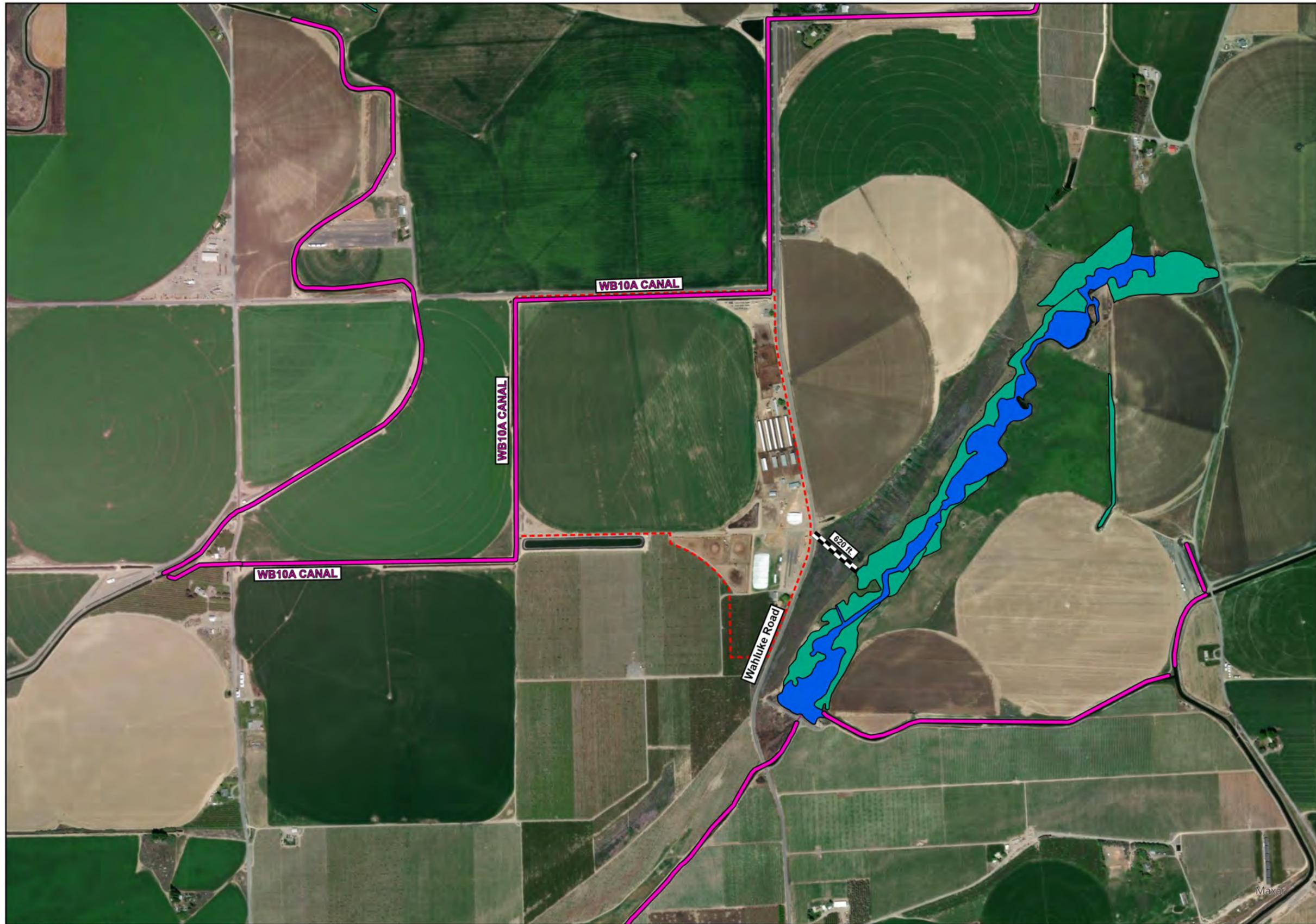
- LEGEND**
- SITE BOUNDARY
  - 111 SOIL UNIT ID**
  - 29** - HEZEL LOAMY FINE SAND, 0 TO 15 PERCENT SLOPES
  - 50** - KOEHLER FINE SAND, 0 TO 15 PERCENT SLOPES
  - 89** - QUINCY LOAMY FINE SAND, 0 TO 15 PERCENT SLOPES
  - 91** - QUINCY LOAMY FINE SAND, 30 TO 55 PERCENT SLOPES
  - 97** - QUINCY-HEZEL COMPLEX, 0 TO 15 PERCENT SLOPES
  - 133** - SAGEHILL VERY FINE SANDY LOAM, 0 TO 2 PERCENT SLOPES
  - 183** - TIMMERMAN FINE SANDY LOAM, 0 TO 2 PERCENT SLOPES

**NOTE:**  
 Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online. Accessed [09/11/2025].



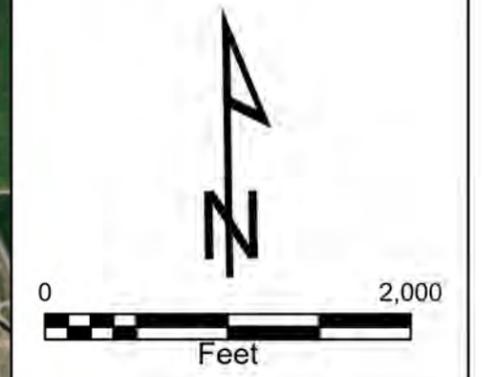
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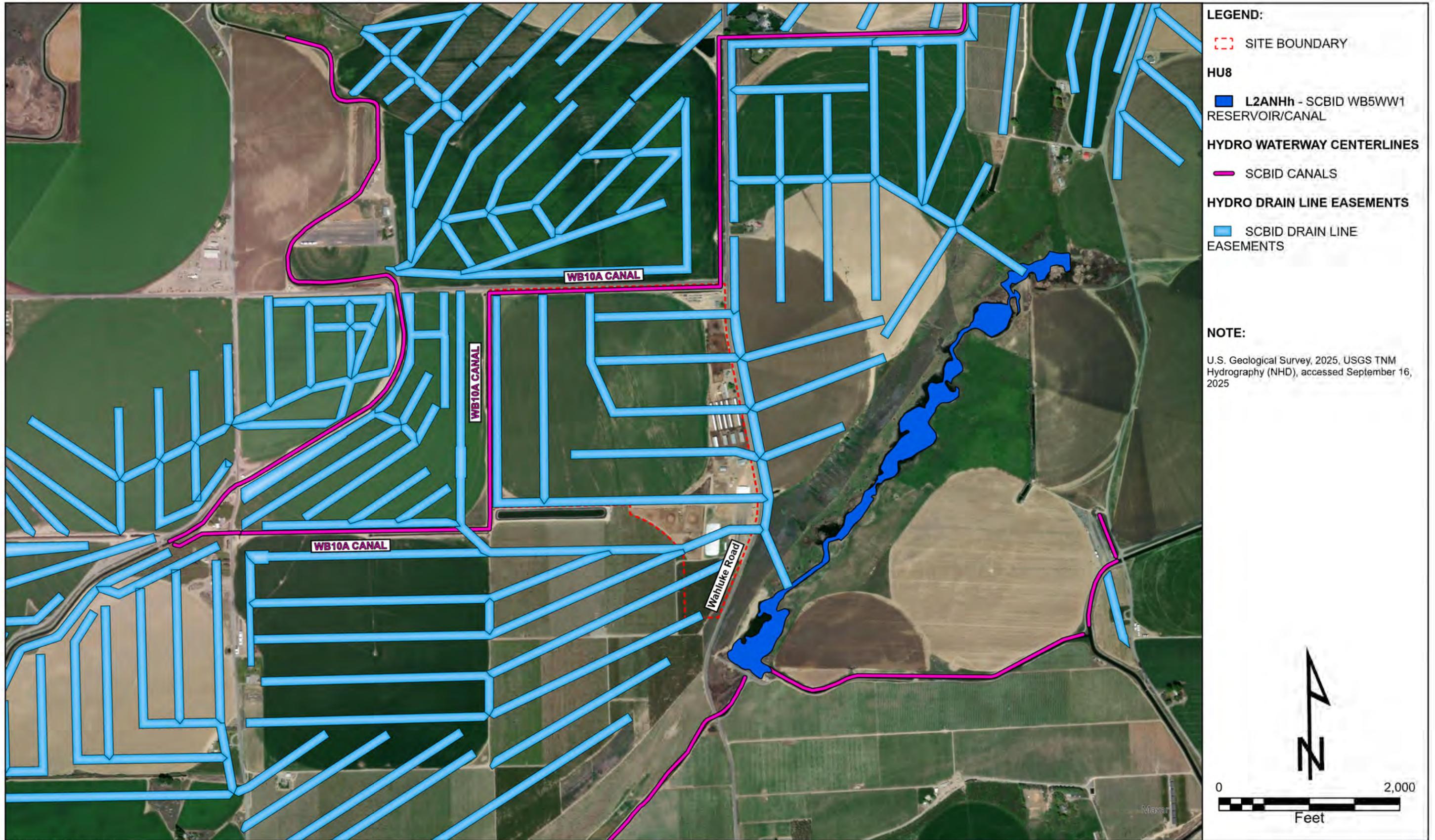
- LEGEND:**
- SITE BOUNDARY
  - HU8**
  - PEM1F - FRESHWATER EMERGENT WETLAND
  - L2ANHh - SCBID WB5WW1 RESERVOIR/CANAL
  - HYDRO WATERWAY CENTERLINES**
  - SCBID CANALS
  - HYDRO BURIED DRAIN LINES**
  - SCBID BURIED DRAIN LINES

**NOTE:**  
 U.S. Geological Survey, 2025, USGS TNM Hydrography (NHD), accessed September 16, 2025



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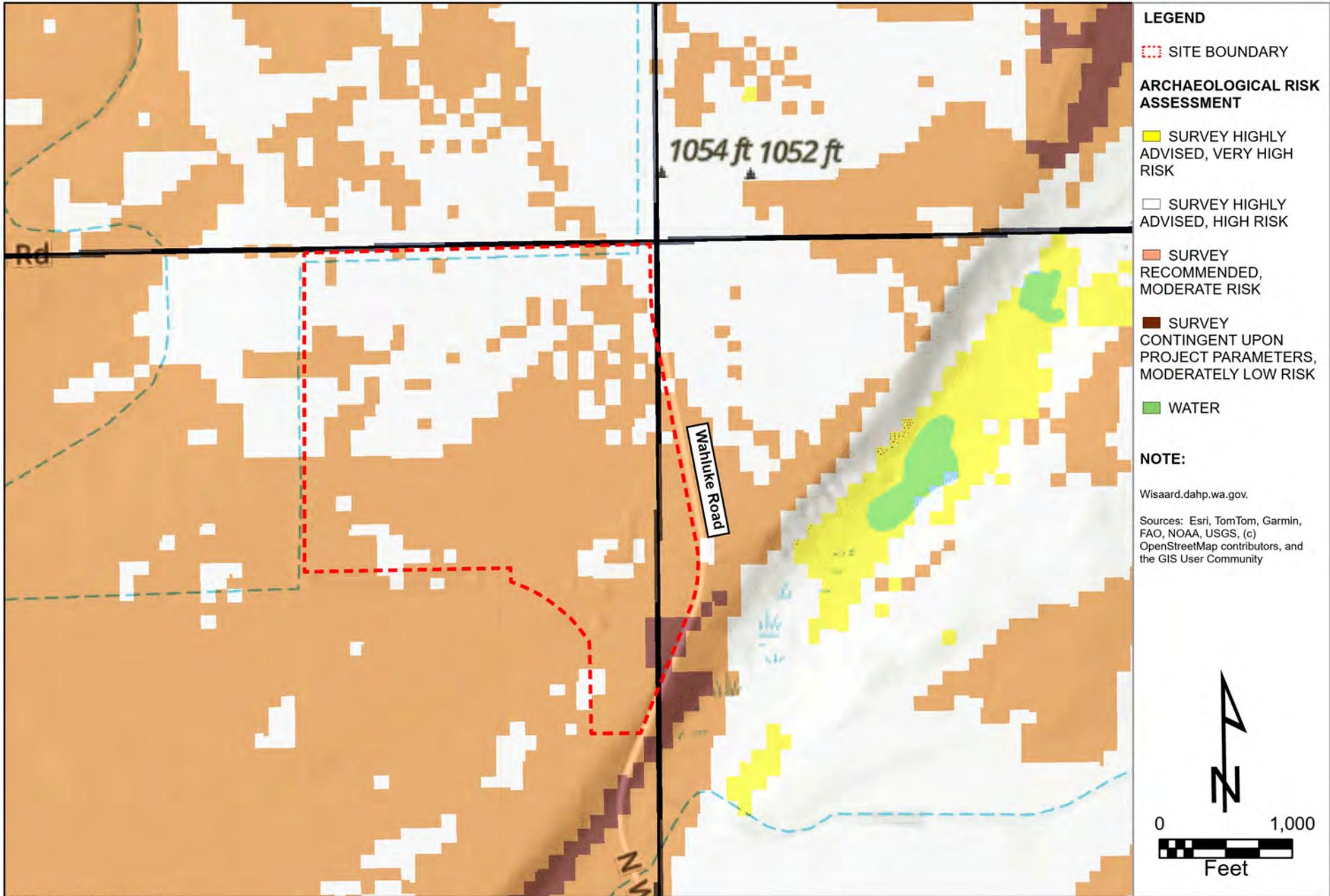




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**VICINITY RIGHT-OF-WAYS & EASEMENTS** **FIGURE**  
 Conditional Use Permit Application  
 T. Freeman Dairy Expansion  
 6201 N Wahluke Road, Othello, WA **7**



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**ARCHAEOLOGICAL RISK ASSESSMENT MAP**  
 Conditional Use Permit Application  
 T. Freeman Dairy Expansion  
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**FIGURE**  
**8**



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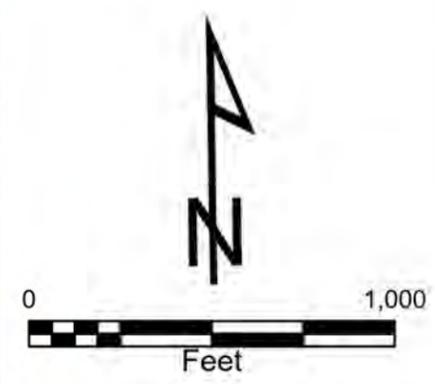
**PRIORITY HABITAT AND SPECIES**  
Conditional Use Permit Application  
T. Freeman Dairy Expansion  
6201 N Wahluke Road, Othello, WA

**FIGURE  
9**



- LEGEND:**
- ▬ PARCEL 121060012
  - ▬ PARCEL 121060013
  - ▬ PARCEL 121060075
- EXISTING BUILDINGS**
- ▭ ANIMAL PENS
  - ▭ COMMODITY STORAGE
  - ▭ WASTE STORAGE POND
  - ▭ MATERIAL STORAGE
  - ▭ FREESTALL BARN
- HYDRAULIC FEATURES**
- ▬ SCBID WB10A CANAL
  - ▬ SCBID BURIED DRAIN EASEMENTS
  - ▭ SEPTIC DRAINFIELD
  - ▣ EXISTING WELLS

**NOTE:**  
 U.S. Geological Survey, 2019, USGS TNM Hydrography (NHD), accessed September 16, 2025



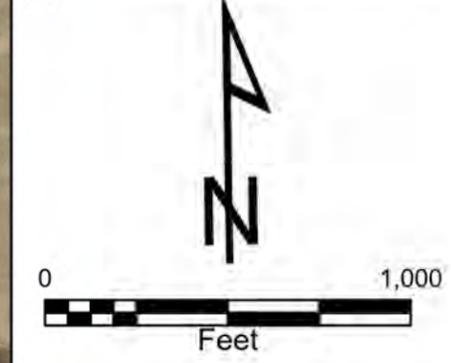
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- LEGEND:**
- ▭ PARCEL 121060012
  - ▭ PARCEL 121060013
  - ▭ PARCEL 121060075
- NEW BUILDINGS**
- ▭ ANIMAL PENS
  - ▭ COMMODITY
  - ▭ WASTE STORAGE POND
  - ▭ COMPOST
  - ▭ COMPOST BUILDING
  - ▭ COW SHADES
  - ▭ FEED LANES
  - ▭ PARKING & LOADING
  - ▭ ROTARY BUILDING
  - ▭ DAIRY BUILDINGS
- HYDRAULIC FEATURES**
- SCBID WB10A CANAL
  - ▭ SCBID BURIED DRAIN LINES

**NOTE:**  
 U.S. Geological Survey, 2019, USGS TNM Hydrography (NHD), accessed September 16, 2025



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## **APPENDIX A**

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### **NRCS SOILS REPORT**



United States  
Department of  
Agriculture

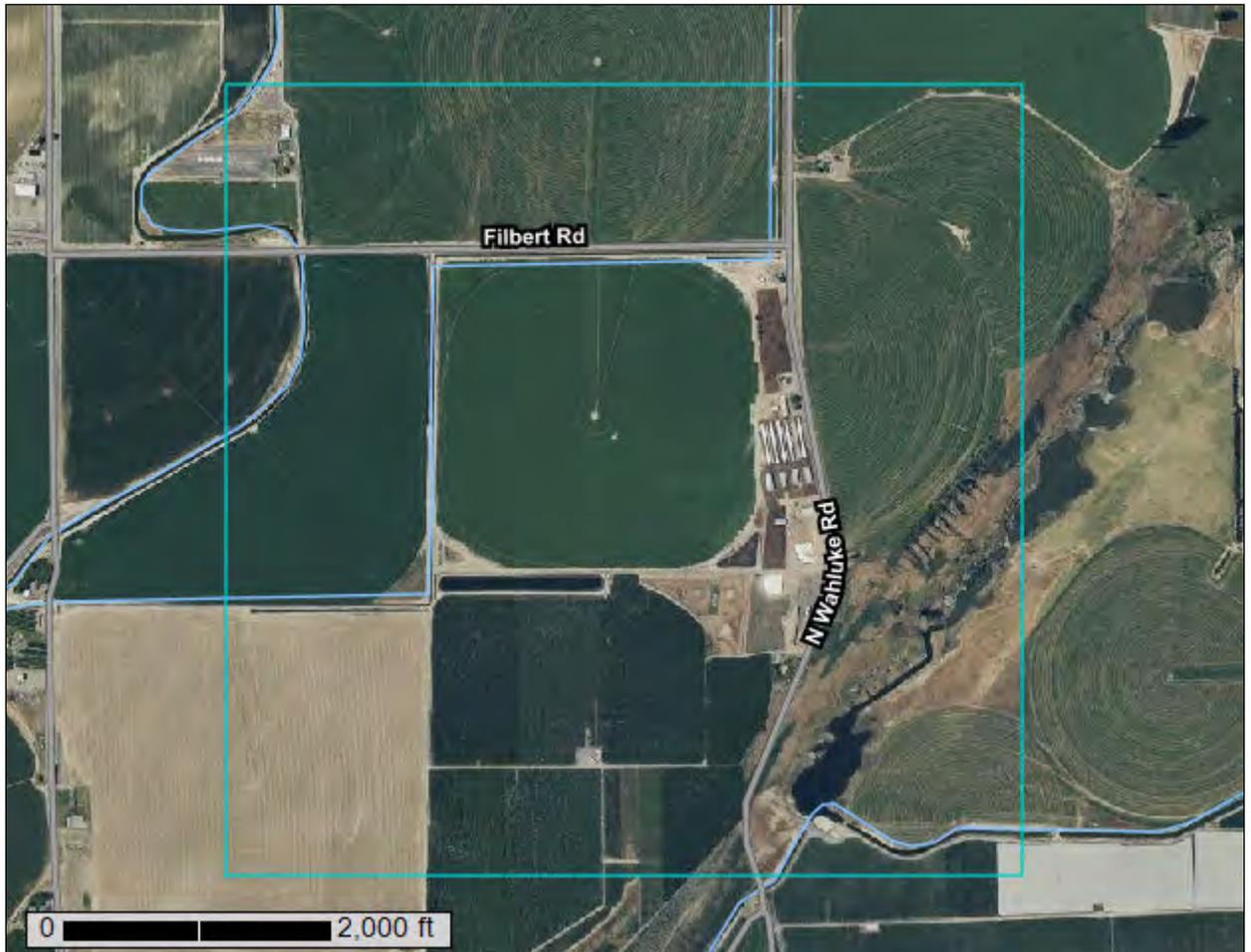
**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for **Franklin County, Washington**

**T. Freeman Dairy**



# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Custom Soil Resource Report

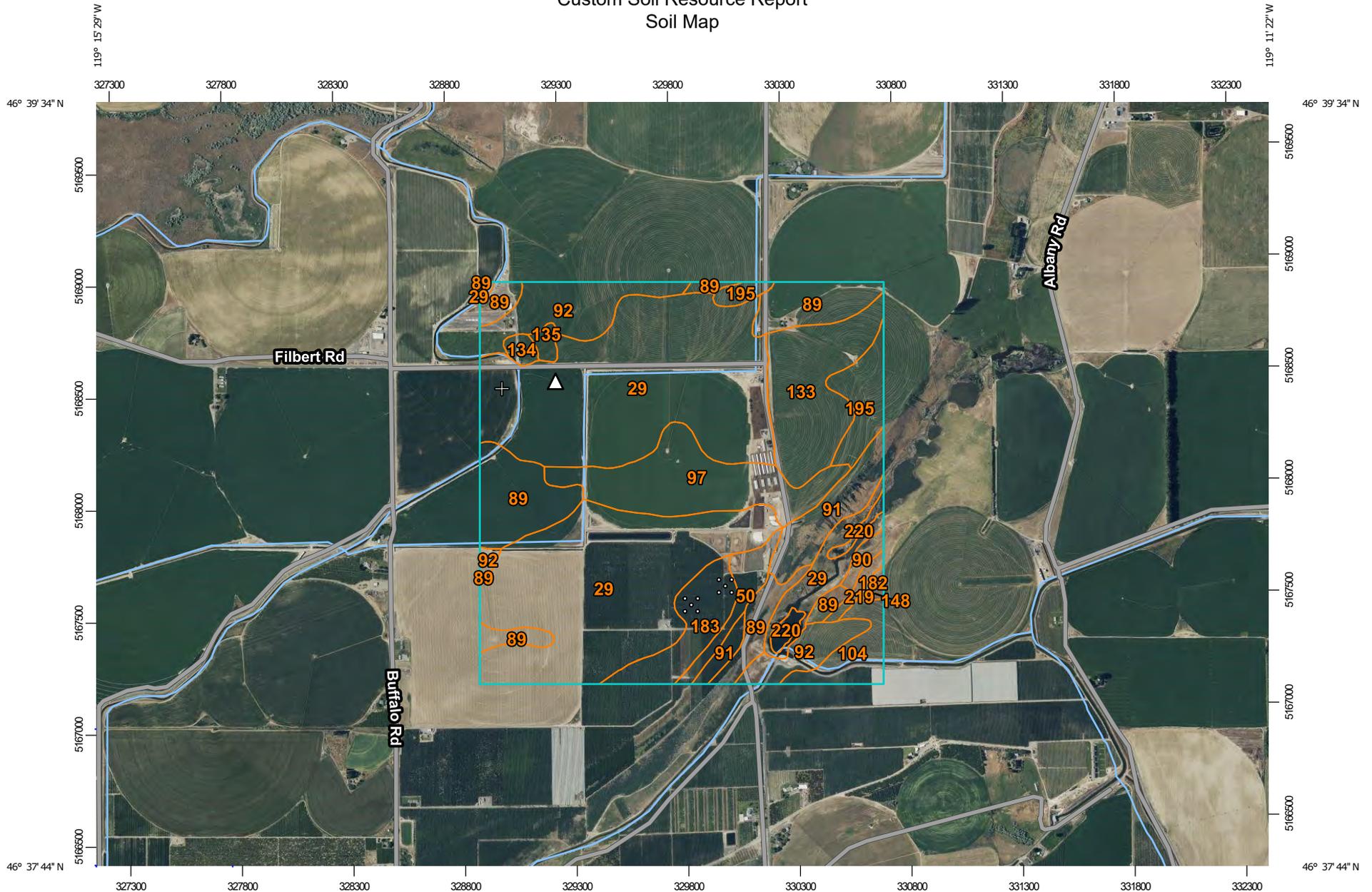
**References**.....94

# Soil Map

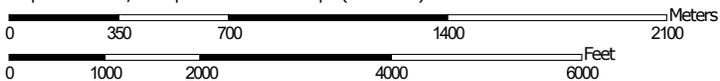
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The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report Soil Map



Map Scale: 1:24,000 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84



### MAP LEGEND

**Area of Interest (AOI)**

 Area of Interest (AOI)

**Soils**

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

**Special Point Features**

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

**Water Features**

 Streams and Canals

**Transportation**

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

**Background**

 Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL:  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Franklin County, Washington  
 Survey Area Data: Version 22, Aug 26, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 26, 2022—Jun 27, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
29	Hezel loamy fine sand, 0 to 15 percent slopes	379.7	47.1%
50	Koehler fine sand, 0 to 15 percent slopes	14.4	1.8%
89	Quincy loamy fine sand, 0 to 15 percent slopes	92.0	11.4%
90	Quincy loamy fine sand, 15 to 30 percent slopes	4.8	0.6%
91	Quincy loamy fine sand, 30 to 55 percent slopes	32.9	4.1%
92	Quincy loamy fine sand, loamy substratum, 0 to 10 percent slopes	55.4	6.9%
97	Quincy-Hezel complex, 0 to 15 percent slopes	67.5	8.4%
104	Rinquin loamy fine sand, 0 to 10 percent slopes	20.0	2.5%
133	Sagehill very fine sandy loam, 0 to 2 percent slopes	61.9	7.7%
134	Sagehill very fine sandy loam, 2 to 5 percent slopes	4.0	0.5%
135	Sagehill very fine sandy loam, 5 to 10 percent slopes	3.6	0.4%
148	Schlomer silt loam, 2 to 5 percent slopes	1.1	0.1%
182	Taunton very fine sandy loam, 2 to 5 percent slopes	1.6	0.2%
183	Timmerman fine sandy loam, 0 to 2 percent slopes	29.8	3.7%
195	Warden very fine sandy loam, 0 to 2 percent slopes	25.7	3.2%
219	Xeric Torriorthents, very steep	4.2	0.5%
220	Water	6.9	0.9%
<b>Totals for Area of Interest</b>		<b>805.5</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named

## Custom Soil Resource Report

according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

## Custom Soil Resource Report

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Franklin County, Washington

### 29—Hezel loamy fine sand, 0 to 15 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2dm1

*Elevation:* 400 to 2,500 feet

*Mean annual precipitation:* 6 to 10 inches

*Mean annual air temperature:* 50 to 54 degrees F

*Frost-free period:* 150 to 200 days

*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Hezel and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Hezel

##### Setting

*Landform:* Terraces

*Parent material:* Glaciofluvial deposits with a mantle of eolian sands

##### Typical profile

*H1 - 0 to 7 inches:* loamy fine sand

*H2 - 7 to 18 inches:* loamy sand

*H3 - 18 to 27 inches:* fine sandy loam

*H4 - 27 to 60 inches:* stratified fine sandy loam to silt loam

##### Properties and qualities

*Slope:* 0 to 15 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Somewhat excessively drained

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.60 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 15 percent

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water supply, 0 to 60 inches:* Moderate (about 9.0 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 3e

*Land capability classification (nonirrigated):* 6e

*Hydrologic Soil Group:* C

*Ecological site:* R007XY140WA - Sands

*Hydric soil rating:* No

#### Minor Components

##### Quincy

*Percent of map unit:* 10 percent

*Landform:* Terraces

*Hydric soil rating:* No

**Sagehill**

*Percent of map unit: 5 percent*  
*Landform: Terraces*  
*Hydric soil rating: No*

**50—Koehler fine sand, 0 to 15 percent slopes**

**Map Unit Setting**

*National map unit symbol: 2dp4*  
*Elevation: 300 to 2,200 feet*  
*Mean annual precipitation: 6 to 9 inches*  
*Mean annual air temperature: 50 to 54 degrees F*  
*Frost-free period: 150 to 210 days*  
*Farmland classification: Not prime farmland*

**Map Unit Composition**

*Koehler and similar soils: 75 percent*  
*Minor components: 10 percent*  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Koehler**

**Setting**

*Landform: Terraces*  
*Parent material: Eolian sands*

**Typical profile**

*H1 - 0 to 4 inches: fine sand*  
*H2 - 4 to 35 inches: fine sand*  
*H3 - 35 to 45 inches: cemented material*  
*H4 - 45 to 60 inches: stratified cemented material to very gravelly sandy loam*

**Properties and qualities**

*Slope: 0 to 15 percent*  
*Depth to restrictive feature: 20 to 40 inches to duripan*  
*Drainage class: Somewhat excessively drained*  
*Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)*  
*Depth to water table: More than 80 inches*  
*Frequency of flooding: None*  
*Frequency of ponding: None*  
*Calcium carbonate, maximum content: 10 percent*  
*Available water supply, 0 to 60 inches: Low (about 3.2 inches)*

**Interpretive groups**

*Land capability classification (irrigated): 4e*  
*Land capability classification (nonirrigated): 7e*  
*Hydrologic Soil Group: A*  
*Ecological site: R007XY140WA - Sands*  
*Hydric soil rating: No*

**Minor Components**

**Sagehill**

*Percent of map unit:* 10 percent  
*Landform:* Terraces  
*Hydric soil rating:* No

**89—Quincy loamy fine sand, 0 to 15 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2dt  
*Elevation:* 350 to 1,200 feet  
*Mean annual precipitation:* 6 to 12 inches  
*Mean annual air temperature:* 48 to 54 degrees F  
*Frost-free period:* 150 to 200 days  
*Farmland classification:* Farmland of statewide importance

**Map Unit Composition**

*Quincy and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Quincy**

**Setting**

*Landform:* Terraces  
*Parent material:* Mixed eolian sands

**Typical profile**

*H1 - 0 to 4 inches:* loamy fine sand  
*H2 - 4 to 60 inches:* fine sand

**Properties and qualities**

*Slope:* 0 to 15 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Excessively drained  
*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (6.00 to 20.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 3 percent  
*Available water supply, 0 to 60 inches:* Low (about 4.9 inches)

**Interpretive groups**

*Land capability classification (irrigated):* 3e  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* A  
*Ecological site:* R007XY140WA - Sands  
*Hydric soil rating:* No

**Minor Components**

**Sagehill**

*Percent of map unit:* 15 percent  
*Landform:* Dunes, terraces  
*Hydric soil rating:* No

**90—Quincy loamy fine sand, 15 to 30 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2dv0  
*Elevation:* 350 to 1,200 feet  
*Mean annual precipitation:* 6 to 12 inches  
*Mean annual air temperature:* 48 to 54 degrees F  
*Frost-free period:* 150 to 200 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Quincy and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Quincy**

**Setting**

*Landform:* Terraces  
*Parent material:* Mixed eolian sands

**Typical profile**

*H1 - 0 to 4 inches:* loamy fine sand  
*H2 - 4 to 60 inches:* fine sand

**Properties and qualities**

*Slope:* 15 to 30 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Excessively drained  
*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (6.00 to 20.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 3 percent  
*Available water supply, 0 to 60 inches:* Low (about 4.9 inches)

**Interpretive groups**

*Land capability classification (irrigated):* 6e  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* A  
*Ecological site:* R007XY140WA - Sands  
*Hydric soil rating:* No

**Minor Components**

**Sagehill**

*Percent of map unit:* 10 percent  
*Landform:* Dunes, terraces  
*Hydric soil rating:* No

**Royal**

*Percent of map unit:* 5 percent  
*Landform:* Terraces, dunes  
*Hydric soil rating:* No

**91—Quincy loamy fine sand, 30 to 55 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2dv3  
*Elevation:* 350 to 1,200 feet  
*Mean annual precipitation:* 6 to 12 inches  
*Mean annual air temperature:* 48 to 54 degrees F  
*Frost-free period:* 150 to 200 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Quincy and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Quincy**

**Setting**

*Landform:* Terraces  
*Parent material:* Mixed eolian sands

**Typical profile**

*H1 - 0 to 4 inches:* loamy fine sand  
*H2 - 4 to 60 inches:* fine sand

**Properties and qualities**

*Slope:* 30 to 55 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Excessively drained  
*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (6.00 to 20.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 3 percent  
*Available water supply, 0 to 60 inches:* Low (about 4.9 inches)

**Interpretive groups**

*Land capability classification (irrigated):* 7e

Custom Soil Resource Report

*Land capability classification (nonirrigated): 7e*  
*Hydrologic Soil Group: A*  
*Ecological site: R007XY140WA - Sands*  
*Hydric soil rating: No*

**Minor Components**

**Sagehill**

*Percent of map unit: 10 percent*  
*Landform: Dunes, terraces*  
*Hydric soil rating: No*

**Royal**

*Percent of map unit: 5 percent*  
*Landform: Dunes, terraces*  
*Hydric soil rating: No*

**92—Quincy loamy fine sand, loamy substratum, 0 to 10 percent slopes**

**Map Unit Setting**

*National map unit symbol: 2dv6*  
*Elevation: 350 to 1,000 feet*  
*Mean annual precipitation: 6 to 9 inches*  
*Mean annual air temperature: 50 to 54 degrees F*  
*Frost-free period: 180 to 200 days*  
*Farmland classification: Farmland of statewide importance*

**Map Unit Composition**

*Quincy and similar soils: 85 percent*  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Quincy**

**Setting**

*Landform: Terraces*  
*Parent material: Mixed eolian sands*

**Typical profile**

*H1 - 0 to 3 inches: loamy fine sand*  
*H2 - 3 to 52 inches: loamy fine sand*  
*H3 - 52 to 60 inches: silt loam*

**Properties and qualities**

*Slope: 0 to 10 percent*  
*Depth to restrictive feature: More than 80 inches*  
*Drainage class: Excessively drained*  
*Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high*  
*(0.60 to 2.00 in/hr)*  
*Depth to water table: More than 80 inches*  
*Frequency of flooding: None*  
*Frequency of ponding: None*

## Custom Soil Resource Report

*Calcium carbonate, maximum content:* 15 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 5.0  
*Available water supply, 0 to 60 inches:* Moderate (about 6.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* 3e  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* A  
*Ecological site:* R007XY140WA - Sands  
*Hydric soil rating:* No

## 97—Quincy-Hezel complex, 0 to 15 percent slopes

### Map Unit Setting

*National map unit symbol:* 2dvt  
*Elevation:* 350 to 2,500 feet  
*Mean annual precipitation:* 6 to 12 inches  
*Mean annual air temperature:* 48 to 54 degrees F  
*Frost-free period:* 150 to 200 days  
*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Quincy and similar soils:* 50 percent  
*Hezel and similar soils:* 25 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Quincy

#### Setting

*Landform:* Terraces  
*Parent material:* Mixed eolian sands

#### Typical profile

*H1 - 0 to 4 inches:* loamy fine sand  
*H2 - 4 to 60 inches:* fine sand

#### Properties and qualities

*Slope:* 0 to 15 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Excessively drained  
*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (6.00 to 20.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 3 percent  
*Available water supply, 0 to 60 inches:* Low (about 4.9 inches)

### Interpretive groups

*Land capability classification (irrigated):* 3e  
*Land capability classification (nonirrigated):* 7e

## Custom Soil Resource Report

*Hydrologic Soil Group: A*  
*Ecological site: R007XY140WA - Sands*  
*Hydric soil rating: No*

### Description of Hezel

#### Setting

*Landform: Terraces*  
*Parent material: Glaciofluvial deposits with a mantle of eolian sands*

#### Typical profile

*H1 - 0 to 7 inches: loamy fine sand*  
*H2 - 7 to 18 inches: loamy sand*  
*H3 - 18 to 27 inches: fine sandy loam*  
*H4 - 27 to 60 inches: stratified fine sandy loam to silt loam*

#### Properties and qualities

*Slope: 0 to 15 percent*  
*Depth to restrictive feature: More than 80 inches*  
*Drainage class: Somewhat excessively drained*  
*Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)*  
*Depth to water table: More than 80 inches*  
*Frequency of flooding: None*  
*Frequency of ponding: None*  
*Calcium carbonate, maximum content: 15 percent*  
*Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)*  
*Available water supply, 0 to 60 inches: Moderate (about 9.0 inches)*

#### Interpretive groups

*Land capability classification (irrigated): 4e*  
*Land capability classification (nonirrigated): 6e*  
*Hydrologic Soil Group: C*  
*Ecological site: R007XY140WA - Sands*  
*Hydric soil rating: No*

### Minor Components

#### Kennewick

*Percent of map unit: 5 percent*  
*Landform: Terraces*  
*Hydric soil rating: No*

#### Sagehill

*Percent of map unit: 5 percent*  
*Landform: Dunes, terraces*  
*Hydric soil rating: No*

#### Warden

*Percent of map unit: 5 percent*  
*Landform: Terraces, dunes*  
*Hydric soil rating: No*

## 104—Rinquin loamy fine sand, 0 to 10 percent slopes

### Map Unit Setting

*National map unit symbol:* 2dd4  
*Elevation:* 800 to 1,100 feet  
*Mean annual precipitation:* 6 to 9 inches  
*Mean annual air temperature:* 48 to 54 degrees F  
*Frost-free period:* 180 to 200 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Rinquin and similar soils:* 75 percent  
*Minor components:* 25 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Rinquin

#### Setting

*Landform:* Terraces  
*Parent material:* Outwash and eolian sands over semiconsolidated siltstone

#### Typical profile

*H1 - 0 to 7 inches:* loamy fine sand  
*H2 - 7 to 21 inches:* loamy fine sand  
*H3 - 21 to 26 inches:* loamy fine sand  
*H4 - 26 to 36 inches:* weathered bedrock

#### Properties and qualities

*Slope:* 0 to 10 percent  
*Depth to restrictive feature:* 20 to 40 inches to paralithic bedrock  
*Drainage class:* Somewhat excessively drained  
*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (6.00 to 20.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 10 percent  
*Available water supply, 0 to 60 inches:* Very low (about 2.7 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 4e  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* A  
*Ecological site:* R007XY449WA - Sandy  
*Hydric soil rating:* No

**Minor Components**

**Sagehill**

*Percent of map unit:* 15 percent  
*Landform:* Terraces  
*Hydric soil rating:* No

**Wiehl**

*Percent of map unit:* 10 percent  
*Landform:* Terraces  
*Hydric soil rating:* No

**133—Sagehill very fine sandy loam, 0 to 2 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2dfs  
*Elevation:* 500 to 1,000 feet  
*Mean annual precipitation:* 6 to 9 inches  
*Mean annual air temperature:* 50 to 54 degrees F  
*Frost-free period:* 180 to 200 days  
*Farmland classification:* Prime farmland if irrigated

**Map Unit Composition**

*Sagehill and similar soils:* 75 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Sagehill**

**Setting**

*Landform:* Terraces  
*Parent material:* Lacustrine deposits with a mantle of loess or eolian deposits

**Typical profile**

*H1 - 0 to 6 inches:* very fine sandy loam  
*H2 - 6 to 25 inches:* very fine sandy loam  
*H3 - 25 to 60 inches:* silt loam

**Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.60 to 2.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 20 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* High (about 10.4 inches)

**Interpretive groups**

*Land capability classification (irrigated): 1*  
*Land capability classification (nonirrigated): 6c*  
*Hydrologic Soil Group: B*  
*Ecological site: R007XY130WA - Loamy*  
*Hydric soil rating: No*

**Minor Components**

**Kennewick**

*Percent of map unit: 15 percent*  
*Landform: Terraces*  
*Hydric soil rating: No*

**134—Sagehill very fine sandy loam, 2 to 5 percent slopes**

**Map Unit Setting**

*National map unit symbol: 2dfv*  
*Elevation: 500 to 1,000 feet*  
*Mean annual precipitation: 6 to 9 inches*  
*Mean annual air temperature: 50 to 54 degrees F*  
*Frost-free period: 180 to 200 days*  
*Farmland classification: Prime farmland if irrigated*

**Map Unit Composition**

*Sagehill and similar soils: 75 percent*  
*Minor components: 15 percent*  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Sagehill**

**Setting**

*Landform: Terraces*  
*Parent material: Lacustrine deposits with a mantle of loess or eolian deposits*

**Typical profile**

*H1 - 0 to 6 inches: very fine sandy loam*  
*H2 - 6 to 25 inches: very fine sandy loam*  
*H3 - 25 to 60 inches: silt loam*

**Properties and qualities**

*Slope: 2 to 5 percent*  
*Depth to restrictive feature: More than 80 inches*  
*Drainage class: Well drained*  
*Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high*  
*(0.60 to 2.00 in/hr)*  
*Depth to water table: More than 80 inches*  
*Frequency of flooding: None*  
*Frequency of ponding: None*  
*Calcium carbonate, maximum content: 20 percent*

## Custom Soil Resource Report

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* High (about 10.4 inches)

### Interpretive groups

*Land capability classification (irrigated):* 2e  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* B  
*Ecological site:* R007XY130WA - Loamy  
*Hydric soil rating:* No

### Minor Components

#### Kennewick

*Percent of map unit:* 15 percent  
*Landform:* Terraces  
*Hydric soil rating:* No

## 135—Sagehill very fine sandy loam, 5 to 10 percent slopes

### Map Unit Setting

*National map unit symbol:* 2dfx  
*Elevation:* 500 to 1,000 feet  
*Mean annual precipitation:* 6 to 9 inches  
*Mean annual air temperature:* 50 to 54 degrees F  
*Frost-free period:* 180 to 200 days  
*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Sagehill and similar soils:* 75 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Sagehill

#### Setting

*Landform:* Terraces  
*Parent material:* Lacustrine deposits with a mantle of loess or eolian deposits

#### Typical profile

*H1 - 0 to 6 inches:* very fine sandy loam  
*H2 - 6 to 25 inches:* very fine sandy loam  
*H3 - 25 to 60 inches:* silt loam

#### Properties and qualities

*Slope:* 5 to 10 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.60 to 2.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None

## Custom Soil Resource Report

*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 20 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* High (about 10.4 inches)

### Interpretive groups

*Land capability classification (irrigated):* 3e  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* B  
*Ecological site:* R007XY130WA - Loamy  
*Hydric soil rating:* No

### Minor Components

#### Kennewick

*Percent of map unit:* 15 percent  
*Landform:* Terraces  
*Hydric soil rating:* No

## 148—Schlomer silt loam, 2 to 5 percent slopes

### Map Unit Setting

*National map unit symbol:* 2dgq  
*Elevation:* 750 to 1,000 feet  
*Mean annual precipitation:* 6 to 9 inches  
*Mean annual air temperature:* 50 to 54 degrees F  
*Frost-free period:* 180 to 200 days  
*Farmland classification:* Prime farmland if irrigated

### Map Unit Composition

*Schlomer and similar soils:* 75 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Schlomer

#### Setting

*Landform:* Terraces  
*Parent material:* Loess over semiconsolidated residuum weathered from shale and siltstone

#### Typical profile

*H1 - 0 to 4 inches:* silt loam  
*H2 - 4 to 16 inches:* silt loam  
*H3 - 16 to 22 inches:* silt loam  
*H4 - 22 to 34 inches:* silty clay loam  
*H5 - 34 to 44 inches:* weathered bedrock

#### Properties and qualities

*Slope:* 2 to 5 percent  
*Depth to restrictive feature:* 20 to 40 inches to paralithic bedrock

## Custom Soil Resource Report

*Drainage class:* Well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.60 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 5 percent  
*Available water supply, 0 to 60 inches:* Moderate (about 6.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* 3e  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* C  
*Ecological site:* R007XY130WA - Loamy  
*Hydric soil rating:* No

### Minor Components

#### Quincy

*Percent of map unit:* 10 percent  
*Landform:* Terraces  
*Hydric soil rating:* No

## 182—Taunton very fine sandy loam, 2 to 5 percent slopes

### Map Unit Setting

*National map unit symbol:* 2dj1  
*Elevation:* 200 to 2,200 feet  
*Mean annual precipitation:* 6 to 12 inches  
*Mean annual air temperature:* 48 to 54 degrees F  
*Frost-free period:* 140 to 210 days  
*Farmland classification:* Prime farmland if irrigated

### Map Unit Composition

*Taunton and similar soils:* 85 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Taunton

#### Setting

*Landform:* Plains, terraces  
*Parent material:* Alluvium

#### Typical profile

*H1 - 0 to 6 inches:* very fine sandy loam  
*H2 - 6 to 25 inches:* very fine sandy loam  
*H3 - 25 to 38 inches:* very fine sandy loam  
*H4 - 38 to 48 inches:* cemented material  
*H5 - 48 to 60 inches:* stratified cemented material to very gravelly sandy loam

## Custom Soil Resource Report

### Properties and qualities

*Slope:* 2 to 5 percent  
*Depth to restrictive feature:* 20 to 40 inches to duripan  
*Drainage class:* Well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 25 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Low (about 5.9 inches)

### Interpretive groups

*Land capability classification (irrigated):* 2e  
*Land capability classification (nonirrigated):* 3e  
*Hydrologic Soil Group:* C  
*Ecological site:* R007XY130WA - Loamy  
*Hydric soil rating:* No

### Minor Components

#### Koehler

*Percent of map unit:* 5 percent  
*Landform:* Terraces  
*Hydric soil rating:* No

#### Tauncal

*Percent of map unit:* 5 percent  
*Landform:* Plains, terraces  
*Hydric soil rating:* No

## 183—Timmerman fine sandy loam, 0 to 2 percent slopes

### Map Unit Setting

*National map unit symbol:* 2djn  
*Elevation:* 350 to 1,000 feet  
*Mean annual precipitation:* 6 to 9 inches  
*Mean annual air temperature:* 50 to 54 degrees F  
*Frost-free period:* 180 to 200 days  
*Farmland classification:* Prime farmland if irrigated

### Map Unit Composition

*Timmerman and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Description of Timmerman

### Setting

*Landform:* Terraces

*Parent material:* Glacial outwash and alluvium mixed with loess in the upper part

### Typical profile

*H1 - 0 to 5 inches:* fine sandy loam

*H2 - 5 to 19 inches:* sandy loam

*H3 - 19 to 60 inches:* loamy coarse sand

### Properties and qualities

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* 13 to 30 inches to strongly contrasting textural stratification

*Drainage class:* Somewhat excessively drained

*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 6.00 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 15 percent

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water supply, 0 to 60 inches:* Very low (about 2.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* 2e

*Land capability classification (nonirrigated):* 6e

*Hydrologic Soil Group:* A

*Ecological site:* R007XY143WA - Sandy Loam

*Hydric soil rating:* No

## Minor Components

### Royal

*Percent of map unit:* 5 percent

*Landform:* Terraces

*Hydric soil rating:* No

### Winchester

*Percent of map unit:* 5 percent

*Landform:* Terraces

*Hydric soil rating:* No

### Sagehill

*Percent of map unit:* 5 percent

*Landform:* Terraces

*Hydric soil rating:* No

## 195—Warden very fine sandy loam, 0 to 2 percent slopes

### Map Unit Setting

*National map unit symbol:* 2dkb  
*Elevation:* 500 to 1,150 feet  
*Mean annual precipitation:* 6 to 9 inches  
*Mean annual air temperature:* 50 to 54 degrees F  
*Frost-free period:* 180 to 200 days  
*Farmland classification:* Prime farmland if irrigated

### Map Unit Composition

*Warden and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Warden

#### Setting

*Landform:* Terraces  
*Parent material:* Lacustrine deposits with a thin mantle of loess

#### Typical profile

*H1 - 0 to 6 inches:* very fine sandy loam  
*H2 - 6 to 19 inches:* silt loam  
*H3 - 19 to 60 inches:* silt loam

#### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.60 to 2.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 8 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* High (about 11.5 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 1  
*Land capability classification (nonirrigated):* 6c  
*Hydrologic Soil Group:* B  
*Ecological site:* R007XY130WA - Loamy  
*Hydric soil rating:* No

### Minor Components

#### Kennewick

*Percent of map unit:* 10 percent

## Custom Soil Resource Report

*Landform:* Terraces  
*Hydric soil rating:* No

### 219—Xeric Torriorthents, very steep

#### Map Unit Setting

*National map unit symbol:* 2dd  
*Elevation:* 350 to 1,000 feet  
*Mean annual precipitation:* 6 to 9 inches  
*Mean annual air temperature:* 50 to 54 degrees F  
*Frost-free period:* 180 to 200 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Xeric torriorthents and similar soils:* 75 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Xeric Torriorthents

##### Setting

*Landform:* Terraces  
*Parent material:* Loess and residuum weathered from sandstone and siltstone

##### Typical profile

*H1 - 0 to 3 inches:* silt loam  
*H2 - 3 to 60 inches:* silt loam

##### Properties and qualities

*Slope:* 40 to 90 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.60 to 2.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 15 percent  
*Available water supply, 0 to 60 inches:* High (about 10.2 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* B  
*Ecological site:* R007XY120WA - Stony  
*Hydric soil rating:* No

#### Minor Components

##### Quincy

*Percent of map unit:* 10 percent

## Custom Soil Resource Report

*Landform:* Escarpments

*Hydric soil rating:* No

### **Rock outcrop**

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

## **220—Water**

### **Map Unit Composition**

*Water:* 100 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Water**

#### **Setting**

*Landform:* Alluvial cones

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 8

*Hydric soil rating:* Unranked

# **Soil Information for All Uses**

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## **Suitabilities and Limitations for Use**

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

## **Land Management**

Land management interpretations are tools designed to guide the user in evaluating existing conditions in planning and predicting the soil response to various land management practices, for a variety of land uses, including cropland, forestland, hayland, pastureland, horticulture, and rangeland. Example interpretations include suitability for a variety of irrigation practices, log landings, haul roads and major skid trails, equipment operability, site preparation, suitability for hand and mechanical planting, potential erosion hazard associated with various practices, and ratings for fencing and waterline installation.

## **Nitrate Leaching Potential, Nonirrigated**

This interpretation is designed to evaluate the potential for nitrate-nitrogen to be transmitted through the soil profile below the root zone by percolating water under nonirrigated conditions. Leaching nitrates have the potential to contaminate shallow and deep aquifers used for drinking water. The ratings are based on inherent soil and climate properties that affect nitrate leaching and do not account for management practices, such as crop rotation and rates and timing of nitrogen fertilizer applications.

The following soil and climate factors are used in the interpretation criteria:

1. Mean annual precipitation minus potential evapotranspiration - This factor provides an estimate of the amount of water that is available to move through the soil profile on an annual basis. Potential evaporation is estimated from mean annual air temperature using an algorithm (developed by the National Soil Survey Center) that employs the Hamon potential evapotranspiration method.

## Custom Soil Resource Report

2. Water travel time through the entire soil profile - This factor uses the saturated hydraulic conductivity (Ksat) and thickness of each soil horizon to estimate the number of hours that would be required for a given volume of water to move through the entire soil profile. One advantage of this method for estimating the rate of water movement is that the properties and thickness of each soil horizon are accounted for instead of using an average saturated hydraulic conductivity for the entire profile. This method accounts for subtle differences between soils in texture, structure, horizon thickness, and depth to water-restricting layers.

3. Available water capacity - This factor accounts for the cumulative amount of water available to plants that the entire soil profile can hold at field capacity to a depth of 150 cm. The more water the soil profile can hold, the less water is available for deep leaching.

4. Depth to and duration of a water table - This factor uses a water table index based on the minimum average depth to a water table and the number of months that the water table is present during the period from April through October. The factor is used to account for the loss of nitrates to the atmosphere as nitrous oxide or nitrogen gas due to denitrification under anaerobic conditions caused by water saturation. The higher the water table and the longer its duration, the larger the quantity of nitrates that would potentially be lost to the atmosphere and therefore would not be available for deep leaching.

5. Slope gradient adjusted for hydrologic soil group - The steeper the slope gradient, the higher the potential for surface runoff and the lower the amount of water available to move through the soil profile. The following adjustments are made to the slope gradient by hydrologic group to account for differences in potential for surface runoff:

Hydrologic group A-slope % x 0.75

Hydrologic group B-slope % x 0.85

Hydrologic group C-slope % x 0.95

Hydrologic group D-no adjustment

The ratings are both verbal and numerical. The ratings for Nitrate Leaching Potential, Nonirrigated Areas, are calculated as follows:

1. The Mean Annual Precipitation minus Potential Evapotranspiration subrule is weighted by multiplying by 0.60.

2. The Water Travel Time subrule is weighted by multiplying by 0.25.

3. The Available Water Capacity subrule is weighted by multiplying by 0.15.

4. The sum of these three weighted subrules results in a value between 0.00 and 1.00.

5. Adjustments are then made for water table depth and duration and for slope gradient adjusted for hydrologic group. The sum of the values from these subrules

## Custom Soil Resource Report

is subtracted from the sum in step 4 above. The maximum reduction is 0.50 for the water table index subrule and 0.30 for the slope gradient subrule.

The following rating classes for Nitrate Leaching Potential, Nonirrigated Areas, are assigned based on the final calculation from the factors above:

Low: 0.00 to 0.25

Moderate: 0.26 to 0.50

Moderately high: 0.51 to 0.75

High: 0.76 to 1.00

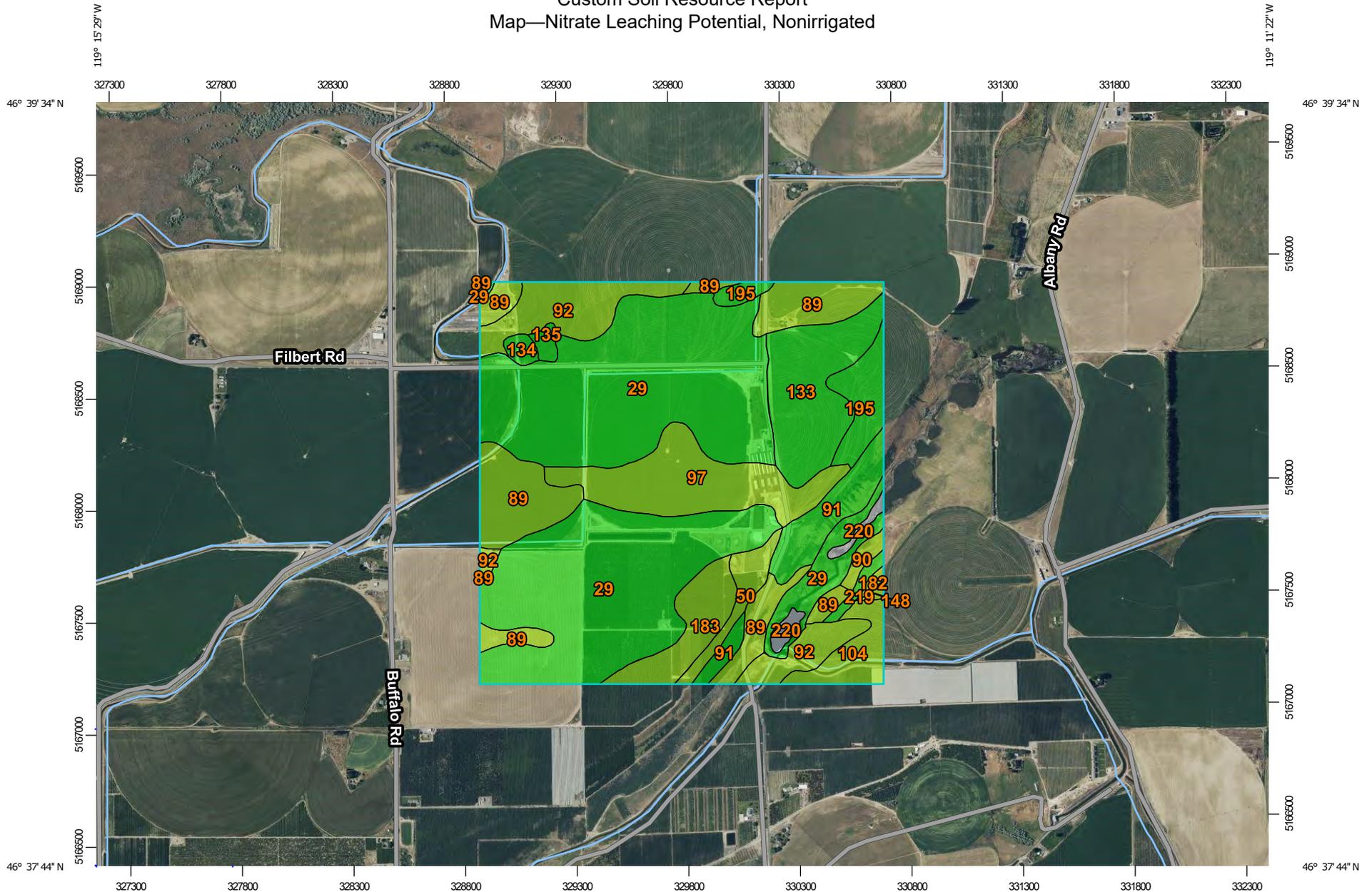
The ratings indicate the potential for nitrate leaching below the root zone, based on inherent soil and climate properties. A "low" rating indicates a low potential for leaching of nitrates below the root zone. A "high" rating indicates a high potential for leaching of nitrates below the root zone. The "moderate" and "moderately high" ratings indicate intermediate potential.

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

# Custom Soil Resource Report

## Map—Nitrate Leaching Potential, Nonirrigated



Map Scale: 1:24,000 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

#### Soil Rating Polygons

 High  
 Moderately high  
 Moderate  
 Low  
 Not rated or not available

#### Soil Rating Lines

 High  
 Moderately high  
 Moderate  
 Low  
 Not rated or not available

#### Soil Rating Points

 High  
 Moderately high  
 Moderate  
 Low  
 Not rated or not available

### Water Features

 Streams and Canals

### Transportation

 Rails  
 Interstate Highways

 US Routes

 Major Roads

 Local Roads

### Background

 Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Franklin County, Washington

Survey Area Data: Version 22, Aug 26, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 26, 2022—Jun 27, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Custom Soil Resource Report

**Tables—Nitrate Leaching Potential, Nonirrigated**

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
29	Hezel loamy fine sand, 0 to 15 percent slopes	Low	Hezel (85%)	Water travel time (0.49)	379.7	47.1%
				Water holding capacity (0.25)		
50	Koehler fine sand, 0 to 15 percent slopes	Moderate	Koehler (75%)	Water travel time (1.00)	14.4	1.8%
				Water holding capacity (0.98)		
89	Quincy loamy fine sand, 0 to 15 percent slopes	Moderate	Quincy (85%)	Water travel time (1.00)	92.0	11.4%
				Water holding capacity (0.97)		
90	Quincy loamy fine sand, 15 to 30 percent slopes	Moderate	Quincy (85%)	Water travel time (1.00)	4.8	0.6%
				Water holding capacity (0.97)		
				Slope (0.07)		
91	Quincy loamy fine sand, 30 to 55 percent slopes	Low	Quincy (85%)	Water travel time (1.00)	32.9	4.1%
				Water holding capacity (0.97)		
				Slope (0.22)		
92	Quincy loamy fine sand, loamy substratum, 0 to 10 percent slopes	Moderate	Quincy (85%)	Water travel time (1.00)	55.4	6.9%
				Water holding capacity (0.87)		
97	Quincy-Hezel complex, 0 to 15 percent slopes	Moderate	Quincy (50%)	Water travel time (1.00)	67.5	8.4%
				Water holding capacity (0.97)		
104	Rinquin loamy fine sand, 0 to 10 percent slopes	Moderate	Rinquin (75%)	Water travel time (1.00)	20.0	2.5%
				Water holding capacity (0.98)		
133	Sagehill very fine sandy loam, 0 to 2 percent slopes	Low	Sagehill (75%)	Water travel time (0.93)	61.9	7.7%
134	Sagehill very fine sandy loam, 2 to 5 percent slopes	Low	Sagehill (75%)	Water travel time (0.93)	4.0	0.5%

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
135	Sagehill very fine sandy loam, 5 to 10 percent slopes	Low	Sagehill (75%)	Water travel time (0.93)	3.6	0.4%
148	Schlomer silt loam, 2 to 5 percent slopes	Moderate	Schlomer (75%)	Water holding capacity (0.86) Water travel time (0.83)	1.1	0.1%
182	Taunton very fine sandy loam, 2 to 5 percent slopes	Moderate	Taunton (85%)	Water travel time (0.99) Water holding capacity (0.95)	1.6	0.2%
183	Timmerman fine sandy loam, 0 to 2 percent slopes	Moderate	Timmerman (85%)	Water travel time (1.00) Water holding capacity (0.98)	29.8	3.7%
195	Warden very fine sandy loam, 0 to 2 percent slopes	Low	Warden (90%)	Water travel time (0.82)	25.7	3.2%
219	Xeric Torriorthents, very steep	Low	Xeric Torriorthents (75%)	Water travel time (0.82) Slope (0.30)	4.2	0.5%
220	Water	Not rated	Water (100%)		6.9	0.9%
<b>Totals for Area of Interest</b>					<b>805.5</b>	<b>100.0%</b>

Rating	Acres in AOI	Percent of AOI
Low	511.9	63.6%
Moderate	286.6	35.6%
Null or Not Rated	6.9	0.9%
<b>Totals for Area of Interest</b>	<b>805.5</b>	<b>100.0%</b>

**Rating Options—Nitrate Leaching Potential, Nonirrigated**

*Aggregation Method:* Dominant Condition  
*Component Percent Cutoff:* None Specified  
*Tie-break Rule:* Higher

## Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

### Soil Physical Properties

Soil Physical Properties are measured or inferred from direct observations in the field or laboratory. Examples of soil physical properties include percent clay, organic matter, saturated hydraulic conductivity, available water capacity, and bulk density.

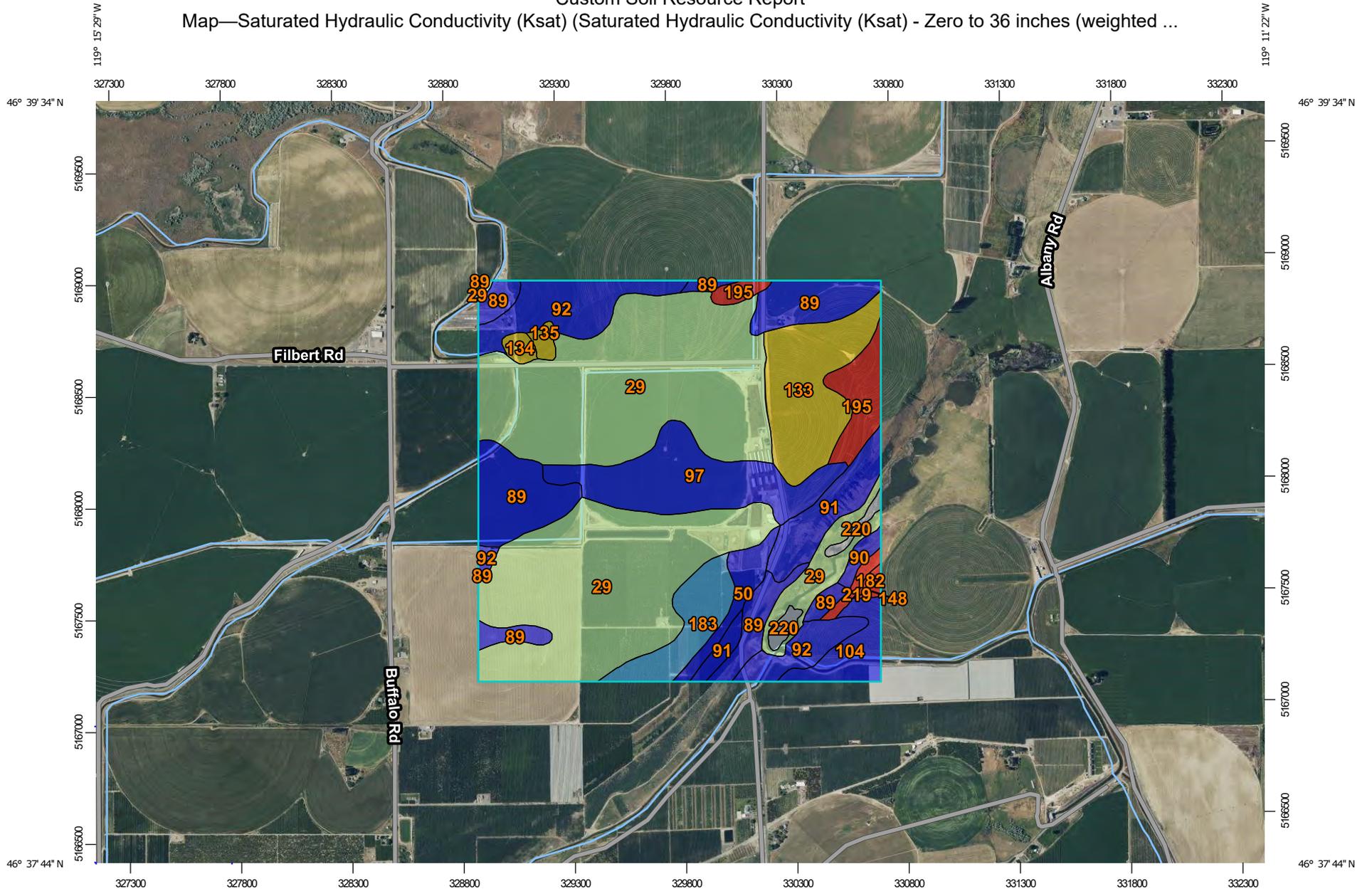
#### **Saturated Hydraulic Conductivity (Ksat) (Saturated Hydraulic Conductivity (Ksat) - Zero to 36 inches (weighted average))**

Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity is considered in the design of soil drainage systems and septic tank absorption fields.

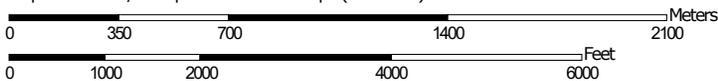
For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

The numeric Ksat values have been grouped according to standard Ksat class limits.

Custom Soil Resource Report  
 Map—Saturated Hydraulic Conductivity (Ksat) (Saturated Hydraulic Conductivity (Ksat) - Zero to 36 inches (weighted ...



Map Scale: 1:24,000 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

### MAP LEGEND

**Area of Interest (AOI)**

 Area of Interest (AOI)

**Soils**

**Soil Rating Polygons**

-  <= 12.1319
-  > 12.1319 and <= 22.3626
-  > 22.3626 and <= 49.4396
-  > 49.4396 and <= 58.2418
-  > 58.2418 and <= 92.0000
-  Not rated or not available

**Soil Rating Lines**

-  <= 12.1319
-  > 12.1319 and <= 22.3626
-  > 22.3626 and <= 49.4396
-  > 49.4396 and <= 58.2418
-  > 58.2418 and <= 92.0000
-  Not rated or not available

**Soil Rating Points**

-  <= 12.1319
-  > 12.1319 and <= 22.3626
-  > 22.3626 and <= 49.4396
-  > 49.4396 and <= 58.2418
-  > 58.2418 and <= 92.0000
-  Not rated or not available

**Water Features**

**Transportation**

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

**Background**

-  Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL:  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Franklin County, Washington  
 Survey Area Data: Version 22, Aug 26, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 26, 2022—Jun 27, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

**MAP LEGEND**

**MAP INFORMATION**



Streams and Canals

**Table—Saturated Hydraulic Conductivity (Ksat) (Saturated Hydraulic Conductivity (Ksat) - Zero to 36 inches (weighted average))**

Map unit symbol	Map unit name	Rating (micrometers per second)	Acres in AOI	Percent of AOI
29	Hezel loamy fine sand, 0 to 15 percent slopes	49.4396	379.7	47.1%
50	Koehler fine sand, 0 to 15 percent slopes	89.9827	14.4	1.8%
89	Quincy loamy fine sand, 0 to 15 percent slopes	92.0000	92.0	11.4%
90	Quincy loamy fine sand, 15 to 30 percent slopes	92.0000	4.8	0.6%
91	Quincy loamy fine sand, 30 to 55 percent slopes	92.0000	32.9	4.1%
92	Quincy loamy fine sand, loamy substratum, 0 to 10 percent slopes	92.0000	55.4	6.9%
97	Quincy-Hezel complex, 0 to 15 percent slopes	92.0000	67.5	8.4%
104	Rinquin loamy fine sand, 0 to 10 percent slopes	92.0000	20.0	2.5%
133	Sagehill very fine sandy loam, 0 to 2 percent slopes	22.3626	61.9	7.7%
134	Sagehill very fine sandy loam, 2 to 5 percent slopes	22.3626	4.0	0.5%
135	Sagehill very fine sandy loam, 5 to 10 percent slopes	22.3626	3.6	0.4%
148	Schlomer silt loam, 2 to 5 percent slopes	6.9070	1.1	0.1%
182	Taunton very fine sandy loam, 2 to 5 percent slopes	12.1319	1.6	0.2%
183	Timmerman fine sandy loam, 0 to 2 percent slopes	58.2418	29.8	3.7%
195	Warden very fine sandy loam, 0 to 2 percent slopes	9.0000	25.7	3.2%
219	Xeric Torriorthents, very steep	9.0000	4.2	0.5%
220	Water		6.9	0.9%
<b>Totals for Area of Interest</b>			<b>805.5</b>	<b>100.0%</b>

### **Rating Options—Saturated Hydraulic Conductivity (Ksat) (Saturated Hydraulic Conductivity (Ksat) - Zero to 36 inches (weighted average))**

*Units of Measure:* micrometers per second

*Aggregation Method:* Dominant Component

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Fastest

*Interpret Nulls as Zero:* No

*Layer Options (Horizon Aggregation Method):* Depth Range (Weighted Average)

*Top Depth:* 0

*Bottom Depth:* 36

*Units of Measure:* Inches

## **Soil Qualities and Features**

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

## **Unified Soil Classification (Surface)**

The Unified soil classification system classifies mineral and organic mineral soils for engineering purposes on the basis of particle-size characteristics, liquid limit, and plasticity index. It identifies three major soil divisions: (i) coarse-grained soils having less than 50 percent, by weight, particles smaller than 0.074 mm in diameter; (ii) fine-grained soils having 50 percent or more, by weight, particles smaller than 0.074 mm in diameter; and (iii) highly organic soils that demonstrate certain organic characteristics. These divisions are further subdivided into a total of 15 basic soil groups. The major soil divisions and basic soil groups are determined on the basis of estimated or measured values for grain-size distribution and Atterberg limits. ASTM D 2487 shows the criteria chart used for classifying soil in the Unified system and the 15 basic soil groups of the system and the plasticity chart for the Unified system.

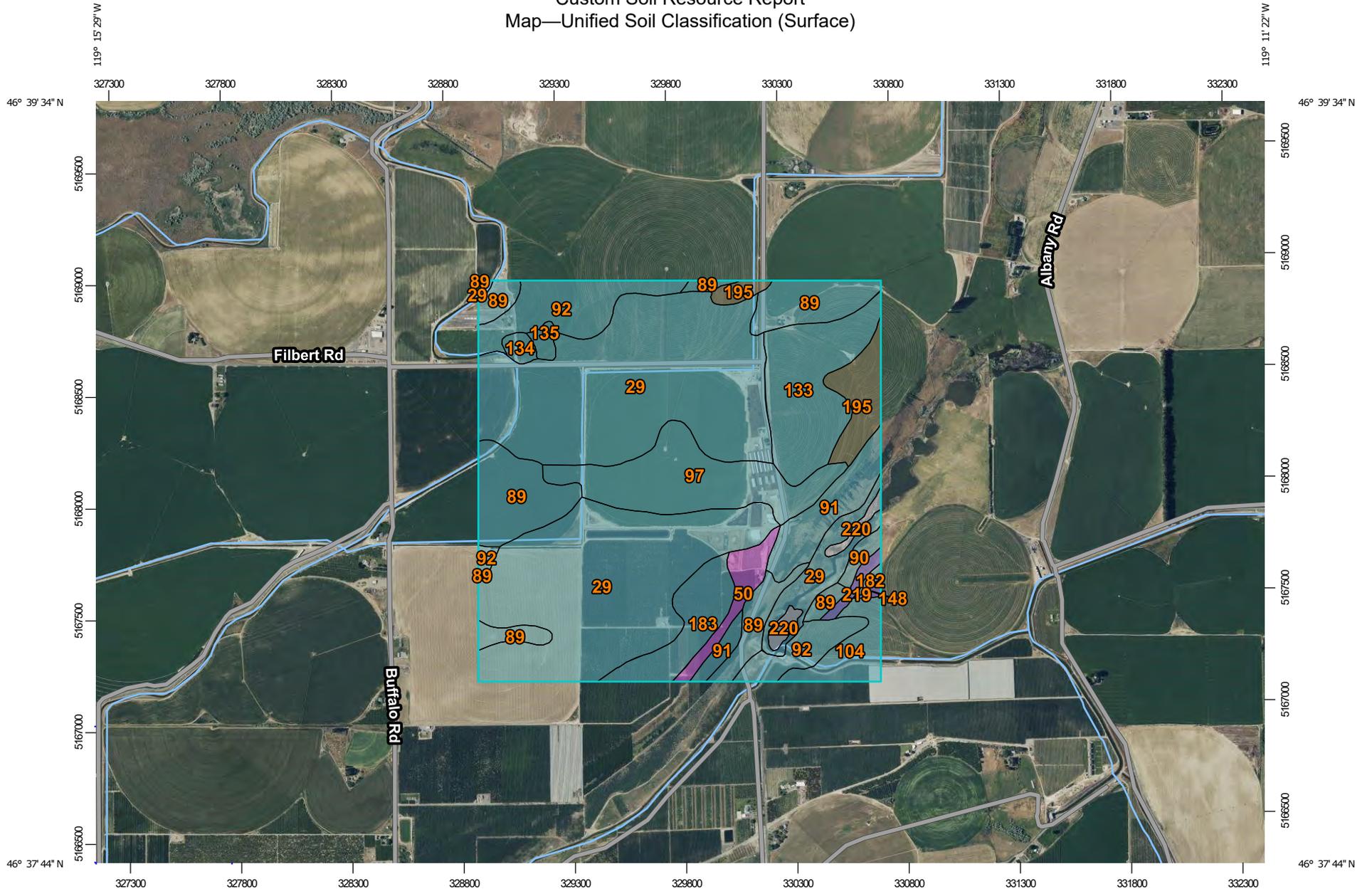
The various groupings of this classification correlate in a general way with the engineering behavior of soils. This correlation provides a useful first step in any field or laboratory investigation for engineering purposes. It can serve to make some general interpretations relating to probable performance of the soil for engineering uses.

## Custom Soil Resource Report

For each soil horizon in the database one or more Unified soil classifications may be listed. One is marked as the representative or most commonly occurring. The representative classification is shown here for the surface layer of the soil.

# Custom Soil Resource Report

## Map—Unified Soil Classification (Surface)



Map Scale: 1:24,000 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84



# Custom Soil Resource Report

## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

#### Soil Rating Polygons

-  CH
-  CL
-  CL-A (proposed)
-  CL-K (proposed)
-  CL-ML
-  CL-O (proposed)
-  CL-T (proposed)
-  GC
-  GC-GM
-  GM
-  GP
-  GP-GC
-  GP-GM
-  GW
-  GW-GC
-  GW-GM
-  MH
-  MH-A (proposed)
-  MH-K (proposed)
-  MH-O (proposed)
-  MH-T (proposed)
-  ML

-  ML-A (proposed)
-  ML-K (proposed)
-  ML-O (proposed)
-  ML-T (proposed)
-  OH
-  OH-T (proposed)
-  OL
-  PT
-  SC
-  SC-SM
-  SM
-  SP
-  SP-SC
-  SP-SM
-  SW
-  SW-SC
-  SW-SM
-  Not rated or not available

#### Soil Rating Lines

-  CH
-  CL
-  CL-A (proposed)
-  CL-K (proposed)
-  CL-ML
-  CL-O (proposed)
-  CL-T (proposed)
-  GC
-  GC-GM
-  GM
-  GP
-  GP-GC
-  GP-GM
-  GW
-  GW-GC
-  GW-GM
-  MH
-  MH-A (proposed)
-  MH-K (proposed)
-  MH-O (proposed)
-  MH-T (proposed)
-  ML
-  ML-A (proposed)
-  ML-K (proposed)
-  ML-O (proposed)
-  ML-T (proposed)
-  OH
-  OH-T (proposed)
-  OL
-  PT
-  SC
-  SC-SM
-  SM

-  SP
-  SP-SC
-  SP-SM
-  SW
-  SW-SC
-  SW-SM
-  Not rated or not available

#### Soil Rating Points

-  CH
-  CL
-  CL-A (proposed)
-  CL-K (proposed)
-  CL-ML
-  CL-O (proposed)
-  CL-T (proposed)
-  GC
-  GC-GM
-  GM
-  GP
-  GP-GC
-  GP-GM
-  GW
-  GW-GC
-  GW-GM
-  MH
-  MH-A (proposed)
-  MH-K (proposed)
-  MH-O (proposed)
-  MH-T (proposed)
-  ML
-  ML-A (proposed)
-  ML-K (proposed)
-  ML-O (proposed)
-  ML-T (proposed)
-  OH
-  OH-T (proposed)
-  OL
-  PT
-  SC
-  SC-SM
-  SM
-  SP
-  SP-SC
-  SP-SM
-  SW
-  SW-SC
-  SW-SM
-  Not rated or not available

#### Water Features

 Streams and Canals

#### Transportation

 Rails

## Custom Soil Resource Report

### MAP INFORMATION

-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

#### Background

-  Aerial Photography

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Franklin County, Washington  
Survey Area Data: Version 22, Aug 26, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 26, 2022—Jun 27, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Custom Soil Resource Report

**Table—Unified Soil Classification (Surface)**

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
29	Hezel loamy fine sand, 0 to 15 percent slopes	SM	379.7	47.1%
50	Koehler fine sand, 0 to 15 percent slopes	SP-SM	14.4	1.8%
89	Quincy loamy fine sand, 0 to 15 percent slopes	SM	92.0	11.4%
90	Quincy loamy fine sand, 15 to 30 percent slopes	SM	4.8	0.6%
91	Quincy loamy fine sand, 30 to 55 percent slopes	SM	32.9	4.1%
92	Quincy loamy fine sand, loamy substratum, 0 to 10 percent slopes	SM	55.4	6.9%
97	Quincy-Hezel complex, 0 to 15 percent slopes	SM	67.5	8.4%
104	Rinquin loamy fine sand, 0 to 10 percent slopes	SM	20.0	2.5%
133	Sagehill very fine sandy loam, 0 to 2 percent slopes	SM	61.9	7.7%
134	Sagehill very fine sandy loam, 2 to 5 percent slopes	SM	4.0	0.5%
135	Sagehill very fine sandy loam, 5 to 10 percent slopes	SM	3.6	0.4%
148	Schlomer silt loam, 2 to 5 percent slopes	CL	1.1	0.1%
182	Taunton very fine sandy loam, 2 to 5 percent slopes	SM	1.6	0.2%
183	Timmerman fine sandy loam, 0 to 2 percent slopes	SM	29.8	3.7%
195	Warden very fine sandy loam, 0 to 2 percent slopes	ML	25.7	3.2%
219	Xeric Torriorthents, very steep	CL	4.2	0.5%
220	Water		6.9	0.9%
<b>Totals for Area of Interest</b>			<b>805.5</b>	<b>100.0%</b>

**Rating Options—Unified Soil Classification (Surface)**

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Lower

*Layer Options (Horizon Aggregation Method):* Surface Layer (Not applicable)

## Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

## AOI Inventory

This folder contains a collection of tabular reports that present a variety of soil information. Included are various map unit description reports, special soil interpretation reports, and data summary reports.

## Component Text Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the selected area. The component descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit. A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the associated soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas (components) for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The "Map Unit Component Nontechnical Descriptions" report gives a brief, general description of the soil components that occur in a map unit. Descriptions of nonsoil (miscellaneous areas) and minor map unit components may or may not be included. This description is written by the local soil scientists responsible for the respective soil survey area data. A more detailed description can be generated by the "Map Unit Description" report.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

## Report—Component Text Descriptions

### Franklin County, Washington

**Map Unit:** 29—Hezel loamy fine sand, 0 to 15 percent slopes

**Description Category:** GENSOIL

Hezel: 85 percent

The Hezel component makes up 85 percent of the map unit. Slopes are 0 to 15 percent. This component is on dissected terraces. The parent material consists of glaciofluvial deposits with a mantle of eolian sands. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 0 percent. This component is in the R007XY140WA Sands ecological site. Nonirrigated land capability classification is 6e. Irrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 10 percent. There are no saline horizons within 30 inches of the soil surface.

**Description Category:** GENSOIL

Quincy: 10 percent

Generated brief soil descriptions are created for major soil components. The Quincy soil is a minor component.

**Description Category:** GENSOIL

Sagehill: 5 percent

Generated brief soil descriptions are created for major soil components. The Sagehill soil is a minor component.

**Map Unit:** 50—Koehler fine sand, 0 to 15 percent slopes

**Description Category:** GENSOIL

Koehler: 75 percent

The Koehler component makes up 75 percent of the map unit. Slopes are 0 to 15 percent. This component is on terraces. The parent material consists of eolian sands. Depth to a root restrictive layer, duripan, is 20 to 40 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter

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content in the surface horizon is about 1 percent. This component is in the R007XY140WA Sands ecological site. Nonirrigated land capability classification is 7e. Irrigated land capability classification is 4e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 5 percent.

### **Description Category:** GENSOIL

Sagehill: 10 percent

Generated brief soil descriptions are created for major soil components. The Sagehill soil is a minor component.

**Map Unit:** 89—Quincy loamy fine sand, 0 to 15 percent slopes

### **Description Category:** GENSOIL

Quincy: 85 percent

The Quincy component makes up 85 percent of the map unit. Slopes are 0 to 15 percent. This component is on terraces. The parent material consists of mixed eolian sands. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R007XY140WA Sands ecological site. Nonirrigated land capability classification is 7e. Irrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 2 percent.

### **Description Category:** GENSOIL

Sagehill: 15 percent

Generated brief soil descriptions are created for major soil components. The Sagehill soil is a minor component.

**Map Unit:** 90—Quincy loamy fine sand, 15 to 30 percent slopes

### **Description Category:** GENSOIL

Quincy: 85 percent

The Quincy component makes up 85 percent of the map unit. Slopes are 15 to 30 percent. This component is on terraces. The parent material consists of mixed eolian sands. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R007XY140WA Sands

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ecological site. Nonirrigated land capability classification is 7e. Irrigated land capability classification is 6e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 2 percent.

### **Description Category:** GENSOIL

Sagehill: 10 percent

Generated brief soil descriptions are created for major soil components. The Sagehill soil is a minor component.

### **Description Category:** GENSOIL

Royal: 5 percent

Generated brief soil descriptions are created for major soil components. The Royal soil is a minor component.

**Map Unit:** 91—Quincy loamy fine sand, 30 to 55 percent slopes

### **Description Category:** GENSOIL

Quincy: 85 percent

The Quincy component makes up 85 percent of the map unit. Slopes are 30 to 55 percent. This component is on terraces. The parent material consists of mixed eolian sands. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R007XY140WA Sands ecological site. Nonirrigated land capability classification is 7e. Irrigated land capability classification is 7e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 2 percent.

### **Description Category:** GENSOIL

Sagehill: 10 percent

Generated brief soil descriptions are created for major soil components. The Sagehill soil is a minor component.

### **Description Category:** GENSOIL

Royal: 5 percent

Generated brief soil descriptions are created for major soil components. The Royal soil is a minor component.

**Map Unit:** 92—Quincy loamy fine sand, loamy substratum, 0 to 10 percent slopes

**Description Category: GENSOIL**

Quincy: 85 percent

The Quincy component makes up 85 percent of the map unit. Slopes are 0 to 10 percent. This component is on terraces. The parent material consists of mixed eolian sands. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R007XY140WA Sands ecological site. Nonirrigated land capability classification is 7e. Irrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent.

**Map Unit:** 97—Quincy-Hezel complex, 0 to 15 percent slopes

**Description Category: GENSOIL**

Quincy: 50 percent

The Quincy component makes up 50 percent of the map unit. Slopes are 0 to 15 percent. This component is on terraces. The parent material consists of mixed eolian sands. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R007XY140WA Sands ecological site. Nonirrigated land capability classification is 7e. Irrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 2 percent.

**Description Category: GENSOIL**

Hezel: 25 percent

The Hezel component makes up 25 percent of the map unit. Slopes are 0 to 15 percent. This component is on dissected terraces. The parent material consists of glaciofluvial deposits with a mantle of eolian sands. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 0 percent. This component is in the R007XY140WA Sands ecological site. Nonirrigated land capability classification is 6e. Irrigated land capability classification is 4e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 10 percent. There are no saline horizons within 30 inches of the soil surface.

**Description Category:** GENSOIL

Warden: 5 percent

Generated brief soil descriptions are created for major soil components. The Warden soil is a minor component.

**Description Category:** GENSOIL

Sagehill: 5 percent

Generated brief soil descriptions are created for major soil components. The Sagehill soil is a minor component.

**Description Category:** GENSOIL

Kennewick: 5 percent

Generated brief soil descriptions are created for major soil components. The Kennewick soil is a minor component.

**Map Unit:** 104—Rinquin loamy fine sand, 0 to 10 percent slopes

**Description Category:** GENSOIL

Rinquin: 75 percent

The Rinquin component makes up 75 percent of the map unit. Slopes are 0 to 10 percent. This component is on terraces. The parent material consists of outwash and eolian sands over semiconsolidated siltstone. Depth to a root restrictive layer, bedrock, paralithic, is 20 to 40 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 0 percent. This component is in the R007XY449WA Sandy ecological site. Nonirrigated land capability classification is 7e. Irrigated land capability classification is 4e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 6 percent.

**Description Category:** GENSOIL

Sagehill: 15 percent

Generated brief soil descriptions are created for major soil components. The Sagehill soil is a minor component.

**Description Category:** GENSOIL

Wiehl: 10 percent

Generated brief soil descriptions are created for major soil components. The Wiehl soil is a minor component.

**Map Unit:** 133—Sagehill very fine sandy loam, 0 to 2 percent slopes

**Description Category:** GENSOIL

Sagehill: 75 percent

The Sagehill component makes up 75 percent of the map unit. Slopes are 0 to 2 percent. This component is on terraces. The parent material consists of lacustrine deposits with a mantle of loess or eolian deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R007XY130WA Loamy ecological site. Nonirrigated land capability classification is 6c. Irrigated land capability classification is 1 This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 11 percent. There are no saline horizons within 30 inches of the soil surface.

**Description Category:** GENSOIL

Kennewick: 15 percent

Generated brief soil descriptions are created for major soil components. The Kennewick soil is a minor component.

**Map Unit:** 134—Sagehill very fine sandy loam, 2 to 5 percent slopes

**Description Category:** GENSOIL

Sagehill: 75 percent

The Sagehill component makes up 75 percent of the map unit. Slopes are 2 to 5 percent. This component is on terraces. The parent material consists of lacustrine deposits with a mantle of loess or eolian deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R007XY130WA Loamy ecological site. Nonirrigated land capability classification is 6e. Irrigated land capability classification is 2e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 11 percent. There are no saline horizons within 30 inches of the soil surface.

**Description Category:** GENSOIL

Kennewick: 15 percent

Generated brief soil descriptions are created for major soil components. The Kennewick soil is a minor component.

**Map Unit:** 135—Sagehill very fine sandy loam, 5 to 10 percent slopes

**Description Category:** GENSOIL

Sagehill: 75 percent

The Sagehill component makes up 75 percent of the map unit. Slopes are 5 to 10 percent. This component is on terraces. The parent material consists of lacustrine deposits with a mantle of loess or eolian deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R007XY130WA Loamy ecological site. Nonirrigated land capability classification is 6e. Irrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 11 percent. There are no saline horizons within 30 inches of the soil surface.

**Description Category:** GENSOIL

Kennewick: 15 percent

Generated brief soil descriptions are created for major soil components. The Kennewick soil is a minor component.

**Map Unit:** 148—Schlomer silt loam, 2 to 5 percent slopes

**Description Category:** GENSOIL

Schlomer: 75 percent

The Schlomer component makes up 75 percent of the map unit. Slopes are 2 to 5 percent. This component is on terraces. The parent material consists of loess over semiconsolidated residuum weathered from shale and siltstone. Depth to a root restrictive layer, bedrock, paralithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R007XY130WA Loamy ecological site. Nonirrigated land capability classification is 6e. Irrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent.

**Description Category:** GENSOIL

Quincy: 10 percent

Generated brief soil descriptions are created for major soil components. The Quincy soil is a minor component.

**Map Unit:** 182—Taunton very fine sandy loam, 2 to 5 percent slopes

**Description Category:** GENSOIL

Taunton: 85 percent

The Taunton component makes up 85 percent of the map unit. Slopes are 2 to 5 percent. This component is on terraces. The parent material consists of alluvium. Depth to a root restrictive layer, duripan, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R007XY130WA Loamy ecological site. Nonirrigated land capability classification is 3e. Irrigated land capability classification is 2e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 18 percent. There are no saline horizons within 30 inches of the soil surface.

**Description Category:** GENSOIL

Taunton: 5 percent

Generated brief soil descriptions are created for major soil components. The Taunton soil is a minor component.

**Description Category:** GENSOIL

Koehler: 5 percent

Generated brief soil descriptions are created for major soil components. The Koehler soil is a minor component.

**Map Unit:** 183—Timmerman fine sandy loam, 0 to 2 percent slopes

**Description Category:** GENSOIL

Timmerman: 85 percent

The Timmerman component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on terraces. The parent material consists of glacial outwash and alluvium mixed with loess in the upper part. Depth to a root restrictive layer, strongly contrasting textural stratification, is 13 to 30 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R007XY143WA Sandy Loam ecological site. Nonirrigated land capability classification is 6e. Irrigated land capability classification is 2e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically,

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does not exceed 8 percent. There are no saline horizons within 30 inches of the soil surface.

### **Description Category:** GENSOIL

Royal: 5 percent

Generated brief soil descriptions are created for major soil components. The Royal soil is a minor component.

### **Description Category:** GENSOIL

Winchester: 5 percent

Generated brief soil descriptions are created for major soil components. The Winchester soil is a minor component.

### **Description Category:** GENSOIL

Sagehill: 5 percent

Generated brief soil descriptions are created for major soil components. The Sagehill soil is a minor component.

**Map Unit:** 195—Warden very fine sandy loam, 0 to 2 percent slopes

### **Description Category:** GENSOIL

Warden: 90 percent

The Warden component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on terraces. The parent material consists of lacustrine deposits with a thin mantle of loess. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R007XY130WA Loamy ecological site. Nonirrigated land capability classification is 6c. Irrigated land capability classification is 1 This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 6 percent. There are no saline horizons within 30 inches of the soil surface.

### **Description Category:** GENSOIL

Kennewick: 10 percent

Generated brief soil descriptions are created for major soil components. The Kennewick soil is a minor component.

**Map Unit:** 219—Xeric Torriorthents, very steep

**Description Category:** GENSOIL

Xeric torriorthents: 75 percent

The Xeric Torriorthents component makes up 75 percent of the map unit. Slopes are 40 to 90 percent. This component is on terraces. The parent material consists of loess and residuum weathered from sandstone and siltstone. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R007XY120WA Stony ecological site. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 8 percent.

**Description Category:** GENSOIL

Quincy: 10 percent

Generated brief soil descriptions are created for major soil components. The Quincy soil is a minor component.

**Description Category:** GENSOIL

Rock outcrop: 5 percent

Generated brief soil descriptions are created for major soil components. The Rock outcrop soil is a minor component.

**Map Unit:** 220—Water

**Description Category:** GENSOIL

Water: 100 percent

Generated brief soil descriptions are created for major soil components. The Water is a miscellaneous area.

## **Water Quality Index (WQIag) Soil Factors**

This table shows the soil factors used in the *Water Quality Index for Runoff Water from Agricultural Fields (WQIag)*. The WQIag web interface is at <http://wqiag.sc.egov.usda.gov/>.

*Slope gradient* is the difference in elevation between two points and is expressed as a percentage of the distance between those points. For example, a difference in elevation of 1 meter over a horizontal distance of 100 meters is a slope of 1 percent.

*Hydrologic group* is a group of soils having similar runoff potential under similar storm and cover conditions. Soil properties that influence runoff potential are those

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that influence the minimum rate of infiltration for a bare soil after prolonged wetting and when not frozen. These properties are depth to a seasonal high water table, saturated hydraulic conductivity after prolonged wetting, and depth to a layer with a very slow water transmission rate.

*Kw factor* is an erosion factor for the surface mineral horizon that indicates the susceptibility of the soil to sheet and rill erosion by water. Factor Kw is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity. Values of Kw range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

*Organic matter* is the plant and animal residue in the soil at various stages of decomposition. In this table, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter in the surface mineral horizon.

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Water Quality Index (WQI) Soil Factors—Franklin County, Washington					
Map symbol and soil name	Pct. of map unit	Slope gradient	Hydrologic group	Kw factor (surface horizon)	Organic matter (surface horizon)
		<i>Pct</i>			<i>Pct</i>
29—Hezel loamy fine sand, 0 to 15 percent slopes					
Hezel	85	0 - 8 - 15	C	.28	0.0 - 0.3 - 0.5
50—Koehler fine sand, 0 to 15 percent slopes					
Koehler	75	0 - 8 - 15	A	.02	0.5 - 0.8 - 1.0
89—Quincy loamy fine sand, 0 to 15 percent slopes					
Quincy	85	0 - 8 - 15	A	.24	0.5 - 0.8 - 1.0
90—Quincy loamy fine sand, 15 to 30 percent slopes					
Quincy	85	15 - 23 - 30	A	.24	0.5 - 0.8 - 1.0
91—Quincy loamy fine sand, 30 to 55 percent slopes					
Quincy	85	30 - 43 - 55	A	.24	0.5 - 0.8 - 1.0
92—Quincy loamy fine sand, loamy substratum, 0 to 10 percent slopes					
Quincy	85	0 - 5 - 10	A	.24	1.0 - 1.5 - 2.0
97—Quincy-Hezel complex, 0 to 15 percent slopes					
Quincy	50	0 - 8 - 15	A	.24	0.5 - 0.8 - 1.0
Hezel	25	0 - 8 - 15	C	.28	0.0 - 0.3 - 0.5
104—Rinquin loamy fine sand, 0 to 10 percent slopes					
Rinquin	75	0 - 5 - 10	A	.28	0.2 - 0.3 - 0.5
133—Sagehill very fine sandy loam, 0 to 2 percent slopes					
Sagehill	75	0 - 1 - 2	B	.49	0.8 - 1.4 - 2.0
134—Sagehill very fine sandy loam, 2 to 5 percent slopes					
Sagehill	75	2 - 4 - 5	B	.49	0.8 - 1.4 - 2.0

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Water Quality Index (WQI) Soil Factors—Franklin County, Washington					
Map symbol and soil name	Pct. of map unit	Slope gradient	Hydrologic group	Kw factor (surface horizon)	Organic matter (surface horizon)
		<i>Pct</i>			<i>Pct</i>
135—Sagehill very fine sandy loam, 5 to 10 percent slopes					
Sagehill	75	5 - 8 - 10	B	.49	0.8 - 1.4 - 2.0
148—Schlomer silt loam, 2 to 5 percent slopes					
Schlomer	75	2 - 4 - 5	C	.55	0.5 - 0.8 - 1.0
182—Taunton very fine sandy loam, 2 to 5 percent slopes					
Taunton	85	2 - 4 - 5	C	.49	0.5 - 1.3 - 2.0
183—Timmerman fine sandy loam, 0 to 2 percent slopes					
Timmerman	85	0 - 1 - 2	A	.43	0.5 - 0.8 - 1.0
195—Warden very fine sandy loam, 0 to 2 percent slopes					
Warden	90	0 - 1 - 2	B	.43	1.0 - 2.0 - 3.0
219—Xeric Torriorthents, very steep					
Xeric torriorthents	75	40 - 65 - 90	B	.43	0.0 - 0.5 - 1.0

## Soil Chemical Properties

This folder contains a collection of tabular reports that present soil chemical properties. The reports (tables) include all selected map units and components for each map unit. Soil chemical properties are measured or inferred from direct observations in the field or laboratory. Examples of soil chemical properties include pH, cation exchange capacity, calcium carbonate, gypsum, and electrical conductivity.

## Chemical Soil Properties

This table shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

*Depth* to the upper and lower boundaries of each layer is indicated.

*Cation-exchange capacity* is the total amount of extractable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

*Effective cation-exchange capacity* refers to the sum of extractable cations plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It is determined for soils that have pH of less than 5.5.

*Soil reaction* is a measure of acidity or alkalinity. It is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

*Calcium carbonate* equivalent is the percent of carbonates, by weight, in the fraction of the soil less than 2 millimeters in size. The availability of plant nutrients is influenced by the amount of carbonates in the soil.

*Gypsum* is expressed as a percent, by weight, of hydrated calcium sulfates in the fraction of the soil less than 20 millimeters in size. Gypsum is partially soluble in water. Soils that have a high content of gypsum may collapse if the gypsum is removed by percolating water.

*Salinity* is a measure of soluble salts in the soil at saturation. It is expressed as the electrical conductivity of the saturation extract, in millimhos per centimeter at 25 degrees C. Estimates are based on field and laboratory measurements at representative sites of nonirrigated soils. The salinity of irrigated soils is affected by the quality of the irrigation water and by the frequency of water application. Hence, the salinity of soils in individual fields can differ greatly from the value given in the table. Salinity affects the suitability of a soil for crop production, the stability of soil if used as construction material, and the potential of the soil to corrode metal and concrete.

*Sodium adsorption ratio* (SAR) is a measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste.

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It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration. Soils that have SAR values of 13 or more may be characterized by an increased dispersion of organic matter and clay particles, reduced saturated hydraulic conductivity and aeration, and a general degradation of soil structure.

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Chemical Soil Properties—Franklin County, Washington								
Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	<i>In</i>	<i>meq/100g</i>	<i>meq/100g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
29—Hezel loamy fine sand, 0 to 15 percent slopes								
Hezel	0-7	1.0-5.0	—	6.6-8.4	0	0	0	0
	7-18	1.0-5.0	—	6.6-8.4	0	0	0	0
	18-27	1.0-5.0	—	7.4-9.0	1-5	0	0.0-2.0	0
	27-60	1.0-5.0	—	7.4-9.0	5-15	0	0.0-2.0	0
50—Koehler fine sand, 0 to 15 percent slopes								
Koehler	0-4	5.0-15	—	7.4-8.4	0	0	0	0
	4-35	5.0-15	—	7.4-8.4	0-10	0	0	0
	35-45	—	—	—	—	—	—	—
	45-60	—	—	—	—	—	—	—
89—Quincy loamy fine sand, 0 to 15 percent slopes								
Quincy	0-4	1.0-3.0	—	6.6-8.4	0	0	0	0
	4-60	1.0-3.0	—	6.6-8.4	0-3	0	0	0
90—Quincy loamy fine sand, 15 to 30 percent slopes								
Quincy	0-4	1.0-3.0	—	6.6-8.4	0	0	0	0
	4-60	1.0-3.0	—	6.6-8.4	0-3	0	0	0
91—Quincy loamy fine sand, 30 to 55 percent slopes								
Quincy	0-4	1.0-3.0	—	6.6-8.4	0	0	0	0
	4-60	1.0-3.0	—	6.6-8.4	0-3	0	0	0

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Chemical Soil Properties—Franklin County, Washington								
Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	<i>In</i>	<i>meq/100g</i>	<i>meq/100g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
92—Quincy loamy fine sand, loamy substratum, 0 to 10 percent slopes								
Quincy	0-3	1.0-4.0	—	6.6-8.4	0	0	0	0
	3-52	1.0-4.0	—	6.6-8.4	0-5	0	0	0
	52-60	3.0-8.0	—	7.4-9.0	5-15	0	0.0-2.0	0-5
97—Quincy-Hezel complex, 0 to 15 percent slopes								
Quincy	0-4	1.0-3.0	—	6.6-8.4	0	0	0	0
	4-60	1.0-3.0	—	6.6-8.4	0-3	0	0	0
Hezel	0-7	1.0-5.0	—	6.6-8.4	0	0	0	0
	7-18	1.0-5.0	—	6.6-8.4	0	0	0	0
	18-27	1.0-5.0	—	7.4-9.0	1-5	0	0.0-2.0	0
	27-60	1.0-5.0	—	7.4-9.0	5-15	0	0.0-2.0	0
104—Rinquin loamy fine sand, 0 to 10 percent slopes								
Rinquin	0-7	2.0-7.0	—	6.6-7.8	0	0	0	0
	7-21	2.0-7.0	—	6.6-7.8	0	0	0	0
	21-26	2.0-7.0	—	7.4-8.4	2-10	0	0	0
	26-36	—	—	—	—	—	—	—
133—Sagehill very fine sandy loam, 0 to 2 percent slopes								
Sagehill	0-6	5.0-10	—	6.6-8.4	0	0	0	0
	6-25	5.0-10	—	6.6-8.4	0	0	0	0
	25-60	5.0-10	—	7.9-9.0	2-20	0	0.0-2.0	0

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Chemical Soil Properties—Franklin County, Washington								
Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	<i>In</i>	<i>meq/100g</i>	<i>meq/100g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
134—Sagehill very fine sandy loam, 2 to 5 percent slopes								
Sagehill	0-6	5.0-10	—	6.6-8.4	0	0	0	0
	6-25	5.0-10	—	6.6-8.4	0	0	0	0
	25-60	5.0-10	—	7.9-9.0	2-20	0	0.0-2.0	0
135—Sagehill very fine sandy loam, 5 to 10 percent slopes								
Sagehill	0-6	5.0-10	—	6.6-8.4	0	0	0	0
	6-25	5.0-10	—	6.6-8.4	0	0	0	0
	25-60	5.0-10	—	7.9-9.0	2-20	0	0.0-2.0	0
148—Schlomer silt loam, 2 to 5 percent slopes								
Schlomer	0-4	8.0-14	—	7.4-7.8	0	0	0	0
	4-16	8.0-14	—	7.4-7.8	0	0	0	0
	16-22	8.0-14	—	7.4-7.8	0	0	0	0
	22-34	25-40	—	7.4-8.4	1-5	0	0	0
	34-44	—	—	—	—	—	—	—
182—Taunton very fine sandy loam, 2 to 5 percent slopes								
Taunton	0-6	10-20	—	7.4-8.4	0	0	0	0
	6-25	10-20	—	7.4-9.0	0	0	0.0-2.0	0
	25-38	10-20	—	7.4-9.0	10-25	0	0.0-2.0	0
	38-48	—	—	—	—	—	—	—
	48-60	—	—	—	—	—	—	—

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Chemical Soil Properties—Franklin County, Washington								
Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	<i>In</i>	<i>meq/100g</i>	<i>meq/100g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
183—Timmerman fine sandy loam, 0 to 2 percent slopes								
Timmerman	0-5	5.0-10	—	6.6-7.8	0	0	0	0
	5-19	5.0-10	—	6.6-7.8	0	0	0	0
	19-60	0.0-5.0	—	7.4-9.0	2-15	0	0.0-2.0	0
195—Warden very fine sandy loam, 0 to 2 percent slopes								
Warden	0-6	2.0-9.0	—	6.6-7.8	0	0	0	0
	6-19	4.0-8.0	—	6.6-7.8	0	0	0	0
	19-60	4.0-8.0	—	7.9-9.0	3-8	0	0.0-2.0	0
219—Xeric Torriorthents, very steep								
Xeric torriorthents	0-3	6.0-14	—	7.4-8.4	1-5	0	0	0
	3-60	4.0-12	—	7.4-8.4	1-15	0	0	0
220—Water								
Water	—	—	—	—	—	—	—	—

## Soil Physical Properties

This folder contains a collection of tabular reports that present soil physical properties. The reports (tables) include all selected map units and components for each map unit. Soil physical properties are measured or inferred from direct observations in the field or laboratory. Examples of soil physical properties include percent clay, organic matter, saturated hydraulic conductivity, available water capacity, and bulk density.

### Particle Size and Coarse Fragments

This table shows estimates of particle size distribution and coarse fragment content of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

*Depth* to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

*Sand* as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In this table, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

*Silt* as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In this table, the estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

*Clay* as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In this table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, saturated hydraulic conductivity (Ksat), plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

*Total fragments* is the content of fragments of rock and other materials larger than 2 millimeters in diameter on volumetric basis of the whole soil.

*Fragments 2-74 mm* refers to the content of coarse fragments in the 2 to 74 millimeter size fraction.

*Fragments 75-249 mm* refers to the content of coarse fragments in the 75 to 249 millimeter size fraction.

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*Fragments 250-599 mm* refers to the content of coarse fragments in the 250 to 599 millimeter size fraction.

*Fragments  $\geq 600$  mm* refers to the content of coarse fragments in the greater than or equal to 600 millimeter size fraction.

Reference:

United States Department of Agriculture, Natural Resources Conservation Service.  
National soil survey handbook, title 430-VI. (<http://soils.usda.gov>)

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Particle Size and Coarse Fragments—Franklin County, Washington										
Map symbol and soil name	Horizon	Depth	Sand	Silt	Clay	Total fragments	Fragments 2-74 mm	Fragments 75-249 mm	Fragments 250-599 mm	Fragments >=600 mm
		<i>In</i>	<i>L-RV-H Pct</i>	<i>L-RV-H Pct</i>	<i>L-RV-H Pct</i>	<i>RV Pct</i>	<i>RV Pct</i>	<i>RV Pct</i>	<i>RV Pct</i>	<i>RV Pct</i>
29—Hezel loamy fine sand, 0 to 15 percent slopes										
Hezel	H1	0-7	-80-	-17-	2- 4- 5	—	—	—	—	—
	H2	7-18	-81-	-17-	0- 3- 5	—	—	—	—	—
	H3	18-27	-66-	-28-	5- 7- 8	—	—	—	—	—
	H4	27-60	-71-	-22-	5- 7- 8	—	—	—	—	—
50—Koehler fine sand, 0 to 15 percent slopes										
Koehler	H1	0-4	-97-	- 1-	0- 3- 5	12	10	2	—	—
	H2	4-35	-81-	-17-	0- 3- 5	14	12	2	—	—
	H3	35-45	—	—	—	57	57	—	—	—
	H4	45-60	—	—	—	57	57	—	—	—
89—Quincy loamy fine sand, 0 to 15 percent slopes										
Quincy	H1	0-4	-80-	-17-	1- 4- 6	—	—	—	—	—
	H2	4-60	-79-	-17-	1- 4- 7	—	—	—	—	—
90—Quincy loamy fine sand, 15 to 30 percent slopes										
Quincy	H1	0-4	-80-	-17-	1- 4- 6	—	—	—	—	—
	H2	4-60	-79-	-17-	1- 4- 7	—	—	—	—	—
91—Quincy loamy fine sand, 30 to 55 percent slopes										
Quincy	H1	0-4	-80-	-17-	1- 4- 6	—	—	—	—	—
	H2	4-60	-79-	-17-	1- 4- 7	—	—	—	—	—

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Particle Size and Coarse Fragments—Franklin County, Washington										
Map symbol and soil name	Horizon	Depth	Sand	Silt	Clay	Total fragments	Fragments 2-74 mm	Fragments 75-249 mm	Fragments 250-599 mm	Fragments >=600 mm
		<i>In</i>	<i>L-RV-H Pct</i>	<i>L-RV-H Pct</i>	<i>L-RV-H Pct</i>	<i>RV Pct</i>	<i>RV Pct</i>	<i>RV Pct</i>	<i>RV Pct</i>	<i>RV Pct</i>
92—Quincy loamy fine sand, loamy substratum, 0 to 10 percent slopes										
Quincy	H1	0-3	-80-	-17-	0- 4- 7	4	4	—	—	—
	H2	3-52	-79-	-17-	1- 4- 7	4	4	—	—	—
	H3	52-60	-34-	-59-	5- 8- 10	4	4	—	—	—
97—Quincy-Hezel complex, 0 to 15 percent slopes										
Quincy	H1	0-4	-80-	-17-	1- 4- 6	—	—	—	—	—
	H2	4-60	-79-	-17-	1- 4- 7	—	—	—	—	—
Hezel	H1	0-7	-80-	-17-	2- 4- 5	—	—	—	—	—
	H2	7-18	-81-	-17-	0- 3- 5	—	—	—	—	—
	H3	18-27	-66-	-28-	5- 7- 8	—	—	—	—	—
	H4	27-60	-34-	-59-	5- 7- 8	—	—	—	—	—
104—Rinquin loamy fine sand, 0 to 10 percent slopes										
Rinquin	H1	0-7	-81-	-17-	1- 2- 3	5	5	—	—	—
	H2	7-21	-81-	-17-	1- 2- 3	5	5	—	—	—
	H3	21-26	-81-	-17-	1- 2- 3	5	5	—	—	—
	H4	26-36	—	—	—	57	57	—	—	—

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Particle Size and Coarse Fragments—Franklin County, Washington										
Map symbol and soil name	Horizon	Depth	Sand	Silt	Clay	Total fragments	Fragments 2-74 mm	Fragments 75-249 mm	Fragments 250-599 mm	Fragments >=600 mm
		<i>In</i>	<i>L-RV-H Pct</i>	<i>L-RV-H Pct</i>	<i>L-RV-H Pct</i>	<i>RV Pct</i>	<i>RV Pct</i>	<i>RV Pct</i>	<i>RV Pct</i>	<i>RV Pct</i>
133—Sagehill very fine sandy loam, 0 to 2 percent slopes										
Sagehill	H1	0-6	-60-	-35-	2- 5- 8	6	4	2	—	—
	H2	6-25	-60-	-35-	2- 5- 8	6	4	2	—	—
	H3	25-60	-37-	-58-	2- 5- 8	6	4	2	—	—
134—Sagehill very fine sandy loam, 2 to 5 percent slopes										
Sagehill	H1	0-6	-60-	-35-	2- 5- 8	6	4	2	—	—
	H2	6-25	-60-	-35-	2- 5- 8	6	4	2	—	—
	H3	25-60	-37-	-58-	2- 5- 8	6	4	2	—	—
135—Sagehill very fine sandy loam, 5 to 10 percent slopes										
Sagehill	H1	0-6	-60-	-35-	2- 5- 8	6	4	2	—	—
	H2	6-25	-60-	-35-	2- 5- 8	6	4	2	—	—
	H3	25-60	-37-	-58-	2- 5- 8	6	4	2	—	—
148—Schlomer silt loam, 2 to 5 percent slopes										
Schlomer	H1	0-4	-14-	-73-	10-13- 15	—	—	—	—	—
	H2	4-16	-14-	-73-	10-13- 15	—	—	—	—	—
	H3	16-22	-14-	-73-	10-13- 15	—	—	—	—	—
	H4	22-34	- 8-	-56-	27-36- 45	—	—	—	—	—
	H5	34-44	—	—	—	57	57	—	—	—

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Particle Size and Coarse Fragments—Franklin County, Washington										
Map symbol and soil name	Horizon	Depth	Sand	Silt	Clay	Total fragments	Fragments 2-74 mm	Fragments 75-249 mm	Fragments 250-599 mm	Fragments >=600 mm
		<i>In</i>	<i>L-RV-H Pct</i>	<i>L-RV-H Pct</i>	<i>L-RV-H Pct</i>	<i>RV Pct</i>	<i>RV Pct</i>	<i>RV Pct</i>	<i>RV Pct</i>	<i>RV Pct</i>
182—Taunton very fine sandy loam, 2 to 5 percent slopes										
Taunton	H1	0-6	-67-	-27-	5- 7- 8	5	5	—	—	—
	H2	6-25	-65-	-27-	5- 9- 12	5	5	—	—	—
	H3	25-38	-65-	-27-	5- 9- 12	36	33	3	—	—
	H4	38-48	—	—	—	57	57	—	—	—
	H5	48-60	—	—	0- 5- 10	57	57	—	—	—
183—Timmerman fine sandy loam, 0 to 2 percent slopes										
Timmerman	H1	0-5	-62-	-35-	0- 3- 5	—	—	—	—	—
	H2	5-19	-66-	-31-	0- 3- 5	2	2	—	—	—
	H3	19-60	-80-	-17-	0- 3- 5	18	14	4	—	—
195—Warden very fine sandy loam, 0 to 2 percent slopes										
Warden	H1	0-6	-63-	-29-	5- 8- 10	4	4	—	—	—
	H2	6-19	-62-	-28-	8-10- 12	4	4	—	—	—
	H3	19-60	-21-	-69-	8-10- 12	4	4	—	—	—
219—Xeric Torriorthents, very steep										
Xeric Torriorthents	H1	0-3	-26-	-53-	15-21- 27	5	5	—	—	—
	H2	3-60	-62-	-21-	8-18- 27	5	5	—	—	—
220—Water										
Water	—	—	—	—	—	—	—	—	—	—

## Physical Soil Properties

This table shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

*Depth* to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

*Sand* as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In this table, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

*Silt* as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In this table, the estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

*Clay* as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In this table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, saturated hydraulic conductivity (*K<sub>sat</sub>*), plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

*Moist bulk density* is the weight of soil (oven-dry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at 1/3- or 1/10-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute linear extensibility, shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

*Saturated hydraulic conductivity (*K<sub>sat</sub>*)* refers to the ease with which pores in a saturated soil transmit water. The estimates in the table are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity (*K<sub>sat</sub>*) is considered in the design of soil drainage systems and septic tank absorption fields.

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*Available water capacity* refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

*Linear extensibility* refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. The amount and type of clay minerals in the soil influence volume change.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

*Organic matter* is the plant and animal residue in the soil at various stages of decomposition. In this table, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter. The content of organic matter in a soil can be maintained by returning crop residue to the soil.

Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

*Erosion factors* are shown in the table as the K factor ( $K_w$  and  $K_f$ ) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and  $K_{sat}$ . Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

*Erosion factor  $K_w$*  indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

*Erosion factor  $K_f$*  indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

*Erosion factor T* is an estimate of the maximum average annual rate of soil erosion by wind and/or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

*Wind erodibility groups* are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are described in the "National Soil Survey Handbook."

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*Wind erodibility index* is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Reference:

United States Department of Agriculture, Natural Resources Conservation Service.  
National soil survey handbook, title 430-VI. (<http://soils.usda.gov>)

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Physical Soil Properties—Franklin County, Washington														
Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	<i>In</i>	<i>Pct</i>	<i>Pct</i>	<i>Pct</i>	<i>g/cc</i>	<i>micro m/sec</i>	<i>In/In</i>	<i>Pct</i>	<i>Pct</i>					
29—Hezel loamy fine sand, 0 to 15 percent slopes														
Hezel	0-7	-80-	-17-	2- 4- 5	1.25-1.45	42.34-141.14	0.09-0.13	0.0-2.9	0.0-0.5	.28	.28	5	2	134
	7-18	-81-	-17-	0- 3- 5	1.40-1.60	42.34-141.14	0.08-0.12	0.0-2.9	0.0-0.5	.32	.32			
	18-27	-66-	-28-	5- 7- 8	1.30-1.50	4.23-14.11	0.13-0.21	0.0-2.9	0.0-0.5	.43	.43			
	27-60	-71-	-22-	5- 7- 8	1.30-1.50	1.40-4.23	0.13-0.21	0.0-2.9	0.0-0.5	.37	.37			
50—Koehler fine sand, 0 to 15 percent slopes														
Koehler	0-4	-97-	- 1-	0- 3- 5	1.40-1.60	42.34-141.14	0.07-0.11	0.0-2.9	0.5-1.0	.02	.02	2	1	250
	4-35	-81-	-17-	0- 3- 5	1.40-1.60	42.34-141.14	0.08-0.10	0.0-2.9	0.0-0.5	.24	.24			
	35-45	—	—	—	1.60-1.80	0.00-0.42	—	—	—					
	45-60	—	—	—	1.40-1.60	0.42-1.41	—	—	—					
89—Quincy loamy fine sand, 0 to 15 percent slopes														
Quincy	0-4	-80-	-17-	1- 4- 6	1.50-1.65	42.34-141.14	0.09-0.11	0.0-2.9	0.5-1.0	.24	.24	5	2	134
	4-60	-79-	-17-	1- 4- 7	1.50-1.65	42.34-141.14	0.05-0.11	0.0-2.9	0.0-0.5	.20	.20			

Custom Soil Resource Report

Physical Soil Properties—Franklin County, Washington														
Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	<i>In</i>	<i>Pct</i>	<i>Pct</i>	<i>Pct</i>	<i>g/cc</i>	<i>micro m/sec</i>	<i>In/In</i>	<i>Pct</i>	<i>Pct</i>					
90—Quincy loamy fine sand, 15 to 30 percent slopes														
Quincy	0-4	-80-	-17-	1- 4- 6	1.50-1.65	42.34-141.14	0.09-0.11	0.0-2.9	0.5-1.0	.24	.24	5	2	134
	4-60	-79-	-17-	1- 4- 7	1.50-1.65	42.34-141.14	0.05-0.11	0.0-2.9	0.0-0.5	.20	.20			
91—Quincy loamy fine sand, 30 to 55 percent slopes														
Quincy	0-4	-80-	-17-	1- 4- 6	1.50-1.65	42.34-141.14	0.09-0.11	0.0-2.9	0.5-1.0	.24	.24	5	2	134
	4-60	-79-	-17-	1- 4- 7	1.50-1.65	42.34-141.14	0.05-0.11	0.0-2.9	0.0-0.5	.20	.20			
92—Quincy loamy fine sand, loamy substratum, 0 to 10 percent slopes														
Quincy	0-3	-80-	-17-	0- 4- 7	1.25-1.45	42.34-141.14	0.08-0.11	0.0-2.9	1.0-2.0	.24	.24	5	2	134
	3-52	-79-	-17-	1- 4- 7	1.30-1.50	42.34-141.14	0.08-0.11	0.0-2.9	0.0-0.5	.32	.32			
	52-60	-34-	-59-	5- 8- 10	1.50-1.70	4.23-14.11	0.16-0.18	0.0-2.9	0.0-0.5	.64	.64			

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Physical Soil Properties—Franklin County, Washington														
Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	<i>In</i>	<i>Pct</i>	<i>Pct</i>	<i>Pct</i>	<i>g/cc</i>	<i>micro m/sec</i>	<i>In/In</i>	<i>Pct</i>	<i>Pct</i>					
97—Quincy-Hezel complex, 0 to 15 percent slopes														
Quincy	0-4	-80-	-17-	1- 4- 6	1.50-1.65	42.34-141.14	0.09-0.11	0.0-2.9	0.5-1.0	.24	.24	5	2	134
	4-60	-79-	-17-	1- 4- 7	1.50-1.65	42.34-141.14	0.05-0.11	0.0-2.9	0.0-0.5	.20	.20			
Hezel	0-7	-80-	-17-	2- 4- 5	1.25-1.45	42.34-141.14	0.09-0.13	0.0-2.9	0.0-0.5	.28	.28	5	2	134
	7-18	-81-	-17-	0- 3- 5	1.40-1.60	42.34-141.14	0.08-0.12	0.0-2.9	0.0-0.5	.32	.32			
	18-27	-66-	-28-	5- 7- 8	1.30-1.50	4.23-14.11	0.13-0.21	0.0-2.9	0.0-0.5	.43	.43			
	27-60	-34-	-59-	5- 7- 8	1.30-1.50	1.40-4.23	0.13-0.21	0.0-2.9	0.0-0.5	.64	.64			
104—Rinquin loamy fine sand, 0 to 10 percent slopes														
Rinquin	0-7	-81-	-17-	1- 2- 3	1.50-1.65	42.34-141.14	0.10-0.12	0.0-2.9	0.2-0.5	.28	.28	3	2	134
	7-21	-81-	-17-	1- 2- 3	1.50-1.70	42.34-141.14	0.09-0.11	0.0-2.9	0.0-0.5	.49	.49			
	21-26	-81-	-17-	1- 2- 3	1.50-1.70	42.34-141.14	0.09-0.11	0.0-2.9	0.0-0.5	.49	.49			
	26-36	—	—	—	1.70-2.00	—	—	—	—					
133—Sagehill very fine sandy loam, 0 to 2 percent slopes														
Sagehill	0-6	-60-	-35-	2- 5- 8	1.30-1.60	14.00-42.34	0.15-0.17	0.0-2.9	0.8-2.0	.49	.49	5	3	86
	6-25	-60-	-35-	2- 5- 8	1.30-1.60	14.00-42.34	0.14-0.16	0.0-2.9	0.0-0.5	.64	.64			
	25-60	-37-	-58-	2- 5- 8	1.30-1.60	4.23-14.11	0.18-0.20	0.0-2.9	0.0-0.5	.64	.64			

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Physical Soil Properties—Franklin County, Washington														
Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	<i>In</i>	<i>Pct</i>	<i>Pct</i>	<i>Pct</i>	<i>g/cc</i>	<i>micro m/sec</i>	<i>In/In</i>	<i>Pct</i>	<i>Pct</i>					
134—Sagehill very fine sandy loam, 2 to 5 percent slopes														
Sagehill	0-6	-60-	-35-	2- 5- 8	1.30-1.60	14.00-42.34	0.15-0.17	0.0-2.9	0.8-2.0	.49	.49	5	3	86
	6-25	-60-	-35-	2- 5- 8	1.30-1.60	14.00-42.34	0.14-0.16	0.0-2.9	0.0-0.5	.64	.64			
	25-60	-37-	-58-	2- 5- 8	1.30-1.60	4.23-14.11	0.18-0.20	0.0-2.9	0.0-0.5	.64	.64			
135—Sagehill very fine sandy loam, 5 to 10 percent slopes														
Sagehill	0-6	-60-	-35-	2- 5- 8	1.30-1.60	14.00-42.34	0.15-0.17	0.0-2.9	0.8-2.0	.49	.49	5	3	86
	6-25	-60-	-35-	2- 5- 8	1.30-1.60	14.00-42.34	0.14-0.16	0.0-2.9	0.0-0.5	.64	.64			
	25-60	-37-	-58-	2- 5- 8	1.30-1.60	4.23-14.11	0.18-0.20	0.0-2.9	0.0-0.5	.64	.64			
148—Schlomer silt loam, 2 to 5 percent slopes														
Schlomer	0-4	-14-	-73-	10-13- 15	1.20-1.40	4.23-14.11	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55	3	5	56
	4-16	-14-	-73-	10-13- 15	1.30-1.50	4.23-14.11	0.17-0.21	0.0-2.9	0.5-1.0	.64	.64			
	16-22	-14-	-73-	10-13- 15	1.20-1.40	4.23-14.11	0.17-0.21	0.0-2.9	0.0-0.5	.64	.64			
	22-34	- 8-	-56-	27-36- 45	1.20-1.40	1.40-4.23	0.17-0.21	3.0-5.9	0.0-0.5	.43	.43			
	34-44	—	—	—	—	—	—	—	—					

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Physical Soil Properties—Franklin County, Washington														
Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	<i>In</i>	<i>Pct</i>	<i>Pct</i>	<i>Pct</i>	<i>g/cc</i>	<i>micro m/sec</i>	<i>In/In</i>	<i>Pct</i>	<i>Pct</i>					
182—Taunton very fine sandy loam, 2 to 5 percent slopes														
Taunton	0-6	-67-	-27-	5- 7- 8	1.15-1.40	14.00-42.34	0.16-0.20	0.0-2.9	0.5-2.0	.49	.49	2	3	86
	6-25	-65-	-27-	5- 9- 12	1.30-1.50	4.23-14.11	0.15-0.18	0.0-2.9	0.0-0.5	.55	.55			
	25-38	-65-	-27-	5- 9- 12	1.30-1.50	4.23-14.11	0.10-0.14	0.0-2.9	0.0-0.5	.28	.64			
	38-48	—	—	—	—	0.00-0.42	—	—	—					
	48-60	—	—	0- 5- 10	—	0.42-1.41	—	—	—					
183— Timmerman fine sandy loam, 0 to 2 percent slopes														
Timmerman	0-5	-62-	-35-	0- 3- 5	1.20-1.40	14.00-42.34	0.13-0.15	0.0-2.9	0.5-1.0	.43	.43	2	3	86
	5-19	-66-	-31-	0- 3- 5	1.35-1.55	14.00-42.34	0.12-0.15	0.0-2.9	0.0-0.5	.37	.37			
	19-60	-80-	-17-	0- 3- 5	1.40-1.60	42.34-141.14	0.03-0.06	0.0-2.9	0.0-0.5	.15	.20			
195—Warden very fine sandy loam, 0 to 2 percent slopes														
Warden	0-6	-63-	-29-	5- 8- 10	1.20-1.30	4.23-14.11	0.15-0.17	0.0-2.9	1.0-3.0	.43	.43	5	3	86
	6-19	-62-	-28-	8-10- 12	1.30-1.45	4.23-14.11	0.16-0.20	0.0-2.9	0.0-0.5	.55	.55			
	19-60	-21-	-69-	8-10- 12	1.35-1.50	4.23-14.11	0.19-0.21	0.0-2.9	0.0-0.5	.64	.64			

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Physical Soil Properties—Franklin County, Washington														
Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	<i>In</i>	<i>Pct</i>	<i>Pct</i>	<i>Pct</i>	<i>g/cc</i>	<i>micro m/sec</i>	<i>In/In</i>	<i>Pct</i>	<i>Pct</i>					
219—Xeric Torriorthents, very steep														
Xeric torriorthents	0-3	-26-	-53-	15-21- 27	1.15-1.35	4.23-14.11	0.16-0.21	3.0-5.9	0.0-1.0	.43	.43	5	6	48
	3-60	-62-	-21-	8-18- 27	1.20-1.40	4.23-14.11	0.16-0.18	3.0-5.9	0.0-0.5	.32	.32			
220—Water														
Water	—	—	—	—	—	—	—	—	—					

## Engineering Properties

This table gives the engineering classifications and the range of engineering properties for the layers of each soil in the survey area.

*Hydrologic soil group* is a group of soils having similar runoff potential under similar storm and cover conditions. The criteria for determining Hydrologic soil group is found in the National Engineering Handbook, Chapter 7 issued May 2007(<http://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=17757.wba>). Listing HSGs by soil map unit component and not by soil series is a new concept for the engineers. Past engineering references contained lists of HSGs by soil series. Soil series are continually being defined and redefined, and the list of soil series names changes so frequently as to make the task of maintaining a single national list virtually impossible. Therefore, the criteria is now used to calculate the HSG using the component soil properties and no such national series lists will be maintained. All such references are obsolete and their use should be discontinued. Soil properties that influence runoff potential are those that influence the minimum rate of infiltration for a bare soil after prolonged wetting and when not frozen. These properties are depth to a seasonal high water table, saturated hydraulic conductivity after prolonged wetting, and depth to a layer with a very slow water transmission rate. Changes in soil properties caused by land management or climate changes also cause the hydrologic soil group to change. The influence of ground cover is treated independently. There are four hydrologic soil groups, A, B, C, and D, and three dual groups, A/D, B/D, and C/D. In the dual groups, the first letter is for drained areas and the second letter is for undrained areas.

The four hydrologic soil groups are described in the following paragraphs:

*Group A.* Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

*Group B.* Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

*Group C.* Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

*Group D.* Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

*Depth* to the upper and lower boundaries of each layer is indicated.

*Texture* is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. "Loam," for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, "gravelly."

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*Classification* of the soils is determined according to the Unified soil classification system (ASTM, 2005) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2004).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest.

*Percentage of rock fragments* larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage. Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

*Percentage (of soil particles) passing designated sieves* is the percentage of the soil fraction less than 3 inches in diameter based on an oven-dry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field. Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

*Liquid limit and plasticity index (Atterberg limits)* indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination. Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

### References:

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

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Absence of an entry indicates that the data were not estimated. The asterisk '\*' denotes the representative texture; other possible textures follow the dash. The criteria for determining the hydrologic soil group for individual soil components is found in the National Engineering Handbook, Chapter 7 issued May 2007(<http://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=17757.wba>). Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

Engineering Properties—Franklin County, Washington														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			<i>In</i>				<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>
29—Hezel loamy fine sand, 0 to 15 percent slopes														
Hezel	85	C	0-7	Loamy fine sand	SM	A-2	0- 0- 0	0- 0- 0	100-100-100	100-100-100	80-90-100	15-25-35	0-5 -10	NP
			7-18	Loamy fine sand, loamy sand, fine sand	SM	A-2	0- 0- 0	0- 0- 0	100-100-100	100-100-100	50-63-75	15-25-35	0-5 -10	NP
			18-27	Fine sandy loam, very fine sandy loam, silt loam	ML	A-4	0- 0- 0	0- 0- 0	100-100-100	100-100-100	70-83-95	50-65-80	15-20-25	NP-3 -5
			27-60	Stratified fine sandy loam to silt loam	ML	A-4	0- 0- 0	0- 0- 0	100-100-100	100-100-100	80-90-100	50-65-80	15-20-25	NP-3 -5
50—Koehler fine sand, 0 to 15 percent slopes														
Koehler	75	A	0-4	Fine sand	SP-SM	A-3	0- 0- 0	0- 3- 5	85-90-95	80-85-90	60-65-70	5- 8- 10	0-5 -10	NP
			4-35	Loamy fine sand, loamy sand, fine sand	SM	A-2	0- 0- 0	0- 3- 5	80-85-90	75-80-85	65-73-80	15-20-25	0-5 -10	NP
			35-45	Cemented material	—	—	—	—	—	—	—	—	—	—
			45-60	Stratified cemented material to very gravelly sandy loam	—	—	—	—	—	—	—	—	—	—

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Engineering Properties—Franklin County, Washington														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			<i>In</i>				<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>
89—Quincy loamy fine sand, 0 to 15 percent slopes														
Quincy	85	A	0-4	Loamy fine sand	SM	A-2	0- 0- 0	0- 0- 0	100-100-100	100-100-100	75-88-100	15-23-30	0-5 -10	NP
			4-60	Loamy fine sand, fine sand	SP-SM, SM	A-2	0- 0- 0	0- 0- 0	100-100-100	100-100-100	75-88-100	10-20-30	0-5 -10	NP
90—Quincy loamy fine sand, 15 to 30 percent slopes														
Quincy	85	A	0-4	Loamy fine sand	SM	A-2	0- 0- 0	0- 0- 0	100-100-100	100-100-100	75-88-100	15-23-30	0-5 -10	NP
			4-60	Loamy fine sand, fine sand	SP-SM, SM	A-2	0- 0- 0	0- 0- 0	100-100-100	100-100-100	75-88-100	10-20-30	0-5 -10	NP
91—Quincy loamy fine sand, 30 to 55 percent slopes														
Quincy	85	A	0-4	Loamy fine sand	SM	A-2	0- 0- 0	0- 0- 0	100-100-100	100-100-100	75-88-100	15-23-30	0-5 -10	NP
			4-60	Loamy fine sand, fine sand	SP-SM, SM	A-2	0- 0- 0	0- 0- 0	100-100-100	100-100-100	75-88-100	10-20-30	0-5 -10	NP
92—Quincy loamy fine sand, loamy substratum, 0 to 10 percent slopes														
Quincy	85	A	0-3	Loamy fine sand	SM	A-2	0- 0- 0	0- 0- 0	95-98-100	95-98-100	80-88-95	10-20-30	0-5 -10	NP
			3-52	Loamy fine sand	SM	A-2	0- 0- 0	0- 0- 0	95-98-100	95-98-100	80-88-95	20-25-30	0-5 -10	NP
			52-60	Silt loam, very fine sandy loam, fine sandy loam	SM, ML	A-2, A-4	0- 0- 0	0- 0- 0	95-98-100	95-98-100	75-85-95	25-48-70	20-25-30	NP-3 -5

Custom Soil Resource Report

Engineering Properties—Franklin County, Washington														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			<i>In</i>				<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>
97—Quincy-Hezel complex, 0 to 15 percent slopes														
Quincy	50	A	0-4	Loamy fine sand	SM	A-2	0- 0- 0	0- 0- 0	100-100-100	100-100-100	75-88-100	15-23-30	0-5 -10	NP
			4-60	Loamy fine sand, fine sand	SP-SM, SM	A-2	0- 0- 0	0- 0- 0	100-100-100	100-100-100	75-88-100	10-20-30	0-5 -10	NP
Hezel	25	C	0-7	Loamy fine sand	SM	A-2	0- 0- 0	0- 0- 0	100-100-100	100-100-100	80-90-100	15-25-35	0-5 -10	NP
			7-18	Loamy fine sand, loamy sand, fine sand	SM	A-2	0- 0- 0	0- 0- 0	100-100-100	100-100-100	50-63-75	15-25-35	0-5 -10	NP
			18-27	Fine sandy loam, very fine sandy loam, silt loam	ML	A-4	0- 0- 0	0- 0- 0	100-100-100	100-100-100	70-83-95	50-65-80	15-20-25	NP-3 -5
			27-60	Stratified fine sandy loam to silt loam	ML	A-4	0- 0- 0	0- 0- 0	100-100-100	100-100-100	80-90-100	50-65-80	15-20-25	NP-3 -5
104—Rinquin loamy fine sand, 0 to 10 percent slopes														
Rinquin	75	A	0-7	Loamy fine sand	SM	A-1, A-2	0- 0- 0	0- 0- 0	95-98-100	90-95-100	40-63-85	15-23-30	0-5 -10	NP
			7-21	Loamy fine sand, fine sand	SM	A-1, A-2	0- 0- 0	0- 0- 0	95-98-100	90-95-100	40-58-75	10-20-30	0-5 -10	NP
			21-26	Loamy fine sand, fine sand	SM	A-1, A-2	0- 0- 0	0- 0- 0	95-98-100	90-95-100	40-58-75	10-20-30	0-5 -10	NP
			26-36	Weathered bedrock	—	—	—	—	—	—	—	—	—	—

Custom Soil Resource Report

Engineering Properties—Franklin County, Washington														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			<i>In</i>				<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>
133—Sagehill very fine sandy loam, 0 to 2 percent slopes														
Sagehill	75	B	0-6	Very fine sandy loam	SM, ML	A-4	0- 0- 0	0- 0- 0	95-98-100	95-98-100	90-93-95	40-50-60	20-23-25	NP-3 -5
			6-25	Very fine sandy loam, fine sandy loam, loamy very fine sand	SM, ML	A-4	0- 0- 0	0- 0- 0	95-98-100	95-98-100	80-88-95	40-55-70	20-23-25	NP-3 -5
			25-60	Silt loam, very fine sandy loam, fine sandy loam	SM, ML	A-4	0- 0- 0	0- 0- 0	95-98-100	95-98-100	80-90-100	45-60-75	20-23-25	NP-3 -5
134—Sagehill very fine sandy loam, 2 to 5 percent slopes														
Sagehill	75	B	0-6	Very fine sandy loam	SM, ML	A-4	0- 0- 0	0- 0- 0	95-98-100	95-98-100	90-93-95	40-50-60	20-23-25	NP-3 -5
			6-25	Very fine sandy loam, fine sandy loam, loamy very fine sand	SM, ML	A-4	0- 0- 0	0- 0- 0	95-98-100	95-98-100	80-88-95	40-55-70	20-23-25	NP-3 -5
			25-60	Silt loam, very fine sandy loam, fine sandy loam	SM, ML	A-4	0- 0- 0	0- 0- 0	95-98-100	95-98-100	80-90-100	45-60-75	20-23-25	NP-3 -5

Custom Soil Resource Report

Engineering Properties—Franklin County, Washington														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			<i>In</i>				<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>
135—Sagehill very fine sandy loam, 5 to 10 percent slopes														
Sagehill	75	B	0-6	Very fine sandy loam	SM, ML	A-4	0- 0- 0	0- 0- 0	95-98-100	95-98-100	90-93-95	40-50-60	20-23-25	NP-3 -5
			6-25	Very fine sandy loam, fine sandy loam, loamy very fine sand	SM, ML	A-4	0- 0- 0	0- 0- 0	95-98-100	95-98-100	80-88-95	40-55-70	20-23-25	NP-3 -5
			25-60	Silt loam, very fine sandy loam, fine sandy loam	SM, ML	A-4	0- 0- 0	0- 0- 0	95-98-100	95-98-100	80-90-100	45-60-75	20-23-25	NP-3 -5
148—Schlomer silt loam, 2 to 5 percent slopes														
Schlomer	75	C	0-4	Silt loam	CL, CL-ML	A-4	0- 0- 0	0- 0- 0	100-100-100	100-100-100	95-98-100	75-80-85	15-18-20	5-8 -10
			4-16	Silt loam, very fine sandy loam	CL, CL-ML	A-4	0- 0- 0	0- 0- 0	100-100-100	100-100-100	95-98-100	50-68-85	15-20-25	5-8 -10
			16-22	Silt loam, very fine sandy loam	CL, CL-ML	A-4	0- 0- 0	0- 0- 0	100-100-100	100-100-100	95-98-100	60-73-85	15-20-25	5-8 -10
			22-34	Silty clay loam, silty clay	CL	A-7	0- 0- 0	0- 0- 0	100-100-100	100-100-100	95-98-100	90-95-100	40-45-50	15-20-25
			34-44	Weathered bedrock	—	—	—	—	—	—	—	—	—	—

Custom Soil Resource Report

Engineering Properties—Franklin County, Washington														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			<i>In</i>				<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>
182—Taunton very fine sandy loam, 2 to 5 percent slopes														
Taunton	85	C	0-6	Very fine sandy loam	SM	A-2, A-4	0- 0- 0	0- 0- 0	95-98-100	90-95-100	80-85-90	30-38-45	15-17-20	NP-3 -5
			6-25	Fine sandy loam, very fine sandy loam, silt loam	SM, ML	A-4	0- 0- 0	0- 0- 0	95-98-100	90-95-100	80-88-95	40-55-70	15-20-25	NP-3 -5
			25-38	Gravelly fine sandy loam, very fine sandy loam, very gravelly silt loam	GM, SM	A-1, A-2, A-4	0- 0- 0	0- 5- 10	50-70-90	35-60-85	30-48-65	20-35-50	15-20-25	NP-3 -5
			38-48	Cemented material	—	—	—	—	—	—	—	—	—	—
			48-60	Stratified cemented material to very gravelly sandy loam	—	—	—	—	—	—	—	—	—	—
183—Timmerman fine sandy loam, 0 to 2 percent slopes														
Timmerman	85	A	0-5	Fine sandy loam	SM	A-2	0- 0- 0	0- 0- 0	100-100-100	100-100-100	70-75-80	25-30-35	15-17-20	NP-3 -5
			5-19	Sandy loam, coarse sandy loam, fine sandy loam	SM	A-4	0- 0- 0	0- 0- 0	100-100-100	95-98-100	70-75-80	40-45-50	15-17-20	NP-3 -5
			19-60	Loamy coarse sand, coarse sand, gravelly coarse sand	SP-SM, SM, SP	A-1	0- 0- 0	0- 8- 15	95-98-100	60-78-95	10-25-40	0-10- 20	0-5 -10	NP

Custom Soil Resource Report

Engineering Properties—Franklin County, Washington														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			<i>In</i>				<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>
195—Warden very fine sandy loam, 0 to 2 percent slopes														
Warden	90	B	0-6	Very fine sandy loam	SM, ML	A-4	0- 0- 0	0- 0- 0	95-98-100	95-98-100	85-90-95	40-53-65	15-20-25	NP-3 -5
			6-19	Very fine sandy loam, silt loam	ML	A-4	0- 0- 0	0- 0- 0	95-98-100	95-98-100	95-98-100	75-83-90	25-28-30	NP-3 -5
			19-60	Silt loam, very fine sandy loam	ML	A-4	0- 0- 0	0- 0- 0	95-98-100	95-98-100	95-98-100	75-83-90	25-28-30	NP-3 -5
219—Xeric Torriorthents, very steep														
Xeric torriorthents	75	B	0-3	Silt loam	CL	A-4, A-6	0- 0- 0	0- 0- 0	95-98-100	90-95-100	85-93-100	75-85-95	20-25-30	10-13-15
			3-60	Very fine sandy loam, silt loam	CL, CL-ML	A-4	0- 0- 0	0- 0- 0	95-98-100	90-95-100	80-90-100	50-73-95	20-25-30	5-10-15

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## Custom Soil Resource Report

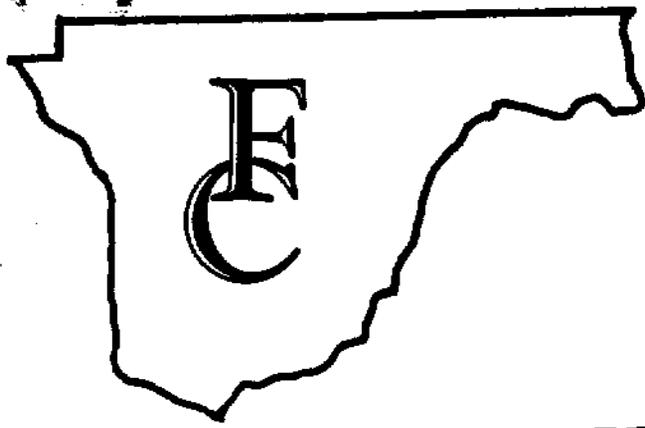
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**CUP 2025-10/  
SEPA 2025-18**

Franklin County Odor & Fly  
Control Plan Resolution  
(Res 2001-238)



# FRANKLIN COUNTY

COMMISSIONERS

Courthouse - 1016 North 4th

Pasco, Washington 99301

(509) 545-3535

RESOLUTION NUMBER 2001 238

BEFORE THE BOARD OF COMMISSIONERS, FRANKLIN COUNTY,  
WASHINGTON:

RE: Odor and Fly Control Guidelines for Livestock and Poultry Operations.

WHEREAS, A Task Force consisting of representatives from the Franklin Conservation District, the County Planning Department, the County Planning Commission, the USDA Natural Resources Conservation Service, the Benton Franklin Health Department, the local Poultry Industry, and the local Dairy Industry have proposed recommendations regarding the Odor and Fly Control Guidelines as they pertain to Livestock and Poultry Operations in Franklin County; and

WHEREAS, on May 15, 2001, the Franklin Conservation District Board of Supervisors stated their support and are recommending the Odor and Fly Control Guidelines for Livestock and Poultry Operations;

WHEREAS, Franklin County is a "right to farm" county where agricultural activities and their associated uses are an important and integral part of the local economy; and

WHEREAS, Franklin County understands the importance of managing odor and nuisance issues to a reasonable extent as they relate to these Livestock and Poultry Operations; and

WHEREAS, the public use and interest will be served by supporting the above stated Odor and Fly Control Guidelines, and

NOW, THEREFORE, BE IT RESOLVED that the Board of Commissioners support the Conservation District's and the Task Force's Recommendations and encourage the use and application of the Guidelines as they relate to the County's Conditional Use Permit Process for Livestock and Poultry Operations in Franklin County.

SIGNED AND DATED THIS 30<sup>th</sup> DAY OF MAY 2001.

BOARD OF COUNTY COMMISSIONERS  
FRANKLIN COUNTY, WASHINGTON

  
Chairman

  
Member

  
Member

Attest:

  
Clerk of the Board

**Task Force Recommendations**

**for**

**Odor and Fly Control Guidelines for Livestock and Poultry Operations  
in Franklin County, Washington**

**Presented to:**

**Franklin County Planning Commission**

**April 2001**

**Prepared by Franklin Conservation District**

## **Task Force Recommendations**

### **Background**

Odors and flies related to livestock and poultry operations are a concern frequently expressed by the general public. While these issues do not pose a significant health or environmental threat, they can affect the “quality of life” for individuals located within close proximity to livestock facilities. Regional odor problems can also affect economical development within the county. At the request of the Franklin County Planning Commission the Franklin Conservation District convened a Task Force to provide stakeholders, planners, and technical agencies the opportunity to develop guidelines to manage odor and nuisance issues related to these industries.

This report describes the results of the Task Force efforts and provides recommendations on guidelines to the Franklin County Planning Commission. It is anticipated these guidelines will be incorporated into the conditional use permit process as appropriate and necessary.

### **Task Force Composition**

The Task Force was comprised of the following individuals:

Burl Booker – Franklin County Planning Commission  
Cliff Bates – Benton/Franklin Health District  
Dick Bengen – Dairy Industry  
Greg Wendt – Franklin County Planning and Building Dept.  
Heather Adams – Franklin Conservation District  
Jerrod MacPherson – Franklin County Planning and Building Dept.  
Kent Woodward – Poultry Industry  
Mark Nielson – Franklin Conservation District  
Nieves Lopez – USDA Natural Resources Conservation Service  
Paul Rogers – USDA Natural Resources Conservation Service  
Steve DeRuyter – Dairy Industry  
Steve Hailey – Franklin County Planning Commission  
Steve VanBatavia – Dairy Industry  
Thane Davidson – Dairy Industry

### **Task Force Recommendations**

### **Applicability**

These guidelines are intended to be used by the Franklin County Planning Commission as part of the conditional use process. The guidelines are not applicable to facilities exempt from Franklin County's zoning ordinances.

Franklin County zoning ordinances require a conditional and/or special use permit for dairies, poultry and egg production, and livestock farming including hog or swine raising, subject to the following head count numbers:

Dairies (milking cows)	500
Feedlots	1,000
Poultry and/or egg production	10,000
Hog or swine raising (sows)	100

Existing operations that currently exceed these numbers are exempt until an expansion occurs.

### **General Philosophy**

The following items represent the general philosophy of the Task Force and helped set sideboards for the subsequent recommendations.

- No livestock facility can be 100% odor free.
- Odor and fly "problems" are relative and hard to quantify.
- Management activities can affect odors and flies.
- Zoning should be used to avoid conflict where possible.
- There is a direct relationship between distance of a facility to neighbors and potential for impacts/complaints.
- All solutions or practices recommended need to be economically and technically feasible.

### **Odor and Fly Control Guidelines**

#### **Introduction**

Odor sensation is a personal response. Not all people are equally sensitive, and they do not always agree about the severity of an odor once it is detected. People who move from urban to rural areas, for example, generally do not tolerate odor as well as a neighboring farmer does. The human nose is still the best means of determining the strength of an odor. Precise documentation of the strength and nature of an odor is generally unavailable because of the large number of gases involved and their effects on each other. While this document mainly focuses on odor control, many of the management items discussed will also decrease complaints about flies. It is generally recognized that a clean and well maintained operation will help control fly populations.

The odors released from livestock production may affect numerous people. In addition to the livestock producers and their families, others exposed to odors include neighbors and

anyone who uses nearby public areas. The number of people affected by any one livestock operation can vary greatly due to the proximity of housing developments or location along major roadways or recreational areas. The more people affected, the greater the chance that some will find the odors offensive. Objections also arise from people feeling they have no power over their own situation and are forced to be exposed to odors. However, it should be pointed out that Franklin County has a Right to Farm Ordinance that recognizes agricultural activities conducted on farmland are presumed reasonable and do not constitute a nuisance unless the activity has a substantial adverse effect on the public health and safety.

When assessing an odor situation and evaluating possible methods of reducing odor, if necessary, it is important to consider what is a realistic expectation. Elimination of odor from livestock and associated facilities is not realistic. Odors of some sort will always be produced and are usually released to the environment. What can be evaluated and possibly changed is the frequency of odor occurrence, the duration of the odor, the intensity of the odor and the negative perceptions by some neighbors. These guidelines will discuss management techniques that can be used to affect these odor characteristics.

#### **Selection of a Farm Site**

One of the most effective means of reducing odor complaints is careful selection of the site for an animal operation. Sites near farm and nonfarm residences, commercial enterprises, recreational areas, or major roads are particularly prone to problems. Locating an animal operation as far away as possible from any housing developments and one-quarter mile from any neighboring residence normally provides some isolation of the farm and dilution of its odors.

Many animal operations are already situated close to neighbors and major roads. Such farms should be examined to identify potential problems and ways to avoid them by modifying the collection, processing, storage, and disposal of manure. This is especially important when considering the upgrading or expansion of an existing site. Sometimes it is better to abandon the site and invest remodeling or expansion money in new facilities at a better location.

Wind direction and topography can help control odor. New facilities may be sited downwind of home sites so that odors will blow away from them. But simply locating downwind of a residence is not always sufficient to ensure acceptability. In some areas, wind direction may fluctuate too much.

Topography around a building site is very important since it affects air movement. Relatively flat sites that have good air movement and mixing are good places to build livestock facilities. It is best to avoid hilltops above residences in a valley, as odors may travel down hills. On calm nights cool air drains from higher to lower elevations. Any odors from livestock facilities will travel with the cooler air, thus creating potential odor problems. If there are no residences at lower elevations, hilltops are a good location for livestock buildings, especially naturally ventilated ones.

### **General Farm Management**

A clean, well-landscaped, and well-maintained farm has less odor and attracts fewer complaints than a poorly kept one. Trees, shrubs, and windbreaks help screen manure storages.

Animal operators should talk with their neighbors and respond promptly to their complaints. Farmers who maintain a cooperative public attitude are seldom subjected to odor complaints. In addition, operators should keep as large a buffer zone as possible around their facility.

Odor from fresh manure is generally less offensive than that from anaerobic decomposing manure. All areas where manure collects should be cleaned frequently and feeding areas, animal pens, and animals kept as clean and dry as possible. The warm body of an animal, when covered with wet manure, accelerates bacterial growth and odor. Allowing a dry layer of manure to form on the surface of a manure storage helps contain odors. Also, proper disposal of dead animals should be practiced.

### **Odors from Buildings and Lots**

Some odors are generated by livestock buildings and lots. Much of the problem can be attributed to dust production and release. Excessive dust particles are an air pollution problem and can transport odors some distance. Practices to reduce the dust generated and released into the air should be used.

Diluted manure is less likely to volatilize gases. Outside livestock lots should be well-drained and kept as dry as possible. If water is not given a chance to accumulate, less bacterial decomposition will occur; and therefore, less odor is produced. Accumulated manure should be scraped and hauled as frequently as possible.

### **Manure Storage**

Bacterial action causes manure in storage to decompose, which generates odors. These odors are then released to the atmosphere if nothing is done to contain them. A number of factors impact the bacterial action that breaks down manure. Moisture is needed for bacteria to function; so dry manure (under 40 % moisture) is usually less odorous than liquid manure. Temperature also has an impact on manure odors. Higher temperatures speed microbial action, resulting in faster decomposition of the manure. Also important is the type of bacteria present that is primarily dependent on the presence or absence of oxygen in the manure. Aerobic bacteria live when oxygen is present. Water and carbon dioxide are the products of manure degradation by aerobic bacteria. Anaerobic bacteria work in the absence of oxygen, which is the status of most manure storage structures. The products of anaerobic bacteria degradation of manure are much more odiferous than the products from aerobic bacteria. Aerobic decomposition is preferable to anaerobic decomposition.

Fresh manure is less offensive than decomposing manure; so decreasing storage time of the manure lessens odors. Frequent removal also usually removes more solids, the portion of manure generally responsible for odor production. However, it is a problem to have

land available for continuous spreading of manure. If such land is available, this technique is a good option. But in areas where crops are growing on the land for a considerable part of the year, frequent spreading is not possible.

Lagoons are much different than "true" storage facilities. In addition to storage, treatment also takes place in a lagoon. Lagoons are much larger than traditional storage structures because the manure must be diluted with 6 to 10 times as much water as manure added. This dilution is necessary for proper bacterial decomposition of the manure. Odor intensity from lagoons is usually less than from typical slurry storage facilities. Although lagoons are not free of odor, odor is seldom a problem if the lagoon is managed properly. An exception is late spring and early summer, when warmer weather causes increased decomposition. During the cooler weather of fall and winter, bacterial activity decreases and less manure solids are broken down. Since the amount of manure added to the lagoon generally remains the same throughout the year, the amount of undigested manure accumulates during the cooler weather. When the weather warms and bacterial activity increases, there is a large amount of manure solids to be broken down. The rapid breakdown of this large amount of accumulated manure generates more intense odors than normal.

Mismanagement of lagoons can cause increased odors throughout the year. In addition to having enough dilution water, it is also important to release consistent amounts of manure frequently into the lagoon. This allows the bacterial population to stabilize and break down the manure as it is added. Adding too much manure at one time, or at infrequent intervals, causes a situation similar to the spring warm-up, when too much manure is available for decomposition at one time. This procedure really starts with proper sizing of the lagoon. If the lagoon is too small, a similar effect is seen as adding too much manure at one time or not having enough dilution water. The lagoon must be large enough for adequate dilution of the manure added to have proper decomposition without excessive odor production. Operations that add production facilities that release manure into a previously constructed lagoon may be asking for trouble if the lagoon is not large enough to properly break down the additional manure. An important aspect of proper lagoon start-up is that adequate water be in the lagoon before any manure is added. The lagoon should have 1/3 to 1/2 of the minimum design level to ensure adequate manure dilution to properly start the manure degradation process. Lagoons should also be started during warm weather when bacteria are more active.

The solids' component of livestock manure is of primary interest in lagoon function because the solids' component contains the organic matter that is broken down by bacteria. Therefore, the solids are ultimately the source of odors. If the amount of solids released into a lagoon is reduced, odor production should also lessen. One method of reducing the solids in a lagoon is to separate the solids from liquids before the liquids are released into the lagoon. There are a number of processes by which this can be done, including mechanical processes or simply gravity in a settling basin or tank. Separation works well for bovine manure but is more difficult with swine.

### **Land Application of Manure**

Land application is the primary method of manure utilization and is part of nearly every manure-handling system. Odors may not be a significant problem for most operations most of the year, but they may become a very big problem when the manure in storage is agitated prior to unloading, or when it is unloaded and spread on the land in relatively large amounts.

Reduce the odor nuisance by the following procedures:

If there is no storage facility, spread the manure as frequently as possible during warm weather. Unload storages on schedule. To minimize the time that odor is released to the air, have machinery in good repair and labor ready before starting to unload.

Avoid spreading when the wind blows toward populated areas or immediately before weekends and holidays, when nearby neighbors are likely to be engaged in outdoor and recreational activities. Spread in the morning when air is warming and rising rather than in the late afternoon.

Follow weather reports to advantage. Sunny, low-humidity days reduce odors. Turbulent breezes dissipate and dilute odors. Rain removes odors from the atmosphere. But warm, still days with a temperature inversion concentrate odors rather than disperse them.

Avoid spreading near heavily traveled highways, and keep manure from spilling on public roads. If a spill does occur, clean the road promptly.

Minimize agitation and exposure of manure to air during preparation for unloading, hauling, and spreading. Mixing, spraying, and agitating, at any step of the operation, however necessary for proper functioning, releases odors into the air.

If possible, incorporate manure during or immediately after land application by injecting it into the soil or plowing or disking the soil. These practices not only minimize odor but also preserve nutrients and reduce loss by runoff. Where immediate incorporation is not possible, apply manure uniformly in a thin layer so that it will dry in five days or less. This will prevent fly propagation.

Waste from animal wastewater application spray systems should be applied in such a manner and under such conditions to prevent drift from the irrigation field of the wastewater spray beyond the boundary of the animal operation.

### **Neighbor Relations**

Personal interaction with neighbors has very little to do with odor control, but may be the most important part of avoiding complaints. Producers who have a cooperative public attitude receive few odor complaints. Open communication is important; hiding something generally arouses suspicion. All spreading activities should be documented so a record is available in case a problem should develop. Determine the cause of any

complaint and work to correct it. Good public relations go a long way toward improving acceptance of odors generated by livestock production.

### **Odor Control Plan Components**

Odor control plans may be a component of a nutrient management plan approved by the Conservation District or USDA-NRCS or may be a stand alone plan submitted in conjunction with the conditional use permit process conducted by the Franklin County Planning Commission. The contents of an odor control plan shall:

- Identify the name, location, and owner of the animal operation;
- Identify the name, title, address, and telephone number of the person filing the plan;
- Identify the potential sources of odor within the animal operation;
- Describe how odor will be controlled from: the animal houses, wastewater lagoons, wastewater application lands, waste conveyances and temporary accumulation points, and other possible sources of odor within the animal operation.
- Contain a diagram showing all structures and lagoons at the animal operation, forced air directions, and approximate distances to structures or groups of structures within 3000 feet of the property line of the animal operation; a recent or updated aerial photograph may be submitted in place of a diagram provided the items required are shown;
- For existing animal operations, contain a schedule not to exceed six months by which the plan will be implemented (a new animal operation is to have and be in compliance with its plan when it begins operation), for an amended plan, the implementation schedule shall not exceed six months;
- Describe how the plan will be implemented, including training of personnel;
- Describe inspection and maintenance procedures; and
- Describe methods of monitoring and record keeping to verify compliance with the plan

### REFERENCES

Much of the above information was extensively borrowed from the following sources:

Animal Manure – Dairy Manure Odor Control, Penpages: Factsheets from Pennsylvania State University, number 0870162, Daniel J. Meyer, Robert E. Graves – Editor, January, 1987.

Environmental Issues in Livestock Production Home Study Course: Odor Assessment and Control, Iowa State University, University Extension, Jay D. Harmon and Gene Tinker.

North Carolina Administrative Code: S 39 D-1800.

**CUP 2025-10/  
SEPA 2025-18**

Franklin County Right to Farm  
Ordinance  
(Ord 8-2008)

## **ORDINANCE NUMBER 8-2008**

### **AN ORDINANCE ADOPTING THE FRANKLIN COUNTY "RIGHT TO FARM" POLICY AND REPEALING ORDINANCE 23-94 ADOPTED ON OCTOBER 17, 1994.**

**WHEREAS**, Franklin County Ordinance No. 23-94 was adopted on October 17, 1994 and intended to reflect the local importance of agricultural activities and convey the same degree of protection to such activities from nuisance lawsuits as the state legislature gave to agricultural activities and forest practices. The intent of the repeal of Ordinance 23-94 and the adoption of this ordinance is to clarify and confirm that the intent of the local legislative authority is to grant the same degree of protection to agricultural activities as Chapter 7.48 RCW and not to grant protection beyond what state law allows.

#### **Section 1: APPLICABILITY**

This ordinance shall apply to the unincorporated areas of Franklin County.

#### **Section 2: FINDINGS AND PURPOSE**

Franklin County finds that agricultural activities conducted on farmland and forest practices in urbanizing areas are often subjected to nuisance lawsuits, and that such suits encourage and even force the premature removal of the lands from agricultural uses and timber production. It is therefore the purpose of this ordinance to provide that agricultural activities conducted on farmland and forest practices be protected from nuisance lawsuits.

#### **Section 3: ACTIVITIES PRESUMED REASONABLE—NOT A NUISANCE—EXCEPTION—DAMAGES**

Agricultural activities conducted on farmland and forest practices, if consistent with good agricultural and forest practices, are presumed to be reasonable and shall not be found to constitute a nuisance unless the activity or practice has a substantial adverse effect on public health and safety.

If those agricultural activities and forest practices are undertaken in conformity with all applicable laws and rules, they are presumed to be good agricultural and forest practices not adversely affecting the public health and safety for purposes of Franklin County Code (FCC) 5.12.030, FCC 5.12.040, and as hereinafter amended. An agricultural activity that is in conformity with such laws and rules shall not be restricted as to the hours of the day or day or days of the week during which it may be conducted.

Nothing in this ordinance shall affect or impair any right to sue for damages.

#### **Section 4: DEFINITIONS.**

When used in this chapter, the definitions in FCC 5.12.050 and as hereinafter amended, shall apply.

(1) "Agricultural activity" means a condition or activity which occurs on a farm in connection with the commercial production of farm products and includes, but is not limited to, marketed produce at roadside stands or farm markets; noise; odors; dust; fumes; operation of machinery and irrigation pumps; movement, including, but not limited to, use of current county road ditches, streams, rivers, canals, and drains, and use of water for agricultural activities; ground and aerial application of seed, fertilizers, conditioners, and plant protection products; keeping of bees for production of agricultural or apicultural products; employment and use of labor; roadway movement of equipment and livestock; protection from damage by wildlife; prevention of trespass; construction and maintenance of buildings, fences, roads, bridges, ponds, drains, waterways, and similar features and maintenance of

streambanks and watercourses; and conversion from one agricultural activity to another, including a change in the type of plant-related farm product being produced. The term includes use of new practices and equipment consistent with technological development within the agricultural industry.

(2) "Farm" means the land, buildings, freshwater ponds, freshwater culturing and growing facilities, and machinery used in the commercial production of farm products.

(3) "Farmland" means land or freshwater ponds devoted primarily to the production, for commercial purposes, of livestock, freshwater aquacultural, or other farm products.

(4) "Farm product" means those plants and animals useful to humans and includes, but is not limited to, forages and sod crops, dairy and dairy products, poultry and poultry products, livestock, including breeding, grazing, and recreational equine use, fruits, vegetables, flowers, seeds, grasses, trees, freshwater fish and fish products, apiaries and apiary products, equine and other similar products, or any other product which incorporates the use of food, feed, fiber, or fur.

(5) "Forest practice" means "forest practice" as defined in RCW 76.09.020.

#### Section 5: CLAIMS BY FARMER-COSTS-RECOVERY

(1) A farmer who prevails in any action, claim, or counterclaim alleging that agricultural activity on a farm constitutes a nuisance may recover the full costs and expenses determined by a court to have been reasonably incurred by the farmer as a result of the action, claim, or counterclaim.

(2) A farmer who prevails in any action, claim, or counterclaim (a) based on an allegation that agricultural activity on a farm is in violation of specified laws, rules, or ordinances, (b) where such activity is not found to be in violation of the specified laws, rules, or ordinances, and (c) actual damages are realized by the farm as a result of the action, claim, or counterclaim, may recover the full costs and expenses determined by a court to have been reasonably incurred by the farmer as a result of the action, claim, or counterclaim.

(3) The costs and expenses that may be recovered according to subsection (1) or (2) of FCC 5.12.060 and as hereinafter amended include actual damages and reasonable attorneys' fees and costs. For the purposes of FCC 5.12.060, "actual damages" include lost revenue and the replacement value of crops or livestock damaged or unable to be harvested or sold as a result of the action, claim, or counterclaim.

(4) In addition to any sums recovered according to subsection (1) or (2) of FCC 5.12.060, a farmer may recover exemplary damages if a court finds that the action, claim, or counterclaim was initiated maliciously and without probable cause.

(5) A farmer may not recover the costs and expenses authorized in this section from a state or local agency that investigates or pursues an enforcement action pursuant to an allegation as specified in subsection (2) of this section.

A state or local agency required to investigate a complaint alleging agricultural activity on a farm is in violation of specified laws, rules, or ordinances and where such activity is not found to be in violation of such specified laws, rules, or ordinances may recover its full investigative costs and expenses if a court determines that the complaint was initiated maliciously and without probable cause.

Section 6: SEVERABILITY.

If any provision of this chapter is declared unconstitutional, or the applicability thereof to any person or circumstance is held invalid, the constitutionality of the remainder of the chapter and the applicability thereof to other persons and circumstances shall not be affected thereby.

Section 7: EFFECTIVE DATE.

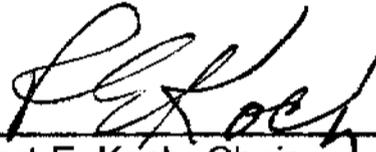
This Chapter shall take effect and be in full force upon its passage and adoption.

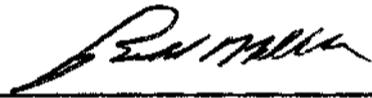
**WHEREAS**, Ordinance Number 8-2008 shall be known as the Franklin County Right To Farm Ordinance; and

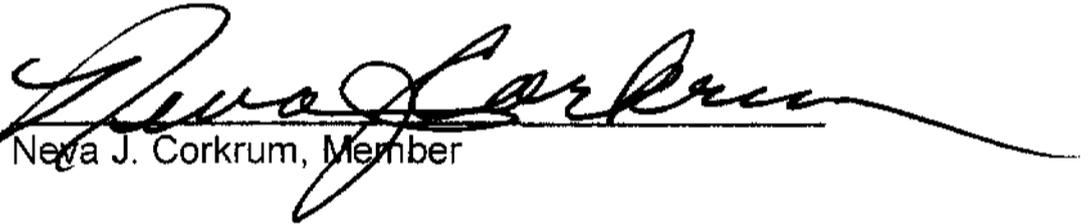
**WHEREAS**, Ordinance Number 23-94 adopted October 17, 1994 is hereby repealed.

PASSED this 3 day of November, 2008.

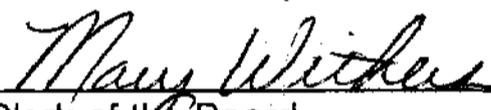
BOARD OF COUNTY COMMISSIONERS  
FRANKLIN COUNTY, WASHINGTON

  
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Robert E. Koch, Chair

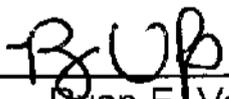
  
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Rick Miller, Chair Pro Tem

  
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Neya J. Corkrum, Member

ATTEST:

  
\_\_\_\_\_  
Clerk of the Board

APPROVED AS TO FORM:

By:   
\_\_\_\_\_  
Ryan E. Verhulp  
Deputy Prosecuting Attorney

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ORDINANCE NUMBER 8-2008